



# The Environmental Assessment and Management (TEAM) Guide

### Georgia Supplement Revised August 2000

Environmental assessments help determine compliance with current environmental regulations. The U.S. Air Force, U.S. Army, Defense Logistics Agency (DLA), and Corps of Engineers (Civil Works) have adopted environmental compliance programs that identify compliance problems before they are cited as violations by the U.S. Environmental Protection Agency.

Since 1984, the U.S. Army Construction Engineering Research Laboratory, in cooperation with numerous Department of Defense (DOD) components, has developed environmental compliance assessment checklist manuals. The Environmental Assessment and Management (TEAM) Guide was developed for use by all DOD components. Currently there are five participating DOD components: the Air Force, Air National Guard, Army, Civil Works, and DLA. These agencies have agreed to share the development and maintenance of this Guide.

The Guide combines Code of Federal Regulations and management practices into a series of checklists that show legal requirements and the specific operations or items to review. TEAM Guide is supplemented by DOD component-specific manuals detailing DOD component regulations and

2 USACERL TR-98/DRAFT

policies. The Georgia Supplement was developed to be used in conjunction with the TEAM Guide, using existing Georgia state environmental legislation and regulations as well as suggested management practices.

#### **FOREWORD**

This is USACERL Special Report 96/110. The report is based on the information available on Enflex Federal and State Regulations of June 2000.

The research was performed for the Air National Guard under Military Interdepartmental Purchase Request (MIPR) number OMAF57/3400/357/A/9830147/PO, technical monitor Chuck Smith; the Army Environmental Center under MIPR 0C48R0006, technical monitor Matthew Andrews; the National Guard Bureau under MIPR 0CCER6EL11, technical monitor Phil Dao; the Air Force Center for Environmental Excellence under MIPR FQ7624-00-08010, technical monitor Scott Newquist; the U.S. Army Corps of Engineers under FAD3123-X-2402-JAN-980803369, technical monitor James Wolcott; the U.S. Army Reserve Center under MIPR 00CCWEL009, technical monitor Dave Jennings; and the U.S. Postal Service under MIPR number 102590-99-Z-093, technical monitor Paul Fennewald.

The research was performed by the Environmental Processes Branch (CN-E), Installations Division (CN), of the U.S. Army Construction Engineering Research Laboratory (CERL). The CERL Principal Investigator was Carolyn O'Rourke. Dr. Ilker Adiguzel is Chief, CN-E, and Dr. John T. Bandy is Chief, CN. The associated Technical Director is Gary Schanche. Dr. Alan Moore is Acting Director of CERL.

CERL is an element of the U.S. Army Engineer Research and Development Center (ERDC), U.S. Army Corps of Engineers. The Director of ERDC is Dr. James R. Houston, and the Commander is COL James S. Weller.

#### NOTICE

This manual is intended as general guidance for personnel at Department of Defense (DOD) installations/CW facilities. It is not, nor is it intended to be, a complete treatise on environmental laws and regulations. Neither the U.S. Government nor any agency thereof, nor any of their employees, makes any warranty, expressed or implied, or assumes any legal liability or responsibility for the accuracy, completeness, or usefulness of any information contained herein. For any specific questions about, or interpretations of, the legal references herein, consult appropriate legal counsel.

#### **GEORGIA SUPPLEMENT**

This Georgia TEAM Supplement contains the protocols necessary for determining compliance with Georgia environmental rules and regulations. This manual is a supplement to the U.S. TEAM Guide; it does not replace it.

The following Georgia agencies have responsibility in the areas indicated:

- Department of Agriculture, Division of Entomology and Pesticides has responsibility for the regulation of pesticide and herbicide management.
- Department of Natural Resources handles all permits required by state and Federal environmental law, except those required by the Coastal Marshlands Protection Act. This includes the National Pollutant Discharge Elimination System (NPDES) permit program and pretreatment permits for effluent discharged into publicly owned treatment works.
- Department of Natural Resources, Emergency Operations Center receives reports of any spills and releases of oil and hazardous substances, telephone 800-241-4113.
- Department of Natural Resources, Environmental Protection Division the Air Protection Branch has responsibility for air quality. The Water Management Branch and the Water Protection Branch administer the safe drinking water and water quality regulations. Groundwater protection includes a ban on any new injection wells, no discharge into groundwater, and a South Georgia groundwater monitoring program. The Land Management Branch has responsibility for solid and hazardous waste management. Biomedical regulations are administered by the Industrial Waste Unit. The Marsh and Beach Section has responsibility for coastal zone management. The Game and Fish Commission has responsibility for endangered species. The Historic Preservation Section has responsibility for the Georgia Register of Historic Places.
- Public Service Commission has responsibility for the transportation of hazardous materials.
- State Fire Marshal, Hazardous Materials Division has responsibility for storage and transportation of flammable and combustible liquids and gases.

#### **ACRONYMS**

ACGIH American Conference of Governmental Industrial Hygienists

AQMA air quality management area

ASTM American Society for Testing and Materials

AWWA American Water Works Association
BACT best available control technology
BOD biochemical oxygen demand

BTEX benzene, toluene, elthylbenzene, xylene

CAR control area responsible party
CAS Chemical Abstract Service
CEM continuous emission monitoring

CERCLA Comprehensive Environmental Response, Compensation, and Liability Act

CFC chlorofluorocarbons CWA *Clean Water Act* 

dB decibel

dBA decibels using A-weighting network
dBC decibels using C-weighting network
DEQ Department of Environmental Quality

ESA Endangered Species Act

FIFRA Federal Insecticide, Fungicide, and Rodenticide Act

GVWR gross vehicle weight rating
HEPA Filter high efficiency particulate air filter
HWM hazardous waste management

IARC International Agency for Research on Cancer

ICRU International Commission on Radiological Units and Measurements

IUPAC International Union of Pure and Applied Chemistry

LAER lowest achievable emission rate
Ldn day-night airport noise level
Leq equivalent noise level
LPG Liquefied Petroleum Gas

MC medium curing

maximum contaminant level **MCL** MFL million fibers per liter **MSDS** material safety data sheet **MSW** municipal-type solid waste **MSWLF** municipal solid waste landfill **MWC** municipal waste combustor NBS National Bureau of Standards National Environmental Policy Act **NEPA NFPA** National Fire Protection Association **NHPA** National Historic Preservation Act

NPDES National Pollutant Discharge Elimination System
NTNCWS nontransient noncommunity water system
OSHA Occupational Safety and Health Administration

PAH polycyclic aromatic hydrocarbons

PCB polychlorinated biphenyl
PEL permissible exposure limit
POTW publicly owned treatment works
PUC Public Utility Commission of Oregon
RACT reasonably available control technology

#### **ACRONYMS**

RC rapid curing

Resource Conservation and Recovery Act **RCRA** 

**RDF** refuse-derived fuel

**REL** recommended exposure level **RGF** recirculating gravel filter RVP Reid vapor pressure

SAE Society of Automotive Engineers

Superfund Amendments and Reauthorization Act **SARA** 

SC slow curing

Safe Drinking Water Act **SDWA** 

Standard Industrial Classification SIC **SMCL** secondary maximum contaminant level spill prevention countermeasure and control SPCC

SPL sound pressure level Solid Waste Disposal Act **SWDA** TLV threshold limit value **TNTC** too numerous to count TPH total petroleum hydrocarbons TRI toxic release inventory **TSCA** Toxic Substance Control Act treatment, storage, and disposal **TSD** 

**TSDF** treatment, storage, and disposal facility

**TSP** total suspended particulate total suspended solids TSS total trihalomethane **TTHM** UL **Underwriters Laboratory UFC** Uniform Fire Code

United States Environmental Protection Agency **USEPA** 

UST underground storage tank VOC volatile organic compound VOL volatile organic liquid

**WPCF** Water Pollution Control Facilities

#### **COMMONLY USED ABBREVIATIONS**

| bbl             | barrel                        | mg     | milligram                       |
|-----------------|-------------------------------|--------|---------------------------------|
| Btu             | British thermal unit          | mi     | mile                            |
| C               | Celsius                       | min    | minute                          |
| cfs             | cubic feet per second         | MJ     | megajoule                       |
| cm              | centimeter                    | mL     | milliliter                      |
| cm <sup>2</sup> | square centimeter             | mm     | millimeter                      |
| dscf            | dry standard cubic foot       | mo     | month                           |
| dscm            | dry standard cubic meter      | mrem   | millirem                        |
| F               | Fahrenheit                    | MW     | megawatt                        |
| ft              | foot                          | ng     | nanogram                        |
| $ft^2$          | square feet                   | NTU    | nephelometric turbidity unit    |
| $\mathrm{ft}^3$ | cubic feet                    | OZ     | ounce                           |
| g               | gram                          | pCi    | picoCurie                       |
| gal             | gallon                        | ppm    | part per million                |
| gJ              | gigajoule                     | ppmv   | part per million by volume      |
| gr              | grain                         | ppmw   | part per million by weight      |
| h               | hour                          | psi    | pound per square inch           |
| ha              | hectare                       | psia   | pounds per square inch absolute |
| hp              | horsepower                    | psig   | pounds per square inch gauge    |
| in.             | inch                          | qt     | quart                           |
| J               | Joule                         | S      | second                          |
| kg              | kilogram                      | scf    | standard cubic foot             |
| km              | kilometer                     | scm    | standard cubic meter            |
| kPa             | kilopascals                   | sdcf   | standard dry cubic foot         |
| L               | liter                         | sdcm   | standard dry cubic meter        |
| lb              | pound                         | TU     | turbidity unit                  |
| m               | meter                         | V      | volt                            |
| $m^3$           | cubic meter                   | yd     | yard                            |
| MBtu            | million British thermal units | $yd^2$ | square yard                     |
| meq             | milligram equivalent          | yr     | year                            |
| CO              | carbon monoxide               | $NO_2$ | nitrogen dioxide                |
| $CO_2$          | carbon dioxide                | $NO_x$ | nitrogen oxides                 |
| Hg              | mercury                       | $SO_2$ | sulfur dioxide                  |
|                 |                               |        |                                 |

#### METRIC CONVERSION TABLE

The following conversion table may be used throughout this manual to make approximate conversions between U.S. units and metric units.

| 1 in.            | = | 2.54 cm or 25.4 mm               |
|------------------|---|----------------------------------|
| 1 ft             | = | 0.3048 m                         |
| $1 \text{ ft}^2$ | = | 0.093 m2                         |
| $1 \text{ ft}^3$ | = | 0.028 m3                         |
| 1 psi            | = | 6.895 kPa                        |
| 1 lb             | = | 0.454 kg                         |
| 1 mi             | = | 1.61 km                          |
| 1 gal            | = | 3.78 L                           |
| °F               | = | $(^{\circ}C + 17.78) \times 1.8$ |
| °C               | = | 0.55 (°F - 32)                   |
| 1 yd             | = | 0.9144 m                         |
| 1 Btu            | = | 4.184 kJ                         |
| 1 acre           | = | 4046.9 m2                        |
| 1 acre           | = | 0.405 hectare                    |

#### **Comment Form**

Comments and questions regarding the Georgia Supplement can be addressed to:

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#### **SECTION 1**

#### AIR EMISSIONS MANAGEMENT

#### Georgia Supplement, August 2000

This section covers the state requirements for Air Emissions Management and is intended to supplement the U.S. TEAM Guide. Refer to the U.S. TEAM Guide and the DOD Component Supplements for Federal, DOD, and service-specific requirements.

See Appendix 1-1 for a list of Federal regulations that have been incorporated and adopted by reference in the Rules of the State of Georgia (RSG).

#### **Definitions**

- *Act* Part I of Chapter 9 of Title 12 of the Official Code of Georgia Annotated (OCGA) Section 12-9-1, et seq., The Georgia Air Quality Act.
- *Air-Cleaning Device* any method, process, or equipment which removes, reduces, or renders less noxious air contaminants discharged into the atmosphere (RSG 391-3-1-.01).
- *Air Contaminant* solid or liquid particulate matter, dust, fumes, gas, mist, smoke, or vapor, or any matter or substance either physical, chemical, biological, or radioactive (including source material, special nuclear material, and byproduct material); or any combination of any of the above (RSG 391-3-1-.01).
- Air Pollution the presence in the outdoor atmosphere of one or more air contaminants (RSG 391-3-1-.01).
- Atlanta Ozone Nonattainment Area the geographic area of the state comprised of Cherokee, Clayton, Cobb, Coweta, Dekalb, Douglas, Fayette, Forsyth, Fulton, Gwinnett, Henry, Paulding, and Rockdale Counties (RSG 391-3-.02(2)(bbb) [Added September 1997].
- Capacity Factor the ratio of the average load on a machine or equipment for the period of time considered, to the design capacity rating of the machine or equipment (RSG 391-3-1-.01).
- Capture System the equipment (including hoods, ducts, fans, etc.) used to contain, capture, or transport a pollutant to an air-cleaning device (RSG 391-3-1-.01).
- Cartridge Filter perforated canisters containing filtration paper and activated carbon that are used in the pressurized system to remove solid particles and fugitive dyes from soil-laden solvents (RSG 391-3-1-.02(2)(qq)(6)).
- Coating Applicator an apparatus used to apply a surface coating (RSG 391-3-1-.01).
- *Coating Line* one or more apparatus or operations that include a coating applicator, flash-off area, and oven wherein a surface coating is applied, dried, or cured (RSG 391-3-1-.01).
- *Cold Cleaning* the batch process of cleaning and removing soils from metal surfaces by spraying, brushing, flushing, or immersion while maintaining the solvent below its boiling point. Wipe cleaning is not included in this definition (RSG 391-3-1-.02(2)(ff)(4)).
- Conditions Beyond The Control Of only those conditions which, though ordinary diligence be employed, remain unforeseeable or unpredictable, such as strikes, walkouts, or other industrial disturbances, acts of God,

civil disturbances, embargoes, or other causes of like character provided, however, that this term shall not include conditions solely because they depend on contingencies, that is, conditions such as, but not limited to, the variable cost or availability of maintenance, equipment, labor, raw materials, fuel, or energy (RSG 391-3-1-.01).

- *Construction* any fabrication, erection, or installation. The term "construction" includes any modification (as defined) (RSG 391-3-1-.01).
- Conveyorized Degreasing the continuous process of cleaning and removing soils from metal surfaces by operating with either cold or vaporized solvents (RSG 391-3-1-.02(2)(ff)(4)).
- *Cutback Asphalt* asphalt cement that has been liquefied by blending with petroleum solvents (diluents). Upon exposure to atmospheric conditions the diluents evaporate, leaving the asphalt cement to perform its function (RSG 391-3-1-.02(2)(dd)(2)).
- Day a 24-h period beginning at midnight or such other 24-h period as agreed by the Director (RSG 391-3-1-.01).
- Department the Department of Natural Resources of the State of Georgia (RSG 391-3-1-.01).
- *Director* the Director of the Division of Environmental Protection, Department of Natural Resources of the State of Georgia, or his designee (RSG 391-3-1-.01).
- *Division* the Environmental Protection Division of the Department of Natural Resources, State of Georgia (RSG 391-3-1-.01).
- *Dust* minute solid particles caused to be suspended in air by natural forces or by mechanical processes such as, but not limited to, crushing, grinding, milling, drilling, demolishing, shoveling, conveying, covering, bagging, mixing, sweeping, digging, scooping, and grading (RSG 391-3-1-.01).
- *Emission* or *Emitting* any discharging, giving off, sending forth, placing, dispensing, scattering, issuing, circulating, releasing, or any other emanation of any air contaminant or contaminants into the atmosphere (RSG 391-3-1-.01).
- Emission Limitation and Emission Standard an established requirement that limits the quantity, rate, or concentration of emissions of air contaminants on a continuous basis including any requirement relating to the equipment or operation or maintenance of a source to assure continuous emission reduction (RSG 391-3-1-.01).
- Emission Inspection all tests and inspections required to determine that a vehicle is not producing excessive emissions, including an exhaust emission test, evaporative emission test, a tampering inspection, checks of onboard diagnostic information, compliance with emission recalls, and other tests required by these rules (RSG 391-3-20-.01).
- *Ethanol Blend* gasoline which contains at least 9 percent and no more than 10 percent (by volume) ethanol, excluding denaturants (RSG 391-3-.02(2)(bbb) [Added September 1997].
- Excessive Emissions emissions of an air pollutant in excess of an emission standard (RSG 391-3-1-.01).
- Exhaust Emissions Test the determination of the amount of specified gases in a vehicle's exhaust, using the procedures specified in Rule 391-3-20-.04 (RSG 391-3-20-.01).
- Flashoff Area the space between the application area and the oven (RSG 391-3-1-.01).
- Flexographic Printing the application of words, designs, and pictures to a substrate by means of a roll printing

technique in which the pattern to be applied is raised above the printing roll and the image carrier is made of rubber or other elastomeric materials (RSG 391-3-1-.02(2)(mm)(3)).

- Fly Ash particulate matter capable of being gasborne or airborne and consisting essentially of fused ash or other burned or unburned materials resulting from a process of combustion of fuel or solid waste (RSG 391-3-1-.01).
- Fossil Fuel-Fired Steam Generator a furnace or boiler used in the process of burning a fossil fuel for the primary purpose of producing steam by heat transfer (RSG 391-3-1-.01).
- Freeboard Height the distance from the top of the vapor zone to the top of the degreaser tank (RSG 391-3-1-.02(2)(ff)(4)).
- Freeboard Ratio the freeboard height divided by the width (smallest dimension) of the degreaser (RSG 391-3-1-.02(2)(ff)(4)).
- Fuel-Burning Equipment equipment the primary purpose of which is the production of thermal energy from the combustion of any fuel. Such equipment is generally that used for, but not limited to, heating water, generating or super heating steam, heating air as in warm air furnaces, furnishing process heat indirectly through transfer by fluids or transmissions through process vessel walls (RSG 391-3-1-.01).
- Fugitive Dust solid airborne particulate matter emitted from any source other than through a stack, vent, or chimney (RSG 391-3-1-.01).
- *Gasoline* any fuel sold for use in spark ignition engines and which is commonly or commercially known or sold as gasoline, including oxygenated gasoline (RSG 391-3-.02(2)(bbb) [Added September 1997].
- *General Permit* a Permit by Rule or a Generic Permit established in or under the Georgia Rules for Air Quality Control covering numerous similar sources (RSG 391-3-1-.01).
- Generic Permit a general permit issued by the Director covering numerous similar sources (RSG 391-3-1-.01).
- *Gray Market Vehicle* a vehicle which was not certified to meet U.S. emission standards, but which was imported into the United States under a waiver of the emission requirements (RSG 391-3-10-.01) [Added September 1997].
- Hot Rod a vehicle in which the original engine has been replaced with an engine from another manufacturer, or with a different type of engine from the same manufacturer which was never installed in that model vehicle. For the purposes of this definition, a different type of engine will include engines with a different number of cylinders from any engine which was originally installed in that make of vehicle. It will not include engines of the same family, e.g., Chevrolet V8s of 283, 305, 327, 350, and 400 cubic inch displacement, nor will it include engines different from the original, but which were also installed in that make of vehicle, e.g., gasoline for diesel engine swaps in General Motors or Volkswagen vehicles, or V8 for V6 swaps where both engines were installed in that model vehicle by the manufacturer for retail sale (RSG 391-3-10-.01).
- Hydrocarbon any organic compound consisting predominantly of carbon and hydrogen (RSG 391-3-1-.01).
- *Incinerators* all devices intended or used for the reduction or destruction of solid, liquid, or gaseous waste by burning (RSG 391-3-1-.01).
- Intermediate Vapor Control System a vapor control system that employs an intermediate vapor holder to accumulate vapors displaced from tanks during filling. The control device treats the accumulated vapors only during automatically controlled cycles (RSG 391-3-1-.01).

- *Kit Car* a motor vehicle which does not utilize a chassis from a vehicle certified to meet emission control standards or for which the original manufacturer's identification has been eliminated due to the replacement of the vehicle's body with one of a different make and/or style (RSG 391-3-10-.01) [Added September 1997].
- Large Petroleum Dry Cleaner any facility engaged in the process of the cleaning of textile and fabric products in which articles are washed in a nonaqua solution (solvent), then dried by exposure to a heated air stream and which consumes 25 tons or more of a petroleum solvent annually (RSG 391-3-1-.02(2)(qq)(6)).
- Light Duty Truck any motor vehicle with a gross vehicle weight rating of 8500 lb or less which is: (RSG 391-3-20-.01)
  - 1. designed primarily for the transportation of property, or is a derivation of such a vehicle
  - 2. designed primarily for the transportation of persons, and has a capacity of 10 persons or more
  - 3. available with special features enabling off-road operation. Pickups and vans are included in this class of vehicle.
- Light Duty Vehicle a passenger car or passenger car derivative capable of seating 10 passengers or less (RSG 391-3-20-.01).
- Loading Rack any aggregation or combination of gasoline loading equipment arranged so that all loading outlets in the combination can be connected to a tank truck or trailer parked in a specified loading space (RSG 391-3-1-.01).
- *Malfunction* mechanical and/or electrical failure of a process, or of air pollution control process or equipment, resulting in operation in an abnormal or unusual manner (RSG 391-3-1-.01).
- *Model Year* the model year of a vehicle as designated by the vehicle manufacturer (RSG 391-3-20-.01) [Added September 1997].
- *Modification* any change in or alteration of fuels, processes, operation, or equipment (including any chemical changes in processes or fuels) which affects the amount or character of any air pollutant emitted or that results in the emission of any air pollutant not previously emitted. [No source shall, by reason of a change that decreases emissions, become subject to the New Source Performance Standards 42 USC Sec. 7411, unless required by the Federal Act. This definition does not apply where the word "modification" is used to refer to action by the Director, Division, or Board, in modifying or changing rules, regulations, orders, or permits. In that context, the word has its ordinary meaning.] The following operations are not considered modifications under this definition: (RSG 391-3-1-.01)
  - 1. routine maintenance, repair, and replacement
  - 2. an increase in production rate (not to exceed maximum production rate stated in a pertinent application), if that increase can be accomplished without a capital expenditure, unless that increase is prohibited by a permit condition
  - 3. an increase in the hours of operation unless that increase is prohibited by a permit condition
  - 4. the use of an alternative fuel or raw material that the source is designed to accommodate. A source shall be considered to be designed to accommodate an alternative fuel or raw material if that use could be accomplished under the facility's construction specifications prior to the change and that use is allowed under a current air quality permit.
- Multiple Chamber Incinerator any article, machine, equipment, or contrivance used for the reduction or destruction of solid, liquid, or gaseous waste by burning; consists of a series of three or more combustion chambers physically separated by refractory walls, interconnected by gas passages or ducts, and lined with refractories having a pyrometric cone equivalent of at least 31, tested according to American Society for Testing and Materials Method C-24 and designed for efficient combustion of the type and volume of material to be burned (RSG 391-3-1-.01).
- Multiple-Effective Evaporator System the multiple-effect evaporators and associated condenser(s) and

hotwell(s) used to concentrate the spent cooking liquid that is separate from the pulp (black liquor) (RSG 391-3-1-.01).

- *Older Vehicles* vehicles with a designated model year which is more than (5) five years older than the current test year (RSG 391-3-10-.01) [Added September 1997].
- Opacity the degree to which emissions reduce the transmission of light and obscure the view of an object in the background; expressed in terms of percent opacity. As used in these Regulations, the measurement of percent opacity does not include the measurement of the obscuration of view due to uncombined water droplets. Any determination of the percent opacity shall be made by the arithmetic average of 6 min of data. With respect to the determination of percent opacity, the 6-min average shall be based on either an average of 24 or more opacity data points equally spaced over a 6-min period or an integrated average of continuous opacity data over a 6-min period. The 6-min period for continuous opacity monitors shall be considered to be any one of ten equal parts of a 1-h period commencing on the hour. Any visual observation or determination of opacity taken for the purpose of determining compliance with any requirement of this Chapter 391-3-1 shall be made by personnel certified according to procedures established for such certification by the Division or by EPA to make such observation or determination (RSG 391-3-1-.01).
- *Open Burning* any outdoor fire from which the products of combustion are emitted directly into the open air without passing through a stack, chimney, or duct (RSG 391-3-1-.01).
- Open Top Vapor Degreasing the batch process of cleaning and removing soils from metal surfaces by condensing hot solvent vapor on the colder metal parts (RSG 391-3-1-.02(2)(ff)(4)).
- *Organic Material* a chemical compound of carbon excluding CO, CO<sub>2</sub>, carbonic acid, metallic carbides or carbonates, and ammonium carbonate (RSG 391-3-1-.01).
- *Oven* a chamber within which heat is used to bake, cure, polymerize, or dry a surface coating (RSG 391-3-1-.01).
- Oxygenated Gasoline gasoline which contains a measurable amount of oxygenate (RSG 391-3-.02(2)(bbb) [Added September 1997].
- Packaging Rotogravure Printing rotogravure printing upon paper, paperboard, metal foil, plastic film, and other substrates, which are, in subsequent operations, formed into packaging products and labels for articles to be sold (RSG 391-3-1-.02(2)(mm)(3)).
- *Part 70 Permit* a Title V operating permit issued by the Director under 391-3-1-.03(10) for a facility subject to 40 CFR 70 requirements (RSG 391-3-1-.01).
- *Particulate Matter* any airborne, finely divided solid or liquid material with an aerodynamic diameter smaller than 100 micrometers (RSG 391-3-1-.01).
- Particulate Matter Emissions all finely divided solid or liquid material, other than uncombined water, emitted to the ambient air as measured by applicable reference methods, or an equivalent or alternate method, established by the USEPA. Whenever the term "Particulate Emissions" is used in these rules, it shall have the same meaning as "Particulate Matter Emissions" (RSG 391-3-1-.01) [Revised August 2000].
- *Permit by Rule* a general permit established in the Georgia Rules for Air Quality Control [391-3-1-.03(11)] covering numerous similar sources (RSG 391-3-1-.01).
- *Person* includes any individual, corporation, partnership, association, state, municipality, political subdivision of a state, and any agency, department, or instrumentality of the United States, or any other entity, and includes any officer, agent, or employee of any of the above (RSG 391-3-1-.01).

- $PM_{10}$  particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers as measured by a reference method based on Appendix J of 40 CFR 50 and designated in accordance with 40 CFR 53 or by an equivalent method designated by the USEPA (RSG 391-3-1-.01).
- *PM*<sub>10</sub> *Emissions* finely divided solid or liquid material, with an aerodynamic diameter less than or equal to a nominal 10 micrometers emitted to the ambient air as measured by applicable reference methods, or an equivalent or alternate method, established by the USEPA (RSG 391-3-1-.01).
- Potential to Emit the maximum capacity of a stationary source to emit any regulated air pollutant under it physical and operational design. Any physical and operational limitation on the capacity of the source to emit a regulated air pollutant, including air pollution control equipment and restrictions on hours of operation or on the type or amount of material combusted, stored, or processed, shall be treated as part of its design if the limitation or the effect it would have on emissions is legally and practically enforceable. Secondary emissions do not count in determining the potential to emit of a stationary source (RSG 391-3-1-.01)[Revised September 1997].
- *Prime Coat* the first film of coating applied in a multicoat operation (RSG 391-3-1-.01).
- Procedures for Testing and Monitoring Sources of Air Pollutants or PTM the Georgia Department of Natural Resources Procedures for Testing and Monitoring Sources of Air Pollutants dated 2 January 1998 (RSG 391-3-1-.01) [Added July 1999].
- *Process Equipment* any equipment, device, or contrivance for changing, melting, storing, handling, or altering chemically or physically any material, the use or existence of which may cause any discharge of air contaminants into the open air, but excluding that equipment defined herein as "Fuel-burning Equipment."
- Process Input Weight Rate a rate established as follows: (RSG 391-3-1-.01)
  - 1. For continuous or long-run, steady-state source operations, the total process weight for the entire period of continuous operation or for a typical portion thereof, divided by the number of hours of such period.
  - 2. For cyclical or batch source operations, the total process weight for a period that covers a complete operation or an integral number of cycles, divided by the hours of actual process operation during such a period.
  - 3. Where the nature of any process or operation or the design of any equipment is such as to permit more than one interpretation of this definition, the interpretation that results in the minimum value for allowable emission shall apply. When recycled material is handled by the process equipment, it shall be included in the total process weight. Moisture shall not be considered as a part of process weight.
- *Publication Rotogravure Printing* rotogravure printing upon paper which is subsequently formed into books, magazines, catalogues, brochures, directories, newspaper supplements, and other types of printed materials (RSG 391-3-1-.02(2)(mm)(3)).
- *Recovery Furnace* either a straight kraft recovery furnace or a cross recovery furnace, and includes the direct-contact evaporator for a direct-contact furnace (RSG 391-3-1-.01).
- Reid Vapor Pressure the absolute vapor pressure of volatile crude oil and volatile nonviscous petroleum liquids except liquefied petroleum gases as determined by ASTM, Part 17, 1973, D-323-82 (Reapproved 1987) (RSG 391-3-1-.01).
- Retailer a person operating an establishment at which motor fuel is sold or offered for sale to an ultimate consumer (RSG 391-3-.02(2)(bbb) [Added September 1997].
- *Roll Printing* the application of words, designs, and pictures to a substrate usually by means of a series of hard rubber or steel rolls each with only partial coverage (RSG 391-3-1-.02(2)(mm)(3)).

- *Rotogravure Printing* the application of words, designs, and pictures to a substrate by means of a roll printing technique that involves intaglio or recessed image areas in the form of cells (RSG 391-3-1-.02(2)(mm)(3)).
- Shutdown the cessation of the operation of a source or facility for any purpose (RSG 391-3-1-.01).
- Smelt Dissolving Tank a vessel used for dissolving the smelt collected from the recovery furnace (RSG 391-3-1-.01).
- *Smoke* small gasborne particles resulting from incomplete combustion, consisting predominantly of carbon, ash, and other combustible materials, that form a visible plume (RSG 391-3-1-.01).
- Solvent organic materials that are liquid at standard conditions and that are used as dissolvers, viscosity reducers, or cleaning agents (RSG 391-3-1-.01).
- Solvent Metal Cleaning the process of cleaning soils from metal surfaces by cold cleaning or open top vapor degreasing or conveyorized degreasing (RSG 391-3-1-.02(2)(ff)(4)).
- Solvent Recovery Dryer a class of dry cleaning dryers that employs a condenser to liquefy and recover solvent vapors evaporated in a closed loop recirculating stream of heated air (RSG 391-3-1-.02(2)(qq)(6)).
- Soot agglomerated particles consisting mainly of carbonaceous material (RSG 391-3-1-.01).
- Source or Facility any property, source, facility, building, structure, location, or installation at, from, or by reason of which emissions or air contaminants are or may reasonably be expected to be emitted into the atmosphere. Such terms included both real and personal property, stationary and mobile sources or facilities, and direct and indirect sources or facilities, without regard to ownership, and both public or private property. An "indirect" source or facility is a source or facility that attracts or tends to attract activity that results in emissions of any air pollutant for which there is an ambient air standard (RSG 391-3-1-.01).
- *Special Circumstances* only such circumstances as are caused by special physical conditions or causes and are unique or peculiar to a pollution source (RSG 391-3-1-.01).
- Special Physical Conditions or Causes only those physical conditions or causes that are intrinsically related to the process, giving rise to a pollutant, the equipment used in such process, or the structure housing such equipment, and such term shall in no case include external conditions such as (1) the ambient air quality in the locale, area, or region of the pollution source, or (2) the cost or availability of raw materials, including fuel or energy, used in the process.
- Stack any point in a source designed to emit solids, liquids, or gasses into the air, including a pipe or duct but not including flares (RSG 391-3-1-.01).
- Standard Conditions a temperature of 20 °C (68 °F) and pressure of 760 mm Hg (29.92 in. Hg) (RSG 391-3-1-.01).
- Startup the commencement of operation of any source (RSG 391-3-1-.01).
- *Stationary Source* any source or facility emitting, either directly or indirectly, from a fixed location (RSG 391-3-1-.01).
- Synthetic Minor Permit a permit issued to a facility that imposes Federally enforceable limits to restrict potential emissions to below major source thresholds (RSG 391-3-1-.01).
- Test Cycle the test year in which an inspection is due and any subsequent years for which the inspection can be used for registration. For regular inspections, this will be the test year and the following year. For off-year

- inspections, this will be either the test year or the test year and the two following years, as provided for by Chapter 391-3-20-.12(5) (RSG 391-3-10-.01) [Added September 1997].
- *Test Year* a period running from the conclusion of one vehicle registration season to the conclusion of the next year's registration season, except that the 1997 test year shall run from 1 October 1996 to 30 September 1997. The 1998 test year shall run from 1 October 1997 to 31 December 1998. All subsequent test years shall be concurrent with the calendar year (RSG 391-3-10-.01) [Added September 1997].
- Topcoat the final film of coating applied in a multiple coat operation (RSG 391-3-1-.01).
- *Total Suspended Particulates* particulate matter as measured by the method described in Appendix B of 40 CFR 50 (RSG 391-3-1-.01).
- *True Vapor Pressure* the equilibrium partial pressure exerted by a petroleum liquid as determined in accordance with methods described in American Petroleum Institute Bulletin 2597, "Evaporation Loss from Floating Roof Tanks," 1962 (RSG 391-3-1-.01).
- *Ultimate Consumer* a person who purchases or obtains motor fuel for direct consumption in a motor vehicle and who does not transfer or offer to transfer the motor fuel to any other person following purchase or receipt (RSG 391-3-.02(2)(bbb) [Added September 1997].
- *Vapor* the gaseous form of a substance (RSG 391-3-1-.01).
- *Vapor Collection System* a vapor transport system that uses direct displacement by the liquid loaded to force vapors from the tank into a vapor control system (RSG 391-3-1-.01).
- *Vapor Control System* a system that prevents release to the atmosphere of at least 90 percent by weight of organic compounds in the vapors displaced from a tank during the transfer of gasoline (RSG 391-3-1-.01).
- Vehicle a motor vehicle (RSG 391-3-10-.01) [Added September 1997].
- Visible Emissions any emission that is capable of being perceived visually (RSG 391-3-1-.01).
- Volatile Organic Compound (VOC) any organic compound which participates in atmospheric photochemical reactions; that is, any organic compound other than those which the Administrator of the U.S. Environmental Protection Agency designates as having negligible photochemical reactivity, including carbon monoxide, carbon dioxide, carbonic acid, metallic carbides or carbonates, ammonium carbonate, methane, ethane, 1,1,1trichloroethane (methyl chloroform), methylene chloride, trichlorofluoromethane dichlorodifluoromethane (CFC-12), chlorodifluoromethane (CFC-22), trifluoromethane (FC-23),trichlorotrifluoroethane (CFC-113) dichlorotetrafluoroethane (CFC-114), chloropentafluoroethane (CFC-115), dichlorotrifluoroethane (HCFC-123), 2-chloro-1,1,1,2-tetrafluoroethane (HCFC-124), pentafluoroethane (HFC-125), 1,1,2,2-tetrafluoroethane (HFC-134), tetrafluoroethane (HFC-134a), dichlorofluoroethane (HCFC-141b), chlorodifluoroethane (HCFC-142b), 1,1,1-trifluoroethane (HFC-143a), 1,1-difluoroethane (HFC-152a), parachlorobenzotrifluoride (PCBTF), cyclic, branched, or linear completely methylated siloxanes, acetone, perchloroethylene (tetrachloroethylene), 3,3-dichloro-1,1,1,2,2-pentafluoropropane (HCFC-225ca); dichloro-1,1,2,2,3-pentafluoropropane (HCFC-225cb); 1,1,1,2,3,4,4,5,5,5-decafluoropentane (HFC-43-10mee), difluoromethane (HFC-32), ethylfluoride (HFC-161), 1,1,1,3,3,3-hexafluoropropane (HFC-236fa), 1,1,2,2,3pentafluoropropane (HFC-245ca), 1,1,2,3,3-pentafluoropropane (HFC-245ea), 1,1,1,2,3-pentafluoropropane (HFC-245eb), 1,1,1,3,3-pentafluoropropane (HFC-245fa), 1,1,1,2,3,3-hexafluoropropane (HFC-236ea); 1,1,1,3,3-pentafluorobutane (HFC-365mfc), chlorofluoromethane (HCFC-31); 1-chloro-1-fluoroethane (HCFC-1,2-dichloro-1,1,2-trifluoroethane 1,1,1,2,2,3,3,4,4-nonafluoro-4-methoxy-butane (HCFA-123a), (C(4)F(9)OCH(3)), 2-(difluoromethoxymethyl)- 1,1,1,2,3,3,3-heptafluoropropane ((CF(3))(2)CFCF(2)OCH(3)), 1-ethoxy-1,1,2,2,3,3,4,4,4-nonafluorobutane (C(4)F(9))C(2)H(5), 2-(ethoxydifluoromethyl)-1,1,1,2,3,3,3heptafluoropropane ((CF(3))(2)CFCF(2)OC(2)H(5)), and four classes of perfluorocarbons (PFC's) as follows:

(RSG 391-3-1-.01) [Revised September 1997; Revised September 1998; Revised August 2000]:

- 1. Cyclic, branched, or linear, completely fluorinated alkanes
- 2. Cyclic, branched, or linear, completed fluorinated ethers, with no unsaturations
- 3. Cyclic, branched, or linear, completely fluorinated tertiaryamines with no unsaturations
- 4. Sulphur containing perfluorocarbons with no unsaturations and with sulfur bonds only to carbon and fluorine
- 5. VOC may be measured by the referenced method, an equivalent method, an alternate method, or by procedures specified under 40 CFR 60. A referenced method, an equivalent method, or an alternate method, however, may also measure nonreactive organic compounds. In such cases, an owner or operator may exclude the nonreactive organic compound when determining compliance with a standard.
- Wholesale Purchaser-Consumer any organization that is an ultimate consumer of gasoline and which purchases or obtains gasoline from a supplier for use in motor vehicles and receives delivery of that product into a storage tank under the control of that organization (RSG 391-3-.02(2)(bbb) [Added September 1997].

## AIR EMISSIONS MANAGEMENT GUIDANCE FOR GEORGIA CHECKLIST USERS

|  | REFER TO CHECKLIST ITEMS:         |
|--|-----------------------------------|
| Missing Checklist Items                              | AE.2.1.GA.                        |
| General  | AE.5.1.GA.                        |
| Permits/Notifications/Exemptions                     | AE.6.1.GA.                        |
| Emissions Limits                                     | AE.9.1.GA.                        |
| Steam Generators                                     | AE.10.1.GA.                       |
|  | AE.15.1.GA. and AE.15.2.GA.       |
| Fuel Burning Equipment                               |                                   |
| Miscellaneous Incinerators                           | AE.25.1.GA. through AE.25.3.GA.   |
| Medical Waste Incinerators                           | 1E 20 1 G1                        |
| General  | AE.30.1.GA. and AE.30.2.GA.       |
| Printing Presses and Graphic Arts                    | AE.60.1.GA.                       |
| Fugitive Emissions                                   | AE.65.1.GA.                       |
| Ory Cleaning Operations                              |                                   |
| Petroleum Solvent                                    | AE.70.1.GA.                       |
| Acid Production Units                                | AE.80.1.GA. and AE.80.2.GA.       |
| Coating Operations                                   | AE.100.1.GA. through AE.100.5.GA. |
| Degreasing Operations                                |                                   |
| General  | AE.115.1.GA. through AE.115.3.GA. |
| Open Burning   | AE.130.1.GA. and AE.130.2.GA.     |
| Vehicle Emissions                                    | AE.135.1.GA.                      |
| Asphalt Paving Materials/Operations                  | AE.145.1.GA.                      |
| County/City Specific Requirements                    |                                   |
| Nitrogen Oxide Emissions from Maj                    | or AE.160.1.GA.                   |
| Sources  |                                   |
| VOC Emissions  | AE.160.2.GA.                      |
| Gasoline Marketing-Reid Vapor Pressure               | AE.160.3.GA.                      |
| NO <sub>x</sub> Emissions from Electric Utility Stea |                                   |
| Generating Units                                     |                                   |

| GUIDANCE FOR APPENDIX USERS |   |  |
|-----------------------------|---|--|
| REFER TO APPENDIX NUMBERS:  | REFER TO APPENDIX TITLES:                               |  |
| 1-1                         | Federal Regulations Adopted by Reference                |  |
| 1-2                         | Sources and Activities Exempted from Permit             |  |
|                             | Requirements  |  |
| 1-3                         | Emission Standards for Fuel Burning Equipment, Nitrogen |  |
|                             | Oxides, and Sulfur Dioxide                              |  |
| 1-4                         | Applicability of 40 CFR 60, Subpart Ec to Existing      |  |
|                             | Hospital/Medical/Infectious Waste Incinerators          |  |
|                             |   |  |

| 5.00 S. P.  |  |  |
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| REGULATORY<br>REQUIREMENTS:   | REVIEWER CHECKS: August 2000   |  |
| AE.2.<br>MISSING CHECKLIST<br>ITEMS   |  |  |
| <b>AE.2.1.GA.</b> Federal facilities are required to comply with all applicable state regulatory requirements not contained in this checklist (a finding under this checklist item will have the citation of the applied regulation as a basis of finding). | Determine whether any new regulations have been issued since the finalization of the manual.  Determine whether the Federal facility has activities or facilities that are regulated but not addressed in the checklists.  Verify that the Federal facility is in compliance with all applicable and newly issued regulations. |  |

| Georgia Supplement  |   |  |
|---|---|--|
| REGULATORY<br>REQUIREMENTS:   | REVIEWER CHECKS:<br>August 2000 [Reorganized October 1999]  |  |
| AE.5.<br>GENERAL  |   |  |
| <b>AE.5.1.GA.</b> All reasonable precautions must be taken to prevent the emission of air contaminants (RSG 391-3-102(2)(a)(1) and (b)(1) and (10)) [Moved in structural reorganization of AE.5 | Verify that the Federal facility does not willfully, negligently, or through failure to provide necessary equipment or facilities cause, permit, or allow the emission of such quantities of air contaminants as will cause injurious conditions or which interferes with the enjoyment of life or use of property.  Verify that no air contaminant is caused, allowed, or permitted to exceed an opacity of equal to or greater than 40 percent. |  |
| October 1999].  | Verify that at all times, including periods of startup, shutdown, and malfunction, any person owning, leasing, or controlling the operation of a stationary source is to maintain and operate such source, including associated air pollution control equipment, in a manner consistent with good air pollution control practice for minimizing emissions.  |  |
|   | (NOTE: Determination of whether acceptable operating and maintenance procedures are being used will be based on any information available to the Division which may include, but is not limited to, monitoring results, observations of the opacity or other characteristic of emissions, review of operating and maintenance procedures or records, and inspection or surveillance of the source.)   |  |

| Georgia Supplement   |  |  |
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| REGULATORY   | REVIEWER CHECKS:   |  |
| REQUIREMENTS:  | August 2000 [Reorganized October 1999]   |  |
| AE.6. PERMITS/ NOTIFICATIONS/ EXEMPTIONS   |  |  |
| AE.6.1.GA. A permit is required to operate, construct, or modify any facility that may result in air pollution (RSG 391-3-103(1)(a), (2)(a), and (6)) [Moved in structural reorganization of AE.5 October 1999]. | Verify that the construction or modification of any facilities that may result in air pollution is performed in accordance with a valid Construction Permit.  Verify that an Operating (SIP) Permit has been obtained for the operation of any facility or the performing of any activity, that is not exempted (listed in Appendix 1-2), from which air contaminants are or may be emitted. |  |

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| REGULATORY   | REVIEWER CHECKS:  |  |
| <b>REQUIREMENTS:</b>   | August 2000 [Reorganized October 1999]  |  |
| AE.9.<br>EMISSIONS LIMITS  |   |  |
| AE.9.1.GA. Emissions must not be created that would cause ambient air concentrations of specific compounds to be exceeded (RSG 391-3-102(4)(a) through (g)) [Moved in structural reorganization of AE.5 October 1999]. | Verify that the concentration of SO2 does not exceed the following:  - at ground level for any 3-h period, 1300 micrograms/m³ more than once per year  - at ground level for any 24-h period, 365 micrograms/m³ more than once per year  - the annual arithmetic mean concentration of 80 micrograms/m³.  Verify that concentrations of PM <sub>10</sub> do not exceed the following limits:  - for any 24-h period, 150 micrograms/m³ for more than one 24-h period/yr  - the annual arithmetic mean concentration of 50 micrograms/m³.  Verify that concentrations of CO do not exceed the following limits:  - at ground level, 40 mg/m³ for a 1 h average  - at ground level, 10 mg/m³ for an 8 h average.  Verify that the concentration of ozone does not exceed 0.12 ppm (235 micrograms/m3).  Verify that the concentration of lead at ground level does not exceed 1.5 micrograms/ m3 averaged over a calendar quarter.  Verify that the annual arithmetic mean concentration of nitrogen dioxide at ground level does not exceed 100 micrograms/m3. |  |

| COMPLIANCE CATEGORY: AIR EMISSIONS MANAGEMENT Georgia Supplement  |   |  |
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| REGULATORY<br>REQUIREMENTS:   | REVIEWER CHECKS: August 2000  |  |
| AE.10.<br>STEAM GENERATORS  |   |  |
| <b>AE.10.1.GA.</b> Emissions control requirements must be met for fossil fuel-fired steam generators (RSG 391-3-102(6)(a)(2)(i), (iv), and (vi)). | (NOTE: This requirement does not apply to steam generators that are subject to any Standards of Performance for New Stationary Sources promulgated in 40 CFR 60 or National Emission Standards for Hazardous Air Pollutants promulgated in 40 CFR 61, or to any steam generators that are not subject to an applicable emission standard.)  |  |
|   | Verify that the operator of any fossil fuel-fired steam generator with an annual average capacity factor of greater than 30 percent, as reported to the Federal Power Commission for calendar year 1974, or as otherwise demonstrated to the Director by the operator, installs, calibrates, operates, and maintains all monitoring equipment necessary for the continuous monitoring of the following:   |  |
|   | <ul> <li>opacity, if such steam generator has a heat input greater than 250 MBtu/h, except where gaseous fuel is the only fuel burned, or oil or a mixture of gas and oil are the only fuels burned and the source is able to comply with the applicable particulate matter and opacity regulations, and the source has never been found in violation of any visible emission standard</li> <li>SO<sub>2</sub>, if the steam generator has a heat input greater than 250 MBtu/h and has installed SO<sub>2</sub> emission control equipment</li> <li>percent oxygen, or CO<sub>2</sub>, in the flue gas as necessary to accurately convert SO<sub>2</sub> continuous emission monitoring data to the units of the emission standard.</li> </ul> |  |
|   | Verify that the operator of a fossil fuel-fired steam generator submits a written report for each calendar quarter and, if excess emissions have occurred, the report states the nature and cause of the excess emissions, if known, and the corrective action taken.   |  |

|  | Georgia Supplement   |
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| REGULATORY   | REVIEWER CHECKS:   |
| REQUIREMENTS:  | August 2000  |
| AE.15. FUEL BURNING EQUIPMENT  |  |
| <b>AE.15.1.GA.</b> Fuel-burning equipment must meet specific emission requirements (RSG 391-3-102(2)(d)).            | Verify that emissions of fly ash and/or particulate matter and NOx do not exceed the amounts calculated in Appendix 1-3.  Verify that emissions from any fuel-burning equipment constructed or extensively modified after 1 January 1972 do not exceed 20 percent except for one 6-min period/h of not more than 27 percent opacity.   |
| AE.15.2.GA. New fuel-burning sources must meet specific emission standards for SO2 (RSG 391-3-102(2)(g)(1) and (2)). | Verify that new fuel-burning sources capable of firing fossil fuel at a rate exceeding 250 MBtu/h heat input, constructed or modified after 1 January 1972 do not emit SO2 in excess of the following:  - 0.8 lb SO <sub>2</sub> /MBtu of heat input derived from liquid fossil fuel or derived from liquid fossil fuel and wood residue  - 1.2 lb SO <sub>2</sub> /MBtu of heat input derived from solid fossil fuel or derived from solid fossil fuel and wood residue  - when different fossil fuels are burned simultaneously in any combination, the standard of SO <sub>2</sub> emissions do not exceed the limits calculated from the formula listed in Appendix 1-3.  Verify that fuel-burning sources below 100 MBtu of heat input/h do not burn fuel containing more than 2.5 percent sulfur by weight.  Verify that fuel-burning sources having a heat input of 100 MBtu or greater do not burn fuel containing more than 3 percent sulfur by weight. |

| COMPLIANCE CATEGORY:     |
|--------------------------|
| AIR EMISSIONS MANAGEMENT |
| Georgia Supplement       |

|   | Georgia Supplement  |
|---|---|
| REGULATORY  | REVIEWER CHECKS:  |
| REQUIREMENTS:   | August 2000   |
| AE.25. MISCELLANEOUS INCINERATORS   | (NOTE: The provisions of this subsection do not apply to:  - any hazardous waste incinerator subject to Section 391-3-11 of the Georgia Rules for Hazardous Waste Management, 40 CFR 264, Subpart O, as adopted by reference, "Standards for Owners and Operators of Hazardous Waste Treatment, Storage and Disposal Facilities, as amended"  - any incinerator subject to Section 391-3-102(8)(b)71. of the Georgia Rules for Air Quality Control, "Standards of Performance for Municipal Waste Combustors for Which Construction is Commenced after September 20, 1994," as amended  - any incinerator subject to the Georgia State Plan, under section 111(d) of the Federal Act, for "Municipal Waste Combustors for which construction is commenced on or before September 20, 1994," as amended  - any incinerator subject to Section 391-3-102(8)(b)73. of the Georgia Rules for Air Quality Control "Standards of Performance for Hospital/Medical/Infectious Waste Incinerators for which construction is commenced after June 20, 1996," as amended  - any incinerator subject to Section 391-3-102(2)(iii) of the Georgia Rules for Air Quality Control "Hospital/Medical/Infectious Waste Incinerators for which construction is commenced on or before June 20, 1996," as amended (RSG 391-3-102(2)(c)(6)).). |
| AE.25.1.GA. Incinerators must meet specific emission requirements (RSG 391-3-102(2)(c)(1) through (3)) [Revised July 1999]. | <ul> <li>(NOTE: These requirements do not apply to conical burners; see AE.25.3.GA.)</li> <li>Verify that incinerators meet the following requirements: <ul> <li>no particles are emitted from an incinerator that are individually large enough to be visible to the unaided eye</li> <li>no emissions are equal to or greater than 20 percent opacity</li> <li>units with charging rates of 500 lb/h or less of combustible waste, including water, do not emit fly ash or particulate grams matter in excess of 1.0 lb/h</li> <li>units with charging rates in excess of 500 lb/h of combustible waste, including water, do not emit fly ash or particulate matter in excess of 0.20 lb of charge.</li> </ul> </li> <li>(NOTE: There is an allowable emission of greater than 20 percent opacity, but not in excess of 27 percent opacity, for a period of 6 min/h.)</li> </ul>  |
| AE.25.2.GA. Incinerators must meet specific design requirements (RSG 391-3-102(2)(c)(4)) [Revised July 1999].               | (NOTE: These requirements do not apply to conical burners; see AE.25.3.GA.)  Verify that an incinerator is not operated unless the following requirements are met:  - it is a multiple chamber incinerator - it is equipped with an auxiliary burner in the primary chamber for the   |

| <b>COMPLIANCE CATEGORY:</b> |
|-----------------------------|
| AIR EMISSIONS MANAGEMENT    |
| Georgia Supplement          |

| Georgia Supplement   |   |  |
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| REGULATORY<br>REQUIREMENTS:  | REVIEWER CHECKS: August 2000  |  |
| AE.25.3.GA. Incinerators must meet specific design requirements (RSG 391-3-102(2)(1)) [Added July 1999]. | purpose of creating a pre-ignition temperature of 800 °F  it has a secondary burner to control smoke and odors that maintains a temperature of at least 1500 °F.  Verify that no conical burners, under construction or modified after 1 January 1972, is allowed to operate unless the burner is equipped with combustion controls acceptable to the Division to minimize smoke emissions.  Verify that the flue gas exit temperature is monitored with a sensing and recording device acceptable to the Division that is maintained in good working order.  Verify that the recording charts are kept on file and made available to the Division upon request.  Verify that there are no visible emissions from any conical burning with opacity equal to or greater than 40 percent. |  |
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| COMPLIANCE CATEGORY:     |
|--------------------------|
| AIR EMISSIONS MANAGEMENT |
| Georgia Supplement       |

| Georgia Supplement  |  |
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| REGULATORY  | REVIEWER CHECKS:   |
| REQUIREMENTS:   | August 2000  |
| AE.30. MEDICAL WASTE INCINERATORS   |  |
| General   | (NOTE: The provisions of this subsection apply to each hospital/ medical/ infectious waste incinerator (HMIWI) that commenced construction, reconstruction, or modification on or before 20 June 1996 (referred to as an "Existing HMIWI"). Physical or operational changes made to an Existing HMIWI solely to comply with this subsection are not considered construction, reconstruction, or modification and would not subject an Existing HMIWI to the requirements of 391-3-102(8)(b)73 (i.e., 40 CFR 60, Subpart Ec, Standards of Performance for Hospital/Medical/Infectious Waste Incinerators; see sections AE.30 through AE.32 in the U.S. TEAM Guide for details.)   |
|   | <ul> <li>(NOTE: Any incinerator which is a co-fired combustor that continually complies with the following limits and requirements is not subject to any other provision of this subsection: <ul> <li>in any calendar quarter, the total amount of waste incinerated that meets the definition of "Hospital or Medical/Infectious Waste" does not exceed 10 percent of the total amount of waste burned during that same period</li> <li>a log is maintained for recording the weight of each charge of waste loaded into the incinerator, where each entry in the log indicates the weight of waste that is Hospital or Medical/Infectious waste and the weight of all other waste charged</li> <li>the log is summarized at the end of each quarter showing the total amount of each waste that has been incinerated during that period</li> <li>the owner/operator submits an initial certification to the Division stating that the incinerator will be operated in accordance with these limits and requirements.)</li> </ul> </li> </ul> |
| AE.30.1.GA. Existing Hospital/Medical/Infectious Waste Incinerators (HMIWIs) must submit initial notification reports (RSG 391-3-102(2)(iii)(2)) [Added July 1999]. | Verify that existing HMIWIs submit the initial notification report, on forms provided, to the Division by no later than 30 March 1999.   |
| AE.30.2.GA. Existing HWIMIs must meet the requirements of 40 CFR 60, Subpart Ec, as modified by state regulations (RSG 391-3-                                       | Verify that existing HMIWIs comply with all the requirements of 40 CFR 60, Subpart Ec, as modified in Appendix 1-4, including the requirements to conduct an initial performance test demonstrating compliance with the emissions limits and establishing operational parameters, on or before the date 1 year after Federal approval of the State HMIWI Plan, but no later than 15 March 2000.  |

| Georgia Supplement                 |   |
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| REGULATORY                         | REVIEWER CHECKS:  |
| REQUIREMENTS:                      | August 2000   |
| 102(2)(iii)(4)) [Added July 1999]. | approval of the State HMIWI Plan, but no later than 15 March 2000.  (NOTE: The requirements of 40 CFR 60, Subpart Ec, Standards of Performance for Hospital/Medical/Infectious Waste Incinerators, are covered in sections AE.30 through AE.32 in the U.S. TEAM Guide.) |

| Georgia Supprement   |  |
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| REGULATORY<br>REQUIREMENTS:  | REVIEWER CHECKS: August 2000   |
| AE.60. PRINTING PRESSES AND GRAPHIC ARTS   | (NOTE: These requirements do not apply to facilities with potential emissions of volatile organic compounds less than 25 tons per year. Compliance determinations for inks shall treat volatile compounds not defined as VOCs as water for the purposes of calculating the "percent by volume or more of water" and the "less water" parts of the ink composition.)  |
| AE.60.1.GA. Graphic arts system operation must meet specific requirements for VOC emissions (RSG 391-3-102(2)(mm)) [Revised September 1997]. | Verify that for the operation of packaging rotogravure and flexographic printing, the VOC content of any ink or coating as applied is equal to or less than one of the following:  - 25 percent by volume of the volatile content of the coating or ink - 40 percent by volume of the coating or ink, minus water - 0.5 lb VOC/lb coating solids.  Verify that for the operation of publication rotogravure printing, the VOC content of any ink or coating as applied is equal to or less than one of the following:  - 25 percent by volume of the volatile content of the coating or ink - 40 percent by volume of the coating or ink, minus water.  Verify that, as an alternative to compliance with the limits above, an owner/operator of a packaging rotogravure, publication rotogravure, or flexographic printing facility complies with the requirements by:  - averaging on a 24-hour weighted basis the VOC content of all inks and coatings, as applied, on a single printing line, where the average does not exceed the limits above (averaging across lines is not allowed) - installing and operating volatile organic compound emission reduction equipment having at least 90.0 percent reduction efficiency, and a capture system approved by the Director. |

| Georgia Supplement   |  |
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| REGULATORY   | REVIEWER CHECKS:   |
| <b>REQUIREMENTS:</b>   | August 2000  |
| AE.65.<br>FUGITIVE EMISSIONS   |  |
| <b>AE.65.1.GA.</b> All reasonable precautions must be taken to prevent fugitive dust (RSG 391-3-1-02(2)(n)). | Verify that all persons responsible for any operation, process, handling, transportation, or storage facility that may result in fugitive dust take all reasonable precautions to prevent dust from becoming airborne, including, but not limited to, the following:   |
|  | <ul> <li>use, where possible, of water or chemicals for control of dust in demolition, construction operations, the grading of roads, and land clearing operations</li> <li>application of asphalt, water, or suitable chemicals on dirt roads, materials, stockpiles, and other surfaces that can give rise to airborne dust</li> <li>use of hoods, fans, and fabric filters to enclose and vent the handling of dusty materials</li> <li>adequate containment methods are employed during sandblasting or similar operations</li> <li>covering, at all times when in motion, open bodied trucks, transporting materials likely to create airborne dust</li> <li>the prompt removal of earth or other material from paved streets onto which earth or other materials have been deposited.</li> <li>Verify that the opacity from fugitive dust sources does not exceed 20 percent.</li> </ul> |

| Georgia Supplement   |   |
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| REGULATORY<br>REQUIREMENTS:  | REVIEWER CHECKS: August 2000  |
| AE.70. DRY CLEANING OPERATIONS   |   |
| Petroleum Solvent  |   |
| <b>AE.70.1.GA.</b> Large petroleum dry cleaning facilities must meet specific design and operational requirements for VOC emissions (RSG 391-3-102(2) (qq)). | Verify that large dry cleaning facilities meet the following requirements:  - emissions of VOC do not exceed 3.5 lb per 100 lb dry weight of articles dry cleaned  - the VOC content of all filtration waste is reduced to 1 lb or less per 100 lb dry weight of articles cleaned before disposal and exposure to the atmosphere  - a cartridge filtration system is installed and operated  - filter cartridges are drained in the sealed housing for at least 8 h before their removal  - all equipment is inspected for leaks every 15 days  - all petroleum vapor and liquid leaks are repaired within 3 days of discovery  - inspection and repair records are maintained for a period of at least 2 yr. |

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| REGULATORY REQUIREMENTS:  | REVIEWER CHECKS: August 2000  |
| AE.80.<br>ACID PRODUCTION<br>UNITS  |   |
| AE.80.1.GA. Nitric acid plants must meet specific standards for emissions of NOx (RSG 391-3-102(2)(i)).                                       | Verify that nitric acid plants are not operated unless equipped with a continuous nitrogen oxide monitor and recorder, or an alternate system approved by the Director.   |
|   | Verify that for nitric acid plants constructed before 1 January 1972, nitrogen oxide emissions expressed as nitrogen dioxide do not exceed 25 lb/ton of 100 percent acid produced.  |
|   | Verify that new nitric acid plants do not exceed nitrogen oxide standards listed in 40 CFR 60, Subpart G.   |
| AE.80.2.GA. Sulfuric acid plants must meet specific standards for emissions of SO2 (RSG 391-3-102(2)(j) and 391-3-102(6)(a)(2)(ii) and (vi)). | Verify that sulfuric acid plants are not operated unless equipped with a continuous SO <sub>2</sub> monitoring system and recorder, or an alternate system approved by the Director.  |
|   | Verify that sulfuric acid plants constructed before 1 January 1972 do not emit $SO_2$ in excess of 27 lb and acid mist in excess of 0.15 lb/ton of 100 percent acid produced.   |
|   | Verify that new sulfuric acid plants do not exceed ${\rm SO}_2$ standards listed in 40 CFR 60, Subpart G.   |
|   | Verify that the operator of a sulfuric acid plant submits a written report for each calendar quarter and, if excess emissions have occurred, the report states the nature and cause of the excess emissions, if known, and the corrective action taken. |
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| COMPLIANCE CATEGORY:     |
|--------------------------|
| AIR EMISSIONS MANAGEMENT |
| Georgia Supplement       |

| Georgia Supplement   |  |
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| REGULATORY<br>REQUIREMENTS:  | REVIEWER CHECKS: August 2000   |
| AE.100. COATING OPERATIONS   | (NOTE: These regulations do not apply to coating operations located outside Clayton, Cobb, Coweta, DeKalb, Douglas, Fayette, Fulton, Gwinnett, Henry, Paulding, and Rockdale counties where the potential emissions of volatile organic compounds are not more than 100 tons/yr, or less than 15 lb/day and less than 3 lb/h.)  (NOTE: The emission limits in this section may be achieved through the use of low solvent content coating technology or through incineration, with a capture system approved by the Director that reduces emissions by 90 percent, or by control equipment that is demonstrated to have an equivalent control efficiency.)   |
| <b>AE.100.1.GA.</b> Specific recordkeeping requirements must be met for all coating operations (RSG 391-3-102(6)(a)(3)). | Verify that for all coating operations, the records containing the following information are maintained for at least 2 yr, for each production line:  - process information, including, but not limited to, hours of operation, method of application, and drying method - coating formulation and analytical data, including, but not limited to, the name of inks or coatings, coating or ink density, VOC content (weight or volume percent), and solids content (volume percent) - coating consumption data, including, but not limited to, name of ink or coating used, amount of ink or coating used, name of diluent and amount of diluent used - capture and control equipment data, including, but not limited to, the destruction and removal efficiency, emission test results, and the capture efficiency - transfer efficiency that, including, but not limited to, baseline transfer efficiency, actual transfer efficiency, and results of efficiency test. |
| <b>AE.100.2.GA.</b> Paper coating operations must meet specific VOC emission standards (RSG 391-3-102(2)(w)).            | Verify that the emission of VOC from paper coating operations do not exceed 2.9 lb/gal, excluding water, delivered to the coating applicator from a paper coating line.  |
| <b>AE.100.3.GA.</b> Metal furniture coating operations must meet specific VOC emission standards (RSG 391-3-102(2)(y)).  | Verify that the emission of VOCs from metal furniture coating operations do not exceed 3.0 lb/gal, excluding water, delivered to the coating applicator from prime and topcoat or single coat operations.  |

| AIR EMISSIONS MANAGEMENT<br>Georgia Supplement   |   |
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| REGULATORY<br>REQUIREMENTS:  | REVIEWER CHECKS: August 2000  |
| AE.100.4.GA. Surface coating operations of miscellaneous metal parts must meet specific VOC emission standards (RSG 391-3-1.02(2)(ii)).                    | (NOTE: The following are not included in the definition of miscellaneous metal parts: automobiles and light duty trucks, metal cans, flat metal sheets and strips in the form of roll or coils, magnet wire, metal furniture, large appliances, exterior of airplanes, automobile refinishing, exterior of marine vessels.)  Verify that emissions of VOCs from surface coating of miscellaneous metal parts do not exceed the following:  - 4.3 lb/gal of coating, excluding water, in the application of clear coatings - 3.5 lb/gal of coating, excluding water, in the application of air dried, or forced warm air dried coatings at temperatures up to 194 °F - 3.5 lb/gal of coating, excluding water, in the application of extreme performance coatings - 6.2 lb/gal, excluding water, in the application of high performance architectural coatings - 3.0 lb/gal, excluding water, in the application of all other coatings.  (NOTE: If more than one emission limitation applies to a coating operation, the least stringent emission limitation will apply.)  (NOTE: Solvent washings are considered in the above emission limitations, unless the solvent is directed into containers that prevent evaporation.) |
| AE.100.5.GA. Wood furniture finishing and cleaning coating operations must meet specific VOC emission standards (RSG 391-3-102(2)(hhh)) [Added July 1999]. | (NOTE: The requirements of this subparagraph apply to facilities with potential emissions of volatile organic emissions exceeding 25 tons per year, located in those counties of Cherokee, Clayton, Cobb, Coweta, DeKalb, Douglas, Fayette, Forsyth, Fulton, Gwinnett, Henry, Paulding, and Rockdale.)  Verify wood furniture finishing and cleaning operations limit VOC emissions from finishing operations by using topcoats that contain no more than 0.8 pounds of VOC per pound of solids, as applied, or by meeting one of the emissions limits listed below, as appropriate:  - all wood furniture finishing operations may comply by:  - using a finishing system of sealers that contain no more than 1.9 pounds of VOC per pound of solids, as applied, and - using topcoats that contain no more than 1.8 pounds of VOC per pound of solids, as applied - wood furniture finishing operations that use acid-cured alkyd amino vinyl sealers and that use acid-cured alkyd amino conversion varnish topcoats may comply by:  - using sealers that contain no more than 2.3 pounds of VOC per pound of solids, as applied, and - using topcoats that contain no more than 2.0 pounds of VOC per pound               |

# **COMPLIANCE CATEGORY:**

| AIR EMISSIONS MANAGEMENT Georgia Supplement |  |
|---|--|
| REGULATORY<br>REQUIREMENTS:                 | REVIEWER CHECKS: August 2000   |
|   | of solids, as applied  - vinyl sealers and that use acid-cured alkyd amino conversion varnish topcoats may comply by:  - wood furniture finishing operations that do not use acid-cured alkyd amino  - using sealers that contain no more than 1.9 pounds of VOC per pound of solids, as applied, and  - using topcoats that contain no more than 2.0 pounds of VOC per pound of solids, as applied  - wood furniture finishing operations that use acid-cured alkyd amino vinyl sealers and that do not use acid-cured alkyd amino conversion varnish topcoats may comply by:  - using sealers that contain no more than 2.3 pounds of VOC per pound of solids, as applied, and  - using topcoats that contain no more than 1.8 pounds of VOC per pound of solids, as applied, and  - using topcoats that contain no more than 1.8 pounds of VOC per pound of solids, as applied  - all wood furniture finishing operations may comply by using an averaging approach that demonstrates the wood furniture finishing operation meets the emission limits listed above, averaged on a daily basis throughout the facility  - all wood furniture finishing operations may comply by using a control system that will achieve an equivalent reduction in emissions and meet the requirements listed above  - all wood furniture finishing operations may comply by using a combination of the methods presented above.  Verify that wood furniture finishing and cleaning operations limit VOC emissions by using strippable booth coating materials that contain no more than 0.8 pounds of VOC per pound of solids, as applied.  Verify that wood furniture finishing and cleaning operations prepare and maintain a written work practice implementation plan that defines work practices for each wood furniture manufacturing operation and addresses each of the topics specified, that has been submitted to the Division for approval.  Verify that wood furniture finishing and cleaning operation maintains certified product data sheets for each sealer, topcoat, and strippable booth coating material that is used |
|   | that has been submitted to the Division for approval.  Verify that wood furniture finishing and cleaning operation maintains certified product data sheets for each sealer, topcoat, and strippable booth coating material that is used to meet the requirements of this rule.  (NOTE: If solvent or other VOC is added to the finishing material before   |

| Georgia Supplement  |  |
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| REGULATORY<br>REQUIREMENTS:   | REVIEWER CHECKS: August 2000   |
| AE.115. DEGREASING OPERATIONS   | 724gust 2000   |
| General   |  |
| AE.115.1.GA. Cold cleaner degreasers must meet specific requirements for the control of VOC emissions (RSG 391-3-102(2)(ff)(1)).    | Verify that the following requirements are met:  - the degreaser is equipped with a cover to prevent the escape of VOC during periods of nonuse - the degreaser is equipped with a facility for draining cleaned parts before removal - if used, the solvent spray is a solid fluid stream (not a fine atomized mist) at a pressure that does not cause excessive splashing - if the solvent volatility is 0.60 psi or greater measured at 100 °F, or if the solvent is heated above 120 °F, then one of the following control devices is used: - freeboard of a ratio of 0.7 or greater - water cover (the solvent must be heavier than water) - other systems of equivalent control, such as a refrigerated chiller or carbon adsorption - waste solvent is stored only in covered containers and is not disposed of in such a manner that will allow excessive evaporation into the atmosphere. |
| <b>AE.115.2.GA.</b> Open top degreasers must meet specific requirements for the control of VOC emissions (RSG 391-3-102(2)(ff)(2)). | Verify that the degreaser is equipped with a cover to prevent the escape of volatile organic compounds during periods of non-use.  Verify that the degreaser is equipped with one of the following control devices:  - freeboard ratio greater than or equal to 0.75 - refrigerated chiller - enclosed design (cover or doors open only when dry parts enter or exit the degreaser) - carbon adsorption system, with ventilation greater than 50 cfm/ft² of air/vapor area (when cover is open), and exhausting less than 25 ppm solvent averaged over one complete adsorption cycle - a control system with control efficiency equivalent or better than the above systems.  Verify operating instructions summarizing the following procedures are displayed on the degreaser.   |

# COMPLIANCE CATEGORY: AIR EMISSIONS MANAGEMENT **Georgia Supplement** REGULATORY **REVIEWER CHECKS: REQUIREMENTS:** August 2000 on the degreaser. Verify that the degreaser is operated in accordance with the following procedures: - the cover is closed at all times except when processing work loads - minimize solvent carry out by the following measures: - rack parts are used to allow full drainage - the work load is degreased in the vapor zone for at least 30 s or until condensation ceases - pools of solvent are tipped out prior to removal of parts - parts are allowed to dry within the degreaser for at least 15 s or until visually dry - porous materials, such as wood, cloth, or leather are not degreased - work loads do not occupy more than one-half of the degreaser's open top area - the vapor level does not drop more than 4 in. when the work load enters the vapor zone - spraying is not done above the vapor zone - solvent leaks are repaired immediately, or the degreaser is shut down - ventilation fans are not used near the degreaser - water is not visually detectable in the solvent exiting the water separator - waste solvent is stored only in covered containers and is not disposed of in such a manner that will allow excessive evaporation into the atmosphere. AE.115.3.GA. Conveyorized Verify that the following VOC emission control requirements are met for conveyorized degreasers: degreasers must meet specific requirements for the control of VOC emissions (RSG 391-3-- the degreaser is equipped with a cover to prevent the escape of VOC during periods of nonuse 1-.02(2)(ff)(3). - the degreaser is equipped with either a drying tunnel, or other means such as a rotating basket, sufficient to prevent cleaned parts from carrying out solvent liquid or vapor - the degreaser is equipped with one of the following: - a refrigerated chiller - a carbon adsorption system that exhausts less than 25 ppm of solvent by volume averaged over a complete cycle - a control system demonstrated to have control efficiency equivalent to or better than the above systems - exhaust ventilation does not exceed 65 cfm/ft<sup>2</sup> of degreaser opening, unless necessary to meet OSHA requirements - workplace fans are not used near the degreaser - parts are racked for best drainage - vertical conveyor speed is less than 11 ft/min - solvent leaks are repaired immediately or the degreaser is shut down - water is not visually detectable in the solvent exiting the water separator - down-time cover is placed over entrances and exits of the degreaser immediately after the conveyor and exhaust are shut down and removed just before

they are started up

| COMPLIANCE CATEGORY: AIR EMISSIONS MANAGEMENT Georgia Supplement |  |
|--|--|
| REGULATORY<br>REQUIREMENTS:                                      | REVIEWER CHECKS: August 2000   |
|  | <ul> <li>waste solvent is stored only in covered containers and is not disposed of in a<br/>manner that will allow excessive evaporation.</li> </ul> |

| COMPLIANCE CATEGORY: AIR EMISSIONS MANAGEMENT Georgia Supplement   |   |
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| REGULATORY<br>REQUIREMENTS:  | REVIEWER CHECKS: August 2000  |
| AE.130.<br>OPEN BURNING  |   |
| AE.130.1.GA. Open burning is prohibited (RSG 391-3-102(5)).  | Verify that there is no open burning.  (NOTE: The following activities are exempt from open burning prohibition:  - burning of leaves, unless prohibited by local ordinance  - recognized agricultural procedures necessary for production or harvesting of crops  - destruction of combustible demolition or construction materials  - burning over of any forest land by the owners of such land  - recreational purposes, or cooking food  - fires set for training fire-fighting personnel  - disposal of tree limbs from storm damage  - weed abatement, disease, and pest prevention  - operation of devices using open flame such as tar kettles, blow torches, portable heaters and other flame making equipment  - setting and maintenance of small fires by contractors and tradesmen necessary for such activities as street paving work, installation or repair of utilities, provided that smoke emissions do not exceed 40 percent opacity and local ordinances do not prohibit such activity  - disposal of all packaging materials previously containing explosives in accordance with U.S. Department of Labor Safety Regulations.)  (NOTE: During an air pollution episode declared by the proper authorities, no open burning of any kind is permitted unless required in the performance of an official duty of any public office or is necessary to thwart a hazard that cannot be properly managed by other means.) |
| <b>AE.130.2.GA.</b> Open burning for land clearing or construction or right-of-way maintenance must meet specific requirements (RSG 391-3-1.02(5)(a)(11)). | Verify that when open burning in other than predominantly residential areas for land clearing or construction or right-of-way maintenance, the following conditions are met:  - prevailing winds at the time of burning are away from the major portion of the area's population - the location of the burning is at least 1000 ft from any dwelling located in a predominantly residential area - the amount of dirt on or in the material being burned is minimized - heavy oils, asphaltic materials, items containing natural or synthetic rubber, or any materials other than plant growth are not being burned - no more than one pile 60 ft by 60 ft, or equivalent, is burned within a 9 acre area at one time  |

| COMPLIANCE CATEGORY: AIR EMISSIONS MANAGEMENT Georgia Supplement |   |  |
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| REGULATORY<br>REQUIREMENTS:                                      | REVIEWER CHECKS: August 2000  |  |
|  | - except for a reasonable period to get a fire started, no smoke of opacity greater than or equal to 40 percent is emitted. |  |

| COMPLIANCE CATEGORY:     |
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| AIR EMISSIONS MANAGEMENT |
| Georgia Supplement       |

| Georgia Supplement  |   |  |
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| REGULATORY<br>REQUIREMENTS:   | REVIEWER CHECKS: August 2000  |  |
| AE.135.<br>VEHICLE EMISSIONS  | (NOTE: This requirement applies to vehicles in the following designated counties: Cherokee, Clayton, Cobb, Coweta, DeKalb, Douglas, Fayette, Fulton, Forsyth, Gwinnett, Henry, Paulding, and Rockdale. This requirement applies to all 1975 and newer model automobiles and all 1975 and newer model light duty trucks with a gross vehicle weight rating of 8500 lb or less. This requirement applies to vehicles operated by Federal or state agencies, municipalities, or other political subdivisions in a covered county and to vehicles that are operated on Federal installations.)  |  |
| AE.135.1.GA. Vehicles operated within specific counties must meet emission inspection requirements (RSG 391-3-2002; 391-3-2003(1), (2), and (8), 391-3-2014(1) and (5)), and 391-3-2012 [Revised September 1997]. | Verify that vehicles are inspected within 30 days of purchase or within 30 days of establishing residence in the covered counties.  Verify that vehicles which are operated for 60 days or more per year on Federal installations located in whole or in part in a covered county are inspected.  Verify that vehicles are inspected biennially and the emission inspection sticker is affixed at all times to the bottom of the driver's side of the vehicle's windshield.  (NOTE: Even model years are tested in even test years. Odd model years are tested in odd test years. There are grandfather provisions for gray market vehicles, kit cars, and hot rods.) |  |

| Georgia Supplement  |  |  |
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| REGULATORY<br>REQUIREMENTS:   | REVIEWER CHECKS:<br>August 2000  |  |
| AE.145.<br>ASPHALT PAVING<br>MATERIALS/<br>OPERATIONS   |  |  |
| <b>AE.145.1.GA.</b> Cutback asphalt for paving operations is prohibited (RSG 391-3-102(2)(dd)). | Verify that cutback asphalt is not used for paving purposes except as necessary for the following:  - long-life stockpile storage - the use or application at ambient temperatures less than 50 °F - solely as a penetrating primecoat - base stabilization. |  |

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| AIR EMISSIONS MANAGEMENT |  |
| Georgia Supplement       |  |

| Georgia Supplement   |   |
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| REGULATORY<br>REQUIREMENTS:  | REVIEWER CHECKS: August 2000  |
| AE.160 COUNTY/CITY SPECIFIC REQUIREMENTS   | August 2000   |
| Nitrogen Oxide Emissions<br>from Major Sources   | (NOTE: These requirements apply to all sources located in the counties of Cherokee, Clayton, Cobb, Coweta, DeKalb, Douglas, Fayette, Forsyth, Fulton, Gwinnett, Henry, Paulding, and Rockdale.)   |
| AE.160.1.GA. Specific requirements must be met for nitrogen oxide emissions from major sources (RSG 391-3-102(2)(yy)) [Revised July 1999]. | Verify that no emissions of NOx are allowed, caused, or permitted from any source to exceed 50 tons/yr unless such source has been approved by the Director as meeting appropriate requirements for all reasonably available control technology in controlling those nitrogen oxide emissions.  Verify that all existing sources of nitrogen oxide emissions comply with the  |
|  | <ul> <li>following:</li> <li>demonstration of appropriate reasonably available control technology for controlling nitrogen oxide emissions from the source has been submitted to the Division</li> <li>a final control plan and application for a permit to construct for the installation of nitrogen oxide emission control systems and/or modifications of process or fuel-burning equipment has been submitted to the Division</li> <li>onsite construction of emission control systems and/or modification of process or fuel-burning equipment has been completed</li> <li>full compliance with these requirements was demonstrated through approved methods and procedures by 31 July 1995.</li> </ul> |
|  | (NOTE: This requirement does not apply to individual equipment at the source which emits $NO_x$ in quantities less than a de minimis level of 1 ton/yr or to air pollution control devices that are installed to effect compliance with state air quality regulations.)   |
| VOC Emissions  | (NOTE: These requirements apply to all sources located in the counties of Cherokee, Clayton, Cobb, Coweta, DeKalb, Douglas, Fayette, Forsyth, Fulton, Gwinnett, Henry, Paulding, and Rockdale. For the purpose of determining applicability, the emissions of VOC from any source excludes all VOC emissions subject to any other more specific VOC requirements.)  |
| AE.160.2.GA. Specific emission requirements must   | Verify that all stationary sources of VOC emissions which emit more than 25 tons/calendar year of VOCs provide the Director with a statement, by 31 March of each   |

| Georgia Supplement  |   |
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| REGULATORY  | REVIEWER CHECKS:  |
| <b>REQUIREMENTS:</b> be met for sources of VOCs   | August 2000  year, showing the actual emissions of VOCs from that source for the previous   |
| (RSG 391-3-102(2)(tt) and 391-3-102(6)(a)(4))   | calendar year.  |
| [Revised September 1997].   | Verify that emissions of VOC from any source are not permitted to exceed 25 tons/yr, unless the source has been approved by the Director as utilizing all reasonably available control technology in controlling those VOC emissions.   |
|   | (NOTE: For the purpose of this subsection, "Reasonably Available Control Technology" means the utilization and/or implementation of water based or low solvent coatings, VOC control equipment such as incineration, carbon adsorption, refrigeration, or other like means as determined by the Director to represent reasonably available control technology for the source category in question. For the purpose of determining applicability of this subsection, the emissions of VOC from any source shall exclude all VOC emissions subject to any other more specific VOC requirements contained in other subsections.) |
| Gasoline Marketing-Reid<br>Vapor Pressure   | (NOTE: Unless the gasoline is segregated and clearly documented as noncomplying and not for sale or supply to an ultimate consumer in the Atlanta ozone nonattainment area, a person may not produce, store, transport, supply, offer to supply, transfer, or otherwise handle, sell, offer for sale, or dispense gasoline that does not meet the RVP limits.)  |
|   | (NOTE: The Atlanta ozone nonattainment area includes: Barrow, Bartow, Butts, Carroll, Cherokee, Clayton, Cobb, Coweta, Dawson, DeKalb, Douglas, Fayette, Forsyth, Fulton, Gwinnett, Hall, Haralson, Henry, Jackson, Newton, Paulding, Pickens, Rockdale, Spalding, and Walton.)   |
| <b>AE.160.3.GA.</b> The Reid vapor pressure of gasoline must not exceed 7.0 psi from 1 June to 15 September (RSG) | Verify that, during the period from 1 June to 15 September of any calendar year no person, retailer, or wholesale purchaser consumer sells, dispenses, supplies, or introduces into commerce gasoline whose Reid vapor pressure exceeds 7.0 psi.  |
| 391-3-102(2)(bbb) [Added September 1997].   | (NOTE: An ethanol blend is considered to be in compliance if its measured Reid vapor pressure does not exceed 8.0 psi. This waiver is subject to the following conditions:  |
|   | <ul> <li>gasoline must contain denatured, anhydrous ethanol. The concentration of ethanol, excluding the required denaturing agent, must be at least 9 percent and no more than 10 percent (by volume) of the gasoline</li> <li>each invoice, loading ticket, bill of lading, delivery ticket and any other document that accompanies a shipment of gasoline containing ethanol contains a legible and conspicuous statement that the gasoline being shipped contains ethanol and the percentage concentration of ethanol.)</li> </ul>  |
|   | Verify that, through 31 March 2003, the sulfur content of all gasoline supplied to comply with the Reid vapor pressure limits does not exceed an average of 150 ppm (by weight).  |

| AIR EMISSIONS MANAGEMENT Georgia Supplement  |  |  |
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| REGULATORY<br>REQUIREMENTS:  |  |  |
| REQUIREMENTS.  | (NOTE: For each calendar year, the sulfur content is averaged on a volume-weighted basis over the pool of gasoline supplied by the producer or importer to the 25 covered counties.)   |  |
|  | Verify that, effective 1 April 2003, the sulfur content of all gasoline supplied by each producer or importer to comply with the Reid vapor pressure limits does not exceed an average of 30 ppm (by weight).  |  |
|  | Verify that, effective 1 April 2003, the olefin content of all gasoline supplied by each producer or importer to comply with the Reid vapor pressure limits does not exceed an average of 4 percent (by weight).   |  |
|  | (NOTE: For each calendar year, the olefin content will be averaged on a volume-weighted basis over the pool of gasoline supplied by the producer or importer to the 25 covered counties.)  |  |
|  | Verify that, effective 1 April 2003, the aromatic hydrocarbon content of all gasoline supplied by each producer or importer to comply with the Reid vapor pressure limits does not exceed an average of 22 percent (by weight).  |  |
|  | (NOTE: For each calendar year, the aromatic hydrocarbon content will be averaged on a volume-weighted basis over the pool of gasoline supplied by the producer or importer to the 25 covered counties.)  |  |
|  | (NOTE: Compliance with the vapor pressure limitations above will be determined from tests conducted by the Georgia Department of Agriculture, using specified methods and procedures found in rules of the Department of Agriculture, Chapter 40-20-1.)  |  |
| NO <sub>x</sub> Emissions from Electric<br>Utility Steam Generating<br>Units   | (NOTE: The requirements contained in this subsection apply to all such sources located in those counties of Cherokee, Clayton, Cobb, Coweta, DeKalb, Douglas, Fayette, Forsyth, Fulton, Gwinnett, Henry, Paulding, and Rockdale.)  |  |
| AE.160.4.GA. All coal-fired electric utility steam generating units with a maximum heat input greater than 250 MBtu/hr must meet NO <sub>x</sub> emissions limits (RSG 391-3-102(2)(jjj)) [Added July 1999]. | Verify that there are no emissions of NO <sub>x</sub> from an affected unit unless:  - the NO <sub>x</sub> emissions from each affected unit(s) do not exceed the alternative emission limit established by the Director for the unit(s)  - if the person does not comply with all alternative emission limits, the person demonstrates that the NO <sub>x</sub> emissions, averaged over all affected units, do not exceed 0.34 lb/MBtu heat input. |  |
|  | Verify that, effective 1 May 2000, there are no emissions of $NO_x$ from an affected unit unless:  |  |

| COMPLIANCE CATEGORY:     |
|--------------------------|
| AIR EMISSIONS MANAGEMENT |
| Georgia Supplement       |

| AIR EMISSIONS MANAGEMENT<br>Georgia Supplement |  |  |
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| REGULATORY<br>REQUIREMENTS:                    | REVIEWER CHECKS: August 2000   |  |
| REQUIREMENTS                                   | <ul> <li>the NO<sub>x</sub> emissions from the affected unit(s) do not exceed the alternative emission limit established by the Director for the unit(s)</li> <li>if the person does not comply with all alternative emission limits, the person demonstrates that the NO<sub>x</sub> emissions, averaged over all affected units, do not exceed 0.30 lb/MBtu heat input.</li> <li>Verify that, no later than 31 December 1999, the owner/operator of the affected units submits actual operating performance data on the affected units, with the natural gas technologies in place and optimized on all affected units, sufficient to allow the Director to determine if the NO<sub>x</sub> emission limits are technically achievable.</li> <li>(NOTE: The compliance period is based on a 30-day rolling average beginning 1 May and ending 30 September of each year. The first 30 day averaging period begins on 1 May, and the last 30 day averaging period ends on 30 September.)</li> </ul> |  |

## Appendix 1-1

# Federal Regulations Adopted by Reference

(Source: RSG 391-3-1-.02(7) through (10))[Revised September 1997; Revised July 1999]

The following Federal regulations have been incorporated and adopted by reference by the Rules of the Georgia Department of Natural Resources (RSG):

#### (7) Prevention of Significant Deterioration of Air Quality.

- (a) General Requirements.
  - 1. The provisions of this section (7) shall apply to any source and the owner or operator of any source subject to any requirement under 40 Code of Federal Regulations (hereinafter, CFR), Part 52.21 as amended.
  - 2. Definitions: For the purpose of this section, 40 CFR, Part 52.21(b) as amended, is hereby incorporated by reference.
- (b) Prevention of Significant Deterioration Standards.
  - 1. Ambient air increments: 40 CFR, Part 52.21(c), as amended, is hereby incorporated and adopted by reference
  - 2. Ambient air ceilings: 40 CFR, Part 52.21(d), as amended, is hereby incorporated and adopted by reference.
  - 3. Restrictions on area classifications: 40 CFR, Part 52.21(e), as amended, is hereby incorporated and adopted by reference.
  - 4. Stack heights: 40 CFR, Part 52.21(h), as amended, is hereby incorporated and adopted by reference.
  - 5. Review of major stationary sources and major modifications -- source applicability and general exemptions: 40 CFR, Part 52.21(i), as amended, is hereby incorporated and adopted by reference.
  - 6. Control technology review: 40 CFR, Part 52.21(j), as amended, is hereby incorporated and adopted by reference.
  - 7. Source impact analysis: 40 CFR, Part 52.21(k), as amended, is hereby incorporated and adopted by reference.
  - 8. Air quality models: 40 CFR, Part 52.21(l), as amended, is hereby incorporated and adopted by reference.
  - 9. Air quality analysis: 40 CFR, Part 52.21(m), as amended, is hereby incorporated and adopted by reference.
  - 10. Source information: 40 CFR, Part 52.21(n), as amended, is hereby incorporated and adopted by reference.
  - 11. Additional impact analyses: 40 CFR, Part 52.21(o), as amended, is hereby incorporated and adopted by reference
  - 12. Sources impacting Federal class I areas -- additional requirements: 40 CFR, Part 52.21(p), as amended, is hereby incorporated and adopted by reference.
  - 13. Public participation: 40 CFR, Part 52.21(q), as amended, is hereby incorporated and adopted by
  - 14. Source obligation: 40 CFR, Part 52.21(r), as amended, is hereby incorporated and adopted by reference.
  - 15. Innovative control technology: 40 CFR, Part 52.21(v), as amended, is hereby incorporated and adopted by reference.
  - 16. Permit rescission: 40 CFR, Part 52.21(w), as amended, is hereby incorporated and adopted by reference. Editorial Note: The word "Administrator" as used in regulations adopted in this section should be read as the "Director of EPD."

#### (8) New Source Performance Standards:

- (a) General Requirement. No person shall construct or operate any facility or source which fails to comply with the New Source Performance Standards contained in 40 Code of Federal Regulations (hereinafter, CFR), Part 60, as amended, including but not limited to (unless specifically excluded below), the subparts hereby adopted through incorporation by reference in paragraph (b) of this subsection.
- (b) New Source Performance Standards.
  - 1. General Provisions. For purposes of applying New Source Performance Standards, 40 CFR, Part 60, subpart A (excluding 60.4 and 60.9) is hereby incorporated and adopted by reference. The word "Administrator" as used in regulations adopted in this paragraph shall mean the Director of EPD.

- 2. Standards of Performance for Fossil-Fuel Fired Steam Generators: 40 CFR, Part 60, subpart D, as amended, is hereby incorporated and adopted by reference.
- 3. Standards of Performance for Electric Utility Steam Generating Units: 40 CFR, Part 60, subpart Da, as amended, is hereby incorporated and adopted by reference.
- 4. Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units: 40 CFR, Part 60, subpart Db, as amended, is hereby incorporated and adopted by reference.
- 5. Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units: 40 CFR, Part 60, subpart Dc, as amended, is hereby incorporated and adopted by reference.
- 6. Standards of Performance for Incinerators: 40 CFR, Part 60, subpart E, as amended, is hereby incorporated and adopted by reference.
- 7. Standards of Performance for Municipal Waste Combustors: 40 CFR, Part 60, subpart Ea, as amended, is hereby incorporated and adopted by reference.
- 8. Standards of Performance for Portland Cement Plants: 40 CFR, Part 60, subpart F, as amended, is hereby incorporated and adopted by reference.
- 9. Standards of Performance for Nitric Acid Plants: 40 CFR, Part 60, subpart G, as amended, is hereby incorporated and adopted by reference.
- 10. Standards of Performance for Sulfuric Acid Plants: 40 CFR, Part 60, subpart H, as amended, is hereby incorporated and adopted by reference.
- 11. Standards of Performance for Asphalt Concrete Plants: 40 CFR, Part 60, subpart I, as amended, is hereby incorporated and adopted by reference.
- 12. Standards of Performance for Petroleum Refineries: 40 CFR, Part 60, subpart J, as amended, is hereby incorporated and adopted by reference.
- 13. Standards of Performance for Storage Vessels for Petroleum Liquids: 40 CFR, Part 60, subpart K, as amended, is hereby incorporated and adopted by reference.
- 14. Standards of Performance for Storage Vessels for Petroleum Liquids: 40 CFR, Part 60, subpart Ka, as amended, is hereby incorporated and adopted by reference.
- 15. Standards of Performance for Volatile Organic Liquid Storage Vessels: 40 CFR, Part 60, subpart Kb, as amended, is hereby incorporated and adopted by reference.
- 16. Standards of Performance for Secondary Lead Smelters: 40 CFR, Part 60, subpart L, as amended, is hereby incorporated and adopted by reference.
- 17. Standards of Performance for Secondary Brass and Bronze Ingot Production Plants: 40 CFR, Part 60, subpart M, as amended, is hereby incorporated and adopted by reference.
- 18. Standards of Performance for Iron and Steel Plants: 40 CFR, Part 60, subpart N, as amended, is hereby incorporated and adopted by reference.
- 19. Standards of Performance for Secondary Emissions from Basic Oxygen Process Steelmaking Facilities for Which Construction is Commenced After January 20, 1983: 40 CFR, Part 60, subpart Na, as amended, is hereby incorporated and adopted by reference.
- 20. Standards of Performance for Sewage Treatment Plants: 40 CFR, Part 60, subpart O, as amended, is hereby incorporated and adopted by reference.
- 21. Standards of Performance for Primary Copper Smelters: 40 CFR, Part 60, subpart P, as amended, is hereby incorporated and adopted by reference.
- 22. Standards of Performance for Primary Zinc Smelters: 40 CFR, Part 60, subpart Q, as amended, is hereby incorporated and adopted by reference.
- 23. Standards of Performance for Primary Lead Smelters: 40 CFR, Part 60, subpart R, as amended, is hereby incorporated and adopted by reference.
- 24. Standards of Performance for Primary Aluminum Reduction Plants: 40 CFR, Part 60, subpart S, as amended, is hereby incorporated and adopted by reference.
- 25. Standards of Performance for the Phosphate Fertilizer Industry: Wet-Process Phosphoric Acid Plants: 40 CFR, Part 60, subpart T, as amended, is hereby incorporated and adopted by reference.
- 26. Standards of Performance for the Phosphate Fertilizer Industry: Superphosphoric Acid Plants: 40 CFR, Part 60, subpart U, as amended, is hereby incorporated and adopted by reference.
- 27. Standards of Performance for the Phosphate Fertilizer Industry: Diammonium Phosphate Plants: 40 CFR, Part 60, subpart V, as amended, is hereby incorporated and adopted by reference.
- 28. Standards of Performance for the Phosphate Fertilizer Industry: Triple Superphosphate Plants: 40 CFR, Part 60, subpart W, as amended, is hereby incorporated and adopted by reference

- 29. Standards of Performance for the Phosphate Fertilizer Industry: Granular Triple Superphosphate Storage Facilities: 40 CFR, Part 60, subpart X, as amended, is hereby incorporated and adopted by reference.
- 30. Standards of Performance for Coal Preparation Plants: 40 CFR, Part 60, subpart Y, as amended, is hereby incorporated and adopted by reference.
- 31. Standards of Performance for Ferroalloy Production Facilities: 40 CFR, Part 60, subpart Z, as amended, is hereby incorporated and adopted by reference.
- 32. Standards of Performance for Steel Plants: Electric Arc Furnaces: 40 CFR, Part 60, subpart AA, as amended, is hereby incorporated and adopted by reference.
- 33. Standards of Performance for Steel Plants. Electric Arc Furnaces and Argon-Oxygen Decarburization Vessels Constructed After August 17, 1983: 40 CFR 60, subpart AAA, as amended, is hereby incorporated and adopted by reference.
- 34. Standards of Performance for Kraft Pulp Mills: 40 CFR, Part 60, subpart BB, as amended, is hereby incorporated and adopted by reference.
- 35. Standards of Performance for Glass Manufacturing Plants: 40 CFR, Part 60, subpart CC, as amended, is hereby incorporated and adopted by reference.
- 36. Standards of Performance for Grain Elevators: 40 CFR, Part 60, subpart DD, as amended, is hereby incorporated and adopted by reference.
- 37. Standards of Performance for Surface Coating of Metal Furniture: 40 CFR, Part 60, subpart EE, as amended, is hereby incorporated and adopted by reference.
- 38. Standards of Performance for Stationary Gas Turbines: 40 CFR, Part 60, subpart GG, as amended, is hereby incorporated and adopted by reference.
- 39. Standards of Performance for Lime Manufacturing Plants: 40 CFR, Part 60, subpart HH, as amended, is hereby incorporated and adopted by reference.
- 40. Standards of Performance for Lead-Acid Battery Manufacturing Plants: 40 CFR, Part 60, subpart KK, as amended, is hereby incorporated and adopted by reference.
- 41. Standards of Performance for Metallic Mineral Processing Plants: 40 CFR, Part 60, subpart LL, as amended, is hereby incorporated and adopted by reference.
- 42. Standards of Performance for Automobile and Light-Duty Truck Coating Operations: 40 CFR, Part 60, subpart MM, as amended, is hereby incorporated and adopted by reference.
- 43. Standards of Performance for Phosphate Rock Plants: 40 CFR, Part 60, subpart NN, as amended, is hereby incorporated and adopted by reference.
- 44. Standards of Performance for Ammonium Sulfate Manufacture: 40 CFR, Part 60, subpart PP, as amended, is hereby incorporated and adopted by reference.
- 45. Standards of Performance for Graphic Arts Industry: Publication Rotogravure Printing: 40 CFR, Part 60, subpart QO, as amended, is hereby incorporated and adopted by reference.
- 46. Standards of Performance for Pressure Sensitive Tape and Label Surface Coating Operations: 40 CFR, Part 60, subpart RR, as amended, is hereby incorporated and adopted by reference.
- 47. Standards of Performance for Industrial Surface Coating: Large Appliances: 40 CFR, Part 60, subpart SS, as amended, is hereby incorporated and adopted by reference.
- 48. Standards of Performance for Metal Coil Surface Coating: 40 CFR, Part 60, subpart TT, as amended, is hereby incorporated and adopted by reference.
- 49. Standards of Performance for Asphalt Processing and Asphalt Roofing Manufacture: 40 CFR, Part 60, subpart UU, as amended, is hereby incorporated and adopted by reference.
- 50. Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry: 40 CFR, Part 60, subpart VV, as amended, is hereby incorporated and adopted by reference.
- 51. Standards of Performance for Beverage Can Surface Coating Industry: 40 CFR, Part 60, subpart WW, as amended, is hereby incorporated and adopted by reference.
- 52. Standards of Performance for Bulk Gasoline Terminals: 40 CFR, Part 60, subpart XX, as amended, is hereby incorporated and adopted by reference.
- 53. Standards of Performance for Rubber Tire Manufacturing Industry: 40 CFR, Part 60, subpart BBB, as amended, is hereby incorporated and adopted by reference.
- 54. Standards of Performance for Volatile Organic Compound (VOC) Emission from Polymer Manufacturing Industry: 40 CFR, Part 60, subpart DDD, as amended, is hereby incorporated and adopted by reference.

- 55. Standards of Performance for Flexible Vinyl and Urethane Printing and Coating: 40 CFR, Part 60, subpart FFF, as amended, is hereby incorporated and adopted by reference.
- 56. Standards of Performance for Equipment Leaks of VOC in Petroleum Refineries: 40 CFR, Part 60, subpart GGG, as amended, is hereby incorporated and adopted by reference.
- 57. Standards of Performance for Synthetic Fiber Production Facilities: 40 CFR, Part 60, subpart HHH, as amended, is hereby incorporated and adopted by reference.
- 58. Standards of Performance for Volatile Organic Compounds (VOC) Emissions From the Synthetic Organic Chemical Manufacturing Industry (SOCMI) Air Oxidation Unit Processes: 40 CFR, Part 60, subpart III, as amended, is hereby incorporated and adopted by reference.
- 59. Standards of Performance for Petroleum Dry Cleaners: 40 CFR, Part 60, subpart JJJ, as amended, is hereby incorporated and adopted by reference.
- 60. Standards of Performance for Equipment Leaks of VOC from Onshore Natural Gas Processing Plants: 40 CFR, Part 60, subpart KKK, as amended, is hereby incorporated and adopted by reference.
- 61. Standards of Performance for Onshore Natural Gas Processing: 40 CFR, Part 60, subpart LLL, as amended, is hereby incorporated and adopted by reference.
- 62. Standards of Performance for Volatile Organic Compounds (VOC) Emissions From the Synthetic Organic Chemical Manufacturing Industry (SOCMI) Distillation Operation: 40 CFR, Part 60, subpart NNN, as amended, is hereby incorporated and adopted by reference.
- 63. Standards of Performance for Nonmetallic Mineral Processing Plants: 40 CFR, Part 60, subpart OOO, as amended, is hereby incorporated and adopted by reference.
- 64. Standards of Performance for Wool Fiberglass Insulation Manufacturing Plants: 40 CFR, Part 60, subpart PPP, as amended, is hereby incorporated and adopted by reference.
- 65. Standards of Performance for VOC Emissions from Petroleum Refinery Wastewater Systems: 40 CFR, Part 60, subpart QQQ, as amended, is hereby incorporated and adopted by reference.
- 66. Standards of Performance for Volatile Organic Compound (VOC) Emissions from Synthetic Organic Chemical Manufacturing Industry (SOCMI) Reactor Process: 40 CFR, Part 60, subpart RRR, as amended, is hereby incorporated and adopted by reference.
- 67. Standards of Performance for Magnetic Tape Coating: 40 CFR, Part 60, subpart SSS, as amended, is hereby incorporated and adopted by reference.
- 68. Standards of Performance for Plastic Parts for Business Machine Coatings: 40 CFR, Part 60, subpart TTT, as amended, is hereby incorporated and adopted by reference.
- 69. Standards of Performance for Calciners and Dryers in Mineral Industries: 40 CFR, Part 60, subpart UUU, as amended, is hereby incorporated and adopted by reference.
- 70. Standards of Performance for Polymeric Coating of Supporting Substrates Facilities: 40 CFR, Part 60, subpart VVV, as amended, is hereby incorporated and adopted by reference.
- 71. Standards of Performance for Municipal Waste Combustors for Which Construction is Commenced after September 20, 1994: 40 CFR, Part 60, subpart Eb, as amended, is hereby incorporated and adopted by reference.
- 72. Standards of Performance for Municipal Solid Waste Landfills: 40 CFR, Part 60, subpart WWW, as amended, is hereby incorporated and adopted by reference.
- 73. Standards of Performance for Hospital/Medical/Infectious Waste Incinerators for which construction is commenced after June 20, 1996: 40 CFR, Part 60, Subpart Ec, as amended, is hereby incorporated and adopted by reference.

#### (9) Emission Standards for Hazardous Air Pollutants:

- (a) General Requirements. The provisions of this section shall apply to any stationary source and to the owner or operator of any stationary source for which a standard is prescribed under 40 Code of Federal Regulations (hereinafter CFR), Parts 61 and 63, including, but not limited to (unless specifically excluded below) the subparts hereby adopted through incorporation by reference in subsection (b) of this section. For purposes of applying emission standards for hazardous air pollutants, 40 CFR, Parts 61 and 63 (excluding 61.04 and 61.16), as amended, are hereby incorporated by reference. The word "Administrator" as used in regulations adopted in this section shall mean the Director of EPD.
- (b) Emission Standards for Hazardous Air Pollutants:
  - 1. Emission Standard for Beryllium: 40 CFR, Part 61, subpart C, as amended, is hereby incorporated and adopted by reference.

- 2. Emission Standard for Beryllium Rocket Motor Firing: 40 CFR, Part 61, subpart D, as amended, is hereby incorporated and adopted by reference.
- 3. Emission Standard for Mercury: 40 CFR, Part 61, subpart E, as amended, is hereby incorporated and adopted by reference.
- 4. Emission Standard for Vinyl Chloride: 40 CFR, Part 61, subpart F, as amended, is hereby incorporated and adopted by reference.
- 5. Emission Standard for Equipment Leaks (Fugitive Emission Sources) of Benzene: 40 CFR, Part 61, subpart J, as amended, is hereby incorporated and adopted by reference.
- 6. Emission Standard for Benzene Emissions from Coke Byproduct Recovery Plants: 40 CFR, Part 61, subpart L, as amended, is hereby incorporated and adopted by reference.
- 7. Emission Standard for Asbestos (inc. work practices): 40 CFR, Part 61, subpart M, as amended, is hereby incorporated and adopted by reference.
- 8. Emission Standard for Inorganic Arsenic Emissions from Glass Manufacturing Plants: 40 CFR, Part 61, subpart N, as amended, is hereby incorporated and adopted by reference.
- 9. Emission Standard for Inorganic Arsenic Emissions from Primary Copper Smelters: 40 CFR, Part 61, subpart O, as amended, is hereby incorporated and adopted by reference.
- Emission Standard for Inorganic Arsenic Emissions from Arsenic Trioxide and Metallic Arsenic Production Facilities: 40 CFR, Part 61, subpart P, as amended, is hereby incorporated and adopted by reference.
- 11. Emission Standard for Equipment Leaks (Fugitive Emission Sources) [of VHAP]: 40 CFR, Part 61, subpart V, as amended, is hereby incorporated and adopted by reference.
- 12. Emission Standard for Benzene Emissions from Benzene Storage Vessels: 40 CFR, Part 61, subpart Y, as amended, is hereby incorporated and adopted by reference.
- 13. Emission Standard for Benzene Emissions from Benzene Transfer Operations: 40 CFR, Part 61, subpart BB, as amended, is hereby incorporated and adopted by reference.
- 14. Emission Standard for Benzene Waste Operations: 40 CFR, Part 61, subpart FF, as amended, is hereby incorporated and adopted by reference.
- 15. General Provisions. For purposes of applying Emission Standards for Hazardous Air Pollutants, 40 CFR, Part 63, Subpart A, as amended, (excluding 63.13, and 63.15(a)(2)) is hereby incorporated and adopted by reference.
- 16. Requirements for control Technology Determinations for Major Sources in Accordance with Clean Air Act Paragraph 112(g): 40 CFR, Parts 63.40 through 63.44, as amended, is hereby incorporated and adopted by reference, subject to the following provisions:
  - (i) Terms used in this paragraph shall have the meaning given to them in the Clean Air Act, 40 CFR 63 Subparts A and B, and the Georgia Air Quality Act.
  - (ii) The "Effective Date of Paragraph 112(g)(2)(B)," as defined in 40 CFR 63.41, shall be June 29, 1998.
  - (iii) The "Notice of MACT Approval," as defined in 40 CFR 63.41, shall be the air construction permit issued by the Division.
  - (iv) The "Permitting Authority," as defined in 40 CFR 63.41, shall be the Division.
  - (v) In lieu of the administrative procedures for review of the Notice of MACT Approval, as set forth in 40 CFR 63.43(f)(1) through (5), the Division will act in accordance with the permitting requirements as set forth in Chapter 391-3-1-.03 Permits, as amended, and administrative procedures for preconstruction review and approval established by the Division.
  - (vi) In lieu of the opportunity for public comment on the Notice of MACT Approval, as set forth in 40 CFR 63.43(h), the Division will provide opportunity for public comment on the Notice of MACT Approval pursuant to Chapter 391-3-1-.03(2)(I).
  - (vii) The Notice of MACT Approval shall become effective upon issuance of the air construction permit by the Division.
- 17. Requirements for Control Technology Determinations for Major Sources in Accordance with the Clean Air Act sections 112(j): 40 CFR 63, Subpart B, Sections 63.50 through 63.56, as amended, is hereby incorporated and adopted by reference.
- 18. [Reserved]
- 19. Compliance Extensions for Early Reductions: 40 CFR, Part 63, Subpart D, as amended, is hereby incorporated and adopted by reference.

- 20. Emission Standards for Organic Hazardous Air Pollutants from the Synthetic Organic Chemical Manufacturing Industry, 40 CFR 63, Subpart F, as amended, is hereby incorporated and adopted by reference.
- 21. Emission Standards for Organic Hazardous Air Pollutants from Synthetic Organic Chemical Manufacturing Industry for Process Vents, Storage Vessels, Transfer Operations, and Wastewater, 40 CFR 63, Subpart G, as amended, is hereby incorporated and adopted by reference. Only procedures listed in § 63.112(e) of 40 CFR 63, Subpart G shall be used to comply with the emission standard in § 63.112(a) unless otherwise specifically approved by the Director.
- 22. Emission Standards for Organic Hazardous Air Pollutants for Equipment Leaks, 40 CFR 63, Subpart H, as amended, is hereby incorporated and adopted by reference.
- 23. Emission Standards for Organic Hazardous Air Pollutants for Certain Processes Subject to the Negotiated Regulation for Equipment Leaks, 40 CFR 63, Subpart I, as amended, is hereby incorporated and adopted by reference.
- 24. [Reserved]
- 25. [Reserved]
- 26. Emission Standards for Coke Oven Batteries, 40 CFR 63, Subpart L, as amended, is hereby incorporated and adopted by reference.
- 27. Perchloroethylene Air Emission Standards for Dry Cleaning Facilities, 40 CFR 63, Subpart M, as amended, is hereby incorporated and adopted by reference.
- 28. Emission Standards for Chromium Emissions from Hard and Decorative Chromium Electroplating and Chromium Anodizing Tanks, 40 CFR 63, Subpart N, as amended, is hereby incorporated and adopted by reference.
- 29. Ethylene Oxide Emissions Standards for Sterilization Facilities, 40 CFR 63, Subpart O, as amended, is hereby incorporated and adopted by reference.
- 30. [Reserved]
- 31. Emission Standards for Hazardous Air Pollutants for Industrial Process Cooling Towers, 40 CFR 63, Subpart Q, as amended, is hereby incorporated and adopted by reference.
- 32. Emission Standards for Gasoline Distribution Facilities (Bulk Gasoline Terminals and Pipeline Breakout Stations), 40 CFR 63, Subpart R, as amended, is hereby incorporated and adopted by reference.
- 33. [Reserved]
- 34. Emission Standards for Halogenated Solvent Cleaning, 40 CFR 63, Subpart T, as amended, is hereby incorporated and adopted by reference.
- 35. Emission Standards for Hazardous Air Pollutant Emissions: Group I Polymers and Resins, 40 CFR 63, Subpart U, as amended, is hereby incorporated and adopted by reference.
- 36. [Reserved]
- 37. Emission Standards for Hazardous Air Pollutants for Epoxy Resins Production and Non-Nylon Polyamides Production, 40 CFR 63, Subpart W, as amended, is hereby incorporated and adopted by reference.
- 38. Emission Standards for Hazardous Air Pollutants From Secondary Lead Smelting, 40 CFR 63, Subpart X, as amended, is hereby incorporated and adopted by reference.
- 39. Emission Standards for Marine Tank Vessel Loading Operations, 40 CFR 63, Subpart Y, as amended, is hereby incorporated and adopted by reference.
- 40. [Reserved]
- 41. [Reserved]
- 42. [Reserved]
- 43. Emission Standards for Hazardous Air Pollutants from Petroleum Refineries, 40 CFR 63, Subpart CC, as amended, is hereby incorporated and adopted by reference. Only procedures listed in § 63.642(k) of 40 CFR 63, Subpart CC shall be used to comply with the emission standard in § 63.642(g).
- 44. Emission Standards for Hazardous Air Pollutants from Off-Site Waste and Recovery Operations, 40 CFR 63, Subpart DD, as amended, is hereby incorporated and adopted by reference.
- 45. Emission Standards for Magnetic Tape Manufacturing Operations, 40 CFR 63, Subpart EE, as amended, is hereby incorporated and adopted by reference.
- 46. [Reserved]
- 47. Emission Standards for Aerospace Manufacturing and Rework Facilities, 40 CFR 63, Subpart GG, as amended, is hereby incorporated and adopted by reference.

- 48. [Reserved]
- 49. Emission Standards for Shipbuilding and Ship Repair (Surface Coating), 40 CFR 63, Subpart II, as amended, is hereby incorporated and adopted by reference.
- 50. Emission Standards for Wood Furniture Manufacturing Operations, 40 CFR 63, Subpart JJ, as amended, is hereby incorporated and adopted by reference.
- 51. Emission Standards for the Printing and Publishing Industry, 40 CFR 63, Subpart KK, as amended, is hereby incorporated and adopted by reference.
- 52. [Reserved]
- 53. [Reserved]
- 54. [Reserved]
- 55. Emission Standards for Tanks-Level 1, 40 CFR 63, Subpart OO, as amended, is hereby incorporated and adopted by reference.
- 56. Emission Standards for Containers, 40 CFR 63, Subpart PP, as amended, is hereby incorporated and adopted by reference.
- 57. Emission Standards for Surface Impoundments, 40 CFR 63, Subpart QQ, as amended, is hereby incorporated and adopted by reference.
- 58. Emission Standards for Individual Drain Systems, 40 CFR 63, Subpart RR, as amended, is hereby incorporated and adopted by reference.
- 59. [Reserved]
- 60. [Reserved]
- 61. [Reserved]
- 62. Emission Standards for Oil-Water Separators and Organic-Water Separators, 40 CFR Part 63, Subpart VV, as amended, is hereby incorporated and adopted by reference.
- 63. Emission Standards for Hazardous Air Pollutant Emissions: Group IV Polymers and Resins, 40 CFR Part 63, Subpart JJJ, as amended, is hereby incorporated and adopted by reference.

#### (10) Chemical Accident Prevention Provisions.

- (a) General Requirements.
  - 1. The provisions of this section (10) shall apply to any stationary source and to the owner or operator of any stationary source subject to any requirement under 40 Code of Federal Regulations (hereinafter CFR), Parts 68, as amended. The word "Administrator" as used in regulations adopted in this section shall mean the Director of EPD.
  - 2. Definitions: For the purpose of this section, 40 CFR, Section 68.3, as amended, is hereby incorporated and adopted by reference.
- (b) Chemical Accident Prevention Standards:
  - 1. General: 40 CFR 68, Subpart A, as amended, is hereby incorporated and adopted by reference.
  - 2. Hazard Assessment, 40 CFR 68, Subpart B, as amended, is hereby incorporated and adopted by reference.
  - 3. Program 2 Prevention Program, 40 CFR 68, Subpart C, as amended, is hereby incorporated and adopted by reference.
  - 4. Program 3 Prevention Program, 40 CFR 68, Subpart D, as amended, is hereby incorporated and adopted by reference.
  - 5. Emergency Response, 40 CFR 68, Subpart E, as amended, is hereby incorporated and adopted by reference.
  - 6. Regulated Substances for Accidental Release Prevention, 40 CFR 68, Subpart F, is hereby incorporated and adopted by reference.
  - 7. Risk Management Plan, 40 CFR 68, Subpart G, as amended, is hereby incorporated and adopted by reference.
  - 8. Other Requirements, 40 CFR 68, Subpart H, as amended, is hereby incorporated and adopted by reference.

#### Appendix 1-2

#### **Sources and Activities Exempted from Permit Requirements**

(Source: RSG 391-3-1-.03(6)) [Revised September 1998]

Exemptions. Unless otherwise required by the Director, SIP permits shall not be required for the following source activities. These exemptions may not be used to avoid any emission limitations or standards of the Rules for Air Quality Control Chapter 391-3-1-.02, lower the potential to emit below "major source" thresholds or to avoid any "applicable requirement" (i.e., NSPS, NESHAP, etc.) as defined in 40 CFR Part 70.2.

(a) Mobile Sources. Mobile sources, such as automobiles, trucks, buses, locomotives, airplanes, boats and ships, whether or not designated as subject to mandatory inspection, maintenance, or emission requirements pursuant O.C.G.A. Section 12-9-40, et seq., as amended, the Georgia Motor Vehicle Emission Inspection and Maintenance Act. This exemption relates only to the requirement for a permit issued under the Act, not to any other requirement under the Act, and in no way affects any requirement for a permit, license, or a certificate under any other law. This limited exemption from the permit requirements of the Act shall in no way affect the applicability of any other requirement related to mobile sources, or any other requirement or limitation which may affect mobile sources.

#### (b) Combustion Equipment.

- 1. Fuel-burning equipment having a total heat input capacity of less than 10 million BTU's per hour burning only natural gas, LPG and/or distillate fuel oil containing 0.50% sulfur by weight or less.
- 2. Fuel-burning equipment rated at less than 5 million BTU's per hour burning a wood or fossil fuel.
- 3. Any fuel-burning equipment with a rated input capacity of 2.5 million BTU's per hour or less.
- 4. Equipment used for cooking food for immediate human consumption.
- 5. Blacksmith forges.
- 6. Clean steam condensate and steam relief vents.
- 7. Funeral homes and crematories of any size.
- 8. Air curtain destructor used at land clearing at a construction site.
- 9. Open burning
- 10. Small incinerators operating as follows:
  - (i) less than 8 million BTU's per hour input, firing types 0, 1, 2 and/or 3 waste; or
  - (ii) less than 8 million BTU's per hour input with no more than 10% pathological (type 4) waste by weight combined with types 0, 1, 2 and/or 3 waste; or
  - (iii) less than 4 million BTU's per hour heat input firing 4 waste
- 11. Stationary engines.
  - (i) Burning natural gas, LPG, gasoline, dual fuel, or diesel fuel which are used exclusively as emergency generators; or
  - (ii) Burning natural gas, LPG, and/or diesel fuel and used for emergency and/or peaking power where the peaking power use does not exceed 200 hr/yr.; or
  - (iii) Used for other purposes provided that the total horsepower of all non-gasoline burning engines combined are less than 1500 engine horsepower and no individual engine operates for more than 1000 hr/yr.; or
  - (iv) Used for other purposes provided that the total horsepower of all gasoline burning engines combined are less than 225 horsepower and no individual engine operates for more than 1000 hr/yr.
  - (v) For the purpose of this subsection, the following definitions shall apply:
    - (I) An "emergency generator" means a generator whose function is to provide back-up power when electric power from the local utility is interrupted and which operates for less than 500 hours per year.
    - (II) "Used for peaking power" means used to reduce the electrical power requirements on the local utility grid. This could be for supplying power during the local utility's peak demand periods, or for peak shaving by the facility.
- 12. Boiler water treatment operations.
- 13. Fire fighter or other emergency/safety equipment used to train fire fighters.

#### (c) Storage Tanks.

- 1. All petroleum liquid storage tanks storing a liquid with a true vapor pressure of equal to or less than 0.50 psia as stored.
- 2. All petroleum liquid storage tanks with a capacity of less than 40,000 gallons storing a liquid with a true vapor pressure of equal to or less than 2.0 psia as stored.
- 3. All petroleum liquid storage tanks with a capacity of less than 10,000 gallons storing a petroleum liquid.
- 4. Pressurized vessels designed to operate in excess of 30 psig storing a petroleum fuel.
- 5. Gasoline storage and handling equipment at loading facilities handling less than 20,000 gallons per day or at vehicle dispensing facilities.
- 6. Portable drums and barrels provided that the volume of each container does not exceed 550 gal.
- 7. All chemical storage tanks used to store a chemical with a true vapor pressure of less than or equal to 10 millimeters of mercury.

#### (d) Agricultural Operations.

- 1. Farm equipment used for soil preparation, livestock handling, crop tending and harvesting and for other farm related activities.
- 2. Herbicide and pesticide mixing and application activities for on site use.

#### (e) Maintenance, Cleaning & Housekeeping.

- 1. Heating, air conditioning and ventilation systems not designed to remove air contaminants generated by or released from process or fuel-burning equipment.
- 2. Routine housekeeping activities such as painting buildings, roofing or paving parking lots, all clerical activities and all janitorial activities.
- 3. Maintenance activities such as: vehicle repair shops, brazing, soldering and welding equipment, carpenter shops, electrical charging stations, grinding and polishing operations maintenance shop vents, miscellaneous non-production surface cleaning, preparation and painting operations.
- 4. Miscellaneous activities such as: aerosol spray cans; air compressors; cafeteria vents; copying, photographic and blueprint machines; decommissioned equipment; dumpsters; fire training activities; fork lifts; railroad flares; refrigerators; space heaters.
- 5. Cold storage refrigeration equipment.
- 6. Vacuum-cleaning systems used exclusively for industrial, commercial, or residential housekeeping purposes.
- 7. Equipment used for portable steam cleaning.
- 8. Blast-cleaning equipment using a suspension of abrasive in water and any exhaust system or collector serving them exclusively.
- 9. Portable blast-cleaning equipment.
- 10. Laundry dryers, extractors, or tumblers for fabric cleaned with only water solutions of bleach or detergents.
- 11. Non-Perchloroethylene Dry-cleaning equipment with a capacity of 100 pounds per hour or less of clothes.
- 12. Cold cleaners having an air/vapor interface of not more than 10 square feet and that do not use a halogenated solvent.
- 13. Steam sterilizers.
- 14. Portable equipment used for the on site painting of buildings, towers, bridges and roads.
- 15. Non-routine clean out of tanks and equipment for the purposes of worker entry or in preparation for maintenance or decommissioning.
- 16. Equipment used for the washing or drying of fabricated products provided that no VOCs are used in the process and that no oil or solid fuels are burned.
- 17. Devices used exclusively for cleaning metal parts or surfaces by burning off residual amounts of paint, varnish, or other foreign material, provided that such devices are equipped with afterburners.
- 18. Fresh water cooling towers provided that the total potential emissions from the entire source remain below 10 tons per year of any single hazardous air pollutant and below 25 tons per year of any combination of hazardous air pollutants.

# (f) Laboratories and Testing.

- 1. Laboratory equipment used exclusively for chemical or physical analyses;
- 2. Sampling connections used exclusively to withdraw materials for testing and analysis, including air contaminant detectors and vent lines;
- 3. Vacuum producing devices;
- 4. Research and development facilities, quality control testing facilities and/or small pilot projects, where combined daily emissions from all operations are below all of the following thresholds:
  - (i) Less than 125 pounds per day of carbon monoxide;
  - (ii) Less than 0.8 pounds per day of lead;
  - (iii) Less than 50 pounds per day of particulate matter, PM(10), or sulfur dioxide;
  - (iv) Less than 50 pounds per day of nitrogen oxides or VOCs except in the Counties of Cherokee, Clayton, Cobb, Coweta, DeKalb, Douglas, Fayette, Forsyth, Fulton, Gwinnett, Henry, Paulding, or Rockdale, where less than 15 pounds per day of nitrogen oxides; or VOCs; and
  - (v) Less than 5 pounds per day of any single hazardous air pollutant and less than 12.5 pounds per day of any combination of hazardous air pollutants.

#### (g) Pollution Control.

- 1. Sanitary wastewater collection and treatment systems, except incineration equipment.
- 2. On site soil or groundwater decontamination units.
- 3. Bioremediation operations.
- 4. Garbage compactors and garbage handling equipment.

#### (h) Industrial Operations.

- 1. Concrete block, brick plants, concrete products plants, and ready mix concrete plants producing less than 125,000 tons per year of product.
- 2. Small aluminum scrap metal reclaimers (non-smelters).
- 3. Any of the following processes or process equipment which are electrically heated or which fire natural gas, LPG or distillate (#2) fuel oil at a maximum total heat input rate of not more than 10 million BTU's per hour.
  - (i) Furnaces for heat treating glass or metals, the use of which does not involve molten materials, oil-coated parts, or oil quenching.
  - (ii) Porcelain enameling furnaces or porcelain enameling drying ovens.
  - (iii) Kilns for firing ceramic ware.
  - (iv) Crucible, furnaces, pot furnaces, or induction melting and holding furnaces with a capacity of 1,000 pounds or less each, in which sweating or distilling is not conducted and in which fluxing is not conducted utilizing free chlorine, chloride or fluoride derivatives, or ammonium compounds.
  - (v) Bakery ovens and confection cookers.
- 4. Grain, metal, or mineral extrusion process.
- 5. Equipment used exclusively for rolling, forging, pressing, stamping, spinning, or extruding either hot or cold metals or plastic such as drop hammers or hydraulic presses for forging or metalworking.
- 6. Die casting machines.
- 7. Equipment used exclusively for sintering of glass or metals, but not exempting equipment used for sintering metal-bearing ores, metal scale, clay, fly ash, or metal compounds.
- 8. Equipment for the mining and screening of uncrushed native sand and gravel.
- 9. Ozonization process or process equipment.
- 10. Electrostatic powder coating booths with an appropriately designed and operated particulate control system.
- 11. Equipment used for the application of a hot melt adhesive.
- 12. Equipment used exclusively for mixing and blending water-based adhesives and coating at ambient temperatures.
- 13. Equipment used for compression, molding and injection of plastics.
- 14. Wood products operations in the following SIC categories (combustion equipment and coatings operations are not included in this exemption):
  - (i) 2426 Dimensional Hardwood Lumber Mills
  - (ii) 2431 Lumber Millwork
  - (iii) 2434 Wood Kitchen Cabinets

- (iv) 2439 structural wood Trusses
- (v) 2441 Wood Boxes
- (vi) 2448 Wood Pallets
- (vii) 2449 Wood Containers
- (viii) 2499 Miscellaneous Wood Products
- 15. Industrial process equipment used exclusively for educational purposes at educational institutions.

#### (i) Other.

- 1. Facilities where the combined emissions from all non-exempt source activities [i.e., not listed in 391-3-1-.03(6)(a) (h)] are below the following for all pollutants:
  - (i) 25 tons per year of monoxide;
  - (ii) 300 pounds per year of lead total; with a 3.0 pound per day maximum emission;
  - (iii) 10 tons per year of particulate matter, PM(10), or sulfur dioxide;
  - (iv) 10 tons per year of nitrogen oxides or VOCs except in the counties of Cherokee, Clayton, Cobb, Coweta, DeKalb, Douglas, Fayette, Forsyth, Fulton, Gwinnett, Henry, Paulding, or Rockdale, where less than 2.5 ton per year of nitrogen oxides or VOCs is exempted; and
  - (v) 1 ton per year total with a 15 pound per day maximum emission of any single hazardous air pollutant and less than 2.5 tons per year of any combination of hazardous air pollutants.
- 2. Facilities where the combined emissions from all source activities are below the thresholds in 1. above for one or more pollutants, are not required to list those pollutants in the permit application.
- 3. Cumulative modifications not covered in an existing permit to an existing permitted facility where the combined emission increases from all nonexempt modified activities are below the following thresholds for all pollutants:
  - (i) 13 tons per year of carbon monoxide;
  - (ii) 150 pounds per year total with a 1.5 pound per day maximum emission of lead
  - (iii) 5 tons per year of particulate matter, PM(10), or sulfur dioxide;
  - (iv) 5 tons per year of nitrogen oxides or VOCs except in the counties of Cherokee, Clayton, Cobb, Coweta, DeKalb, Douglas, Fayette, Forsyth, Fulton, Gwinnett, Henry, Paulding, or Rockdale, where less than 1.3 ton per year of nitrogen oxides or VOCs is exempted; and
  - (v) 1 ton per year total with a 15 pound per day maximum emission of any single hazardous air pollutant and less than 2.5 tons per year of any combination of hazardous air pollutants.
- 4. Changes in a process or process equipment which do not involve installing, constructing, or reconstructing an emission unit or the primary air cleaning device of an air pollution control system provided that such changes do not result in the increase of emissions from any emission unit or the emissions of a pollutant not previously emitted. Examples of such changes in a process or process equipment include the following:
  - (i) Change in the supplier or formulation of similar raw materials, fuels, or paints and other coatings;
  - (ii) Changes in product formulations;
  - (iii) Change in the sequence of the process;
  - (iv) Change in the method of raw material addition;
  - (v) Change in the method of product packaging;
  - (vi) Change in process operating parameters;
  - (vii) Replacement of a fuel burner in a boiler with a more efficient burner; or
  - (viii) Lengthening a paint drying oven to provide additional curing time.
- 5. Sources of minor significance as specified by the Director.
- 6. Sources for which there is no applicable emission limit, standard or other emission requirement established under, by, or pursuant to the Act.

## Appendix 1-3

# Emission Standards for Fuel Burning Equipment, Nitrogen Oxides, and Sulfur Dioxide (Source: RSG 391-3-1-.02(2)(d))

### **Emission Standards for Fuel Burning Equipment**

P = allowable weight of emissions of fly ash and/or other particulate matter in lb/MBtu heat input.

R = heat input of fuel-burning equipment in million British thermal per hour.

For equipment constructed before 1 January 1972, emissions of fly ash and/or other particulate matter must not be equal to or exceed the following:

For equipment less than 10 MBtu heat input/h:

P = 0.7 lb/MBtu heat input

For equipment equal to or greater than 10 MBtu heat input/h, or equal to or less than 2000 MBtu/h:

For equipment larger than 2000 MBtu heat input/h:

P = 0.24 lb/MBtu heat input

Equipment constructed after 1 January 1972, emissions of fly ash and/or other particulate matter must not be equal to or exceed the following:

Equipment less than 10 MBtu heat input/h:

P = 0.5 lb/MBtu heat input

For equipment equal to or greater than 10 MBtu heat input/h, or equal to or less than 250 MBtu/h:

For equipment greater than 250 MBtu heat input/h:

P = 0.10 lb/MBtu heat input.

# **Emission Standards for Nitrogen Oxides**

x = percent of total heat input derived from gaseous fuel

y = percent of total heat input derived from oil

z = percent of total heat input derived from coal

For fuel burning equipment equal to or greater than 250 MBtu/h of heat input constructed or modified after 1 January 1972, nitrogen oxide emissions expressed as nitrogen dioxide must not exceed the following:

when firing coal, 0.7 lb NO<sub>x</sub>/MBtu heat input

when firing oil, 0.3 lb NO<sub>x</sub>/MBtu heat input

when firing gas, 0.2 lb NO<sub>x</sub>/MBtu heat input

when different fuels are burned simultaneously, the standard is determined by the following formula:

$$\frac{x(0.20) + y(0.30) + z(0.70)}{x + y + z}$$

#### **Emission Standards for Sulfur Dioxide**

- y = percent of total heat input derived from liquid fossil fuel
- z = percent of total heat input derived from solid fossil fuel
- a = the allowable emission in pounds per million British thermal units.

When different fossil fuels are burned simultaneously  $SO_2$  emissions standards are determined by the following formula:

$$a = y(0.80) + z(1.2)$$
  
 $y + z$ 

# Appendix 1-4

# Applicability of 40 CFR 60, Subpart Ec to Existing Hospital/Medical/Infectious Waste Incinerators (Source: RSG 391-3-1-.02(2)(iii)7) [Added July 1999]

For the purposes of implementing the requirements and provisions of the Emission Guidelines of 40 CFR 60, Subpart Ce for Existing HMIWIs, each Existing HMIWI shall comply with the standards, requirements and provisions of 40 CFR Part 60, Subpart Ec, as amended, which is hereby incorporated and adopted by reference, with the exceptions as follows:

| Federal Requirement in 40 CFR 60, Subpart Ec   | Georgia Modification  |
|--|---|
| 60.50c Applicability and delegation of authority   | (i) The provisions of 40 CFR 60.50c apply to each Existing HMIWI as stated therein with the exception of the following:   |
| (a) Except as provided in paragraphs (b) through (h) of this section, the affected facility to which this subpart applies is each individual hospital/medical/infectious waste incinerator (HMIWI) for which construction is commenced after June 20, 1996 or for which modification is commenced after March 16, 1998.  | Except as provided in 40 CFR 60.50c(b) through (h), this Subpart shall apply to each Existing HMIWI, as identified in paragraph 1. of this subsection [NOTE: See applicability statement at beginning of section AE.30.GA.].  |
| (e) Any combustor which meets the applicability requirements under subpart Cb, Ea, or Eb of this part (standards or guidelines for certain municipal waste combustors) is not subject to this subpart.   | Any combustor which meets the applicability requirements under 40 CFR Part 60 Subparts Cb, Ea, Eb, or Ec (standards or guidelines for certain municipal and new medical waste combustors) is not subject to this Subpart.   |
| [NOTE: Administrative provisions.]   | The provisions of 40 CFR 60.50c(i), (j), (k), and (l) do not apply to an Existing HMIWI.  |
| § 60.52c Emission limits.  | Emission Limits. The provisions of 40 CFR 60.52c apply to each Existing HMIWI as stated therein with the exception of the following:  |
| (a) On and after the date on which the initial performance test is completed or is required to be completed under § 60.8, whichever date comes first, no owner or operator of an affected facility shall cause to be discharged into the atmosphere from that affected facility any gases that contain stack emissions in excess of the limits presented in Table 1 of this subpart.   | No owner or operator of an Existing HMIWI shall cause to be discharged into the atmosphere from that affected facility any gases that contain stack emissions in excess of the applicable limits found in Table 1 of 40 CFR 60.33e(a). Table 1 of 40 CFR 60.33e(a) is hereby incorporated and adopted by reference. |
| (c) On and after the date on which the initial performance test is completed or is required to be completed under § 60.8, whichever date comes first, no owner or operator of an affected facility utilizing a large HMIWI shall cause to be discharged into the atmosphere visible emissions of combustion ash from an ash conveying system (including conveyor transfer points) in excess of 5 percent of the observation period (i.e., 9 minutes per 3-hour period), as determined by | The provisions of 40 CFR 60.52c(c), (d), and (e) do not apply to an Existing HMIWI.   |

| Federal Requirement in 40 CFR 60, Subpart Ec  | Georgia Modification  |
|---|---|
| EPA Reference Method 22, except as provided in paragraphs (d) and (e) of this section.  |   |
| (d) The emission limit specified in paragraph (c) of this section does not cover visible emissions discharged inside buildings or enclosures of ash conveying systems; however, the emission limit does cover visible emissions discharged to the atmosphere from buildings or enclosures of ash conveying systems.   |   |
| (e) The provisions specified in paragraph (c) of this section do not apply during maintenance and repair of ash conveying systems. Maintenance and/or repair shall not exceed 10 operating days per calendar quarter unless the owner or operator obtains written approval from the State agency establishing a date whereby all necessary maintenance and repairs of ash conveying systems shall be completed. |   |
| § 60.53c Operator training and qualification requirements.  | Operator Training. An Operator of an Existing HMIWI must meet the requirements as outlined in the State HMIWI Plan to be considered qualified to operate an HMIWI. The provisions of 40 CFR 60.53c apply as stated therein with the exception of the following:                             |
| (1) The initial review of the information listed in paragraph (h) of this section shall be conducted within 6 months after the effective date of this subpart or prior to assumption of responsibilities affecting HMIWI operation, whichever date is later.  | The initial review of the information listed in paragraph (h) of 60.53c shall be conducted within 12 months after federal approval of the State HMIWI Plan or prior to assumption of responsibilities affecting HMIWI operation, whichever date is later, but no later than March 15, 2000. |
| § 60.54c Siting requirements.   | Siting Requirements. The provisions of 40 CFR 60.54c do not apply to an Existing HMIWI.   |
| § 60.55c Waste management plan.   | (vi) Waste Management Plan. The provisions of 40 CFR 60.55c apply to each Existing HMIWI as stated therein.   |
| § 60.56c Compliance and performance testing.  | Compliance and Performance Testing. In lieu of 40 CFR 60.56c, Section 2.117.2 of the Georgia Department of Natural Resources Procedures for Testing and Monitoring Sources of Air Pollutants applies to each Existing HMIWI.  |
| § 60.57c Monitoring requirements.   | (viii) Monitoring Requirements. In lieu of 40 CFR 60.57c, Section 2.117.3 of the Georgia Department of Natural Resources Procedures for Testing and Monitoring Sources of Air Pollutants applies to each Existing HMIWI.  |

| Federal Requirement in 40 CFR 60, Subpart Ec       | Georgia Modification   |
|--|--|
| § 60.58c Reporting and recordkeeping requirements. | (ix) Reporting and Record Keeping Requirements. In lieu of 40 CFR 60.57c, Section 2.117.4 of the Georgia Department of Natural Resources Procedures for Testing and Monitoring Sources of Air Pollutants applies to each Existing HMIWI. |

#### **SECTION 2**

#### CULTURAL RESOURCES MANAGEMENT

#### Georgia Supplement, August 2000

This section covers the state requirements for Cultural Resources Management and is intended to supplement the U.S. TEAM Guide. Refer to the U.S. TEAM Guide and the DOD Component Supplements for Federal, DOD, and service-specific requirements.

#### **Definitions**

- *Department* the Georgia Department of Natural Resources (GDNR) (Rules of the State of Georgia (RSG) 391-5-9 and 391-5-10).
- *Division* the Parks, Recreation, and Historic Sites Division of the Department of Natural Resources (RSG 391-5-9 and 391-5-10).
- Exploration all activities involving the search for and determination of the nature of submerged cultural resources located on, or imbedded in, the bottoms of the Atlantic Ocean within the 3-mi territorial limit of the state or within navigable waters of the state (RSG 391-5-9).
- Georgia Register of Historic Places or Georgia Register the Georgia Register of districts, sites, buildings, structures, and objects significant in Georgia history, architecture, engineering, and culture (RSG 391-5-10).
- National Register of Historic Places the national list of districts, sites, buildings, structures, and objects significant in American history, architecture, archaeology, engineering, and culture, maintained by the Secretary of the Interior under authority of the National Historic Preservation Act (RSG 391-5-10).
- *Operation* any project, activity, work, exploration, recovery, or conduct for which a permit is required (RSG 391-5-9).
- *Recovery* all activities involving the collection, excavation, dislodgement, displacement, disassembly, salvage, or any other removal of submerged cultural resources or associated artifacts from their natural or cultural disposition setting or surroundings (RSG 391-5-9).
- Submerged Cultural Resources all prehistoric and historic sites, ruins, artifacts, treasure, treasuretrove, shipwrecks, or vessels and their cargo or tackle that have remained on the bottom for more than 50 yr, and similar sites and objects found in the Atlantic Ocean within the 3-mi territorial limit of the state or within its navigable waters. This term may include, but not be limited to, sites listed in, or eligible for listing, in the National Register of Historic Places (RSG 391-5-9).

### CULTURAL RESOURCES MANAGEMENT GUIDANCE FOR GEORGIA CHECKLIST USERS

### REFER TO CHECKLIST ITEMS:

Missing Checklist Items CR.2.1.GA.

Historic Properties CR.5.1.GA. through CR.5.3.GA.

### COMPLIANCE CATEGORY: CULTURAL RESOURCES MANAGEMENT Georgia Supplement

| Georgia Supplement   |  |
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| REGULATORY<br>REQUIREMENTS:  | REVIEWER CHECKS:<br>August 2000  |
| CR.2.<br>MISSING CHECKLIST<br>ITEMS  |  |
| CR.2.1.GA. Federal facilities are required to comply with all applicable state regulatory requirements not contained in this checklist (a finding under this checklist item will have the citation of the applied regulation as a basis of finding). | Determine whether any new regulations have been issued since the finalization of the manual.  Determine whether the Federal facility has activities or facilities that are regulated but not addressed in the checklists.  Verify that the Federal facility is in compliance with all applicable and newly issued regulations. |

#### COMPLIANCE CATEGORY: CULTURAL RESOURCES MANAGEMENT Georgia Supplement

| Georgia Supplement   |  |
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| REGULATORY   | REVIEWER CHECKS:   |
| REQUIREMENTS:  | August 2000  |
| CR.5.<br>HISTORIC<br>PROPERTIES  |  |
| <b>CR.5.1.GA.</b> Historic property listed in the Georgia Register and must meet specific requirements (RSG 391-5-1002).   | Verify that all regulations concerning the listing of property in the Georgia Register are met, including those concerning the following categories:  - boundary alterations - movement of properties - removal of properties from the Georgia Register.  (NOTE: All properties currently listed in the National Register will be listed in the Georgia Register, as will any subsequent listings. However, listing in the Georgia Register does not mean listing in the National Register.) |
| <b>CR.5.2.GA.</b> A permit is required prior to conducting any exploration, survey, or recovery operation where any part of a submerged cultural resource may be endangered, removed, displaced, or destroyed (RSG 391-5-904). | (NOTE: This checklist item was moved here from CR.20.1.GA.; September 1998.)  Determine if the Federal facility is conducting any exploration, survey, or recovery operation where any part of a submerged cultural resource may be endangered, removed, displaced, or destroyed.  Verify that a permit has been obtained and the operation is conducted according to the conditions of the permit.  |
| <b>CR.5.3.GA.</b> All findings of submerged or suspended cultural resources must be reported to the Division (RSG 391-5-903).  | (NOTE: This checklist item was moved here from CR.20.2.GA.; September 1998.)  Verify that all findings and sightings of submerged or suspended cultural resources are reported to the Division within 2 days of such finding.  |

#### **SECTION 3**

#### HAZARDOUS MATERIALS MANAGEMENT

#### Georgia Supplement, August 2000

This section covers the state requirements for Hazardous Materials Management and is intended to supplement the U.S. TEAM Guide. Refer to the U.S. TEAM Guide and the DOD Component Supplements for Federal, DOD, and service-specific requirements.

The following National Fire Protection Association Codes and Standards have been adopted except to the extent modified:

Flammable and Combustible Liquids Code (NFPA Number 30, 1990), with modification

Automotive and Marine Service Station Code (NFPA Number 30A, 1990), with modification

Manufacture and Storage of Aerosol Products (NFPA Number 30B, 1990)

Standards for the Installation of Oil Burning Equipment (NFPA Number 31, 1990)

Standards for Drycleaning Plants (NFPA Number 32, 1990)

Standards for Spray Application Using Flammable and Combustible Materials (NFPA Number 33)

Standard for the Installation and Use of Stationary Combustion Engines and Gas Turbines (NFPA Number 37, 1990)

National Electrical Code (NFPA Number 70, 1990)

Standard for Parking Structures (NFPA Number 88A, 1991)

Standard of Repair Garages (NFPA Number 88B, 1991)

Standard on Basic Classification of Flammable and Combustible Liquids (NFPA Number 321, 1991).

Standards Procedures for Cleaning or Safeguarding Small Tanks and Containers (NFPA Number 327, 1987)

Standards for Tank Vehicles for Flammable and Combustible Liquids (NFPA Number 385, 1990), with modification

Standards for Portable Shipping Tanks (NFPA Number 386, 1990)

Standards for Tank Vehicles for Flammable and Combustible Liquids on Farms and Isolated Construction Projects (NFPA Number 395, 1988)

Aircraft Fuel Servicing (NFPA Number 407, 1990).

(NOTE: The manufacture, purchase, sale, conveyance, transport, storage, or possession of explosives or blasting agents under the jurisdiction of the Federal Department of Transportation; Interstate Commerce Commission, the Georgia Public Service Commission; the U.S. Coast Guard; the regular military; the Air Force; the Navy; the duly authorized militia of the state; state law enforcement officials; or any Federal agencies are exempt from obtaining a permit or license (RSG, Chapter 120-3-10).)

#### **Definitions**

- *Act* Transportation of Hazardous Materials Act, Act 487, Georgia Laws of 1979, p. 789 (Rules of the State of Georgia (RSG) 672-10-.01).
- *Bulk Storage* the portion of a property where flammable and combustible liquids are received by tank vessel, pipeline, tank car, or tank vehicle, and are stored or blended in bulk (RSG 120-3-11-02).
- *Carrier* any person engaged in the transportation of liquefied natural gas (LNG), polychlorinated biphenyls (PCBs), and radioactive materials (RSG 120-3-11-02).
- Commission Georgia Public Service Commission (RSG 120-3-11-02).

- *Commissioner* the Georgia Safety Fire Commissioner (RSG 120-3-11-02).
- Dealer in Liquefied Petroleum Gas any person who sells or offers to sell liquefied petroleum gas to an ultimate consumer for agricultural, industrial, commercial, or domestic use (RSG 120-3-11-02).
- *Defined Release* any release that is an event that has a known duration of less than 30 consecutive days, that has a known source, and which involves quantities that are known or can be estimated (RSG 391-3-19.02(2)).
- Department the Georgia Department of Transportation (RSG 672-10-.01).
- Detection Limit the practical quantitation limit, defined as the lowest concentration, for an approved analytical test method and for a given sample matrix, at which the quantity of a regulated substance can be measured with a stated degree of confidence under routine laboratory operating conditions (RSG 391-3-19.02(2)).
- Exclusive Use Vehicle a vehicle designed or used exclusively for transporting hazardous materials or any vehicle during a trip which, due to requirements based on the nature of a particular load, is allowed to transport only that material (RSG 672-10-.01).
- *Firm Foundation* foundation material that meets the following requirements: has a level top surface, is on solid earth, will not settle or careen, will not deteriorate, and is of masonry or other sturdy noncombustible material that will not decay or rust (RSG 120-3-11-02).
- Free Product any nonaqueous phase liquid that contains a regulated substance and that has accumulated at a groundwater surface, has pooled above a low permeability boundary in an aquifer, or can move freely in the aquifer (RSG 391-3-19.02(2)).
- Groundwater any subsurface water that is in a zone of saturation (RSG 391-3-19.02(2)).
- *Hazardous Material* all radioactive materials, liquefied natural gas (LNG), and polychlorinated biphenyl (PCB) (RSG 672-10-.01).
- Nonresidential Property any real property or portion of a property not currently being used for human habitation or for other purposes with a similar potential for human exposure, at which activities have been or are being conducted that can be categorized in one of the 1987 Standard Industrial Classification (SIC) major groups 01-97 inclusive (except the four-digit codes 4941, 8051, 8059, 8062-3, 8069, 8211, 8221-2, 8351, 8661, and 9223). Nonresidential property includes all of the contiguous block(s) and lot(s) controlled by the same owner or operator that are vacant land, or that are used in conjunction with such business. For leased properties, nonresidential property includes the leasehold and any external tank, surface impoundment, septic system, or any other structure, vessel, contrivance, or unit that provides, or is utilized for the management of regulated substances to or from the leasehold (RSG 391-3-19.02(2)).
- *Public Hall* any building regularly used for public assembly for purposes of amusement, instruction, religious worship, or other meetings (RSG 120-3-11-02).
- Regulated Substance any substance defined in the Hazardous Waste Management Act, OCGA Sec. 12-8-62, by the terms "hazardous waste" or "hazardous constituent," or any substance defined in the Hazardous Site Response Act, Official Code of Georgia, Annotated (OCGA), Sec. 12-8-92, as "hazardous substance" (all such regulated substances are listed in Appendix I (see Appendix 4-1)) (RSG 391-3-19.02(2)).
- Release any intentional or unintentional act or omission resulting in the spilling, leaking, pumping, pouring, emitting, emptying, discharging, injecting, escaping, leaching, dumping, or disposing into the environment, including without limitation the abandonment of discarding of barrels, containers, and other closed receptacles, of any hazardous waste, hazardous constituent, or hazardous substance; provided however, that such term shall not include any release that results in exposure to persons solely within a workplace, with respect to a claim

which such persons may assert against the employer of such persons; emissions from the engine exhaust of any motor vehicle, rolling stock, aircraft, vessel, or pipeline pumping station; or the normal application of fertilizer (RSG 391-3-19.02(2)).

- Residential Property any property that does not exclusively meet the definition of non-residential property. In addition to recognized residential use, it also includes property used for establishments classified by those SIC codes that are excepted from the definition herein of "nonresidential." Also, a portion of nonresidential property that is used in part for residential activities, such as a daycare center, is defined as residential (RSG 391-3-19.02(2)).
- *Responsible Party* any person who has contributed or who is contributing to a release, as defined at OCGA 12-8-92(9) (RSG 391-3-19.02(2)).
- *Serious Accident* an accident in which loss of life, hospitalization of persons, or loss or damage to property involving \$100.00 or more results from the accident (RSG 120-3-11-02).
- *Shipper* any person who arranges for, provides for, solicits a carrier for, consigns to a carrier for, or contracts with a carrier for shipment or transport of goods or property (RSG 120-3-11-02).
- *Site* that portion of the owner's contiguous property and any other owner's property affected by a release exceeding a reportable quantity (RSG 391-3-19.02(2)).
- Soil any unconsolidated earth material, together with any unconsolidated plant or animal matter or foreign material that has become incorporated into it, that either consists of, remains within, or comes to be deposited on, native soil or regolith (RSG 391-3-19.02(2)).
- Wastewater any self-generated hazardous waste that undergoes on-site management in a wastewater treatment facility prior to its discharge from an outfall that is regulated under the Georgia Water Quality Control Act.

### HAZARDOUS MATERIALS MANAGEMENT GUIDANCE FOR GEORGIA CHECKLIST USERS

|                                    | REFER TO CHECKLIST ITEMS:        |
|------------------------------------|----------------------------------|
|                                    |                                  |
| Missing Checklist Items            | HM.2.1.GA.                       |
| Releases of Hazardous Materials    | HM.20.1.GA. and HM.20.2.GA.      |
| Flammable/Combustible Liquids      |                                  |
| General                            | HM.35.1.GA. through HM.35.6.GA.  |
| Liquefied Petroleum Gases          | HM.35.7.GA. through HM.35.12.GA. |
| Compressed Gases Storage           | HM.45.1.GA.                      |
| Hazardous Materials Transportation | HM.50.1.GA. and HM.50.2.GA.      |

| GUIDANCE FOR APPENDIX USERS |   |  |
|-----------------------------|---|--|
| REFER TO APPENDIX NUMBERS:  | REFER TO APPENDIX TITLES:   |  |
| 3-1                         | Regulated Substances and Soil Concentrations that                     |  |
| 3-2                         | Trigger Notification Exclusions from Release Notification Requirement |  |

| Georgia Supplement  |   |
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| REGULATORY  | REVIEWER CHECKS:  |
| REQUIREMENTS:   | August 2000   |
| HM.2.   |   |
| MISSING CHECKLIST   |   |
| ITEMS   |   |
|   |   |
| HM.2.1.GA. Federal facilities                                 | Determine whether any new regulations have been issued since the finalization of                    |
| are required to comply with                                   | the manual.   |
| all applicable state regulatory requirements not contained in | Determine whether the Federal facility has activities or facilities that are regulated              |
| this checklist (a finding under                               | but not addressed in the checklists.  |
| this checklist item will have                                 |   |
| the citation of the applied regulation as a basis of          | Verify that the Federal facility is in compliance with all applicable and newly issued regulations. |
| finding).   | issued regulations.   |
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| Georgia Supplement   |   |
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| REGULATORY<br>REQUIREMENTS:  | REVIEWER CHECKS:<br>August 2000   |
| HM.20<br>RELEASES OF<br>HAZARDOUS<br>MATERIALS   |   |
| HM.20.1.GA. Releases of regulated substances must be reported to the Director (RSG 391-3-1904) [Added September 1997]. | Verify that the Director is notified of any of the following releases within 30 days of their occurrence:  - a release of a regulated substance that causes the concentration in groundwater to exceed the naturally-occurring background concentration - a release of a regulated substance which causes the concentration in soil to exceed a concentration in Appendix 3-1 - the discarding or abandonment of a regulated substance in barrels, drums, other containers, tanks, or other storage or transportation vessels, in process units, or in waste management units that have neither a hazardous waste permit nor interim status.  (NOTE: Exclusions from the notification requirement are listed in Appendix 3-2.)  Verify that notification includes, at minimum, all of the following:  - name, mailing address, and telephone number of the site's property owner and, if different, of the facility owner and/or operator - street address of the site or, if a numbered street address is not available, a location descriptor - an original of the most current topographic map of scale 1:24,000 produced by the U.S. Geological Survey, with the geographic center of the site identified - a chemical name, taken from Appendix 4-1, of each regulated substance released at the site that independently meets the notification criteria - a general description of the nature of the release and the location of areas affected by the release or by its subsequent migration, both within and beyond the original site's property boundaries - if known, the source, quantity, and the date of the regulated substance released - a summary of actions taken to investigate, clean up, or otherwise remediate the site - a statement that identifies the criteria by which it was determined that a release that requires notification has occurred. |
| HM.20.2.GA. Releases exceeding a reportable quantity, as determined by the Director, must submit                       | (NOTE: Any owner of real property where a release has occurred must furnish to the Director any information which that person may have or reasonably obtain which is relevant to the release when requested by the Director. The Director may list a site on the Hazardous Site Inventory if the Director determines that a release   |

| Georgia Supplement   |  |
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| REGULATORY   | REVIEWER CHECKS:   |
| REQUIREMENTS:  | August 2000  |
| additional documentation (RSG 391-3-1905(2)) [Added September 1997]. | exceeding a reportable quantity has occurred or that a release poses a danger to human health and the environment. See Other Environmental Issues Checklist for clean-up requirements. (RSG 391-3-19-04(1) and 391-3-1905(1)).)  |
|  | (NOTE: If the Director determines that a release exceeding a reportable quantity has occurred, he shall notify the property owner in writing of his finding. If the Director determines that a release exceeding a reportable quantity has not occurred, he shall likewise issue such determination in writing.)   |
|  | Verify that, within 45 days of the receipt of the Director's written determination that a release exceeding a reportable quantity has occurred, the following information is submitted (unless such information has already been submitted):   |
|  | <ul> <li>name, mailing address, and telephone number of the site's property owner, lessee, tenant, or facility owner or operator</li> <li>street address of the site or, if a numbered street address is not available, a</li> </ul>   |
|  | location descriptor - an original of the most current topographic map of scale 1:24,000 produced   |
|  | by the U.S. Geological Survey, with the geographic center of the site identified   |
|  | <ul> <li>a description of the property boundaries in the vicinity of the site, by legal<br/>description, survey plat, tax map, or other means</li> </ul>   |
|  | - chemical name, taken from Appendix 3-1, of each regulated substance released at the site which independently meets the notification criteria   |
|  | - general description of the nature of the release and the location of areas affected by the release or by its subsequent migration, both within and beyond the original site's property boundaries  |
|  | - if known, the source, quantity, and date of the regulated substance released - suspected or known date and quantity of each release at the site - suspected or known source of each release at the site and the known or estimated extent of the area contaminated by said release or by its subsequent migration, both within and beyond the site's property boundaries |
|  | <ul> <li>- a summary of actions taken to investigate, clean up, or otherwise remediate the site</li> <li>- a statement which identifies the criteria by which the property owner</li> </ul>  |
|  | determined that a release which requires notification has occurred.  |

| Georgia Supplement   |  |
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| REGULATORY   | REVIEWER CHECKS:   |
| REQUIREMENTS:  | August 2000  |
| FLAMMABLE/<br>COMBUSTIBLE LIQUIDS  | (NOTE: The state has adopted National Fire Protection Association (NFPA) Codes and Standards for the handling and storage of flammable and combustible liquids with the exception of the following modifications.)   |
| HM.35.<br>General  |  |
| HM.35.1.GA. Approvals are required for the installation of new flammable or combustible liquids storage tanks or modification of existing tanks (Rules of the Safety Fire Commissioner (RSG) 120-3-1103(1) and (3)). | Verify that approval has been obtained from the local authority or the State Fire Marshal prior to starting construction of nonportable storage tanks or add to or relocate tanks at existing facilities with the following capacities:  - more than a 60-gal capacity for Class I liquids - a 120-gal capacity for Class II and Class III liquids.  Verify that approval has been obtained from the local authority or the State Fire Marshal prior to starting construction. |
|  | Verify that a copy of approved plans are kept at the site during construction.   |
| HM.35.2.GA. Flammable and combustible liquids storage must meet the following  | (NOTE: RSG 120-3-1107 contains modifications, additions, and deletions to NFPA Number 30, 1990, Flammable and Combustible Liquids Code.)   |
| safety standards (RSG 120-3-1107(1)).  | Verify that aboveground storage tanks for Class I flammable liquids are not erected within 300 ft of any school, church, hospital, theater, or public hall.  |
|  | Verify that barrels, drums of combustible materials are not stored beneath or within 10 ft of any aboveground storage tank.  |
|  | Verify that underground storage tanks that are filled by gravity from aboveground storage tanks are equipped with either of the following:   |
|  | <ul> <li>a device that eliminates the possibility of overflow</li> <li>a qualified person in constant attendance that has the means to stop the flow to the underground tanks promptly.</li> </ul>   |
|  | Verify that defective or leaky tanks, containers, and piping are immediately made tight or replaced.   |
|  | Verify that a suitable fence or other enclosure surrounds all aboveground tanks at bulk plants to prevent access from the public.  |

#### COMPLIANCE CATEGORY: HAZARDOUS MATERIALS MANAGEMENT **Georgia Supplement REVIEWER CHECKS:** REGULATORY **REQUIREMENTS:** August 2000 Verify that there are no open lights and fires allowed and signs are posted to indicate this. Verify that Class I liquids are not used as a solvent or cleaning fluid except in conjunction with equipment and processes specifically designed and approved for the Verify that hoses are inspected at regular intervals and are replaced when signs of deterioration, weathering, or wearing are observed. HM.35.3.GA. Verify that the State Fire Marshal is notified as soon as possible or within 72 h of Reporting fires involving regulated vehicles, equipment, or facilities and all accidents that requirements must be met for fires or accident (RSG 120-3may create a hazard to the public from fire, explosion, or related risk. 11-.05 and 120-3-22-.06). HM.35.4.GA. Tank vehicles Verify that vehicles that transport flammable and combustible liquids are that transport flammable and maintained in good operating condition. combustible liquids must meet specific safety standards (RSG Verify that persons driving, attending, making deliveries, filling, discharging, or 120-3-11-.07(3)(a) repairing vehicles that transport flammable and combustible liquids are not under through the influence of intoxicants, narcotics, or other dangerous drugs. (d); and (f)). Verify that intoxicating beverages, narcotics, and other dangerous drugs are not carried in or on tank vehicles. Verify that each vehicle has the following markings: - the name and address of the Federal facility on the sides and rear - name in letters at least 4 in. high - address lettering as large as will fit. HM.35.5.GA. Operators of Verify that no Class I liquids are transferred from tank trucks to motor vehicle fuel tanks or other tanks or containers on any highway, road, street, or alley except in tank vehicles that transport flammable and combustible an emergency. liquids must meet delivery and (NOTE: These regulations do not prohibit machinery or vehicles used in road contransfer standards (RSG 120struction and maintenance, fire-fighting vehicles, equipment used by public 3-11-.07(3)(e)). authorities or the U.S. Armed Services, or fuel containers used for such vehicles and equipment.) Verify that except for fire fighting apparatus, all machinery and vehicle motors are

shut down while refueling.

| Georgia Supplement   |  |
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| REGULATORY   | REVIEWER CHECKS:   |
| REQUIREMENTS:  | August 2000  |
|  | (NOTE: Auxiliary motors involved with environmental control in cargo spaces may be kept running if necessary.)   |
|  | Verify that, during flammable liquid off loading at public service stations, the area is posted and roped or barricaded as appropriate to limit access and prevent or control the source of ignition.              |
| HM.35.6.GA. The transportation of flammable and combustible liquids by other | Determine whether the Federal facility transports flammable and combustible liquids by other than tank vehicles.   |
| than tank vehicles must meet specific standards (RSG 120-3-1108).            | Verify persons driving, attending, making deliveries, or otherwise handling flammable liquids while loading or unloading vehicles are not under the influence of intoxicants, narcotics, or other dangerous drugs. |
|  | Verify that intoxicants, narcotics, or other dangerous drugs are not carried in or on vehicles transporting flammable or combustible liquids.  |
|  | Verify that only metal containers that meet ICC, DOT, or GPSC regulations are used.  |
|  | Verify that containers loaded in or on vehicles are securely fastened to prevent slipping and overturning.   |
|  | Verify that vehicles are in good operating conditions and are not overloaded.  |
|  | Verify that each vehicle is equipped with at least one 20-BC rated fire extinguisher, permanently mounted and readily accessible to the driver.  |
|  | Verify that drivers of vehicles are physically able to perform the job, carefully, capably, reliably, and are familiar with traffic laws and applicable regulations.   |
|  | Verify that no person smokes in vehicles when transporting Class I liquids unless the loaded containers are the original, unopened containers.   |
|  | Verify that vehicles transporting 1000 lb gross weight or more of flammable liquids carry placards on the front, rear, and sides that meet DOT requirements for text, color, and size.                             |
| Liquefied Petroleum Gases  | (NOTE: The state has adopted NFPA Codes and Standards for the handling and storage of liquefied petroleum gases with the exception of the following modifications.)  |
| HM.35.7.GA. The storage of   | Verify that complete plans and specifications for all systems involving the storage  |

| Georgia Supplement   |   |
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| REGULATORY   | REVIEWER CHECKS:  |
| REQUIREMENTS:  | August 2000   |
| liquefied petroleum gas must<br>be approved by the State Fire<br>Marshal (RSG 120-3-1604). | of over 2000 water gallons of liquefied petroleum gas are submitted and approved by the State Fire Marshal before installation is started.  |
|  | Verify that systems that require a license but involve the storage of 2000 water gallons or less of liquefied petroleum gas have received a final inspection from the State Fire Marshal.   |
| HM.35.8.GA. The storage and handling of liquefied petroleum gases must meet                | Verify that portable storage containers are located on a firm and level foundation with solid support and inflatable tires are not part of the support.   |
| specific container standards (RSG 120-3-1607(2)(a) through (f), and (n)).                  | Verify that all dealer-owned containers installed at the ultimate consumer's location are marked in a legible manner with the name of the Federal facility and are in compliance with the American Society of Mechanical Engineers (ASME) data plate and certification standards. |
|  | Verify that liquefied petroleum gas introduced into noncompliant containers have been approved by the State Fire Marshal.   |
|  | Verify that a valid license has been obtained for the introduction of liquefied petroleum gas into containers used for storage or transportation of the gas for sale, for each location.  |
|  | Verify that ASME containers subject to internal pressure that requires welding to the shell, heads, or part of the container meet the code under which the tank was fabricated.   |
|  | Verify that ASME tanks that have been involved in a fire and the protective coating has been burned off are repaired and retested for compliance with the code under which it was fabricated.   |
|  | (NOTE: Tanks are not required to be retested, if the protective coating is only soiled from smoke or debris and the container is still intact.)   |
|  | Verify that tanks permanently removed from liquefied petroleum gas service are completely purged of any combustible mixture and the following are done:   |
|  | <ul> <li>DOT/ICC containers are tested or requalified with DOT regulations</li> <li>ASME containers with a design working pressure of less than 250 psi are not used, except for continued use at existing plants.</li> </ul>   |
|  | Verify that systems or portions of systems that are red-tagged by the State Fire Marshal are only removed by the State Fire Marshal or an authorized representative.  |
|  | Verify that piping, tubing, or regulators are rigidly fastened in their intended position.  |

| DECHI ADODY  | DEGLE ATORY  |  |
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| REGULATORY<br>REQUIREMENTS:  | REVIEWER CHECKS: August 2000   |  |
| HM.35.9.GA. Specific requirements must be met for the use of liquefied petroleum gas (RSG 120-3-1607(2)(1)).   | Verify that no liquefied petroleum gas is used as a source of pressure in operating spray guns and other equipment not specifically designed or intended to use liquefied petroleum gas.   |  |
| HM.35.10.GA. Bulk storage facilities, cylinder filling facilities, and cylinder exchange staging areas must meet specific safety standards (RSG 120-3-1607(2)(m)). | Verify that bulk storage facilities, cylinder filling facilities, and cylinder exchange staging areas have emergency contact information posted in a prominent location accessible to persons who might notice leaks, fires, or other unsafe conditions.  Verify that bulk storage and cylinder filling facilities have letters at least 2 in. high using a 1/4 in. stroke.  Verify that cylinder staging areas have letters at least 3/4 in. high and using approximately a 1/8 in. stroke.                                       |  |
| HM.35.11.GA. Liquefied petroleum gas containers must meet specific valve standards (RSG 120-3-1607(2)(o), (q), and (r)).   | Verify that "No Smoking" signs are conspicuously posted.  Verify that except during transfer operations, the liquid cargo valve(s) of all cargo and tank trucks are closed by means of self-closing shutoff valves.  Verify that all containers used in industrial truck service including fork lift truck cylinders have the container pressure relief valve protected by a suitable pressure relief valve cover.  Verify that all container pressure relief valves are inspected at regular intervals and replaced as necessary. |  |
| HM.35.12.GA. Personnel that handle LP gases must meet training standards (RSG, Chapter 120-3-16, Section 120-3-1607(2)(s)).  | Verify that all persons that handle LP gases are trained in proper handling and operation procedures.  Verify that personnel training documentation is maintained.   |  |

| REGULATORY<br>REQUIREMENTS:  | REVIEWER CHECKS: August 2000  |
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| HM.45.<br>COMPRESSED GASES<br>STORAGE  | (NOTE: The state has adopted the following NFPA standards: #52 (1988) and #59A (1990)).   |
| <b>HM.45.1.GA.</b> Systems for the storage of liquefied natural or compressed natural gas must be approved by the State Fire Marshal (RSG 120-3-1703). | Verify that prior to the installation of a system involving the storage of liquefied natural or compressed natural gas, State Fire Marshal approval is obtained.  Verify that a copy of approved plans are kept available at the construction site.  Verify that, for a system that stores or handles liquefied natural gas that suffers a fire or serious accident involving liquefied natural gas a written report is submitted to the State Fire Marshal as soon as possible but no later than 72 h. |

| Georgia Supplement   |   |  |  |  |
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| REGULATORY<br>DECLIDEMENTS.  | REVIEWER CHECKS:  |  |  |  |
| REQUIREMENTS:  HM.50. HAZARDOUS MATERIALS TRANSPORTATION   | August 2000   |  |  |  |
| HM.50.1.GA. A permit is required for the movement of hazardous materials (RSG 672-1002 and 672-1003(2)). | Verify that a permit has been obtained for all loads of LNG, all loads of PCBs, and all loads of radioactive materials which are transported on an exclusive use vehicle, or are spent fuels, or have a Transportation Index in excess of 50, or which are "large quantities" as defined in 49 CFR.       |  |  |  |
| , , , , , , , , , , , , , , , , , , ,  | Verify that all conditions of the permit are met.   |  |  |  |
|  | Verify that movers of hazardous materials that do not require a permit (as above), initially and annually, declare in writing to the Georgia Department of Transportation, their intent to transport or continue to transport hazardous materials within the state, furnishing the following information: |  |  |  |
|  | <ul> <li>name and address of mover</li> <li>name, address, and phone number of the individual in responsible charge of the movements</li> <li>estimated number of trips and the types and quantities of hazardous materials to be transported per trip.</li> </ul>  |  |  |  |
|  | (NOTE: No permit is required for movements of weaponry or other classified loads when being moved by the U.S. Department of Energy, on government owned vehicles, when under the direction of and escorted by the U.S. Department of Energy.)   |  |  |  |
| HM.50.2.GA. The transportation of hazardous materials must meet specific requirements (RSG 672-10-       | Verify that all hazardous materials are packaged, marked, labeled, handled, loaded, unloaded, stored, detained, transported, placarded, and monitored in compliance with 49 CFR.  |  |  |  |
| .04(a) through (c); and 672-1005(a) and (b)).  | Verify that all Federal, state, and local laws and regulations are met for the transportation of hazardous materials.   |  |  |  |
|  | Verify that the permitted vehicle or load is not operated over any public road in the state other than those described or allowed in the permit.  |  |  |  |
|  | Verify that prior notification is given to the Department for all loads that require a permit, except loads of PCB being transported in a totally enclosed manner as defined in 49 CFR 761.20.  |  |  |  |
|  | Verify that if at any time an incident, accident, or breakdown occurs, the transporter immediately calls the Department, gives the authorization code, and  |  |  |  |

| Georgia Supplement          |   |  |
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| REGULATORY<br>REQUIREMENTS: | REVIEWER CHECKS: August 2000  |  |
|                             | supplies all facts concerning the time, location, and nature of the occurrence.  Verify that upon completion of a movement within the state, or upon leaving the state with any such vehicle or load, the driver calls the Department, gives his authorization code, and informs the Department that his movement has been completed.   |  |
|                             | Verify that movers of quantities of hazardous materials that are not required to secure a permit, and movers of quantities of hazardous materials which are required to have a permit but are not required by the permit to give prior notification, on an annual basis, submit a written report to the Department specifying for the previous 12-mo period the actual number of trips made and the types and quantities of hazardous materials transported per trip. |  |

#### Appendix 3-1

#### Regulated Substances and Soil Concentrations that Trigger Notification

(Source: RSG 391-3-19, Appendix I)

The following table contains all substances that are regulated under this chapter and includes all chemicals and chemical categories listed in the following three sources: (A) "List of Hazardous Substances and Reportable Quantities," 40 CFR 302, Table 302.4; (B) "List of Extremely Hazardous Substances and Their Threshold Planning Quantities," 40 CFR 355; and (C) "Hazardous Constituents," 40 CFR 261, Appendix VIII. The column labeled "Source" indicates which of the above sources lists a particular substance. The column labeled "CAS No." provides the number assigned to the substance by the Chemical Abstracts Service Registry (negative numbers are those arbitrarily assigned by EPD for use in administering this chapter). The table is sorted alphanumerically by chemical name; many substances are listed several times under synonyms.

Soil concentrations that trigger notification requirements (NCs), for the purposes of Rule 391-3-19-.04(3)(b), are those given in the last column of the table. Non-numeric symbols in the NC column are explained in the legend at the end of the table. Concentrations are on a dry-weight total soil basis unless specifically indicated otherwise. Where a release involves multiple regulated substances and/or where a regulated substance can meet more than one listing, all relevant substance listings must be considered in determining whether an NC has been exceeded. If the concentration in the soil sample exceeds an NC for any listing, a notifiable condition exists. Whether or not a notifiable soil concentration has been exceeded is independent of the number of contributing releases or the number of contributing substances.

| CAS NO. | Source | Chemical Name  | NC(mg/kg) |
|---------|--------|--|-----------|
| 92875   | AC     | (1,1'-Biphenyl)-4,4'-diamine                           | DL/.05    |
| 119904  | AC     | (1,1'-Biphenyl)-4,4'-diamine, 3,3'dimethoxy-           | 1.75      |
| 119937  | AC     | (1,1'-Biphenyl)-4,4'-diamine,3,3'dimethyl-             | 1.30      |
| 98828   | A      | (1-Methylethyl)benzene                                 | 21.88     |
| 62384   | ABC    | (Acetato)-phenylmercury                                | DL/.024   |
| 91941   | AC     | 1,1'-Biphenyl-4,4'-diamine, 3,3'dichloro-              | 25.00     |
| 630206  | AC     | 1,1,1,2-Tetrachloroethane                              | 1.03      |
| 71556   | AC     | 1,1,1-Trichloroethane                                  | 5.44      |
| 79345   | AC     | 1,1,2,2-Tetrachloroethane                              | 0.13      |
| 76131   | A      | 1,1,2-Trichloro-1,2,2-trifluoroethane                  | 6.92      |
| 79005   | AC     | 1,1,2-Trichloroethane                                  | 0.50      |
| 75343   | AC     | 1,1-Dichloroethane                                     | 0.03      |
| 75354   | AC     | 1,1-Dichloroethene                                     | 0.36      |
| 75354   | AC     | 1,1-Dichloroethylene                                   | 0.36      |
| 78999   | A      | 1,1-Dichloropropane                                    | [1000]    |
| 465736  | ABC    | 1,2,3,4,10,10-Hexachloro-1,4,4a,5,8, 8a-hexa-          | DL(P)     |
|         |        | hydro-1,4:5,8-endo, endo-dimethanonaphthalene          |           |
| 55630   | AC     | 1,2,3-Propanetriol, trinitrate-                        | DL(P)     |
| 96184   | AC     | 1,2,3-Trichloropropane                                 | 0.54      |
| 95943   | AC     | 1,2,3,4,5-Tetrachlorobenzene                           | 25.00     |
| 120821  | AC     | 1,2,4-Trichlorobenzene                                 | 10.83     |
| 56553   | AC     | 1,2-Benzanthracene                                     | 5.00      |
| 496720  | AC     | 1,2-Benzenediamine, 4-methyl-                          | [100]     |
| 85449   | AC     | 1,2-Benzenedicarboxylic acid anhydride                 | [1000]    |
| 117817  | AC     | 1,2-Benzenedicarboxylic acid, bis(2-ethylhexyl)ester   | 50.00     |
| 85687   | AC     | 1,2-Benzenedicarboxylic acid, butyl phenylmethyl ester | 50.00     |
| 84742   | AC     | 1,2-Benzenedicarboxylic acid, dibutyl ester            | 13.70     |
| 84662   | AC     | 1,2-Benzenedicarboxylic acid, diethyl ester            | 0.74      |
| 131113  | AC     | 1,2-Benzenedicarboxylic acid, dimethyl ester           | 0.66      |

| 117840  | AC  | 1.2 Panzanadioarhavulia said dioatul aster                           | 50.00   |
|---------|-----|--|---------|
|         |     | 1,2-Benzenedicarboxylic acid, dioctyl ester                          |         |
| 218019  | AC  | 1,2-Benzphenanthrene   | 5.00    |
| 107153  | AB  | 1,2-Diaminoethane  | [1000]  |
| 106934  | AC  | 1,2-Dibromoethane  | 0.01    |
| 95501   | AC  | 1,2-Dichlorobenzene  | 25.00   |
| 107062  | AC  | 1,2-Dichloroethane   | 0.02    |
| 78875   | AC  | 1,2-Dichloropropane  | 0.02    |
| 123331  | AC  | 1,2-Dihydro-3, 6-pyridazinedione                                     | DL/5E-4 |
| 95476   | A   | 1,2-Dimethylbenzene  | 20.00   |
| 540738  | AC  | 1,2-Dimethylhydrazine  | 0.32    |
| 528290  | A   | 1,2-Dinitrobenzene   | [1000]  |
| 122667  | AC  | 1,2-Diphenylhydrazine  | 7.20    |
| 107153  | AB  | 1,2-Ethanediamine  | [1000]  |
| 91805   | AC  | 1,2-Ethanediamine N,N-dimethyl-N'-2-pyridinyl-N'- (2-thienylmethyl)- | [1000]  |
| 111546  | AC  | 1,2-Ethanediylbiscarbamodithioic acid                                | [1000]  |
| 1120714 | AC  | 1,2-Oxathiolane, 2,2-dioxide   | [100]   |
| 75558   | ABC | 1,2-Propyleneimine   | DL(P)   |
| 1464535 | ABC | 1,2:3,4-Diepoxybutane  | [100]   |
| 53703   | AC  | 1,2:5,6-Dibenzanthracene   | 5.00    |
| 99354   | AC  | 1,3,5-Trinitrobenzene  | DL/0.07 |
| 123637  | AC  | 1,3,5-Trioxane, 2,4,6-trimethyl-                                     | [1000]  |
| 823405  | AC  | 1,3-Benzenediamine, 2-methyl-  | [100]   |
| 95807   | AC  | 1,3-Benzenediamine, 4-methyl-  | 3.74    |
| 108463  | AC  | 1,3-Benzenediol  | DL/.030 |
| 120581  | AC  | 1,3-Benzodioxole, 5-(1-propenyl)-                                    | [1000]  |
| 94597   | AC  | 1,3-Benzodioxole, 5-(2-propenyl)-                                    | [1000]  |
| 94586   | AC  | 1,3-Benzodioxole, 5-propyl   | [100]   |
| 87683   | AC  | 1,3-Butadiene, 1,1,2,3,4,4-hexachloro-                               | 17.50   |
| 541731  | AC  | 1,3-Dichlorobenzene  | 2.22    |
| 142289  | A   | 1,3-Dichloropropane  | [1000]  |
| 542756  | AC  | 1,3-Dichloropropene  | 0.20    |
| 108383  | A   | 1,3-Dimethylbenzene  | 20.00   |
| 99650   | A   | 1,3-Dinitrobenzene   | 1.05    |
| 96457   | AC  | 1,3-Ethylenethiourea   | 19.94   |
| 85449   | AC  | 1,3-Isobenzofurandione   | [1000]  |
| 504609  | A   | 1,3-Pentadiene   | [1000]  |
| 1120714 | AC  | 1,3-Propane sultone  | [100]   |
| 106503  | A   | 1,4-Benzenediamine   | [25]    |
| 764410  | AC  | 1,4-Dichloro-2-butene  | [25]    |
| 106467  | AC  | 1,4-Dichlorobenzene  | 6.84    |
| 123911  | AC  | 1,4-Diethylene dioxide   | DL/.13  |
| 100254  | A   | 1,4-Dinitrobenzene   | [1000]  |
| 123911  | AC  | 1,4-Dioxane  | DL/.13  |
| 130154  | AC  | 1,4-Naphthalenedione   | [1000]  |
| 130154  | AC  | 1,4-Naphthoquinone   | [1000]  |
| 117806  | A   | 1,4-Naphthoquinone 2,3-dichloro-                                     | [25]    |
| 5344821 | ABC | 1-(o-Chlorophenyl)thiourea   | DL(P)   |
| 591082  | AC  | 1-Acetyl-2-thiourea  | DL(P)   |
| 79196   |     | 1-Amino-2-thiourea   | DL(P)   |
| 109739  | A   | 1-Aminobutane  | [1000]  |
| 101553  | AC  | 1-Bromo-4-phenoxybenzene   | [1000]  |
| 109739  | A   | 1-Butanamine   | [1000]  |
| 924163  | AC  | 1-Butanamine, N-butyl-N-nitroso-                                     | DL/.40  |
| 71363   | A   | 1-Butanol  | DL/.54  |
| 106898  |     | 1-Chloro-2,3-epoxypropane  | DL/.003 |
|         |     | / I  |         |

| 7005722  | ٨   | 1 Chlore A mhonovychonzona  | [1000] |
|----------|-----|---|--------|
| 7005723  | A   | 1-Chloro-4-phenoxybenzene   | [1000] |
| 504609   | A   | 1-Methylbutadiene   | [1000] |
| 63252    | ADC | 1-Naphthyl methylcarbamate  | 1/BG   |
| 86884    |     | 1-Naphthyl-2-thiourea   | DL(P)  |
| 134327   | AC  | 1-Naphthylamine   | [1000] |
| 98862    | AC  | 1-phenylethanone  | DL/.26 |
| 107108   | AC  | 1-Propanamine   | [1000] |
| 78819    | A   | 1-Propanamine, 2-methyl   | [1000] |
| 621647   | AC  | 1-Propanamine, N-nitroso-n-propyl-  | 1.71   |
| 142847   | A   | 1-Propanamine, N-propyl-  | [1000] |
| 126727   | AC  | 1-Propanol, 2,3-dibromo-, phosphate                                       | 25.00  |
| 78831    | AC  | 1-Propanol, 2-methyl-   | DL/.07 |
| 765344   | AC  | 1-Propenal, 2,3-epoxy-  | DL/.07 |
| 1888717  | AC  | 1-Propene, 1,1,2,3,3,3-hexachloro-  | [1000] |
| 107051   | A   | 1-Propene, 3-chloro-  | [1000] |
| 107186   | ABC | 1-Propen-3-ol   | DL(P)  |
| 1464535  | ABC | 2,2'Bioxirane   | [100]  |
| 108601   | AC  | 2,2'-oxybis(1-chloropropane)  | [1000] |
| 75990    | A   | 2,2-Dichloropropanoic acid  | 10.00  |
| 58902    | AC  | 2,3,4,6-Tetrachlorophenol   | 25.00  |
| 15950660 | A   | 2,3,4-Trichlorophenol   | [100]  |
| 933788   | A   | 2,3,5-Trichlorophenol   | 25.00  |
| 933755   | A   | 2,3,6-Trichlorophenol   | 10.05  |
| 1746016  | AC  | 2,3,7,8-Tetrachlorodibenzo-p-dioxin                                       | 8.0E-5 |
| 616239   | A   | 2,3-Dichloro-1-propanol   | [25]   |
| 78886    | A   | 2,3-Dichloropropene   | [1000] |
| 3164292  | A   | 2,3-Dihydroxybutanedioic acid, diammonium salt                            | [1000] |
| 93765    | AC  | 2,4,5-T   | 0.66   |
| 2545597  | A   | 2,4,5-T 2-butoxyethyl ester   | 0.66   |
| 1928478  | A   | 2,4,5-T 2-ethylhexyl ester  | 0.66   |
| 2008460  | A   | 2,4,5-T amines  | 0.66   |
| 93798    | A   | 2,4,5-T esters  | 0.66   |
| 13560991 | A   | 2,4,5-T salts   | 0.66   |
| 93721    | AC  | 2,4,5-TP  | 10.00  |
|          |     | 2,4,5-1F<br>2,4,5-TP acid esters  |        |
| 32534955 | A   |   | 10.00  |
| 95954    | AC  | 2,4,5-Trichlorophenol   | 4.56   |
| 93765    | AC  | 2,4,5-Trichlorophenoxyacetic acid   | 0.66   |
| 1319728  | A   | 2,4,5-Trichlorophenoxyacetic acid, compound with 1-amino-2-propanol (1:1) | 0.66   |
| 6369977  | A   | 2,4,5-Trichlorophenoxyacetic acid, dimethylamine salt                     | 0.66   |
| 25168154 | A   | 2,4,5-Trichlorophenoxyacetic acid, isooctyl ester                         | 0.66   |
| 3813147  | A   | 2,4,5-Trichlorophenoxyacetic acid, triethanolamine salt                   | 0.66   |
| 6369966  | A   | 2,4,5-Trichlorophenoxyacetic acid, trimethylamine salt                    | 0.66   |
| 61792072 | A   | 2,4,5-Trichlorophenoxyacetic acid-1-methylypropyl ester                   | 0.66   |
| 93721    | AC  | 2,4,5-Trichlorophenoxypropionic acid                                      | 10.00  |
| 88062    | AC  | 2,4,6-Trichlorophenol   | 0.66   |
| 94757    | AC  | 2,4-D   | 1.16   |
| 1929733  | A   | 2,4-D 2-butoxyethyl ester   | 1.16   |
| 2971382  | A   | 2,4-D chlorocrotyl ester  | 1.16   |
| 94111    | A   | 2,4-D Esters  | 1.16   |
| 1928387  | A   | 2,4-D Methyl ester  | 1.16   |
| 1928616  | A   | 2,4-D propyl ester  | 1.16   |
| 1320189  | A   | 2,4-D, Propylene glycol butyl ether ester                                 | 1.16   |
| -99001   | C   | 2,4-D, salts, esters  | 1.16   |
| 95807    | AC  | 2,4-Diaminotoluene  | 3.74   |
| 120832   | AC  | 2,4-Dichlorophenol  | 0.96   |
|          |     | •   |        |

| 94111            | ۸        | 2,4-Dichlorophenoxyacetic acid, esters   | 1.16            |
|------------------|----------|--|-----------------|
| 25168267         | A<br>A   | 2,4-Dichlorophenoxyacetic acid, esters  2,4-Dichlorophenoxyacetic acid, isooctyl ester | 1.16            |
|                  |          | 2,4-Dichlorophenoxyacetic acid, isooctyl ester   |                 |
| 94757<br>105679  | AC<br>AC |  | 1.16<br>1.51    |
|                  | AC<br>AC | 2,4-Dimethylphenol 2,4-Dinitrophenol   | 3.30            |
| 51285            | AC<br>AC | 2,4-Dinitrophenoi 2,4-Dinitrotoluene   |                 |
| 121142           |          | 2,4-Diffuotoluefie  2,4-Diffuotoluefie   | 0.66            |
| 541537           | AC       |  | DL(P)           |
| 106514<br>329715 | AC<br>A  | 2,5-Cyclohexadiene-1,4-dione<br>2,5-Dinitrophenol                                      | [100]           |
| 108316           | AC       | 2,5-Furandione   | [100]<br>[1000] |
|                  | AC<br>AC | 2,6-Diaminotoluene   | -               |
| 823405           |          |  | [100]           |
| 1194656<br>87650 | A<br>AC  | 2,6-Dichlorophonol   | [1000]          |
| 573568           |          | 2,6-Dichlorophenol   | [1000]          |
|                  | A        | 2,6-Dinitrophenol 2,6-Dinitrotoluene   | [100]           |
| 606202           | AC       |  | 0.76            |
| 823405           | AC       | 2,6-Toluenediamine   | [100]           |
| 2312358          | A        | 2-(p-tert-butylphenoxy) cyclohexyl 2-propynyl sulfite                                  | [100]           |
| 53963            | AC       | 2-Acetylaminofluorene  | [25]            |
| 95534            | AC       | 2-Amino-1-methylbenzene  | 49.85           |
| 13952846         | A        | 2-Aminobutane  | [1000]          |
| 13952846         | A        | 2-Butanamine   | [1000]          |
| 513495           | A        | 2-Butanamine, (S)-   | [1000]          |
| 78933            | AC       | 2-Butanone   | 0.79            |
| 1338234          | AC       | 2-Butanone peroxide  | [100]           |
| 39196184         |          | 2-Butanone, 3,3-dimethyl-1-(methylthio)-, O-[(methyl amino)carbamoyl]oxime             |                 |
| 4170303          |          | 2-Butenal  | [1000]          |
| 123739           | AB       | 2-Butenal, (E)-  | 6.30            |
| 764410           | AC       | 2-Butene, 1,4-dichloro (mixture of cis and trans)                                      | [25]            |
| 126998           | AC       | 2-Chloro-1,3-butadiene   | [25]            |
| 107200           | AC       | 2-Chloro-1-ethanal   | DL(P)           |
| 78886            | A        | 2-Chloroallyl chloride   | [1000]          |
| 110758           | AC       | 2-Chloroethylvinyl ether   | [1000]          |
| 91587            | AC       | 2-Chloronaphthalene  | 25.00           |
| 95578            | AC       | 2-Chlorophenol   | 0.68            |
| 131895           | AC       | 2-Cyclohexyl-4,6-dinitrophenol   | DL(P)           |
| 110805           | AC       | 2-Ethoxyethanol  | DL/.16          |
| 640197           | ABC      | 2-Fluoroacetamide  | DL(P)           |
| 98011            | A        | 2-Furaldehyde  | DL/.012         |
| 98011            | A        | 2-Furancarboxaldehyde  | DL/.012         |
| 96457            | AC       | 2-Imidazolidinethione  | 19.94           |
| 78795            | A        | 2-Methyl-1,3-butadiene   | [1000]          |
| 534521           | ABC      | •  | DL(P)           |
| 107120           |          | 2-Methylacetonitrile   | DL(P)           |
| 75558            |          | 2-Methylaziridine  | DL(P)           |
| 75865            |          | 2-Methyllactonitrile   | Sec.            |
| 95487            | AB       | 2-Methylphenol   | 3.80            |
| 109068           | AC       | 2-Methylpyridine   | [1000]          |
| 494031           | AC       | 2-Naphthaleneamine, N,N-bis(2-chloroethyl)   | [1000]          |
| 91598            | AC       | 2-Naphthylamine  | [100]           |
| 88755            | A        | 2-Nitrophenol  | [1000]          |
| 79469            | AC       | 2-Nitropropane   | [100]           |
| 109068           | AC       | 2-Picoline   | [1000]          |
| 75649            | A        | 2-Propanamine, 2-methyl-   | [1000]          |
| 67641            | A        | 2-Propanone  | 2.74            |
| 598312           | AC       | 2-Propanone, 1-bromo-  | DL(P)           |
|                  |          |  |                 |

| 405406   |     |  | D. (D)          |
|----------|-----|--|-----------------|
| 107186   |     | 2-Propen-1-ol  | DL(P)           |
| 107028   |     | 2-Propenal   | DL(P)           |
| 79061    |     | 2-Propenamide  | DL/.001         |
| 107131   |     | 2-Propenenitrile   | 1.37            |
| 126987   | ABC | 2-Propenenitrile, 2-methyl-  | DL/.016         |
| 79107    | A   | 2-Propenoic acid   | DL/.008         |
| 97632    | AC  | 2-Propenoic acid, 2-methyl-, ethyl ester                             | [1000]          |
| 80626    | AC  | 2-Propenoic acid, 2-methyl-, methyl ester                            | DL/.17          |
| 140885   | A   | 2-Propenoic acid, ethyl ester  | 249.25          |
| 107197   | AC  | 2-Propyn-1-ol  | DL(P)           |
| 88857    | ABC | 2-sec-butyl-4,6-dinitrophenol  | 0.66            |
| 56042    | AC  | 2-Thio-6-methyluracil  | [100]           |
| 2763964  |     | 3(2H)-Isoxazolone, 5-(aminomethyl)-                                  | DL(P)           |
| 91941    | AC  | 3,3'-Dichlorobenzidine   | 25.00           |
| 119904   | AC  | 3,3'-Dimethoxybenzidine  | 1.75            |
| 119937   | AC  | 3,3'-Dimethylbenzidine   | 1.30            |
| 39196184 | ABC | 3,3-dimethyl-1-(methylthio)-2-butanone-O- [methylaminocarbonyl]oxime | DL(P)           |
| 609198   | A   | 3,4,5-Trichlorophenol  | 19.60           |
|          | AC  | 3,4-Benzacridine   |                 |
| 225514   |     |  | [1000]          |
| 205992   | AC  | 3,4-Benzofluoranthene  | 5.00            |
| 50328    | AC  | 3,4-Benzopyrene  | 1.64            |
| 496720   | AC  | 3,4-Diaminotoluene   | [100]           |
| 610399   | A   | 3,4-Dinitrotoluene   | [100]           |
| 496720   | AC  | 3,4-Toluenediamine   | [100]           |
| 78591    | A   | 3,5,5-Trimethyl-2-cyclohexenone                                      | DL/.19          |
| 330541   | A   | 3-(3,4-Dichlorophenyl)-1,1-dimethylurea                              | [1000]          |
| 81812    | ABC | 3-(alpha-Acetonylbenzyl)-4-hydroxycoumarin                           | DL(P)           |
| 107051   | A   | 3-Chloropropene  | [1000]          |
| 542767   | ABC | 3-Chloropropionitrile  | DL(P)           |
| 56495    | AC  | 3-Methylcholanthrene   | 5.00            |
| 108394   | A   | 3-Methylphenol   | 3.80            |
| 554847   | A   | 3-Nitrophenol  | [1000]          |
| 99081    | A   | 3-Nitrotoluene   | [1000]          |
| 56042    | AC  | 4(1H)-Pyrimidinone, 2,3-dihydro-6-methyl-2-thioxo-                   | [100]           |
| 72548    | AC  | 4,4'-DDD   | 0.66            |
| 72559    | AC  | 4,4'-DDE   | 0.66            |
| 50293    | AC  | 4,4'-DDT   | 0.66            |
| 101144   | AC  | 4,4'-Methylenebis(2-chloroaniline)                                   | 25.00           |
| 534521   | ABC |  | DL(P)           |
| -99002   | C   | 4,6-Dinitro-o-cresol 4,6-Dinitro-o-cresol salts                      |                 |
|          | AC  | 4-Amino-1-methylbenzene  | [1000]<br>62.97 |
| 106490   | C   | · · · · · · · · · · · · · · · · · · ·                                |                 |
| 92671    |     | 4-Aminobiphenyl  | [25]            |
| 504245   | ABC | 4-Aminopyridine  | DL(P)           |
| 101553   | AC  | 4-Bromophenyl phenyl ether   | [1000]          |
| 59507    | AC  | 4-Chloro-3-methylphenol  | 13.20           |
| 3165933  | A   | 4-Chloro-o-toluidine, hydrochloride                                  | 26.01           |
| 106478   | AC  | 4-Chloroaniline  | DL(P)           |
| 7005723  | A   | 4-Chlorophenylphenyl ether   | [1000]          |
| 108101   | A   | 4-Methyl-2-pentanone   | 3.30            |
| 106445   | A   | 4-Methylphenol   | 3.80            |
| 100027   | AC  | 4-Nitrophenol  | 3.30            |
| 99990    | A   | 4-Nitrotoluene   | 1.12            |
| 504245   | ABC | 4-Pyridinamine   | DL(P)           |
| 2763964  | ABC | 5-(Aminomethyl)-3-isoxazolol   | DL(P)           |
| 99558    | AC  | 5-Nitro-o-toluidine  | 362.54          |
|          |     |  |                 |

| 57976   | AC       | 7,12-Dimethyl-1,2-Benzanthracene  | [25]              |
|---------|----------|---|-------------------|
| 57976   | AC       | 7,12-Dimethylbenz(a)anthracene  | [25]              |
| 194592  | C        | 7H-Dibenzo[c,g]carbazole  | 5.00              |
| 83329   | A        | Acenaphthene  | 300.00            |
| 208968  | A        | Acenaphthylene  | 130.00            |
| 83329   | A        | Acenaphthylene, 1,2-dihydro-  | 300.00            |
| 75070   | A        | Acetaldehyde  | DL/0.003          |
| 107200  | AC       | Acetaldehyde, chloro-   | DL/0.003<br>DL(P) |
| 640197  | ABC      | Acetanide, 2-fluoro-  | DL(P)             |
| 62442   | AC       | Acetamide, N-(4-ethoxyphenyl)-  | [1000]            |
| 591082  | AC       | Acetamide, N-(4-ethoxyphenyr)- Acetamide, N-(aminothioxomethyl)-                                | DL(P)             |
| 53963   | AC<br>AC | Acetamide, N-9H-fluoren-2-yl  | [25]              |
| 53963   | AC       | Acetamidofluorene   | [25]              |
| 64197   | A        | Acetic acid   | [1000]            |
| 108054  | AB       | Acetic acid ethylene ether  | 0.51              |
| 94791   | A        | Acetic acid (2,4-dichlorophenoxy)-, 1-methylpropyl ester  | [1000]            |
| 540885  | A        | Acetic acid (2,4-dicinorophicioxy)-, 1-methylpropyr ester  Acetic acid, 1,1-dimethylethyl ester | [1000]            |
| 105464  | A        | Acetic acid, 1,1-difficulty/rester  Acetic acid, 1-methylpropyl ester                           | [1000]            |
| 631618  | A        | Acetic acid, 1-methylpropyl ester Acetic acid, ammonium salt                                    | [1000]            |
| 123864  | A        | Acetic acid, animonium sait Acetic acid, butyl ester  |                   |
|         | A        |   | [1000]<br>DL/.07  |
| 141786  | A<br>AC  | Acetic acid, ethyl ester  |                   |
| 301042  |          | Acetic acid, lead (2+) salt   | (i)               |
| 563688  | AC       | Acetic acid, thallium (1+) salt   | (n)               |
| 108247  | A        | Acetic anhydride  | [1000]            |
| 108247  | A        | Acetic oxide  | [1000]            |
| 67641   | A        | Acetone   | 2.47              |
| 75865   |          | Acetone cyanohydrin   | Sec.              |
| 1752303 | В        | Acetone Thiosemicarbazide   | [25]              |
| 75058   | AC       | Acetonitrile  | DL/.04            |
| 98862   | AC       | Acetophenone  | DL/.26            |
| 506967  | A        | Acetyl bromide  | [1000]            |
| 75365   | AC       | Acetyl chloride   | [1000]            |
| 108247  | A        | Acetyl oxide  | [1000]            |
| 75207   | A        | Acetylenogen  | [100]             |
| 1066337 | A        | Acid ammonium carbonate   | [1000]            |
| 1341497 | A        | Acid ammonium fluoride  | [1000]            |
| 107028  | ABC      | Acrolein  | DL(P)             |
| 79061   |          | Acrylamide  | DL/.001           |
| 79107   | A        | Acrylic acid  | DL/.008           |
| 107028  | ABC      | Acrylic aldehyde  | DL(P)             |
| 107131  | ABC      | Acrylonitrile   | 1.37              |
| 814686  | В        | Acrylyl Chloride  | [25]              |
| 124049  | A        | Adipic acid   | DL/0.006          |
| 111693  | В        | Adiponitrile  | [1000]            |
| 51434   | AC       | Adrenalin   | Sec.              |
| 1402682 | C        | Aflatoxins  | Sec.              |
| 116063  | ABC      | Aldicarb  | DL(P)             |
| 309002  |          | Aldrin  | 0.66              |
| 110178  | A        | Allomaleic acid   | [1000]            |
| 107186  |          | Allyl alcohol   | DL(P)             |
| 107051  | A        | Allyl chloride  | [1000]            |
| 107119  | В        | Allylamine  | [25]              |
| 122098  | AC       | Alpha, alpha-Dimethylphenethylamine   | DL(P)             |
| 80159   | A        | Alpha,alpha-Dimethylbenzylhydroperoxide   | [100]             |
| 319846  | A        | Alpha-Benzenehexachloride   | 0.66              |

| 210046             |     | ALL DUG  | 0.66     |
|--------------------|-----|--|----------|
| 319846             | A   | Alpha-BHC  | 0.66     |
| 75865              |     | Alpha-Hydroxyisobutyronitrile                    | Sec.     |
| 134327             | AC  | Alpha-Naphthylamine                              | [1000]   |
| 86884              |     | Alpha-Naphthylthiourea                           | DL(P)    |
| 109068             | AC  | Alpha-Picoline                                   | [1000]   |
| 20859738           |     | Aluminum phosphide (AlP)                         | DL(P)    |
| 10043013           | A   | Aluminum sulfate                                 | [1000]   |
| 60571              | AC  | Alvit  | 0.66     |
| 62533              | ABC | Aminobenzene                                     | DL/.038  |
| 74895              | A   | Aminomethane                                     | [1000]   |
| 62533              | ABC | Aminophen  | DL/0.038 |
| 54626              | В   | Aminopterin                                      | [25]     |
| 78535              | В   | Amiton   | [25]     |
| 3734972            | В   | Amiton Oxalate                                   | [25]     |
| 61825              | AC  | Amitrole   | 10.00    |
| 7664417            | AB  | Ammonia  | 500.00   |
| 10380297           | A   | Ammoniated copper sulfate monohydrate            | (h)      |
| 631618             | A   | Ammonium acetate                                 | [1000]   |
| 7773060            | A   | Ammonium amidosulfate                            | [1000]   |
| 1111780            | A   | Ammonium aminoformate                            | [1000]   |
| 1863634            | A   | Ammonium benzoate                                | [1000]   |
| 1066337            | A   | Ammonium bicarbonate                             | [1000]   |
| 1341497            | A   | Ammonium bifluoride                              | [1000]   |
| 5972736            | Α   | Ammonium bioxalate monohydrate                   | [1000]   |
| 10192300           | Α   | Ammonium bisulfite                               | [1000]   |
| 13826830           | A   | Ammonium borofluoride                            | [1000]   |
| 1111780            | A   | Ammonium carbamate                               | [1000]   |
| 506876             | A   | Ammonium carbonate                               | [1000]   |
| 12125029           | A   | Ammonium chloride                                | [1000]   |
| 7789095            | A   | Ammonium chromate ((NH4)2CrO7)                   | (f)      |
| 7788989            | A   | Ammonium chromate (VI)                           | (f)      |
| 3012655            | A   | Ammonium citrate, dibasic                        | [1000]   |
| 3164292            | A   | Ammonium d-tartrate                              | [1000]   |
| 7789095            | A   | Ammonium dichromate (VI)                         | (f)      |
| 1185575            | A   | Ammonium decinomate (V1) Ammonium ferric citrate | [1000]   |
| 13826830           | A   | Ammonium fluoborate                              | [1000]   |
| 12125018           | A   | Ammonium fluoride                                | [1000]   |
| 16919190           | A   | Ammonium fluoride Ammonium fluoride              | [1000]   |
| 1066337            | A   |  | [1000]   |
|                    | A   | Ammonium hydrogen carbonate                      |          |
| 1341497<br>1336216 | A   | Ammonium hydrogen fluoride Ammonium hydroxide    | [1000]   |
| 12125029           | A   | Ammonium muriate                                 | [1000]   |
|                    |     | Ammonium nickel sulfate                          | [1000]   |
| 15699180           | A   |  | (k)      |
| 6009707            | A   | Ammonium oxalate monohydrate                     | [1000]   |
| 131748             | A   | Ammonium picrate                                 | DL(P)    |
| 1762954            | A   | Ammonium rhodanite                               | [1000]   |
| 16919190           | A   | Ammonium silicofluoride                          | [1000]   |
| 7773060            | A   | Ammonium sulfamate                               | [1000]   |
| 12135761           | A   | Ammonium sulfide                                 | [1000]   |
| 10196040           | A   | Ammonium sulfite                                 | [1000]   |
| 1762954            | A   | Ammonium sulfocyanate                            | [1000]   |
| 14307438           | A   | Ammonium tartrate                                | [1000]   |
| 1762954            | A   | Ammonium thiocyanate                             | [1000]   |
| 7803556            | AC  | Ammonium vanadate                                | (p)      |
| 300629             | В   | Amphetamine                                      | Sec.     |
|                    |     |  |          |

| 628637   | A   | Amyl acetate                              | [1000]     |
|----------|-----|---|------------|
| 123922   | A   | Amylacetic ester                          | [1000]     |
| 628637   | A   | Amylacetic ester                          | [1000]     |
| 62533    |     | Aniline                                   | DL/.038    |
| 88051    | В   | Aniline, 2,4,6-Trimethyl-                 | [25]       |
| 120127   | A   | Anthracene                                | 500.00     |
| 7440360  | AC  | Antimony                                  | 10/BG      |
| -99003   | C   | Antimony compounds, N.O.S.                | (b)        |
| 7783564  | A   | Antimony fluoride                         | (b)<br>(b) |
| 7647189  | A   | Antimony pentachloride                    |            |
| 7783702  | B   | · ·                                       | (b)        |
|          | A   | Antimony Pentafluoride                    | (b)        |
| 28300745 |     | Antimony potassium tartrate               | (b)        |
| 7789619  | A   | Antimony tribromide                       | (b)        |
| 10025919 | A   | Antimony trichloride                      | (b)        |
| 7783564  | A   | Antimony trifluoride                      | (b)        |
| 1309644  | A   | Antimony trioxide                         | (b)        |
| 1397940  | В   | Antimycin A                               | [25]       |
| 7697372  | AB  | Aqua fortis                               | (v)        |
| 140578   | C   | Aramite                                   | [25]       |
| 137268   | AC  | Arasan                                    | 10.00      |
| 506616   |     | Argentate(1-), dicyano-, potassium        | (r)        |
| 12674112 | A   | Aroclor 1016                              | (s)        |
| 11104282 | Α   | Aroclor 1221                              | (s)        |
| 11141165 | A   | Aroclor 1232                              | (s)        |
| 53469219 | A   | Aroclor 1242                              | (s)        |
| 12672296 | A   | Aroclor 1248                              | (s)        |
| 11097691 | A   | Aroclor 1254                              | (s)        |
| 11096825 | A   | Aroclor 1260                              | (s)        |
| 1336363  | A   | Aroclors                                  | (s)        |
| 7784465  | AB  | Arsenenous acid, sodium salt              | (a)        |
| 7440382  | AC  | Arsenic                                   | 41.00      |
| 7778394  | AC  | Arsenic acid (H3As04)                     | (a)        |
| 7778441  | AB  | Arsenic acid (H3As04), calcium salt (2:3) | (a)        |
| 7631892  | AB  | Arsenic acid (H3As04), sodium salt        | (a)        |
| 1303282  | ABC | Arsenic acid anhydride                    | (a)        |
| 7645252  | Α   | Arsenic acid, lead salt                   | (a)        |
| 7784409  | A   | Arsenic acid, lead(2+) salt (1:1)         | (a)        |
| 10102484 | A   | Arsenic acid, lead(4+) salt (3:2)         | (a)        |
| 7784341  | AB  | Arsenic chloride                          | (a)        |
| -99004   | AC  | Arsenic compounds, N.O.S.                 | (a)        |
| 1303328  | A   | Arsenic disulfide                         | (a)        |
| 1303282  | ABC | Arsenic pentoxide                         | (a)        |
| 1303328  | A   | Arsenic sulfide                           | (a)        |
| 1327533  | ABC | Arsenic trioxide                          | (a)        |
| 1303339  | A   | Arsenic trisulfide                        | (a)        |
| 1327533  | ABC | Arsenic(III) oxide (As203)                | (a)        |
| 1303282  | ABC | Arsenic(V) oxide (As205)                  | (a)        |
| 10124502 | AB  | Arsenious acid                            | (a)        |
| 1303339  | A   | Arsenious sulfide                         | (a)        |
| 1327533  |     | Arsenous oxide                            | (a)        |
| 7784341  | AB  | Arsenous trichloride                      | (a)        |
| 7784421  | В   | Arsine                                    | (a)        |
| 692422   | AC  | Arsine, diethyl                           | (a)        |
| 75605    | AC  | Arsinic acid, dimethyl                    | (a)        |
| 10124502 | AB  | Arsonic acid, potassium salt              | (a)        |
| <b></b>  |     |   | (4)        |

| 696286   | ABC | Arsonous dichloride, phenyl-                    | (a)       |
|----------|-----|---|-----------|
| 1332214  | A   | Asbestos  | Sec.      |
| 492808   | AC  | Auramine  | [1000]    |
| 2303164  | AC  | Avadex  | 196.13    |
| 115026   | AC  | Azaserine                                       | [25]      |
| 2642719  | В   | Azinphos-Ethyl                                  | 10.00     |
| 86500    | AB  | Azinphos-methyl                                 | 10.00     |
| 151564   |     | Aziridine                                       | DL(P)     |
| 75558    | ABC |   | DL(P)     |
| 625161   | A   | Banana oil                                      | [1000]    |
| 7440393  | C   | Barium  | 500.00/BG |
| -99005   | C   | Barium compounds, N.O.S.                        | (c)       |
|          |     | Barium sulfate (not a regulated substance)      | ( )       |
| 542621   | AC  | Barium cyanide                                  | (r)       |
| 333415   | A   | Basudin   | 1/BG      |
| 225514   | AC  | Benz(c)acridine                                 | [1000]    |
| 98873    | ABC | Benzal chloride                                 | [1000]    |
| 62533    | ABC | Benzeneamine                                    | DL/.038   |
| 636215   | AC  | Benzenamine, 2-methyl-, hydrochloride           | [1000]    |
| 99558    | AC  | Benzenamine, 2-methyl-5-nitro-                  | 362.54    |
| 99168    | В   | Benzenamine, 3-(Trifluoromethyl)-               | [25]      |
| 101144   | AC  | Benzenamine, 4,4'-methylenebis[2chloro-         | 25.00     |
| 492808   | AC  | Benzenamine, 4,4'carbonimidoylbis[N,N-dimethyl- | [1000]    |
| 106478   | AC  | Benzenamine, 4-chloro-                          | DL(P)     |
| 3165933  | A   | Benzenamine, 4-chloro-2-methyl, hydrochloride   | 26.01     |
| 106490   | AC  | Benzenamine, 4-methyl-                          | 62.97     |
| 100016   | AC  | Benzenamine, 4-nitro-                           | DL(P)     |
| 60117    | AC  | Benzenamine, N,N-dimethyl-4-(phenylazo)-        | [100]     |
| 86306    | A   | Benzenamine, N-nitroso-N-phenyl                 | 6.46      |
| 122394   | AC  | Benzenamine, N-phenyl                           | [25]      |
| 71432    | AC  | Benzene   | 0.02      |
| 108907   | AC  | Benzene chloride                                | 4.18      |
| 100447   | ABC | Benzene, (chloromethyl)-                        | 1.05      |
| 98873    | ABC | Benzene, (dichloromethyl)-                      | [1000]    |
| 98077    | ABC | Benzene, (trichloromethyl)-                     | [100]     |
| 95943    | AC  | Benzene, 1,2,4,5-tetrachloro-                   | 25.00     |
| 120821   | AC  | Benzene, 1,2,4-trichloro-                       | 10.83     |
| 528290   | A   | Benzene, 1,2-Dinitro-                           | 205.10    |
| 94597    | AC  | Benzene, 1,2-methylenedioxy-4-allyl             | [1000]    |
| 120581   | AC  | Benzene, 1,2-methylenedioxy-4-propenyl-         | [1000]    |
| 94586    | AC  | Benzene, 1,2-methylenedioxy-4-propyl-           | [100]     |
| 99354    | AC  | Benzene, 1,3,5-trinitro-                        | DL/0.07   |
| 541731   | AC  | Benzene, 1,3-dichloro-                          | 2.22      |
| 91087    | AB  | Benzene, 1,3-diisocyanato-2-methyl              | [1000]    |
| 26471625 | AC  | Benzene, 1,3-diisocyanatomethyl-                | [1000]    |
| 99650    | Α   | Benzene, 1,3-dinitro-                           | 1.05      |
| 106467   | AC  | Benzene, 1,4-dichloro-                          | 6.84      |
| 100254   | Α   | Benzene, 1,4-dinitro-                           | 205.10    |
| 100141   | В   | Benzene, 1-(Chloromethyl)-4-Nitro-              | [25]      |
| 101553   | AC  | Benzene, 1-bromo-4-phenoxy-                     | [1000]    |
| 7005723  | A   | Benzene, 1-chloro-4-phenoxy                     | [1000]    |
| 121142   | AC  | Benzene, 1-methyl-2,4-dinitro                   | 0.66      |
| 98828    | A   | Benzene, 1-methylethyl-                         | 21.88     |
| 606202   | AC  | Benzene, 2-methyl-1,3-dinitro-                  | 0.76      |
| 25321226 | AC  | Benzene, dichloro- (N.O.S.)                     | [1000]    |

| 1220207           | ٨      | Danzana dimathul   | 20.00   |
|-------------------|--------|--|---------|
| 1330207<br>110827 | A<br>A | Benzene, dimethyl-<br>Benzene, hexahydro-                                  | 20.00   |
|                   |        | Benzene, nitro-  |         |
| 98953             | AC     |  | 0.70    |
| 608935            | BC     | Benzene, pentachloro-<br>Benzenearsenic acid                               | 25.00   |
| 98055             |        |  | (a)     |
| 305033            | AC     | Benzenebutanoic acid, 4-[bis(2-chloroethyl)amino-                          | [100]   |
| 98884             | A      | Benzenecarbonyl chloride   | Sec.    |
| 65850             | A      | Benzenecarboxylic acid   | 1000    |
| 25376458          | AC     | Benzenediamine, ar-methyl-   | [100]   |
| 122098            | AC     | Benzeneethanamine, alpha, alpha-dimethyl-                                  | DL(P)   |
| 608731            | A      | Benzenehexachloride  Personnel 16 min 11 mil 1                             | 0.66    |
| 98099             | A      | Benzenesulfonic chloride   | [1000]  |
| 98099             | A      | Benzenesulfonyl acid chloride  | [1000]  |
| 108985            |        | Benzenethiol   | DL(P)   |
| 92875             | AC     | Benzidine  Renzidine   | DL/.05  |
| 3615212           | В      | Benzimidazole, 4,5-dichloro-2-(trifluoromethyl)-                           | [25]    |
| 56553             | AC     | Benzo(a)anthracene   | 5.00    |
| 50328             | AC     | Benzo(a)pyrene   | 1.64    |
| 205992            | AC     | Benzo(b)fluoranthene   | 5.00    |
| 91225             | A      | Benzo(b)pyridine   | DL/.51  |
| 191242            | A      | Benzo(ghi)perylene   | 500.00  |
| 206440            | AC     | Benzo(j,k)fluorene   | 500.00  |
| 207089            | AC     | Benzo(k)fluoranthene   | 5.00    |
| 65850             | A      | Benzoic acid   | 1000    |
| 100470            | A      | Benzonitrile   | DL/.17  |
| 98077             |        | Benzotrichloride   | [100]   |
| 98884             | A      | Benzoyl chloride   | Sec.    |
| 129000            | AB     | Benzo[def]phenanthrene   | 500.00  |
| 205823            | C      | Benzo[j]fluoranthene   | 5.00    |
| 100447            |        | Benzyl chloride  | 1.05    |
| 140294            | В      | Benzyl Cyanide   | [1000]  |
| 98873             |        | Benzylidene chloride   | [1000]  |
| 205992            | AC     | Benz[e]acephenanthrylene   | 5.00    |
| 56495             | AC     | Benz[j]aceanthrylene, 1,2-dihydro-3-methyl-                                | 5.00    |
| 7440417           | A      | Beryllium  | 3.00/BG |
| 7787475           | A      | Beryllium chloride   | (d)     |
| -99006            | AC     | Beryllium compounds, N.O.S.  | (d)     |
| 7787497           | Α      | Beryllium fluoride   | (d)     |
| 13597994          | Α      | Beryllium nitrate  | (d)     |
| 7787555           | Α      | Beryllium nitrate trihydrate   | (d)     |
| 319857            | A      | beta-Benzenehexachloride   | 0.66    |
| 319857            | A      | beta-BHC   | 0.66    |
| 33213659          | A      | beta-Endosulfan  | 10.00   |
| 91598             | AC     | beta-Naphthylamine   | [100]   |
| 608731            | A      | ВНС  | 0.66    |
| 15271417          | В      | Bicyclo[2.2.1]heptane-2-carbonitrile,5-chloro-6-                           | [25]    |
|                   |        | ((methylamino)carbonyl)oxy)imino)-,(1S-(1-alpha, 2-beta,4-alpha,5-alpha,6E |         |
| 108601            | AC     | bis(2-Chloro-1-methylethyl) ether  | 170.91  |
| 111911            | AC     | bis(2-Chloroethoxy)methane   | DL/.027 |
| 111444            | ABC    | bis(2-Chloroethyl) ether   | DL/.60  |
| 108601            | AC     | bis(2-Chloroisopropyl) ether   | 170.91  |
| 117817            | AC     | bis(2-Ethylhexyl) phthalate  | 50.00   |
| 534076            | В      | Bis(Chloromethyl) Ketone   | [25]    |
| 542881            |        | Bis(chloromethyl)ether   | DL(P)   |
| 137268            | AC     | bis(Dimethylthiocarbamoyl)disulfide  | 10.00   |
| 13/200            |        | 2.5(2.1.12.1.)101100011011100  | 10.00   |

| 4044650             | D       | Ditagonata  | [25]         |
|---------------------|---------|---|--------------|
| 4044659<br>7723140  | B<br>AB | Bitoscanate Black phosphorus  | [25]<br>[25] |
|                     |         | Bladafum  |              |
| 3689245             |         | Boletic acid  | DL(P)        |
| 110178              | A<br>B  | Boron Trichloride   | [1000]       |
| 10294345            | В       | Boron Trifluoride  Boron Trifluoride                                    | [25]         |
| 7637072             |         |   | [25]         |
| 353424              | B<br>B  | Boron trifluoride compound with methyl ether (1:1)                      | [25]         |
| 28772567<br>7726956 | В       | Bromadiolone  | [25]         |
| 506683              |         | Bromine Bromine cyanide   | [25]         |
|                     | AC      | Bromoacetone  | (r)          |
| 598312              |         |   | DL(P)        |
| 75274<br>75252      | A       | Bromodichloromethane  | 1.18         |
| 75252               | AC      | Bromoform   | 1.0          |
| 74839               |         | Bromomethane  | 0.80         |
| 357573              | AC      | Brucine  Determining a sid 2.2 di hadrony (B. (B* B*)). Annuanium sala  | DL(P)        |
| 14307438            | A       | Butanedioic acid, 2,3-di-hydroxy-(R-(R*,R*))-, Ammonium salt            | [1000]       |
| 305033              | AC      | Butanoic acid, 4-[bis(2-chloroethyl)-amino] benzene-                    | [100]        |
| 110178              | A       | (E)-2-Butenedioic acid  | [1000]       |
| 94804               | A       | Butyl 2,4-D   | [1000]       |
| 85687               | AC      | Butyl benzyl phthalate  | 50.00        |
| 107926              | A       | Butyric acid  | [1000]       |
| 75605               | AC      | Cacodylic acid  | (a)          |
| 7440439             | AC      | Cadmium   | 39.00        |
| 543908              | A       | Cadmium acetate   | (e)          |
| 7789426             | A       | Cadmium bromide   | (e)          |
| 10108642            | A       | Cadmium chloride  | (e)          |
| -99007              | AC      | Cadmium compounds, N.O.S.   | (e)          |
| 1306190             | В       | Cadmium Oxide   | (e)          |
| 2223930             | В       | Cadmium Stearate  | (e)          |
| 7778441             | AB      | Calcium arsenate  | (a)          |
| 52740166            | A       | Calcium arsenite  | (a)          |
| 75207               | A       | Calcium carbide   | [100]        |
| 13765190            | AC      | Calcium chromate  | (f)          |
| 592018              | AC      | Calcium cyanide   | (r)          |
| 26264062            | A       | Calcium dodecylbenzene sulfonate  | [1000]       |
| 7778543             | A       | Calcium hypochlorite  | [100]        |
| 56257               | В       | Cantharidin   | [25]         |
| 133062              | A       | Captan  | 1/BG         |
| 51832               | В       | Carbachol Chloride  | [25]         |
| 51796               | AC      | Carbamic acid, ethyl ester  | [1000]       |
| 63252               | A       | Carbamic acid, methyl-, 1-naphthyl ester                                | 1/BG         |
| 2032657             | AB      | Carbamic acid, methyl-, 4-(methylthio)-3,5-xylyl ester                  | 10.00        |
| 315184              | AB      | Carbamic acid, methyl-, 4-dimethylamino-3,5-xylyl ester                 | 10.00        |
| 26419738            | В       | Carbamic acid, methyl-,   | [25]         |
|                     |         | O-(((2,4-dimethyl-1,3-dithiolan-2-yl)methylene)Amino)                   |              |
| 615532              | AC      | Carbamic acid, methylnitroso-, ethyl ester                              | [25]         |
| 79447               | AC      | Carbamic chloride, dimethyl-  | [25]         |
| 684935              | AC      | Carbamide, N-methyl-N-nitroso-  | [25]         |
| 62566               | AC      | Carbamide, thio-  |              |
| [100]               |         |   |              |
| 630104              | AC      | Carbamimidoselenoic acid  | DL(P)        |
| 111546              | AC      | Carbamodithioic acid, 1,2-ethanediylbis-, salts and esters              | [1000]       |
| 2303164             | AC      | Carbamothioic acid, bis(1-methylethyl)-S-(2,3-dichloro-2-propenyl)ester | 196.13       |
| 63252               | A       | Carbaryl  | 1/BG         |
| 1563662             | AB      | Carbofuran  | 0.80         |

| 108952             |        | Carbolic acid                           | 50.00   |
|--------------------|--------|---|---------|
| 75150              |        | Carbon bisulfide                        | DL(P)   |
| 75150              |        | Carbon disulfide                        | DL(P)   |
| 353504             | AC     | Carbon oxyfluoride                      | [1000]  |
| 56235              | AC     | Carbon tetrachloride                    | 0.17    |
| 6533739            |        | Carbonic acid, dithallium (1+) salt     | (n)     |
| 75445              |        | Carbonic dichloride                     | DL(P)   |
| 353504             | AC     | Carbonic difluoride                     | [1000]  |
| 79221              |        | Carbonochloridic acid, methyl ester     | [1000]  |
| 75445              |        | Carbonyl chloride                       | DL(P)   |
| 353504             | AC     | Carbonyl fluoride                       | [1000]  |
| 786196             | В      | Carbophenothion                         | 1/BG    |
| 1310732            | A      | Caustic soda                            | (v)     |
| 62384              | ABC    | Ceresan                                 | DL/.024 |
| 75694              | AC     | CFC-11                                  | 0.70    |
| 75718              | AC     | CFC-12                                  | 1.49    |
| 305033             | AC     | Chlorambucil                            | [100]   |
| 57749              | ABC    | Chlordane                               | 9.20    |
| 470906             | В      | Chlorfenvinfos                          | [25]    |
| 68411450           | AC     | Chlorinated benzenes, NOS               | [25]    |
| 68411723           | AC     | Chlorinated ethane, NOS                 | [25]    |
| -99008             | C      | Chlorinated fluorocarbons, N.O.S.       | [25]    |
| 70776033           | AC     | Chlorinated naphthalene, NOS            | [25]    |
| -99009             | AC     | Chlorinated phenol, N.O.S.              | [25]    |
| 7782505            | AB     | Chlorine                                | Sec.    |
| 506774             | AC     | Chlorine cyanide                        | (r)     |
| 24934916           | В      | Chlormephos                             | [25]    |
| 999815             | В      | Chlormequat Chloride                    | [25]    |
| 494031             | AC     | Chlornaphazine                          | [1000]  |
| 107200             | AC     | Chloroacetaldehyde                      | DL(P)   |
| 79118              | В      | Chloroacetic Acid                       | [25]    |
| -99010             | AC     | Chloroalkyl esters, N.O.S.              | [25]    |
| 107051             | Α      | Chloroallylene                          | [1000]  |
| 108907             | AC     | Chlorobenzene                           | 4.18    |
| 68411450           | A      | Chlorobenzenes                          | [25]    |
| 510156             | AC     | Chlorobenzilate                         | [100]   |
| 124481             | A      | Chlorodibromomethane                    | 1.63    |
| 75003              | A      | Chloroethane                            | 0.17    |
| 107073             | В      | Chloroethanol                           | [25]    |
| 627112             | В      | Chloroethyl Chloroformate               | [25]    |
| 67663              | ABC    | Chloroform                              | 0.68    |
| 75445              |        | Chloroformyl chloride                   | DL(P)   |
| 74873              | AC     | Chloromethane                           | 0.04    |
| 107302             | ABC    | Chloromethyl methyl ether               | DL/.012 |
| 3691358            | В      | Chlorophacinone                         | [25]    |
| 59507              | AC     | Chlorophenol, 4-, methyl, 3-            | 13.20   |
| 126998             | AC     | Chloroprene Chloroprene                 | [25]    |
| 7790945            | A      | Chlorosulfonic acid                     | [1000]  |
| 1982474            | В      | Chloroxuron                             | [25]    |
| 2921882            | A      | Chlorpyrifos                            | 1/BG    |
| 21923239           | B<br>B | Chlorthiophos                           | [25]    |
| 7738945            | A      | Chromic (VI) acid                       |         |
| 1066304            | A<br>A | Chronic acetate                         | (f)     |
|                    |        |   | (f)     |
| 7789095<br>7738045 | A      | Chromic acid (H2Cr207), diammonium salt | (f)     |
| 7738945            | A      | Chromic acid (H2Cr04)                   | (f)     |

| 7700000             | ٨       | Chromic acid (II) Cr(1) diammonium calt                              | <b>(f</b> ) |
|---------------------|---------|--|-------------|
| 7788989<br>13765190 | A<br>AC | Chromic acid (H2Cr04), diammonium salt<br>Chromic acid, calcium salt | (f)         |
|                     | B<br>B  | Chromic Chloride   | (f)         |
| 10025737            |         |  | (f)         |
| 10101538            | A       | Chromic sulfate  | (f)         |
| 7440473             | AC      | Chromium Chromium - company de N.O.C.                                | 1200.00     |
| -99011              | AC      | Chromium compounds, N.O.S.   | (f)         |
| 10049055            | A       | Chromous chloride  | (f)         |
| 218019              | AC      | Chrysene   | 5.00        |
| 110167              | A       | cis-1,2-Ethylenedicarboxylic acid                                    | [1000]      |
| 110167              | A       | cis-Butenedioic acid   | [1000]      |
| 108316              | AC      | cis-Butenedioic acid anhydride                                       | [1000]      |
| 3012655             | A       | Citric acid diammonium salt  | [1000]      |
| 6358538             | C       | Citrus red No. 2   | [25]        |
| 8007452             | C       | Coal tar creosote  | 5.00        |
| 7789437             | A       | Cobalt bromide   | (g)         |
| 10210681            | В       | Cobalt Carbonyl  | (g)         |
| 7789437             | A       | Cobalt dibromide   | (g)         |
| 544183              | A       | Cobalt formate   | (g)         |
| 14017415            | A       | Cobalt sulfamate   | (g)         |
| -99204              | -       | Cobalt (reference only, not regulated substance                      | 25/BG       |
| 62207765            | В       | Cobalt, ((2,2'-(1,2-ethanediylbis                                    |             |
|                     |         | (nitrilomethylidyne))bis(6-fluorophenolato) (2-)-N,N',O,O')-         | (g)         |
| 14017415            | A       | Cobaltous sulfamate  | (g)         |
| 65996818            | A       | Cake oven emissions  | Sec.        |
| 64868               | В       | Colchicine   | [25]        |
| 2312358             | A       | Comite   | [100]       |
| 7440508             | A       | Copper   | 1500.00     |
| 142712              | A       | Copper acetate   | (h)         |
| 12002038            | AB      | Copper acetate aresenite   | (a)         |
| 12002038            | AB      | Copper acetoarsenite   | (a)         |
| -99012              | A       | Copper and compounds   | (h)         |
| 7447394             | A       | Copper chloride  | (h)         |
| 544923              | AC      | Copper cyanide   | (r)         |
| 3251238             | A       | Copper nitrate   | (h)         |
| 7558987             | A       | Copper sulfate   | (h)         |
| 815827              | A       | Copper tartrate  | (h)         |
| 10380297            | A       | Copper (2+), tetraammine-, sulfate (1:1), monohydrate                | (h)         |
| 56724               | AB      | Coumaphos  | 1/BG        |
| 56724               | AB      | Coumarin, 3-chloro-7-hydroxy-4-methyl-,                              |             |
|                     |         | O-ester with O,O-diethylpyrophosphorothioate                         | 1/BG        |
| 5836293             | В       | Coumatetralyl  | [25]        |
| 8001589             | AC      | Creosote   |             |
| 1319773             | AC      | Cresols  | 3.80        |
| 1319773             | AC      | Cresylic acid  | 3.80        |
| 535897              | В       | Crimidine  | [25]        |
| 4170303             |         | Crotonaldehyde   | [1000]      |
| 123739              | AB      | Crotonaldehyde, (E)  | [1000]      |
| 4170303             | ABC     | Crotylaldehyde   | [1000]      |
| 98828               | A       | Cumene   | 21.88       |
| 80159               | A       | Cumene hydroperoxide   | [100]       |
| 142712              | A       | Cupric acetate   | (h)         |
| 12002038            | AB      | Cupric acetoarsenite   | (a)         |
| 7447394             | A       | Cupric chloride  | (h)         |
| 3251238             | A       | Cupric nitrate   | (h)         |
| 5893363             | A       | Cupric oxalate   | (h)         |
| 5075505             | 11      | Cupite Ordina  | (11)        |

| 7758987            | ٨       | Cuprio culfoto   | (b)           |
|--------------------|---------|--|---------------|
| 10380297           | A<br>A  | Cupric sulfate Cupric sulfate, ammoniated, monohydrate | (h)<br>(h)    |
|                    |         | ÷  |               |
| 815827             | A<br>AC | Cupric tartrate  | (h)           |
| 57125              |         | Cyanides (soluble salts and complexes) n.o.s.          | (r)           |
| -99013             | A       | Cyanides (CN anion)                                    | 10.00         |
| 100470             | A       | Cyanobenzene   | DL/.17        |
| 107131             |         | Cyanoethylene  | 1.37          |
| 460195             | AC      | Cyanogen   | DL(P)         |
| 506683             |         | Cyanogen bromide                                       | (r)           |
| 506774             | AC      | Cyanogen chloride                                      | (r)           |
| 506785             | В       | Cyanogen Iodide  | (r)           |
| 506683             |         | Cyanogen monobromide                                   | (r)           |
| 2636262            | В       | Cyanophos  | [25]          |
| 675149             | В       | Cyanuric Fluoride                                      | [25]          |
| 14901087           | C       | Cycasin  | [25]          |
| 110827             | A       | Cyclohexane  | 20.00         |
| 108941             | A       | Cyclohexanone  | DL/.031       |
| 71432              | AC      | Cyclohexatriene  | 0.02          |
| 66819              | В       | Cycloheximide  | [25]          |
| 108918             | В       | Cyclohexylamine  | [25]          |
| 50180              | AC      | Cyclophosphamide                                       | [100]         |
| 60515              | ABC     | Cygon  | DL(P)         |
| 18883664           | AC      | D-Glucopyranose, 2-deoxy-2-(3-methyl-3-nitrosoureido)- | [25]          |
| 75990              | A       | Dalapon  | 10.00         |
| 20830813           | AC      | Daunomycin   | [100]         |
| 20830813           | AC      | Daunorubicin   | [100]         |
| 96128              | AC      | DBCP   | DL/.003       |
| 156605             | AC      | DCE, trans-1,2-  | 0.53          |
| 108601             | AC      | DCIP   | 170.91        |
| 330541             | A       | DCMU   | [1000]        |
| 72548              | AC      | DDD  | 0.66          |
| 72559              | AC      | DDE  | 0.66          |
| 50293              | AC      | DDT  | 0.66          |
| 62737              | AB      | DDVP   | 1/BG          |
| 17702419           | В       | Decaborane(14)   | [25]          |
| 319868             | A       | delta-Benzenehexachloride                              | [25]          |
| 319868             | A       | delta-BHC  | [25]          |
| 8065483            | В       | Demeton  | 20.51         |
| 919868             | В       | Demeton-S-Methyl                                       | [25]          |
| 56531              | AC      | DES  | [25]          |
| 115322             | A       | Di(p-chlorophenyl)-trichloromethylcarbinol             | 1/BG          |
| 117840             | AC      | Di-n-octyl phthalate                                   | 50.00         |
| 621647             | AC      | Di-n-propylnitrosamine                                 | 1.71          |
| 10311849           | В       | Dialifor   | [25]          |
| 2303164            | AC      | Diallate   | 196.13        |
| 302012             |         | Diamine  | DL/4E-5       |
| 25376458           | AC      | Diaminotoluene   | [100]         |
| 7788989            |         |  |               |
| 3012655            | A<br>A  | Diammonium chromate ((NH4)2CrO4) Diammonium citrate    | (f)<br>[1000] |
| 3012633<br>7789095 | A<br>A  | Diammonium citrate Diammonium dichromate               | [1000]        |
|                    |         |  | (f)           |
| 6009707            | A       | Diammonium oxalate monohydrate                         | [1000]        |
| 3164292            | A       | Diammonium tartrate                                    | [1000]        |
| 1309644            | A       | Diantimony trioxide                                    | (b)           |
| 333415             | A       | Diazinon Dibenza(a b)enthuseene                        | 1/BG          |
| 53703              | AC      | Dibenzo(a,h)anthracene                                 | 5.00          |

| 100550                                  |     | D'' ( ')                                      | 5.00    |
|---|-----|---|---------|
| 189559                                  | AC  | Dibenzo(a,i)pyrene                            | 5.00    |
| 192654                                  | C   | Dibenzo[a,e]pyrene                            | 5.00    |
| 189640                                  | C   | Dibenzo[a,h]pyrene                            | 5.00    |
| 1746016                                 | AC  | Dibenzo[b,e][1,4]dioxin, 2,3,7,8-tetrachloro- | 8.0E-5  |
| 226368                                  | C   | Dibenz[a,h]acridine                           | [25]    |
| 224420                                  | C   | Dibenz[a,j]acridine                           | [25]    |
| 19287457                                | В   | Diborane                                      | [25]    |
| 300765                                  | A   | Dibrom  | [100]   |
| 124481                                  | A   | Dibromochloromethane                          | 1.63    |
| 96128                                   | AC  | Dibromochloropropane                          | DL/.003 |
| 74953                                   | AC  | Dibromomethane                                | [1000]  |
| 84742                                   | AC  | Dibutyl phthalate                             | 13.70   |
| 1918009                                 | A   | Dicamba                                       | 1/BG    |
| 1194656                                 | A   | Dichlobenil                                   | [1000]  |
| 117806                                  | A   | Dichlone                                      | [25]    |
| 25321226                                | AC  | Dichlorobenzene, N.O.S.                       | [1000]  |
| 1331471                                 | A   | Dichlorobenzidines                            | [25]    |
| 75274                                   | A   | Dichlorobromomethane                          | 1.18    |
| 75718                                   | AC  | Dichlorodifluoromethane                       | 1.49    |
| 72548                                   | AC  | Dichlorodiphenyldichloroethane                | 0.66    |
| 111444                                  |     | Dichloroethyl ether                           | DL/.60  |
| 25323302                                | C   | Dichloroethylene, N.O.S.                      | 0.53    |
| 75092                                   | AC  | Dichloromethane                               | 0.08    |
| 149746                                  | В   | Dichloromethylphenylsilane                    | [25]    |
| 696286                                  | ABC | Dichlorophenylarsine                          | (a)     |
| 8003198                                 | A   | Dichloropropane dichloropropene mixture       | [1000]  |
| 26638197                                | AC  | Dichloropropane, NOS                          | [1000]  |
| 26545733                                | C   | Dichloropropanol, N.O.S.                      | [25]    |
| 26952238                                | AC  | Dichloropropene, NOS                          | [1000]  |
| 62737                                   | AB  | Dichlorvos                                    | 1/BG    |
| 115322                                  | A   | Dicofol                                       | 1/BG    |
| 141662                                  | В   | Dicrotophos                                   | [25]    |
| 60571                                   | AC  | Dieldrin                                      | 0.66    |
| 56382                                   | ABC | Diethyl 4-nitrophenylphosphorothioate         | DL(P)   |
| 814493                                  | В   | Diethyl Chlorophosphate                       | [25]    |
| 60297                                   | A   | Diethyl ether                                 | 0.56    |
| 84662                                   | AC  | Diethyl phthalate                             | 0.74    |
| 311455                                  | AC  | Diethyl-p-nitrophenyl phosphate               | DL(P)   |
| 109897                                  | A   | Diethylamine                                  | [1000]  |
| 692422                                  | AC  | Diethylarsine                                 | (a)     |
| 1642542                                 | В   | Diethylcarbamazine Citrate                    | [25]    |
| 56531                                   | AC  | Diethylstilbestrol                            | DL      |
| 71636                                   | В   | Digitoxin                                     | Sec.    |
| 2238075                                 | В   | Diglycidyl Ether                              | [25]    |
| 20830755                                | В   | Digoxin                                       | [25]    |
| 95486                                   | AC  | Dihydrosafrole                                | [100]   |
| 55914                                   |     | Diisopropylfluorophosphate                    | DL(P)   |
| 115264                                  | В   | Dimefox                                       | [25]    |
| 60515                                   |     | Dimethoate                                    | DL(P)   |
| 2524030                                 | В   | Dimethyl Phosphorochloridothioate             | [25]    |
| 131113                                  | AC  | Dimethyl phthalate                            | 0.66    |
| 77781                                   |     | Dimethyl sulfate                              | DL/.12  |
| 99989                                   | В   | Dimethyl-p-Phenylenediamine                   | [25]    |
| 124403                                  | A   | Dimethylamine                                 | [1000]  |
| 79447                                   | AC  | Dimethylcarbamoyl chloride                    | [25]    |
| ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, | 110 | Dimenty leaf outilog temoriae                 | [23]    |

| 75785    | В      | Dimethyldichlorosilane                      | [25]    |
|----------|--------|---|---------|
| 62759    |        | Dimethylnitrosamine                         | 0.66    |
| 1300716  | A      | Dimethylphenol                              | 307.64  |
| 644644   | В      | Dimetilan                                   | [25]    |
| 25154545 | AC     | Dinitrobenzene, NOS                         | [1000]  |
| 10544726 | A      | Dinitrogen tetroxide                        | [100]   |
| 25550587 | A      | Dinitrophenol                               | [100]   |
| 25321146 | A      | Dinitrotoluene                              | [100]   |
| 88857    | ABC    | Dinoseb                                     | 0.66    |
| 1420071  | В      | Dinoterb                                    | [25     |
| 78342    | В      | Dioxathion                                  | 1/BG    |
| 1746016  | AB     | Dioxamon                                    | 8.0E-5  |
| 82666    | В      | Diphacinone                                 | [25]    |
| 122394   | AC     | Diphenylamine                               | [25]    |
| 38622183 | A      | Diphenylhydrazine Diphenylhydrazine         | [25]    |
| 152169   | ABC    | Diphosphoramide, octamethyl-                | DL(P)   |
|          | ABC    |   | 1/BG    |
| 333415   | A<br>A | Dipofene<br>Dipographica                    |         |
| 142847   |        | Dipropylamine                               | [1000]  |
| 2764729  | A      | Diquat Diquat dibuomida                     | 2.00    |
| 85007    | A      | Duquat dibromide                            | 2.00    |
| 7631892  | AB     | Disodium arsenate                           | (a)     |
| 7558794  | A      | Disodium phosphate                          | [1000]  |
| 10102188 | AB     | Disodium selenite                           | (L)     |
| 14644612 | A      | Disulfatozirconic acid                      | [1000]  |
| 298044   |        | Disulfoton                                  | DL(P)   |
| 8014957  | A      | Disulphuric acid                            | (v)     |
| 298044   |        | Disyston                                    | DL(P)   |
| 514738   | В      | Dithiazanine Iodide                         | [25]    |
| 751504   |        | Dithiocarbonic anhydride                    | DL(P)   |
| 3689245  |        | Dithiopyrophosphoric acid, tetraethyl ester | DL(P)   |
| 330541   | A      | Diuron                                      | [1000]  |
| 72435    | AC     | DMDT  | 10.00   |
| 27176870 | A      | Dodecylbenzenesulfonic acid                 | [1000]  |
| 2921882  | A      | Dursban                                     | 1/BG    |
| 106934   | AC     | EDB   | 0.01    |
| 60004    | A      | Edetic acid                                 | [1000]  |
| 60004    | A      | EDTA  | [1000]  |
| 316427   | В      | Emetine, Dihydrochloride                    | [25]    |
| 959988   | A      | Endosulfan (alpha)                          | 10.00   |
| 115297   | ABC    | Endosulfan (mixed isomers)                  | 3.30    |
| 1031078  | A      | Endosulfan sulfate                          | 1.65    |
| 959988   | A      | Endosulfan-I                                | 10.00   |
| 33213659 | A      | Endosulfan-II                               | 10.00   |
| 145733   | AC     | Endothall                                   | 0.66    |
| 2778943  | В      | Endothion                                   | [25]    |
| 72208    | ABC    | Endrin                                      | 10.00   |
| 7421934  | Α      | Endrin aldehyde                             | 10.00   |
| -99014   | AC     | Endrin metabolites                          | 10.00   |
| 106898   | ABC    | Epichlorhydrin                              | DL/.003 |
| 51434    | AC     | Epinephrine                                 | Sec.    |
| 2104645  | В      | EPN   | [25]    |
| 50146    | В      | Ergocalciferol                              | [25]    |
| 379793   | В      | Ergotamine Tartrate                         | [25]    |
| 1464535  | ABC    | Erythritol anhydride                        | [100]   |
| 75070    | A      | Ethanal                                     | DL/.003 |
|          |        |   |         |

| 122000   | 4.0 | Ed. ' 11 E 4 10 1 1                                     | DI (D)  |
|----------|-----|---|---------|
| 122098   | AC  | Ethanamine, 1,1-dimethyl-2-phenyl                       | DL(P)   |
| 55185    | AC  | Ethanamine, N-ethyl-N-nitroso-                          | DL/.014 |
| 5893663  | A   | Ethandioic acid copper salt                             | (h)     |
| 60297    | A   | Ethane, 1,1'-oxybis-                                    | 0.56    |
| 111444   |     | Ethane, 1,1'-oxybis[2-chloro]-                          | DL/.60  |
| 111911   | AC  | Ethane, 1,1'-[methylenebis(oxy)]bis[2-chloro-           | DL/.027 |
| 630206   | AC  | Ethane, 1,1,1,2-tetrachloro-                            | 1.03    |
| 106934   | AC  | Ethane, 1,2-dibromo-                                    | 0.01    |
| 107062   | AC  | Ethane, 1,2-dichloro-                                   | 0.02    |
| 460195   | AC  | Ethanedinitrile   | DL(P)   |
| 55488874 | A   | Ethanedioic acid, ammonium iron salt                    | [1000]  |
| 2944674  | A   | Ethanedioic acid, ammonium iron(3+) salt (3:3:1) [1000] | [1000]  |
| 14258492 | A   | Ethanedioic acid, ammonium salt                         | [1000]  |
| 6009707  | A   | Ethanedioic acid, diammonium salt, monohydrate          | [1000]  |
| 5972736  | A   | Ethanedioic acid, monoammonium salt, monohydrate        | [1000]  |
| 75058    | AC  | Ethanenitrile   | DL/.04  |
| 1622328  | В   | Ethanesulfonyl Chloride, 2-Chloro-                      | [25]    |
| 62555    | AC  | Ethanethioamide   | [100]   |
| 64197    | A   | Ethanoic acid   | [1000]  |
| 10140871 | В   | Ethanol, 1,2-Dichloro-, Acetate                         | [25]    |
| 1116457  | AC  | Ethanol, 2,2'-(nitrosoimino)bis-                        | 4.27    |
| 98862    | AC  | Ethanone, 1-phenyl-                                     | DL/.26  |
| 75365    | AC  | Ethanoyl chloride                                       | [1000]  |
| 4549400  | AC  | Ethenamine, N-methyl-N-nitroso-                         | DL(P)   |
| 110758   | AC  | Ethene, (2-chloroethoxy)-                               | [1000]  |
| 75014    | AC  | Ethene, chloro  | 0.04    |
| 563122   | AB  | Ethion  | [100]   |
| 13194484 | В   | Ethoprophos   | [25]    |
| 141786   | A   | Ethyl acetate   | DL/.07  |
| 140885   | A   | Ethyl acrylate  | [1000]  |
| 75070    | A   | Ethyl aldehyde  | DL/.003 |
| 51796    | AC  | Ethyl carbamate   | [1000]  |
| 75003    | A   | Ethyl chloride  | 0.17    |
| 107120   |     | Ethyl cyanide   | DL(P)   |
| 60297    | A   | Ethyl ether   | 0.56    |
| 97632    | AC  | Ethyl methacrylate                                      | [1000]  |
| 62500    | AC  | Ethyl methanesulfonate                                  | [25]    |
| 510156   | AC  | Ethyl-4,4'-dichlorobenzilate                            | 44.31   |
| 107926   | A   | Ethylacetic acid  | [1000]  |
| 75047    | A   | Ethylamine  | [1000]  |
| 100414   | A   | Ethylbenzene  | 20.00   |
| 538078   | В   | Ethylbis(2-Chloroethyl)Amine                            | [25]    |
| 106934   | AC  | Ethylene dibromide                                      | 0.01    |
| 107062   | AC  | Ethylene dichloride                                     | 0.02    |
| 371620   | В   | Ethylene Fluorohydrin                                   | [25]    |
| 110805   | AC  | Ethylene glycol monoethyl ether                         | DL/.16  |
| 72518    |     | Ethylene oxide  | 11.73   |
| 79016    | AC  | Ethylene trichloride                                    | 0.13    |
| 111546   | AC  | Ethylenebisdithiocarbamic acid, salts and esters        | [1000]  |
| 107153   | AB  | Ethylenediamine   | [1000]  |
| 60004    | A   | Ethylenediamine tetraacetic acid                        | [1000]  |
| 151564   |     | Ethyleneimine   | DL(P)   |
| 96457    | AC  | Ethylenethiourea  | 19.94   |
| 79094    | A   | Ethylformic acid  | [1000]  |
| 75343    | AC  | Ethylidene dichloride                                   | 0.03    |

| 542905   | В        | Ethylthiocyanata                        | [25]          |
|----------|----------|---|---------------|
| 52857    | АC       | Ethylthiocyanate<br>Famophos            | DL(P)         |
| 52857    | AC<br>AC | ÷                                       |               |
| 22224926 | B<br>B   | Famphur<br>Fenamiphos                   | DL(P)         |
| 122145   | В        | Fenitrothion                            | [25]          |
|          | В        |   | [25]<br>10.00 |
| 115902   |          | Fensulfothion                           |               |
| 1185575  | A        | Ferric ammonium citrate                 | [1000]        |
| 55488874 | A        | Ferric ammonium oxalate                 | [1000]        |
| 2944674  | A        | Ferric ammonium oxalate Ferric chloride | [1000]        |
| 7705080  | A        | Ferric fluoride                         | [1000]        |
| 7783508  | A        |   | [1000]        |
| 10421484 | A        | Ferric nitrate                          | [1000]        |
| 10028225 | A        | Ferric persulfate                       | [1000]        |
| 10028225 | A        | Ferric sesquisulfate                    | [1000]        |
| 10028225 | A        | Ferric sulfate                          | [1000]        |
| 10045893 | A        | Ferric ammonium sulfate                 | [1000]        |
| 7758943  | A        | Ferrous chloride                        | [1000]        |
| 7720787  | A        | Ferrous sulfate                         | [1000]        |
| 7782630  | A        | Ferrous sulfate heptahydrate            | [1000]        |
| 4301502  | В        | Fluenetil                               | [25]          |
| 206440   | AC       | Fluoranthene                            | 500.00        |
| 86737    | A        | Fluorene                                | 360.00        |
| 7782414  |          | Fluorine                                | 600/BG        |
| 144490   | В        | Fluoroacetic Acid                       | [25]          |
| 62748    |          | Fluoroacetic acid, sodium salt          | DL(P)         |
| 359068   | В        | Fluoroacetyl Chloride                   | [25]          |
| 75694    | AC       | Fluorotrichloromethane                  | 0.70          |
| 51218    | В        | Fluorouracil                            | [25]          |
| 944229   | В        | Fonofos                                 | [25]          |
| 30525894 | A        | Formagene                               | [1000]        |
| 50000    | ABC      | Formaldehyde                            | DL/.010       |
| 107164   | В        | Formaldehyde Cyanohydrin                | Sec.          |
| 50000    | ABC      | Formalin                                | DL/.010       |
| 23422539 | В        | Formetanate Hydrochloride               | [25]          |
| 64186    | AC       | Formic acid                             | [1000]        |
| 2540821  | В        | Formothion                              | [25]          |
| 17702577 | В        | Formparanate                            | [25]          |
| 21548323 | В        | Fosthietan                              | [25]          |
| 76131    | A        | Freon 113                               | 6.92          |
| 3878191  | В        | Fuberidazole                            | [25]          |
| 628864   | AC       | Fulminic acid, mercury (2+) salt        | DL            |
| 110178   | A        | Fumaric acid                            | [1000]        |
| 8014957  | A        | Fuming sulfuric acid                    | (v)           |
| 1563662  | AB       | Furadan                                 | 0.80          |
| 110009   | AB       | Furan                                   | 512.74        |
| 109999   | A        | Furan, tetrahydro-                      | DL/.014       |
| 98011    | A        | Furfural                                | DL/.012       |
| 110009   | AB       | Furfuran                                | 512.74        |
| 13450903 | В        | Gallium Trichloride                     | [25]          |
| 58899    | ABC      | gamma-Benzenehexachloride               | 0.66          |
| 58899    |          | gamma-BHC                               | 0.66          |
| 64197    | A        | Glacial acetic acid                     | [1000]        |
| 765344   | AC       | Glycidylaldehyde                        | DL/.07        |
| 7720787  | A        | Green vitriol                           | [1000]        |
| 70257    | AC       | Guanidine, N-methyl-N'-nitro-N-nitroso- | [100]         |
|          | -        | ,                                       | [100]         |

| -99205           | A      | Haloethers  | [25] |
|------------------|--------|---|------|
| -99015           | AC     | Halomethanes, N.O.S.                                  | [25] |
| -99017           | A      | Hazardous Waste No. D001 (Ignitable)                  | (u)  |
| -99094           | A      | Hazardous Waste No. D002 (Corrosive)                  | (v)  |
| -99018           | A      | Hazardous Waste No. D003 (Reactive)                   | (w)  |
| -99069           | A      | Hazardous Waste No. D004 (Arsenic)                    | (x)  |
| -99068           | A      | Hazardous Waste No. D005 (Barium)                     | (x)  |
| -99066           | A      | Hazardous Waste No. D006 (Cadmium)                    | (x)  |
| -99140           | A      | Hazardous Waste No. D007 (Chromium)                   | (x)  |
| -99139           | A      | Hazardous Waste No. D008 (Lead)                       | (x)  |
| -99138           | A      | Hazardous Waste No. D009 (Mercury)                    | (x)  |
| -99137           | A      | Hazardous Waste No. D010 (Selenium)                   | (x)  |
| -99136           | A      | Hazardous Waste No. D011 (Silver)                     | (x)  |
| -99113           | A      | Hazardous Waste No. D012 (Endrin)                     | (x)  |
| -99108           | A      | Hazardous Waste No. D013 (Lindane)                    | (x)  |
| -99107           | Α      | Hazardous Waste No. D014 (Methoxychlor)               | (x)  |
| -99100           | Α      | Hazardous Waste No. D015 (Toxaphene)                  | (x)  |
| -99118           | Α      | Hazardous Waste No. D016 (2,4-D)                      | (x)  |
| -99096           | Α      | Hazardous Waste No. D017 (2,4,5-TP)                   | (x)  |
| -99300           | A      | Hazardous Waste No. D018 (Benzene)                    | (x)  |
| -99016           | Α      | Hazardous Waste No. D019 (Carbon tetrachloride)       | (x)  |
| -99019           | Α      | Hazardous Waste No. D020 (Chlordane)                  | (x)  |
| -99021           | Α      | Hazardous Waste No. D021 (Chlorobenzene)              | (x)  |
| -99020           | Α      | Hazardous Waste No. D022 (Chloroform)                 | (x)  |
| -99122           | Α      | Hazardous Waste No. D023 (o-Cresol)                   | (x)  |
| -99121           | Α      | Hazardous Waste No. D024 (m-Cresol)                   | (x)  |
| -99120           | A      | Hazardous Waste No. D025 (p-Cresol)                   | (x)  |
| -99119           | Α      | Hazardous Waste No. D026 (Cresols)                    | (x)  |
| -99117           | A      | Hazardous Waste No. D027 (1,4-Dichlorobenzene)        | (x)  |
| -99116           | A      | Hazardous Waste No. D028 (1,2-Dichloroethane)         | (x)  |
| -99115           | A      | Hazardous Waste No. D029 (1,1-Dichloroethylene)       | (x)  |
| -99114           | A      | Hazardous Waste No. D030 (2,4-Dinitrotoluene)         | (x)  |
| -99112           | Α      | Hazardous Waste No. D031 (Heptachlor and its epoxide) | (x)  |
| -99111           | A      | Hazardous Waste No. D032 (Hexachlorobenzene)          | (x)  |
| -99110           | Α      | Hazardous Waste No. D033 (Hexachlorobutadiene)        | (x)  |
| -99109           | Α      | Hazardous Waste No. D034 (Hexachloroethane)           | (x)  |
| -99106           | A      | Hazardous Waste No. D035 (Methyl ethyl ketone)        | (x)  |
| -99105           | Α      | Hazardous Waste No. D036 (Nitrobenzene)               | (x)  |
| -90104           | A      | Hazardous Waste No. D037 (Pentachlorophenol)          | (x)  |
| -99103           | A      | Hazardous Waste No. D038 (Pyridine)                   | (x)  |
| -99101           | A      | Hazardous Waste No. D039 (Tetrachloroethylene)        | (x)  |
| -99099           | A      | Hazardous Waste No. D040 (Trichloroethylene)          | (x)  |
| -99098           | A      | Hazardous Waste No. D041 (2,4,5-Trichlorophenol)      | (x)  |
| -99097           | A      | Hazardous Waste No. D042 (2,4,6-Trichlorophenol)      | (x)  |
| -99095           | A      | Hazardous Waste No. D043 (Vinyl chloride)             | (x)  |
| -99124           | A      | Hazardous Waste No. F001                              | (z)  |
| -99082           | A      | Hazardous Waste No. F002                              | (z)  |
| -99123           | A      | Hazardous Waste No. F003                              | (u)  |
| -99081           | A      | Hazardous Waste No. F004                              | (z)  |
| -99080<br>00070  | A      | Hazardous Waste No. F005                              | (z)  |
| -99079           | A      | Hazardous Waste No. F006                              | (z)  |
| -99078<br>99077  | A      | Hazardous Waste No. F007                              | (z)  |
| -99077<br>-99076 | A<br>A | Hazardous Waste No. F008<br>Hazardous Waste No. F009  | (z)  |
| -99076<br>-99075 | A<br>A | Hazardous Waste No. F010                              | (z)  |
| -77013           | A      | Trazaruous Wasie IVO. Poto                            | (z)  |

| -99074 | Α | Hazardous Waste No. F011 | (z) |
|--------|---|--------------------------|-----|
| -99073 | Α | Hazardous Waste No. F012 | (z) |
| -99072 | Α | Hazardous Waste No. F019 | (z) |
| -99185 | Α | Hazardous Waste No. F020 | (z) |
| -99184 | Α | Hazardous Waste No. F021 | (z) |
| -99183 | Α | Hazardous Waste No. F022 | (z) |
| -99182 | Α | Hazardous Waste No. F023 | (z) |
| -99181 | Α | Hazardous Waste No. F024 | (z) |
| -99180 | Α | Hazardous Waste No. F025 | (z) |
| -99179 | Α | Hazardous Waste No. F026 | (z) |
| -99178 | Α | Hazardous Waste No. F027 | (z) |
| -99177 | Α | Hazardous Waste No. F028 | (z) |
| -99176 | Α | Hazardous Waste No. F032 | (z) |
| -99175 | Α | Hazardous Waste No. F034 | (z) |
| -99174 | Α | Hazardous Waste No. F035 | (z) |
| -99173 | Α | Hazardous Waste No. F037 | (z) |
| -99172 | Α | Hazardous Waste No. F038 | (z) |
| -99171 | Α | Hazardous Waste No. K001 | (z) |
| -99170 | Α | Hazardous Waste No. K002 | (z) |
| -99169 | A | Hazardous Waste No. K003 | (z) |
| -99168 | A | Hazardous Waste No. K004 | (z) |
| -99167 | Α | Hazardous Waste No. K005 | (z) |
| -99166 | A | Hazardous Waste No. K006 | (z) |
| -99165 | A | Hazardous Waste No. K007 | (z) |
| -99164 | Α | Hazardous Waste No. K008 | (z) |
| -99163 | Α | Hazardous Waste No. K009 | (z) |
| -99162 | Α | Hazardous Waste No. K010 | (z) |
| -99161 | Α | Hazardous Waste No. K011 | (z) |
| -99160 | A | Hazardous Waste No. K013 | (z) |
| -99159 | Α | Hazardous Waste No. K014 | (z) |
| -99158 | Α | Hazardous Waste No. K015 | (z) |
| -99157 | Α | Hazardous Waste No. K016 | (z) |
| -99156 | Α | Hazardous Waste No. K017 | (z) |
| -99155 | Α | Hazardous Waste No. K018 | (z) |
| -99154 | Α | Hazardous Waste No. K019 | (z) |
| -99153 | Α | Hazardous Waste No. K020 | (z) |
| -99152 | A | Hazardous Waste No. K021 | (z) |
| -99151 | A | Hazardous Waste No. K022 | (z) |
| -99150 | A | Hazardous Waste No. K023 | (z) |
| -99149 | A | Hazardous Waste No. K024 | (z) |
| -99148 | A | Hazardous Waste No. K025 | (z) |
| -99147 | A | Hazardous Waste No. K026 | (z) |
| -99146 | A | Hazardous Waste No. K027 | (z) |
| -99145 | A | Hazardous Waste No. K028 | (z) |
| -99144 | A | Hazardous Waste No. K029 | (z) |
| -99143 | A | Hazardous Waste No. K030 | (z) |
| -99135 | A | Hazardous Waste No. K031 | (z) |
| -99134 | A | Hazardous Waste No. K032 | (z) |
| -99133 | A | Hazardous Waste No. K033 | (z) |
| -99132 | A | Hazardous Waste No. K034 | (z) |
| -99131 | A | Hazardous Waste No. K035 | (z) |
| -99130 | A | Hazardous Waste No. K036 | (z) |
| -99129 | A | Hazardous Waste No. K037 | (z) |
| -99128 | A | Hazardous Waste No. K038 | (z) |
| -99127 | A | Hazardous Waste No. K039 | (z) |
|        | _ |                          | (2) |

| -99126 | Α | Hazardous Waste No. K040 | (z) |
|--------|---|--------------------------|-----|
| -99125 | Α | Hazardous Waste No. K041 | (z) |
| -99071 | Α | Hazardous Waste No. K042 | (z) |
| -99070 | Α | Hazardous Waste No. K043 | (z) |
| -99102 | Α | Hazardous Waste No. K044 | (w) |
| -99142 | Α | Hazardous Waste No. K045 | (w) |
| -99067 | Α | Hazardous Waste No. K046 | (z) |
| -99141 | Α | Hazardous Waste No. K047 | (w) |
| -99086 | Α | Hazardous Waste No. K048 | (z) |
| -99087 | Α | Hazardous Waste No. K049 | (z) |
| -99090 | Α | Hazardous Waste No. K050 | (z) |
| -99092 | Α | Hazardous Waste No. K051 | (z) |
| -99065 | A | Hazardous Waste No. K052 | (z) |
| -99083 | A | Hazardous Waste No. K060 | (z) |
| -99064 | A | Hazardous Waste No. K061 | (z) |
| -99084 | A | Hazardous Waste No. K062 | (z) |
| -99063 | A | Hazardous Waste No. K064 | (z) |
| -99062 | A | Hazardous Waste No. K065 | (z) |
| -99061 | A | Hazardous Waste No. K066 | (z) |
| -99060 | A | Hazardous Waste No. K069 | (z) |
| -99059 | A | Hazardous Waste No. K071 | (z) |
| -99058 | A | Hazardous Waste No. K073 | (z) |
| -99057 | A | Hazardous Waste No. K083 | (z) |
| -99091 | A | Hazardous Waste No. K084 | (z) |
| -99056 | A | Hazardous Waste No. K085 | (z) |
| -99093 | A | Hazardous Waste No. K086 | (z) |
| -99089 | A | Hazardous Waste No. K087 | (z) |
| -99055 | A | Hazardous Waste No. K088 | (z) |
| -99054 | A | Hazardous Waste No. K090 | (z) |
| -99088 | A | Hazardous Waste No. K091 | (z) |
| -99053 | A | Hazardous Waste No. K093 | (z) |
| -99052 | A | Hazardous Waste No. K094 | (z) |
| -99051 | A | Hazardous Waste No. K095 | (z) |
| -99050 | A | Hazardous Waste No. K096 | (z) |
| -99049 | A | Hazardous Waste No. K097 | (z) |
| -99048 | A | Hazardous Waste No. K098 | (z) |
| -99047 | A | Hazardous Waste No. K099 | (z) |
| -99046 | A | Hazardous Waste No. K100 | (z) |
| -99045 | A | Hazardous Waste No. K101 | (z) |
| -99044 | A | Hazardous Waste No. K102 | (z) |
| -99043 | A | Hazardous Waste No. K103 | (z) |
| -99042 | A | Hazardous Waste No. K104 | (z) |
| -99041 | A | Hazardous Waste No. K105 | (z) |
| -99085 | A | Hazardous Waste No. K106 | (z) |
| -99040 | A | Hazardous Waste No. K107 | (z) |
| -99039 | A | Hazardous Waste No. K108 | (z) |
| -99038 | A | Hazardous Waste No. K109 | (z) |
| -99037 | A | Hazardous Waste No. K110 | (z) |
| -99036 | A | Hazardous Waste No. K111 | (z) |
| -99035 | A | Hazardous Waste No. K112 | (z) |
| -99034 | A | Hazardous Waste No. K113 | (z) |
| -99033 | A | Hazardous Waste No. K114 | (z) |
| -99032 | A | Hazardous Waste No. K115 | (z) |
| -99031 | A | Hazardous Waste No. K116 | (z) |
| -99030 | A | Hazardous Waste No. K117 | (z) |
|        |   |                          | ` ' |

| -99029           | A        | Hazardous Waste No. K118                           | (z)              |
|------------------|----------|--|------------------|
| -99028           | A        | Hazardous Waste No. K123                           | (z)              |
| -99027           | A        | Hazardous Waste No. K124                           | (z)              |
| -99026           | A        | Hazardous Waste No. K125                           | (z)              |
| -99025           | A        | Hazardous Waste No. K126                           | (z)              |
| -99024           | A        | Hazardous Waste No. K131                           | (z)              |
| -99023           | A        | Hazardous Waste No. K131                           | (z)              |
| -99022           | A        | Hazardous Waste No. K136                           | (z)              |
| 118741           | AC       | HCB  | 2.14             |
| 77474            | ABC      | HCP  | 15.20            |
| 76448            | AC       | Heptachlor   | 0.66             |
| 1024573          | AC       | Heptachlor epoxide                                 | 1.65             |
| -99186           | C        | Heptachlorodibenzo-p-dioxins                       | (t(.01))         |
| -99180<br>-99187 | C        |  |                  |
|                  | AC       | Heptachlorodibenzofurans.<br>Hexachlorobenzene     | (t(.01))<br>2.14 |
| 118741<br>87683  | AC<br>AC | Hexachlorobutadiene                                | 17.50            |
| 608731           |          |  |                  |
|                  | A        | Hexachlorocyclohexane                              | 0.66             |
| 319846           | A        | Hexachlorocyclohexane (alpha)                      | 0.66             |
| 319857           | A        | Hexachlorocyclohexane (beta)                       | 0.66             |
| 319868           | A        | Hexachlorocyclohexane (delta)                      | [25]             |
| 58899            |          | Hexachlorocyclohexane (gamma)                      | 0.66             |
| 77474            |          | Hexachlorocyclopentadiene                          | 15.20            |
| 19408743         | C        | Hexachlorodibenzo-p-dioxins                        | 1.9E-3           |
| -99188           | C        | Hexachlorodibenzofurans                            | (t(.01))         |
| 67721            | AC       | Hexachloroethane                                   | 9.99             |
| 465736           |          | Hexachlorohexahydro-endo,endo-dimethanonaphthalene | 25.00            |
| 70304            | AC       | Hexachlorophene                                    | 25.00            |
| 1888717          | AC       | Hexachloropropene                                  | [1000]           |
| 757854           | AC       | Hexaethyltetraphosphate                            | DL(P)            |
| 10124568         | A        | Hexametaphosphate, sodium salt                     | [1000]           |
| 110827           | A        | Hexamethylene                                      | 20.00            |
| 4835114          | В        | Hexamethylenediamine, N,N'-Dibutyl-                | [25]             |
| 124049           | A        | Hexanediotic acid                                  | DL/.006          |
| 302012           |          | Hydrazine  | DL/4E-5          |
| 57147            |          | Hydrazine, 1,1-dimethyl                            | 4.60             |
| 1615801          | AC       | Hydrazine, 1,2-diethyl-                            | [100]            |
| 540738           | AC       | Hydrazine, 1,2-dimethyl                            | 0.32             |
| 122667           | AC       | Hydrazine, 1,2-diphenyl                            | 7.20             |
| 79196            |          | Hydrazinecarbothioamide                            | DL(P)            |
| 122667           | AC       | Hydrazobenzene                                     | 7.20             |
| 7647010          | AB       | Hydrochloric acid                                  | (v)              |
| 74908            | ABC      | · · ·  | (r)              |
| 7664393          |          | Hydrofluoric acid                                  | (v)              |
| 7647010          | AB       | Hydrogen chloride (gas only)                       | (v)              |
| 74908            | ABC      |  | (r)              |
| 7664393          |          | Hydrogen fluoride                                  | (v)              |
| 7722841          | В        | Hydrogen Peroxide (Conc > 52%)                     | (25)             |
| 7803512          |          | Hydrogen phosphide                                 | DL(P)            |
| 7783075          | В        | Hydrogen Selenide                                  | (L)              |
| 7783064          |          | Hydrogen sulfide                                   | [1000]           |
| 80159            | A        | Hydroperoxide, 1-methyl-1-phenylethyl-             | [100]            |
| 123319           | В        | Hydroquinone                                       | [25]             |
| 7783064          |          | Hydrosulfuric acid                                 | [1000]           |
| 108952           |          | Hydroxybenzene                                     | 50.00            |
| 75605            | AC       | Hydroxydimethylarsine oxide                        | (a)              |
|                  |          |  |                  |

| 7781529         A         Hypochlorous acid, calcium salt         [1000]           7681529         A         Hypochlorous acid, sodium salt         [1000]           10022705         A         Hypochlorous acid, sodium salt, pentahydrate         [1000]           193395         AC         Indeno(1,2-cd)pyrene         5.00           7758943         A         Iron chloride         [1000]           7758943         A         Iron dichloride         [1000]           10421484         A         Iron nitrate         [1000]           13463406         B         Iron pentacarbonyl         [25]           7705080         A         Iron trichloride         [1000]           110190         A         iso-Butyl acetate         [1000]           17812         A         iso-Butyla acetate         [1000]           1297789         B         Isobenzan         [25]           78831         AC         Isobutyla acetate         [1000]           1297789         B         Isobenzan         [25]           78831         AC         Isobutyla acetate         [25]           102363         B         Isocyanic acid, methyl ester         [25]           102363         B         I  | 1200716  | 4  | II. day and day the discount                           | 207.64 |
|--|----------|----|--|--------|
| 7681529 A Hypochlorous acid, sodium salt   10000   10022705 A Hypochlorous acid, sodium salt, pentahydrate   10000   1738943 A Iron chloride   110001   1758943 A Iron chloride   110001   1758943 A Iron dichloride   110001   1758943 A Iron dichloride   110001   1424484 A Iron nitrate   110001   13463406 B Iron pentacarbonyl   255   7705080 A Iron trichloride   110001   138463406 B Iron pentacarbonyl   10001   138463406 B Iron pentacarbonyl   10001   188819 A iso-Butylamine   110001   188819 A iso-Butylamine   110001   129922 A Isoamyl acetate   110001   129022 A Isoamyl acetate   110001   129022 A Isoamyl acetate   110001   129023 A Isoamyl acetate   1251                      | 1300716  | A  | Hydroxydimethylbenzene Hyrochlorous acid, calcium calt | 307.64 |
| 10027075   |          |    |  |        |
| 19395         AC         Indenof (1,2-cd)pyrene         5.00           74884         AC         Iodomethane         [1000]           7758943         A         Iron chloride         [1000]           7758943         A         Iron dichloride         [1000]           10421484         A         Iron intrate         [1000]           13463406         B         Iron pentacarbonyl         [25]           7705080         A         Iron trickloride         [1000]           110190         A         iso-Butylamine         [1000]           78819         A         iso-Butylarectate         [1000]           123922         A         Isoamyl acetate         [1000]           123922         A         Isoamyl acetate         [1000]           297789         B         Isobenzan         [25]           78831         AC         Isobutyl alcohol         DL/07           78820         B         Isobenzan         [25]           624839         B         Isobutynoitrile         [25]           102303         B         Isocyanic &cid, methyl ester         [25]           10253         B         Isocyanic &cid, methyl ester         [25]   |          |    |  |        |
| 14884   AC   Iodomethane   11000    1758943   A   Iron chloride   11000    1758943   A   Iron dichloride   11000    10421484   A   Iron nitrate   11000    3463406   B   Iron pentacarbony    255   1705080   A   Iron trichloride   11000    110190   A   iso-Butyl acetate   11000    110190   A   iso-Butylamine   11000    13819   A   iso-Butylamine   11000    13912   A   iso-Butyria ecid   11000    139322   A   Isomyl acetate   11000    297789   B   Isobenzan   255   18831   AC   Isobutyl alcohol   DL.97   78820   B   Isobutyl alcohol   DL.97   78820   B   Isobutyl alcohol   DL.97   78820   B   Isobutyl alcohol   DL.97   18820   B   Isobutyl alcohol   DL.97   18950   ABC   Isocyanic acid, methyl ester   DL.P9   12363   B   Isocyanic acid, al-Dichlorophenyl Ester   DL.P9   18591   A   Isophorone   DL.P9   18591   A   Isophorone   DL.P9   18591   A   Isophorone   DL.P9   18950   A   Isophorone   DL.P9   18950   A   Isophorone   DL.P9   189828   Isophorone   DI.98   189828   Isophorone   Isocyanate   1251   189828   A   Isopropanolamine dodecybenzene sulfonate   10000   18236   B   Isophorone   Isocyanate   1251   189828   A   Isopropylbenzene   21.88   19380   B   Isophorophylbenzene   22.18   189828   A   Isopropylbenzene   18963   189828   A   Isophoropylbenzene   18963   189828   A   Isop |          |    |  |        |
| 7758943         A Iron chloride         [1000]           7758943         A Iron dichloride         [1000]           10421484         A Iron mitrate         [1000]           13463406         B Iron pentacarbonyl         [25]           7705080         A Iron trichloride         [1000]           78819         A iso-Butyla acetate         [1000]           78819         A iso-Butylamine         [1000]           123922         A Isoamyl acetate         [1000]           297789         B Isobenzan         [25]           78820         B Isobutyla alcohol         DL/97           78821         AC Isobutyl alcohol         DL/97           8820         B Isobutyronitrile         [25]           624839         ABC Isocyanic acid, methyl ester         [DLP]           102363         B Isocyanic Acid,3,4-Dichlorophenyl Ester         [25]           465736         ABC Isofrin         DLPP           78591         A Isophorone         DL/19           4098719         B Isophorone Diisocyanate         [25]           78795         A Isoprone         [1000]           108236         B Isopropyl Chloroformate         [25]           98828         A Isopropyl Chloroformate   |          |    | = -  |        |
| 1758943         A Iron dichloride         [1000]           13463406         B Iron pentacarbonyl         [25]           7705080         A Iron trichloride         [1000]           110190         A iso-Butyl acetate         [1000]           78819         A iso-Butylacide         [1000]           78819         A iso-Butyric acid         [1000]           123922         A Isoamyl acetate         [1000]           297789         B Isobenzan         [25]           78820         B Isobutyl alcohol         DL./07           78820         B Isobutyonitrile         [25]           624839         ABC Isocyanic acid, methyl ester         DL./07           102363         B Isopopric Acid, 3.4-Dichlorophenyl Ester         [25]           465736         ABC Isodrin         DL/P           55914         ABC Isofluorphate         DL/P           4098719         B Isophorone Diisocyanate         [25]           42504461         A Isopropanolamine dodecybenzene sulfonate         [1000]           108236         B Isopropaphyl Enzlore         [218]           19380         B Isopropylbenzene         [25]           198828         A Isopropylbenzene         [25]           148500         AC E   |          |    |  |        |
| 10421484   |          |    |  |        |
| 13463406 B   Iron pentacarbonyl   125   1705080 A   Iron trichloride   11000   110190 A   iso-Butyl acetate   11000   18819 A   iso-Butyl acetate   11000   123922 A   iso-Butyl acetate   11000   1259   18831 AC   iso-Butyl alcohol   1245   18433 ABC   iso-Butyl alcohol   18234 ABC   iso-Butyl alcoholor   1245   18433 ABC   iso-Butyl alcoholor   18234 ABC   iso-Butyl a |          |    |  |        |
| 7705080         A         Iron trichloride         [1000]           110190         A         iso-Butyl acetate         [1000]           78819         A         iso-Butylamine         [1000]           78812         A         iso-Butyric acid         [1000]           123922         A         Isomutyl acetate         [1000]           297788         B         Isobenzan         [25]           78820         B         Isobutyl alcohol         DL.07           78820         B         Isobutyronitrile         [25]           624839         ABC         Isocyanic acid, methyl ester         DL.09           102363         B         Isocyanic acid, methyl ester         [25]           465736         ABC         Isocyanic acid, methyl ester         [25]           455746         ABC         Isofluoriphate         DL.0P           78591         A         Isophorone         DL.1P           4098719         B         Isophorone Dissocyanate         [25]           78795         A         Isopropeno         DL.7P           42504461         A         Isopropylmeting dedecybenzene sulfonate         [25]           119320         B         Isopropylmeting hyprazolyl di  |          |    |  |        |
| 10190  |          |    |  |        |
| 78819         A         iso-Butylamine         [1000]           79312         A         iso-Butyric acid         [1000]           123922         A         Isoamyl acetate         [1000]           297789         B         Isobenzan         [25]           78831         AC         Isobutyl alcohol         DL/07           78820         B         Isobutyronitrile         [25]           624839         ABC         Isocyanic acid, methyl ester         DL/P           102363         B         Isocyanic acid, methyl ester         DL/P           465736         ABC         Isodrin         DL/P           55914         ABC         Isofluorphate         DL/P           55914         ABC         Isofluorphate         DL/P           4098719         B         Isophorone Disocyanate         [25]           48591         A         Isoproprollamine dodecybenzene sulfonate         [1000]           108236         B         Isopropyl Chloroformate         [25]           108236         B         Isopropyl Chloroformate         [25]           108236         B         Isopropyl Chloroformate         [25]           12836         B         Isopropyl Chloroformate  |          |    |  |        |
| 79312  |          |    | •  |        |
| 123922   |          |    |  |        |
| 297789         B         Isobetzan         [25]           78821         AC         Isobuty alcohol         DL.07           78820         B         Isobuty ronitrile         [25]           624839         ABC         Isocyanic acid, methyl ester         DL(P)           102363         B         Isocyanic Acid,3,4-Dichlorophenyl Ester         DL(P)           465736         ABC         Isodrin         DL(P)           55914         ABC         Isofluorphate         DL(P)           78991         A         Isophorone         DL/P           4098719         B         Isophorone Diisocyanate         [25]           78795         A         Isoprene         [1000]           42504461         A         Isopropanolamine dodecybenzene sulfonate         [1000]           108236         B         Isopropyl Chloroformate         [25]           198828         A         Isopropyl Chloroformate         [25]           119380         B         Isopropyl Del propyl Chloroformate         [25]           12512         AC         Isosafrole         [1000]           115320         AC         Keithane         1/BG           143500         AC         Kepone <td< td=""><td></td><td></td><td>·</td><td></td></td<>  |          |    | ·  |        |
| 7881         AC         Isobutyl alcohol         DL/07           78820         B         Isobutyronitrile         [25]           624839         ABC         Isocyanic acid, methyl ester         DL/P           102363         B         Isocyanic acid, alpholophophyl Ester         [25]           465736         ABC         Isodrin         DL/P           55914         ABC         Isodrin         DL/P           78591         A         Isophorone         DL/19           4098719         B         Isophorone Diisocyanate         [25]           42504461         A         Isopropanolamine dodecybenzene sulfonate         [1000]           108236         B         Isopropylenzene         [25]           98828         A         Isopropylenzene         21.88           119380         B         Isopropylmethylpyrazolyl dimethylcarbamate         [25]           120581         AC         Isosafrole         [1000]           115322         A         Keithane         1/BG           143500         AC         Kepone         10.00           148823         AC         L-Phenylalanine, 4-[bis)2-chloroethyl)amino]-         10.00           18926         A         L-Tartari  |          |    | ·  |        |
| 78820         B         Isobutyronitrile         [25]           624839         ABC         locycanic acid, methyl ester         [25]           102363         B         Isocyanic Acid, 3,4-Dichlorophenyl Ester         [27]           465736         ABC         Isodrin         DL(P)           55914         ABC         Isofluorphate         DL(P)           78591         A         Isophorone         DL/19           4098719         B         Isophorone Diisocyanate         [25]           78795         A         Isopropanolamine dodecybenzene sulfonate         [1000]           108236         B         Isopropyl Chloroformate         [25]           98828         A         Isopropyllenthylpyrazolyl dimethylcarbamate         [25]           120581         AC         Isosafrole         [1000]           115322         A         Keithane         1/8G           143500         AC         Kepone         10,00           148823         AC         L-Phenylalanine, 4-[bis)2-chloroethyl)amino]-         10,00           14892         A         L-Tartaric acid ammonium salt         [1000]           30344         A         L-Serine, diazoaceteate (ester)         [25]           30334  |          |    |  |        |
| 624839         ABC         Isocyanic acid, methyl ester         DL(P)           102363         B         Isocyanic Acid,3,4-Dichlorophenyl Ester         [25]           465736         ABC         Isodrin         DL(P)           55914         ABC         Isofluorphate         DL(P)           75914         ABC         Isophorone         DL(P)           4098719         B         Isophorone Diisocyanate         [25]           78795         A         Isoproprone Diisocyanate         [1000]           42504461         A         Isopropanolamine dodecybenzene sulfonate         [1000]           108236         B         Isopropylenzene         [25]           198828         A         Isopropylenzene         [25]           119380         B         Isopropylmethylpyrazolyl dimethylcarbamate         [25]           120581         AC         Isosafrole         [1000]           143500         AC         Kepone         10.00           148823         AC         L-Phenylalanine, 4-[bis)2-chloroethyl)amino]-         10.00           148823         AC         L-Phenylalanine, 4-[bis)2-chloroethyl)amino]-         10.00           78977         B         Lactonitrile         Sec.  |          |    |  |        |
| 102363         B         Isocyanic Acid,3,4-Dichlorophenyl Ester         [25]           465736         ABC         Isodrin         DL(P)           55914         ABC         Isofluorphate         DL(P)           78591         A         Isophorone         DL/19           4098719         B         Isophorone Diisocyanate         [25]           78795         A         Isopropanolamine dodecybenzene sulfonate         [1000]           108236         B         Isopropanolamine dodecybenzene sulfonate         [25]           98828         A         Isopropylenzene         21.88           19380         B         Isopropylbenzene         21.88           19380         B         Isopropylmethylpyrazolyl dimethylcarbamate         [25]           120581         AC         Isosafrole         [1000]           115322         A         Keithane         1/BG           143500         AC         Kepone         10.00           148823         AC         L-Phenylalanine, 4-[bis)2-chloroethyl)amino]-         10.00           18026         AC         L-Serine, diazoaceteate (ester)         [25]           3164292         A         L-Tartaric acid ammonium salt         [1000]           7  |          |    |  |        |
| 465736         ABC         Isodrin         DL(P)           55914         ABC         Isofluorphate         DL(P)           78591         A         Isophorone         DL/19           4098719         B         Isophorone Diisocyanate         [25]           78795         A         Isoprene         [1000]           42504461         A         Isopropyl Chloroformate         [25]           98828         A         Isopropyl Chloroformate         [25]           98828         A         Isopropyl Chloroformate         [25]           119380         B         Isopropylenthylpyrazolyl dimethylcarbamate         [25]           119580         AC         Isosafrole         [1000]           115322         A         Keithane         1/BG           143500         AC         Kepone         10.00           148823         AC         L-Phenylalanine, 4-[bis)2-chloroethyl)amino]-         10.00           148823         AC         L-Phenylalanine, 4-[bis)2-chloroethyl)amino]-         10.00           78977         B         Lactonitrile         \$cc.           303344         A         Lafratrate acid ammonium salt         [100]           7784409         A         Lead   |          |    | · · · · · · · · · · · · · · · · · · ·                  |        |
| 55914         ABC         Isofluorphate         DL(P)           78591         A         Isophorone         ISOL/19           4098719         B         Isophorone Disocyanate         [25]           78795         A         Isoprene         [1000]           42504461         A         Isopropanolamine dodecybenzene sulfonate         [1000]           108236         B         Isopropyl Chloroformate         [25]           98828         A         Isopropylbenzene         21.88           119380         B         Isopropylmethylpyrazolyl dimethylcarbamate         [25]           120581         AC         Isosafrole         [1000]           115322         A         Keithane         1/BG           143500         AC         Kepone         10.00           148823         AC         L-Phenylalanine, 4-[bis)2-chloroethyl)amino]-         10.00           115026         AC         L-Serine, diazoaceteate (ester)         [25]           3164292         A         L-Tartaric acid ammonium salt         [1000]           78977         B         Lactonitrile         Sec.           303341         C         Lead concircilla         (i)           7439921         AC   |          |    | · · ·  |        |
| 78591         A         Isophorone         DL/19           4098719         B         Isophorone Diisocyanate         [25]           78795         A         Isoprene         [1000]           42504461         A         Isopropanolamine dodecybenzene sulfonate         [1000]           108236         B         Isopropyl Chloroformate         [25]           98828         A         Isopropylbenzene         21.88           119380         B         Isopropylmethylpyrazolyl dimethylcarbamate         [25]           120581         AC         Isosafrole         [1000]           115322         A         Keithane         1/BG           143500         AC         Kepone         10.00           148823         AC         L-Phenylalanine, 4-[bis)2-chloroethyl)amino]-         10.00           115026         AC         Kepone         10.00           115027         A         Lactonitrile         Sec.           303344         A         Lactonitrile         Sec.           303341         C         Lead         30.00           301042         AC         Lead acetate         (i)           7784409         A         Lead acidarsenate         (a)   |          |    |  |        |
| 4098719         B         Isophorone Diisocyanate         [25]           78795         A         Isoprene         [1000]           42504461         A         Isopropanolamine dodecybenzene sulfonate         [1000]           108236         B         Isoproppyl Chloroformate         [25]           98828         A         Isopropylbenzene         21.88           119380         B         Isopropylmethylpyrazolyl dimethylcarbamate         [25]           120581         AC         Isosafrole         [1000]           115322         A         Keithane         1/BG           143500         AC         Kepone         10.00           148823         AC         L-Phenylalanine, 4-[bis)2-chloroethyl)amino]-         10.00           115026         AC         L-Serine, diazoaceteate (ester)         [25]           3164292         A         L-Tartaric acid ammonium salt         [1000]           78977         B         Lactonitrile         Sec.           303344         A         Lasiocarpine         [100]           7439921         AC         Lead         (i)           7784409         A         Lead acetate         (i)           7758954         A         Lead ch  |          |    |  |        |
| 78795         A         Isoprene         [1000]           42504461         A         Isopropanolamine dodecybenzene sulfonate         [1000]           108236         B         Isopropyl Chloroformate         [25]           98828         A         Isopropylbenzene         21.88           119380         B         Isopropylmethylpyrazolyl dimethylcarbamate         [25]           120581         AC         Isosafrole         [1000]           115322         A         Keithane         1/BG           143500         AC         Kepone         10.00           148823         AC         L-Phenylalanine, 4-[bis)2-chloroethyl)amino]-         10.00           115026         AC         L-Serine, diazoaceteate (ester)         [25]           3164292         A         L-Tartaric acid ammonium salt         [1000]           78977         B         Lactonitrile         Sec.           303344         A         Lasiocarpine         [100]           7439921         AC         Lead         300.00           301042         AC         Lead acetate         (i)           77584409         A         Lead create         (i)           77583462         A         Lead diluoride </td <td></td> <td></td> <td></td> <td></td>   |          |    |  |        |
| 42504461         A         Isopropanolamine dodecybenzene sulfonate         [1000]           108236         B         Isopropyl Chloroformate         [25]           98828         A         Isopropylbenzene         21.88           119380         B         Isopropylmethylpyrazolyl dimethylcarbamate         [25]           120581         AC         Isosafrole         [1000]           115322         A         Keithane         1/BG           148500         AC         Kepone         10.00           148823         AC         L-Phenylalanine, 4-[bis)2-chloroethyl)amino]-         10.00           115026         AC         L-Serine, diazoaceteate (ester)         [25]           3164292         A         L-Tartaric acid ammonium salt         [1000]           78977         B         Lactonitrile         Sec.           303344         A         Lasiocarpine         [100]           7439921         AC         Lead         300.00           301042         AC         Lead acetate         (i)           7784409         A         Lead acetate         (i)           7783462         A         Lead compounds, N.O.S.         (i)           7783462         A         Lead  |          |    |  |        |
| 108236         B         Isopropyl Chloroformate         [25]           98828         A         Isopropylbenzene         21.88           119380         B         Isopropylmethylpyrazolyl dimethylcarbamate         [25]           120581         AC         Isosafrole         [1000]           115322         A         Keithane         1/BG           143500         AC         Kepone         10.00           148823         AC         L-Phenylalanine, 4-[bis)2-chloroethyl)amino]-         10.00           115026         AC         L-Serine, diazoaceteate (ester)         [25]           3164292         A         L-Tartaric acid ammonium salt         [1000]           78977         B         Lactonitrile         Sec.           303344         A         Lasiocarpine         [100]           303341         C         Lead         300,00           301042         AC         Lead acetate         (i)           7784409         A         Lead acetate         (i)           7758954         A         Lead compounds, N.O.S.         (i)           7783462         A         Lead fluoride         (i)           18194965         A         Lead fluoride         (i) </td <td></td> <td></td> <td><u>-</u></td> <td></td>  |          |    | <u>-</u>   |        |
| 98828         A         Isopropylbenzene         21.88           119380         B         Isopropylmethylpyrazolyl dimethylcarbamate         [25]           120581         AC         Isosafrole         [1000]           115322         A         Keithane         1.00           143500         AC         Kepone         10.00           148823         AC         L-Phenylalanine, 4-[bis)2-chloroethyl)amino]-         10.00           115026         AC         L-Serine, diazoaceteate (ester)         [25]           3164292         A         L-Tartaric acid ammonium salt         [1000]           78977         B         Lactonitrile         Sec.           303344         A         Lasiocarpine         [100]           303341         C         Lead         300.00           301042         AC         Lead         300.00           301042         AC         Lead acetate         (a)           7645252         A         Lead chloride         (i)           -99189         AC         Lead compounds, N.O.S.         (i)           7783462         A         Lead fluoride         (i)           13814965         A         Lead fluoride         (i)  |          | В  |  |        |
| 119380         B         Isopropylmethylpyrazolyl dimethylcarbamate         [25]           120581         AC         Isosafrole         [1000]           115322         A         Keithane         1/BG           143500         AC         Kepone         10.00           14823         AC         L-Phenylalanine, 4-[bis)2-chloroethyl)amino]-         10.00           115026         AC         L-Serine, diazoaceteate (ester)         [25]           3164292         A         L-Tartaric acid ammonium salt         [1000]           78977         B         Lactonitrile         Sec.           303344         A         Lasiocarpine         [100]           30341         C         Lead         300.00           7439921         AC         Lead         300.00           301042         AC         Lead acetate         (a)           7784409         A         Lead acreate         (a)           7783954         A         Lead chloride         (i)           -99189         AC         Lead compounds, N.O.S.         (i)           7783462         A         Lead fluoride         (i)           10101630         A         Lead fluoride         (i) <t< td=""><td>98828</td><td>A</td><td></td><td></td></t<>   | 98828    | A  |  |        |
| 120581         AC         Isosafrole         [1000]           115322         A         Keithane         1/BG           143500         AC         Kepone         10.00           148823         AC         L-Phenylalanine, 4-[bis)2-chloroethyl)amino]-         10.00           115026         AC         L-Serine, diazoaceteate (ester)         [25]           3164292         A         L-Tartaric acid ammonium salt         [1000]           78977         B         Lactonitrile         Sec.           303344         A         Lasiocarpine         [100]           303341         C         Lasiocarpine         [100]           7439921         AC         Lead         300.00           301042         AC         Lead acetate         (i)           7784409         A         Lead acetate         (i)           7758954         A         Lead chloride         (i)           79189         AC         Lead compounds, N.O.S.         (i)           7783462         A         Lead fluoborate         (i)           7783462         A         Lead ifluoride         (i)           10099748         A         Lead phosphate         (i)           74   | 119380   | В  |  | [25]   |
| 115322         A         Keithane         1/BG           143500         AC         Kepone         10.00           148823         AC         L-Phenylalanine, 4-[bis)2-chloroethyl)amino]-         10.00           115026         AC         L-Serine, diazoaceteate (ester)         [25]           3164292         A         L-Tartaric acid ammonium salt         [1000]           78977         B         Lactonitrile         Sec.           303344         A         Lasiocarpine         [100]           303341         C         Lasiocarpine         [100]           7439921         AC         Lead         300.00           301042         AC         Lead acetate         (i)           7784409         A         Lead acid arsenate         (a)           7645252         A         Lead coloride         (i)           7783954         A         Lead compounds, N.O.S.         (i)           7783462         A         Lead fluoride         (i)           13814965         A         Lead fluoride         (i)           10101630         A         Lead intrate         (i)           7446277         AC         Lead phosphate         (i)           <   | 120581   | AC |  |        |
| 148823         AC         L-Phenylalanine, 4-[bis)2-chloroethyl)amino]-         10.00           115026         AC         L-Serine, diazoaceteate (ester)         [25]           3164292         A         L-Tartaric acid ammonium salt         [1000]           78977         B         Lactonitrile         Sec.           303344         A         Lasiocarpine         [100]           303341         C         Lasiocarpine         [100]           7439921         AC         Lead         300.00           301042         AC         Lead acetate         (i)           7784409         A         Lead acid arsenate         (a)           7645252         A         Lead chloride         (i)           -99189         AC         Lead compounds, N.O.S.         (i)           7783462         A         Lead fluoride         (i)           13814965         A         Lead fluoride         (i)           10101630         A         Lead fluoride         (i)           10099748         A         Lead nitrate         (i)           1072351         A         Lead stearate         (i)           7428480         A         Lead stearate         (i)  | 115322   | A  | Keithane   |        |
| 115026       AC       L-Serine, diazoaceteate (ester)       [25]         3164292       A       L-Tartaric acid ammonium salt       [1000]         78977       B       Lactonitrile       Sec.         303344       A       Lasiocarpine       [100]         303341       C       Lasiocarpine       [100]         7439921       AC       Lead       300.00         301042       AC       Lead acetate       (i)         7784409       A       Lead acid arsenate       (a)         745252       A       Lead chloride       (i)         -99189       AC       Lead compounds, N.O.S.       (i)         7783462       A       Lead difluoride       (i)         13814965       A       Lead fluoborate       (i)         7783462       A       Lead fluoride       (i)         10101630       A       Lead intrate       (i)         10099748       A       Lead stearate       (i)         1072351       A       Lead stearate       (i)         1072351       A       Lead stearate       (i)         52652592       A       Lead stearate       (i)         56189094       A <t< td=""><td>143500</td><td>AC</td><td>Kepone</td><td>10.00</td></t<>  | 143500   | AC | Kepone   | 10.00  |
| 3164292         A         L-Tartaric acid ammonium salt         [1000]           78977         B         Lactonitrile         Sec.           303344         A         Lasiocarpine         [100]           303341         C         Lasiocarpine         [100]           7439921         AC         Lead         300.00           301042         AC         Lead acetate         (i)           7784409         A         Lead acid arsenate         (a)           7645252         A         Lead arsenate         (a)           7958954         A         Lead chloride         (i)           -99189         AC         Lead compounds, N.O.S.         (i)           7783462         A         Lead fluoride         (i)           13814965         A         Lead fluoride         (i)           1783462         A         Lead fluoride         (i)           10101630         A         Lead iodide         (i)           10099748         A         Lead nitrate         (i)           1072351         A         Lead stearate         (i)           7428480         A         Lead stearate         (i)           52652592         A <t< td=""><td>148823</td><td>AC</td><td>L-Phenylalanine, 4-[bis)2-chloroethyl)amino]-</td><td>10.00</td></t<>  | 148823   | AC | L-Phenylalanine, 4-[bis)2-chloroethyl)amino]-          | 10.00  |
| 78977         B         Lactonitrile         Sec.           303344         A         Lasiocarpine         [100]           303341         C         Lasiocarpine         [100]           7439921         AC         Lead         300.00           301042         AC         Lead acetate         (i)           7784409         A         Lead acid arsenate         (a)           7645252         A         Lead arsenate         (a)           7758954         A         Lead chloride         (i)           -99189         AC         Lead compounds, N.O.S.         (i)           7783462         A         Lead fluoride         (i)           13814965         A         Lead fluoride         (i)           10101630         A         Lead iodide         (i)           10099748         A         Lead nitrate         (i)           7446277         AC         Lead phosphate         (i)           1072351         A         Lead stearate         (i)           7428480         A         Lead stearate         (i)           52652592         A         Lead stearate         (i)           56189094         A         Lead stearate<   | 115026   | AC | L-Serine, diazoaceteate (ester)                        | [25]   |
| 303344       A       Lasiocarpine       [100]         303341       C       Lasiocarpine       [100]         7439921       AC       Lead       300.00         301042       AC       Lead acetate       (i)         7784409       A       Lead acid arsenate       (a)         7645252       A       Lead arsenate       (a)         7758954       A       Lead chloride       (i)         -99189       AC       Lead compounds, N.O.S.       (i)         7783462       A       Lead fluoride       (i)         13814965       A       Lead fluoride       (i)         7783462       A       Lead fluoride       (i)         10101630       A       Lead iodide       (i)         10099748       A       Lead nitrate       (i)         7446277       AC       Lead phosphate       (i)         1072351       A       Lead stearate       (i)         7428480       A       Lead stearate       (i)         52652592       A       Lead stearate       (i)         56189094       A       Lead stearate       (i)  | 3164292  | A  | L-Tartaric acid ammonium salt                          | [1000] |
| 303341       C       Lasiocarpine       [100]         7439921       AC       Lead       300.00         301042       AC       Lead acetate       (i)         7784409       A       Lead acid arsenate       (a)         7645252       A       Lead arsenate       (a)         7758954       A       Lead chloride       (i)         -99189       AC       Lead compounds, N.O.S.       (i)         7783462       A       Lead difluoride       (i)         13814965       A       Lead fluoborate       (i)         7783462       A       Lead fluoride       (i)         10101630       A       Lead iodide       (i)         10099748       A       Lead phosphate       (i)         1072351       A       Lead stearate       (i)         7428480       A       Lead stearate       (i)         52652592       A       Lead stearate       (i)         56189094       A       Lead stearate       (i)  | 78977    | В  | Lactonitrile   | Sec.   |
| 7439921       AC       Lead       300.00         301042       AC       Lead acetate       (i)         7784409       A       Lead acid arsenate       (a)         7645252       A       Lead arsenate       (i)         7758954       A       Lead chloride       (i)         -99189       AC       Lead compounds, N.O.S.       (i)         7783462       A       Lead difluoride       (i)         13814965       A       Lead fluoborate       (i)         7783462       A       Lead fluoride       (i)         10101630       A       Lead iodide       (i)         10099748       A       Lead nitrate       (i)         7446277       AC       Lead phosphate       (i)         1072351       A       Lead stearate       (i)         7428480       A       Lead stearate       (i)         56189094       A       Lead stearate       (i)   | 303344   | Α  | Lasiocarpine   | [100]  |
| 301042       AC       Lead acetate       (i)         7784409       A       Lead acid arsenate       (a)         7645252       A       Lead arsenate       (a)         7758954       A       Lead chloride       (i)         -99189       AC       Lead compounds, N.O.S.       (i)         7783462       A       Lead difluoride       (i)         13814965       A       Lead fluoride       (i)         10101630       A       Lead iodide       (i)         10099748       A       Lead nitrate       (i)         7446277       AC       Lead phosphate       (i)         1072351       A       Lead stearate       (i)         7428480       A       Lead stearate       (i)         52652592       A       Lead stearate       (i)         56189094       A       Lead stearate       (i)   | 303341   | C  | Lasiocarpine   | [100]  |
| 7784409       A       Lead acid arsenate       (a)         7645252       A       Lead arsenate       (a)         7758954       A       Lead chloride       (i)         -99189       AC       Lead compounds, N.O.S.       (i)         7783462       A       Lead difluoride       (i)         13814965       A       Lead fluoborate       (i)         7783462       A       Lead fluoride       (i)         10101630       A       Lead iodide       (i)         10099748       A       Lead nitrate       (i)         7446277       AC       Lead phosphate       (i)         1072351       A       Lead stearate       (i)         7428480       A       Lead stearate       (i)         52652592       A       Lead stearate       (i)         56189094       A       Lead stearate       (i)  | 7439921  | AC | Lead   | 300.00 |
| 7645252       A       Lead arsenate       (a)         7758954       A       Lead chloride       (i)         -99189       AC       Lead compounds, N.O.S.       (i)         7783462       A       Lead difluoride       (i)         13814965       A       Lead fluoborate       (i)         7783462       A       Lead fluoride       (i)         10101630       A       Lead iodide       (i)         10099748       A       Lead nitrate       (i)         7446277       AC       Lead phosphate       (i)         1072351       A       Lead stearate       (i)         7428480       A       Lead stearate       (i)         52652592       A       Lead stearate       (i)         56189094       A       Lead stearate       (i)   | 301042   | AC | Lead acetate   | (i)    |
| 7758954       A       Lead chloride       (i)         -99189       AC       Lead compounds, N.O.S.       (i)         7783462       A       Lead difluoride       (i)         13814965       A       Lead fluoborate       (i)         7783462       A       Lead fluoride       (i)         10101630       A       Lead iodide       (i)         10099748       A       Lead nitrate       (i)         7446277       AC       Lead phosphate       (i)         1072351       A       Lead stearate       (i)         7428480       A       Lead stearate       (i)         52652592       A       Lead stearate       (i)         56189094       A       Lead stearate       (i)   | 7784409  | Α  | Lead acid arsenate                                     | (a)    |
| -99189       AC       Lead compounds, N.O.S.       (i)         7783462       A       Lead difluoride       (i)         13814965       A       Lead fluoborate       (i)         7783462       A       Lead fluoride       (i)         10101630       A       Lead iodide       (i)         10099748       A       Lead nitrate       (i)         7446277       AC       Lead phosphate       (i)         1072351       A       Lead stearate       (i)         7428480       A       Lead stearate       (i)         52652592       A       Lead stearate       (i)         56189094       A       Lead stearate       (i)   |          | Α  | Lead arsenate  | (a)    |
| 7783462       A       Lead difluoride       (i)         13814965       A       Lead fluoborate       (i)         7783462       A       Lead fluoride       (i)         10101630       A       Lead iodide       (i)         10099748       A       Lead nitrate       (i)         7446277       AC       Lead phosphate       (i)         1072351       A       Lead stearate       (i)         7428480       A       Lead stearate       (i)         52652592       A       Lead stearate       (i)         56189094       A       Lead stearate       (i)  | 7758954  |    | Lead chloride  | (i)    |
| 13814965       A       Lead fluoborate       (i)         7783462       A       Lead fluoride       (i)         10101630       A       Lead iodide       (i)         10099748       A       Lead nitrate       (i)         7446277       AC       Lead phosphate       (i)         1072351       A       Lead stearate       (i)         7428480       A       Lead stearate       (i)         52652592       A       Lead stearate       (i)         56189094       A       Lead stearate       (i)  |          | AC | Lead compounds, N.O.S.                                 | (i)    |
| 7783462       A       Lead fluoride       (i)         10101630       A       Lead iodide       (i)         10099748       A       Lead nitrate       (i)         7446277       AC       Lead phosphate       (i)         1072351       A       Lead stearate       (i)         7428480       A       Lead stearate       (i)         52652592       A       Lead stearate       (i)         56189094       A       Lead stearate       (i)   |          |    |  |        |
| 10101630       A       Lead iodide       (i)         10099748       A       Lead nitrate       (i)         7446277       AC       Lead phosphate       (i)         1072351       A       Lead stearate       (i)         7428480       A       Lead stearate       (i)         52652592       A       Lead stearate       (i)         56189094       A       Lead stearate       (i)   | 13814965 |    |  |        |
| 10099748       A       Lead nitrate       (i)         7446277       AC       Lead phosphate       (i)         1072351       A       Lead stearate       (i)         7428480       A       Lead stearate       (i)         52652592       A       Lead stearate       (i)         56189094       A       Lead stearate       (i)  |          |    |  |        |
| 7446277       AC       Lead phosphate       (i)         1072351       A       Lead stearate       (i)         7428480       A       Lead stearate       (i)         52652592       A       Lead stearate       (i)         56189094       A       Lead stearate       (i)  |          |    |  |        |
| 1072351       A       Lead stearate       (i)         7428480       A       Lead stearate       (i)         52652592       A       Lead stearate       (i)         56189094       A       Lead stearate       (i)  |          |    |  |        |
| 7428480       A       Lead stearate       (i)         52652592       A       Lead stearate       (i)         56189094       A       Lead stearate       (i)  |          |    |  |        |
| 52652592 A Lead stearate (i)<br>56189094 A Lead stearate (i)   |          |    |  |        |
| 56189094 A Lead stearate (i)   |          |    |  |        |
|  |          |    |  |        |
| 1335326 AC Lead subacetate (i)   |          |    |  |        |
|  | 1335326  | AC | Lead subacetate  | (1)    |

| 7446142  | A       | Lead sulfate                                  | (i)        |
|----------|---------|---|------------|
| 15739807 | A       | Lead sulfate  Lead sulfate                    | (i)<br>(i) |
| 1314870  | A       | Lead sulfide  Lead sulfide                    | (i)<br>(i) |
| 592870   | A       | Lead sulfocyanate                             | (i)<br>(i) |
| 78002    |         | Lead tetraethyl                               | DL(P)      |
|          |         | •   |            |
| 592870   | A<br>AC | Lead thiocyanate                              | (i)        |
| 1335326  | AC<br>A | Lead, bis(acetato-0)tetrahydroxytri-          | (i)        |
| 56189094 | A<br>B  | Lead, bis(octadecanoato)dioxodi-              | (i)        |
| 21609905 | В       | Leptophos<br>Lewisite                         | [25]       |
| 541253   |         |   | [25]       |
| 58899    |         | Lindane                                       | 0.66       |
| 14307358 | A       | Lithium chromate                              | (f)        |
| 7580678  | В       | Lithium Hydride                               | [25]       |
| 108394   | A       | m-Cresol                                      | 3.80       |
| 541731   | AC      | m-Dichlorobenzene                             | 2.22       |
| 99650    | A       | m-Dinitrobenzene                              | 1.05       |
| 554847   | A       | m-Nitrophenol                                 | [1000]     |
| 99081    | A       | m-Nitrotoluene                                | [1000]     |
| 108383   | A       | m-xylene                                      | 20.00      |
| 121755   | A       | Malathion                                     | 1/BG       |
| 110167   | A       | Maleic acid                                   | [1000]     |
| 108316   | AC      | Maleic anhydride                              | [1000]     |
| 123331   | AC      | Maleic hydrazide                              | DL/5E-4    |
| 109773   |         | Malononitrile                                 | 10.25      |
| 12108133 | В       | Manganese, tricarbonyl methylcyclopentadienyl | [25]       |
| 51752    | В       | Mechlorethamine                               | [25]       |
| 78933    | AC      | MEK   | 0.79       |
| 148823   | AC      | Melphalan                                     | 10.00      |
| 72208    |         | Mendrin                                       | 10.00      |
| 950107   | В       | Mephosfolan                                   | [25]       |
| 108985   |         | Mercaptobenzene                               | DL(P)      |
| 96407    | AC      | Mercaptoimidazoline                           | 19.94      |
| 74931    |         | Mercaptomethane                               | [1000]     |
| 1600277  | В       | Mercuric Acetate                              | DL         |
| 7487947  | В       | Mercuric Chloride                             | (j)        |
| 10045940 | Α       | Mercuric nitrate                              | (j)        |
| 21908532 | В       | Mercuric Oxide                                | (j)        |
| 7783359  | Α       | Mercuric sulfate                              | (j)        |
| 592858   | A       | Mercuric sulfocyanide                         | [100]      |
| 592858   | A       | Mercuric thiocyanate                          | [100]      |
| 10415755 | A       | Mercurous nitrate                             | (j)        |
| 7782867  | A       | Mercurous nitrate, monohydrate                | (j)        |
| 10415755 | A       | Mercurous protonitrate                        | (j)        |
| 7439976  | AC      | Mercury                                       | 17.00      |
| -99190   | AC      | Mercury compounds, N.O.S.                     | (j)        |
| 592041   | A       | Mercury cyanide                               | (j)        |
| 628864   | AC      | Mercury fulminate                             | DL         |
| 62384    | ABC     | Mercury, (actetato-0)phenyl-                  | DL/.024    |
| 108462   | AC      | meta-Dihydroxybenzene                         | DL/.030    |
| 10124568 | A       | Metaphosphoric acid, hexasodium salt          | [1000]     |
| 7785844  | A       | Metaphosphoric acid, trisodium salt           | [1000]     |
| 10476956 | В       | Methacrolein Diacetate                        | [25]       |
| 760930   | В       | Methacrylic Anhydride                         | [25]       |
| 126987   |         | Methacrylonitrile                             | DL/.016    |
| 920467   | В       | Methacryloyl Chloride                         | [25]       |
|          |         | • •   | [1         |

| 20674907 | D   | Matha amilarilarizathril Isa aramata | [25]    |
|----------|-----|--------------------------------------|---------|
| 30674807 | В   | Methacryloyloxyethyl Isocyanate      | [25]    |
| 10265926 | В   | Methamidophos                        | 25.64   |
| 74895    | A   | Methanamine                          | [1000]  |
| 124403   | ADC | Methanamine, N-methyl-               | [1000]  |
| 107302   |     | Methane, chloromethoxy-              | DL/.012 |
| 109773   |     | Methane, dicyano-                    | 10.25   |
| 624839   |     | Methane, isocyanato-                 | DL(P)   |
| 542881   |     | Methane, oxybis[chloro-              | DL(P)   |
| 509148   |     | Methane, tetranitro-                 | DL(P)   |
| 594423   | AB  | Methanesulfenyl chloride, trichloro- | [1000]  |
| 62500    | AC  | Methanesulfonic acid, ethyl ester    | [25]    |
| 558258   | В   | Methanesulfonyl Fluoride             | [25]    |
| 74931    | ABC | Methanethiol                         | [1000]  |
| 64186    | AC  | Methanoic acid                       | [1000]  |
| 67561    | A   | Methanol                             | 1.37    |
| 91805    | AC  | Methapyrilene                        | [1000]  |
| 950378   | В   | Methidathion                         | [25]    |
| 2032657  | AB  | Methiocarb                           | 10.00   |
| 16752775 | ABC | Methomyl                             | 10.00   |
| 72435    | AC  | Methoxychlor                         | 10.00   |
| 151382   | В   | Methoxyethylmercuric Acetate         | DL      |
| 80637    | В   | Methyl 2-Chloroacrylate              | [25]    |
| 67561    | A   | Methyl alcohol                       | 1.37    |
| 74839    | ABC | Methyl bromide                       | 0.80    |
| 74873    | AC  | Methyl chloride                      | 0.04    |
| 79221    |     | · · · · · · · ·                      | [1000]  |
| 71556    | AC  | Methyl chloroform                    | 5.44    |
| 79221    |     | Methyl cloroformate                  | [1000]  |
| 75058    | AC  | Methyl cyanide                       | DL/.04  |
| 78933    | AC  | Methyl ethyl ketone                  | 0.79    |
| 1338234  | AC  | Methyl ethyl ketone peroxide         | [100]   |
| 74884    | AC  | Methyl iodide                        | [1000]  |
| 624839   | ABC | Methyl isocyanate                    | DL(P)   |
| 556616   | В   | Methyl Isothiocyanate                | [25]    |
| 74931    | ABC | Methyl mercaptan                     | [1000]  |
| 80626    | AC  | Methyl methacrylate                  | DL/.17  |
| 66273    | C   | Methyl methanesulfonate              | [25]    |
| 298000   | ABC | Methyl parathion                     | DL(P)   |
| 3735237  | В   | Methyl Phenkapton                    | [25]    |
| 676971   | В   | Methyl Phosphonic Dichloride         | [25]    |
| 77781    | ABC | Methyl sulfate                       | DL/.12  |
| 556649   | В   | Methyl Thiocyanate                   | [25]    |
| 78944    | В   | Methyl Vinyl Ketone                  | [25]    |
| 79094    | A   | Methylacetic acid                    | [1000]  |
| 123626   | A   | Methylacetic anhydride               | [1000]  |
| 74895    | A   | Methylamine                          | [1000]  |
| 108883   | AC  | Methylbenzene                        | 14.40   |
| 74953    | AC  | Methylene bromide                    | [1000]  |
| 75092    | AC  | Methylene chloride                   | 0.08    |
| 50000    | ABC | Methylene oxide                      | DL/.010 |
| 60344    | ABC | Methylhydrazine                      | DL(P)   |
| 108101   | A   | Methylisobutylketone                 | 3.30    |
| 502396   | В   | Methylmercuric Dicyamide             | (j)     |
| 25376458 | AC  | Methylphenylene diamine              | [100]   |
| 56042    | AC  | Methylthiouracil                     | [100]   |
| 300-12   |     | 1.10ary runo druon                   | [100]   |

| 75706            | D         | Mathyittiiahlanasilana                  | [25]           |
|------------------|-----------|---|----------------|
| 75796<br>1129415 | B<br>B    | Methyltrichlorosilane<br>Metolcarb      | [25]           |
| 7786347          | AВ        | Mevinphos                               | [25]           |
| 108101           | Ab<br>A   | MIBK                                    | 10.00<br>3.30  |
| 50077            | ABC       | Mitomycin C                             | [100]          |
| 70257            | AC        | MNNG                                    |                |
|                  | AC<br>AC  | MOCA                                    | [100]<br>25.00 |
| 101144<br>107302 | ABC       |   | DL/.012        |
| 6923224          | В         | Monocrotophos                           | [25]           |
| 75047            | A         | Monoethylamine                          | [1000]         |
| 74895            | A         |   |                |
|                  |           | Monomethylamine Monomethylbydrozina     | [1000]         |
| 60344<br>7647010 | ABC<br>AB | Monomethylhydrazine<br>Muriatic acid    | DL(P)          |
|                  |           |   | (v)            |
| 2763964          | ABC       | Mustand cos                             | DL(P)          |
| 50562            | BC<br>AC  | Mustard gas                             | [25]           |
| 1615801          |           | N,N'-Diethylhydrazine                   | [100]          |
| 494031           | AC        | N,N'-Bis(2-chloroethyl)-2-naphthylamine | [1000]         |
| 107926           | A         | n-Butanoic acid                         | [1000]         |
| 123864           | A         | n-Butyl acetate                         | [1000]         |
| 71363            | A         | n-Butyl alcohol                         | DL/.54         |
| 109739           | A         | n-Butylamine                            | [1000]         |
| 759739           | AC        | n-Nitroso-N-ethylurea                   | DL             |
| 684935           | AC        | N-Nitroso-N-methylurea                  | [25]           |
| 615532           | AC        | N-Nitroso-N-methylurethane              | [25]           |
| 924163           | AC        | N-Nitrosodi-n-butylamine                | DL/.40         |
| 621647           | AC        | N-Nitrosodi-n-propylamine               | 1.71           |
| 1116547          | AC        | N-Nitrosodiethanolamine                 | 4.27           |
| 55185            | AC        | N-Nitrosodiethylamine                   | DL/.014        |
| 62759            | ABC       | N-Nitrosodimethylamine                  | 0.66           |
| 86306            | A         | N-Nitrosodiphenylamine                  | 6.46           |
| 10595956         | C         | N-Nitrosomethylamine                    | DL             |
| 4549400          | AC        | N-Nitrosomethylvinylamine               | DL(P)          |
| 59892            | C         | N-nitrosomopholine                      | [25]           |
| 16543558         | C         | N-Nitrosonornicotine                    | [25]           |
| 100754           | AC        | N-Nitrosopiperidine                     | [100]          |
| 930552           | AC        | N-Nitrosopyrrolidine                    | DL/.14         |
| 13256229         | C         | N-Nitrososarcosine                      | [25]           |
| 122394           | AC        | N-Phenylbenzeneamine                    | [25]           |
| 103855           |           | N-Phenylthiourea                        | DL(P)          |
| 107108           | AC        | n-Propylamine                           | [1000]         |
| 300765           | A         | Naled                                   | [100]          |
| 91203            | AC        | Naphthalene                             | 100.00         |
| 91587            | AC        | Naphthalene, 2-chloro-                  | 25.00          |
| 1338245          | A         | Naphthenic acid                         | [1000]         |
| 12125018         | A         | Neutral ammonium fluoride               | [1000]         |
| 72571            | AC        | Niagara blue                            | [100]          |
| 7440020          | AC        | Nickel                                  | 420.00         |
| 7718549          | A         | Nickel (II) chloride                    | (k)            |
| 557197           | AC        | Nickel (II) cyanide                     | (r)            |
| 15699180         | A         | Nickel ammonium sulfate                 | (k)            |
| 13463393         | ABC       | ·                                       | (k)            |
| 37211055         | A         | Nickel chloride                         | (k)            |
| -99191           | AC        | Nickel compounds N.O.S.                 | (k)            |
| 12054487         | A         | Nickel hydroxide                        | (k)            |
| 14216752         | A         | Nickel nitrate                          | (k)            |

| 7786814  | ٨   | Niekel gulfete   | (15)       |
|----------|-----|--|------------|
| 13463393 | A   | Nickel sulfate NIckel tetracarbonyl  | (k)<br>(k) |
|          |     |  |            |
| 7718549  | ADC | Nickelous chloride<br>Nicotine   | (k)        |
| 54115    | С   |  | DL(P)      |
| -99192   |     | Nicotine salts   | [25]       |
| 65305    | В   | Nicotine Sulfate   | [25]       |
| 7697372  | AB  | Nitric acid  | (v)        |
| 7787555  | A   | Nitric acid, beryllium salt, trihydrate  | (d)        |
| 7782867  | A   | Nitric acid, mercury(1+) salt, monohydrate   | (j)        |
| 7761888  | A   | Nitric acid, silver (1+) salt  | (m)        |
| 10102451 | AC  | Nitric acid, thallium (1+) salt  | (n)        |
| 10102439 |     | Nitric oxide   | DL(P)      |
| 98953    |     | Nitrobenzene   | 0.70       |
| 1122607  | В   | Mitrocyclohexane   | [25]       |
| 10102440 | ABC | Nitrogen dioxide (NO2)   | DL(P)      |
| 10544726 | A   | Nitrogen dioxide, di-  | [100]      |
| 51752    | C   | Nitrogen mustard   | [25]       |
| 126852   | C   | Nitrogen mustard N-oxide   | [25]       |
| -99194   | C   | Nitrogen mustard, hydrochloride salt   | [25]       |
| -99193   | C   | Nitrogen mustard, N-oxide, hydrochloride salt  | [25]       |
| 10544726 | A   | Nitrogen oxide   | [100]      |
| 10102439 |     | Nitrogen oxide (NO)  | DL(P)      |
| 10102440 |     | Nitrogen oxide (NO2)   | DL(P)      |
| 10102440 |     | Nitrogen peroxide  | DL(P)      |
| 10102439 |     | Nitrogen (II) oxide  | DL(P)      |
| 55630    | AC  | Nitroglycerin  | DL(P)      |
| 25154556 | A   | Nitrophenols   | [1000]     |
| -99326   | AC  | Nitrosamines, NOS  | [25]       |
| 1321126  | Α   | Nitrotoluene   | [1000]     |
| 991424   | В   | Norbormide   | [25]       |
| 126681   | C   | O,O,O-Triethyl phosphorothioate  | [25]       |
| 297972   | ABC | O,O-Diethyl-O-(2-pyrazinyl)phosphorothioate  | DL(P)      |
| 95487    | AB  | o-Cresol   | 3.80       |
| 95487    | AB  | o-Cresylic acid  | 3.80       |
| 95501    | AC  | o-Dichlorobenzene  | 25.00      |
| 528290   | A   | o-Dinitrobenzene   | 205.10     |
| 88755    | A   | o-Nitrophenol  | [1000]     |
| 88722    | A   | o-Nitrotoluene   | [1000]     |
| 119937   | AC  | o-Tolidine   | 1.30       |
| 95534    | AC  | o-Toluidine  | 49.85      |
| 636215   | AC  | o-Toluidine hydrochloride  | [1000]     |
| 95476    | A   | o-Xylene   | 20.00      |
| 152169   | ABC | Octamethylpyrophosphoramide  | DL(P)      |
| 2312358  | A   | Omite  | [100]      |
| 7778394  | AC  | Orthoarsenic acid  | (a)        |
| 7664382  | A   | Orthophosphoric acid   | (v)        |
| 20816120 | AC  | Osmic acid anhydride   | DL(P)      |
| 20816120 | AC  | Osmium oxide (OsO4), (T-4)-  | DL(P)      |
| 20816120 | AC  | Osmium tetroxide   | DL(P)      |
| 630604   | В   | Ouabain  | [25]       |
| 110009   | AB  | Oxacyclopentadiene   | [1000]     |
| 2944674  | A   | Oxalic acid, ammonium iron(3+) salt (3: 3: 1)  | [1000]     |
| 14258492 | A   | Oxalic acid, ammonium salt   | [1000]     |
| 23135220 | В   | Oxamyl   | 10.00      |
| 78717    | В   | Oxetane, 3,3-Bis(Chloromethyl)-  | [25]       |
| 70/1/    | 2   | one more processing the control of t | [23]       |

| 75210    | A D.C.  | 0.                           | 11.72        |
|----------|---------|------------------------------|--------------|
| 75218    |         | Oxirane                      | 11.73        |
| 106898   |         | Oxirane, (chloromethyl)      | DL/.003      |
| 765344   | AC      | Oxiranecarboxyaldehyde       | DL/.07       |
| 249076   | В       | Oxydisulfoton                | [25]         |
| 10028156 | В       | Ozone                        | Sec.         |
| 106514   | AC      | p-Benzoquinone               | [100]        |
| 59507    | AC      | p-Chloro-m-cresol            | 13.20        |
| 106478   | AC      | p-Cloroaniline               | DL(P)        |
| 106445   | A       | p-Cresol                     | 3.80         |
| 106467   | AC      | p-Dichlorobenzene            | 6.84         |
| 60117    | AC      | p-Dimethylaminozobenzene     | [100]        |
| 100254   | A       | p-Dinitrobenzene             | 205.10       |
| 123911   | AC      | p-Dioxane                    | DL/.13       |
| 100016   | AC      | p-Nitroaniline               | DL(P)        |
| 100027   | AC      | p-Nitrophenol                | 3.30         |
| 99990    | A       | p-Nitotoluene                | 1.12         |
| 106503   | A       | p-Phenylenediamine           | [25]         |
| 106490   | AC      | p-Toluidine                  | 62.97        |
| 106423   | A       | •                            | 20.00        |
|          |         | p-Xylene<br>Page farms       |              |
| 30525894 | A       | Paraform                     | [1000]       |
| 30525894 | A       | Paraformaldehyde             | [1000]       |
| 123637   | AC      | Paraldehyde                  | [1000]       |
| 311455   | AC      | Paraoxon                     | DL(P)        |
| 1910425  | В       | Paraquat                     | 10.00        |
| 2074502  | В       | Paraquat Methosulfate        | 10.00        |
| 56382    | ABC     | Parathion                    | DL(P)        |
| 56382    | ABC     | Parathion-ethyl              | DL(P)        |
| 298000   | ABC     | Parathion-methyl             | DL(P)        |
| 12002038 | AB      | Paris green                  | (a)          |
| 12674112 | A       | PCB-1016                     | (s)          |
| 11104282 | A       | PCB-1221                     | (s)          |
| 11141165 | A       | PCB-1232                     | (s)          |
| 53469219 | A       | PCB-1242                     | (s)          |
| 12672296 | A       | PCB-1248                     | (s)          |
| 11097691 | A       | PCB-1254                     | (s)          |
| 11096825 | A       | PCB-1260                     | (s)          |
| 1336363  | A       | PCBs                         | 1.55         |
| 82688    | AC      | PCNB                         | 1.55<br>1/BG |
| 87865    | AC      | PCP                          | 3.30         |
|          |         | Pentaborane                  |              |
| 19264227 | B<br>AC |                              | [25]         |
| 608935   |         | Pentachlorobenzene           | 25.00        |
| -99195   | C       | Pentachlorodibenzo-p-dioxins | (t(0.5))     |
| -99196   | C       | Pentachlorodibenzofurans     | (t(0.5))     |
| 76017    | AC      | Pentachloroethane            | 5.37         |
| 82688    | AC      | Pentachloronitrobenzene      | 1/BG         |
| 87865    | AC      | Pentachlorophenol            | 3.30         |
| 2570265  | В       | Pentadecylamine              | [25]         |
| 7758294  | A       | Pentasodium triphosphate     | [1000]       |
| 79210    | В       | Peracetic Acid               | [25]         |
| 77474    | ABC     | Perachlorocyclopentadiene    | 15.20        |
| 127184   | AC      | Perchloroethylene            | 0.18         |
| 56235    | AC      | Perchloromethane             | 0.17         |
| 594423   | AB      | Perchloromethylmercaptan     | [1000]       |
| 62442    | AC      | Phenacetin                   | [1000]       |
| 85018    | A       | Phenanthrene                 | 110.00       |
|          |         |                              |              |

| 4000 # 2 |        | TV 1  | <b>=</b> 0.00 |
|----------|--------|---|---------------|
| 108952   |        | Phenol  | 50.00         |
| 70304    | AC     | Phenol, 2,2'-methylenebis(3,4,6-trichloro-                          | 25.00         |
| 15950660 | A      | Phenol, 2,3,4-trichloro-  | [100]         |
| 933788   | A      | Phenol, 2,3,5-trichloro-  | 25.00         |
| 933755   | A      | Phenol, 2,3,6-trichloro-  | 10.05         |
| 95954    | AC     | Phenol, 2,4,5-trichloro-  | 4.56          |
| 88062    | AC     | Phenol, 2,4,6-trichloro-  | 0.66          |
| 131748   | A      | Phenol, 2,4,6-trinitro-, ammonium salt                              | DL(P)         |
| 120832   | AC     | Phenol, 2,4-dichloro-   | 0.96          |
| 105679   | AC     | Phenol, 2,4-dimethyl-   | 1.51          |
| 51285    | AC     | Phenol, 2,4-dinitro   | 3.30          |
| 87650    | AC     | Phenol, 2,4-dichloro-   | [1000]        |
| 88857    |        | Phenol, 2-(1-methylpropyl)-4,6-dinitro-                             | 0.66          |
| 131895   | AC     | Phenol, 2-cyclohexyl-4,6-dinitro-                                   | DL(P)         |
| 534521   |        | Phenol, 2-methyl-4,6-dinitro-                                       | DL(P)         |
| 88755    | A      | Phenol, 2-nitro   | [1000]        |
|          |        |   | 19.60         |
| 609198   | A      | Phenol, 3,4,5-trichloro-  |               |
| 64006    | В      | Phenol, 3-(1-Methylethyl)-, methylcarbamate                         | [25]          |
| 108394   | A      | Phenol, 3-methyl-   | 3.80          |
| 315184   | AB     | Phenol, 4-(di-methylamino)-3,5- dimethyl, methylcarbamate (ester)   | 10.00         |
| 106445   | A      | Phenol, 4-methyl-   | 3.80          |
| 100027   | AC     | Phenol, 4-nitro-  | 3.30          |
| 1319773  | AC     | Phenol, methyl-   | 3.80          |
| 87865    | AC     | Phenol, pentachloro-  | 3.30          |
| 25167822 | A      | Phenol, trichloro- (N.O.S)  | [100]         |
| 4418660  | В      | Phenol, 2,2'-Thiobis(4-Chloro-6-Methyl)-                            | [25]          |
| 58366    | В      | Phenoxarsine, 10,10'-Oxydi-   | (a)           |
| 1220098  | AC     | Phentermine   | DL(P)         |
| 100470   | A      | Phenyl cyanide  | DL/.17        |
| 108985   |        | Phenyl mercaptan  | DL(P)         |
| 62533    |        | Phenylamine   | DL/.038       |
| 696286   |        | Phenyldichloroarsine  | (a)           |
| 25265763 | C      | Phenylenediamine  | [25]          |
| 100414   | A      | Phenylethane  | 20.00         |
|          | A      | Phenylethylene  | 14.00         |
| 100425   | A<br>B | • •   |               |
| 59881    |        | Phenylhydrazine Hydrochloride                                       | [25]          |
| 62384    | ABC    | Phenylmercuric acetate  | DL/.024       |
| 2097190  | В      | Phenylsilatrane   | [25]          |
| 103855   |        | Phenylthiocarbamide   | DL(P)         |
| 298022   |        | Phorate   | DL(P)         |
| 62442    | AC     | Phorazetim  | [1000]        |
| 4104147  | В      | Phosacetim  | [25]          |
| 947024   | В      | Phosfolan   | [25]          |
| 75445    | ABC    | Phosgene  | DL(P)         |
| 732116   | В      | Phosmet   | [25]          |
| 13171216 | В      | Phosphamidon  | [25]          |
| 7803512  | ABC    | Phosphine   | DL(P)         |
| 50782699 | В      | Phosphonothioic acid, methyl-                                       | [25]          |
|          |        | S-(2-(bis(1-methylethyl)amino)ethyl) O-ethyl ester                  |               |
| 2665307  | В      | Phosphonothioic acid, methyl-, O-(4-nitrophenyl) O-phenyl ester     | [25]          |
| 2703131  | В      | Phosphonothioic acid, methyl-, O-ethyl O-(4-methythio)phenyl) ester | [25]          |
| 7664382  | A      | Phosphoric acid   | (v)           |
| 300765   | A      | Phosphoric acid, 1,2-dibromo-2,2-dichloroethyl dimethyl ester       | [100]         |
| 62737    | AB     | Phosphoric acid, 2,2-dichlorovinyl dimethyl ester                   | 1/BG          |
| 311455   | AC     | Phosphoric acid, diethyl-4-nitrophenyl ester                        | DL(P)         |
| 311433   | AC     | i nosphorie acia, alemyi-4-introphenyi estei                        | DL(r)         |

|           | _   |   |        |
|-----------|-----|---|--------|
| 3254635   | В   | Phosphoric acid, dimethyl 4-(methylthio) phenyl ester           | [25]   |
| 7558794   | A   | Phosphoric acid, disodium salt                                  | [1000] |
| 10039324  | A   | Phosphoric acid, disodium salt, dodecahydrate                   | [1000] |
| 10140655  | A   | Phosphoric acid, disodium salt, hydrate                         | [1000] |
| 7446277   | AC  | Phosphoric acid, lead (2+) salt                                 | (i)    |
| 7601549   | A   | Phosphoric acid, trisodium salt                                 | [1000] |
| 10361894  | A   | Phosphoric acid, trisodium salt, decahydrate                    | [1000] |
| 10101890  | A   | Phosphoric acid, trisodium salt, dodecahydrate                  | [1000] |
| 2104645   | В   | Phosphorodithioic acid, phenyl-o-ethyl-o(                       | [25]   |
| 3288582   | AC  | Phosphorodithioic acid, O,O-diethyl S-methyl ester              | [1000] |
| 298022    |     | Phosphorodithioic acid, O,O-diethyl S-[(ethylthio)methyl) ester | DL(P)  |
| 298044    |     | Phosphorodithioic acid, O,O-diethyl S-[2(ethylthio)ethyl] ester | DL(P)  |
| 55914     |     | Phosphoroflouridic acid, bis(1-methylethyl) ester               | DL(P)  |
| 294972    | ABC | Phosphorothioic acid, O,O-diethyl O-pyrazinyl ester             | DL(P)  |
| 298000    | ABC | Phosphorothioic acid, O,O-dimethyl O-(4-nitrophenyl) ester      | DL(P)  |
| 2587908   | В   | Phosphorothioic acid, O,O-dimethyl-S-(2-methylthio) ethyl ester | [25]   |
| 7719122   | AB  | Phosphorus chloride   | [1000] |
| 10025873  | AB  | Phosphorus oxychloride  | [1000] |
| 10026138  | В   | Phosphorus Pentachloride  | [25]   |
| 1314803   | A   | Phosphorus pentasulfide   | [1000] |
| 1314563   | В   | Phosphorus Pentoxide  | [25]   |
| 1314803   | A   | Phosphorus persulfide   | [1000] |
| 1314803   | A   | Phosphorus sulfide  | [1000] |
| 7719122   | AB  | Phosphorus trichloride  | [1000] |
| 7723140   | AB  | Phosphorus, elemental   | 10.25  |
| 10025873  | AB  | Phosphoryl chloride   | [1000] |
| 121755    | A   | Phosphothion  | 1/BG   |
| -99197    | AC  | Phthalic acid esters, N.O.S                                     | [25]   |
| 85449     | AC  | Phthalic anhydride  | [1000] |
| 117806    | A   | Phygon  | [25]   |
| 57476     | В   | Physostigmine   | [25]   |
| 57647     | В   | Physostigmine, Salicylate (1:)                                  | [25]   |
| 124878    | В   | Picrotoxin  | [25]   |
| 110894    | В   | Piperidine  | [25]   |
| 100754    | AC  | Piperidome, 1-Nitroso   | [100]  |
| 23505411  | В   | Pirimifos-Ethyl   | [25]   |
| 1336363   | AC  | Polychlorinated biphenyls, NOS                                  | (s)    |
| 130498292 | A   | Polynuclear aromatic hydrocarbons                               | 5.00   |
| 30525894  | A   | Polyoxymethylene  | [1000] |
| 53467111  | A   | Poly[oxy(methyl-1,2-ethanediyl),                                | [25]   |
|           |     | Alpha-[2,4-dichloro-phenyoxy)acetyl]-n-butoxy-                  | [25]   |
| 28300745  | A   | Potassium antimonyl d-tartrata                                  | (b)    |
| 7784410   | A   | Potassium arsenate  | (a)    |
| 10124502  | AB  | Potassium arsenite  | (a)    |
| 7778509   | A   | Potassium bichromate  | (f)    |
| 7789006   | A   | Potassium chromate  | (f)    |
| 151508    | ABC |   | (r)    |
| 7778509   | A   | Potassium dichromate  | (f)    |
| 1310583   | A   | Potassium hydrate   | (v)    |
| 1310583   | A   | Potassium hydroxide   | (v)    |
| 10124502  | AB  | Potassium metaarsenite  | (a)    |
| 7722647   | A   | Potassium permanganate  | [1000] |
| 506616    | ABC |   | (r)    |
| 2631370   | В   | Promecarb   | [25]   |
| 23950585  | AC  | Pronamide   | [1000] |
| 20,00000  |     |   | [1000] |

| 2312358        | A   | Prop-2-ynyl 2-(4-tert-butylphenoxy) cyclohexyl sulfite | [100]    |
|----------------|-----|--|----------|
| 96184          | AC  | Propane, 1,2,3-trichloro-                              | 0.54     |
| 108601         | AC  | Propane, 2,2'-oxybis[1-chloro-                         | [1000]   |
| 109773         | ABC | •  | 10.25    |
| 107120         |     | Propanenitrile   | DL(P)    |
| 75865          |     | Propanenitrile, 2-hydroxy-2-methyl-                    | Sec.     |
| 542767         | ABC | Propanenitrile, 3-chloro-                              | DL(P)    |
| 79094          | A   | Propanoic acid   | [1000]   |
| 123626         | A   | Propanoic anhydride                                    | [1000]   |
| 2312358        | A   | Propargite   | [100]    |
| 107197         | AC  | Propargyl alcohol                                      | DL(P)    |
| 106967         | В   | Propargyl Bromide                                      | [25]     |
| 75569          | AB  | Propene oxide  | [1000]   |
| 542756         | AC  | Propene, 1,3-dichloro-                                 | 0.20     |
| 57578          | B   | Propiolactone, Beta-                                   | [25]     |
| 79094          | A   | Propionic acid   | [1000]   |
|                |     |  |          |
| 123626         | ADC | Propionic anhydride                                    | [1000]   |
| 107120         | ABC | Propionitrile Propionhanona 4 Amina                    | DL(P)]   |
| 70699          | В   | Propiophenone, 4-Amino-                                | [25]     |
| 109615         | B   | Propyl Chloroformate                                   | [25]     |
| 4170303        |     | Propylene aldehyde                                     | [1000]   |
| 26638197       | AC  | Propylene dichloride                                   | [1000]   |
| 78875          | AC  | Propylene dichloride                                   | 0.02     |
| 75569<br>51535 | AB  | Propylene oxide  | [1000]   |
| 51525          | C   | Propylhtiouracil                                       | [25]     |
| 2275185        | В   | Prothoate  | [25]     |
| 74908          |     | Prussic acid   | (r)      |
| 129000         | AB  | Pyrene   | 500.00   |
| 121211         | A   | Pyrethrin I  | 10.00    |
| 121299         | A   | Pyrethrin II   | 10.00    |
| 8003347        | A   | Pyrethrins and Pyrethroids                             | 10.00    |
| 8003347        | Α   | Pyrethrum  | 10.00    |
| 121211         | A   | Pyrethrum I  | 10.00    |
| 110861         | AC  | Pyridine   | DL/.038  |
| 109068         | AC  | Pyridine, 2-methyl-                                    | [1000]   |
| 140761         | В   | Pyridine, 2-Methyl-5-Vinyl-                            | [25]     |
| 91805          | AC  | Pyridine, 2-[(2-(dimethylamino)ethyl)-2-thienylamino]- | [1000]   |
| 504245         |     | Pyridine, 4-amino-                                     | DL/(P)   |
| 1124330        | В   | Pyridine, 4-Nitro, 1-Oxide                             | [25]     |
| 100754         | AC  | Pyridine, hexahydro-N-nitroso-                         | [100]    |
| 53558251       | В   | Pyriminil  | [25]     |
| 98011          | A   | Pyromucic aldehyde                                     | DL/.012  |
| 107493         | ABC | Pryophosphoric acid, tetraethyl ester                  | DL(P)    |
| 8014957        | A   | Pyrosulfuric acid                                      | (v)      |
| 930522         | AC  | Pyrrole, tetrahydro-N-nitroso                          | DL/.14   |
| 930522         | AC  | Pyrrolodome. 1-nitroso                                 | DL/.14   |
| 91225          | A   | Quinoline  | DL/.51   |
| 106514         | AC  | Quinone  | [100]    |
| 82688          | AC  | Quintozene   | 1/BG     |
| -99198         | A   | Radionuclides  | (y)      |
| 7723140        | AB  | Red phosphorus   | 10.25    |
| 50555          | AC  | Reserpine  | [1000]   |
| 108463         | AC  | Resorcin   | DL/.030  |
| 108463         | AC  | Resorcinol   | DL/.030  |
| 2306164        | AC  | S-(2,3-Dichloroallyl) diisopropyl-thiocarbamate        | 196.13   |
|                | -   | V / "T 'T 'T '   | -, -, -, |

| 81072          | AC  | Saccharin (and salts)                           | Sec.           |
|----------------|-----|---|----------------|
| 94597          | AC  | Safrole   | [1000]         |
| 14167181       | В   | Salcomine                                       | [25]           |
| 107448         | В   | Sarinnnn  |                |
| 626380         | A   | sec-Amyl acetate                                | [25]<br>[1000] |
| 94971          | A   | sec-Butyl, 2,4-dichloropehnoxyacetate           | [1000]         |
| 105464         | A   | sec-Butyl acetate                               | [1000]         |
| 13952846       | A   | sec-Butylamine                                  |                |
|                | A   | ·   | [1000]         |
| 513495         |     | sec-Butylamine, (S)-<br>Selenious acid (H2SeO3) | [1000]         |
| 7783008        | ABC | · · · · · · · · · · · · · · · · · · ·           | (L)<br>(L)     |
| 10102188       | AB  | lenious acid (H2SeO3), disodium salt            |                |
| 12039520       | AC  | Selenious acid, dithallium(1+) salt             | DL(P)          |
| 7782823        | AC  | Selenious acid, monosodium salt                 | (L)            |
| 7782492        | AC  | Selenium  | 36.00          |
| -99199         | AC  | Selenium compounds, N.O.S                       | (L)            |
| 7446084        | A   | Selenium dioxide                                | (L)            |
| 7488564        | AC  | Selenium disulfide                              | (L)            |
| 7446084        | AC  | Selenium oxide                                  | (L)            |
| 7791233        | В   | Selenium Oxychloride                            | (L)            |
| 630104         | AC  | Selenourea                                      | DL(P)          |
| 7783008        |     | Selenous acid                                   | (L)            |
| 563417         | В   | Semicarbazide Hydrochloride                     | [25]           |
| 63252          | A   | Sevin   | 1/BG           |
| 3037727        | В   | Silane, (4-Aminobutyl)Diethoxymethyl-           | [25]           |
| 7440224        | AC  | Silver  | 10/BG          |
| -99200         | AC  | Silver compounds, N.O.S                         | (m)            |
| 506649         | AC  | Silver cyanide (AgCN)                           | (r)            |
| 7761888        | Α   | Silver nitrate                                  | (m)            |
| 93721          | AC  | Silvex  | 10.00          |
| 1310732        | Α   | Soda lye  | (v)            |
| 7440235        | Α   | Sodium (elemental)                              | Sec.           |
| 7631905        | Α   | Sodium acid sulfite                             | [1000]         |
| 7631892        | AB  | Sodium arsenate                                 | (a)            |
| 7784465        | AB  | Sodium arsenite                                 | (a)            |
| 26628228       | AB  | Sodium azide (Na(N3))                           | DL(P)          |
| 10588019       | A   | Sodium bichromate                               | (f)            |
| 1333831        | A   | Sodium biflouride                               | [1000]         |
| 7631905        | A   | Sodium bisulfite                                | [1000]         |
| 124652         | В   | Sodium cacodylate                               | (a)            |
| 7775113        | A   | Sodium chromate                                 | (f)            |
| 143339         | ABC | Sodium cyanide (NaCN)                           | (r)            |
| 10588019       | A   | Sodium dichromate                               | (f)            |
| 25155300       | A   | Sodium dodecylbenzene sulfonate                 | [1000]         |
| 7681494        | A   | Sodium flouride                                 | [1000]         |
| 62748          | ABC | Sodium flouracetate                             | DL(P)          |
| 10124568       | A   | Sodium hexametaphosphate                        | [1000]         |
| 16721805       | A   | Sodium hydrogen sulfide                         | [1000]         |
| 7631905        | A   | Sodium hydrogen sulfite                         | [1000]         |
| 16721805       | A   | Sodium hydrosulfide                             | [1000]         |
| 1310732        | A   | Sodium hydroxide                                | (v)            |
| 7681529        | A   | Sodium hypochlorite                             | [1000]         |
| 10022705       | A   | Sodium hypochlorite pentahydrate                | [1000]         |
| 7784465        | AB  | Sodium metaarsenite                             | (a)            |
| 124414         | A   | Sodium metoxide                                 | [1000]         |
| 124414         | A   | Sodium methylate                                | [1000]         |
| 14771 <b>7</b> | 4.1 | Sociali illouijiuto                             | [1000]         |

| 7622000             |           | C - di   | [1000]           |
|---------------------|-----------|--|------------------|
| 7632000             | A         | Sodium nitrite   | [1000]<br>[1000] |
| 10101890            | A         | Sodium phosphate dodecahydrate   |                  |
| 7558794             | A         | odium phosphate, dibasic   |                  |
| 10039324            | A<br>A    | Sodium phosphate, dibasic, dodecahydrate   | [1000]           |
| 10140655            |           | Sodium phosphate dibasic, hydrate  | [1000]           |
| 7601549             | A         | Sodium phosphate, tribasic   | [1000]           |
| 7758294             | A<br>A    | Sodium phosphate, tribasic   | [1000]           |
| 10124568            |           | Sodium phosphate, tribasic<br>Sodium phosphate, tribasic                             | [1000]           |
| 7785844             | A         | * * ·  | [1000]<br>[1000] |
| 10101890            | A<br>B    | Sodium phosphate, tribasic, dodecahydrate<br>Sodium Selenate                         |                  |
| 13410010            |           | Sodium selenite, disodium salt   | (L)              |
| 10102188            | AB<br>A   |  | (L)              |
| 7782823             |           | Sodium selenite, monosodium salt<br>Sodium Tellurite                                 | (L)              |
| 10102202            | В         |  | [25]             |
| 7785844<br>7758294  | A<br>A    | Sodium trimetaphosphate  | [1000]           |
| 900958              | B         | Sodium tripolyphosphate<br>Stannae, Acetoxytriphenly-                                | [1000]           |
| 56531               | AС        | Stilbestrol  | [25]<br>DL       |
| 18883664            | AC<br>AC  |  |                  |
|                     | AC<br>AC  | Streptozcin  | [25]             |
| 18883664            | AC<br>A   | Streptozotocin Strontium chromate  | [25]             |
| 7789062<br>57249    | ABC       |  | (f)<br>DL(P)     |
| 357573              |           | Strychnidin-10-one   |                  |
| 557575<br>57249     | AC<br>ABC | Strychnidin-10-one, 2,3-dimethoxy-   | DL(P)            |
|                     | В         | Strychnine and salts   | DL(P)            |
| 60413               |           | Strychnine sulfate   | [25]             |
| 100425<br>7773060   | A<br>A    | Styrene<br>Sulfamic acid monoammonium salt   | 14.00            |
|                     |           |  | [1000]           |
| 3689245<br>369571   | ABC<br>B  | Sulforeida 2 Chloropropropul Octul   | DL(P)            |
| 12771083            | A         | Sulfoxide, 3-Chloropropropyl Octyl<br>Sulfur chloride                                | [25]<br>[1000]   |
|                     | В         | Sulfur Dioxide   |                  |
| 7446095             |           | Sulfur hydride   | (v)              |
| 7783064<br>12771083 | ABC<br>A  | Sulfur monochloride  | [1000]<br>[1000] |
| 1314803             | A         | Sulfur phosphide   | [1000]           |
| 7488564             | AC        | Sulfur selenide  |                  |
| 7783600             | B         | Sulfur Tetraflouride   | (L)<br>[25]      |
| 7446119             | В         | Sulfur Trioxide  |                  |
| 7664939             | AВ        | Sulfuric acid  | (v)              |
| 7446186             | ABC       | Sulfuric acid, dithallium (1+) salt  | $(\mathbf{v})$   |
| 7782630             | ABC       | Sulfuric acid, iron(2+) salt (1:1), heptahydrate                                     | (n)<br>[1000]    |
| 7446142             | A         | Sulfuric acid, lead(2+) salt (1:1), heptanydrate  Sulfuric acid, lead(2+) salt (1:1) | (i)              |
| 8014957             | A         | Sulfuric acid, mixture with sulfur trioxide  | (r)<br>(v)       |
| 10031591            | AB        | Sulfuric acid, thallium(I) salt  |                  |
| 7790945             | AB        | Sulfuric acid, maniful (1) sait Sulfuric chlorohydrin                                | (n)<br>[1000]    |
| 121755              | A         | Sumitox  | 1/BG             |
| 99354               | AC        | sym-Trinitrobenzene  | DL/.07           |
| 77816               | В         | Tabun  | [25]             |
| 14307438            | A         | Tartaric acid amonium salt   | [1000]           |
| 1746016             | AC        | TCDD, 2,3,7,8-   | 8.0E-5           |
| 79016               | AC        | TCE TCE  | 0.13             |
| 72548               | AC        | TDE  | 0.13             |
| 13494809            | B<br>B    | Tellurium  | [25]             |
| 7783804             | В         | Tellurium Hexaflouride   | [25]             |
| 116063              | ABC       | Temik  | DL(P)            |
| 107493              |           | TEPP   | DL(P)            |
| 10/723              | ADC       | 1141   | DL(f)            |

| 13071799 | В   | Terbufos   | 12.82          |
|----------|-----|--|----------------|
| 82688    | AC  | Terraclor  | 1/BG           |
| 625161   | A   | tert-Amyl acetate                                  | [1000]         |
| 540855   | A   | tert-Butyl acetate                                 | [1000]         |
| 75649    | A   | tert-Butylamine                                    | [1000]         |
| -99201   | C   | Tetrachlorodibenzo-p-dioxins                       | (t)            |
| -99202   | C   | Tetrachlorodibenzofurans                           | (t) $(t(0.1))$ |
| 72548    | AC  | Tetrachlorodiphenyltahne                           | 0.66           |
| 25322207 | C   | Tetrachloroerthane, N.O.S                          | [1000]         |
| 127184   | AC  | Tetrachloroethene                                  | 0.018          |
| 127184   | AC  | Tetrachloroethylene                                | 0.018          |
| 56235    | AC  | Tetrachlorodmethane                                | 0.017          |
| 3689245  |     | Tetraethyldithiopyrophosphate                      | DL(P)          |
| 78002    |     | Tetraethyllead                                     | DL(P)          |
| 107493   |     | Tetraethylpyrophosphate                            | DL(P)          |
| 597648   | В   | Tetraethyltin                                      | [25]           |
| 109999   | A   | Tetrahydrofuran                                    | DL/0.014       |
| 75741    | В   | Tetramethyllead                                    | (i)            |
| 509148   | ABC | Tetranitromethane                                  | DL(P)          |
| 75784    | AC  | Tetraphosphoric acid, hexaethyl ester              | DL(P)          |
| 1314325  | AC  | Thallic oxide (Tl203)                              | (n)            |
| 7440280  | AC  | Thallium   | 10/BG          |
| 563688   | AC  | Thallium (I) acetate                               | (n)            |
| 6533739  |     | Thallium (I) carbonate                             | (n)            |
| 7791120  |     | Thallium (I) chloride                              | (n)            |
| 10102451 | AC  | Thallium (I) nitrate                               | (n)            |
| 7446186  |     | Thallium (I) sulfate                               | (n)            |
| 1314325  | AC  | Thallium (III) oxide                               | DL(P)          |
| -99203   | AC  | Thallium caompunds, N.O.S                          | (n)            |
| 12039520 | AC  | Thallium selenite                                  | DL(P)          |
| 10031591 | AB  | Thallium sulfate                                   | (n)            |
| 12039520 | AC  | Thallium (I) selenide                              | DL(P)          |
| 7791120  | ABC | Thallous chloride                                  | DL(P)          |
| 2757188  | В   | Thallous Malonate                                  | (n)            |
| 10031591 | AB  | Thallous sulfate                                   | (n)            |
| 7446186  | ABC | Thallous sulfate                                   | (n)            |
| 298022   | ABC | Thimet   | DL(P)          |
| 62555    | AC  | Thioacetamide                                      | [100]          |
| 2231574  | В   | Thiocarbazide                                      | [25]           |
| 1762954  | A   | Thiocyanic acid amonium salt                       | [1000]         |
| 115297   | ABC | Thiodan  | 3.30           |
| 39196184 | ABC | Thiofanox  | DL(P)          |
| 541537   | ABC | Thiomidocarbonic diamide                           | DL(P)          |
| 74931    | ABC | Thiomethanol                                       | [1000]         |
| 297972   | ABC | Thioazin   | DL(P)          |
| 137268   | AC  | Thioperoxydicarbonic diamide, tetramethyl          | 10.00          |
| 108985   | ABC | Thiophenol   | DL(P)          |
| 1314803  | A   | Thiosophoric anhydride                             | [1000]         |
| 3689245  |     | Thiosophoric acid ([(HO)2P(S)]20) tetraethyl ester | DL(P)          |
| 79196    |     | Thiosemicarbazide                                  | DL(P)          |
| 62566    | AC  | Thiourea   | [100]          |
| 53444821 |     | Thiourea (2-chlorophenyl)-                         | DL(P)          |
| 614788   | В   | Thiourea (2-Methylphenyl)-                         | [25]           |
| 86884    |     | Thiourea 1-naphthalenyl-                           | DL(P)          |
| 103855   | ABC | Thiourea, phenyl                                   | DL(P)          |

| 1070 (0  | 4.0 | TDI '                                   | 10.00          |
|----------|-----|---|----------------|
| 137268   | AC  | Thiram                                  | 10.00<br>10.00 |
| 137268   | AC  | Thiuram                                 |                |
| 7550450  | В   | Titanium Tetrachloride                  | [25]           |
| 75503    | ADC | TMA                                     | [1000]         |
| 509148   |     | TNM                                     | DL(P)          |
| 108883   | AC  | Toluene                                 | 14.40          |
| 91087    | AB  | Toluene diisocyanate                    | [1000]         |
| 95807    | AC  | Toluene, 2,4-diamino-                   | 3.74           |
| 26471625 | AC  | Toluene-1,3-diisocyanate                | [1000]         |
| 584849   | AB  | Toluene-2,4-diisocyanate                | [1000]         |
| 25376458 | AC  | Toluenediamine                          | [100]          |
| 8001352  |     | Toxaphene                               | 10.88          |
| 57749    |     | Toxachlor                               | 9.20           |
| 156605   | AC  | trans-1,2-Dichloroethene                | 0.53           |
| 110178   | A   | trans-1,2-Ethylenediacarboxylic acid    | [1000]         |
| 110576   | В   | Trans-1,4-Dichlorobutene                | [25]           |
| 1031476  | В   | Triamiphos                              | [25]           |
| 24017478 | В   | Triazofos                               | [25]           |
| 75252    | AC  | Tribromomethane                         | 1.0            |
| 7778441  | AB  | Tricalcium orthoarsenate                | (a)            |
| 52686    | A   | Trichlorfon                             | 10.00          |
| 1558254  | В   | Trichloro(Chromethyl)Silane             | [25]           |
| 27137855 | В   | Trichloro(Dichlorophenyl)Silane         | [25]           |
| 75876    | AC  | Trichloroacetaldehyde                   | [1000]         |
| 76028    | В   | Trichloroacetyl Chloride                | [25]           |
| 79016    | AC  | Trichloroethane                         | 0.13           |
| 79016    | AC  | Trichloroethylene                       | 0.13           |
| 115219   | В   | Trichloroethylsilane                    | [25]           |
| 75694    | AC  | Trichlorofluromethane                   | 0.70           |
| 67663    | ABC | Trichloromethane                        | 0.68           |
| 594223   | AB  | Trichloromethanesulfenyl chloride       | [1000]         |
| 75707    | C   | Trichloromethanethiol                   | DL(P)          |
| 327980   | В   | Trichloronate                           | [25]           |
| 25167822 | A   | Trichlorophenol, N.O.S                  | [100]          |
| 98135    | В   | Trichlorophenylsilane                   | [25]           |
| 25735299 | C   | Trichloropropane, N.O.S.                | [25]           |
| 27323417 | A   | Triethanolamine dodecylbenzenesulfonate | [1000]         |
| 998301   | В   | Triethoxysilane                         | [25]           |
| 121448   | A   | Triethylamine                           | [1000]         |
| 75503    | A   | Trimethylamine                          | [1000]         |
| 75574    | В   | Trimethylchlorosilane                   | [25]           |
| 824113   | В   | Trimethylolopropane Phosphite           | [25]           |
| 1066451  | В   | Trimethyltin Chloride                   | [25]           |
| 639587   | В   | Triphenyltin Chloride                   | [25]           |
| 7758294  | A   | Triphophoric acid, pentasodium salt     | [1000]         |
| 52244    | C   | Tris(1-aziridinyl)phosphine sulfide     | [25]           |
| 126727   | AC  | Tris(2,3-dibromopropyl)phosphate        | 25.00          |
| 555771   | В   | Tris(2-Chloroethyl)Amine                | [25]           |
| 7601549  | A   | Trisodium phosphate                     | [1000]         |
| 10361894 | A   | Trisodium phosphate decahydrate         | [1000]         |
| 7785844  | A   | Trisodium trimetaphosphate              | [1000]         |
| 72571    | AC  | Trypan blue                             | [100]          |
| 57147    | ABC | UDMH                                    | 4.60           |
| 66751    | AC  | Uracil mustard                          | [100]          |
| 66751    | AC  | Uracil, 5-[bis(2-chloroethyl)amino]-    | [100]          |
|          |     |   |                |

| 36478769 | A   | Uranium, bis(nitrate-O,O')dioxo-                   | [1000]     |
|----------|-----|--|------------|
| 541093   | A   | Uranyl acetate                                     | [1000]     |
| 10102064 | A   | Jranyl nitrate                                     |            |
| 36478769 | A   | · · · ·  |            |
| 759739   | AC  | anyl nitrate, 1,1'-dioxo- ea, N-ethyl-N-nitroso-   |            |
| 684935   | AC  | Urea, N-methyl-N-nitroso-                          | DL<br>[25] |
| 51796    | AC  | Urethane   | [1000]     |
| 2001958  | В   | Valinomycin  | [25]       |
| 1314621  |     | Vanadic acid anhydride                             | (p)        |
| 7803556  | AC  | Vanadic acid, amonium salt                         | (p)        |
| 1314621  |     | Vanadic anhydride                                  | (p)        |
| 27774136 | A   | Vanadic sulfate                                    | (p)        |
| 1314621  |     | Vanadium oxide (V2O5)                              | (p)        |
| 1314621  |     | Vanadium pentoxide                                 | (p)        |
| 2774136  | A   | Vanadium sulfate                                   | (p)        |
| -99000   | 7.1 | Vanadium (reference only, not regulated substance) | 100/BG     |
| 2774136  | A   | Vanadyl sulfate                                    | (p)        |
| 7681494  | A   | Villaumite   | [1000]     |
| 108054   | AB  | Vinyl acetate                                      | 0.51       |
| 107186   |     | Vinyl carbinol                                     | DL(P)      |
| 75014    | AC  | Vinyl chloride                                     | 0.04       |
| 107131   |     | Vinyl cyanide                                      | 1.37       |
| 4549400  | AC  | Vinylamine, N-methyl-N-nitroso                     | DL(P)      |
| 100425   | A   | Vinylbenzene                                       | 14.00      |
| 75354    | AC  | Vinylidine chloride                                | 0.36       |
| 7723140  | AB  | Violet phosphorus                                  | 10.25      |
| 81812    |     | Warfarin and salts                                 | DL(P)      |
| 129066   | В   | Warfarin Sodium                                    | 10.00      |
| 7723140  | AB  | White phosphorus                                   | 10.25      |
| 1330207  | A   | Xylene (total)                                     | 20.00      |
| 1330207  | A   | Xylenes  | 20.00      |
| 1300716  | A   | Xylenol  | 307.64     |
| 28347139 | В   | Xylene Dichloride                                  | [25]       |
| 1303339  | A   | Yellow arsenic sulfide                             | (a)        |
| 7723140  | AB  | Yellow phosphorus                                  | 10.25      |
| 7440666  | A   | Zinc   | 2800.00    |
| 557346   | A   | Zinc acetate                                       | (q)        |
| 14639986 | A   | Zinc amonium chloride                              | (q)        |
| 14639975 | A   | Zinc amonium chloride                              | (q)        |
| 52628258 | A   | Zinc amonium chloride                              | (q)        |
| -99206   | A   | Zinc and compounds                                 | (q)        |
| 1332076  | A   | Zinc borate  | (q)        |
| 7699458  | A   | Zinc bromide                                       | (q)        |
| 3486359  | A   | Zinc carbonate                                     | (q)        |
| 7646857  | A   | Zinc chloride                                      | (q)        |
| 557211   | AC  | Zinc cyanide                                       | (r)        |
| 7783495  | A   | Zinc fluoride                                      | (q)        |
| 16871719 | A   | Zinc fluosilicate                                  | (q)        |
| 557415   | A   | Zinc formate                                       | (q)        |
| 7779864  | A   | Zinc hydrosulfite                                  | (q)        |
| 7779886  | A   | Zinc nitrate                                       | (q)        |
| 127822   | A   | Zinc p-phenosulfonate                              | (q)        |
| 1314847  | ABC | Zinc phosphide (Zn3P2)                             | DL(P)      |
| 16871719 | A   | Zinc silicofluoride                                | (q)        |
| 7733020  | A   | Zinc sulfate                                       | (q)        |
|          |     |  |            |

| 127822   | A   | inc sulfocarbolate (q)   |        |
|----------|-----|--|--------|
| 7733020  | A   | Zinc vitriol   | (q)    |
| 58270089 | A   | Zinc, dichloro(4,4-dimethyl-5(((methylamino)carbonyl)oxy) pentanenitrile(T-4). | [25]   |
| 14639975 | A   | Zincate(2-), tetrachloro-, diammonium, (T-4)-                                  | (q)    |
| 14639986 | A   | Zincate(3-), pentachloro-, triammonium   | (q)    |
| 297972   | ABC | Zinophos   | DL(P)  |
| 13746899 | A   | Zirconium nitrate  | [1000] |
| 16923958 | A   | Zirconium potassium fluoride   | [1000] |
| 14644612 | A   | Zirconium sulfate  | [1000] |
| 10026116 | A   | Zirconium tetrachloride  | [1000] |

#### LEGEND:

- aE-b Scientific notation for a number, e.g. "4E-5" means 4 x 10<sup>-5</sup>, which equals 0.00004.
- Default value based on Federal reportable quantities from sources A and B.
- DL An NC for the substance shall be the detection limit as defined in this chapter.
- DL(P) An NC for the substance shall be the detection limit as defined in this chapter because the substance is elsewhere classified as an acute hazardous waste.
- DL/ The detection limit as defined in this chapter shall be an NC, unless the detection limit is lower than the number following the slash, in which case the numerical value shall supplant the detection limit as an NC.
- /BG The numerical value preceding the slash shall be an NC, unless the background concentration is greater, in which case the background value shall supplant the numerical value as an NC.
- Sec. An NC for this substance has not been established either because a hazard of exposure to the substance is improbable from a contaminated soil context or because a hazard exists only in the contexts covered by Rule 391-3-19-.04(3)(c). (a) (q). Applicable NCs shall be the NC for the elemental form of each metal given below. For those substances that are compounds meeting more than one listing (e.g., lead arsenate) or that are not specifically listed in the table but which are described by one or more general categories (e.g., mercuric dichromate--"mercury compounds, n.o.s." and "chromium compounds, n.o.s."), all applicable NCs must be considered.

| (a) | arsenic   | 41 (mg/kg) |
|-----|-----------|------------|
| (b) | antimony  | 10/BG      |
| (c) | barium    | 500/BG     |
| (d) | beryllium | 3/BG       |
| (e) | cadmium   | 39         |
| (f) | chromium  | 1200       |
| (g) | cobalt    | 25/BG      |
| (h) | copper    | 1500       |
| (i) | lead      | 300        |
| (j) | mercury   | 17         |
| (k) | nickel    | 420        |
| (1) | selenium  | 36         |
| (m) | silver    | 10/BG      |
| (n) | thallium  | 10/BG      |
| (p) | vanadium  | 100/BG     |
| (q) | zinc      | 2800       |

- (r) NCs shall be that for "Cyanides {CN anion}" and that for any other applicable listing.
- (s) The NC for this substance shall be that given for "PCBs."
- (t) The NC for this substance shall be the 2,3,7,8-TCDD Toxic Equivalent, which is the NC for 2,3,7,8-TCDD divided by the Toxic Equivalency Factor shown in braces.
- (u) Releases shall be reported if the concentration of the substance in the soil is such that the soil meets the ignitibility criteria of 40 CFR 261.21(a)(2).
- (v) Releases shall be reported if the concentration of this substance in the soil is such that the soil exhibits a pH less than 2 or greater than 12.5, respectively.

- (w) Releases shall be reported if a contaminated soil has any of the properties by which solid wastes are determined to exhibit the characteristic of reactivity in 40 CFR 261.23(a).
- (x) An NC shall be that for the substance in parentheses.
- (y) For radionuclides, releases shall be reported if the direct ionizing radiation (exposure rate), as measured 1 m above the soil surface, is greater than 50 microroentgens per hour (R/h) above the local background level, or the measured radionuclide concentration in soil is sufficient to deliver a dose to any individual of 25 mrem/yr Committed Effective Dose Equivalent (CEDE) or 75 mrem/yr Committed Dose Equivalent (CEDE) to any organ.
- (z) NCs for this hazardous waste shall be all NCs for each hazardous constituent which is a basis for listing the waste, as defined by 40 CFR 261 Appendix VII.

#### Appendix 3-2

#### **Exclusions from Release Notification Requirement**

(Source: RSG 391-3-19-.04(2))

(NOTE: The notations from the regulations has been retained.)

The following are excluded from the notification requirements of this section:

- (a) Any release that, within 30 days of the owner's discovery or of the effective date of these rules, whichever is later, no longer meets any criterion for notification under Rule 391-3-19-.04(3).
- (b) Any defined release which is being cleaned-up under emergency response authorities other than the Hazardous Site Response Act where the person responsible for the clean-up remains in compliance with instructions given by the Division or by an on-scene coordinator under the NCP, such exclusion to expire 180 days after the date upon which the release began if at or after that time any of the criteria of Rule 391-3-19-.04(3) are met.
- (c) Emissions regulated under the Georgia Air Quality Control Act, OCGA Section 12-9-1 et seq.
- (d) Releases of substances regulated under the Georgia Asbestos Safety Act, OCGA Section 12-2-1 et seq., except for release at inactive disposal sites that are not in compliance with the performance standards in 40 CFR 61.153.
- (e) Point source discharges that are regulated under the Georgia Water Quality Control Act, OCGA Section 12-5-20 et seq.
- (f) Releases of a pesticide that have been registered under the Georgia Pesticide Control Act, OCGA Section 2-7-50 et seq., when the release consists solely of the use of said pesticide in a manner consistent with its label or labelling.
- (g) Releases regulated solely under the Georgia Underground Storage Tank Act, OCGA Section 12-13-1 et seq.
- (h) Releases of any petroleum-based fuel, lubricant, or hydraulic fluid.
- (i) Releases consisting of treatment or disposal in a unit that is regulated under a permit issued, or rules promulgated, pursuant to the Georgia Hazardous Waste Management Act, OCGA Section 12-8-60 et seq., the Georgia Solid Waste Management Act, OCGA Section 12-8-20 et seq., or the Georgia Water Quality Control Act, OCGA Section 12-5-20 et seq., provided the Director has been informed, in accordance with requirements in such permit or rules, of any discovery that such releases exceed standards permitted by these statutes and the rules promulgated pursuant to these statutes.
- (j) Releases arising from the use of a commercial product that has been manufactured and sold for household use which is used by a private individual in a manner consistent with and incidental to the manufacturer's recommended use of the product.
- (k) Releases arising from the application to soil of fertilizers, liming materials, or soil amendments (unless any are used in a manner constituting disposal as defined and regulated in the Rules for Hazardous Waste Management, Chapter 391-3-11).
- (1) Releases of naturally-occurring radionuclides described in 40 CFR 302.6(c).

- (m) Direct radiation and/or releases of radionuclides regulated by the Division under the Georgia Radiation Control Act, OCGA Section 31-13 et seq., or by the U.S. Nuclear Regulatory Commission, or any successor agency, under the Atomic Energy Act of 1954, as amended.
- (n) Any release to groundwater that is discovered solely as a result of detection within a public drinking water system being monitored in accordance with the Rules for Safe Drinking Water, Chapter 391-3-5, provided that the Director is informed of such detection in accordance with the aforementioned Rules.
- (o) Releases that arise from land-disturbing activities involving the extraction and stockpiling of ores and minerals, or involving the removal, stockpiling, and replacement of overburden materials, at any mine permitted under the Georgia Surface Mining Act, OCGA, Section 12.4-70 et seq.

### **SECTION 4**

#### HAZARDOUS WASTE MANAGEMENT

#### Georgia Supplement, August 2000

This section covers the state requirements for Hazardous Waste Management and is intended to supplement the U.S. TEAM Guide. Refer to the U.S. TEAM Guide and the DOD Component Supplements for Federal, DOD, and service-specific requirements.

The following Federal regulations have been incorporated by reference by the Rules of the State of Georgia (RSG), Department of Natural Resources, Division 3, Environmental Protection, (RSG 391-3) [This list revised as of July 1999]:

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40 CFR Sections 260.10 - 260.11 (1997) (RSG 391-3-11-.02(1))
40 CFR 264, Subpart H (1997), and Part 265, Subpart H (1997) (RSG 391-3-11-.05)
40 CFR 261 (1996, as amended through June 1997) (RSG 391-3-11.07(1))
40 CFR 260, Subpart C (1997) (RSG 391-3-11-.07(2))
40 C.F.R. Part 262 (1997), as amended by 61 Fed. Reg. 16,309 (April 12, 1996) (RSG 391-3-11-.08(1))
40 C.F.R. Part 263 (1997), as amended by 61 Fed. Reg. 16,309 (April 12, 1996) (RSG 391-3-11-.09(1))
40 C.F.R. Part 264, Subparts A - G, Subparts I - O, Subpart S, Subpart W, Subpart X, Subpart AA, Subpart
   BB, Subpart CC, Subpart DD and Subpart EE (1997, as through December 1997) (RSG 391-3-11-.10)
40 C.F.R. Part 265, Subparts A through G, Subparts I through S, Subpart W, Subpart X, Subpart AA, Subpart
   BB, Subpart CC, Subpart DD and Subpart EE (1997, as amended through December 1997) (RSG 391-3-
40 C.F.R. Part 266 (1997), as amended by 61 Fed. Reg. 16,309 April 12, 1996 (RSG 391-3-11-.10))
40 C.F.R. § 270.1(c) (1997) (RSG 391-3-11-.11)
40 C.F.R. § 124.1(a) (1997) (RSG 391-3-11-.11)
40 C.F.R. § 124.31 through 33 (1997) (RSG 391-3-11-.11)
40 C.F.R. § 124.3 (1997) and 40 C.F.R. § 270.10 (1997) (RSG 391-3-11-.11)
40 C.F.R. § 270.11 (1997) (RSG 391-3-11-.11)
40 C.F.R. § 270.12(b) (1997) (RSG 391-3-11-.11)
40 C.F.R. §§ 270.70 - 270.73 (1997) (RSG 391-3-11-.11)
40 C.F.R. § 270.13 (1997) (RSG 391-3-11-.11)
40 C.F.R. §§ 270.14 through 270.27 (1997, as amended through December 1997) (RSG 391-3-11-.11)
40 C.F.R. Part 268 (1997) (RSG 391-3-11-.16)
40 C.F.R. Part 279 (1997, as amended through July 1998) (RSG 391-3-11-.17)
40 C.F.R. Part 273 (1997, as amended through July 1998) (RSG 391-3-11-.18).
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#### **Definitions**

- Closure or Closed the assessment, remedial action, or abatement needed to identify, remove, and properly dispose or recycle all discarded lamps, mercury-containing residuals, or contaminated media from destination facilities after the date of cessation of operations (RSG 391-3-11-.19(3)).
- Destination Facility a facility that treats, disposes of, or recycles a particular category of waste mercury-containing lamps, except those management activities described in 391-3-11-.19(4)(d) and 391-3-11-.19(5)(d). A facility at which a particular category of waste mercury-containing lamps are only accumulated, is not a destination facility for purposes of managing waste mercury-containing lamps (RSG 391-3-11-.19(3)).
- *Generator* any person, by site, whose act or process produces hazardous waste identified or listed in 40 C.F.R. part 261 or whose act first causes a hazardous waste to become subject to regulation (RSG 391-3-11-.19(3)).

- Large Quantity Handler of Waste Mercury-containing Lamps a waste mercury-containing lamps handler (as defined in this section) who accumulates 5,000 kilograms or more total of waste mercury-containing lamps at any time. This designation as a large quantity handler of waste mercury-containing lamps is retained through the end of the calendar year in which 5,000 kilograms or more total of waste mercury-containing lamps is accumulated (RSG 391-3-11-.19(3)).
- Waste Mercury-containing Lamp any type of high or low pressure lighting device that is unprocessed, contains mercury, and generates light through the discharge of electricity either directly or indirectly through a fluorescing coating. The term waste mercury-containing lamp includes fluorescent lamps, mercury lamps, metal halide lamps, and high pressure sodium lamps (RSG 391-3-11-.19(3)).
- On-site the same or geographically contiguous property which may be divided by public or private right-of-way, provided that the entrance and exit between the properties is at a crossroads intersection, and access is by crossing as opposed to going along the right-of-way. Noncontiguous properties owned by the same person but connected by a right-of-way, which he controls and to which the public does not have access, are also considered on-site property (RSG 391-3-11-.19(3)).
- Small Quantity Handler of Waste Mercury-containing Lamps a waste mercury-containing lamp handler (as defined in this section) who does not accumulate more than 5,000 kilograms total of waste mercury-containing lamps at any time (RSG 391-3-11-.19(3)).
- Waste mercury-containing Lamps Handler: (RSG 391-3-11-.19(3))
  - 1. Means:
    - a. a generator (as defined in this section) of waste mercury-containing lamps; or
    - b. the owner or operator of a facility, including all contiguous property, that receives waste mercury-containing lamps from other waste mercury-containing lamp handlers, accumulates waste mercury-containing lamps, and sends waste mercury-containing lamps to another waste mercury-containing lamp handler, or to a destination facility.
  - 2. Does not mean:
    - a. a person who treats, disposes of, or recycles waste mercury-containing lamps; or
    - b. a person engaged in the offsite transportation of waste mercury-containing lamps by air, rail, highway, or water, including a waste mercury-containing lamp transfer facility.
- Waste Mercury-containing Lamp Transfer Facility any transportation-related facility including loading docks, parking areas, storage areas, and other similar areas where shipments of waste mercury-containing lamps are held during the normal course of transportation for 10 days or less (RSG 391-3-11-.19(3)).
- Waste Mercury-containing Lamp Transporter a person engaged in the off-site transportation of waste mercury-containing lamps by air, rail, highway, or water. (RSG 391-3-11-.19(3)).

### HAZARDOUS WASTE MANAGEMENT GUIDANCE FOR GEORGIA CHECKLIST USERS

### REFER TO CHECKLIST ITEMS:

(NOTE: See the Hazardous Materials Management Checklist and Other Environmental Management Issues Checklist for release reporting and clean-up requirements.)

Missing Checklist Items HW.2.1.GA.

State-Specific Hazardous Waste Requirements

General HW.5.1.GA. and HW.5.2.GA.

(NOTE: The checklist items on universal wastes have been moved to the appropriate sections from

HW.5.GA.; September 1998.)

Small Quantity Universal Waste Handlers

General

Waste Mercury-Containing Lamps HW.280.1.GA. through HW.280.6.GA.

Large Quantity Universal Waste Handlers

General

Waste Mercury-Containing Lamps HW.370.1.GA. through HW.370.7.GA.

Universal Waste Transporters

HW.450.1.GA. through HW.450.5.GA.
Universal Waste Destination Facilities

HW.470.1.GA. through HW.470.9.GA.

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|--|--|--|--|--|--|
| REGULATORY REQUIREMENTS:   | REVIEWER CHECKS: August 2000   |  |  |  |  |
| HW.2.<br>MISSING CHECKLIST<br>ITEMS  |  |  |  |  |  |
| HW.2.1.GA. Federal facilities are required to comply with all applicable state regulatory requirements not contained in this checklist (a finding under this checklist item will have the citation of the applied regulation as a basis of finding). | Determine whether any new regulations have been issued since the finalization of the manual.  Determine whether the Federal facility has activities or facilities that are regulated but not addressed in the checklists.  Verify that the Federal facility is in compliance with all applicable and newly issued regulations. |  |  |  |  |

| REGULATORY<br>REQUIREMENTS:  | REVIEWER CHECKS: August 2000  |
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| HW.5.<br>STATE-SPECIFIC<br>HAZARDOUS WASTE<br>REQUIREMENTS   |   |
| General  |   |
| <b>HW.5.1.GA.</b> The Division must be notified of the activities of hazardous waste generation, transportation, and the operation of hazardous waste storage, treatment, or disposal facility (RSG 391-3-1104). | Verify that every hazardous waste generator, transporter, and operator of a hazardous waste storage, treatment, or disposal facility notifies the Division of such activities.  Verify that any person that begins to generate hazardous waste notifies the Division within 30 days after commencing such generation. |
| <b>HW.5.2.GA.</b> A hazardous waste facility permit is required for the construction, installation, operation, and alteration of hazardous waste facilities (RSG 391-3-1111(1)).                                 | Verify that a hazardous waste facility is not constructed, installed, operated, or substantially altered without first obtaining and possessing a hazardous waste facility permit.  Verify that all conditions in the hazardous waste facility permit are met.  |

| REGULATORY  | REVIEWER CHECKS:  |  |  |
|---|---|--|--|
| REQUIREMENTS:   | August 2000   |  |  |
| SMALL QUANTITY<br>UNIVERSAL WASTE<br>HANDLERS   | (NOTE: A waste mercury-containing lamp handler who does not accumulate more than 5000 kilograms total of waste mercury-containing lamps at any time is a small quantity handler (RSG 391-3-1119(3)).)   |  |  |
| HW.280.<br>GENERAL  |   |  |  |
| Waste Mercury-Containing<br>Lamps   |   |  |  |
| HW.280.1.GA. Small quantity handlers of waste mercury-containing lamps                      | Verify that a small quantity handler of waste mercury-containing lamps does not dispose of waste mercury-containing lamps.  |  |  |
| must meet specific prohibitions (RSG 391-3-1119(4)(b) and (c)) [Added                       | Verify that a small quantity handler of waste mercury-containing lamps does not dilute or treat mercury-containing lamps, except by responding to releases.   |  |  |
| September 1997; Revised September 1998].  | Verify that a small quantity handler of waste mercury-containing lamps does not accumulate over 12,000 waste mercury-containing lamps at any time.  |  |  |
|   | Verify that a small quantity handler of waste mercury-containing lamps does not accumulate greater than 5,000 kg total of universal waste (as defined at 40 CFR Part 273.6) and waste mercury-containing lamps, calculated collectively, at any time. |  |  |
|   | (NOTE: A small quantity handler of waste mercury-containing lamps is not required to notify the Director of waste mercury-containing lamps handling activities.)  |  |  |
| HW.280.2.GA. Small quantity handlers of waste mercury-containing lamps must meet management | Verify that mercury-containing lamps are managed in a way that prevents releases of any waste mercury-containing lamps or a component of a waste mercury-containing lamp to the environment.  |  |  |
| requirements (RSG 391-3-1119(4)(d)) [Added September 1997].                                 | Verify that mercury-containing lamps that show evidence of leakage, spillage, or damage that could cause mercury to escape are contained in a container that meets the following requirements:  |  |  |
|   | <ul> <li>closed, structurally sound, compatible with the contents of the waste mercury-containing lamps</li> <li>lack evidence of leakage, spillage, or damage that could cause leakage.</li> </ul>   |  |  |

| COMPLIANCE CATEGORY: HAZARDOUS WASTE MANAGEMENT Georgia Supplement  |  |  |  |
|---|--|--|--|
| REGULATORY<br>REQUIREMENTS:   | REVIEWER CHECKS: August 2000   |  |  |
| REQUIREMENTS.   | Verify that unbroken waste mercury-containing lamps are transported in containers or in containers secured on pallets to prevent leakage, spillage, or damage.   |  |  |
|   | Verify that the waste mercury-containing lamps are not secured with any filler structure, or adhesive material inside the container unless required by the destination facility.   |  |  |
|   | Verify that broken or unbroken waste mercury-containing lamps which are packaged appropriately are placed in a facility or a vehicle that is closed, structurally sound, compatible with the waste mercury-containing lamp, and that lacks evidence of leakage, spillage, or damage that could cause leakage.  |  |  |
| HW.280.3.GA. Small quantity handlers of waste mercury-containing lamps must meet labeling and marking requirements (RSG 391-3-1119(4)(e)) [Added September 1997]. | Verify that the waste mercury-containing lamps are clearly labeled or marked to identify the type of waste mercury-containing lamps with any one of the following phrases: "Waste Mercury-Containing Lamps" or "Used Mercury-Containing Lamps."  |  |  |
| HW.280.4.GA. Small quantity handlers of waste mercury-containing lamps must meet accumulation requirements (RSG 391-3-1119(4)(f)) [Added September 1997].         | Verify that a small quantity handler of waste mercury-containing lamps does not accumulate waste mercury-containing lamps for longer than 1 year from the date the waste mercury-containing lamps are generated, or received from another handler, unless the activity is solely for the purpose of accumulation of quantities of waste mercury-containing lamps as necessary to facilitate proper recovery, treatment, or disposal. |  |  |
| 1997].  | (NOTE: The handler bears the burden of proving that such activity is solely for the purpose of accumulation of such quantities of waste mercury-containing lamps as necessary to facilitate proper recovery, treatment, or disposal.)  |  |  |
|   | Verify that the length of time that the waste mercury-containing lamps have been accumulated can be demonstrated from the date they become a waste or are received by one of the following methods:  |  |  |
|   | - placing the waste mercury-containing lamps in a container and marking or labeling the container with the earliest date that any waste mercury-   |  |  |

the area became a waste or was received

became a waste or were received

containing lamps in the container became a waste or were received

- maintaining an inventory system on-site that identifies the earliest date that any waste mercury-containing lamps in a group of waste mercury-containing lamp items or a group of waste containers of waste mercury-containing lamps

- placing the waste mercury-containing lamps in a specific accumulation area and identifying the earliest date that any waste mercury-containing lamps in

| COMPLIANCE CATEGORY: HAZARDOUS WASTE MANAGEMENT Georgia Supplement   |  |  |
|--|--|--|
| REGULATORY<br>REQUIREMENTS:  | REVIEWER CHECKS: August 2000   |  |
| REQUIREMENTS:  | - any other method which clearly demonstrates the length of time that the waste mercury-containing lamps have been accumulated from the date they became a waste or were received.   |  |
| HW.280.5.GA. Small quantity handlers of waste mercury-containing lamps must meet release response requirements (RSG 391-3-1119(4)(g) and (h)) [Added September 1997].                    | Verify that all employees who handle or have responsibility for managing waste mercury-containing lamps are informed of proper handling and emergency procedures appropriate to containing a spill or release of waste mercury-containing lamps handled at the facility.   |  |
|  | Verify that, when a release occurs, all releases of waste mercury-containing lamps and other residues are immediately contained.   |  |
|  | Verify that a determination is made whether any material resulting from the release is hazardous waste.  |  |
|  | Verify that, if the release is a hazardous waste, the hazardous waste is managed in compliance with all applicable requirements of 40 CFR Parts 260 through 272.   |  |
|  | (NOTE: The handler is considered the generator of the material resulting from the release, and must manage it in compliance with 40 CFR Part 262.)   |  |
| HW.280.6.GA. Small quantity handlers of waste mercury-containing lamps must meet specific requirements for off-site shipments (RSG 391-3-1119(4)(i) through (k)) [Added September 1997]. | Verify that waste mercury-containing lamps are not sent or taken to a place other than another waste mercury-containing lamps handler, or a destination facility.  |  |
|  | (NOTE: If a small quantity handler of waste mercury-containing lamps self-transports waste mercury-containing lamps off-site, the handler becomes a waste mercury-containing lamps transporter for those self-transportation activities and must comply with the transporter requirements of 391-3-1119(6) while transporting the waste mercury-containing lamps.) |  |
|  | Verify that, if waste mercury-containing lamps being offered for off-site transportation meets the definition of hazardous materials under 49 CFR Parts 171 through 180, the shipment is packaged, labeled, marked and placard and the proper shipping papers are prepared in accordance with the applicable DOT regulations under 49 CFR Parts 172 through 180.   |  |
|  | Verify that prior to sending a shipment of waste mercury-containing lamps to another waste mercury-containing lamps handler, the originating handler ensures that the receiving handler agrees to receive the shipment.  |  |
|  | (NOTE: If a small quantity handler of waste mercury-containing lamps sends a shipment of waste mercury-containing lamps to another handler or to a destination facility and the shipment is rejected by the receiving handler or destination facility, the originating handler must either:  |  |

| Georgia Supplement          |   |
|-----------------------------|---|
| REGULATORY<br>REQUIREMENTS: | REVIEWER CHECKS: August 2000  |
| - J                         | <ul> <li>receive the waste back when notified that the shipment has been rejected, or</li> <li>agree with the receiving handler on a destination facility to which the shipment will be sent.)</li> </ul>   |
|                             | Verify that, if a handler rejects a shipment or a portion of a shipment, he contacts the originating handler to notify him of the rejection and to discuss reshipment of the load.  |
|                             | Verify that, if a handler rejects a shipment or a portion of a shipment, the handler does one of the following:   |
|                             | <ul> <li>sends the shipment back to the originating handler, or</li> <li>if agreed to by both the originating and receiving handler, sends the shipment to destination facility.</li> </ul>   |
|                             | Verify that, if a shipment containing hazardous waste that is not a waste mercury-containing lamp is received, the handler immediately notifies the Director of the illegal shipment, and provide the name, address, and phone number of the originating shipper.               |
|                             | (NOTE: The Director shall provide instructions for managing the hazardous waste.)   |
|                             | Verify that, if a small quantity handler of waste mercury-containing lamps receives a shipment of non-hazardous, non-mercury-containing lamps, the handler manages the waste in any way that is in compliance with applicable Federal, state, or local solid waste regulations. |
|                             | (NOTE: A small quantity handler of waste mercury-containing lamps is not required to keep records of shipments of waste mercury-containing lamps.)  |
|                             | (NOTE: The requirements of 391-3-1119 do not apply to exports of waste mercury-containing lamps.)   |
|                             |   |

| REGULATORY  | REVIEWER CHECKS:  |
|---|---|
| <b>REQUIREMENTS:</b>  | August 2000   |
| LARGE QUANTITY<br>UNIVERSAL WASTE<br>HANDLERS   |   |
| HW.370.<br>GENERAL  |   |
| Waste Mercury-Containing<br>Lamps   |   |
| HW.370.1.GA. Large quantity handlers of waste mercury-containing lamps must meet specific prohibitions and notification requirements (RSG 391-3-11-19(5)(b) and (c)) [Added September 1997; Revised July 1999]. | Verify that a large quantity handler of waste mercury-containing lamps does not dispose of waste mercury-containing lamps.  Verify that a large quantity handler of waste mercury-containing lamps does not dilute or treat mercury-containing lamps, except by responding to releases.  Verify that a large quantity handler of waste mercury-containing lamps does not accumulate over 12,000 waste mercury-containing lamps at any time from other handlers without having:      |
|   | <ul> <li>a closure plan</li> <li>a contract (including pricing) with an approved destination facility; and</li> <li>insurance reflecting DOT regulations to transport hazardous materials.</li> <li>Verify that a large quantity handler of waste mercury-containing lamps has sent written notification of waste mercury-containing lamps management to the Director, and received an EPA Identification Number, before meeting or exceeding the 5000 kg storage limit.</li> </ul> |
| HW.370.2.GA. Large quantity handlers of waste mercury-containing lamps must meet specific management requirements (RSG 391-3-1119(5)(b) and (c)) [Added September 1997].  | Verify that mercury-containing lamps are managed in a way that prevents releases of any waste mercury-containing lamps or a component of a waste mercury-containing lamp to the environment.  Verify that mercury-containing lamps that show evidence of leakage, spillage, or damage that could cause mercury to escape are contained in a container that meets the following requirements:  |
|   | <ul> <li>closed, structurally sound, compatible with the contents of the waste mercury-containing lamps</li> <li>lack evidence of leakage, spillage, or damage that could cause leakage.</li> </ul>   |

| Georgia Supplement  |  |  |
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| REGULATORY<br>REQUIREMENTS:   | REVIEWER CHECKS: August 2000   |  |
|   | Verify that unbroken waste mercury-containing lamps are transported in containers or in containers secured on pallets to prevent leakage, spillage, or damage.   |  |
|   | Verify that the waste mercury-containing lamps are not secured with any filler structure or adhesive material inside the container unless required by the destination facility.  |  |
|   | Verify that broken or unbroken waste mercury-containing lamps which are packaged appropriately are placed in a facility or a vehicle that is closed, structurally sound, compatible with the waste mercury-containing lamp, and that lacks evidence of leakage, spillage, or damage that could cause leakage.  |  |
| HW.370.3.GA. Large quantity handlers of waste mercury-containing lamps must meet marking and labeling requirements (RSG 391-3-1119(5)(e)) [Added September 1997]. | Verify that the waste mercury-containing lamps are clearly labeled or marked to identify the type of waste mercury-containing lamps with any one of the following phrases: "Waste Mercury-Containing Lamps" or "Used Mercury-Containing Lamps."  |  |
| HW.370.4.GA. Large quantity handlers of waste mercury-containing lamps must meet accumulation requirements (RSG 391-3-1119(5)(f)) [Added September 1997].         | Verify that a large quantity handler of waste mercury-containing lamps does not accumulate waste mercury-containing lamps for longer than 1 year from the date the waste mercury-containing lamps are generated, or received from another handler, unless the activity is solely for the purpose of accumulation of quantities of waste mercury-containing lamps as necessary to facilitate proper recovery, treatment, or disposal.   |  |
| 1997].  | (NOTE: The handler bears the burden of proving that such activity is solely for the purpose of accumulation of such quantities of waste mercury-containing lamps as necessary to facilitate proper recovery, treatment, or disposal.)  |  |
|   | Verify that the length of time that the waste mercury-containing lamps have been accumulated can be demonstrated from the date they become a waste or are received by one of the following methods:  |  |
|   | <ul> <li>placing the waste mercury-containing lamps in a container and marking or labeling the container with the earliest date that any waste mercury-containing lamps in the container became a waste or were received</li> <li>maintaining an inventory system on-site that identifies the earliest date that any waste mercury-containing lamps in a group of waste mercury-containing lamp items or a group of waste containers of waste mercury-containing lamps became a waste or were received</li> <li>placing the waste mercury-containing lamps in a specific accumulation area and identifying the earliest date that any waste mercury-containing lamps in the area became a waste or was received</li> </ul> |  |

### COMPLIANCE CATEGORY: HAZARDOUS WASTE MANAGEMENT **Georgia Supplement** REGULATORY **REVIEWER CHECKS: REQUIREMENTS:** August 2000 - any other method which clearly demonstrates the length of time that the waste mercury-containing lamps have been accumulated from the date they became a waste or were received. HW.370.5.GA. Verify that all employees who handle or have responsibility for managing waste Large mercury-containing lamps are informed of proper handling and emergency quantity handlers of waste mercury-containing lamps procedures appropriate to containing a spill or release, relative to their responsibilities during normal facility operations and emergencies. must meet release response requirements (RSG 391-3-11-Verify that, when a release occurs, all releases of waste mercury-containing lamps .19(5)(g) and (h)) [Added September 1997]. and other residues are immediately contained. Verify that a determination is made whether any material resulting from the release is hazardous waste. Verify that, if the release is a hazardous waste, the hazardous waste is managed in compliance with all applicable requirements of 40 CFR Parts 260 through 272. (NOTE: The handler is considered the generator of the material resulting from the release, and must manage it in compliance with 40 CFR Part 262.) HW.370.6.GA. Verify that waste mercury-containing lamps is not sent or taken to a place other Large quantity handlers of waste than another waste mercury-containing lamps handler, or a destination facility. mercury-containing lamps must meet specific require-(NOTE: If a large quantity handler of waste mercury-containing lamps selftransports waste mercury-containing lamps off-site, the handler becomes a waste ments for off-site shipments mercury-containing lamps transporter for those self-transportation activities and (RSG 391-3-11-.19(5)(i) and must comply with the transporter requirements of 391-3-11-.19(6) while (k)) [Added September 1997]. transporting the waste mercury-containing lamps.) Verify that, if waste mercury-containing lamps being offered for off-site transportation meets the definition of hazardous materials under 49 CFR Parts 171 through 180, the shipment is packaged, labeled, marked and placard and the proper shipping papers are prepared in accordance with the applicable DOT regulations under 49 CFR Parts 172 through 180. Verify that prior to sending a shipment of waste mercury-containing lamps to another waste mercury-containing lamps handler, the originating handler ensures that the receiving handler agrees to receive the shipment. (NOTE: If a large quantity handler of waste mercury-containing lamps sends a shipment of waste mercury-containing lamps to another handler or to a destination facility and the shipment is rejected by the receiving handler or destination facility.

- receive the waste back when notified that the shipment has been rejected, or

the originating handler must either:

| HAZARDOUS WASTE MANAGEMENT Georgia Supplement  |  |  |
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| REGULATORY<br>REQUIREMENTS:  | REVIEWER CHECKS: August 2000   |  |
| nagenamina (18)  | - agree with the receiving handler on a destination facility to which the shipment will be sent.)  |  |
|  | Verify that, if a handler rejects a shipment or a portion of a shipment, he contacts the originating handler to notify him of the rejection and to discuss reshipment of the load.   |  |
|  | Verify that, if a handler rejects a shipment or a portion of a shipment, the handler does one of the following:  |  |
|  | <ul> <li>sends the shipment back to the originating handler, or</li> <li>if agreed to by both the originating and receiving handler, sends the shipment to destination facility.</li> </ul>  |  |
|  | Verify that, if a shipment containing hazardous waste that is not a waste mercury-containing lamp is received, the handler immediately notifies the Director of the illegal shipment, and provide the name, address, and phone number of the originating shipper.  |  |
|  | (NOTE: The Director shall provide instructions for managing the hazardous waste.)  |  |
|  | Verify that, if a large quantity handler of waste mercury-containing lamps receives a shipment of non-hazardous, non-mercury-containing lamps, the handler manages the waste in any way that is in compliance with applicable Federal, state, or local solid waste regulations.  |  |
|  | (NOTE: The requirements of 391-3-1119 do not apply to exports of waste mercury-containing lamps.)  |  |
| HW.370.7.GA. Large quantity handlers of waste mercury-containing lamps must meet specific requirements for shipments (RSG 391-3-1119(5)(j) [Added September 1997]. | Verify that a large quantity handler of waste mercury-containing lamps keeps a record of each shipment of waste mercury-containing lamps received at the facility.   |  |
|  | Verify that the record for each shipment of waste mercury-containing lamps received includes the following information:  |  |
|  | <ul> <li>the name and address of the originating waste mercury-containing lamps handler from whom the waste mercury-containing lamps were sent</li> <li>the quantity of each type of waste mercury-containing lamp received</li> <li>the date of receipt of the shipment of waste mercury-containing lamps.</li> </ul> |  |
|  | Verify that a large quantity handler of waste mercury-containing keeps a record of each shipment of waste mercury-containing lamps sent from the handler to other facilities   |  |
|  | Verify that the record for each shipment of waste mercury-containing lamps sent  |  |

| Georgia Supplement          |  |
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| REGULATORY<br>REQUIREMENTS: | REVIEWER CHECKS: August 2000   |
| REQUIREMENTS:               | August 2000  includes the following information:  - the name and address of the waste mercury-containing lamps handler, destination facility, or foreign destination to whom the waste mercury-containing lamps was sent - the quantity of each type of waste mercury-containing lamp sent - the date the shipment of waste mercury-containing lamps left the facility.  (NOTE: Shipping records may take the form of a log, invoice, manifest, bill of lading, or other shipping document.)  Verify that records of shipments received and shipments sent are retained for at least 3 yr. |
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| Georgia Supplement  |  |
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| REGULATORY<br>REQUIREMENTS:   | REVIEWER CHECKS: August 2000   |
| HW.450.<br>UNIVERSAL WASTE<br>TRANSPORTERS  | 1 August 2000  |
| HW.450.1.GA. Transporters of waste mercury-containing lamps must meet specific management requirements (RSG 391-3-1119(6)(b) and (c)) [Added September 1997]. | Verify that a transporter does not dispose of waste mercury-containing lamps.  Verify that a transporter does not dilute or treat waste mercury-containing lamps, except by responding to releases.  Verify that a transporter does not intentionally break waste mercury-containing lamps he is transporting.  Verify that the transporter notifies the Director, in writing, of his intent to transport no later than 1 March of each calendar year.  Verify that the transporter complies with all applicable U.S. DOT regulations in 49 CFR Part 171 through 180 for transport of any waste mercury-containing lamps that meets the definition of hazardous material in 49 CFR 171.8.  (NOTE: For purposes of the DOT regulations, a material is considered a hazardous waste if it is subject to the Hazardous Waste Manifest Requirements of the U.S. Environmental Protection Agency specified in 40 CFR Part 262. Because waste mercury-containing lamps do not require a hazardous waste manifest, it is not considered hazardous waste under the Department of Transportation regulations. Some waste mercury-containing lamp materials are regulated by the Department of Transportation as hazardous materials because they meet the criteria for one or more hazard classes specified in 49 CFR 173.2. As waste mercury-containing lamps shipments do not require a manifest under 40 CFR Part 262, they may not be described by the DOT proper shipping name "hazardous waste, (1) or (s), n.o.s.", nor may the hazardous material's proper shipping name be modified by adding the word "waste".) |
| HW.450.2.GA. Transporters of waste mercury-containing lamps must meet specific storage time limits (RSG 391-3-1119(6)(d))[Added September 1997].              | Verify that the transporter only stores the waste mercury-containing lamps at a waste mercury-containing lamps transfer facility for 10 days or less.  (NOTE: If a waste mercury-containing lamps transporter stores waste mercury-containing lamps for more than 10 days, the transporter becomes a waste mercury-containing lamps handler and must comply with the applicable requirements of 391-3-1119(4) or (5) while storing the waste mercury-containing lamps.)  |
| HW.450.3.GA. Transporters of waste mercury-containing   | Verify that the transporter immediately contains all releases of waste mercury-containing lamps and other residues from waste mercury-containing lamps.  |

| Georgia Supplement   |   |
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| REGULATORY   | REVIEWER CHECKS:  |
| REQUIREMENTS:  | August 2000   |
| lamps must meet release  | containing lamps and other residues from waste mercury-containing lamps.  |
| requirements (RSG 391-3-11-19(6)(e)) [Added September 1997].   | Verify that the transporter determines whether any material resulting from the release is hazardous waste.  |
|  | (NOTE: Any material determined to be a hazardous waste is subject to all applicable requirements of 40 CFR Parts 260 through 272. If the waste is determined to be a hazardous waste, the transporter is subject to 40 CFR Part 262.)   |
| HW.450.4.GA. Transporters of waste mercury-containing lamps must meet specific shipping requirements (RSG 391-3-1119(6)(f) through (h)(1)) [Added September 1997]. | Verify that the transporter does not transport the waste mercury-containing lamps to a place other than a waste mercury-containing lamps handler or a destination facility.   |
|  | Verify that, if the waste mercury-containing lamps being shipped off-site meets the DOT's definition of hazardous materials under 49 CFR 171.8, the shipment is properly described on a shipping paper in accordance with the applicable DOT regulations under 49 CFR Part 172. |
|  | (NOTE: Exporters of waste mercury-containing lamps are subject to the requirements of 40 CFR Part 262.)   |
|  | Verify that trucks are totally enclosed and in good condition for the transport of waste mercury-containing lamps.  |
|  | (NOTE: Another mode of transportation that complies with the DOT's regulations and provides the same level of containment as a totally enclosed truck may be used.)   |
|  | Verify that, if properly packaged waste mercury-containing lamps are stored in totally enclosed trucks, which are used in the actual transportation of such waste mercury-containing lamps from a generator location to a facility, the time does not exceed 10 days.           |
|  | Verify that all drivers are trained in the proper handling and emergency cleanup and containment procedures applicable to the transport of waste mercury-containing lamps.  |
|  | Verify that vehicles used to transport the waste mercury-containing lamps, when not in use, are parked at their business location for inspection upon request by the Director or his authorized representative.   |
| HW.450.5.GA. Shipments in excess of 1000 waste mercury-containing lamps  | Verify that, for individual shipments in excess of 1000 bulbs or more per generator, handler, or storage facility location, the transporter issues and keeps copies of the shipping papers or electronic documents that accompanies each  |

| Georgia Supplement          |  |
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| REGULATORY                  | REVIEWER CHECKS:   |
| <b>REQUIREMENTS:</b>        | August 2000  |
| must meet recordkeeping     | shipment.  |
| requirements (RSG 391-3-11- |  |
| .19(6)(h)(2) [Added         | Verify that copies of the shipping documents are kept for a period of 3 yrs from     |
| September 1997].            | the shipment dates at their business location, and are available for inspection upon |
|                             | request by the Director or his authorized representative.                            |
|                             |  |
|                             | Verify that copies of the shipping papers or the shipment tracking number are        |
|                             | provided to the generator, handler, or storage facility initiating the shipment.     |
|                             | Verify that the shipping paper or electronic document contains at a minimum the      |
|                             | following information:   |
|                             | Tonowing information.  |
|                             | - the generator, handler, or storage facility's name and address                     |
|                             | - a shipping description which indicates the type of waste mercury-containing        |
|                             | lamps and the amount being shipped   |
|                             | - the date of shipment and shipment tracking number in the case of an                |
|                             | electronic document  |
|                             | - the transporter's name   |
|                             | - the receiving facility's permit number   |
|                             | - a place for the receiving facility representative's signature and date of receipt  |
|                             | to be placed.  |
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| Georgia Supplement  |   |
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| REGULATORY  | REVIEWER CHECKS:  |
| REQUIREMENTS:   | August 2000   |
| HW.470.<br>UNIVERSAL WASTE<br>DESTINATION<br>FACILITIES   | (NOTE: The owner/operator of a destination facility is subject to all applicable requirements of 40 CFR Parts 262, 264, 265, 266, 268, 270, and 124 of these rules. The owner/operator of a destination facility that recycles waste mercury-containing lamps without storing the waste mercury-containing lamps before they are recycled must comply with 40 CFR 261.6(c)(2). (RSG 391-3-1119(7)(a)) |
| HW.470.1.GA. Waste mercury-containing lamp destination facilities must meet specific prohibitions (RSG 391-3-1119(7) (f) and  | Verify that destination facilities do not dilute waste mercury-containing lamps and dispose of waste mercury-containing lamps in a landfill or an incinerator.  Verify that destination facilities are not located in a 100-year flood plain.   |
| (j)) [Added September 1997].  | Verify that a mobile system is not used to treat waste mercury-containing lamps unless it receives written approval from the Director.  |
|   | Verify that a destination facility accumulates waste mercury-containing lamps for no longer than 180 days from the date the waste mercury-containing lamps are generated on-site, or received from another handler or storage facility.   |
| HW.470.2.GA. Waste mercury-containing lamp destination facilities must meet specific management requirements (RSG 391-3-1119(7)(d)(1) through (13)) [Added September 1997]. | Verify that waste mercury-containing lamps are processed on-site and converted into recovered materials such as: metal, glass, powder and liquid mercury through distillation or retorting.   |
|   | Verify that the destination facility reclaims a minimum of 95 percent, by weight, of the mercury from waste mercury-containing lamps introduced into its process within 90 days of processing such lamps.   |
|   | Verify that the reclamation process generates liquid mercury that is 99 percent or more in purity.  |
|   | Verify that the destination facility has the capability on-site to recover mercury from high intensity discharge lamps.   |
|   | Verify that the destination facility has procedures and equipment to manage a mercury spill.  |
|   | Verify that the destination facility routinely (i.e., a minimum of twice a week) monitors internal air quality for mercury vapor.   |
|   | Verify that the lamp processing/reclamation equipment is operated in a designated room with sealed concrete floors and under negative pressure.   |
|   | Verify that the processing area uses air pollution control technology to control  |

| Georgia Supplement   |   |
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| REGULATORY REVIEWER CHECKS:  |   |
| REQUIREMENTS:  | August 2000   |
|  | mercury vapor and dust.  Verify that the destination facility has a written health and safety plan in accordance with OSHA.   |
|  | Verify that medical surveillance is conducted for operations employees.   |
|  | Verify that a respiratory protection plan is established if respirators are used by operations employees.   |
|  | Verify that destination facility has a written contingency plan.  |
|  | Verify that it can be demonstrated that a minimum of 95 percent, by weight, of the mercury from waste mercury-containing lamps and devices that are recycled during a calendar year is recovered.   |
|  | Verify that storage of unprocessed materials does not exceed the storage limits specified in the operating permit.  |
| HW.470.3.GA. Waste mercury-containing lamp destination facilities must meet specific testing requirements (RSG 391-3-1119(7)(d)(14)) [Added September 1997]. | Verify that the destination facility tests and determines whether processed materials, except for liquid mercury that is a minimum of 99 percent or more in purity, are a solid waste and/or hazardous waste.   |
|  | Verify that processed materials (e.g., glass, metal, powder) that are in excess of 0.2 mg/L TCLP level for mercury are either retested, reprocessed, or delivered to another destination facility for further treatment or to a treatment, storage, or disposal facility. |
|  | Verify the daily physical samples are taken of the waste mercury-containing materials at the point at which they exit the processing equipment.   |
|  | Verify that, at the beginning of each bi-weekly interval, the prior bi-weekly's daily samples are consolidated into a bi-weekly sample which is submitted for chemical analysis of total mercury content using an approved EPA methodology.                               |
|  | (NOTE: The result of this analysis is considered the "bi-weekly composite sample of process operations".)   |
|  | Verify that a TCLP for mercury is run on each of the bi-weekly composites if the total mercury value warrants it.   |
| HW.470.4.GA. Waste mercury-containing lamp destination facilities must   | Verify that there are established markets for the utilization of reclaimed materials and these markets are identified to the Director within 12-mo of operation.  |
| meet specific quality and  | Verify that only waste mercury-containing lamps are introduced for which the  |

| Georgia Supplement   |   |
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| REGULATORY   | REVIEWER CHECKS:  |
| REQUIREMENTS:  | August 2000   |
| inspection requirements (RSG 391-3-1119(7)(d)(16(i) and  | equipment was specifically designed to process.   |
| (ii)) [Added September 1997].  | Verify that processing equipment is operated and maintained consistent with the equipment manufacturer's specifications.  |
|  | Verify that a written inspection schedule is submitted to the Director for inspecting processing equipment, safety and monitoring equipment, emission control equipment, and emergency response equipment.                                    |
|  | Verify that facilities are inspected for malfunctions and deterioration, and discharges which may cause, or lead to a release of hazardous materials into the environment or which might lead to a threat to human health or the environment. |
|  | Verify that a written quality control plan is submitted to the Director and implemented.  |
|  | Verify that records of inspections are kept for a minimum of 3 yr from the date of the inspection and contain the following:  |
|  | <ul> <li>date and time of inspections</li> <li>name of the inspector</li> <li>notation of observations made</li> <li>the date and nature of any repairs made or other remedial actions taken.</li> </ul>                                      |
|  | Verify that air pollution control equipment is installed, operated, monitored, and maintained as to reduce dust and mercury emission from the processing equipment, processing operations, and in the processing area.                        |
| HW.470.5.GA. Waste mercury-containing lamp destination facilities must meet specific operational | Verify that unprocessed materials are stored indoors in closed containers to prevent breakage of waste mercury-containing lamps prior to further processing or use other means to prevent mercury emissions.                                  |
| requirements (RSG 391-3-11-  | Verify that processed materials are stored indoors in covered containers.   |
| .19(7)(d)(16)(iii) and (vi) and (7)(e)) [Added September 1997].                                  | Verify that storage areas for waste mercury-containing lamps are clearly and visibly labeled with the words WASTE MERCURY-CONTAINING LAMPS.   |
| HW.470.6.GA. Waste mercury-containing lamp destination facilities must                           | Verify that owners/operators cease operations and notify the Director when not in compliance with provisions of this Section.   |
| meet specific documentation requirements (RSG 391-3-11-  | Verify that owners/operators notify the Director of modifications or alterations to the operations or equipment which do not conform to the approved permit.  |
| .19(7)(d)(16)(v) through (x) and (7)(e)) [Added September 1997].                                 | Verify that owners/operators keep and maintain copies of shipping documents, including shipping papers and logs detailing shipments received from exempt  |

# **COMPLIANCE CATEGORY:**

| HAZARDOUS WASTE MANAGEMENT Georgia Supplement   |  |
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| REGULATORY<br>REQUIREMENTS:   | REVIEWER CHECKS: August 2000   |
| 1997].  | transporters, hazardous waste manifests, and any documents disclosing shipping discrepancies.  |
|   | Verify that shipping records are kept at the facility location for a period of 3 yr from the dates of receipt or shipment and are made available to the Director upon request, and include the following information:  |
|   | <ul> <li>dates, amounts, and generators of materials received for processing</li> <li>dates, amounts, and locations of materials shipped off-site for further processing or disposal</li> <li>any other information that indicates the ultimate disposition of the processed materials.</li> </ul>   |
|   | Verify that annual reports of the following information are submitted to the Director by 1 March of each year for activities performed in the previous calendar year:  |
|   | <ul> <li>total types and amounts of waste mercury-containing lamps received by the facility for processing</li> <li>amounts, by destination, of materials shipped off-site for further processing, recycling, treatment, storage, or disposal</li> <li>total amounts and descriptions of any unprocessed and processed materials stored at the facility at the beginning and the end of the reporting period.</li> </ul> |
|   | Verify that, within two weeks of any emergency, the operator of the facility submits to the Director a written report on the emergency, that includes the following:   |
|   | <ul> <li>a description of the origin or cause of the emergency</li> <li>the actions taken to deal with the emergency</li> <li>the results of those actions taken, and an analysis of the success or failure of the actions.</li> </ul>   |
|   | Verify that destination facilities notify in writing the receiving sources of the processed materials (except for commodity grade mercury) of the potential or actual content of any mercury present in these materials.   |
|   | (NOTE: Facilities must ensure that recyclable materials that are generated from its operation are of commercial grade and are suitable for their intended end use.)  |
| HW.470.7.GA. Waste mercury-containing lamp destination facilities must meet specific training | training that teaches them to perform their duties safely and to ensure compliance with RCRA and OSHA requirements.  |
| requirements (RSG 391-3-11-   | Verify that training includes topics such as, but not limited to, the following:   |
| 19(7)(g)) [Added September 1997].   | - OSHA training  |

| COMPLIANCE CATEGORY:       |
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| HAZARDOUS WASTE MANAGEMENT |
| Georgia Supplement         |

| Georgia Supplement   |   |
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| REGULATORY   | REVIEWER CHECKS:  |
| REQUIREMENTS:  | August 2000   |
| 1997].   | <ul> <li>employee right-to-know</li> <li>general safety</li> <li>forklift</li> <li>personal protective equipment, lockout/tagout-</li> <li>emergency procedures</li> <li>DOT training and hazardous waste management.</li> </ul>  |
|  | Verify that written records are of the successful training and the type and nature of the training provided for each employee, for a period of 3 yr from the date an employee last worked at the facility.  |
|  | Verify that the written records certify that employees handling waste mercury-containing lamps are trained in the proper handling and emergency cleanup and containment procedures applicable to the storage of waste mercury-containing lamps.   |
|  | Verify that the emergency procedures are kept at the business location for inspection upon request by the Director or his authorized representative.  |
| HW.470.8.GA. Waste mercury-containing lamp destination facilities must meet specific requirements for shipments (RSG 391-3-1119(7)(b) and (i)) [Added September 1997]. | Verify that the destination facility does not send or take waste mercury-containing lamps to a place other than a waste mercury-containing lamps handler, or another destination facility.  |
|  | Verify that, if the owner/operator of the destination facility rejects a shipment or a portion of a shipment, he contacts the shipper to notify him of the rejection and to discuss reshipment of the load.   |
|  | Verify that, if a shipment has been rejected, the owner/operator of the destination facility either:  |
|  | <ul> <li>sends the shipment back to the original shipper</li> <li>if agreed to by both the shipper and the owner or operator of the destination facility, sends the shipment to another destination facility.</li> </ul>  |
|  | Verify that, if a shipment is received containing hazardous waste that is not waste mercury-containing lamps, the owner/operator of the destination facility immediately notifies the Director of the illegal shipment, and provide the name, address, and phone number of the shipper. |
|  | (NOTE: The Director will provide instructions for managing the hazardous waste.)  |
|  | (NOTE: If the owner/operator of a destination facility receives a shipment of non-hazardous, non-mercury-containing lamps, the owner/operator may manage the waste in any way that is in compliance with applicable Federal or state solid waste regulations.)                          |

| Georgia Supplement  |  |
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| REGULATORY<br>REQUIREMENTS:   | REVIEWER CHECKS: August 2000   |
| HW.470.9.GA. Waste mercury-containing lamp destination facilities must meet recordkeeping requirements for shipments (RSG 391-3-1119(7)(c) and (i)) [Added September 1997]. | Verify that a record is kept of each shipment of waste mercury-containing lamps received at the facility.  (NOTE: The record may take the form of a log, invoice, manifest, bill of lading, or other shipping document.)  Verify that the record for each shipment of waste mercury-containing lamps received includes the following information:  - the name and address of the waste mercury-containing lamps handler or destination facility  - the quantity of waste mercury-containing lamps received  - the date of receipt of the shipment of waste mercury-containing lamps.  Verify that the shipping documents are kept for at least 3 yr from the date of receipt of a shipment of waste mercury-containing lamps.  Verify that shipping papers/computer records are maintained for every generator and transporter hauling items to a destination facility.  Verify that shipping papers/computer records for every generator and transporter shall includes the following:  - delivery date  - customer's name, address, telephone number, and contact  - quantity of waste mercury-containing lamps received.  Verify that the destination facility tracks annually the total type and amount of waste mercury-containing lamps received and the quantity and type of recovered materials shipped off-site for processing, recycling, or disposal. |

### **SECTION 5**

### NATURAL RESOURCES MANAGEMENT

### Georgia Supplement, August 2000

This section covers the state requirements for Natural Resources Management and is intended to supplement the U.S. TEAM Guide. Refer to the U.S. TEAM Guide and the DOD Component Supplements for Federal, DOD, and service-specific requirements.

### **Definitions**

- *Department* the Georgia Department of Natural Resources (GDNR) (Rules of the State of Georgia (RSG) 391-4-10-.02).
- Division the Environmental Protection Division of the Department of Natural Resources (RSG 391-3-7-.01).
- *Erosion* the process by which land surface is worn away by the action of wind, water, ice, or gravity (RSG 391-3-7-.01).
- *Erosion and Sediment Control Plan* a plan for the control of soil erosion and sediment resulting from a land-disturbing activity (RSG 391-3-7-.01).
- Land-Disturbing Activity any activity that may result in soil erosion and the movement of sediments into state waters or onto lands within the state, including but not limited to clearing, dredging, grading, excavating, transporting, and filling of land, but not including agricultural practices as described in the Official Code of Georgia, Annotated (OCGA) 12-7-17(5) (RSG 391-3-7-.01).
- *Permit* the authorization necessary to conduct a land-disturbing activity under the provisions of these rules and regulations (RSG 391-3-7-.01).
- *Person* any individual, partnership, firm, association, joint venture, public or private corporation, trust, estate, commission, board, public or private institution, utility, cooperative, state agency, municipality, or other political subdivision of this state, any interstate body, or any other legal entity (RSG 391-3-7-.01).
- *Project* the entire area of the proposed development site, regardless of the size of the area of land to be disturbed (RSG 391-3-7-.01).
- *Protected Species* those species of plants and animal life which the Department shall have designated as such and has made subject to the protection of the Acts. Protected species shall be interpreted to include those classified as follows: (RSG 391-4-10-.02)
  - 1. endangered species: any resident species that is in danger of extinction throughout all or a significant portion of its range, or one designated as endangered under the provisions of the Federal Endangered Species Act of 1973
  - 2. threatened species: any resident species that is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range or one that is designated as threatened under the provisions of the Federal Endangered Species Act of 1973
  - 3. rare species: any resident species that, although not presently endangered or threatened, should be protected because of its scarcity
  - 4. unusual species: any resident species that exhibits special or unique features and because of these features deserves special consideration in its continued survival in the state.

- *Public Lands* all those lands within the state that are owned or subject to the dominion and the control of the United States, the State of Georgia, or local governments within the State of Georgia (RSG 391-4-10-.02).
- Resident Species any species, subspecies, or variety of plant or animal life that is genetically, morphologically, ecologically, or geographically distinct, and that interbreeds freely with its kind at maturity, and that exists in this state, including its waters, in the wild during any part of its life (RSG 391-4-10-.02).
- Roadway Drainage Structure bridges, culverts, piping, and ditches associated with roadway construction, that allow stream flows to move freely under a stream crossing or that convey stormwater runoff from a roadway to a stream (RSG 391-3-7-.01).
- *Sediment* solid material, both organic and inorganic, that is in suspension, is being transported, or has been moved from its site of origin by wind, water, ice, or gravity as a product of erosion (RSG 391-3-7-.01).
- Sedimentation the action or process of forming or depositing sediment (RSG 391-3-7-.01).
- Status Undermined Species a resident species that is not afforded protection under these rules and regulations, but should additional research show the need for protection, these or any other species may be moved to the protected category (RSG 391-4-10-.02).
- *Stream Bank* the confining cut of a stream channel usually identified as the point where the flow has wrested the vegetation (RSG 391-3-7-.01).
- *Trout Streams* all stream segments and all streams within watersheds designated by the Game and Fish Division of the Georgia Department of Natural Resources under the provisions of the Georgia Water Quality Control Act, OCGA 12-5-20 et. seq., and includes both primary and secondary designations (RSG 391-3-7-.01).

## NATURAL RESOURCES MANAGEMENT GUIDANCE FOR GEORGIA CHECKLIST USERS

### REFER TO CHECKLIST ITEMS:

(See WA.150 Watershed Protection for additional requirements for land and water management.)

Missing Checklist Items NR.2.1.GA.

Land Management NR.10.1.GA. and NR.10.2.GA.
Water Resource Management NR.15.1.GA. through NR.15.3.GA.
Wildlife NR.20.1.GA. through NR.20.3.GA.

| GUIDANCE FOR APPENDIX USERS |   |
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| REFER TO APPENDIX NUMBERS:  | REFER TO APPENDIX TITLES:   |
| 5-1                         | Endangered, Threatened, or Unusual Species Found in Georgia       |
| 5-2                         | Endangered, Threatened, or Unusual Plant Species Found in Georgia |

| Georgia Supplement   |  |
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| REGULATORY<br>REQUIREMENTS:  | REVIEWER CHECKS:<br>August 2000  |
| NR.2.<br>MISSING CHECKLIST<br>ITEMS  |  |
| NR.2.1.GA. Federal facilities are required to comply with all applicable state regulatory requirements not contained in this checklist (a finding under this checklist item will have the citation of the applied regulation as a basis of finding). | Determine whether any new regulations have been issued since the finalization of the manual.  Determine whether the Federal facility has activities or facilities that are regulated but not addressed in the checklists.  Verify that the Federal facility is in compliance with all applicable and newly issued regulations. |

### **COMPLIANCE CATEGORY:** NATURAL RESOURCES MANAGEMENT Georgia Supplement **REVIEWER CHECKS:** REGULATORY August 2000 **REQUIREMENTS:** NR.10. LAND MANAGEMENT NR.10.1.GA. Land disturb-Verify that no person performs any land disturbing activity without first obtaining ing activities must meet spea permit from the Division to perform the activity. cific requirements (RSG 391-Verify that the land disturbing activity is conducted in accordance with any permit 3-7-.03(1) and (2)(b). conditions and with the approved erosion and sedimentation control plant (submitted with the permit application and subject to approval by the Division). NR.10.2.GA. Permitted land Verify that an undisturbed natural vegetative buffer of 25 ft adjacent to any state disturbing activities must meet waters is maintained, except as otherwise required by the Metropolitan River specific standards (RSG 391-Protection Act or the Division. 3-7-.06 through 391-3-7-.08; and OCGA Section 12-7-Verify that land disturbing activities, with the exception of roadway drainage structures, are not conducted within 100 ft horizontally of the banks of trout 6(16) and (18)). streams without a granted variance. Verify that the turbidity of stormwater runoff discharges are controlled and do not exceed the following limits: - 50 NTU higher than the turbidity level of the receiving stream immediately upstream from the stormwater discharge at the time of discharge - where a roadway drainage structure must be constructed, 60 NTU higher than the turbidity level of the receiving stream immediately upstream from the construction site. Verify that downstream turbidity measurements are taken at points where the entering discharge is fully mixed with the receiving stream flow.

| Georgia Supplement   |   |
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| REGULATORY<br>REQUIREMENTS:  | REVIEWER CHECKS:<br>August 2000   |
| NR.15.<br>WATER RESOURCE<br>MANAGEMENT   |   |
| NR.15.1.GA. A valid permit is required for shoreline engineering activities or land alteration of the shoreline (RSG 391-2-204 and 391-2-205(7)).  | (NOTE: The following are exempted from the permit requirement: - structure, shoreline, engineering activity, or land alteration that existed as of 25 April 1979 - reconstruction of any structure or land alteration that is appraised to be 80 percent or less destroyed of a fair market value or which is destroyed by other than wave action.)   |
|  | Verify that a permit has been obtained to construct, erect, or engage in any shoreline engineering or land alteration that alters the natural topography or vegetation of any area.   |
|  | (NOTE: A permit is required for both project construction and project maintenance except maintenance that does not alter the natural topography or vegetation.)   |
|  | (NOTE: The modification or construction of additions or extensions to structures that existed as of 25 April 1979 must obtain a permit.)  |
|  | Verify that the Committee is notified in writing within 30 days of the transfer of a permit for shoreline engineering activities or land alteration of the shoreline.   |
| NR.15.2.GA. A valid permit is required for activities to remove, fill, dredge, drain, or otherwise alter any marshlands or construct or locate any structure on or over marshlands (RSG 391-3-6, Section 12-5-286(a), and 391-2-302(1)). | <ul> <li>(NOTE: The following are exempt from obtaining a permit for altering marshlands: <ul> <li>Department of Transportation public road system activities</li> <li>United States and Georgia agencies engaged in keeping state rivers and harbors open for navigation</li> <li>public utility company activities</li> <li>railroad company activities</li> <li>political subdivision's approved water and sewer activities</li> <li>building of private, noncommercial docks on pilings, with walkways above the marsh grass.)</li> </ul> </li> </ul> |
|  | Verify that a permit is obtained prior to any activities to remove, fill, dredge, drain, or otherwise alter any marshlands or construct or locate any structure on or over marshlands within the estuarine area.  |
|  | (NOTE: A permit is required for both project construction and project maintenance that does not alter marshlands. Dwellings on stilts are not exempt from permit conditions.)   |

| Georgia Supplement   |   |
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| REGULATORY<br>REQUIREMENTS:  | REVIEWER CHECKS:<br>August 2000   |
| NR.15.3.GA. The alteration or construction upon marshlands must meet specific standards (RSG, Sections 12-5-286(p), 12-5-292, and 12-5-293). | Verify that the Department is notified within 30 days of completion of permitted alteration and construction upon marshlands.  Verify that a copy of the permit is prominently posted within the area of the proposed activity.  Verify that the Department is notified in writing 30 days prior to the transfer of a permit to alter or construct upon marshlands. |

| REGULATORY<br>REQUIREMENTS:   | REVIEWER CHECKS:<br>August 2000   |
|---|---|
| NR.20.<br>WILDLIFE  |   |
| NR.20.1.GA. A Departmental permit is required for the collection, transportation, and/or possession of protected plant and animal species (RSG 391-4-1007). | Determine if any surveys have been conducted to locate state-protected species on the property or if a recent listing of state protected species is maintained.  Verify that a permit has been obtained for the collection, transportation, or possession of a protected plant or animal species (see Appendix 5-1 and 5-2 for state lists of protected plants and animals).  (NOTE: Such permits do not alleviate the responsibility to acquire specific Federal permits if required.) |
| NR.20.2.GA. Protected animal species and their habitat must be protected (RSG 391-4-1006(a)).   | Verify that there is no harassment, capture, sale, killing, or other action that directly causes the death of any protected animal.  Verify that there is no destruction of the habitat of a protected species on public land.  |
| NR.20.3.GA. Protected plant species and their habitat must be protected (RSG 391-4-1006(b)).  | Verify that no protected plant species is cut, dug, pulled up, or otherwise removed from public land, unless an appropriate permit has been obtained.   |

### Appendix 5-1

## **Endangered, Threatened, or Unusual Species Found in Georgia** (Source: RSG 391-4-10-.09)

| Scientific Name           | Common Name                | Status* |
|---------------------------|----------------------------|---------|
|                           | MAMMALS                    |         |
| Eubalaena glacialis       | Northern Right Whale       | E       |
| Felis concolor coryi      | Florida Panther            | E       |
| Felis concolor cougar     | Eastern Cougar             | E       |
| Megaptera novaeangliae    | Humpback Whale             | E       |
| Myotis sodalis            | Indiana Bat                | E       |
| Myotis grisescens         | Gray Bat                   | E       |
| Neofiber alleni           | Round-tailed Muskrat       | T       |
| Plecotus rafinesquii      | Rafinesque's Big-eared Bat | R       |
| Sylvilagus tobscurus      | Appalachian Cottontail     | R       |
| Trichechus manatus        | West Indian Manatee        | E       |
|                           | BIRDS                      |         |
| Aimophia aestivalis       | Bachman's Sparrow          | R       |
| Campephilus principalis   | Ivory-billed Woodpecker    | E       |
| Charadrius melodus        | Piping Plover              | Т       |
| Charadrius wilsonia       | Wilson's Plover            | R       |
| Corvus corax              | Common Raven               | R       |
| Dendroica kirtlandii      | Kirtland's Warbler         | Е       |
| Elanoides forficatus      | Swallow-tailed Kite        | R       |
| Falco peregrinus          | Peregrine Falcon           | E       |
| Haematopus palliatus      | American Oystercatcher     | R       |
| Haliaeetus leucocephalus  | Bald Eagle                 | E       |
| Mycteria americana        | Wood Stork                 | E       |
| Picoides borealis         | Red-cockaded Woodpecker    | E       |
| Sterna antillarum         | Least Tern                 | R       |
| Sterna nilotica           | Gull-billed Tern           | T       |
| Thryomanes bewickii       | Bewick's Wren              | R       |
| Vermivora bachmanii       | Bachman's Warbler          | E       |
|                           | REPTILES                   |         |
| Caretta caretta           | Loggerhead Sea Turtle      | T       |
| Chelonia mydas            | Green Sea Turtle           | T       |
| Clemmmys guttata          | Spotted Turtle             | U       |
| Clemmys muhlenbergii      | Bog Turtle                 | T       |
| Dermochelys coriacea      | Leatherback Sea Turtle     | E       |
| Drymarchon corais couperi | Eastern Indigo Snake       | T       |
| Eretmochelys imbricata    | Hawksbill Sea Turtle       | E       |
| Gopherus polyphemus       | Gopher Tortoise            | T       |
| Graptemys barbouri        | Barbour's Map Turtle       | T       |
| Grapteys geographica      | Map Turtle                 | R       |
| Graptemys pulchra         | Alabama Map Turtle         | R       |
| Lepidochelys kempii       | Kemp's Ridley Sea Turtle   | E       |
| Macroclemys temmincki     | Alligator Snapping Turtle  | T       |
|                           | AMPHIBIANS                 |         |
| Ambystoma cingulatum      | Flatwoods Salamander       | R       |
| Amphiuma pholeter         | One-toed Amphiuma          | R       |
|                           |                            |         |

| Scientific Name             | Common Name                | Status* |
|-----------------------------|----------------------------|---------|
| Aneides aeneus              | Green Salamander           | R       |
| Crytobranchus alleganiensis | Hellbender                 | R       |
| Haideotriton wallacei       | Georgia's Blind Salamander | T       |
| Notophthalmus perstriatus   | Striped Newt               | R       |
| Plethodon petraeus          | Pigeon Mountain Salamander | R       |
|                             | FISHES                     |         |
| Acipenser brevirostrum      | Shortnose Sturgeon         | Е       |
| Alosa alabamae              | Alabama Shad               | U       |
| Amble neislerii             | Fat Threeridge             | E       |
| Ameiurus serracanthus       | Spotted Bullhead           | R       |
| Cyprinella caerulea         | Blue Shiner                | E       |
| Cyprinella callitaenia      | Bluestripe Shiner          | T       |
| Cyprinella gibbsi           | Tallapoosa Shiner          | R       |
| Cyprinella xaenura          | Altamaha Shiner            | E       |
| Elliptoideus sloatianus     | Purple Bankclimber         | T       |
| Ennaecanthus chaetodon      | Blackbanded Sunfish        | R       |
| Erimystax insignis          | Blotched Chub              | T       |
| Etheostoma brevirostrum     | Holiday Darter             | T       |
| Etheostoma chlorobranchium  | Greenfin Darter            | T       |
| Etheostoma ditrema          | Coldwater Darter           | T       |
| Etheostoma duryi            | Black Darter               | T       |
| Etheostoma parvipinne       | Goldstripe Darter          | R       |
| Etheostoma tallapoosae      | Tallapoosa Darter          | R       |
| Etheostoma trisella         | Trispot Darter             | T       |
| Etheostoma vulneratum       | Wounded Darter             | E       |
| Etheostoma sp. cf coosae    | Cherokee Darter            | T       |
| Etheostoma sp. cf jordani   | Etowah Darter              | T       |
| Etheostoma sp. cf jordani   | Lipstick Darter            | E       |
| Fundulus auroguttatus       | Undescribed Topminnow      | R       |
| Fundulus bifax              | Stippled Studfish          | E       |
| Fundulus catenatus          | Northern Studfish          | T       |
| Hemitremia flammea          | Flame Chub                 | Е       |
| Hybopsis amblops            | Bigeye Chub                | R       |
| Ichthyomyzon bdellium       | Ohio Lamprey               | R       |
| Lucania goodei              | Bluefin Killifish          | U       |
| Lythrurus bellus            | Pretty Shiner              | T       |
| Micropterus notius          | Suwannee Bass              | R       |
| Moxostoma carinatum         | River Redhorse             | R       |
| Moxostoma robustum          | Robust Redhorse            | E       |
| Notropis ariommus           | Popeye Shiner              | T       |
| Notropis harperi            | Redeye Chub                | R       |
| Notropis hypsilepis         | Highscale Shiner           | T       |
| Notropis photogenis         | Silver Shiner              | E       |
| Notropis scepticus          | Sandbar Shiner             | R       |
| Noturus eleutherus          | Mountain Madtom            | T       |
| Noturus funebris            | Black Madtom               | R       |
| Noturus munitus             | Frecklebelly Madtom        | E       |
| Noturus nocturnus           | Freckled Madtom            | E       |
| Percina antesella           | Amber Darter               | E       |
| Percina aurantiaca          | Tangerine Darter           | E       |
| Percina aurolineata         | Goldline Darter            | T       |
| Percina jenkinsi            | Conasauga Logperch         | Е       |

| Common Name               | Status*  |
|---------------------------|--|
| Freckled Darter           | Е  |
| Dusky Darter              | R  |
| River Darter              | E  |
| Olive Darter              | T  |
| Snail Darter              | E  |
| Muscadine Darter          | R  |
| Fatlips Minnow            | E  |
| Stargazing Minnow         | T  |
| Oval Pigtoe               | E  |
| Broadstripe Shiner        | R  |
| Bluenose Shiner           | R  |
| Southern Cavefish         | R  |
| INVERTEBRATES             |  |
| Upland Combshell          | E  |
| Southern Acornshell       | E  |
| Atlantic Pigtoe Mussel    | E  |
| Fine-lined Pocketbook     | T  |
| Shiny-rayed Pocketbook    | E  |
| Alabama Moccasinshell     | T  |
| Coosa Moccasinshell       | E  |
| Gulf Moccasinshell        | E  |
| Ochlockonee Moccasinshell | E  |
| Southern Clubshell        | E  |
| Southern Pigtoe           | E  |
| Ovate Clubshell           | E  |
| Triangula Kidneyshell     | E  |
|                           | Freckled Darter Dusky Darter River Darter Olive Darter Snail Darter Muscadine Darter Fatlips Minnow Stargazing Minnow Oval Pigtoe Broadstripe Shiner Bluenose Shiner Southern Cavefish  INVERTEBRATES Upland Combshell Southern Acornshell Atlantic Pigtoe Mussel Fine-lined Pocketbook Shiny-rayed Pocketbook Alabama Moccasinshell Coosa Moccasinshell Gulf Moccasinshell Ochlockonee Moccasinshell Southern Clubshell Southern Pigtoe Ovate Clubshell |

\***Key:**E = Endangered
T = Threatened

R = Rare

U = Unusual

### Appendix 5-2

## **Endangered, Threatened, or Unusual Plant Species Found in Georgia** (Source: RSG 391-4-10-.09)

| Scientific name                       | Common name                    | Status* |
|---------------------------------------|--------------------------------|---------|
| Allium speculae                       | Flatrock Onion                 | T       |
| Amphianthus pusillus                  | Pool Sprite                    | T       |
| Arnoglossum diversifolium             | Variable-leaf Indian-plaintain | T       |
| Baduina atropurpurea                  | Purple Honeycomb Head          | R       |
| Baptisia arachnifera                  | Hairy rattleweed               | E       |
| Calamintha ashei                      | Ohoopee Wild Basil             | T       |
| Carex baltzelli                       | Baltzell Sedge                 | E       |
| Carex biltmoreana                     | Biltmore Sedge                 | T       |
| Carex dasycarpa                       | Velvet Sedge                   | R       |
| Carex manhartii                       | Manhart Sedge                  | T       |
| Carex misera                          | Sedge                          | T       |
| Carex pupurifera                      | Purple sedge                   | T       |
| Ceratiola ericoides                   | Rosemary                       | T       |
| Chamaecyparis thyoides                | Atlantic White-Cedar           | R       |
| Chrysopsis pinifolia                  | Sandhill Goldenaster           | T       |
| Clematis socialis                     |                                |         |
| Croomia pauciflora                    | Croomia                        | T       |
| Cuscuta harperi                       | Harper Dodder                  | T       |
| Cymophyllus fraseri                   | Fraser Sedge                   | T       |
| Cypripedium acaule                    | Pink Ladyslipper               | U       |
| Cypripedium calceolus                 | Yellow Ladyslipper             | U       |
| Draba aprica                          | Open-ground Whitlow-grass      | Е       |
| Echinacea laevigata                   | Smooth Purple Coneflower       | T       |
| Elliottia racemosa                    | Georgia plume                  | T       |
| Epidendrum conopseum                  | Greenfly Orchid                | U       |
| Evolvulus sericeus                    | Creeping Morning-glory         | E       |
| Fimbristylis perpusilla               | Harper fimbristylis            | E       |
| Fothergilla gardenii                  | Dwarf witch-alder              | T       |
| Gentianopsis crinita                  | Fringed Gentian                | T       |
| Gymnoderma lineare                    | Rock Gnome Lichen              | E       |
| Hartwrightia floridana                | Hartwrightia                   | T       |
| Helonias bullata                      | Swamp pink                     | T       |
| Hexastylis shuttlewothii var. harperi | Harper Heartleaf               | U       |
| Hydrastis canadensis                  | Goldenseal                     | E       |
| Hymenocallis coronaria                | Shoals spiderlily              | E       |
| Illicum floridanum                    | Florida Anise-tree             | E       |
| Isoetes melanospora                   | Black-spored quillwort         | E       |
| Isoetes tegetiformans                 | Mat-forming quillwort          | E       |
| Isotria medeoloides                   | Small whorled pogonia          | T       |
| Jeffersonia diphylla                  | Twinleaf                       | E       |
| Leavenworthia exigua                  | Gladecress                     | T       |
| Lindera melissifolia                  | Pondberry                      | E       |
| Lindernia saxicola                    | Rock False pimpernel           | E       |
| Litsea aestivalis                     | Pond Spice                     | T       |
| Lysimachia fraseri                    | Fraser Loosestrife             | R       |
| Lythrum curtissii                     | Curtiss Loosestrife            | T       |

| Scientific name                       | Common name                 | Status*                   |
|---------------------------------------|-----------------------------|---------------------------|
| Marshallia mohrii                     | Coosa Barbara Buttons       | T                         |
| Marshallia ramosa                     | Pineland Barbara Buttons    | R                         |
| Matelea alabamensis                   | Alabama Milkvine            | T                         |
| Matelea pubiflora                     | Trailing Milkvine           | R                         |
| Myriophyllum laxum                    | Lax Water-milfoil           | T                         |
| Nestronia umbellula                   | Indian Olive                | T                         |
| Neviusia alabemensis                  | Alabama Snow-wreath         | T                         |
| Oxypolis canbyi                       | Canby Dropwort              | E                         |
| Panicum hirstii                       | Panic Grass                 | Е                         |
| Penstemon dissectus                   | GritBeardtongue             | R                         |
| Physostegia leptophylla               | Narrowleaf Obedient Plant   | T                         |
| Pinguicula primuliflora               | Clearwater Butterwort       | T                         |
| Pityopsis pinifolia                   | Sandhill Golden-aster       | T                         |
| Plantanthera integrilabia             | Monkeyface Orchid           | T                         |
| Potentilla tridentata                 | Three-toothed Cinquefoil    | E                         |
| Ptilimnium nodosum                    | Mock Bishop-weed            | Е                         |
| Quercus oglethorpensis                | Oglethorpe Oak              | T                         |
| Rhododendron prunifolium              | Plumleaf Azalea             | T                         |
| Rhus michauxii                        | Dwarf Sumac                 | Е                         |
| Sabatia capitata                      | Cumberland Rose Gentian     | R                         |
| Sageretia minutiflora                 | Climbing Buckthorn          | T                         |
| Sagittaria secundifolia               | Kral Water-plantain         | T                         |
| Salix floridana                       | Florida Willow              | Е                         |
| Sanguisorba canadensis                | Canada Burnet               | T                         |
| Sarracenia flava                      | Yellow Flytrap              | Ü                         |
| Sarracenia leucophylla                | Whitetop Pitcherplant       | E                         |
| Sarracenia minor                      | Hooded Pitcherplant         | U                         |
| Sarracenia oreophila                  | Green Pitcherplant          | E                         |
| Sarracenia psittacina                 | Parrot Pitcherplant         | T                         |
| Sarracenia purpurea                   | Northern Pitcherplant       | E                         |
| Sarracenia rubra                      | Sweet Pitcherplant          | E                         |
| Schisandra glabra                     | Bay Star-vine               | T                         |
| Schwalbea americana                   | Chaffseed                   | Е                         |
| Scutellaria montana                   | Large-flower Skullcap       | E                         |
| Scutellaria ocmulgee                  | Ocmulgee Skullcap           | T                         |
| Sedum nevii                           | Nevius Stonecrop            | T                         |
| Sedum pusillum                        | Granite Stonecrop           | T                         |
| Senecio millefolium                   | Blue Ridge Golden Ragwort   | T                         |
| Shortia galacifolia                   | Oconee Bells                | E                         |
| Sibbaldiopsis tridentata              | Three-tooth Cinquefoil      | E                         |
| Sideroxylon thornei                   | Swamp Buckthorn             | E                         |
| Silene polypetala                     | Fringed Campion             | Е                         |
| Silene regia                          | Royal Catchfly              | R                         |
| Spiraea virginiana                    | Virginia Spirea             | T                         |
| Spiranthes magnicamporum              | Great Plains Ladies-tresses | E                         |
| Steartia malacodendron                | Silky Camelia               | R                         |
| Stylisma pickeringii var. pickeringii | Pickering Morning-glory     | T                         |
| Thalictrum cooleyi                    | Cooley Meadowrue            | Ē                         |
| Thalictrum debile                     | Trailing Meadowrue          | $\overline{\overline{T}}$ |
| Tillandsia recurvata                  | Ball-Moss                   | T                         |
| Torreya taxifolia                     | Florida Torreya             | Ē                         |
| Trientalis borealis                   | Starflower                  | E                         |
| Trillium persistens                   | Persistent Trillium         | E                         |
| r =                                   | - 'm-m                      | _                         |

| Scientific name           | Common name                | Status* |
|---------------------------|----------------------------|---------|
| Trillium reliquum         | Relict Trillium            | Е       |
| Viburnum bracteatum       | Limerock Arrow-wood        | E       |
| Waldsteinia lobata        | Barren Strawberry          | T       |
| Xerophyllum asphodeloides | Eastern Turkeybeard        | R       |
| Xyris tennesseensis       | Tennessee Yellow-Eye Grass | E       |

\***Key:** E = Endangered T = ThreatenedR = RareU = Unusual

### **SECTION 6**

### OTHER ENVIRONMENTAL ISSUES

### Georgia Supplement, August 2000

This section covers the state requirements for Other Environmental Issues and is intended to supplement the U.S. TEAM Guide. Refer to the U.S. TEAM Guide and the DOD Component Supplements for Federal, DOD, and service-specific requirements.

### **Definitions**

- Defined Release any release that is an event that has a known duration of less than 30 consecutive days, which
  has a known source, and which involves quantities that are known or can be estimated (Rules of the State of
  Georgia (RSG) 391-3-19.02(2)).
- Regulated Substance any substance defined in the Hazardous Waste Management Act, Official Code of Georgia, Annotated (OCGA), Sec. 12-8-62, by the terms "hazardous waste" or "hazardous constituent," or any substance defined in the Hazardous Site Response Act, OCGA, Sec. 12-8-92, as "hazardous substance" (all such regulated substances are listed in Appendix I of this Chapter) (RSG 391-3-19.02(2)).
- Release any intentional or unintentional act or omission resulting in the spilling, leaking, pumping, pouring, emitting, emptying, discharging, injecting, escaping, leaching, dumping, or disposing into the environment, including without limitation the abandonment or discarding of barrels, containers, and other closed receptacles, of any hazardous waste, hazardous constituent, or hazardous substance; provided, however, that such term shall not include any release that results in exposure to persons solely within a workplace, with respect to a claim that such persons may assert against the employer of such persons; emissions from the engine exhaust of any motor vehicle, rolling stock, aircraft, vessel, or pipeline pumping station; or the normal application of fertilizer (RSG 391-3-19.02(2)).
- *Responsible Party* any person who has contributed or who is contributing to a release, as defined at OCGA 12-8-92(9) (RSG 391-3-19.02(2)).
- *Site* that portion of the owner's contiguous property and any other owner's property affected by a release exceeding a reportable quantity (RSG 391-3-19.02(2)).

### OTHER ENVIRONMENTAL ISSUES GUIDANCE FOR GEORGIA CHECKLIST USERS

### REFER TO CHECKLIST ITEMS:

The NEPA Process

Refer to the U.S. TEAM Guide and the DOD Component Supplements for Federal, DOD, and service-specific requirements

Missing Checklist Items O1.2.1.GA.

**Environmental Noise** 

Refer to the U.S. TEAM Guide and the DOD Component Supplements for Federal, DOD, and service-specific requirements

Missing Checklist Items O2.2.1.GA.

**IRP** 

Missing Checklist Items O3.2.1.GA.

State-Specific Requirements O3.20.1.GA. through O3.20.3.GA.

Pollution Prevention

Refer to the U.S. TEAM Guide and the DOD Component Supplements for DOD and service-

specific requirements.

Missing Checklist Items O4.2.1.GA.

Program Management

Refer to the DOD Component Supplements for Federal, DOD, and service-specific requirements.

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| REGULATORY<br>REQUIREMENTS:  | REVIEWER CHECKS: August 2000   |  |
| NEPA O1.2. Missing Checklist Items   |  |  |
| O1.2.1.GA. Federal facilities are required to comply with all applicable state regulatory requirements not contained in this checklist (a finding under this checklist item will have the citation of the applied regulation as a basis of finding). | Determine whether any new regulations have been issued since the finalization of the manual.  Determine whether the Federal facility has activities or facilities that are regulated but not addressed in the checklists.  Verify that the Federal facility is in compliance with all applicable and newly issued regulations. |  |

| REGULATORY<br>REQUIREMENTS:  | REVIEWER CHECKS: August 2000   |
|--|--|
| ENVIRONMENTAL<br>NOISE   |  |
| O2.2.<br>Missing Checklist Items   |  |
| O2.2.1.GA. Federal facilities are required to comply with all applicable state regulatory requirements not contained in this checklist (a finding under this checklist item will have the citation of the applied regulation as a basis of finding). | Determine whether any new regulations have been issued since the finalization of the manual.  Determine whether the Federal facility has activities or facilities that are regulated but not addressed in the checklists.  Verify that the Federal facility is in compliance with all applicable and newly issued regulations. |

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| REGULATORY<br>REQUIREMENTS:  | REVIEWER CHECKS: August 2000   |  |
| IRP O3.2. Missing Checklist Items  | <b>g</b>   |  |
| O3.2.1.GA. Federal facilities are required to comply with all applicable state regulatory requirements not contained in this checklist (a finding under this checklist item will have the citation of the applied regulation as a basis of finding). | Determine whether any new regulations have been issued since the finalization of the manual.  Determine whether the Federal facility has activities or facilities that are regulated but not addressed in the checklists.  Verify that the Federal facility is in compliance with all applicable and newly issued regulations. |  |

|   | Georgia Supplement   |
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| REGULATORY<br>REQUIREMENTS:   | REVIEWER CHECKS: August 2000   |
| O3.20.<br>STATE-SPECIFIC<br>REQUIREMENTS  | (NOTE: These requirements apply to any person who is a responsible party at a site listed on the Hazardous Site Inventory (RSG 391-3-1906(1)).)  |
| O3.20.1.GA. A compliance status report must be submitted to the Director for sites listed on the Hazardous Site Inventory (RSG 391-3-1906(3)(a)).     | (NOTE: These requirements do not apply to remedial actions conducted in accordance with a Record of Decision under the National Contingency Plan or to corrective actions required by a Resource Recovery and Action permit.)  Verify that any person who is a responsible party for a site on the Hazardous Site Inventory submits to the Director a compliance status report that documents the current status of the site with regard to the risk reduction standards for all regulated substances associated with each release at the site.  |
| O3.20.2.GA. Public participation requirements must be met for sites listed on the Hazardous Site Inventory (RSG 391-3-1906(5)(a), (b), (d), and (e)). | (NOTE: These requirements do not apply to remedial actions conducted in accordance with a Record of Decision under the National Contingency Plan or to corrective actions required by a Resource Recovery and Action permit.)  Verify that within 7 days after submitting to the Director the compliance status report, the responsible party publishes a notice in both a major local newspaper of general circulation and the legal organ of the local governments in whose jurisdiction the site is located, announcing that such report is available for inspection by the general public.  Verify that within 7 days after submitting to the Director a proposed corrective action plan, the responsible party publishes a notice in both a major local newspaper of general circulation and the legal organ of the local governments in whose jurisdiction the site is located, announcing that such report is available for inspection by the general public.  Verify that within 15 days after publishing the public notice, the Director is provided with an exact copy of the public notice as it appeared in the paper.  Verify that within 7 days after submitting to the Director either the compliance status report or a proposed corrective action plan, the responsible party provides to the county government in the county in which the site is located and to the |
| O3.20.3.GA. Specific requirements must be met for sites that are listed on the  | government of any city in whose jurisdictions the site is located, a written notice providing the same information that was provided in the public notices.  (NOTE: These requirements do not apply to remedial actions conducted in accordance with a Record of Decision under the National Contingency Plan or to corrective actions required by a Resource Recovery and Action permit.)   |

| Georgia Supplement  |   |  |
|---|---|--|
| REGULATORY<br>REQUIREMENTS:   | REVIEWER CHECKS: August 2000  |  |
| Hazardous Site Inventory and that have been designated as requiring corrective action (RSG 391-3-19.08(1), (2), and (4)). | corrective actions required by a Resource Recovery and Action permit.)  Verify that, if a site that is listed on the Hazardous Site Inventory has been designated as requiring corrective action by the Director, the property owner meets the following requirements:  - a notice, stating the following, is placed in any warranty deed, mortgage, security deed, lease, rental agreement, or other instrument that is thereafter given or caused to be given by the property owner which creates an interest in or grants a use of the property: "This property has been listed on the state's hazardous site inventory and has been designated as needing corrective action due to the presence of hazardous wastes, hazardous constituents, or hazardous substances regulated under state law. Contact the property owner or the Georgia Environmental Protection Division for further information concerning this property. This notice is provided in compliance with the Georgia Hazardous Site Response Act."  - within 45 days from the date the Director issues the written notice requiring corrective action, the property owner causes to be prepared an affidavit of such fact in recordable form, files the affidavit with the clerk of the superior court of each county in which the real property or any part thereof lies, and provides a copy of the affidavit to the Georgia Environmental Protection Division. |  |

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| REGULATORY<br>REQUIREMENTS:  | REVIEWER CHECKS: August 2000   |
| POLLUTION PREVENTION  O4.2. Missing Checklist Items  | August 2000  |
| O4.2.1.GA. Federal facilities are required to comply with all applicable state regulatory requirements not contained in this checklist (a finding under this checklist item will have the citation of the applied regulation as a basis of finding). | Determine whether any new regulations have been issued since the finalization of the manual.  Determine whether the Federal facility has activities or facilities that are regulated but not addressed in the checklists.  Verify that the Federal facility is in compliance with all applicable and newly issued regulations. |

### **SECTION 7**

### PESTICIDE MANAGEMENT

### Georgia Supplement, August 2000

This section covers the state requirements for Pesticide Management and is intended to supplement the U.S. TEAM Guide. Refer to the U.S. TEAM Guide and the DOD Component Supplements for Federal, DOD, and service-specific requirements.

### **Definitions**

- *Beneficial Insects* those insects that, during their lifecycles, are effective pollinators of plants, are parasites or predators of pests, or are otherwise beneficial (Official Code of Georgia, Title 2, Chapter 7, Article 3, Section 2-7-92 (OCGA 2-7-92)).
- *Certified Applicator* any individual who is certified under this article to use or supervise the use of any restricted-use pesticide restricted to use by certified applicators or any state-restricted pesticide use restricted to use by certified applicators (OCGA 2-7-92).
- Commercial Application application of a pesticide by a Pesticide Contractor or his employee (Rules of the State of Georgia, Control No. 40, Division 21, Chapter 9, Section 40-21-9-.01 (RSG 40-21-9-.01)) [Added July 1999].
- Commercial Applicator any individual who meets either of the following conditions (OCGA 2-7-92):
  - 1. uses or supervises the use of any restricted-use pesticide restricted to use by certified applicators or any state-restricted pesticide use restricted to use by certified applicators, and is not a private applicator
  - 2. uses or supervises the use of any other pesticide for a pesticide contractor, as an employee or otherwise.
- *Commissioner* the Commissioner of Agriculture.
- *Defoliant* any substance or mixture of substances intended for causing the leaves or foliage to drop from a plant, with or without causing abscission (OCGA 2-7-92).
- *Desiccant* any substance or mixture of substances intended for artificially accelerating the drying of plant tissue (OCGA 2-7-92).
- *Label* the written, printed, or graphic matter on or attached to the pesticide or device or any of its containers or wrappers (OCGA 2-7-92).
- Labeling the label and all other written, printed, or graphic matter that accompanies the pesticide or device at any time or to which reference is made on the label or in literature accompanying the pesticide or device, except for current official publications of the USEPA, USDA, U.S. Department of Interior, U.S. Department of Health and Human Services, state experiment stations, state agricultural stations, and other Federal/state agencies authorized to conduct pesticide research (OCGA 2-7-92).
- Landscape any maintained areas of turf, trees, shrubs, or other ornamental plants, indoors or outdoors. This term does not include (RSG 40-21-9-.01) [Added July 1999]:
  - 1. rights-of-way, either public or private or;
  - 2. land areas used for agricultural production or research.

- *Non Commercial Application* application of a pesticide by anyone other than a Pesticide Contractor or his employee (RSG 40-21-9-.01) [Added July 1999].
- *Pest* any insect, rodent, nematode, fungus, or weed; or any other form of terrestrial or aquatic plant or animal life or virus, bacterium, or other microorganism, except viruses, bacteria, or other microorganisms on or in living man or other living animals which the USEPA or the Commissioner declares to be a pest (OCGA 2-7-92).
- Pesticide any substance or mixture of substances intended for any of the following uses (OCGA 2-7-92):
  - 1. preventing, destroying, repelling, or mitigating any pests
  - 2. use as a plant regulator, defoliant, or desiccant.
- *Pesticide Contractor* any person who engages in the business of contracting for the application of any pesticide to the lands of another (OCGA 2-7-92).
- *Plant Regulator* any substance or mixture of substances, intended through physiological action for accelerating or retarding the rate of growth or rate of maturation or for otherwise altering the behavior of ornamental or crop plants or the produce thereof, but not including plant nutrients, trace elements, nutritional chemicals, plant inoculants, and soil amendments (OCGA 2-7-92).
- Private Applicator any individual who purchases, uses, or supervises the use of any restricted-use pesticide
  that is restricted to use by certified applicators or any state-restricted pesticide use that is restricted to use by
  certified applicators, for purposes of producing any agricultural or forestry commodity on property owned or
  rented by him or his employer or, if applied without compensation other than the trading of personal services
  between producers of agricultural and forestry commodities, on the property of another person (OCGA 2-7-92).
- Public Non-Residential Properties any public or privately owned property operated for public benefit and to
  which members of the public normally have access, including, but not limited to, parks, golf courses, cemeteries,
  sports fields, landscapes associated with public buildings, and interiorscapes (RSG 40-21-9-.01) [Added July
  1999].
- Restricted Use Pesticide any pesticide whose label bears one or more uses that have been classified as restricted by the USEPA (OCGA 2-7-92).
- State Restricted Pesticide Use any pesticide use for which the Commission requires additional restrictions (see Appendix 7-1) (OCGA 2-7-92).
- *Under the Direct Supervision of a Certified Applicator* the application of a pesticide by a competent person acting under the instructions and control of a certified applicator who is available if and when needed, even though such certified applicator is not physically present at the time and place the pesticide is applied (OCGA 2-7-92).
- Wildlife all living things that are not human, nor domesticated, nor pests; including, but not limited to, mammals, birds, and aquatic life (OCGA 2-7-92).

## PESTICIDE MANAGEMENT GUIDANCE FOR GEORGIA CHECKLIST USERS

### **REFER TO CHECKLIST ITEMS:**

Missing Checklist Items PM.2.1.GA.

Pesticide Applicators PM.5.1.GA. through PM.5.3.GA.

Pesticide Application

General PM.10.1.GA. and PM.10.2.GA.

Other

Irrigation PM.35.1.GA.
Landscape Applications PM.35.2.GA.
Golf Courses PM.35.3.GA.

Fumigations PM.35.4.GA. through PM.35.6.GA.

Documentation PM.40.1.GA.

| GUIDANCE FOR APPENDIX USERS |                                   |  |
|-----------------------------|-----------------------------------|--|
| REFER TO APPENDIX NUMBERS:  | REFER TO APPENDIX TITLES:         |  |
| 7-1                         | Georgia Restricted-Use Pesticides |  |

# COMPLIANCE CATEGORY: PESTICIDE MANAGEMENT Georgia Supplement

| Georgia Supplement   |  |  |
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| REGULATORY<br>REQUIREMENTS:  | REVIEWER CHECKS:<br>August 2000  |  |
| PM.2.<br>MISSING CHECKLIST<br>ITEMS  |  |  |
| PM.2.1.GA. Federal facilities are required to comply with all applicable state regulatory requirements not contained in this checklist (a finding under this checklist item will have the citation of the applied regulation as a basis of finding). | Determine whether any new regulations have been issued since the finalization of the manual.  Determine whether the Federal facility has activities or facilities that are regulated but not addressed in the checklists.  Verify that the Federal facility is in compliance with all applicable and newly issued regulations. |  |

| COMPLIANCE CATEGORY: |
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| PESTICIDE MANAGEMENT |
| Georgia Supplement   |
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| PESTICIDE MANAGEMENT  Georgia Supplement  |   |  |
|---|---|--|
| REGULATORY  | REVIEWER CHECKS:  |  |
| PM.5. PESTICIDE APPLICATORS   | August 2000   |  |
| PM.5.1.GA. Pesticide applicators must meet certification requirements (RSG 40-21-601, 40-21-602, 620-302(1)(b), (i) and | Verify that no uncertified person applies any restricted use pesticide or any State restricted pesticide use when the labeling for such pesticide or pesticide use or other restriction imposed by the Commissioner requires application only by a certified operator.  |  |
| (j)) [Revised July 1999].   | (NOTE: Uncertified persons may apply restricted use pesticides or pesticides with State restricted uses only if they are under the direct supervision of a certified applicator. Such direct supervision requires that the uncertified person carry out all applications under specific instructions, written or oral, from the certified applicator, who is responsible for the actions of all persons under his supervision. Unless otherwise required by the label or labeling, the certified applicator is not required to be present at time of application but must be available, if needed by the uncertified person, within a reasonable time through conventional means of communication.) |  |
|   | (See Appendix 7-1 for a list of State restricted-use pesticides.)   |  |
|   | Verify that each licensee designates a Certified Operator who is in charge of and actively participates in providing adequate personal supervision in the pest control operations.  |  |
|   | Verify that certified operators give appropriate written or oral instructions to all persons working under their direct supervision relating to selection and use of appropriate pesticides, including proper formulation, dilution, dosages, and use precautions.  |  |
|   | Verify that every employee takes all reasonable measures to insure that pesticides are applied in such a manner to avoid accidental injury or poisoning of humans and domestic animals, including, but not limited to, the removal and proper disposal of any spilled pesticide, and the proper disposal of unused pesticides and pesticide containers.   |  |
|   | Verify that no pesticide applications are made by a licensee without a Designated Certified Operator.   |  |
|   | (NOTE: If a licensee loses a Designated Certified Operator through an unplanned separation or event of crisis, other than the intentional or forced transfer of a Designated Certified Operator from one licensee or office to another, the licensee shall notify the Commission immediately. A licensee who has lost his Designated Certified Operator, may obtain the services of a Certified Operator who is in the employment of another licensee, and who may serve as the Designated Certified Operator for both licensees for not more than 90 days. The licensee will notify the  |  |

### COMPLIANCE CATEGORY: PESTICIDE MANAGEMENT Georgia Supplement

|  | Georgia Supplement   |
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| REGULATORY                             | REVIEWER CHECKS:   |
| REQUIREMENTS:                          | August 2000  |
|  | Commission immediately of the dual service of such Designated Certified Operator.)   |
|  | Verify that all licenses are displayed in a conspicuous place in the licensed office and the duplicate in the sub-office.  |
|  | Verify that all operators and employees carry their certification and registration cards on their person at all times when they are soliciting or performing pest control. |
| <b>PM.5.2.GA.</b> [Deleted July 1999]. | (NOTE: See PM.40.GA. for documentation requirements.)  |
| <b>PM.5.3.GA.</b> [Deleted July 1999]. |  |

| <b>COMPLIANCE CATEGORY:</b> |
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| PESTICIDE MANAGEMENT        |
| Georgia Supplement          |

| Georgia Supplement   |  |  |
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| REGULATORY<br>REQUIREMENTS:  | REVIEWER CHECKS: August 2000   |  |
| PESTICIDE<br>APPLICATION   | August 2000  |  |
| PM.10.<br>GENERAL  |  |  |
| PM.10.1.GA. The application or use of pesticides must meet specific operating requirements (Ga. Code, Part V, Chapter 5-15, Section 5-1506(b) and Chapter 5-15a, Sections 5-1511a(a) and 5-1518a). | Verify that personnel that handle, apply, or use pesticides do not commit any of the following acts:  - distribute a pesticide to an individual who lacks the permit or certification required for its use - detach, alter, deface, or destroy, wholly or in part, pesticide labeling - use a pesticide in a way inconsistent with its labeling or its USEPA or Georgia state registration, or in violation of USEPA or state restrictions on its usage - handle, transport, store, display, or distribute pesticides in ways that endanger humans, the environment, or food, feed, or any other products - dispose of, discard, or store pesticides or pesticide containers in ways that cause injury to humans, vegetation, crops, livestock, wildlife, or beneficial insects, or that pollute any water supply or waterway - use any pesticide inconsistent with the labeling, USEPA or Georgia state registration, or in violation of USEPA or Georgia state restrictions on the use of that pesticide - apply known ineffective or improper pesticides - operate faulty or unsafe equipment - operate in a faulty, careless, or negligent manner. |  |
| PM.10.2.GA. Pesticide applicators must meet sign-posting requirements (RSG 620-302(1)(k)) [Added July 1999].   | All applications of pesticides other than pesticide products which are applied in enclosed stations in compliance with registered product label directions, by a Licensee to outdoor areas when associated with inside structural applications and extending more than six (6) feet from the structure shall be subject to the following requirements:  Verify that, at the time of application, the licensee posts signs at the primary point(s) of entry to the treated area(s).  Verify that the sign is at least 4" x 5" in size and made of sturdy, weather resistant material.  Verify that the printing is in contrasting colors to the background of the sign.  Verify that the bottom edge of the sign is 8 to 12 in. above the ground.   |  |

| <b>COMPLIANCE CATEGORY:</b> |
|-----------------------------|
| PESTICIDE MANAGEMENT        |
| Georgia Supplement          |

| REGULATORY   | REVIEWER CHECKS:  |
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| REQUIREMENTS:  | August 2000   |
| PESTICIDE<br>APPLICATION   |   |
| PM.35.<br>OTHER  |   |
| Irrigation Systems   |   |
| <b>PM.35.1.GA.</b> Irrigation systems used for the application of pesticides must meet specific requirements (RSG 40-23-2).                          | Verify each irrigation system that is designed or used for the application of fertilizers, pesticides, or chemicals is equipped with an anti-syphon device consisting of all of the following components, all of which are free of corrosion and buildup and are operative at all times during system operation:  - a functional check valve - a low pressure drain - a vacuum relief valve.  |
| Landscape Applications   |   |
| PM.35.2.GA. Landscape applications of pesticides must meet sign-posting requirements (RSG 40-21-902(a) and (b), and 40-21-903(2)) [Added July 1999]. | (NOTE: This requirement applies to all applications of pesticides to landscapes, whether commercial or noncommercial, and whether to residential or nonresidential properties, with the exception of applications made by the homeowner to the landscape at his own single-family residence, and applications to golf courses (see PM.35.3.GA. below).)  Verify that at time of application, the Pesticide Contractor or other person |
|  | responsible for the pesticide application posts a sign, not to be removed until the day after the application, at the primary point(s) of entry to the treated area.  |
|  | Verify that the sign is at least 4 in. x 5 in. in size and made of sturdy, weather resistant material.  |
|  | Verify that the printing is in contrasting colors to the background of the sign.  |
|  | Verify that the bottom edge of the sign is 8 to 12 in. above the ground.  |
|  | (NOTE: No posting is required of any plants in interior landscapes which are treated with pesticides 2 hr or more before the public has normal access to the area   |

| COMPLIANCE CATEGORY: PESTICIDE MANAGEMENT Georgia Supplement   |   |  |
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| REGULATORY   | REVIEWER CHECKS:  |  |
| REQUIREMENTS:  | August 2000 in which the plants are treated.)   |  |
| Golf Courses   |   |  |
| PM.35.3.GA. Golf course applications of pesticides must meet sign-posting requirements (RSG 40-21-902(c)) [Added July 1999]. | Verify that golf courses treated with pesticides shall be posted as follows:  Verify that the sign is at least 8 by 10 in. in size and made of sturdy, weather resistant material.  |  |
| ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,  | Verify that the printing is in contrasting colors to the background of the sign.  |  |
|  | Verify that the sign is posted at a conspicuous place in the golf shop, in the clubhouse, or at the first tee.  |  |
|  | Verify that the wording and format include:   |  |
|  | PESTICIDE APPLICATION NOTICE PESTICIDES ARE PERIODICALLY APPLIED TO THIS GOLF COURSE FOR ADDITIONAL INFORMATION, CONTACT (name and telephone number)  |  |
| Fumigations  |   |  |
| PM.35.4.GA. Fumigations must meet notification requirements (RSG 620-802 and 620-805) [Added July 1999].                     | Verify that the licensee provides the Enforcement Agency and the local fire and police departments having jurisdiction with the information specified below, before performing fumigation of any residential or commercial building or other potentially habitable structure:  - location of the structure or enclosed space to be fumigated - type of structure or enclosed space and its current use - name of the fumigant to be used - date, time of release, and approximate exposure period |  |
|  | - name of the Operator-In-Charge and his day and night telephone numbers.   |  |
|  | Verify that notification is made to the Enforcement Agency at least 48 hr prior to the scheduled time of release of the fumigant, and that notification to other agencies is made at least 3 hr prior to scheduled time of release of the fumigant.   |  |
|  | (NOTE: Prior notification to the Enforcement Agency and local fire and police departments and the posting of a watchman is not required for fumigation of aircraft, railroad cars, tanks, trucks, or other common carrier, or any chamber, vault, or special room specially designed for fumigation.)   |  |

### COMPLIANCE CATEGORY: PESTICIDE MANAGEMENT Georgia Supplement

| Georgia Supplement  |   |  |  |
|---|---|--|--|
| REGULATORY  | REVIEWER CHECKS:  |  |  |
| REQUIREMENTS:   | August 2000   |  |  |
| PM.35.5.GA. Fumigation crews must meet specific requirements (RSG 620-803) [Added July 1999]. | Verify that during the fumigation of any residential or commercial building or any other structure which the operator may be reasonably expected to enter at any time during the fumigation operation and exposed to toxic concentrations of the fumigant, the crew consists of at least 2 persons, one of whom is the Operator-In-Charge.  |  |  |
| <b>PM.35.6.GA.</b> Operators-incharge of fumigations must meet specific requirements          | occupant of any structure to be fumigated at least 3 hr prior to release of the fumigant, or posts such notice on all regular entrances to such building.   |  |  |
| (RSG 620-804) [Added July 1999].  | Verify that the Operator-In-Charge personally supervises all preparations of the structure, including the posting of a sign on all normal ground level entrances, with at least 1 sign on each side of the structure to be fumigated.   |  |  |
|   | Verify that the sign is printed in indelible and water insoluble red ink or paint on a white background.  Verify that the words "DANGER" and "DEADLY POISON" are in black letters at least 2 in. high and the sign conforms to the following format:  |  |  |
|   |   |  |  |
|   | Skull DANGER Skull and Fumigation with and Crossbones (Name of Fumigant) Crossbones  DEADLY POISON ALL PERSONS ARE WARNED TO KEEP AWAY  Name of Fumigator Address Telephone Operator-In-Charge Day Phone Night Phone Verify that the Operator-In-Charge makes a final inspection before releasing the fumigant and personally confirms that all preparations have been completed, including:  - that no human beings or domestic animals are present within the structure or enclosed space to be fumigated or in any other structure or enclosed space physically joined or in contact with the structure or enclosed space to be fumigated  - that all open flames, pilot lights, or oil lamps have been appropriately extinguished  - that all doors, windows (unless otherwise specified on the product labeling), and other means of access are locked or barred and that all keys are in his possession |  |  |

| COMPLIANCE CATEGORY: PESTICIDE MANAGEMENT Georgia Supplement |  |  |
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| REGULATORY   | REGULATORY REVIEWER CHECKS:  |  |
| REQUIREMENTS:  | August 2000  |  |
|  | <ul> <li>that all foods or other materials subject to contamination by the fumigant have been removed from the structure or enclosed space, or sealed in 6 mil polyethylene bags</li> <li>that all personnel engaged in the fumigation operation are outside the structure or enclosed space to be fumigated</li> <li>that a capable, alert watchman is present and will remain present at the fumigation site to prevent entry of any unauthorized person until the exposure period has elapsed, ventilation has been completed, and the Operator-In-Charge has declared the structure or enclosed space to be safe for human occupancy.</li> </ul> |  |
|  | Verify that the Operator-In-Charge insures that safety precautions and appropriate application procedures are applied by any uncertified employee who performs spot fumigation under his supervision.  |  |

### COMPLIANCE CATEGORY: PESTICIDE MANAGEMENT Georgia Supplement

| Georgia Supplement   |   |  |
|--|---|--|
| REGULATORY   | REVIEWER CHECKS:  |  |
| REQUIREMENTS:  | August 2000   |  |
| PESTICIDE<br>APPLICATION   |   |  |
| PM.40.<br>DOCUMENTATION  |   |  |
| PM.40.1.GA. Irrigation systems used for the application of pesticides must meet specific requirements (RSG 40-21-501 and 40-21-502) [Added July 1999]. | Verify that every licensed pesticide contractor maintains true and accurate records of all pesticide applications performed as a part of his business operations.  Verify that every licensed commercial pesticide applicator not employed by or otherwise acting for a licensed pesticide contractor maintains true and accurate records of all applications of restricted use pesticides and pesticides with State restricted uses, whether applied by him or persons under his supervision.  (NOTE: Licensed private pesticide applicators are not required to maintain records of pesticide application.)  Verify that all records of pesticide application required by these regulations include the following information:  - date and time of application - name of person for whom applied - location of application site - crop or target to which applied - acreage, size of area treated, or total amount of pesticide applied - target pest for which applied - pesticide used and application rate - type of equipment used - name of applicator - notation of any unexpected occurrence at or during application, such as spillage, exposure of humans or non-target animals, or drift, and any corrective or emergency action taken - names, concentrations and quantities of all pesticides disposed of and the manner of disposition.  Verify that all records required for pesticide application are maintained for a period of 2 yr. |  |
|  |   |  |

### Appendix 7-1

**Georgia Restricted-Use Pesticides** (Source: Georgia Restricted Use Pesticide List, February 1996)

Application of the following pesticides must be licensed.

| Corporations              | Product Name                            | Number        |
|---------------------------|---|---------------|
| 1                         |   |               |
| Agrevo USA Company        | Decis 0.2 EC                            | 34147-8-45639 |
| Allied Corp               | Creosote-Coal Tar                       | 218-136       |
| 1                         | Creosote Oil                            | 218-609       |
|                           | Creosote Oil-24-CB                      | 218-132       |
| Ameribrom Inc             | 66-33                                   | 8622-12       |
|                           | Metabrom 99                             | 8622-17       |
|                           | 67-33                                   | 8622-13       |
|                           | 75-25                                   | 8622-15       |
|                           | 98-2                                    | 8622-12       |
| Ameribrom Inc             | Metabrom 100                            | 8622-16       |
| American Cyanamid Company | Cythion Insecticide                     | 241-208       |
|                           | Cythion ULV Insecticide                 | 241-208       |
|                           | Counter 15 g Systemic Insecticide       | 241-238       |
| American Cyanamid         | Counter Systemic Insecticide            | 241-238       |
| j                         | Thimet 15G                              | 241-145       |
|                           | Counter 20CR                            | 241-314       |
| American Cyanamid Company | Contour Herbicide                       | 241-353       |
|                           | Thimet 15-G Soil & Systemic Insecticide | 241-145       |
|                           | Thimet 20-G Soil/Systemic Insecticide   | 241-257       |
|                           | Prozine 70 DF Herbicide                 | 241-302       |
|                           | Counter 20CR Systemic Insecticide       | 241-314       |
|                           | Counter 20 CR Lock'n Load               | 241-314       |
| Ameron Protective Coating | Ameron Protective Coating               | 8120-48       |
|                           | Ameron Protective Coating               | 8120-49       |
| Amvac Chemical            | Phosdrin IPA 4                          | 5481-114      |
|                           | Phosdrin 4 EC                           | 5481-412      |
|                           | PCNB Disulfoton Granules                | 5481-415      |
| Aristech Chemical         | Creosote Solution                       | 57344-5       |
|                           | Creosote Oil                            | 57344-1       |
| Asgrow Florida Co         | Methomyl 5G (Corn)                      | 14775-48      |
|                           | Asgrow MBC 2-1 Soil Fumigant            | 14775-20      |
|                           | MBC 67-33 Pre-Plant Soil Fumigant       | 3377-17-14775 |
|                           | MBC 98-2 Pre-Plant Soil Fumigant        | 3377-16-14775 |
|                           | MBC 98-2 Preplant Soil Fumigant         | 5785-22-14775 |
|                           | MBC 67-33 Preplant Soil Fumigant        | 5785-24-14775 |
|                           | MBC 75-25                               | 3377-30-14775 |
|                           | MBC 75-25                               | 5785-40-14775 |
| Avitrol Corp              | Avitrol Concentrate                     | 11649-10      |
|                           | Avitrol Whole Corn                      | 11649-7       |
|                           | Avitrol Wheat                           | 11649-1       |
|                           | Avitrol Mixed Grain                     | 11649-4       |
|                           | Avitrol Double Strength Whole Corn      | 11649-8       |

| Corporations                          | Product Name                       | Number         |
|---------------------------------------|------------------------------------|----------------|
|                                       |                                    |                |
|                                       | Avitrol Double Strength Corn Chops | 11649-5        |
|                                       | Avitrol Corn Chops                 | 11649-6        |
| BASF Corporation                      | Laddok                             | 7969-54        |
| _                                     | Prompt Herbicide                   | 7969-54        |
| Bell Laboratories                     | ZP Tracking Powder                 | 12455-16       |
|                                       | ZP Rodent Bait AG                  | 12455-18       |
|                                       | ZP Rodent Bait AG                  | 12455-17       |
| Bell Laboratories Inc.                | Ditrac Tracking Powder             | 12455-56       |
| Bernardo Chemical                     | Gastoxin Fumigation                | 43743-3        |
|                                       | Gastoxin Fumigation Tablets        | 43743-1        |
|                                       | Gastoxin Fumigation Pellets        | 43743-2        |
|                                       | Phostex Fumigation Tablets         | 43743-1-1015   |
|                                       | Phostex Fumigation Pellets         | 43743-2-1015   |
|                                       | Phostex Fumigation Sachets         | 43743-3-1015   |
| Cape Fear Chemicals                   | Tiger Brand 20% Lindane            | 4887-155-3342  |
| Chem Nut Inc.                         | Methyl Parathion 4 EC              | 51036-18-37686 |
| Chemical Specialties                  | CCA Type-C Wood                    | 10356-13       |
| T T T T T T T T T T T T T T T T T T T | CCA-A 50% Concentrate              | 10356-8        |
|                                       | Arsenic Acid 757                   | 10356-18       |
| Ciba Geigy Corp                       | Curacron 8E                        | 100-699        |
|                                       | Triumph 4E                         | 100-643        |
|                                       | DZN Diazinon AG500                 | 100-461        |
|                                       | DZN Diazinon 50W                   | 100-460        |
|                                       | DZN Diazinon 14G                   | 100-469        |
|                                       | Aatrex 4L                          | 100-497        |
|                                       | Supracide 2E                       | 100-501        |
|                                       | Aatrex nine-o                      | 100-585        |
|                                       | Bicep                              | 100-645        |
|                                       | Bicep II                           | 100-710        |
|                                       | Cycle Herbicide                    | 100-716        |
|                                       | Bicep Lite Herbicide               | 100-731        |
|                                       | SLN GA-880007 Diazinon 50W         | SLN GA-880007  |
| Courtaulds Coatings                   | Interswift A/F BKA 007 Red Bka 008 | 2693-123       |
| C                                     | Intersmooth Hisol Spc BFA 254 Plum | 2693-127       |
|                                       | Micron 44 Premium Copolymer        | 2693-127       |
| Degesch America                       | Degesch Phostoxin                  | 40285-13       |
|                                       | Degesch Phos New Coated Tablets-R  | 40285-1        |
|                                       | Degesch Fumi-Strip                 | 40285-8        |
|                                       | Degesch Phostoxin Prepac           | 40285-14       |
|                                       | Degesch Fumi-Cel Plate             | 40285-8        |
|                                       | Degesch Phostoxin Coated Pellets   | 40285-3        |
|                                       | Magtoxin Prepac Spot Fumigant      | 40285-12       |
| Degesch America Inc                   | Detia Fumex                        | 40285-16       |
| Delfia Inc                            | Arena Grass Herbicide              | 524-314-55765  |
|                                       | Guide Herbicide                    | 524-314-55765  |
|                                       | Arena Grass ME                     | 524-344-55765  |
| Douglas Products & Packaging          | Chlor-o-pic                        | 5785-17-1015   |
| Dowelanco                             | Vikane Gas Fumigant                | 62719-4        |
|                                       | Tordon 101 Weed & Brush Killer     | 62719-5        |
|                                       | Forestry Tordon 101 Mixture        | 62719-5        |
|                                       | Telene C-17                        | 62719-12       |

| Corporations                    | Product Name                       | Number        |
|---------------------------------|------------------------------------|---------------|
|                                 |                                    |               |
|                                 | Tordon K Herbicide                 | 62719-17      |
|                                 | Forestry Tordon K                  | 62719-17      |
|                                 | Telone II Soil Fumigant            | 62719-32      |
|                                 | Access Herbicide                   | 62719-57      |
|                                 | Grazon P+D                         | 62719-182     |
| Drexel Chemical                 | Lindane 20%                        | 728-70-19713  |
|                                 | Drexel Atrazine 4 L                | 19713-37      |
| E I Dupont De Nemours           | Asana XL Insecticide               | 352-515       |
| 1                               | Bladex 4 Herbicide                 | 352-470       |
|                                 | Vydate L Insect/Nema               | 352-372       |
|                                 | Lannate L Insecticide              | 352-370       |
|                                 | Bladex 90 DF Herbicide             | 352-495       |
| E I Dupont De Nemours Co.       | Extrazine II 40L Herbicide         | 352-497       |
| 1                               | Vydate C-LV Insecticide            | 352-532       |
|                                 | Extrazine II DF Herbicide          | 352-577       |
| E I Dupont De Nemours Inc.      | Lannate Insecticide                | 352-342       |
|                                 | Lannate LV Insecticide             | 352-384       |
| Elf Atochem North America       | Penncap M                          | 4581-292      |
| Zii i noonein i torm i interieu | Penncap-M Chrysanthemums           | SLN GA-810002 |
|                                 | Penncap-M Insecticide              | SLN GA-840003 |
| Farmland Industries             | Farmland Liquid Atrazine 4L        | 1990-381      |
| Farmland Industries Inc.        | Farmland Atrazine 90 DF            | 100-585-1990  |
| FMC Corp                        | Furadan 15G                        | 279-3023      |
| Twic corp                       | Furadan 4F                         | 279-2876      |
|                                 | Capture, 2 EC                      | 279-3069      |
|                                 | Methyl Parathion 2 Thiodan 3 EC    | 279-2149      |
|                                 | Ammo 2.5 EC                        | 279-3027      |
|                                 | Pounce 25 WP                       | 279-3051      |
|                                 | Pounce 3.2 EC                      | 279-3014      |
| FMC Corporation                 | Astro T&O 3.2 EC Insecticide       | 279-3014      |
| Twe corporation                 | Astro T&O 25WP Insecticide         | 279-3051      |
|                                 | Ammo WSB Insecticide               | 279-3084      |
|                                 | Fury 1.5 EC Insecticide            | 279-3125      |
|                                 | Fury 1.5 EX Insecticide            | 279-3126      |
|                                 | SLN Furadan Nemacur Tobacco        | SLN GA-840008 |
|                                 | SLN 90003 Capture 2 EC Insecticide | SLN GA-900003 |
| Forshaw Chemical                | Pentacon-40                        | 7234-11       |
| Fuller System Inc               | Fulex Nicotine Fumigator           | 1327-41       |
| Fuller Systems Inc              | Fulex Dithio Insecticidal Smoke    | 1327-38       |
| Gowan Company                   | Azinphos-M 50WP                    | 10163-78      |
| Somail Company                  | Azinphos-M 2EC                     | 10163-98      |
|                                 | Azinphos-M 50 W                    | 10163-148     |
| Great Lakes Biochemical         | Brom-O-Gas                         | 5785-4        |
| Steat Lakes Biochemical         | Chloropicrin                       | 5785-58       |
| Great Lakes Chemical            | Chlor-O-Pic                        | 5785-17       |
| Great Lakes Chemical            | Bromo-O-Sol                        | 5785-13       |
|                                 | Bromo-O-Gas                        | 5785-42       |
|                                 | Bromo-O-Gas                        | 5785-55       |
|                                 | Math-O-Gas 100                     | 5785-11       |
|                                 | Meth-O-Gas                         | 5785-41       |
|                                 | Terr-O-Cide 98                     | 5785-22       |
|                                 | Ton O-Ciuc 70                      | 3103-22       |

| Corporations              | Product Name  | Number               |
|---------------------------|---|----------------------|
|                           |   |                      |
|                           | Terr-O-Gas 67   | 5785-24              |
|                           | Terr-O-Gas 45   | 5785-23              |
|                           | Terr-O-Gas 33   | 5785-25              |
|                           | Meth-O-Gas Q Commodity Fumigant                                       | 5785-41              |
| Griffin Corp              | Du-Ter Flowable 30  | 1812-277             |
| -                         | super Tin 4L  | 1812-244             |
| Haco Inc                  | Hopkins Zinc Phosphide Bait   | 2393-185             |
|                           | Hopkins Zinc Phosphide Pellets  | 2393-521             |
| Hendrix & Dail            | MBC Soil Fumigant   | 8853-1               |
|                           | MBC Concentrate Soil Fumigant   | 8853-2               |
|                           | MBC-33 Soil Fumigant  | 8853-3               |
|                           | HD-PIC Fumigant   | 8853-4               |
|                           | Pic-Clor-35   | 8536-23-8853         |
| Hendrix & Dail Inc        | Tri-Form 30   | 11220-21-8853        |
|                           | Chloropicrin 100 Fumigant   | 8536-02-8853         |
|                           | Tir-cal Trilone II  | 11220-01-8853        |
|                           | Methyl Bromide 99.5%  | 8536-12-8853         |
|                           | Methyl Bromide 100, Commodity Fum.                                    | 8536-15              |
|                           | Tri-Con 75/25   | 11220-8-8853         |
|                           | Pic-Brom 20   | 58266-1-8853         |
| Hickson Corp              | Wolmanac Concentrate 50%  | 62190-2              |
| 1                         | CCA Type C Conc. 50% Wood Pres.                                       | 62190-2              |
| Hoechst-Roussel           | Scout X-Tra Insecticide   | 34147-3-54382        |
|                           | Scout Insecticide   | 34147-2-54382        |
|                           | Hoelon 3EC Herbicide  | 8340-2054382         |
| Hoechst-Roussel Crop Prot | Illoxan 3 EC Herbicide  | 8340-20-54382        |
|                           | Bugle TM Herbicide  | 8340-40-54382        |
|                           | SLN Iloxan 3 EC   | SLN Ga-900006        |
| ISK Biotech               | Penta Plus 40   | 1022-46-50534        |
|                           | Pol-Nu  | 1022-240-50534       |
|                           | POL-Nu Paks   | 1022-240-50534       |
| J J Mauget Co             | Inject-A-Cide   | 7946-10              |
| o o manger es             | Inject-A-Cide B   | 7946-11              |
| Kop Coat                  | Alumacoat II  | 60061-80             |
| Kop-Coat Inc              | Woolsey Miracol III 461, 462, 463                                     | 60061-80             |
| Lesco, Inc.               | Diazinon 5 G  | 10404-23             |
| Liphatech Inc             | Rozol Tracking Powder   | SLN GA-780019        |
| Liphatech, Inc            | Rozol Blue Tracking Powder  | 7173-172             |
| Explicateen, me           | Ridall-Zinc Rodent Field & Ag Bait                                    | 7173-195             |
|                           | Ridall-Zinc Tracking Powder for Mice                                  | 7173-193             |
| Micro Flo                 | Methyl Parathion 4 EC   | 51036-18             |
| 1411010 1 10              | Azinphos Methyl 2 EC  | 51036-76             |
|                           | Diazinon 14G  | 51036-70             |
|                           | Diazinon Ag-500   | 51036-70             |
|                           | Diazinon 50W  | 51036-108            |
|                           | Parathion 8 E   | 51036-180            |
| Miles Ag Chemical         | Furadan 4 Flowable Insecticide  | 279-2876-3125        |
| whics Ag Chemical         | Guthion 2L Emuls Insecticide  |                      |
|                           |   | 3125-102             |
|                           | Metasysox P.S.C. Syst. Insecticide                                    | 3125-111<br>3125-111 |
|                           | Metasysox-R S C Syst. Insecticide Guthion 2S Emulsifiable Insecticide | 3125-111             |
|                           | Oudifoli 28 Elliuisiliadie Insecticide                                | 3143-143             |

| Corporations           | Product Name                              | Number             |
|------------------------|---|--------------------|
|                        |   |                    |
|                        | Di-Syston 15% Granular Systemic Insect    | 3125-172           |
|                        | Nemacur 15% Granular Nematicide           | 3125-236           |
|                        | Nemacur 10% Turf & Ornamental Nem.        | 3125-237           |
|                        | Monitor 3                                 | 3125-280           |
|                        | Nemacur 3 Emulsifiable Nematicide         | 3125-283           |
|                        | Nemacur 3 Turf Nematicide                 | 3125-283           |
|                        | Mesurol 75% WP Insect-Bird Repel          | 3125-288           |
|                        | Di-Syston 8 Systemic Insecticide          | 3125-307           |
|                        | Bolstar 6 Emulsifiable Insecticide        | 3125-321           |
|                        | Guthion 3 Flowable Insecticide            | 3125-338           |
|                        | Pryfon 6 Insecticide                      | 3125-339           |
|                        | Baythroid 2 Emulsifiable Pyrethroid       | 3125-351           |
|                        | SLN GA-840004 Guthion 2L                  | SLN GA-840004      |
|                        | SLNGA-840008 Furadan 4F                   | SLN GA-840008      |
|                        | SLNGA-900001 Monitor 4                    | SLN GA-900001      |
| Miles, Inc.            | Co-Ral Flowable Insecticide               | 11556-98           |
|                        | Co-Ral Emulsifiable Livestock Insecticide | 11556-23           |
| Monsanto Ag Co         | Harness Plus EC Herbicide                 | 524-473            |
| Monsanto Ag Products   | Harnexx Xtra 5.6L Herbicide               | 524-485            |
| Monsanto Co            | Bullet Herbicide                          | 524-418            |
|                        | Freedom Herbicide                         | 524-422            |
|                        | Lasso II                                  | 524-296            |
|                        | Lasso                                     | 524-314            |
|                        | Arena                                     | 524-314            |
|                        | Judge Herbicide                           | 524-314-97797      |
|                        | Stall Herbicide                           | 524-314-34704      |
|                        | Lariat                                    | 524-329            |
|                        | Bronco                                    | 524-341            |
|                        | Micro-Tech                                | 524-344            |
|                        | Judge MT                                  | 524-314-9779       |
|                        | Stall MT                                  | 524-314-34704      |
|                        | Partner WDS Herbicide                     | 524-403            |
|                        | Harness Pus Herbicide                     | 524-476            |
| Nor Am Chemical        | Turcam 2-1/2 G                            | 45639-100          |
|                        | Turcam                                    | 45639-59           |
|                        | Fundal 4 EC                               | 45639-75           |
|                        | Ficam 2 1/2G                              | 45639-100          |
| 0 W 1D                 | Rotate 2 1/2G                             | 45639-100          |
| Osmose Wood Preserving | Osmose K-33-C (50%) Wood Preserva.        | 3008-28            |
|                        | Osmose K-33-C (72%) Wood Preserva.        | 3008-17            |
|                        | Mitc-Fume/Fungicide for Wood              | 54289-2-3008       |
|                        | Timber Fume                               | 3008-39            |
|                        | K-33-A (50%) Wood Preservative            | 3008-42            |
|                        | Timber Fume II                            | 3008-46<br>3008-56 |
|                        | Osmoplastic-D Wood Preserving Compound    |                    |
|                        | Timberlife-D Wood Preserving Compound     | 3008-56<br>3008-56 |
|                        | Osmoplastic Wood Preserving Compound      |                    |
| Dagtaon Cristoms       | Timberlife Wood Preserving Compound       | 3008-56            |
| Pestcon Systems        | Fumitoxin Aluminum Phosphide Bags         | 5857-6             |
|                        | Fumitoxin New Coated Tablets              | 5857-1             |
| Diagram Classical      | Funitoxin Coated Pellets                  | 5857-2             |
| Phos Fume Chemical     | Fumiphos 60% Alum. Phos. Fum. Pellets     | 43568-1            |

| Corporations                 | Product Name                                 | Number              |
|------------------------------|--|---------------------|
|                              |  |                     |
|                              | Fumiphos 60% Alum. Phos. Fumi. Bags          | 43568-2             |
|                              | Fumiphos 60% Alum. Phos. Fum. Tablets        | 43568-3             |
| Plant Products               | Nicotine Smoke Generator                     | 8241-9              |
|                              | Plantfume 130                                | 8241-10             |
| Platte Chemical              | Clean Crop Phorate 20 G                      | 34704-259           |
|                              | Clean Crop Methyl Parathion 7.5              | 34704-72            |
|                              | Clean Crop Methyl Parathion 4-E              | 34704-10            |
|                              | Clean Crop Diazinon 50W                      | 100-460-34704       |
|                              | Clean Crop Endocide Plus MP                  | 34704-183           |
|                              | Atrazine 90WDG                               | 34704-622           |
|                              | Clean Crop Sniper 2-E Azinphos Meth          | 34704-691           |
|                              | Holdem Insecticide-Nematicide                | 34704-710           |
|                              | Paraspray 4-E                                | 34704-714           |
|                              | Paraspray 6-3                                | 34704-715           |
|                              | Paraspray 8-E                                | 34704-717           |
| Prentiss Drug                | Prentox Lindane 20%                          | 655-579             |
|                              | Prenfish Tox. Liquid-Emulsifiable            | 655-422             |
|                              | Diazinon 50W                                 | 655-456             |
|                              | Diazinon AG500 Insecticide                   | 655-459             |
|                              | Prentox Diazinon 14G                         | 655-557             |
| Professional Pest Management | Zoecon Safrotin Emulsifiable Conc.           | 2724-314-50809      |
|                              | Zoecon Safrotin Roack Plus Emulsif.          | 2724-355-50809      |
| Red Panther                  | Red Panther Methyl Parathion 4 LB EC         | 9779-34-42761       |
| Reddick Fumigants            | Bro-Mean C-1/4                               | 5785-55-37733       |
|                              | Bro-Mean C-33                                | 5785-24-37733       |
|                              | Bro-Mean C-0                                 | 5785-41-37733       |
|                              | Bro-Mean SOL                                 | 5785-13-37733       |
|                              | Bro-Mean C-2PRE                              | 5785-22-37733       |
|                              | Bro-Mean C-1/4                               | 5785-47-37733       |
| Regal Chemical Co            | Consyst                                      | 48234-3             |
| Research Products            | Detia GA EX-B                                | 2548-59             |
|                              | Weevil-cide Tablets                          | 59209-1-2548        |
|                              | Weevil-cide Pellets                          | 59209-2-2548        |
| Rhone-Poulenc                | Amizol                                       | 264-                |
|                              | Temik TSX                                    | 264-                |
|                              | Temik 10G                                    | 264-                |
|                              | Temik 15G                                    | 264-                |
|                              | Temik 15G Gran Aldicarb Pesticide            | SLN GA-870013       |
|                              | SLNGA-870003 Temik 15G Aldicarb              | SLN GA-870003       |
|                              | SLNGA-870004 Larvin 3.2                      | SLN GA-870004       |
|                              | Mocap 10% Nematicide                         | 264-457             |
|                              | Mocap Phys 4.2 FC                            | 264-497             |
|                              | Mocap Plus                                   | 264-464             |
|                              | Mocap Plus                                   | 264-459             |
|                              | Mocap EC Nematicide Buctril & Atrazine       | 264-458<br>264-477  |
| Rid-A-Bird                   | Rid-A-Bird 1100                              |                     |
|                              |  | 7579-2              |
| Riverside/Terra Corp         | Phorate 20-G  Piverside Methyl Perethion 7.2 | 9779-293            |
|                              | Riverside Methyl Parathion 7.2               | 9779-218<br>9779-34 |
|                              | Methyl Parathin 4 Diazinon 4AG               | 9779-34             |
|                              | MBC 67-33                                    | 5785-24-9779        |
|                              | MIDC 07-33                                   | 3103-24-3113        |

| Corporations              | Product Name                         | Number           |
|---------------------------|--------------------------------------|------------------|
|                           |                                      |                  |
|                           | MBC 75-25                            | 5785-40-9779     |
|                           | MBC 98-2                             | 5785-22-9779     |
|                           | MBC 67-33                            | 3377-17-9779     |
|                           | MBC 75-25                            | 3377-30-9779     |
|                           | MBC 98-2                             | 3377-16-9779     |
|                           | Riverside Atrazine 90DF              | 9779-253         |
| Rohm & Hass               | Kerb 50-W in Water Soluble Pouches   | 707-159          |
|                           | Kerb WSP Turf & Ornamental Herbicide | 707-159          |
| Roussel UCLAF Corp        | Diazinon AG500 Insecticide           | 10370-52         |
|                           | Gold Crest Diazinon 14G              | 10370-148-43     |
| Setre Chemical            | 7.5 LB Methyl Parathion              | 5905-414-38167   |
|                           | Paraquat Plus                        | 239-2186-38167   |
|                           | 4 LB Methyl Parathion                | 5905-55-38167    |
|                           | Setre Diazinon AG 500                | 5905-248-38167   |
|                           | Parathion 8E                         | 5905-514-38167   |
|                           | Diazinon AG 500                      | 5905-248-38167   |
| Sostram Corporation       | Atrazine 90 DF Hebericide            | 35915-3-60063    |
| •                         | Atrazine 4L Herbicide                | 35915-4-60063    |
| Southeastern Fumigants    | Fastphos 60                          | 43568-3-65038    |
| Sureco, Inc               | All Pro Diazinon AG500               | 769-689          |
| TIFA (C.I.) Limited       | Chem Fish Regular                    | 1439-157         |
| U.S. Dept of Agriculture  | Zinc Phosphide                       | 56228-6          |
| o.s. Dept of rightenitate | Pigeon Bait                          | 56228-8          |
|                           | Zinc Phosphide Conc                  | 56228-9          |
|                           | Compound DRC-1339                    | 56228-10         |
| Uniroyal Chemical         | Dimilin 2F                           | 37100-27-400     |
| emreyar enemicar          | Dimilin 25W                          | 37100-8-400      |
|                           | Dimilin 4L                           | 37100-54-400     |
|                           | Terraclor Super X Granular W/Disyst  | 400-416          |
| Valent USA                | Danitrol 2.4 EC Spray                | 59639-35         |
| valent esti               | Monitor 4 Spray                      | 59639-56         |
|                           | Monitor 4 Spray                      | SLN GA 900005    |
| Zeneca                    | Force 1.5 G Insect                   | 10182-130        |
| Zeneed                    | Dyfonate II 20-G                     | 10182-135        |
|                           | Ambush 25-W                          | 10182-35         |
|                           | Ambust 25 W Insecticide              | 10182-110        |
|                           | Gramoxone Super Herbicide            | 10182-103        |
|                           | Karate Insecticide                   | 10182-96         |
|                           | Ambush 2E Insecticide (soybeans)     | SLN GA-830007    |
|                           | Ambush Insecticide (soybeans)        | 10182-18         |
|                           | Sutazine +18-66                      | 10182-10         |
|                           | Dyfonate 4-EC Emulsifiable Liquid    | 10182-201        |
|                           | Sutazine+                            | 10182-248        |
|                           | Gramoxone Extra Herbicide            | 10182-240        |
|                           | Karate CSD Insecticide               | 10182-230        |
|                           | Surpass 100 Selective Herbicide      | 10182-363        |
|                           | SLN Syfonate 4-EC Insecticide        | SLN GA-820016    |
|                           | Gramoxone Gramoxone                  | SLN GA-940006    |
|                           | Gramozone                            | DLI1 0/1 / 70000 |

### **SECTION 8**

### PETROLEUM, OIL, AND LUBRICANT (POL) MANAGEMENT

### Georgia Supplement, August 2000

This section covers the state requirements for POL Management and is intended to supplement the U.S. TEAM Guide. Refer to the U.S. TEAM Guide and the DOD Component Supplements for Federal, DOD, and service-specific requirements.

40 CFR 279 (1997), Recycled Used Oil Management Standards, has been incorporated by reference by the Rules of the Georgia Department of Natural Resources (RGDNR), Division 3, Environmental Protection (Ga. Code 391-3-11-.17).

### PETROLEUM, OIL, AND LUBRICANT (POL) MANAGEMENT GUIDANCE FOR GEORGIA CHECKLIST USERS

### REFER TO CHECKLIST ITEMS:

Missing Checklist Items PO.2.1.GA.

Service Stations/Vehicle Maintenance PO.45.1.GA. through PO.45.6.GA.

| overgan supplement   |  |  |
|--|--|--|
| REGULATORY   | REVIEWER CHECKS:   |  |
| REQUIREMENTS:  | August 2000  |  |
| PO.2.<br>MISSING CHECKLIST<br>ITEMS  |  |  |
| PO.2.1.GA. Federal facilities are required to comply with all applicable state regulatory requirements not contained in this checklist (a finding under this checklist item will have the citation of the applied regulation as a basis of finding). | Determine whether any new regulations have been issued since the finalization of the manual.  Determine whether the Federal facility has activities or facilities that are regulated but not addressed in the checklists.  Verify that the Federal facility is in compliance with all applicable and newly issued regulations. |  |

| Georgia Supplement   |   |  |
|--|---|--|
| REGULATORY   | REVIEWER CHECKS:  |  |
| REQUIREMENTS:  | August 2000   |  |
| PO.45.<br>SERVICE STATIONS/<br>VEHICLE<br>MAINTENANCE  |   |  |
| PO.45.1.GA. Leaking or condemned storage tank  | Verify that flammable or combustible liquids are not introduced into any leaking, condemned, or unapproved storage tank or container.   |  |
| standards must be met for tanks that store flammable or combustible liquids (Ga. Code 120-3-1107(2)(j)).   | Verify that flammable or combustible liquids are immediately removed from any leaking or condemned storage tank.  |  |
| 120-3-110/(2)(j)).   | Verify that condemned or red tagged systems are not restored to service without proper corrective actions and the approval of the appropriate authority.  |  |
|  | Verify that systems that are changed from gasoline to diesel or home heating fuel, etc., are purged to avoid cross contamination and the appropriate authority is notified.                         |  |
| PO.45.2.GA. Self-service stations must meet specific permit conditions (Ga. Code 120-3-1104(1), (2)(c), and (4)).                                  | Verify that self-service stations have a valid self-service permit issued by the State Fire Marshal.  Verify that plan approval is obtained prior to the construction of a self-service operation.  |  |
| (1)).  | Verify that a self-service permit is conspicuously posted on the premises.  |  |
| PO.45.3.GA. Self-service operations that dispense Class I motor fuels must meet specific safety standards (Ga. Code 120-3-1107(2)(a) through (f)). | (NOTE: Ga. Code 120-3-1107 contains modifications, additions, and deletions to NFPA Number 30, 1990, Flammable and Combustible Liquids Code.)   |  |
|  | Verify that self-service operations that dispense Class I motor fuels are kept clean, neat, and free from rubbish and trash.  |  |
|  | Verify that combustible materials other than required stock and supplies are not accumulated in storerooms or other areas in or on the premises.  |  |
|  | Verify that a qualified attendant, at least 18 yr of age, meets the following criteria:   |  |
|  | <ul> <li>experienced with and physically able to carefully and capably perform the required duties</li> <li>not addicted to the use or under the influence of intoxicants, narcotics, or</li> </ul> |  |
|  | controlled substances, other than prescription drugs - familiar with all applicable state laws and regulations.   |  |

| Georgia Supplement   |   |  |
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| REGULATORY<br>REQUIREMENTS:  | REVIEWER CHECKS:<br>August 2000   |  |
|  | Verify that while Class I liquids are being dispensed, the attendant is not assigned to perform other duties that might distract or prevent the attendant from properly supervising the dispensing.   |  |
|  | Verify that only those dispensers that are designed, or modified by approved means, and approved for self-service dispensing are used for the operations.   |  |
|  | Verify that dispensers are not left in a condition that would permit delivery of Class I liquids without the knowledge of the attendant.  |  |
|  | Verify that the attendant takes positive action immediately prior to each separate use of the dispenser by a customer.  |  |
|  | Verify that appropriate signs indicating self-service operations are clearly posted and that self-service and full-service areas are clearly identified.  |  |
| PO.45.4.GA. Dispensing facility with key or card controlled self-service operations must meet specific standards (Ga. Code 120-3-1107(2)(g)).          | Verify that the dispensing facility has a key or card controlled self-service operation.  Verify that the dispensing facility meets the following criteria in lieu of a qualified attendant when the service station is not open to the public:  - all dispensers are key or card controlled - all key or card holders are fully trained in the safety operations and meet the requirements of a qualified attendant - a fire extinguisher is located within 100 ft of the dispenser - each location has an approved manual fire alarm system such as a pull station, a 911 system, or a similar emergency alarm system within 100 ft of the dispenser(s) that will signal the local fire department - each location has a public telephone within 100 ft of the dispenser(s) - each location has emergency phone numbers and contact points that are clearly visible to the user - each facility has a valid self-service permit posted. |  |
| PO.45.5.GA. Dispensing facilities that dispense Class I liquids must meet specific operator dispensing standards (Ga. Code 120-3-1107(2) (h) and (i)). | Verify that dispensing facilities that are not permitted for self-service operations, do not allow any person other than authorized operators and employees to use or operate any motor fuel dispensing equipment or other Class I liquids dispensing equipment at any service station open or accessible to the public.  Verify that all motor fuel or Class I liquid dispensing equipment operators meet the following standards:   |  |
|  | are physically and mentally capable and qualified to operate the dispensing equipment   |  |

| Georgia Supplement  |  |  |
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| REGULATORY REVIEWER CHECKS:   |  |  |
| August 2000   |  |  |
| - are not under the influence of intoxicants, narcotics, or other dangerous drugs while operating the equipment.  |  |  |
| Verify that service stations that are open or accessible to the public additionally do not permit persons under the age of 16 to dispense motor fuel or Class I liquids.  |  |  |
| Verify that an appropriate warning sign is conspicuously posted in the dispensing area that incorporates the following or equivalent warning: "WARNING - It is unlawful for any person under the age of 16 to dispense flammable liquids or operate dispensing equipment. All dispensing shall be supervised by a qualified attendant who shall be at least 18 yr old."   |  |  |
| Verify that service stations open to the public do not use portable aboveground skid tanks with more than a 60-gal capacity for Class I liquids or a 120-gal capacity for Class II or higher liquids.  Verify that service stations open to the public that store Class II and Class III liquids such as kerosene and fuel oil in aboveground tanks meet the following standards:  - the tank's aggregate capacity does not exceed 560 gal - plans are approved prior to installation of the tank(s). |  |  |
|   |  |  |

#### **SECTION 9**

#### SOLID WASTE MANAGEMENT

### Georgia Supplement, August 2000

This section covers the state requirements for Solid Waste Management and is intended to supplement the U.S. TEAM Guide. Refer to the U.S. TEAM Guide and the DOD Component Supplements for Federal, DOD, and service-specific requirements.

The Rules of the State of Georgia (RSG) Department of Natural Resources, Environmental Protection Division, Chapter 391-3-4, Solid Waste Management (RSG 391-3-4) incorporate by reference the following Federal regulations:

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40 CFR 258, Subpart F, Section 258.60, regarding closure criteria (RSG 391-3-4-.11(1)) 40 CFR 258, Subpart F, Section 258.61, regarding postclosure care (RSG 391-3-4-.12(1)).
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### **Definitions**

- Active Life the period of operation beginning with the initial receipt of solid waste and ending at completion of
  closure activities (RSG 391-3-4-.01).
- Active Portion that part of a solid waste handling facility or landfill unit that has received or is receiving wastes and that has not been closed (RSG 391-3-4-.01).
- Air Curtain Destructor a forced air pit thermal treatment technology for the burning of wood wastes (RSG 391-3-4-.08(2)).
- Aquifer a geological formation, group of formations, or portion of a formation capable of yielding significant quantities of groundwater to wells or springs (RSG 391-3-4-.01).
- Affected County in addition to the county in which a facility is or is proposed to be located, each county contiguous to the host county and each county and municipality within a county that has a written agreement with the facility to dispose of solid waste (RSG 391-3-4-.01).
- Asbestos-Containing Waste any solid waste containing more than 1 percent, by weight, of naturally occurring hydrated mineral silicates separable into commercially used fibers, specifically the asbestiform varieties of serpentine, chrysotile, cummingtonite-grunerite, amosite, riebeckite, crocidolite, anthophyllite, tremolite, and actinolite, using the method specified in Appendix A, Subpart F, 40 CFR 763, Section 1 (RSG 391-3-4-.01).
- Baling a volume reduction technique whereby solid waste is compressed into bales (RSG 391-3-4-.01).
- *Biomedical Waste* the following definitions apply: (RSG 391-3-4-.15(2)):
  - 1. any solid waste that contains pathological waste, biological waste, cultures, and stocks of infectious agents and associated biologicals, contaminated animal carcasses (body parts, their bedding, and other wastes from such animals), chemotherapy waste, discarded medical equipment and parts, not including expendable supplies and materials, that have not been decontaminated, as further defined in 391-3-4-.15 (RSG 391-3-4-.01).
  - 2. means and includes the following:
    - a. pathological waste, which means all recognizable human tissues and body parts except teeth that are removed during surgery, obstetrical procedures, autopsy, and laboratory procedures

- b. biological waste, which means blood and blood products, exudates, secretions, suctionings, and other body fluids that contain free liquids and cannot be or are not directly discarded into a municipal sewer system
- c. cultures and stocks of infectious agents and associated biologicals including cultures from medical and pathological laboratories, cultures and stocks of infectious agents from research and industrial laboratories, wastes from the production of biologicals, discarded live and attenuated vaccines, and culture dishes and devices used to transfer, inoculate, and mix cultures
- d. contaminated animal carcasses, body parts, their bedding, and other wastes from such animals that are infected with or have been exposed to infectious agents, capable of causing disease in man
- e. sharps, which means any discarded article that may cause punctures or cuts. Such waste includes, but is not limited to, items such as needles, IV tubing and syringes with needles attached, and scalpel blades
- f. chemotherapy waste, which means any disposable material that has come in contact with cytotoxic/antineoplastic agents (agents toxic to cells) and/or antineoplastic agents (agents that inhibit or prevent the growth and spread of tumors or malignant cells) during the preparation, handling, and administration of such agents. Such waste includes, but is not limited to, masks, gloves, gowns, empty IV tubing bags and vials, and other contaminated materials. The above waste must first be classified as empty, which means such quantity that it is not subject to other Federal or state waste management regulations prior to being handled as biomedical waste
- g. discarded medical equipment and parts, excluding expendable supplies and materials included in paragraphs (a) through (f) of this Rule, that have not been decontaminated, and that were in contact with infectious agents.
- *Boiler* a device as defined in Chapter 391-3-11, the Rules for Hazardous Waste Management (RSG 391-3-4-.01).
- *Certificate* a document issued by a college or university of the University System of Georgia or other organization approved by the Director, stating that the operator has met the requirements of the Board for the specified operator classification of the certification program (RSG 391-3-4-.01).
- *Closure* a procedure approved by the Division that provides for the cessation of waste receipt at a solid waste disposal site and for the securing of the site in preparation for postclosure (RSG 391-3-4-.01).
- *Collector* the person or persons as defined herein who, under agreements, verbal or written, with or without compensation does the work of collecting and/or transporting solid wastes, from industries, offices, retail outlets, businesses, institutions, and/or similar locations, or from residential dwellings, provided, however, that this definition shall not include an individual collecting and/or transporting waste from his own single family dwelling unit (RSG 391-3-4-.01).
- Commercial Biomedical Waste Treatment Facility a facility that accepts over 25 percent of its biomedical waste from other, offsite facilities, that are not owned by the facility owning the treatment or disposal facility, generally for a fee (RSG 391-3-4-.15(6)(e)).
- *Commercial Solid Waste* all types of solid waste generated by stores, offices, restaurants, warehouses, and other nonmanufacturing activities, excluding residential and industrial wastes (RSG 391-3-4-.01).
- Composite Liner a system consisting of two components; the upper component must consist of a minimum 30-mil flexible membrane liner (FML), and the lower component must consist of at least a 2-ft layer of compacted soil with a hydraulic conductivity of no more than 1 x 10<sup>-7</sup> cm/s. FML components consisting of High Density Polyethylene (HDPE) shall be at least 60-mil thick. The FML component must be installed in direct and uniform contact with the compacted soil component (RSG 391-3-4-.07(1)(d)(3)).
- Composting the controlled biological decomposition of organic matter into a stable, odor free humus (RSG 391-3-4-.01).

- Construction/Demolition Waste waste building materials and rubble resulting from construction, remodeling, repair, and demolition operations on pavements, houses, commercial buildings, and other structures. Such wastes include, but are not limited to, asbestos-containing waste, wood, bricks, metal, concrete, wall board, paper, cardboard, inert waste landfill material, and other nonputrescible wastes that have a low potential for groundwater contamination (RSG 391-3-4-.01).
- *Detected* statistically significant evidence of contamination has been determined to exist by using methods specified in 391-3-4-.14 (RSG 391-3-4-.01).
- *Director* the Director of the Environmental Protection Division of the Department of Natural Resources (RSG 391-3-4-.01).
- *Disease Vectors* any rodents, flies, mosquitoes, or other animals, including insects, capable of transmitting disease to humans (RSG 391-3-4-.07(3)(f)(2)).
- *Disposal Facility* any facility or location where the final disposition of solid waste occurs and includes, but is not limited to, landfilling and solid waste thermal treatment technology facilities (RSG 391-3-4-.01).
- Division the Environmental Protection Division of the Department of Natural Resources (RSG 391-3-4-.01).
- End User the last person who uses the scrap tires, chips, crumb rubber, or similar materials to make a product with economic value or in the case of energy recovery, the person who utilizes the heat content or other forms of energy from the incineration or pyrolysis of waste tires, chips, or similar materials (RSG 391-3-4-.19(2)).
- Existing Municipal Solid Waste Landfill (MSWLF) or Landfill Unit means the following: (RSG 391-3-4-.01)
  - 1. any municipal solid waste landfill or landfill unit that is receiving solid waste as of 9 October 1993, and meets either of the following two conditions:
    - a. disposed of over 100 tons per day (TPD) of solid waste between 9 October 1991 and 9 October 1992 (or other dates consistent with Federal standards and as may be approved by the Director)
    - b. is on the National Priorities List (NPL) as found in Appendix B to 40 CFR 300.
  - 2. any municipal solid waste landfill or landfill unit that is receiving solid waste as of 9 April 1994 and meets the following two conditions:
    - a. disposed of 100 tons or less per day of solid waste between 9 October 1991 and 9 October 1992, and disposes of no more than an average of 100 TPD of solid waste each month between 9 October 1993 and 9 April 1994 (or other dates consistent with Federal standards and as may be approved by the Director)
    - b. is not on the NPL, as found in Appendix B to 40 CFR 300.
  - 3. waste placement in existing units must be consistent with past operating practices or modified practices to ensure good management.
- Gas Condensate the liquid generated as a result of gas recovery process(es) at the landfill unit (RSG 391-3-4-.04(9)(c)(2)).
- Generator any person in Georgia or in any other state who creates solid waste (RSG 391-3-4-.01).
- *Garbage* food waste including waste accumulations of animal or vegetable matter used or intended for use as food, or that attends the preparation, use, cooking, dealing in or storing of meat, fish, fowl, fruit or vegetables (RSG 391-3-4-.01).
- *Groundwater* water below the land surface in a zone of saturation (RSG 391-3-4-.01).
- *Hazardous Waste* any solid waste which has been defined as a hazardous waste in regulations promulgated by the Board of Natural Resources, Chapter 391-3-11 (RSG 391-3-4-.01).

- *Household Waste* any solid waste (including garbage, trash, and sanitary waste in septic tanks) derived from households (including single and multiple residences, hotels and motels, bunkhouses, ranger stations, crew quarters, campgrounds, picnic grounds, and day-use recreation areas (RSG 391-3-4-.01).
- *Host Local Government* the host county or other local governmental jurisdiction within whose boundaries a municipal solid waste disposal facility is located (RSG 391-3-4-.01).
- *Industrial Furnace* a device as defined in Chapter 391-3-11, the Rules for Hazardous Waste Management (RSG 391-3-4-.01).
- Industrial Waste solid waste generated by manufacturing or industrial processes that is not a hazardous waste regulated under the Hazardous Waste Management Act and regulations promulgated by the Board of Natural Resources, Chapter 391-3-11. Such waste includes, but is not limited to, wastes resulting from the following manufacturing processes: electric power generation; fertilizer/agricultural chemicals; food and related products/byproducts; inorganic chemicals; iron and steel manufacturing; leather and leather products; nonferrous metals manufacturing/foundries; organic chemicals; plastics and resins manufacturing; pulp and paper industry; rubber and miscellaneous plastic products; stone, glass, clay, and concrete products; textile manufacturing; transportation equipment; and water treatment. This term does not include mining waste or oil or gas waste (RSG 391-3-4-.01).
- *Inert Waste Landfill* a disposal facility accepting only wastes that will not or are not likely to cause production of leachate of environmental concern. Such wastes are limited to earth and earth-like products, concrete, cured asphalt, rock, bricks, yard trimmings, stumps, limbs, and leaves. This definition excludes industrial and demolition waste not specifically listed above (RSG 391-3-4-.01).
- Landfill Unit an area of land on which or an excavation in which solid waste is placed for permanent disposal and that is not a land application unit, surface impoundment, injection well, or compost pile. Permanent disposal requires the placement of daily, intermediate, and/or final earth, synthetic, or a combination of earth and synthetic cover over the solid waste (RSG 391-3-4-.01).
- Lateral Expansion a horizontal expansion of the waste boundaries of an existing MSWLF unit or landfill unit (RSG 391-3-4-.01).
- *Leachate* a liquid that has passed through or emerged from solid waste and contains soluble, suspended, or miscible materials removed from such wastes (RSG 391-3-4-.01).
- Leachate Collection System a system at a landfill for collection of the leachate that may percolate through the waste and into the soils surrounding the landfill (RSG 391-3-4-.01).
- *Liner* a continuous layer of natural or manmade materials, beneath or on the sides of a disposal site or disposal site cell that restricts the downward or lateral escape of solid waste, solid waste constituents, or leachate (RSG 391-3-4-.01).
- *Liquid Waste* any waste material that is determined to contain "free liquids" as defined by Method 9095 (Paint Filter Liquids Test), as described in "Test Methods for the Evaluation of Solid Wastes, Physical/ Chemical Methods" (EPA Pub. No. SW-846) (RSG 391-3-4-.01 and 391-3-4-.04(9)(c)(1)).
- Lower Explosive Limit the lowest percent by volume of a mixture of explosive gases in air that will propagate a flame at 25 °C and atmospheric pressure (RSG 391-3-4-.07(3)(h)(4)).
- *Manifest* a form or document used for identifying the quantity and composition and the origin, routing, and destination of scrap tires during transportation from the point of generation, through any intermediate points, to an end user, processor, or disposer approved by the Division (RSG 391-3-4-.19(2)).

- Materials Recovery Facility a solid waste handling facility that provides for the extraction from solid waste of
  recoverable materials, materials suitable for use as a fuel or soil amendment, or any combination of such
  materials (RSG 391-3-4-.01).
- *Mixed Tires* a heterogeneous group of tires consisting of "used," "retreadable casings," and "scrap tires" (RSG 391-3-4-.19(2)).
- Monofill a method of solid waste disposal that involves the landfilling of one waste type or wastes having very similar characteristics in a segregated trench or area that is physically separated from dissimilar or incompatible waste (RSG 391-3-4-.01).
- *Municipal Solid Waste* any solid waste derived from households, including garbage, trash, and sanitary waste in septic tanks and means solid waste from single-family and multifamily residences, hotels, and motels, bunkhouses, campgrounds, picnic grounds, and day use recreation areas. The term includes yard trimmings and commercial solid waste, but does not include solid waste from mining, agricultural, or silvicultural operations or industrial processes or operations (RSG 391-3-4-.01).
- Municipal Solid Waste Landfill (MSWLF) Unit a discrete area of land or an excavation that receives household waste and that is not a land application unit, surface impoundment, injection well, or waste pile, as those terms are defined under 40 CFR 257.2. A MSWLF unit also may receive other types of solid waste, such as commercial solid waste, nonhazardous sludge, small quantity generator waste, and industrial solid waste. Such a landfill may be publicly or privately owned. A MSWLF unit may be a new MSWLF unit, an existing MSWLF unit or a lateral expansion (RSG 391-3-4-.01).
- Municipal Solid Waste Disposal Facility any facility or location where the final deposition of any amount of
  municipal solid waste occurs, whether or not mixed with or including commercial or industrial solid waste, and
  includes, but is not limited to, municipal solid waste landfills and solid waste thermal treatment technology
  facilities (RSG 391-3-4-.01).
- *Municipal Solid Waste Disposal Facility Operator* the operator certified in accordance with the 391-3-4-.18 and stationed on the site who is in responsible charge of and has direct supervision of the daily field operations of a municipal solid waste disposal facility to ensure that the facility operates in compliance with the permit (RSG 391-3-4-.01).
- Municipal Solid Waste Landfill a disposal facility where any amount of municipal solid waste, whether or not
  mixed with or including commercial waste, industrial waste, nonhazardous sludges, or small quantity generator
  hazardous wastes, is disposed of by means of placing an approved cover thereon (RSG 391-3-4-.01).
- New MSWLF Unit any municipal solid waste landfill unit that has not received waste prior to 9 October 1993 (RSG 391-3-4-.01).
- Onsite Waste Processing or Thermal Treatment Facility a facility that processes or thermally treats, no less than 75 percent, by weight, solid waste generated at the permit-by-rule facility location or facilities owned by the same person who owns the property containing the permit-by-rule facility. Onsite facilities may include fixed or mobile facilities either owned or under contract with the solid waste generator of 75 percent of the solid waste so long as the solid waste generator maintains legal control of the solid waste while at the permit-by-rule facility (RSG 391-3-4-.06(3)(d)(1)).
- *Open Burning* the combustion of solid waste without: (RSG 391-3-4-.01)
  - 1. control of combustion air to maintain adequate temperature for efficient combustion
  - 2. containment of the combustion reaction in an enclosed device to provide sufficient residence time and mixing for complete combustion
  - 3. control of the emission of the combustion products.

- *Open Dump* a disposal facility at which solid waste from one or more sources is left to decompose, burn, or to otherwise create a threat to human health or the environment (RSG 391-3-4-.01).
- Operating Records written records including, but not limited to, permit applications, monitoring reports, inspection reports, and other demonstrations of compliance with this Chapter, which records are kept on file at the facility or at an alternative location as approved by the Division (RSG 391-3-4-.01).
- *Operator* the person(s) responsible for the overall operation of a facility or part of a facility (RSG 391-3-4-.01).
- *Owner* the person(s) who owns a facility or part of a facility (RSG 391-3-4-.01).
- *Person* the State of Georgia or any other state or any agency or institution thereof, and any municipality, county, political subdivision, public or private corporation, solid waste authority, special district empowered to engage in solid waste management activities, individual, partnership, association, or other entity in Georgia or any other state. This term also includes any officer or governing or managing body of any municipality, political subdivision, solid waste authority, special district empowered to engage in solid waste activities, or public or private corporation in Georgia or any other state. This term also includes employees, departments, and agencies of the Federal government (RSG 391-3-4-.01).
- *Postclosure* a procedure approved by the Division to provide for long-term financial assurance, monitoring, and maintenance of a solid waste disposal facility to protect human health and the environment (RSG 391-3-4-.01).
- Private Industry Solid Waste Disposal Facility a disposal facility that is operated exclusively by and for a private solid waste generator for the purpose of accepting solid waste generated exclusively by said private solid waste generator (RSG 391-3-4-.01).
- *Processing Operation* any method, system, or other treatment designed to change the physical form or chemical content of solid waste and includes all aspects of its management (administration, personnel, land, equipment, buildings, and other elements) (RSG 391-3-4-.01).
- Putrescible Wastes wastes that are capable of being quickly decomposed by microorganisms. Examples of
  putrescible wastes include but are not necessarily limited to kitchen wastes, animal manure, offal, hatchery and
  poultry processing plant wastes, dead animals, garbage, and wastes that are contaminated by such wastes (RSG
  391-3-4-.01).
- *Run-Off* any rainwater, leachate, or other liquid that drains over land from any part of a facility (RSG 391-3-4-.01).
- *Run-On* any rainwater, leachate, or other liquid that drains over land onto any part of a facility (RSG 391-3-4-.01).
- Recovered Materials those materials that have known use, reuse, or recycling potential; can be feasibly used, reused, or recycled; and have been diverted or removed from the solid waste stream for sale, use, reuse, or recycling, whether or not requiring subsequent separation and processing (RSG 391-3-4-.01).
- Recovered Materials Processing Facility a facility engaged solely in the storage, processing, and resale or reuse of recovered materials. Such term shall not include a solid waste handling facility; provided, however, any solid waste generated by such facility shall be subject to all applicable laws and regulations relating to such solid waste (RSG 391-3-4-.01).

- Recycling any process by which materials that would otherwise become solid waste are collected, separated, or
  processed and reused or returned to use in the form of raw materials or products (RSG 391-3-4-.01).
- Regional Landfill or Regional Solid Waste Disposal Facility a facility owned by a county, municipality, or special district empowered to engage in solid waste management activities, or any combination thereof, that serves two or more or any combination of counties, municipalities, or special solid waste districts (RSG 391-3-4-.01).
- Relevant Point of Compliance a vertical surface located at the hydraulically downgradient limit of the waste management unit boundary that extends down into the uppermost aquifer underlying the facility. This point will be specified by the Director and shall be no more than 150 m from the waste management unit boundary and shall be located on land owned by the owner of the landfill unit. The downgradient monitoring system must be installed at this point, and monitoring conducted to ensure that the concentration values listed in Table 1 of 391-3-4-.07 will not be exceeded in the uppermost aquifer (RSG 391-3-4-.01).
- Retreadable Casing a tire that has the quality and soundness of the tire structure to accept a retread or repair and provide additional service and is destined for retreading (RSG 391-3-4-.19(2)).
- Retail Tire Dealer a person actively engaged in the business of selling new replacement tires. Retail tire dealers may also be, but are not limited to, manufacturers, wholesalers, and others who sell new replacement tires to the ultimate consumer (RSG 391-3-4-.19(2)).
- Saturated Zone that part of the earth's crust in which all voids are filled with water (RSG 391-3-4-.01).
- Scavenge the unpermitted removal of solid waste from a solid waste handling facility (RSG 391-3-4-.01).
- *Scrap Tire* a tire that is no longer suitable for its original intended purpose because of wear, damage, or defect (RSG 391-3-4-.19(2)).
- *Scrap Tire Carrier* any person engaged in picking up or transporting scrap tires not otherwise exempted in this Rule for the purpose of removal to a scrap tire processor, end user, or disposal facility (RSG 391-3-4-.19(2)).
- *Scrap Tire Generator* any person who generates scrap tires. Generators may include, but are not limited to, retail tire dealers, retreaders, scrap tire processors, automobile dealers, private company vehicle maintenance shops, garages, service stations, and city, county, and state governments (RSG 391-3-4-.19(2)).
- Scrap Tire Processing any method, system, or other treatment designed to change the physical form, size, or chemical content of scrap tires and includes all aspects of its management (administration, personnel, land, equipment, buildings, and other elements). Processing includes, but is not limited to, shredding, baling, recycling, or sorting of scrap tires (RSG 391-3-4-.19(2)).
- Scrap Tire Processor any person who is approved by the Division to receive scrap tires from scrap tire generators or scrap tire carriers for the purpose of scrap tire processing (RSG 391-3-4-.19(2)).
- *Scrap Tire Sorter* any person other than the original scrap tire generator, who handles mixed tires by separating used tires and retreadable casings from scrap tires (RSG 391-3-4-.19(2)).
- *Shredding* the process by which solid waste is cut or torn into small pieces for final disposal of further processing (RSG 391-3-4-.01).
- Significant Groundwater Recharge Areas any area as designated on Hydrologic Atlas 18 Most Significant Ground-Water Recharge Areas of Georgia, 1989, as published by the Georgia Geologic Survey, Environmental Protection Division, Georgia Department of Natural Resources, unless an applicant for a solid waste handling

- permit or other interested party can demonstrate to the satisfaction of the Director that an area designated on Hydrologic Atlas 18 is or is not, in fact, a significant groundwater recharge area (RSG 391-3-4-.01).
- *Sludge* any solid, semisolid, or liquid waste generated from a municipal, commercial, or industrial wastewater treatment plant, water supply treatment plant, or air pollution control facility exclusive of the treated effluent from a wastewater treatment plant (RSG 391-3-4-.01).
- Solid Waste any garbage or refuse; sludge from a wastewater treatment plant, water supply treatment plant, or air pollution control facility; and other discarded material including solid, liquid, semisolid, or contained gaseous material resulting from industrial, commercial, mining, and agricultural operations and from community activities, but does not include recovered materials; solid or dissolved materials in irrigation return flows or industrial discharges that are point sources subject to permit under 33 U.S.C. Section 1342; or source, special nuclear, or byproduct material as defined by the Federal Atomic Energy Act of 1954, as amended (68 Stat. 923) (RSG 391-3-4-.01).
- *Solid Waste Handling* the storage, collection, transportation, treatment, utilization, processing, or disposal of solid waste, or any combination of such activities (RSG 391-3-4-.01).
- Solid Waste Handling Facility any facility, the primary purpose of which is the storage, collection, transportation, treatment, utilization, processing, or disposal, or any combination thereof, of solid waste (RSG 391-3-4-.01).
- *Solid Waste Handling Permit* written authorization granted to a person by the Director to engage in solid waste handling (RSG 391-3-4-.01).
- *Solid Waste Management Act* or *the Act* wherever referred to in these Rules, means the Georgia Comprehensive Solid Waste Management Act, OCGA 12-8-20, et seq (RSG 391-3-4-.01).
- Solid Waste Thermal Treatment Technology any solid waste handling facility, the purpose of which is to reduce the amount of solid waste to be disposed of through a process of combustion, with or without the process of waste to energy (RSG 391-3-4-.01).
- *Tire* a continuous solid or pneumatic rubber covering designed for encircling the wheel of a motor vehicle and which is neither attached to the motor vehicle nor a part of the motor vehicle as original equipment (RSG 391-3-4-.01).
- *Tire Handling Business* persons whose income is at least partially derived from the sale, processing, transporting, or disposal of tires (RSG 391-3-4-.19(5)(g)(6)(i)).
- *Tire Retreader* any person actively engaged in the business of retreading scrap tires by scarifying the surface to remove the old surface tread and attaching a new tread to make a usable tire (RSG 391-3-4-.19(2)).
- *Transfer Station* a facility used to transfer solid waste from one transportation vehicle to another for transportation to a disposal facility or processing operation (RSG 391-3-4-.01).
- *Ultimate Consumer* the last person who receives and uses a new replacement tire. Ultimate consumers may be, but are not limited to: (RSG 391-3-4-.19(2))
  - 1. an individual consumer
  - 2. a leasing company purchasing tires from retail dealers for their vehicle fleet
  - 3. a private company purchasing tires from retail dealers for their vehicle fleet
  - 4. a governmental agency purchasing tires from retail dealers for their vehicle fleet.
- Used Tire a tire that has a minimum of 2/32 in. of road tread and that is still suitable for its original purpose. It must be inventoried and marketed in substantially the same fashion as a new tire, the dealer must be able to

provide satisfactory evidence to the Division that a market exists, and that the used tires are, in fact, being marketed (RSG 391-3-4-.19(2)).

- *Uppermost Aquifer* the geologic formation nearest the natural ground surface that is an aquifer, as well as lower aquifers that are hydraulically interconnected with this aquifer within the solid waste handling facility's property boundary (RSG 391-3-4-.01).
- *Vertical Expansion* the expansion of a landfill beyond the approved maximum final elevations and within the approved waste management boundaries of the existing permit (RSG 391-3-4-.01).
- Waste Management Unit Boundary a vertical surface located at the hydraulically downgradient limit of the unit. This vertical surface extends down into the uppermost aquifer (RSG 391-3-4-.01).
- Waste-to-Energy Facility a solid waste handling facility that provides for the extraction and utilization of energy from municipal solid waste through a process of combustion (RSG 391-3-4-.01).
- *Yard Trimmings* leaves, brush, grass, clippings, shrub and tree prunings, discarded Christmas trees, nursery and greenhouse vegetative residuals, and vegetative matter resulting from landscaping development and maintenance other than mining, agricultural, and silvicultural operations (RSG 391-3-4-.01).

### SOLID WASTE MANAGEMENT GUIDANCE FOR GEORGIA CHECKLIST USERS

REFER TO CHECKLIST ITEMS:

#### Missing Checklist Items SO.2.1.GA. General SO.5.1.GA. and SO.5.2.GA. Permits/Notifications/Exemptions SO.6.1.GA. through SO.6.4.GA. Operations SO.8.1.GA. and SO.8.2.GA. Specific Wastes SO.9.1.GA. and SO.9.2.GA. Transfer Facilities SO.15.1.GA. Municipal Solid Waste Landfills **Location Restrictions** SO.55.1.GA. Design Criteria SO.60.1.GA. Operating Criteria SO.65.1.GA. through SO.65.6.GA. **Emissions** SO.67.1 GA. through SO.67.4.GA. Groundwater Monitoring Criteria SO.70.1.GA. SO.85.1.GA. Documentation SO.90.1.GA. Thermal Processing Facilities Resource Recovery Facilities SO.95.1.GA. Medical Waste Generators

SO.105.1.GA. and SO.105.2.GA.

Containers/Labeling/Storage Areas SO.110.1.GA. Transportation SO.115.1.GA.

Treatment/Disposal SO.120.1.GA. and SO.120.2.GA. Landfills SO.135.1.GA. through SO.135.6.GA.

Construction/Demolition Landfills SO.140.1.GA.

Incinerators SO.145.1.GA. and SO.145.2.GA.

Industrial Waste Units SO.150.1.GA.

Waste Tires Facilities SO.160.1.GA. through SO.160.4.GA.

SO.165.1.GA. Yard Waste/Composting Other Treatment/Processing Units SO.175.1.GA.

SO.180.1.GA. and SO.180.2.GA. Closure of Solid Waste Facilities

| REGULATORY<br>REQUIREMENTS:  | REVIEWER CHECKS: August 2000   |
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| SO.2.<br>MISSING CHECKLIST<br>ITEMS  |  |
| SO.2.1.GA. Federal facilities are required to comply with all applicable state regulatory requirements not contained in this checklist (a finding under this checklist item will have the citation of the applied regulation as a basis of finding). | Determine whether any new regulations have been issued since the finalization of the manual.  Determine whether the Federal facility has activities or facilities that are regulated but not addressed in the checklists.  Verify that the Federal facility is in compliance with all applicable and newly issued regulations. |

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| REGULATORY  | REVIEWER CHECKS:   |  |
| REQUIREMENTS:   | August 2000 [Reorganized October 1999]   |  |
| SO.5.<br>GENERAL  |  |  |
| SO.5.1.GA. Solid waste handling must meet management requirements (RSG 391-3-404(1)) [Moved in structural reorganization of SO.5 October 1999]. | Verify that solid waste handling procedures are not:  - conducive to insect and rodent infestation or the harboring and feeding of wild dogs or other animals  - the cause of impaired environmental quality, including air quality and ground or surface water quality  - likely to create hazards to the public health, safety, or well-being. |  |
| SO.5.2.GA. Solid waste must not be burned or dumped (RSG 391-3-404(4)) [Moved in structural reorganization of SO.5 October 1999].               | Verify that there is no open burning of solid waste.  Verify that there is no open dumping of solid waste.   |  |

| Georgia Supplement  |   |  |
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| REGULATORY<br>REQUIREMENTS:   | REVIEWER CHECKS: August 2000 [Reorganized October 1999]   |  |
| SO.6. PERMITS/ NOTIFICATIONS/ EXEMPTIONS  | August 2000 [Reorganized October 1999]  |  |
| SO.6.1.GA. Solid waste handling facility construction and operation must be permitted by the Director (RSG 391-3-402(1), (4), and (5)) [Moved in structural reorganization of SO.5 October 1999].   | Verify that the solid waste handling facility has a construction permit issued by the Director.  Verify that the solid waste handling facility has an operating permit issued by the Director (unless operating under permit by rule).  Verify that modifications and transfers of permits are approved by the Director.  |  |
| SO.6.2.GA. Collection operations, transfer station operations, inert waste landfill operations, and waste processing and thermal treatment operations operating under permit by rule must meet notification requirements (RSG 391-3-406 (1) and (2)) [Moved in structural reorganization of SO.5 October 1999]. | Verify that collection operations, transfer station operations, inert waste landfill operations, and waste processing and thermal treatment operations that do not have a permit or exemption from these requirements notify the Director within 30 days of commencement of solid waste handling activities and meet all necessary operating requirements (see SO.10, SO.15, SO.90, and SO.135) for permit by rule. (NOTE: Failure to notify the Director of such activities is considered operating without a permit.).  |  |
| SO.6.3.GA. Solid waste collection operations must meet specific requirements in order to operate under permit-by-rule (RSG 391-3-406(1), (2), and (3)(a)) [Moved in structural reorganization of SO.5 October 1999].  | Verify that all vehicles and containers used to collect or transport solid waste or similar putrescible wastes, or mixtures containing putrescible wastes, are covered, substantially leakproof, durable, and easily cleanable.  Verify that all solid waste collection/transportation vehicles are cleaned frequently and are maintained in good repair.  Verify that littering and spillage of solid waste from containers and vehicles used for the collection and transportation of solid waste are avoided by careful handling and moving, and by covering when necessary to prevent blowing of material from the vehicle. |  |

| Georgia Supplement   |   |  |
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| REGULATORY<br>REQUIREMENTS:  | REVIEWER CHECKS: August 2000 [Reorganized October 1999]   |  |
| REQUIREMENTS:  | Verify that no regulated quantities of hazardous wastes are collected and transported.  |  |
|  | Verify that all local rules, regulations, and ordinances pertaining to the operation of solid waste collection systems are met.   |  |
|  | Verify that all wastewater from the cleaning of vehicles is handled in accordance with all applicable environmental laws and regulations.   |  |
|  | Verify that all collected solid waste is deposited in a permitted solid waste handling facility authorized to receive the applicable waste types.   |  |
| SO.6.4.GA. Municipal solid waste disposal facilities operated under a permit or permit by rule must meet reporting requirements (RSG 391-3-417(1) and (3)) | Verify that municipal solid waste disposal facilities operated under a permit or permit by rule file quarterly reports with the Director on the total amount, in tons, of solid waste disposed.  Verify that the remaining capacity of the facility, in cubic yards, is reported to the |  |
| [Moved in structural reorganization of SO.5 October 1999].   | Director annually on 1 July.  |  |

| REGULATORY<br>REQUIREMENTS:  | REVIEWER CHECKS: August 2000 [Reorganized October 1999]   |
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| SO.8<br>OPERATIONS   |   |
| SO.8.1.GA. Scavenging is not permitted at solid waste handling facilities (RSG 391-3-404(4)(a)) [Moved in structural reorganization of SO.5 October 1999].                       | Verify that there is no scavenging at any solid waste handling facility, disposal site, or processing operation.                                    |
| SO.8.2.GA. Municipal solid waste disposal facilities must meet operator certification requirements (RSG 391-3-418(1)) [Moved in structural reorganization of SO.5 October 1999]. | Verify that all operators of municipal solid waste landfills and solid waste thermal treatment technology facilities are certified by the Division. |

| REGULATORY   | REVIEWER CHECKS:  |
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| REQUIREMENTS:  | August 2000 [Reorganized October 1999]  |
| SO.9<br>SPECIFIC WASTES  |   |
| SO.9.1.GA. Roofing shingles containing asphalt must be disposed of in either a construction and demolition landfill or a municipal solid waste landfill (RSG 391-3-404(4)(d)) [Moved in structural reorganization of SO.5 October 1999]. | Verify that roofing shingles containing asphalt are disposed of in either a construction and demolition landfill or a municipal solid waste landfill.   |
| SO.9.2.GA. Specific wastes are prohibited from disposal at solid waste disposal facilities (RSG 391-3-404(6)) [Moved in structural reorganization of SO.5 October 1999].   | Verify that the following wastes are disposed of at a solid waste disposal facility:  - lead acid batteries - liquid waste (prohibited in landfills) - regulated quantities of hazardous wastes - radioactive wastes - PCB-containing waste - all other wastes that have been prohibited by the Division. |

| Georgia Supplement   |   |
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| REGULATORY<br>REQUIREMENTS:  | REVIEWER CHECKS:<br>August 2000   |
| SO.15.<br>TRANSFER FACILITIES  |   |
| SO.15.1.GA. Solid waste transfer stations operated under permit-by-rule must meet specific requirements (RSG 391-3-406(1), (2), and (3)(b)). | Verify that sewage solids and regulated quantities of hazardous wastes are excluded from the handling at the transfer station.  Verify that solid waste is confined to the transfer station interior, and not allowed to scatter outside the transfer station.  Verify that transfer station interior floors are free of accumulated waste and are clean and well drained.  Verify that dust, odors, and similar conditions resulting from transfer operations are controlled at all times.  Verify that rodents, insects, and other pests are controlled.  Verify that contaminated runoff from washwater is discharged to a wastewater treatment system and, before final release, is treated in a manner approved by the Division. |

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| REGULATORY   | REVIEWER CHECKS:   |
| REQUIREMENTS:  | August 2000  |
| MUNICIPAL SOLID<br>WASTE LANDFILLS   |  |
| SO.55.<br>LOCATION<br>RESTRICTIONS   |  |
| SO.55.1.GA. New MSWLFs must not be located within 2 mi of bombing ranges (RSG 391-3-405(1)(1)) [Revised September 1998]. | Verify that new MSWLF units are not located within 2 mi of a Federally restricted military air space which is used for a bombing range.  (NOTE: See SO.135.5.GA. for siting restrictions for all solid waste landfills.) |

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| REGULATORY   | REVIEWER CHECKS:  |
| REQUIREMENTS:  | August 2000   |
| MUNICIPAL SOLID<br>WASTE LANDFILLS   |   |
| SO.60.<br>DESIGN CRITERIA  |   |
| SO.60.1.GA. MSWLFs must be constructed to meet specific design requirements (RSG 391-3-407(1) and (2)).  | (NOTE: These requirements apply to all landfills and are repeated in SO.135.1.)  Verify that each landfill is designed by a professional engineer registered to practice in Georgia.  Verify that each MSWLF has been constructed according to the provisions of an approved design and operational plan and the conditions of a Solid Waste Handling Permit.  Verify that prior to being opened for operation, all MSWLF construction and modification projects are certified with the Division.  Verify that the MSWLF meets the operational and maintenance requirements of the design plan including, but not limited to, the requirements of the following categories, where applicable:  - buffer maintenance |
|  | <ul> <li>liners and leachate collection</li> <li>erosion and sedimentation control</li> <li>filling sequence, cover, final grading, and revegetation</li> <li>access roads and access control</li> <li>fire protection</li> <li>the Groundwater and Surface Water Monitoring Plan</li> <li>closure and postclosure care.</li> </ul>   |

| Georgia Supplement   |  |
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| REGULATORY   | REVIEWER CHECKS:   |
| REQUIREMENTS:  | August 2000  |
| MUNICIPAL SOLID<br>WASTE LANDFILLS   |  |
| SO.65.<br>OPERATING CRITERIA   |  |
| <b>SO.65.1.GA.</b> MSWLF operators must be certified (RSG 391-3-407(n)).   | Verify that the MSWLF has a certified operator who is present at all times during operation.   |
| 371-3- <del>4</del> 07(II)).   | Verify that the operator is trained in the operation of landfills and the implementation of the landfill's design and operation plans.   |
| SO.65.2.GA. MSWLF must meet general operational requirements (RSG 391-3-4- | (NOTE: These requirements apply to MSWLFs and to all landfills. They are repeated in SO.135.3.GA.)   |
| .07(3)(b), thought (d); (g), (k)   | Verify that solid waste is unloaded only at the working face of the operation.   |
| through (m); and (o) through (t)).   | Verify that a program is implemented for detecting and preventing the disposal of regulated quantities of hazardous wastes, PCB wastes, liquids, radioactive waste, lead acid batteries, and other wastes prohibited by the facility's permit. |
|  | Verify that the program to exclude prohibited wastes is part of the record and includes random inspections, records of inspections, personnel training, and notification of the Director if a prohibited waste is discovered at the facility.  |
|  | Verify that solid waste is spread in uniform layers and compacted to its smallest practical volume before being covered.   |
|  | Verify that a cover of at least 6 in. of clean earth is placed over all exposed solid waste by the operating day's end or more frequently if required by the Division.   |
|  | Verify that no solid waste is left uncovered for more than 24 h.   |
|  | Verify that intermediate cover is not less than 1 ft deep.   |
|  | Verify that all-weather access roads are provided to the working face and provisions are made for prompt equipment repair and replacement when needed.   |
|  | Verify that the landfill is operated to prevent air, land, or water pollution, as well as public health hazards.   |
|  | Verify that signs are posted at the entrance to landfills indicating the days and  |

| Georgia Supplement   |   |
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| REGULATORY<br>REQUIREMENTS:  | REVIEWER CHECKS: August 2000  |
|  | hours of operation.   |
|  | Verify that access is limited to authorized entrances that are closed when the site is not in operation.  |
|  | Verity that unauthorized vehicular traffic and illegal dumping of wastes is prohibited by using artificial barriers, natural barriers, or both, as appropriate to protect human health and the environment.   |
|  | Verify that open burning, scavenging, and the open dumping of wastes is prohibited.   |
|  | Verify that scattering of wastes by wind is controlled by fencing or other barriers and the entire site is inspected daily and all litter removed.  |
|  | Verify that suitable materials are provided to control fires (stockpiled soil is considered to be the most satisfactory fire fighting material).  |
|  | Verify that the disposal site is graded and drained to minimize runoff onto the landfill, drain water from the landfill surface, and prevent erosion.   |
|  | Verify that all erosion and sedimentation control measures or facilities are continuously maintained so as to be effective.   |
|  | Verify that the vegetation is established on disturbed exposed soil that will not be a part of the waste disposal area or that will remain exposed for more than 3 mo.  |
| SO.65.3.GA. [Moved September 1998].  | (NOTE: This checklist item moved to SO.135.6.GA.; September 1998. The regulation was revised to apply to all landfills, not just MSWLFs.)   |
| SO.65.4.GA. MSWLFs must meet specific methane monitoring requirements (RSG 391-3-407(3)(h)). | Verify that the operator ensures that the concentration of methane gas does not exceed 25 percent of the lower explosive limit for methane in facility structures, and that the concentration of methane gas does not exceed the lower explosive limit for methane at the facility property boundary.   |
|  | Verify that a routine methane monitoring program is implemented.  |
|  | Verify that, if methane gas levels exceed 25 percent of the lower explosive limit, the following steps are taken:   |
|  | <ul> <li>immediately ensure protection of human health and notify the Director</li> <li>within 7 days of detection, place in the operating record the methane gas levels detected and a description of the steps taken to protect human health</li> <li>within 60 days of detection, implement a remediation plan for the methane gas releases, place a copy of the plan in the operating record, and notify the</li> </ul> |

## COMPLIANCE CATEGORY: SOLID WASTE MANAGEMENT **Georgia Supplement** REGULATORY **REVIEWER CHECKS: REQUIREMENTS:** August 2000 Director that the plan has been implemented. (NOTE: For purposes of this section, lower explosive limit means the lowest percent by volume of a mixture of explosive gases in air that will propagate a flame at 25 °C and atmospheric pressure.) SO.65.5.GA. MSWLFs must Verify that a run-on control system is designed, constructed, and maintained to meet requirements for run-on prevent flow onto the active portion of the landfill during the peak discharge from a 25-yr storm and a runoff control system is designed, constructed, and maintained and run-off control and from the active portion of the landfill to collect and control at least the water protection of surface waters (RSG 391-3-4-.07(3)(i) and volume resulting from a 24-h, 25-yr storm. (j)). Verify that the landfill does not cause a discharge of pollutants or a discharge of a nonpoint source of pollution into waters of the state or the United States, including wetlands. SO.65.6.GA. MSWLFs must Verify that the MSWLF units do not violate any applicable requirements specific developed under a State Implementation Plan (SIP) approved or promulgated by operating requirements (RSG 391-3-4the USEPA. .07(3)(a), (e), and (f)). Verify that open burning of solid waste, except for the infrequent burning of agricultural wastes, silvicultural wastes, landclearing debris, diseased trees, or debris from emergency, is not allowed. Verify that the owner/operator of all MSWLF units covers disposed solid waste with 6 in. of earthen material at the end of each operating day, or at more frequent intervals if necessary, to control disease vectors, fires, odors, blowing litter, and scavenging. (NOTE: Alternative materials (such as foams or tarps) of an alternative thickness (other than at least 6 in. of earthen material) may be approved by the Director if the owner/operator demonstrates that the alternative material and thickness control disease vectors, fires, odors, blowing litter, and scavenging without presenting a threat to human health and the environment.) Verify that all MSWLF units prevent or control onsite populations of disease vectors using techniques appropriate for the protection of human health and environment.

| COMPLIANCE CATEGORY: SOLID WASTE MANAGEMENT Georgia Supplement   |  |
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| REGULATORY<br>REQUIREMENTS:  | REVIEWER CHECKS: August 2000   |
| MUNICIPAL SOLID<br>WASTE LANDFILLS   |  |
| SO.67.<br>EMISSIONS  | (NOTE: These provisions apply to each municipal solid waste landfill that commenced construction, reconstruction or modification before 30 May 1991 and has accepted waste at any time since 8 November 1987, or has additional design capacity available for future waste deposition. Physical or operational changes made to an existing municipal solid waste landfill solely to comply with this subsection are not considered construction, reconstruction, or modification and would not subject an existing municipal solid waste landfill to the requirements of 391-3-102(8)(b)72New Source Performance Standards for Municipal Solid Waste Landfills.) |
|  | (NOTE: Definitions of all terms used, but not defined, have the meaning given them in 40 CFR Part 60 Subpart WWW, as amended. Terms not defined have the meaning given them in the Federal Clean Air Act, the Georgia Air Quality Act, or 40 CFR Part 60 Subparts A and B.)  |
|  | (NOTE: 40 CFR Part 60 Subpart WWW, as amended, is incorporated by reference with the exceptions that are included in this checklist (RSG 391-3-102(ggg)(1) through (3)).)  |
|  | (NOTE: See the U.S. TEAM Guide SO.67 for Federal requirements.)  |
| SO.67.1.GA. MSWLFs with a design capacity of less than 2.5 million MG by mass or 2.5 million cubic meters by volume are required to meet additional requirements for the design plan (RSG 391-3-102(ggg)(3)(i)(I) and (II) [Added September 1997]. | (NOTE: The provisions of 40 CFR 60.752 (Standards for air emissions from municipal solid waste landfills) are applicable with the following additions.)  |
|  | Verify that, if any increase in the maximum design capacity of a landfill that is exempted from the provisions of 40 CFR 60.752(b) through 60.759 on the basis of the design capacity exemption, results in a revised maximum design capacity equal to or greater than 2.5 million megagrams or 2.5 million cubic meters, the owner/operator complies with the New Source Performance Standards for Municipal Solid Waste Landfills (RSG 391-3-102(8)(b)72).   |
|  | Verify that the collection and control system design plan includes any alternatives to the operational standards, test methods, procedures, compliance measures, monitoring, recordkeeping, or reporting provisions of 40 CFR 60.753 through 60.758 proposed by the owner or operator.   |
|  | Verify that, in addition, the collection and control design plan specifies:  |
|  | - the date by which contracts for control system/process modifications will be awarded, (no later than 20 mo after the date the NMOC emissions rate is first calculated to meet or exceed 50 megagrams per year)   |

### COMPLIANCE CATEGORY: SOLID WASTE MANAGEMENT Georgia Supplement REGULATORY **REVIEWER CHECKS: REQUIREMENTS:** August 2000 the date by which on-site construction or installation of the air pollution control devices(s) or process changes will begin (which shall be no later than 24 months after the date the NMOC emissions rate is first calculated to meet or exceed 50 megagrams per year) - the date by which the construction or installation of the air pollution control devices(s) or process changes will be complete. SO.67.2.GA. MSWLFs with (NOTE: The provisions of 40 CFR 60.757 apply as stated therein with the a design capacity of less than following additions.) 2.5 million MG by mass or 2.5 million cubic meters by Verify that the initial design capacity report is submitted by 1 October 1997. volume are required to meet Verify that the initial NMOC emission rate reports submitted by 1 October 1997 reporting requirements (RSG with subsequent NMOC emission rate reports submitted annually thereafter. 391-3-1-.02(ggg)(3)(vi) [Added September 1997]. (NOTE: The initial NMOC emission rate may be combined with the initial design capacity report.) SO.67.3.GA. [Deleted (NOTE: Regulation revised August 2000]. SO.67.4.GA. MSWLFs with Verify that the following Federal requirements are met: a design capacity of less than - operational standards for collection and control systems (the provisions of 2.5 million MG by mass or 40 CFR 60.753) 2.5 million cubic meters by - test methods and procedures (the provisions of 40 CFR 60.754 with the volume are required to meet specific Federal requirements exception of § 60.754(c) [comparison of estimated NMOC emission rate to (RSG 391-3-1-.02(ggg)(3)(ii) the PSD major source and significance levels], which does not apply) - compliance provisions (40 CFR 60.755) through (v), (vii) and (viii)) - monitoring of operations (40 CFR 60.756) [Added September 1997]. - recordkeeping requirements (40 CFR 60.758) - specifications for active collection systems (40 CFR 60.759).

| COMPLIANCE CATEGORY: SOLID WASTE MANAGEMENT Georgia Supplement                         |  |
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| REGULATORY<br>REQUIREMENTS:  | REVIEWER CHECKS: August 2000   |
| MUNICIPAL SOLID<br>WASTE LANDFILLS   |  |
| SO.70.<br>GROUNDWATER<br>MONITORING CRITERIA   |  |
| SO.70.1.GA. Groundwater monitoring at MSWLFs must meet specific requirements           | Verify that all water monitoring points are sampled in accordance with the approved Groundwater and Surface Water Monitoring Plan or with any directive issued by the Division.  |
| (RSG 391-3-407(3)(v); 391-3-414(1), (3), (5), (13), (14), (16), (18), (22), and (30)). | Verify that all existing MSWLF units that are required by the Division to install groundwater monitoring systems, do so within 270 days of being notified by the Division.   |
|  | Verify that all new MSWLF units have groundwater monitoring systems in place before waste is placed in the unit.   |
|  | Verify that once established at a MSWLF unit, groundwater monitoring is conducted throughout the active life and postclosure care period of that MSWLF unit.   |
|  | Verify that the groundwater monitoring program includes sampling and analytical methods that are appropriate for groundwater sampling and that accurately measure hazardous constituents and other monitoring parameters in groundwater samples.           |
|  | Verify that the sampling procedures and frequency are protective of human health and the environment.  |
|  | Verify that the operator establishes background groundwater quality in a hydraulically upgradient or background well for each of the monitoring parameters or constituents that applies to the MSWLF unit.   |
|  | Verify that the operator specifies in the operating record the statistical method to be used in evaluating groundwater monitoring data for each hazardous constituent.   |
|  | Verify that the monitoring frequency for all constituents is at least semiannual during the active life of the facility (including closure) and the postclosure care period.   |
|  | Verify that if one or more constituents are detected at statistically significant levels above the groundwater protection standard in any sampling event, the operator, within 14 days of the finding, places a notice in the operating record identifying |

| COMPLIANCE CATEGORY:<br>SOLID WASTE MANAGEMENT<br>Georgia Supplement |   |
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| REGULATORY<br>REQUIREMENTS:  | REVIEWER CHECKS: August 2000  |
|  | the constituents that have exceeded the groundwater protection standard and notifies the Director and all appropriate local government officials. |

| Georgia Supplement   |  |  |
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| REGULATORY   | REVIEWER CHECKS:   |  |
| REQUIREMENTS:  | August 2000  |  |
| MUNICIPAL SOLID<br>WASTE LANDFILLS   |  |  |
| SO.85.<br>DOCUMENTATION  |  |  |
| SO.85.1.GA. Recordkeeping requirements must be met for the operation of landfills (RSG 391-3-407(3)(u)). | Verify that the following records are retained near the facility in an operating record as the records become available:  - inspection records - training procedures - notification procedures - gas monitoring results from monitoring and any remediation plans - any MSWLF unit design documentation for placement of leachate or gas condensate - any demonstration, certification, finding, monitoring, testing, or analytical data - closure and postclosure care plans and any monitoring, testing, or analytical data.  Verify that the Director is notified when any of the above records are placed in the operating record. |  |

| Georgia Supplement   |  |
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| REGULATORY<br>REQUIREMENTS:  | REVIEWER CHECKS: August 2000   |
| SO.90.<br>THERMAL PROCESSING<br>FACILITIES   |  |
| <b>SO.90.1.GA.</b> Solid waste onsite processing and thermal treatment operations must meet specific requirements in order to operate under permitby-rule (RSG 391-3-406(1), | Verify that the Director was notified of the solid waste handling activities within 30 days of beginning operations.   |
|  | Verify that the onsite waste processing and thermal treatment technology facility is adequate in size and capacity to manage the projected volume of solid waste and residue generated.  |
| (2), and (3)(d)).  | Verify that the onsite thermal treatment technology facility is designed to meet the following requirements:   |
|  | <ul> <li>to expedite the routine sampling of bottom and fly ash</li> <li>the temperature and combustion time is sufficient to produce a satisfactory residue</li> <li>to be essentially free of odors and unstable organic matter.</li> </ul>  |
|  | Verify that the residue from the onsite thermal treatment technology facility is promptly deposited in a MSWLF having a liner and leachate collection system.  |
|  | Verify that the areas for storing wastes prior to processing are clearly defined and the maximum capacity specified, and no waste is stored in excess of the designated capacity.  |
|  | Verify that treated waste from onsite processing facilities and any material not sold or used, reused, or recycled is disposed of in a permitted disposal facility.  |
|  | Verify that onsite processing and thermal treatment technology facilities are designed and operated in such a manner as to meet any air quality standards of the Division.   |
|  | Verify that onsite processing and thermal treatment technology facilities are designed so that any wastewater generated is discharged to a wastewater treatment system and, before final release, is treated in a manner approved by the Division.   |
|  | Verify that fire control equipment is provided and placed near the storage and charging area, and elsewhere as needed.   |
|  | Verify that operation and management of the onsite thermal treatment technology facility is under the direct supervision and control of an operator that is present at all times of operation and is qualified in thermal treatment technology management by training, education, or experience. |
|  | Verify that operation and management of the onsite processing facility is under the  |

| Georgia Supplement          |   |
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| REGULATORY<br>REQUIREMENTS: | REVIEWER CHECKS: August 2000  |
|                             | supervision and control of a responsible individual properly trained in the operation of such facilities at all times during operation.   |
|                             | Verify that no lead acid batteries, radioactive waste, or regulated quantities of hazardous waste or PCBs are accepted for processing or thermal treatment and the operator has a plan for excluding these wastes.  |
|                             | Verify that onsite processing and thermal treatment technology facilities are maintained in a clean and sanitary condition and solid waste is confined to the designated storage area.  |
|                             | Verify that accurate written, daily records by actual weight are kept, for at least 3 yr, and submitted to the Division quarterly, of all waste processed or disposed at the onsite processing and thermal treatment technology facility, including the source of the waste, by facility name and location. |
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| Georgia Supplement   |   |
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| REGULATORY<br>REQUIREMENTS:  | REVIEWER CHECKS: August 2000  |
| SO.95.<br>RESOURCE RECOVERY<br>FACILITIES  |   |
| SO.95.1.GA. Resource recovery facilities must meet specific requirements (RSG 391-3-404(7)). | (NOTE: Recovered materials and recovered materials processing facilities are excluded from regulation as solid wastes and solid waste handling facilities, providing the material has a known use, reuse, or recycling potential, is feasibly used, reused, or recycled, and has been diverted or removed from the solid waste stream for sale, use, reuse, or recycling, whether or not requiring subsequent separation and processing.)   |
|  | Verify that materials accumulated speculatively meet the applicable solid waste management requirements.  |
|  | (NOTE: A recovered material is not accumulated speculatively if the person accumulating it can show that there is a known use, reuse, or recycling potential for the material, that the material can be feasibly sold, used, reused, or recycled, and that during the preceding 90 days the amount of material that is recycled, sold, used, or reused equals at least 60 percent by weight or volume of the material received during the 90-day period and 60 percent by weight or volume of all material previously received and not recycled, sold, used, or reused, and carried forward into that 90-day period.) |
|  | Verify that proof of recycling, sale, use, or reuse kept in the form of bills of sale, or other records showing adequate proof of movement of the material in question to a recognized recycling facility or for proper use or reuse from the accumulation point.   |

| Georgia Supplement  |  |
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| REGULATORY<br>REQUIREMENTS:   | REVIEWER CHECKS:<br>August 2000  |
| MEDICAL WASTE   |  |
| SO.105.<br>GENERATORS   |  |
| SO.105.1.GA. The generation and handling of biomedical waste must meet specific requirements (RSG 391-3-415(1), (3)(a), and (3)(c)).  | (NOTE: Biomedical waste that is generated from single family dwelling units or residential premises in the selfcare and treatment of residents is not regulated as biomedical waste if the wastes are disposed of as residential solid waste. However, those wastes originating from home health care organizations or physicians treating patients in a home are regulated as biomedical waste.)  |
|   | (NOTE: Facilities that may generate or handle biomedical wastes include, but are not limited to, the following:  - ambulatory service centers  - blood banks  - clinics  - dental offices  - funeral homes  - health maintenance organizations (HMOs)  - hospitals  - laboratories  - medical buildings  - physicians' offices  - veterinary offices  - research facilities  - nursing homes  - biomedical waste transportation, storage, treatment, and disposal facilities.)  Verify that, if the facility has not been specifically exempted from biomedical waste handling requirements, it meets the applicable requirements for biomedical waste and the applicable solid waste handling requirements. |
| SO.105.2.GA. Medical facilities that generate less than 100 lb/mo of biomedical waste must meet specific requirements for the storage and containment of biomedical waste (RSG 391-3-415(3)(b), (4)(a) through (c), (6)(c) and (7)(b)). | <ul> <li>(NOTE: Medical facilities that generate less than 100 lb/mo and that meet these requirements are exempt from all other requirements for biomedical waste.)</li> <li>Verify that each medical facility generating biomedical waste meets all of the following storage and containment requirements: <ul> <li>biomedical waste is deposited into separate containers from other kinds of waste at the point of origin</li> <li>disposable containers used for biomedical waste are red or orange, or are clearly marked with the universal biohazard symbol or the word BIOHAZARD</li> </ul> </li> </ul>  |

| COMPLIANCE CATEGORY:<br>SOLID WASTE MANAGEMENT<br>Georgia Supplement |   |
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| REGULATORY<br>REQUIREMENTS:  | REVIEWER CHECKS: August 2000  |
|  | <ul> <li>sharps are stored, transported, treated, and disposed of in leakproof, rig puncture-resistant containers which are taped closed or tightly lidded</li> <li>all biomedical waste, except for sharps, are placed in containers that a moisture-impervious, do not rip, tear, or burst in normal use, and are secure closed so as to prevent leakage or expulsion of solid or liquid wastes duri storage, handling, and transport.</li> </ul> Verify that biomedical waste is contained in a manner and location that meets |
|  | following conditions:  - protected from rain and wind   |
|  | <ul> <li>protected from animals</li> <li>does not provide a breeding place or food source for insects or rodents</li> <li>exposure of the wastes to the public is minimized.</li> </ul>   |
|  | Verify that each medical facility meets all of the following disposal requirements  |
|  | <ul> <li>biomedical wastes are disposed of at a permitted landfill or treatment facili</li> <li>recognizable human anatomical remains are not disposed of by landfilling.</li> </ul>  |

| Georgia Supplement   |   |
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| REGULATORY   | REVIEWER CHECKS:  |
| REQUIREMENTS:  | August 2000   |
| MEDICAL WASTE  |   |
| SO.110.<br>CONTAINERS/<br>LABELING/<br>STORAGE AREAS                               |   |
| SO.110.1.GA. The storage and containment of biomedi-                               | Verify that biomedical waste is contained in a manner and location that meets the following conditions:   |
| cal waste must meet storage<br>and containment requirements<br>(RSG 391-3-415(4)). | - protected from rain and wind - protected from animals   |
| (RSG 371-3-413(4)).  | <ul> <li>does not provide a breeding place or food source for insects or rodents</li> <li>exposure of the wastes to the public is minimized.</li> </ul>   |
|  | Verify that biomedical waste is deposited into separate containers from other kinds of waste at the point of origin.  |
|  | Verify that disposable containers used for biomedical waste are either red, orange, clearly marked with the universal biohazard symbol, or clearly marked with the word BIOHAZARD.  |
|  | Verify that sharps are stored, transported, treated, and disposed of in leakproof, rigid, puncture-resistant containers which are taped closed or tightly lidded.   |
|  | Verify that all biomedical waste, except for sharps, are placed in containers that are moisture-impervious, do not rip, tear, or burst in normal use, and are securely closed so as to prevent leakage or expulsion of solid or liquid wastes during storage, handling, and transport.  |
|  | Verify that biomedical waste contained in disposable containers is placed for storage, handling, or transport in disposable or reusable pails, cartons, boxes, drums, dumpsters, or portable bins, of any color and conspicuously labeled with the universal biohazard symbol and the word BIOHAZARD on the sides so as to be readily visible from any lateral direction when the container is upright. |
|  | Verify that reusable containers used for the shipment of biomedical waste are thoroughly washed and decontaminated each time they are emptied.  |
|  | Verify that reusable pails, drums, dumpsters, or bins used for containment of biomedical waste are not used for other purposes except after being decontaminated and after the universal biohazard symbol and word BIOHAZARD are removed.   |
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| Georgia Supplement  |   |
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| REGULATORY<br>REQUIREMENTS:   | REVIEWER CHECKS: August 2000  |
| MEDICAL WASTE   |   |
| SO.115.<br>TRANSPORTATION   |   |
| SO.115.1.GA. The transfer of biomedical waste to offsite treatment or disposal facilities must meet specific require- | Verify that any generator of biomedical waste transfers custody of the biomedical waste only to a collector who is operating under authority to transport biomedical waste.   |
| must meet specific requirements (RSG 391-3-415(5)).   | Verify that biomedical waste is not transported in the same vehicle with other solid waste unless the biomedical waste is contained in a separate, fully enclosed leakproof container within the vehicle compartment or unless all of the waste is to be treated as biomedical waste. |
|   | Verify that biomedical waste is delivered for storage, including intermediate transfer, and treatment only to a facility or location for which there is a valid and appropriate operating permit.   |
|   | Verify that surfaces of transport vehicles that have contacted spilled or leaked biomedical waste are decontaminated.   |
|   | Verify that equipment used to transport waste from the generator to the offsite treatment or disposal facility does not destroy the integrity of the container.   |
|   | Verify that vehicles used for the transport of biomedical waste are not used for the transportation of food or food products.   |
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| Georgia Supplement   |  |
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| REGULATORY   | REVIEWER CHECKS:   |
| REQUIREMENTS:  | August 2000  |
| MEDICAL WASTE  |  |
| SO.120.<br>TREATMENT/DISPOSAL  |  |
| SO.120.1.GA. The treatment of biomedical waste must meet specific requirements                               | (NOTE: Biomedical waste that is treated by one of the following methods prior to disposal at a permitted solid waste disposal facility is no longer considered biomedical waste and may be combined and handled with regular solid waste.)   |
| (RSG 391-3-415(6)).  | Verify that if biomedical waste is to be handled as regular solid waste, the biomedical waste is treated by one of the following methods:  |
|  | <ul> <li>incineration in a thermal treatment technology facility that provides complete combustion of waste to render it nonpathogenic</li> <li>decontamination by heating with steam under pressure (autoclave) so as to render the biomedical waste noninfectious</li> <li>other methods approved by the Director.</li> </ul>        |
|  | (NOTE: Biological waste, which means blood and blood products, exudates, secretions, suctionings, and other body fluids which contain free liquids, may be discharged to a sewage treatment system that provides secondary treatment of waste if approved by the agency responsible for the operation of the sewage treatment system.) |
|  | Verify that biomedical waste consisting of recognizable human anatomical remains are not disposed of by landfilling.   |
|  | Verify that chemotherapy waste is treated at a permitted thermal treatment technology facility or other facility approved by the Director (steam decontamination may not be used for treatment of chemotherapy waste).   |
| SO.120.2.GA. The disposal of biomedical waste must meet specific requirements (RSG 391-3-415(7)(a) and (c)). | Verify that biomedical waste that has been treated is properly disposed of at a facility that has been permitted for the disposal of solid waste.  Verify that untreated biomedical waste from generators of more than 100 lb/mo, is not disposed by landfilling.  |
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| Georgia Supplement  |  |
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| REGULATORY  | REVIEWER CHECKS:   |
| REQUIREMENTS:   | August 2000  |
| SO.135.<br>LANDFILLS  | (NOTE: The requirements in SO.135.1.GA through SO.135.3.GA apply to all landfills and are repeated in part under the requirements for MSWLFs.)   |
| SO.135.1.GA. Landfills must be constructed to meet specific design requirements       | Verify that each landfill is designed by a professional engineer registered to practice in Georgia.  |
| (RSG 391-3-407(1) and (2)).   | Verify that each landfill has been constructed according to the provisions of an approved design and operational plan and the conditions of a Solid Waste Handling Permit.   |
|   | Verify that, prior to being opened for operation, all landfill construction and modification projects are certified with the Division.   |
|   | Verify that, the landfill meets the operational and maintenance requirements of the design plan including, but not limited to, the requirements of the following categories, where applicable:   |
|   | - buffer maintenance   |
|   | liners and leachate collection     erosion and sedimentation control   |
|   | <ul> <li>filling sequence, cover, final grading, and revegetation</li> <li>access roads and access control</li> <li>fire protection</li> </ul>   |
|   | - the Groundwater and Surface Water Monitoring Plan - closure and postclosure care.  |
| SO.135.2.GA. Landfill operators must meet specific requirements (RSG 391-3-407(n)).   | Verify that the facility is under the supervision of an operator who is present at all times during operation and who is properly trained in the operation of landfills and the implementation of design and operational plans.                    |
| SO.135.3.GA. Landfills must meet general operational                                  | Verify that solid waste is unloaded only at the working face of the operation.   |
| requirements (RSG 391-3-407(3)(b), thought (d); (g), (k) through (m); and (o) through | Verify that a program is implemented for detecting and preventing the disposal of regulated quantities of hazardous wastes, PCB wastes, liquids, radioactive waste, and lead acid batteries, and other wastes prohibited by the facility's permit. |
| (t)).   | Verify that the program to exclude prohibited wastes is part of the record and includes random inspections, records of inspections, personnel training, and notification of the Director if a prohibited waste is discovered at the facility.      |
|   | Verify that solid waste is spread in uniform layers and compacted to its smallest  |

| SOLID WASTE MANAGEMENT Georgia Supplement                 |   |
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| REGULATORY<br>REQUIREMENTS:                               | REVIEWER CHECKS:  |
| REQUIREMENTS:   | August 2000 practical volume before being covered.  |
|   | Verify that a cover of at least 6 in. of clean earth is placed over all exposed solid waste by the operating day's end or more frequently if required by the Division.                                      |
|   | Verify that no solid waste is left uncovered for more than 24 h.  |
|   | Verify that intermediate cover is not less than 1 ft deep.  |
|   | Verify that all-weather access roads are provided to the working face and that provisions are made for prompt equipment repair and replacement when needed.   |
|   | Verify that the landfill is operated to prevent air, land, or water pollution, and public health hazards.   |
|   | Verify that signs are posted at the entrance to landfills indicating the days and hours of operation.   |
|   | Verify that access is limited to authorized entrances that are closed when the site is not in operation.  |
|   | Verify that unauthorized vehicular traffic and illegal dumping of wastes is prohibited by using artificial barriers, natural barriers, or both, as appropriate to protect human health and the environment. |
|   | Verify that open burning, scavenging, and the open dumping of wastes is prohibited.   |
|   | Verify that scattering of wastes by wind is controlled by fencing or other barriers and the entire site is inspected daily and all litter removed.  |
|   | Verify that suitable materials (stockpiled soil is considered to be the most satisfactory fire fighting material) are provided to control fires.  |
|   | Verify that the disposal site is graded and drained to minimize runoff onto the landfill, drain water from the landfill surface, and prevent erosion.   |
|   | Verify that all erosion and sedimentation control measures or facilities are continually maintained so as to be effective.  |
|   | Verify that the vegetation is established on disturbed exposed soil that will not be a part of the waste disposal area or that will remain exposed for more than 3 mo.                                      |
| SO.135.4.GA. Inert waste landfills operated under per-    | Verify that, within 30 days of commencing solid waste handling activities, notification was made to the Director of the activities.   |
| mit-by-rule must meet specific requirements (RSG 391-3-4- | Verify that only the following kinds of waste are disposed of in the inert waste  |

| Georgia Supplement        |  |
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| REGULATORY                | REVIEWER CHECKS:   |
| REQUIREMENTS:             | August 2000  |
| .06(1), (2), and (3)(c)   | landfill:  |
| [Revised September 1998]. |  |
|                           | - earth and earthlike products   |
|                           | - concrete   |
|                           | - cured asphalt  |
|                           | - rock   |
|                           | - bricks   |
|                           | - yard trimmings   |
|                           | - land clearing debris (i.e., stumps, limbs, and leaves).  |
|                           | Verify that no portion of waste disposal area is located within 100 linear ft of any property line or enclosed structure.  |
|                           | Verify that the materials placed in the inert waste landfill are spread in uniform layers and compacted to the least practical volume.   |
|                           | Verify that all exposed waste is covered over at least monthly with a uniform, compacted layer of clean earth at least 1 ft deep.  |
|                           | Verify that the disposal site is graded and drained to minimize runoff onto the landfill surface to prevent erosion and to drain water from the surface of the landfill.   |
|                           | Verify that access to the inert waste landfill is limited to authorized entrances which are closed when the site is not in operation.  |
|                           | Verify that suitable means are provided to prevent and control fires, such as stockpiled earth.  |
|                           | Verify that not later than 1 mo after final placement of inert waste within a lift, a final cover not less than 2 ft deep and vegetative cover are in place over the final lift.   |
|                           | Verify that the Director is notified within 30 days of receiving the final load of waste.  |
|                           | (NOTE: Any site not receiving waste for over 180 days is deemed abandoned and in violation of state regulation, unless properly closed.)   |
|                           | Verify that all deeds for real property that have been used for landfilling include notice of the landfill operations, the date the landfill operation commenced and terminated, an accurate legal description of the actual location of the landfill, and a description of the type of solid wastes that have been deposited in the landfill. |
|                           | Verify that all wastes received at the landfill are measured and reported.   |
| SO.135.5.GA. Solid waste  | (NOTE: This checklist item was moved here from SO.55.1.GA.; September  |

# COMPLIANCE CATEGORY: SOLID WASTE MANAGEMENT

# Georgia Supplement

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| REGULATORY   | REVIEWER CHECKS:   |
| REQUIREMENTS:  | August 2000  |
| landfills must not be located  | 1998.)   |
| in river corridors (RSG 391-3-   |  |
| 1604(4)(h)) [Added   | Verify that solid waste landfills are not located in river corridors.  |
| September 1997; Citation   |  |
| Revised September 1998 ].  |  |
| SO.135.6.GA. Operating requirements must be met at MSWLFs regarding liquid wastes (RSG 391-3-404(9)) [Revised September 1998]. | (NOTE: This checklist item moved here from SO.65.3.GA.; September 1998. The regulation was revised to apply to all landfills, not just MSWLFs.)  Verify that bulk or noncontainerized liquid wastes are not placed in landfill units unless the following requirements are met:  - the waste is household waste other than septic waste - the waste is leachate or gas condensate derived from the landfill unit, and the landfill unit, whether it is a new or existing landfill or lateral expansion, is designed with a composite liner and leachate collection system.  Verify that containers holding liquid waste are not placed in landfill units unless the following requirements are met:  - the container is a small container similar in size to that normally found in household waste - the container is designed to hold liquids for use other than storage - the waste is household waste. |
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| REGULATORY   | REVIEWER CHECKS:   |
| REQUIREMENTS:  | August 2000  |
| SO.140.<br>CONSTRUCTION/<br>DEMOLITION<br>LANDFILLS  |  |
| SO.140.1.GA. The operation of construction/demolition waste disposal facilities must meet specific requirements (RSG 391-3-407(4)(b)). | Verify that the construction/demolition waste disposal facility meets all requirements applicable to MSWLFs.  (NOTE: The Director may grant variances to the MSWLF requirement if the facility only receives construction and demolition wastes that do not include household wastes.) |

| Georgia Supplement   |   |
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| REGULATORY   | REVIEWER CHECKS:  |
| REQUIREMENTS:  | August 2000   |
| SO.145.<br>INCINERATORS  |   |
| SO.145.1.GA. The operation of a solid waste thermal treatment facility must meet | Verify that the solid waste thermal treatment facility has been permitted and is designed and operated according to the approved design and operational plan.   |
| specific requirements (RSG 391-3-408(1)).  | Verify that the solid waste thermal treatment facility is adequate in size and capacity to manage the projected incoming solid waste and residue volumes.   |
|  | Verify that the solid waste thermal treatment facility meets the following requirements:  |
|  | <ul> <li>to expedite the routine sampling of bottom and fly ash</li> <li>the temperature and combustion time is sufficient to produce a satisfactory residue, essentially free of odors and unstable organic matter</li> <li>all residue is promptly deposited in a MSWLF with a liner and leachate collection system.</li> </ul> |
|  | Verify that the solid waste thermal treatment facility provides for a minimum storage capacity of not less than three times the daily capacity of the thermal treatment technology equipment, and no waste is stored in excess of the designated capacity.  |
|  | Verify that the solid waste thermal treatment facility is designed and operated in such a manner as to meet any air quality standards of the Division.  |
|  | Verify that the solid waste thermal treatment facility is designed so that any wastewater generated is discharged to a wastewater treatment system and, before final release, is treated in a manner approved by the Division.  |
|  | Verify that fire control equipment is provided and placed near the storage and charging area, and elsewhere as needed, and additional fire fighting equipment is made available for emergencies.  |
|  | Verify that operation and management of the thermal treatment technology facility is under the direct supervision and control of an operator that is present at all times of operation and is qualified in thermal treatment technology management by training, education, or experience.   |
|  | Verify that signs are posted at the entrance to the plant indicating the days and hours of operation and access to the plant is limited to those times when authorized personnel are on duty.   |
|  | Verify that onsite processing and thermal treatment technology facilities are maintained in a clean and sanitary condition and solid waste is confined to the   |

# **COMPLIANCE CATEGORY:** SOLID WASTE MANAGEMENT Georgia Supplement **REVIEWER CHECKS:** REGULATORY **REQUIREMENTS:** August 2000 unloading area, which is maintained free of dust and nuisances. Verify that sampling of ash residues is conducted at the following frequencies (fly ash and bottom ash are sampled and analyzed separately): - prior to the initial disposal of ash or residue from a facility - at a minimum, monthly for the first 6 mo of operations at the facility, and annually during the remaining life of the facility - according to an approved sampling and analysis plan. Verify that no lead acid batteries, radioactive waste, or regulated quantities of hazardous waste are accepted and the operator has a plan for excluding these wastes. Verify that accurate written, daily records by actual weight are kept, for at least 3 yr, of all waste received at the thermal treatment facility. Verify that the ACD has been permitted and is designed and operated according to **SO.145.2.GA.** The operation of an air curtain destructor the approved design and operational plan. (ACD) must meet specific requirements (RSG 391-3-4-Verify that all ash and residue is removed from the facility, and handled as a recovered material or disposed of in a permitted facility. .08(2)). Verify that areas for storing wastes prior to treatment are clearly defined and maximum capacity specified. Verify that the ACD only burns wood wastes consisting of trees, logs, brush, stumps relatively free of soil, and natural wood products free of wood preserving chemicals, paints, and other contaminants. (NOTE: Fallen leaves, sawdust, other densely packed wood wastes, and paper (any type) may not be burned. No ACD may burn household waste or yard trimmings.) Verify that the ACD is designed and operated in such a manner as to meet any air quality standards of the Division and no smoke emissions exceeding 20 percent opacity are produced during operation except for a specified ignition period. Verify that fire control equipment is provided and placed near the storage area and ACD area, and additional fire fighting equipment is made available for emergencies. Verify that operation and management of the ACD is under the direct supervision

in ACD management by training, education, or experience.

and control of an operator that is present at all times of operation and is qualified

| Georgia Supplement          |   |
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| REGULATORY<br>REQUIREMENTS: | REVIEWER CHECKS: August 2000  |
|                             | Verify that the ACD meets the following requirements:   |
|                             | <ul> <li>the temperature and combustion time is sufficient to produce a satisfactory residue</li> <li>all residue is promptly deposited in a landfill operated and maintained according to Federal and state regulations</li> <li>ashes are not allowed to build up on the combustion pit to higher than one-third the pit depth or to the point where combustion is impeded, whichever comes first.</li> </ul> |
|                             | Verify that facility access is restricted to prohibit unauthorized storage or disposal of wastes and to prevent injury during ACD operation.  |
|                             | Verify that the ACD and all operating appurtenances are routinely inspected and adequately maintained to ensure proper working order and storage areas are inspected and maintained to exclude unauthorized wastes and minimize any fire hazard.  |
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|  | Georgia Supplement  |
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| REGULATORY<br>REQUIREMENTS:  | REVIEWER CHECKS: August 2000  |
| SO.150.<br>INDUSTRIAL<br>WASTE UNITS   | V   |
| <b>SO.150.1.GA.</b> The operation of industrial waste disposal facilities must meet specific requirements (RSG 391-3-407(4)(a)). | Verify that the industrial waste disposal facility meets all requirements applicable to MSWLFs.  (NOTE: Industrial waste disposal facilities permitted to receive only a single type of industrial waste (monofill), or to receive only a single industry's waste, may be granted variances to MSWLF requirements.) |

|   | Georgia Supplement  |
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| REGULATORY  | REVIEWER CHECKS:  |
| REQUIREMENTS:   | August 2000   |
| SO.160.<br>WASTE TIRES<br>FACILITIES  | (NOTE: These requirements apply to all persons presently engaged in or proposing to be engaged in the retail sale of new replacement tires and/or handling of scrap tires. All persons subject to these requirements must also comply with applicable solid waste management requirements (RSG 391-3-419(1)).)    |
| SO.160.1.GA. Retail tire dealers must meet specific recordkeeping requirements (RSG 391-3-419(3)(b)). | Verify that retail tire dealers keep accurate records and report to the Division quarterly on the number of new replacement tires sold.   |
| SO.160.2.GA. Scrap tire generators must meet specific requirements (RSG 391-3-419(4)).                | Verify that any person who generates scrap tires has a Scrap Tire Generator Identification Number issued by the Division and the identification number is used on all scrap tire shipment manifests.  |
|   | (NOTE: Separate Scrap Tire Generator Identification Numbers are required for generators with multiple generation locations.)  |
|   | Verify that the generator initiates a manifest to transport scrap tires from the point of generation to an end user or to a scrap tire processing or disposal facility approved by the Division, including the following information:   |
|   | <ul> <li>name and identification number of the generator</li> <li>number or total tons of scrap tires to be transported</li> <li>date of transport</li> <li>destination of scrap tires.</li> </ul>  |
|   | Verify that the scrap tires are only transported by a person that holds a valid Scrap Tire Carrier Permit issued by the Division.   |
|   | (NOTE: Generators that generate less than 100 tires per month and who transport their own scrap tires to approved end users, processors, recyclers, or disposers are not required to have a Scrap Tire Carrier Permit, but must comply with all other provisions required of generators and scrap tire carriers.) |
|   | Verify that the generator maintains receipts (copies of the completed manifest) for a period of 3 yr.   |
|   | Verify that the generator reports to the Division any carrier who fails to return a properly completed manifest to the generator within 30 days of scrap tire pickup.   |
| SO.160.3.GA. Scrap tire carriers must meet specific requirements (RSG 391-3-4-                        | Verify that any person collecting or transporting scrap tires has a Scrap Tire Carrier Permit issued by the Division.   |

| Georgia Supplement  |  |
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| REGULATORY<br>REQUIREMENTS:   | REVIEWER CHECKS: August 2000   |
| .19(5)).  | (NOTE: A separate permit is required for each scrap tire carrier business location.)  Verify that the carrier transports scrap tires, properly manifested, only to an end user, recycler, processor, sorter, or disposer approved or permitted by the Division.  Verify that the carrier reports quarterly (by the 1st day of May, August, October, and February) to the Division the number of scrap tires transported and the manner of their disposition.  Verify that the carrier returns a completed copy of the manifest to the scrap tire generator, no later than 30 days from the date on which the carrier took possession of the scrap tires.  (NOTE: The following are not required to have a Scrap Tire Carrier Permit:  - generators who transport scrap tires only between their own branch office locations  - persons carrying only used tires or retreadable casings  - a tire retailer or tire retreader transporting tires to or from a customer's place of operation or between branch offices of the tire retailer or retreader  - a municipal solid waste collector holding a valid solid waste collection permit  - a private individual transporting the individual's own scrap tires to a processor, permitted disposal facility, or other facility approved by the Division  - a company transporting the company's own tires to a processor or for proper disposal, providing the company is not in the tire handling business and the company generates less than 100 scrap tires per month.) |
| SO.160.4.GA. Scrap tire storage must meet specific requirements (RSG 391-3-419(6)). | Verify that no person stores more than 100 scrap tires anywhere in Georgia, unless one of the following are met:  - the storage is a solid waste disposal site that is permitted by the Division authorizing the storage of scrap tires prior to their disposal  - a tire retailer with not more than 3000 scrap tires in storage, if the retailer has notified the Division  - a tire retreader with not more than 3000 scrap tires in storage so long as the scrap tires are of the type the retreader is actively retreading  - an auto salvage yard with not more than 500 scrap tires in storage  - a scrap tire processor approved by the Division so long as the number of scrap tires in storage does not exceed the quantity approved by the Division.  |

| Georgia Supplement   |   |
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| REGULATORY   | REVIEWER CHECKS:  |
| REQUIREMENTS:  | August 2000   |
| SO.165.<br>YARD WASTE/<br>COMPOSTING                                     |   |
| SO.165.1.GA. Composting must meet specific requirements (RSG 391-3-416). | (NOTE: For yard trimming composting operations to be excluded from regulation as solid wastes handling facilities, the yard trimmings must be kept separate from solid waste and must be converted to a usable compost or mulch product.)   |
|  | Verify that composting of solid waste or special solid waste, other than yard trimmings, is operated under a permit.  |
|  | Verify that the operation and management of the facility is under the supervision and control of a responsible operator properly trained in the operation of such facilities at all times during operation and the operator is present at all times during operation of the facility. |
|  | Verify that the compost resulting from composting operations is nonpathogenic, free of offensive odors, biologically and chemically stable, free of injurious components or particles, and is able to sustain plant growth.   |
|  | Verify that rejects generated by the composting process are disposed of as solid waste.   |
|  | Verify that signs are posted at the entrance to the facility indicating the days and hours of operation.  |
|  | Verify that access to the facility is limited to those times when authorized personnel are on duty.   |
|  | Verify that composting facilities are maintained in a clean and sanitary condition.   |
|  | Verify that solid waste is confined to the unloading area, which is maintained free of dust.  |
|  | Verify that accumulations of putrescible materials and rubbish are controlled in a manner so as to minimize odors and prevent infestation by insects or rodents.  |
|  | Verify that insect and rodent control measures are applied as needed.   |
|  | Verify that sanitary facilities are provided for employees and are kept clean and in good repair.   |
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| Georgia Supplement  |  |
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| REGULATORY<br>REQUIREMENTS:   | REVIEWER CHECKS: August 2000   |
| SO.175.<br>OTHER TREATMENT/<br>PROCESSING UNITS   |  |
| SO.175.1.GA. The operation of shredding, baling, materials recovery facilities, and other processing operations must meet specific requirements (RSG 391-3-409(1)). | Verify that the facility has been permitted and is designed and operated according to the approved design and operational plan.  |
|   | Verify that the facility is adequate in size and capacity to manage the projected incoming solid waste and residue volumes.  |
|   | Verify that baling equipment is capable of producing a relatively uniform bale size and shape which can be easily handled by equipment at the baling facility and the bales have sufficient stability to withstand transportation to the disposal site and handling necessary to position them for final disposal. |
|   | Verify that the facility provides for a minimum storage capacity of not less than three times the daily capacity of the shredding, baling, or materials recovery equipment, and no waste is stored in excess of the permitted capacity.  |
|   | Verify that the facility is designed and operated in such a manner as to meet any air quality standards of the Division.   |
|   | Verify that the facility is designed so that any wastewater generated is discharged to a wastewater treatment system and, before final release, is treated in a manner approved by the Division.   |
|   | Verify that fire control equipment is provided and placed near the storage area and elsewhere as needed, and additional fire fighting equipment is made available for emergencies.   |
|   | Verify that shredded and baled waste and any material not sold or used, reused, or recycled as recovered material is disposed of at a permitted facility.  |
|   | Verify that operation and management of the facility is under the direct supervision and control of a responsible individual properly trained in the operation of such facilities at all times during operation.   |
|   | Verify that shredded material is deposited in a MSWLF or handled in such a manner as may be approved by the Division.  |
|   | Verify that signs are posted at the entrance to the plant indicating the days and hours of operation and access to the plant is limited to those times when authorized personnel are on duty.  |
|   | Verify that the facility is maintained in a clean and sanitary condition and solid waste is confined to the unloading area, which is maintained free of dust and   |

| Georgia Supplement          |  |
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| REGULATORY<br>REQUIREMENTS: | REVIEWER CHECKS: August 2000   |
|                             | nuisances.   |
|                             | Verify that accumulations of putrescible materials and rubbish are controlled in a manner so as to minimize odors and prevent infestation by insects or rodents, and insect and rodent control measures are applied as needed. |
|                             | Verify that sanitary facilities are provided for employees and are kept clean and in good repair.  |
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|   | Georgia Supplement   |
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| REGULATORY  | REVIEWER CHECKS:   |
| REQUIREMENTS:   | August 2000  |
| SO.180.<br>CLOSURE OF SOLID<br>WASTE FACILITIES   |  |
| SO.180.1.GA. The closure of solid waste handling facilities must meet specific requirements (RSG 391-3-411(2) through (7)). | Verify that the solid waste handling facility is closed in accordance with the approved closure plan.  |
|   | Verify that notice of final closure is submitted to the Director within 30 days of receiving the final load of waste and includes the date of final waste receipt and an accurate legal description of the boundaries of the landfill.   |
|   | Verify that all deeds for real property which have been used for landfilling include notice of the landfill operations, the date the landfill operation commenced and terminated, an accurate legal description of the actual location of the landfill, and a description of the type of solid wastes which have been deposited in the landfill. |
|   | Verify that upon completion of closure, a closure certificate is provided to the Division.   |
| SO.180.2.GA. The postclosure care of solid waste han-   | Verify that the operator of all landfills conduct postclosure care for at least 30 yr after the Director has authorized the closure certificate.   |
| dling facilities must meet specific requirements (RSG 391-3-412(2) through (7)).  | Verify that the operator of the solid waste handling facility conducts all monitoring during the postclosure care period.  |
|   | Verify that postclosure use of the property is not allowed to disturb the integrity of the final cover, liner(s), or any other components of the containment system, or the function of the monitoring systems.  |
|   | Verify that, if any subsequent owner or operator wishes to remove wastes and waste residues, the liner, if any, or contaminated soils, written approval from the Division is obtained.   |
|   | Verify that postclosure care is conducted in accordance with the approved postclosure care plan.   |
|   |  |

### **SECTION 10**

#### STORAGE TANK MANAGEMENT

### Georgia Supplement, August 2000

This section covers the state requirements for Storage Tank Management and is intended to supplement the U.S. TEAM Guide. Refer to the U.S. TEAM Guide and the DOD Component Supplements for Federal, DOD, and service-specific requirements.

The following Federal regulations have been incorporated by reference by the Georgia Department of Natural Resources, Environmental Protection Division:

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40 CFR 264, Subpart J (1995) (Rules of the State of Georgia (RSG) 391-3-11.10(2) 40 CFR 265, Subpart J (1995) (RSG 391-3-11.10(1) 40 CFR 279 (1995) (RSG 391-3-11-.17) 40 CFR 280.10(c) and (d) (RSG 391-3-15-.02(3)) 40 CFR 280.11 (1995) (RSG 391-3-15-.04) 40 CFR 280, Subpart B (RSG 391-3-15-.05(1)) 40 CFR 280.20(d) (1995) (RSG 391-3-15-.05(2)) 40 CFR 280.22 (1995) (RSG 391-3-15-.05(3)) 40 CFR 280, Subpart C (1995) (RSG 391-3-15-.06) 40 CFR 280, Subpart D (1995) (RSG 391-3-15-.07(1)) 40 CFR 280, Subpart E (1995) (RSG 391-3-15-.08) 40 CFR 280, Subpart F (1995) (RSG 391-3-15-.09(1)) 40 CFR 280, Subpart G (1995) (RSG 391-3-15-.11(1)).
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### **Definitions**

- Approved Stage II Vapor Recovery System a Stage II vapor recovery system that has demonstrated 95 percent by weight or greater volatile organic compound (VOC) control efficiency by:
  - 1. a California Air Resources Board (CARB) certified system
  - 2. testing and approval by the Department using CARB's test procedures and methods; or equivalent test procedures and methods approved by the Environmental Protection Division and EPA, and conducted by the Division or by a third party approved by the Division (RSG 391-3-1-.02(2)(zz)(3)).
- Average Monthly Throughput Rate the average of the gallons pumped monthly for the most recent 2-yr period
  of operation excluding any inactive period. If a facility has not been in operation for 2 yr or does not have access
  to records for the most recent 2 yr of operation, the Division shall determine the length of time to determine the
  average of the gallons pumped monthly (RSG 391-3-1-.02(2)(zz)(3)).
- Board the Board of Natural Resources of the State of Georgia (RSG 391-3-15-.02(1)).
- *Bottom Filling* the filling of a tank truck or stationary storage tank through an opening that is located at the tank bottom (RSG 391-3-1-.02(2)(pp)(5)).
- Bulk Gasoline Plant a gasoline storage and distribution facility with an average daily throughput of more than 4,000 gal but less than 20,000 gal that receives gasoline from bulk terminals by rail and/or trailer transport, stores it in tanks, and subsequently dispenses it via account trucks to local farms, businesses, and service stations (RSG 391-3-1-.02(2)(pp)(5)).

- Bulk Gasoline Terminal a gasoline storage facility that receives gasoline from refineries primarily by pipeline, ship, or barge, and delivers gasoline to bulk gasoline plants or to commercial or retail accounts primarily by tank truck and has an average daily throughput of more than 20,000 gal of gasoline (RSG 391-3-1-.02(2)(pp)(5)).
- *CARB* the California Air Resources Board, Sacramento, CA 96812 (RSG 391-3-1-.02(2)(rr)(3) and 391-3-1-.02(2)(zz)(3)).
- Combustible Gas Detector a portable VOC gas analyzer with a minimum range of 0 to 100 percent of the Lower Explosive Limit (LEL) as propane (RSG 391-3-1-.02(2)(ss)(5)).
- Control Of either the right or authority to govern receipt or removal of any regulated substances from an underground storage tank (RSG 391-3-15-.02(1)).
- Controlling Interest direct or indirect ownership of at least 50 percent of the voting stock of another entity (RSG 391-3-15-.02(1)).
- Corrective Action those activities required for response to and cleanup of releases of regulated substances from underground storage tanks, including, but not limited to, initial response, initial abatement measures and site check, initial site characterization, free product removal, investigations for soil and groundwater cleanup, and preparation and implementation of a corrective action plan (RSG 391-3-15-.02(1)).
- *Delivery Vessel* the following definitions apply:
  - 1. tank trucks or trailers equipped with a storage tank and used for the transport of gasoline from sources of supply to stationary storage tanks of gasoline dispensing facilities (RSG 391-3-1-.02(2)(rr)(3)).
  - 2. any tank truck or trailer equipped with a storage tank in use for the transport of volatile organic liquids from sources of supply to stationary storage tanks (RSG 391-3-1-.02(2)(vv)(2)).
- Department the Department of Natural Resources of the State of Georgia (RSG 391-3-15-.02(1)).
- *Director* the Director of the Environmental Protection Division of the Department of Natural Resources (RSG 391-3-15-.02(1)).
- *Division* the Environmental Protection Division of the Department of Natural Resources of the State of Georgia (RSG 391-3-15-.02(1) and 391-3-1-.02(2)(zz)(3)).
- Division Approved any Stage I gasoline vapor recovery system that complies with the appropriate official executive order from CARB, excepting the coaxial drop tube requirement exempted by paragraph 6., or any Stage I gasoline vapor recovery system whose design has been submitted to the Division, has passed any required certification tests, and has received a written approval from the Division. The submitted design shall include but may not be limited to drawings detailing all components of the system and a written narrative describing the components and their use (RSG 391-3-1-.02(2)(rr)(3)).
- External Floating Roof a storage vessel cover in an open top tank consisting of a double deck or pontoon single deck that rests upon and is supported by the petroleum liquid being contained and is equipped with a closure seal or seals to close the space between the roof edge and tank wall (RSG 391-3-1-.02(2)(mm)(7)).
- Federal Act the Solid Waste Disposal Act, 42 USC, Sec. 3152 et seq., as amended, particularly by the Hazardous and Solid Waste Amendments of 1984, Public Law 98-616, 42 USC, Sec. 6991 et seq., as amended by Public Law 99-499, 1986 (RSG 391-3-15-.02(1)).
- *Fill Cap* a cap that fits over the stationary gasoline storage tank riser that contains the submerged fill pipe and that is used to prevent contaminants from entering the tank and as a secondary measure to prevent the release of gasoline vapors (RSG 391-3-1-.02(2)(zz)(3)).

- Floating Roof a storage vessel cover consisting of a double deck, pontoon single deck, internal floating cover or covered floating roof, which rests upon and is supported by the petroleum liquid being contained, and is equipped with a closure seal or seals to close the space between the roof edge and tank wall (RSG 391-3-1-.02(2)(bb)(3)).
- *Gasoline* a petroleum distillate having a Reid vapor pressure of 4.0 psia or greater (RSG 391-3-1-.02(2)(pp)(5), 391-3-1-.02(2)(rr)(3), and 391-3-1-.02(2)(zz)(3)).
- Gasoline Dispensing Facility the following definitions apply:
  - 1. any site where gasoline is dispensed to motor vehicle gasoline tanks from stationary storage tanks in excess of 10,000 gal/mo (RSG 391-3-1-.02(2)(rr)(3)).
  - 2. any site where gasoline is dispensed to motor vehicle gasoline tanks from stationary storage tanks (RSG 391-3-1-.02(2)(zz)(3)).
- Gasoline Transport Vehicle any mobile storage vessel including tank trucks and trailers used for the transport of gasoline from sources of supply to stationary storage tanks of gasoline dispensing facilities, bulk gasoline plants, or bulk gasoline terminals (RSG 391-3-1-.02(2)(ss)(5)).
- Gasoline Vapor Leak a reading of 100 percent or greater of the LEL of gasoline when measured as propane at a distance of 1 in. (RSG 391-3-1-.02(2)(ss)(5)).
- *Jobber* anyone who distributes petroleum product from a bulk storage plant to a UST owner or operator, or purchases petroleum product from a terminal for distribution to a UST owner or operator (RSG 391-3-15-.02(1)).
- Liquid-Mounted Seal a primary seal mounted in continuous contact with the liquid between the tank wall and the floating roof around the circumference of the tank (RSG 391-3-1-.02(2)(mm)(7)).
- *Nonoperational Storage Tank* any UST in which regulated substances were not deposited or from which regulated substances were not dispensed after 8 November 1984 (RSG 391-3-15-.02(1)).
- *Operator* the following definitions apply:
  - 1. any person in control of, or having responsibility for, the daily operation of a UST (RSG 391-3-15-.02(1)).
  - 2. any person who operates a facility utilizing gasoline dispensing equipment and receives income from sale of gasoline at such facility (RSG 391-3-1-.02(2)(zz)(3)).
- *Owner* the following definitions apply:
  - 1. the person who owns the gasoline dispensing equipment that transfers gasoline from a stationary gasoline storage tank, which shall include but not be limited to the gasoline dispensers, hoses, nozzles, breakaways, and vapor piping (RSG 391-3-1-.02(2)(zz)(3)).
  - 2. in the case of a UST system in use on 8 November 1984, or brought into use or capable of being used after that date, any person who owns a UST system used for or capable of being used for the storage or dispensing of regulated substances and, in the case of any UST system in use before 8 November 1984, but no longer in use or capable of being used on or after 8 November 1984, any person who owned such UST immediately before the discontinuation of its use; provided, however, such term shall not include any person who, without participating in the management of an underground storage tank and otherwise not engaged in petroleum production, refining, and marketing, holds indicia of ownership primarily to protect that person's security interest in the UST (RSG 391-3-15-.02(1)).
- *Person* an individual, trust, firm, joint-stock company, joint-venture, corporation, including a government corporation, partnership, association, municipality, commission, political subdivision, or any agency, board, department, or bureau of this state or of any other state or of the Federal government (RSG 391-3-15-.02(1)).

- *Petroleum* petroleum, including crude oil or any fraction thereof that is liquid at standard conditions of temperature and pressure (60 °F and 14.7 psia) (RSG 391-3-15-.02(1)).
- *Petroleum Liquids* crude oil, condensate, and any finished or intermediate products manufactured or extracted in a petroleum refinery (RSG 391-3-1-.02(2)(bb)(3) and 391-3-1-.02(2)(mm)(7)).
- *Petroleum Product* petroleum, including gasoline, gasohol, diesel fuel, fuel oils including #2 fuel oil, kerosene, and jet turbine fuel (RSG 391-3-15-.02(1)).
- *Petroleum Refinery* any facility engaged in producing gasoline, kerosene, distillate fuel oils, residual fuel oils, lubricants, or other products through distillation of crude oils, or through redistillation, cracking, extraction, or reforming of unfinished petroleum derivatives (RSG 391-3-1-.02(2)(bb)(3)).
- *Plume* the area of groundwater containing concentrations of petroleum constituents or other regulated substances above Estimated Quantitation Limits as established in Test Methods for Evaluating Solid Waste (USEPA, Office of Solid Waste and Emergency Response, SW-846, Third Edition, as revised) or in an alternate method approved by the Division (RSG 391-3-15-.02(1)).
- Reconstruction the replacement of any stationary gasoline storage tank (RSG 391-3-1-.02(2)(zz)(3)).
- Regulated Substance any substance defined in Sec. 101(14) of the Comprehensive Environmental Response, Compensation and Liability Act of 1980, 42 USC, Sec. 9601, as amended by P.L. 99-499, 1986, et seq., and petroleum, including crude oil or any fraction thereof which is liquid at the standard conditions of temperature and pressure (60 °F and 14.7 psia), but not including any substance regulated as a hazardous waste under the Georgia Hazardous Waste Management Act, OCGA 12-8-60, as amended (RSG 391-3-15-.02(1)).
- *Release* any spilling, leaking, emitting, discharging, escaping, leaching, or disposing from a UST into groundwater, surface water, or subsurface soils (RSG 391-3-15-.02(1)).
- Release Response in addition to certain corrective action activities, those actions taken as initial response, initial abatement measures and site check, initial site characterization, and free product removal (RSG 391-3-15-.02(1)).
- Responsibility For either the right or authority to close a UST or maintain and repair a UST or take action for compliance with all or part of the requirements of these Rules (RSG 391-3-15-.02(1)).
- Stage II Controls a gasoline vapor recovery system that recovers vapors during the refueling of motor vehicles (RSG 391-3-1-.02(2)(zz)(3)).
- Stationary Storage Tank all underground vessels and any aboveground vessels never intended for mobile use (RSG 391-3-1-.02(2)(rr)(3)).
- Submerged Filling the filling of a tank truck or stationary tank through a pipe or hose whose discharge opening is not more than 6 in. from the tank bottom (RSG 391-3-1-.02(2)(pp)(5)).
- Submerged Fill Pipe any fill pipe with a discharge opening which is within a nominal distance of 6 in. from the tank bottom (RSG 391-3-1-.02(2)(rr)(3) and 391-3-1-.02(2)(vv)(2)).
- *Terminal* a bulk storage facility for storing petroleum products supplied by pipeline or marine vessel (RSG 391-3-15-.02(1)).
- True Vapor Pressure the equilibrium partial pressure exerted by a petroleum liquid as determined in accordance with methods described in American Petroleum Institute Bulletin 2517, "Evaporation Loss from Floating Roof Tanks," 1962 (RSG 391-3-1-.02(2)(bb)(3)).

- Underground Storage Tank (UST) any one or combination of tanks, including underground pipes connected thereto, that is used to contain an accumulation of regulated substances and the volume of which, including the volume of the underground pipes connected thereto, is 10 percent or more beneath the surface of the ground. The term "underground storage tank" does not include any:
  - 1. farm or residential tank of 1100 gal or less capacity used for storing motor fuel for noncommercial purposes
  - 2. tank used for storing heating oil for consumptive use on the premises where stored
  - 3. septic tank
  - 4. pipeline facility (including gathering lines) that is regulated under:
    - a. the Natural Gas Pipeline Safety Act of 1968 (49 U.S.C. App. 1671 et seq.)
    - b. the Hazardous Liquid Pipeline Safety Act of 1979 (49 U.S.C. App. 2001 et seq.)
    - c. which is an intrastate pipeline facility regulated under state laws
  - 5. surface impoundment, pit, pond, or lagoon
  - 6. stormwater or wastewater collection system
  - 7. flow-through process tank
  - 8. liquid trap or associated gathering lines directly related to oil or gas production and gathering operations
  - 9. storage tank situated in an underground area (such as a basement, cellar, mineworking, drift, shaft, or tunnel) if the storage tank is situated upon or above the surface of the floor
  - 10. UST system holding hazardous wastes listed or identified under Subtitle C of the Solid Waste Disposal Act, or a mixture of such hazardous waste and other regulated substances
  - 11. wastewater treatment tank system that is part of a wastewater treatment facility regulated under section 402 or 307(b) of the Clean Water Act
  - 12. equipment or machinery that contains regulated substances for operational purposes such as hydraulic lift tank and electrical equipment tank
  - 13. UST system whose capacity is 110 gal or less
  - 14. UST system that contains a "de minimis" concentration of regulated substances
  - 15. emergency spill or overflow containment UST system that is expeditiously emptied after use
  - 16. pipes connected to any tank described in subparagraphs (1) through (15) of this definition (RSG 391-3-15-.02(1)).
- *UST System* or *Tank System* an underground storage tank and its associated ancillary equipment and containment system, if any (RSG 391-3-15-.02(1) and (2)).
- Vapor Balance System a combination of pipes or hoses that create a closed system between the vapor spares of an unloading tank and a receiving tank such that vapors displaced from the receiving tank are transferred to the tank being unloaded (RSG 391-3-1-.02(2)(pp)(5)).
- Vapor Cap the cap that fits over the stationary gasoline storage tank riser which carries vapors from the storage tank to the delivery vessels during the transfer of gasoline in two-point Stage I vapor recovery systems and that is used to prevent contaminants from entering the storage tank and as a secondary measure to prevent the loss of gasoline vapors (RSG 391-3-1-.02(2)(zz)(3)).
- *Vapor Collection System* a vapor transport system, including any piping, hoses, and devices, that uses direct displacement by the gasoline being transferred to force vapors from the vessel being loaded into either a vessel being unloaded or vapor control system or vapor holding tank (RSG 391-3-1-.02(2)(ss)(5)).
- *Vapor Control System* a system, including any piping, hoses, equipment, and devices, that is designed to control the release of VOCs displaced from a vessel during transfer of gasoline (RSG 391-3-1-.02(2)(ss)(5)).
- *Vapor-Mounted Seal* a primary seal mounted so there is an annular vapor space underneath the seal. The annular vapor space is bounded by the bottom of the primary seal, the tank wall, the liquid surface, and the floating roof (RSG 391-3-1-.02(2)(mm)(7)).

# STORAGE TANK MANAGEMENT GUIDANCE FOR GEORGIA CHECKLIST USERS

# **REFER TO CHECKLIST ITEMS:**

Missing Checklist Items ST.2.1.GA.

Aboveground Storage Tanks ST.5.1.GA. through ST.5.5.GA. Emissions/Discharges From Bulk Gasoline ST.10.1.GA. through ST.10.4.GA.

Terminals

Emissions/Discharges From POL Storage Vessels ST.15.1.GA. through ST.15.3.GA.

Emissions/Discharges From VOL Storage Vessels ST.20.1.GA.

UST State-Specific ST.30.1.GA. through ST.30.4.GA.

| GUIDANCE FOR APPENDIX USERS |  |
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| REFER TO APPENDIX NUMBERS:  | REFER TO APPENDIX TITLES:                        |
| 10-1                        | Petroleum Constituents and Soil Threshold Levels |

| Georgia Supplement   |  |
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| REGULATORY   | REVIEWER CHECKS:   |
| REQUIREMENTS:  | August 2000  |
| ST.2.<br>MISSING CHECKLIST<br>ITEMS  |  |
| ST.2.1.GA. Federal facilities are required to comply with all applicable state regulatory requirements not contained in this checklist (a finding under this checklist item will have the citation of the applied regulation as a basis of finding). | Determine whether any new regulations have been issued since the finalization of the manual.  Determine whether the Federal facility has activities or facilities that are regulated but not addressed in the checklists.  Verify that the Federal facility is in compliance with all applicable and newly issued regulations. |

| Georgia Supplement  |   |
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| REGULATORY<br>REQUIREMENTS:   | REVIEWER CHECKS: August 2000  |
| ST.5.<br>ABOVEGROUND<br>STORAGE TANKS   |   |
| Diesel Aboveground Storage<br>Tanks   | (NOTE: The regulations of this section apply to aboveground diesel fuel storage tanks that are designed to supply commercial, industrial, governmental, manufacturing, or agricultural fuel dispensing systems that are not open to the public and that are intended only for the fueling of motor vehicles.) |
| ST.5.1.GA. Diesel fuel aboveground storage tanks must meet specific standards | (NOTE: Diesel fuel aboveground storage tanks must comply with the applicable provisions of Chapters 2 and 3 of NFPA 30, Flammable and Combustible Liquids Code.)  |
| (RSFC 120-3-1107 (2)(m)(1) through (3)).                                      | Verify that diesel fuel storage tanks at an individual site do not exceed a maximum aggregate capacity of 12,000 gal.   |
|   | Verify that no backfill is permitted.   |
|   | Verify that tanks designed and built for underground use are not installed for aboveground use.   |
|   | Verify that tanks meet the following location standards:  |
|   | <ul> <li>50 ft from the nearest important building on the same property</li> <li>50 ft from any fuel dispenser</li> <li>50 ft from the nearest side of any public way</li> <li>100 ft from any property line that is or may be built upon, including the opposite side of any public way.</li> </ul>          |
|   | (NOTE: Location standards may be reduced by 50 percent if the tanks are installed with a vault that meets the requirements of RSFC 120-3-1107(2)(m)(4).)  |
|   | Verify that spill control and overfill prevention are provided.   |
| ST.5.2.GA. Diesel fuel aboveground storage tanks must meet specific standards | Verify that vaults of aboveground diesel fuel storage tanks meet the following construction standards:  |
| for vaults (RSFC 120-3-1107 (2)(m)(4)).                                       | <ul> <li>walls, top, and floor constructed of at least 6 in. thick reinforced concrete</li> <li>designed for the anticipated loading and anticipated soil and hydrostatic loading for vaults installed below grade</li> <li>liquid tight</li> </ul>   |

| COMPLIANCE CATEGORY:<br>STORAGE TANK MANAGEMENT<br>Georgia Supplement   |   |  |
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| REGULATORY<br>REQUIREMENTS:   | REVIEWER CHECKS: August 2000  |  |
|   | <ul> <li>no backfill around the tank</li> <li>meet good engineering practices</li> <li>resistant to damage from the impact of a motor vehicle or have suitable collision barriers</li> <li>vent pipes terminate at least 12 ft above ground level.</li> </ul>   |  |
|   | Verify that vaults meet the following safety standards:   |  |
|   | <ul> <li>each tank has its own vault</li> <li>each vault and tank are suitably anchored to withstand uplifting groundwater or flooding including when the tank is empty</li> <li>adequate ventilation is provided to dilute, disperse, and remove vapors</li> <li>a water and flammable or combustible liquids detection system is provided with an alarm</li> <li>provided with an approved means to admit a fire suppression agent into the vault.</li> <li>Verify that the vault has adequate means to recover liquid from the vault.</li> <li>Verify that each vault is provided with a means for personnel entry.</li> <li>Verify that each entry point is secured against unauthorized entry and vandalism and has a warning sign indicating the need for safe entry into confined spaces.</li> </ul> |  |
| ST.5.3.GA. Diesel fuel aboveground storage tanks must meet piping and ancillary equipment standards (RSFC 120-3-1107(2)(m)5). | Verify that each tank's liquid level can be determined and the gauge is easily accessible to the delivery operator.   |  |
|   | Verify that each tank either automatically stops the delivery of fuel when the liquid level reaches 95 percent of capacity or an alarm sounds when the liquid level reaches 90 percent of capacity.   |  |
|   | Verify that fuel is not dispensed from the tank by either gravity flow or pressurization of the tank.   |  |
|   | Verify that the tank is equipped to prevent the release of liquid by syphon flow.   |  |
|   | Verify that if the tank's elevation produces a gravity head on the dispensing device, the tank outlet is equipped with a device that prevents gravity flow from the tank to the dispenser including in the event of a piping or hose failure.   |  |
|   | Verify that if a submersible pump system is used, a listed emergency shut-off valve is installed at each dispensing device.   |  |
|   | Verify that if a suction pump-type dispensing device is used, a listed, vacuum-actuated shut-off valve, with a shear section, or an equivalent-type valve is installed directly beneath each dispensing device.   |  |

| Georgia Supplement  |  |
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| REGULATORY<br>REQUIREMENTS:   | REVIEWER CHECKS: August 2000   |
|   | Verify that shut-off and check valves are equipped with a pressure-relieving device that relieves the pressure generated by thermal expansion back to the tank.  |
|   | Verify that piping is routed so that exposure to physical damage is minimized.   |
| ST.5.4.GA. Diesel fuel aboveground storage tanks must meet physical protection standards (RSFC, Chapter 120-3-11, Section 120-3-11- | Verify that tanks not enclosed in a perimeter security fence are enclosed with a chain link fence that meets the following criteria:  - at least 10 ft high - at least 10 ft away from the tanks   |
| .07(2)(m)6).  | - the gate is secured at all times.  |
|   | Verify that aboveground tanks are protected against vehicular collision by suitable barriers.  |
|   | Verify that the area within the fence and dike is kept free of vegetation, debris, and any other material that is not necessary to the proper operation of the tank and piping system.   |
|   | Verify that any portion of a tank or its piping system that is in contact with the soil is protected from corrosion in accordance with sound engineering practices.  |
| ST.5.5.GA. Diesel fuel aboveground storage tanks  | Verify that the delivery vehicle is separated from any aboveground tank by at least 25 ft.   |
| must meet tank filling operation standards (RSFC, Chapter 120-3-11, Section 120-3-1107(2)(m)7).                                     | Verify that a check valve, gate valve with quick-connect coupling, or a dry-break valve is installed in the piping at the point where connection and disconnection is made for delivery from the vehicle to any aboveground tank and is protected against tampering and physical damage. |
|   | Verify that if the delivery hose is connected directly to the tank, the fill line at the tank is equipped with a tight-fill device for connecting the hose to the tank.  |
|   | Verify that approved measures are taken to prevent or contain any spill that may occur during delivery operations.   |
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| STORAGE TANK MANAGEMENT<br>Georgia Supplement   |   |
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| REGULATORY<br>REQUIREMENTS:   | REVIEWER CHECKS: August 2000  |
| ST.10.<br>EMISSIONS/<br>DISCHARGES FROM<br>BULK GASOLINE<br>TERMINALS   |   |
| ST.10.1.GA. Bulk gasoline plants must meet design and operational requirements (RSG 391-3-102(2)(pp)).                                    | (NOTE: This rule does not apply to stationary storage tanks of less than 2000 gal.)  Verify that the receiving or dispensing of gasoline from a stationary storage tank is not permitted, unless the following requirements are met:  |
|   | <ul> <li>each tank is equipped with a submerged fill pipe approved by the Director</li> <li>each tank is equipped with a fill line with the discharge opening at the tank bottom</li> <li>each tank has a vapor balance system consisting of the following major components: <ul> <li>a vapor space connection on the stationary storage tank equipped with vapor-tight fittings that automatically and immediately close upon disconnection to prevent escape of gasoline and gasoline vapor</li> <li>a connecting pipe or hose equipped with vapor-tight fittings that automatically and immediately close upon disconnection.</li> </ul> </li> </ul>                               |
|   | Verify that the transfer of gasoline is not permitted between the stationary tank and a truck or trailer, unless:   |
|   | <ul> <li>the vapor balance system is connected, operating, and in good working order</li> <li>the gasoline transport vehicle is maintained to prevent the escape of fugitive vapors and gases during loading operations</li> <li>means are provided to prevent liquid drainage from the loading device when it is not in use or to accomplish complete drainage before the loading device is disconnected</li> <li>the pressure relief valves on storage vessels and tank trucks or trailers are set to release at 0.7 psia or greater, unless restricted by state or local fire codes in which case the valve is set to release at the highest possible pressure allowed.</li> </ul> |
| ST.10.2.GA. The loading and unloading of gasoline from bulk gasoline terminals must meet specific requirements (RSG 391-3102 (2)(cc)(1)). | Verify that gasoline is not loaded into any tank trucks or trailers from a bulk gasoline terminal, unless:  - the bulk terminal is equipped with vapor control equipment properly installed and in good working order that does not allow the emission of VOC in excess of 4.7 grains/gal of gasoline, and consists of one of the following:  - an adsorber or condensation equipment which processes and recovers at least 90 percent of all vapors and gases from the equipment being controlled  |

| COMPLIANCE CATEGORY: STORAGE TANK MANAGEMENT Georgia Supplement  |  |
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| REGULATORY<br>REQUIREMENTS:  | REVIEWER CHECKS: August 2000   |
|  | <ul> <li>vapor collection equipment that directs all vapors to a fuel gas system control equipment demonstrated to have an equivalent efficiency that is approved by the Director</li> <li>all displaced vapors and gases are vented only to the vapor control equipment</li> <li>complete drainage of any loading arm is accomplished before it is removed from the tank</li> <li>all vapor loading lines are equipped with fittings that make vapor-tight connections and that close automatically when disconnected, or a loading arm with vapor return line and hatch seal designed to prevent the escape of gases and vapor while loading.</li> </ul>   |
| ST.10.3.GA. Gasoline dispensing facilities must meet specific design and operation requirements (RSG 391-3-102(2)(rr)).  | Verify that the transfer of gasoline from any delivery vessel to any stationary storage tank is not caused or allowed, unless:  - the tank is equipped with all of the following: - a submerged fill pipe - a Division-approved Stage I vapor recovery system that remains in good working condition, such as keeping the vapor return opening free of liquid or solid obstructions, and that also is leak tight - vents that are at least 12 ft in height from the ground and have a pressure/vacuum vent valve with minimum settings of 8 oz of pressure and 1/2 oz of vacuum unless the facility has a CARB certified Stage II vapor recovery system where the CARB executive order explicitly states the settings for the vent valve - the vapors displaced from the storage tank during filling are controlled by one of the following: - a vapor-tight return line from the stationary gasoline storage tank vent line that is connected from the delivery vessel to the storage tank(s) and the system ensures that the vapor line is connected before gasoline can be transferred into the tank - if a manifold connects all stationary gasoline storage tank vent lines, a vapor tight vapor return line from a tank being filled to the delivery vessel with sufficient return capacity to control vapors from all tanks being filled at the time and to prevent release of said vapors from the vent line(s) or other tank openings - a refrigeration-condensation system or a carbon adsorption system is utilized and recovers at least 90 percent by weight of the organic compounds in the displaced vapor. |
| ST.10.4.GA. Vapor recovery at new or reconstructed and existing gasoline dispensing facilities must meet specific requirements (RSG 391-3-102(2)(zz)(1), (5), (6), (7), (8), | (NOTE: This requirement applies to all gasoline dispensing facilities located in the counties of Cherokee, Clayton, Cobb, Coweta, DeKalb, Douglas, Fayette, Forsyth, Fulton, Gwinnett, Henry, Paulding, and Rockdale.)  (NOTE: This requirement does not apply to gasoline facilities that dispense no more than 10,000 gal/mo.)   |

| STORAGE TANK MANAGEMENT<br>Georgia Supplement |  |
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| REGULATORY<br>REQUIREMENTS:                   | REVIEWER CHECKS: August 2000   |
| (13), (14), (17), and (19)).                  | more than 10,000 gal/mo.)  |
|   | Verify that no gasoline dispensing facility is constructed or reconstructed, unless the gasoline dispensing facility is equipped and operating with a vapor recovery system to recover the displacement vapors from the vehicle's gasoline storage tank.   |
|   | Verify that gasoline is not transferred from stationary storage tanks at existing gasoline dispensing facilities to any vehicle gasoline tank unless the gasoline dispensing facility is equipped with an approved vapor recovery system to recover the displaced vapors from the vehicle's gasoline tank.   |
|   | Verify that the Stage II vapor recovery system is in proper operating condition as specified by the manufacturer and free of defects, leaks, or malfunctions that could impair the effectiveness of the system.  |
|   | Verify that upon identification of any defects, the operator tags all dispensing equipment for which vapor recovery has been impaired with a sign stating "out-of-order."  |
|   | Verify that the operator inspects all nozzles and nozzle boots or faceplates on a daily basis.   |
|   | Verify that the facility operator ensures that at least one facility representative receives training and instruction in the operation and maintenance of the specific Stage II vapor recovery system in use at the facility.  |
|   | Verify that operating instructions are conspicuously posted on the front of each gasoline dispenser using the Stage II vapor recovery system, that includes, at a minimum:   |
|   | <ul> <li>a clear description of how to correctly dispense gasoline using the system</li> <li>a warning to not attempt continued refueling after automatic shutoff of the system (an indication that the vehicle fuel tank is full)</li> <li>a telephone number to be used to report to the station repair representative any problems experienced with the system.</li> </ul>  |
|   | Verify that the following records are maintained for 2 yr:   |
|   | <ul> <li>maintenance records including any repaired or replacement parts and a description of the problem</li> <li>compliance records including warnings or notices of violation issued by the Division</li> <li>gasoline throughput records that will allow the average monthly gasoline throughput rate to be continually determined</li> <li>inspection results including self-inspection weekly summaries</li> <li>records of operator employee training for current employees.</li> </ul> |
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| Georgia Supplement   |  |
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| REGULATORY<br>REQUIREMENTS:  | REVIEWER CHECKS: August 2000   |
| ST.15.<br>EMISSIONS/<br>DISCHARGES FROM POL<br>STORAGE VESSELS   |  |
| ST.15.1.GA. Design requirements must be met for petroleum liquid storage vessels of 40,000 gal or more | (NOTE: This rule does not apply to USTs, if the total volume of petroleum liquids added to and taken from the tank annually does not exceed twice the volume of the tank.)   |
| (RSG 391-3-102 (2)(bb) and (nn)(1)).   | Verify that a fixed roof storage vessel is not used for the storage of volatile petroleum liquid where the true vapor pressure is greater than 1.52 psia and the capacity is 40,000 gal or more, unless:   |
|  | <ul> <li>the vessel has been fitted with a floating roof</li> <li>the vessel has been fitted with control equipment approved by the Director.</li> </ul>   |
|  | Verify that storage tanks for petroleum liquids in capacities greater than 40,000 gal that have external floating roofs meet one of the following design requirements:   |
|  | <ul> <li>the vessel is fitted with a continuous secondary seal extending from the floating roof to the tank wall (rim mounted secondary seal)</li> <li>the vessel is fitted with a continuous secondary seal extending from the floating roof to the tank wall</li> <li>the vessel is fitted with a closure device that controls VOC emissions with an effectiveness equal to or greater than a secondary seal.</li> </ul>   |
|  | Verify that all seal closure devices on storage tanks for petroleum liquids in capacities greater than 40,000 gal that have external floating roofs meet the following requirements:   |
|  | <ul> <li>there are no visible holes, tears, or other openings in the seal or seal fabric</li> <li>the seals are intact and uniformly in place around the circumference of the floating roof and the tank wall</li> <li>for vapor mounted primary seals, the accumulated area of gaps exceeding 1/8 in. does not exceed 1.0 in. 2/ft of tank diameter</li> <li>all openings in the external floating roof, except for automatic bleeder vents, rise areas wants and log classes are:</li> </ul> |
|  | rim space vents, and leg sleeves are:  - equipped with covers or seals or lids kept in the closed position at all times except when in use   |
|  | <ul> <li>equipped with projections into the tank that remain below the liquid surface at all times</li> <li>automatic bleeder vents are kept closed at all times except when the roof is</li> </ul>  |
|  | floated off or landed on the roof leg supports - rim vents are set to open when the roof is being floated off leg supports or at the manufacturer's recommended setting  |

### **COMPLIANCE CATEGORY:** STORAGE TANK MANAGEMENT **Georgia Supplement** REGULATORY **REVIEWER CHECKS: REQUIREMENTS:** August 2000 - emergency roof drains are provided with slotted membrane fabric covers or equivalent covers that cover at least 90 percent of the area of the opening. ST.15.2.GA. Inspection and (NOTE: This rule does not apply to the following petroleum liquid storage recordkeeping requirements vessels: must be met for petroleum - vessels used to store waxy, heavy pour crude oil liquids stored in external - vessels having a capacity of less than 420,000 gal and are used to store produced crude oil and condensate prior to lease custody transfer floating roof storage tanks with capacities greater than - vessels containing a petroleum liquid with a true vapor pressure of less than 40,000 gal (RSG 391-3-1-1.5 psia - vessels containing a petroleum liquid with a true vapor pressure of less than .02(2)(nn)(2), (3), and (6)). 4.0 psia and have the following: - are of welded construction - have a metallic type shoe seal, a liquid mounted foam seal, a liquid mounted liquid filled type seal, or similar device.) Verify that the following inspection requirements are met: - semiannual inspections of the secondary seal system - annual measurement of the secondary seal gap when the floating roof is equipped with a vapor-mounted primary seal. Verify that records of the types of volatile petroleum liquids stored, the maximum true vapor pressure of the liquid as stored, and the results of inspections are maintained for a minimum of 2 yr. ST.15.3.GA. (NOTE: This rule applies to gasoline dispensing facilities located in the following Design and counties: Clayton, Cobb, Coweta, DeKalb, Douglas, Fayette, Fulton, Gwinnett, operational requirements must be met for the loading and Henry, Paulding, and Rockdale.) unloading of gasoline from gasoline transport vehicles Verify that the loading or unloading of gasoline from any transport vehicle, of any (RSG 391-3-1-.02(2)(ss)). size, is not permitted, unless the following requirements are met: - the tank sustains a pressure change of not more than 3 in. of water in 5 min when pressurized to 18 in. of water and evacuated to 6 in. of water - the vehicle displays a marking on the right front side of the tank, in characters at least 2 in. high, that reads either P/V TEST DATE or EPA27, and the date on which the tank was last tested - the tank has no visible liquid leaks and no gasoline vapor leaks as measured by a combustible gas detector - the vehicle is equipped with vapor-tight fittings that automatically and immediately close upon disconnection with a vapor return line and hatch seal.

Verify that all vapor collection and control systems are designed and operated in a

| Georgia Supplement          |  |
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| REGULATORY<br>REQUIREMENTS: | REVIEWER CHECKS: August 2000   |
|                             | manner that prevents the following:  |
|                             | <ul> <li>gauge pressure from exceeding 18 in. of water and vacuum pressure from exceeding 6 in. of water in the gasoline tank truck</li> <li>a reading equal to or greater than 100 percent of the lower explosive limit at 1 in. from all points on the perimeter of a potential leak source during loading or unloading operations</li> <li>avoidable visible liquid leaks during loading and unloading operations.</li> </ul> |

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| REGULATORY<br>REQUIREMENTS:  | REVIEWER CHECKS: August 2000  |
| ST.20.<br>EMISSIONS/<br>DISCHARGES FROM<br>VOL STORAGE VESSELS   |   |
| ST.20.1.GA. The handling or storage of any volatile organic liquid (VOL) in tanks greater than 4000 gal capacity must meet specific requirements (RSG 391-3-102(2)(vv).) | Verify that the transfer of any VOL other than gasoline from a delivery vessel into a stationary storage tank of greater than 4000 gal is conducted only if the tank is equipped with submerged fill pipes. |

| Georgia Supplement   |   |
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| REGULATORY<br>REQUIREMENTS:  | REVIEWER CHECKS:<br>August 2000   |
| ST.30.<br>UST STATE-SPECIFIC   |   |
| ST.30.1.GA. Any UST previously installed and subsequently removed must be recertified (RSG 391-305(2)).  | Verify that any tank previously installed and subsequently removed is recertified by the manufacturer or by an authorized representative of the manufacturer or by a Georgia-registered Professional Engineer prior to installation as a UST.   |
| ST.30.2.GA. USTs must be registered annually (RSG 391-3-1505(4)(a) and (e)).   | Verify that all USTs are registered initially and annually thereafter, on or before 1 September.  Verify that no person places a regulated substance in a regulated UST unless there  |
| ST.30.3.GA. Corrective action plans (CAPs) must meet design and implementation requirements for release response and corrective actions for UST systems containing petroleum (RSG 391-3-1509(2), (3), (5), and (6)). | Verify that a CAP is submitted to the Division for approval within 60 days after release confirmation, when one or more of the following conditions is encountered:  - free product exceeds 1/8 in. thickness or an alternate thickness, as required by the Division - groundwater or surface water contamination exceeds Federal and state instream water quality standards - groundwater contamination exceeds Federal and state maximum contaminant levels for safe drinking water - concentrations of VOCs and/or polynuclear aromatic hydrocarbons, as appropriate, in soil exceed the threshold levels listed in Tables A and B (see Appendix 10-1) - the Division has determined that, because of unique geologic, hydrologic, or other site-specific conditions, a CAP is necessary to adequately protect human health and the environment.  Verify that petroleum contaminated soil is only transported to storage, treatment, or disposal facilities which have all applicable local, state, and Federal permits and such facility has been designated in the CAP.  Verify that, upon completion of corrective action, a completion report is submitted to the Division certifying that the CAP was implemented completely and correctly and that the objectives of the corrective action have been achieved. |

| Georgia Supplement   |   |  |
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| REGULATORY   | REVIEWER CHECKS:  |  |
| <b>REQUIREMENTS:</b>   | August 2000   |  |
| ST.30.4.GA. A closure report must be submitted to the Division upon completion of closure (RSG 391-3-1511(3)). | Verify that, for all UST systems permanently closed, a closure report is submitted to the Division within 45 days of completion of closure. |  |

# Appendix 10-1

#### **Petroleum Constituents and Soil Threshold Levels**

(Source: RSG 391-3-15-.10(d), Tables A and B)

(NOTE: Table A, to be used for UST corrective action sites where withdrawal points for public and nonpublic water supplies exist within distances defined in RSG 391-3-15-.09(3).)

| Constituent                      | AVERAGE OR HIGHER                |                       | LOWER GRO                                 | DUNDWATER                    |
|----------------------------------|----------------------------------|-----------------------|---|------------------------------|
|                                  |                                  |                       |   | EPTIBILITY AREA <sup>c</sup> |
|                                  | SUSCEPTIBILITY AREA <sup>b</sup> |                       | (Where public water supplies exist within |                              |
|                                  |                                  | supplies exist within | 1.0 mi and/or nonpublic supplies exist    |                              |
|                                  |                                  | ublic supplies exist  | within (                                  | 0.25 mi)                     |
|                                  |                                  | 0.5 mi)               |   |                              |
| VOCs                             |                                  |                       |   | > 500 ft to withdrawal       |
|                                  | point                            | point                 | point                                     | point                        |
| Benzene <sup>g</sup>             | 0.005 mg/kgd                     | 0.008 mg/kg           | 0.005 mg/kgd                              | 0.71 mg/kg                   |
| Toluene                          | 0.400 mg/kg                      | 6.00 mg/kg            | 0.400 mg/kg                               | 500.00 mg/kg                 |
| Ethylbenzene                     | 0.370 mg/kg                      | 10.00 mg/kg           | 0.500 mg/kg                               | 140.00 mg/kg                 |
| Xylenes (total)                  | 20.00 mg/kg                      | 700.00 mg/kg          | 27.00 mg/kg                               | 700.00 mg/kg                 |
| POLYNUCLEAR AROMAT  Acenaphthene | N/Ae                             | N/Ae                  | N/Ae                                      | N/Ae                         |
| Anthracene                       | N/Ae                             | N/Ae                  | N/Ae                                      | N/Ae                         |
| Benz(a)anthracene                | N/Ae                             | N/Ae                  | N/Ae                                      | N/Ae                         |
| Benzo(a)pyrene                   | 0.660 mg/kgd                     | N/Ae                  | N/Ae                                      | N/Ae                         |
| Benzo(b)fluoranthene             | 0.820 mg/kgd,f                   | N/Ae                  | N/Ae                                      | N/Ae                         |
| Benzo(g,h,i)perylene             | N/Ae                             | N/Ae                  | N/Ae                                      | N/Ae                         |
| Benzo(k)fluoranthene             | 1.60 mg/kgd,f                    | N/Ae                  | N/Ae                                      | N/Ae                         |
| Chrysene                         | 0.660 mg/kgd                     | N/Ae                  | N/Ae                                      | N/Ae                         |
| Dibenz(a,h)anthracene            | 1.50 mg/kgd,f                    | N/Ae                  | N/Ae                                      | N/Ae                         |
| Fluoranthene                     | N/Ae                             | N/Ae                  | N/Ae                                      | N/Ae                         |
| Fluorene                         | N/Ae                             | N/Ae                  | N/Ae                                      | N/Ae                         |
| Indeno(1,2,3-c,d) pyrene         | 0.660 mg/kgd                     | N/Ae                  | 0.660 mg/kgd                              | N/Ae                         |
| Naphthalene                      | N/Ae                             | N/Ae                  | N/Ae                                      | N/Ae                         |
| Phenanthrene                     | N/Ae                             | N/Ae                  | N/Ae                                      | N/Ae                         |
| Pyrene                           | N/Ae                             | N/Ae                  | N/Ae                                      | N/Ae                         |

<sup>&</sup>lt;sup>a</sup> Based on worst-case assumptions for one-dimensional vadose zone and groundwater contaminant fate and transport models.

water supplies do not exist within distances defined in RSG 391-3-15-.09(3):

b Based on an assumed distance of 0.5 ft between contaminated soils and the water table.

<sup>&</sup>lt;sup>c</sup> Based on an assumed distance of 5.0 ft between contaminated soils and the water table.

d Estimated Quantitation Limit. The health-based threshold level is less than the laboratory method limit of detection.

<sup>&</sup>lt;sup>e</sup> Not applicable. The health-based threshold level exceeds the expected soil concentration under free product

<sup>&</sup>lt;sup>f</sup> To protect surface waters, the soil threshold level in Table B may supersede that found in Table A.

g In the presence of other petroleum contaminants in concentrations exceeding 1.0 mg/kg, the Estimated Quantitation Limit, and hence the soil threshold level, may be substantially greater, as approved by the Division. (NOTE: Table B, to be used at other UST corrective action sites where withdrawal points for public and nonpublic

| Constituent                    | GROUNDWAT         | AVERAGE OR HIGHER<br>GROUNDWATER POLLUTION<br>SUSCEPTIBILITY AREA <sup>b</sup> |                   | LOWER GROUNDWATER<br>POLLUTION SUSCEPTIBILITY AREA <sup>c</sup> |  |
|--------------------------------|-------------------|--|-------------------|---|--|
| VOCs                           | 500 ft to surface | > 500 ft to surface  | 500 ft to surface | > 500 ft to surface   |  |
|                                | water body        | water body   | water body        | water body  |  |
| Benzenef                       | 0.017 mg/kg       | 0.120 mg/kg  | 0.020 mg/kg       | 11.30 mg/kg   |  |
| Toluene                        | 115.00 mg/kg      | 500.00 mg/kg   | 135.00 mg/kg      | 500.00 mg/kg  |  |
| Ethylbenzene                   | 18.00 mg/kg       | 140.00 mg/kg   | 28.00 mg/kg       | 140.00 mg/kg  |  |
| Xylenes (total)                | 700.00 mg/kg      | 700.00 mg/kg   | 700.00 mg/kg      | 700.00 mg/kg  |  |
| POLYNUCLEAR AROMA Acenaphthene | N/Ae              | N/Ae   | N/Ae              | N/Ae  |  |
| Anthracene                     | N/Ae              | N/Ae   | N/Ae              | N/Ae  |  |
| Benz(a)anthracene              | 0.660 mg/kgd      | N/Ae   | N/Ae              | N/Ae  |  |
| Benzo(a)pyrene                 | 0.660 mg/kgd      | N/Ae   | N/Ae              | N/Ae  |  |
| Benzo(b)fluoranthene           | 0.660 mg/kgd      | N/Ae   | N/Ae              | N/Ae  |  |
| Benzo(g,h,i)perylene           | N/Ae              | N/Ae   | N/Ae              | N/Ae  |  |
| Benzo(k)fluoranthene           | 0.660 mg/kgd      | N/Ae   | N/Ae              | N/Ae  |  |
| Chrysene                       | 0.660 mg/kgd      | N/Ae   | N/Ae              | N/Ae  |  |
| Dibenz(a,h)anthracene          | 0.660 mg/kgd      | N/Ae   | N/Ae              | N/Ae  |  |
| Fluoranthene                   | N/Ae              | N/Ae   | N/Ae              | N/Ae  |  |
| Fluorene                       | N/Ae              | N/Ae   | N/Ae              | N/Ae  |  |
| Indeno(1,2,3-c,d) pyrene       | 0.660 mg/kgd      | N/Ae   | 0.660 mg/kgd      | N/Ae  |  |
| Naphthalene                    | N/Ae              | N/Ae   | N/Ae              | N/Ae  |  |
| Phenanthrene                   | N/Ae              | N/Ae   | N/Ae              | N/Ae  |  |
| Pyrene                         | N/Ae              | N/Ae   | N/Ae              | N/Ae  |  |

<sup>&</sup>lt;sup>a</sup> Based on worst-case assumptions for one-dimensional vadose zone and groundwater contaminant fate and transport models.

<sup>&</sup>lt;sup>b</sup> Based on an assumed distance of 0.5 ft between contaminated soils and the water table.

<sup>&</sup>lt;sup>c</sup> Based on an assumed distance of 5.0 ft between contaminated soils and the water table.

<sup>&</sup>lt;sup>d</sup> Estimated Quantitation Limit. The health-based threshold level is less than the laboratory method limit of detection.

<sup>&</sup>lt;sup>e</sup> Not applicable. The health-based threshold level exceeds the expected soil concentration under free product condition.

f In the presence of other petroleum contaminants in concentrations exceeding 1.0 mg/kg, the Estimated Quantitation Limit, and hence the soil threshold level, may be substantially greater, as approved by the Division.

### **SECTION 11**

#### TOXIC SUBSTANCES MANAGEMENT

#### Georgia Supplement, August 2000

This section covers the state requirements for Toxic Substances Management and is intended to supplement the U.S. TEAM Guide. Refer to the U.S. TEAM Guide and the DOD Component Supplements for Federal, DOD, and service-specific requirements.

#### **Definitions**

- Abatement any measures or set of measures designed to permanently eliminate lead-based paint hazards in accordance with standards, including, but not limited to:
  - 1. Removal of lead-based paint and lead-contaminated dust, the permanent enclosure or encapsulation of lead-based paint, the replacement of lead-painted surfaces or fixtures, and the removal or covering of lead-contaminated soil; and
  - 2. All preparation, clean-up, disposal, and post-abatement clearance testing activities associated with such measures.
  - 3. Abatement in target housing and child-occupied facilities includes, but is not limited to:
    - a. Projects for which there is a written contract or other documentation which provides that a person or lead firm will be conducting activities in or to a residential dwelling or child-occupied facility that will result in the permanent elimination of lead-based paint hazards or designed to eliminate lead-based paint hazards, including lead-based paint, and lead-contaminated dust or soil;
    - b. Projects involving the permanent elimination of a lead-based paint hazard, including lead-based paint, and lead-contaminated dust or soil, conducted by firms or persons certified in accordance with Rule 391-3-24-.05, unless such projects are covered by subsection (d) of this definition;
    - c. Projects involving the permanent elimination of a lead-based paint hazard, including lead-based paint, and lead-contaminated dust or soil, conducted by firms or persons who, through their company name or promotional literature, or otherwise represent, advertise, or hold themselves to be in the business of performing lead-based paint activities as defined by these Rules, unless such projects are covered by subsection (d) of this definition; or
    - d. Projects involving the permanent elimination of lead-based paint hazards, including lead-based paint, lead-contaminated dust or soil, that are conducted in response to State or local abatement orders.
  - 4. Abatement does not include renovation, remodeling, landscaping, or other activities, when such activities are not designed to permanently eliminate lead-based paint hazards, but instead are designed to repair, restore, or remodel a given structure or dwelling, even though these activities may incidentally result in a reduction or elimination of lead-based paint hazards. Furthermore, abatement does not include interim controls, operations and maintenance activities, or other measures and activities designed to temporarily, but not permanently, reduce lead-based paint hazards (Rules of the State of Georgia (RSG) 391-3-24-.02) [Revised July 1999].
- Act the "Georgia Asbestos Safety Act," O.C.G.A. Section 12-12-1 et seq (RSG 391-3-14-.01).
- *Asbestos* any naturally-occurring hydrated mineral silicates separable into commercially used fibers, specifically the asbesti-form varieties of serpentine, chrysotile; cummingtomite-grunerite, amosite; riebeckite, crocidolite; anthophyllite; tremolite; and actinolite (RSG 391-3-14-.01).
- Asbestos-Containing Waste any solid waste containing more than 1 percent, by weight, of naturally occurring
  hydrated mineral silicates separable into commercially used fibers, specifically the asbestiform varieties of
  serpentine, chrysotile, cummingtonite-grunerite, amosite, riebeckite, crocidolite, anthophyllite, tremolite, and
  actinolite, using the method specified in Appendix A, Subpart F, 40 CFR 763, Section 1 (RSG 391-3-4-.01).

- Asbestos Foreman any individual employed or engaged by a contractor to supervise the removal, encapsulation, cleaning, or disposal of friable asbestos-containing materials (ACM) (RSG 391-3-14-.01).
- *Board* the Asbestos Licensing Board (RSG 391-3-14-.01).
- *Contractor* any person who contracts with an owner or operator of a facility or residential dwelling to perform the removal or encapsulation of friable ACM from any such facility or residential dwelling. 'Contractor' shall not include any employee of such owner or operator (RSG 391-3-14-.01).
- Child-Occupied Facility a building, or portion of a building constructed prior to 1978, visited by the same child, six years of age or under, on at least two different days within the same week (Sunday through Saturday period), provided each days visit lasts at least three hours and the combined weekly visit lasts at least six hours. Child-occupied facilities include, but are not limited to, day-care centers, pre-schools and kindergarten classrooms (RSG 391-3-24-.02) [Added July 1999].
- Department the Department of Natural Resources of the State of Georgia (RSG 391-3-14-.01).
- *Demolition* the wrecking or taking out of any load supporting structural member of a facility together with related handling operations (RSG 391-3-14-.01).
- *Director* the director of the Environmental Protection Division of the Department of Natural Resources of the State of Georgia or his designee (RSG 391-3-14-.01).
- Division the Environmental Protection Division of the Department of Natural Resources of the State of Georgia (RSG 391-3-14-.01).
- Emergency Project the removal or encapsulation of friable ACM from any facility where such activity must be conducted immediately in order to prevent disruption of a commercial or industrial process or activity or destruction of property (RSG 391-3-14-.01).
- *Encapsulation* to coat, bind, or resurface walls, ceilings, pipes, or other structures with a sealant to prevent friable asbestos from becoming airborne (RSG 391-3-14-.01).
- Facility any institutional, commercial, or industrial structure, installation, or building, including apartment buildings having more than four dwelling units (RSG 391-3-14-.01).
- Friable Asbestos-Containing Material any material that is applied onto ceilings, walls, structural members, piping, boilers, tanks, pumps, ductwork, or any other part of the building containing more than 1 percent asbestos, by weight, and that when dry may be crumbled, pulverized, or reduced to powder by hand pressure (RSG 391-3-14-.01).
- Outside Air the air outside buildings and structures (RSG 391-3-14-.01).
- *Person* any individual, partnership, association, trust, firm, corporation, county, municipality, or other entity, including the state and Federal governments (RSG 391-3-14-.01).
- *Project* the removal or encapsulation by a contractor of friable ACM from any facility or residential dwelling (RSG 391-3-14-.01).
- *Removal* to take out, strip, clean up, or dispose of friable or potentially friable ACM from any facility or residential dwelling as defined by this Chapter (RSG 391-3-14-.01).
- Residential Dwelling any family residence or apartment building with four or fewer dwelling units (RSG 391-3-14-.01).

- *Small Project* any asbestos removal or encapsulation project involving less than 160 ft<sup>2</sup> or 260 linear feet of friable ACM (RSG 391-3-14-.01).
- *Structural Member* any load supporting member of a facility, such as beams and load supporting walls; or any nonload supporting member, such as ceilings and nonload supporting walls (RSG 391-3-14-.01).
- *Target Housing* any residential dwelling constructed prior to 1978, except residential dwelling for the elderly or persons with disabilities (unless any child who is age 6 years or under resides or is expected to reside in such residential dwelling for the elderly or persons with disabilities) or any 0-bedroom dwelling (RSG 391-3-24-.02) [Added July 1999].
- *Visible Emissions* any emissions containing particulate asbestos material that are visually detectable without the aid of instruments. This does not include condensed, uncombined water vapor (RSG 391-3-14-.01).

### TOXIC SUBSTANCES MANAGEMENT GUIDANCE FOR GEORGIA CHECKLIST USERS

### REFER TO CHECKLIST ITEMS:

PCB Management

(NOTE: PCBs are regulated as a hazardous material. See Hazardous Materials, Section 3, for PCB

management.)

Missing Checklist Items T1.2.1.GA.

Asbestos Management

Missing Checklist Items T2.2.1.GA.

Renovation and Demolition of T2.5.1.GA. through T2.5.7.GA.

Asbestos-Containing Structures

Asbestos Disposal T2.15.1.GA. and T2.15.2.GA.

Radon Management

Refer to the U.S. TEAM Guide and the DOD Component Supplements for Federal, DOD, and

service-specific requirements

Missing Checklist Items T3.2.1.GA.

Lead-Based Paint T4.1.1.GA. and T4.1.2.GA.

Missing Checklist Items T4.2.1.GA.

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| REGULATORY<br>REQUIREMENTS:  | REVIEWER CHECKS: August 2000   |  |  |
| PCB MANAGEMENT   |  |  |  |
| T1.2.<br>Missing Checklist Items   |  |  |  |
| T1.2.1.GA. Federal facilities are required to comply with all applicable state regulatory requirements not contained in this checklist (a finding under this checklist item will have the citation of the applied regulation as a basis of finding). | Determine whether any new regulations have been issued since the finalization of the manual.  Determine whether the Federal facility has activities or facilities that are regulated but not addressed in the checklists.  Verify that the Federal facility is in compliance with all applicable and newly issued regulations. |  |  |

| REGULATORY REVIEWER CHECKS:   |  |  |  |
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| REQUIREMENTS:   | August 2000  |  |  |
| ASBESTOS MANAGEMENT T2.2. Missing Checklist Items   |  |  |  |
| <b>T2.2.1.GA.</b> Federal facilities are required to comply with all applicable state regulatory requirements not contained in this checklist (a finding under this checklist item will have the citation of the applied regulation as a basis of finding). | Determine whether any new regulations have been issued since the finalization of the manual.  Determine whether the Federal facility has activities or facilities that are regulated but not addressed in the checklists.  Verify that the Federal facility is in compliance with all applicable and newly issued regulations. |  |  |

| REGULATORY  | REVIEWER CHECKS:  |
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| REQUIREMENTS:   | August 2000   |
| ASBESTOS<br>MANAGEMENT  |   |
| T2.5. RENOVATION AND DEMOLITION OF ASBESTOS CONTAINING STRUCTURES   |   |
| <b>T2.5.1.GA.</b> Notification of asbestos removal activities is  | Verify that notice of removal activities is submitted to the Director at least seven calendar days prior to commencement of the removal project.  |
| required (RSG 391-3-1402(2)).   | Verify that notice of emergency activities is submitted to the Director within seven calendar days after commencement of the emergency project.   |
|   | Verify that upon completion of the project certification of completion of the project is submitted to the Director.   |
|   | (NOTE: Contractors doing asbestos removal must be licensed and certified by the state. If the project is conducted by a contractor, the contractor is responsible for the notification requirements.)   |
| <b>T2.5.2.GA.</b> The demolition of structurally unsound facilities and dwellings must meet specific requirements (RSG 391-3-1402(1)(a)(1)(vii)).       | Verify that when facilities and dwellings are being demolished under order of the state or local governmental agencies, issued because the facility or residential dwelling is structurally unsound and in danger of imminent collapse, the portions containing friable ACM are adequately wet during the wrecking operation. |
| <b>T2.5.3.GA.</b> Procedures for removal of ACM from a facility or dwelling must meet specific requirements (RSG 391-3-1402(1)(a)(1)(i) through (iii)). | Verify that friable ACM is removed from facilities and residential dwellings before any wrecking or dismantling that would break up the material or preclude access to the material for subsequent removal, unless both of the following conditions are met:  |
|   | <ul> <li>the friable asbestos is on a component that is encased in concrete or other similar material</li> <li>the materials are adequately wetted whenever exposed during demolition.</li> </ul>   |
|   | Verify that when components covered or coated with friable asbestos materials are taken out as units or in sections, both of the following requirements are met:  |
|   | - friable asbestos materials exposed during cutting or disjointing operations are   |

| Georgia Supplement  |   |  |
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| REGULATORY  | REVIEWER CHECKS:  |  |
| REQUIREMENTS:   | August 2000   |  |
|   | adequately wet - units or sections are carefully lowered (not thrown or dropped) to ground level.   |  |
|   | Verify that friable asbestos material is adequately wet when it is being stripped from components before removal from a facility or dwelling.   |  |
|   | (NOTE: The Director may determine that an exhaust ventilation and collection system may be used if wetting will damage removal equipment.)  |  |
| <b>T2.5.4.GA.</b> Management of friable ACM and components after removal from a facility or dwelling must meet specific requirements (RSG 391-3-1402(1)(a)(1)(iv) and (v)). | Verify that after components of a facility or residential dwelling have been taken out of the facility or residential dwelling as units or in sections, one of the following requirements is met:  - the friable ACM is adequately wet during stripping - a local exhaust ventilation and collection system is used that captures the   |  |
|   | particulate ACM without exhibiting visible emissions to the outside air.  Verify that the management of friable ACM that has been removed or stripped meets the following requirements:   |  |
|   | <ul> <li>adequately wet to ensure that they remain wet until they are collected for disposal</li> <li>carefully lowered to the ground or a lower floor without dropping or throwing</li> <li>materials are transported to the ground via dust-tight chutes or containers if they have been removed or stripped more than 50 ft above ground level and were not removed as units or in sections.</li> </ul>  |  |
| T2.5.5.GA. When the temperature is at or below 0 °C (32 °F), specific requirements must be met for the management of friable ACM (RSG 391-3-1402(1)(a)(1)(vi)).             | Verify that when the temperature is at or below 0 °C (32 °F), the following requirements are met for the management of ACM:  - components that are coated or covered with friable ACM are removed as units or in sections to the maximum extent possible  - the friable ACM is adequately wet during stripping  - for facilities and dwellings that are being demolished under order of the state or local governmental agencies, issued because the facility or residential dwelling is structurally unsound and in danger of imminent collapse, the portions containing friable ACM are adequately wet during the wrecking operation  - a local exhaust ventilation and collection system that exhibits no visible emissions to the outside air is used to capture ACM  - ACM is carefully lowered to the ground or lower floors  - if ACM is stripped more than 50 ft above ground level and not removed as units or in sections, the materials are transported to the ground via dust-tight |  |

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| REGULATORY REVIEWER CHECKS:   |  |  |
| REQUIREMENTS:   | August 2000 chutes or containers.  |  |
|   |  |  |
| <b>T2.5.6.GA.</b> The handling of asbestos-containing waste material from removal or  | Verify that all asbestos-containing waste material meets the following disposal standards:   |  |
| demolition operations must meet specific requirements (RSG 391-3-1402(1)(b)).         | <ul> <li>- deposited at a disposal site approved by the Division for disposal of ACM</li> <li>- discharges no visible emissions to the outside air during the collection, processing, packaging, transporting, or disposition of the material by the use of one of the following methods:</li> </ul> |  |
|   | <ul> <li>treat asbestos-containing waste material with water and meet the following requirements:</li> <li>mix asbestos-containing waste from control devices with water to form a slurry and adequately wet other ACM</li> </ul>  |  |
|   | - discharge no visible emissions to the outside air from collection, mixing, and wetting operations - after wetting, seal all asbestos-containing waste materials in leak-   |  |
|   | tight containers while wet  the containers are labeled with the following: CAUTION! CONTAINS ASBESTOS AVOID OPENING OR BREAKING CONTAINER. BREATHING ASBESTOS IS HAZARDOUS TO YOUR HEALTH.   |  |
|   | <ul> <li>use an alternative disposal method that has received prior approval<br/>from the Director.</li> </ul>   |  |
| <b>T2.5.7.GA.</b> When air cleaning is used to prevent emissions to the outside air,  | Verify that when air cleaning is used, the fabric filter collection devices meet the following requirements:   |  |
| specific requirements must be met for the filtering equipment (RSG 391-3-1402(1)(c)). | <ul> <li>operated at a pressure drop of no more than 4 in. water gauge, as measured across the fabric filter</li> <li>the air flow permeability does not exceed 30 ft3/min/ft² for woven fabrics or 35 ft³/min/ft² for felted fabrics</li> </ul>   |  |
|   | <ul> <li>felted fabric weighs at least 14 oz/yd² and is at least 1/16 in. thick throughout</li> <li>avoid the use of synthetic fabrics that contain fill yarn other than that which is spun.</li> </ul>  |  |
|   | Verify that all air cleaning equipment is properly installed, operated, and maintained.  |  |
|   | Verify that bypass devices are used only during upset or emergency conditions and only as long as necessary.   |  |
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| REGULATORY   | REVIEWER CHECKS:  |
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| REQUIREMENTS:  | August 2000   |
| ASBESTOS<br>MANAGEMENT   |   |
| T2.15.<br>ASBESTOS DISPOSAL  |   |
| <b>T2.15.1.GA.</b> Trucks used for the transportation of asbestoscontaining waste must meet specific requirements (RSG 391-3-404(8)(a)). | Verify that vehicles used for the transportation of containerized asbestos waste have an enclosed carrying compartment or utilize a covering sufficient to contain the transported waste, prevent damage to containers, and prevent release or spillage from the vehicle. |
|  | Verify that vehicles used to reduce waste volume by compaction are not used for asbestos waste.   |
|  | Verify that vacuum trucks used to transport waste slurry are constructed and operated to ensure that liquids do not leak from the truck.  |
| <b>T2.15.2.GA.</b> The disposal of asbestos-containing waste   | Verify that asbestos-containing waste is disposed of only in a permitted landfill or other facility authorized by the Division to accept asbestos-containing waste.   |
| must meet specific requirements (RSG 391-3-404(8)(b)).   | Verify that asbestos-containing waste is sealed in leak-proof containers labeled with the following: "CAUTIONCONTAINS ASBESTOS FIBERSAVOID OPENING OR BREAKING CONTAINERBREATHING ASBESTOS IS HAZARDOUS TO YOUR HEALTH."  |
|  | Verify that asbestos-containing waste is disposed of in such a manner as not to destroy the integrity of the ACM containers prior to the placement of cover material.   |
|  | Verify that the waste is completely covered immediately after deposition with a minimum of 6 in. of nonasbestos material.   |
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| REGULATORY   | REVIEWER CHECKS:   |  |  |
| REQUIREMENTS:  | August 2000  |  |  |
| RADON MANAGEMENT   |  |  |  |
| T3.2.<br>Missing Checklist Items   |  |  |  |
| T3.2.1.GA. Federal facilities are required to comply with all applicable state regulatory requirements not contained in this checklist (a finding under this checklist item will have the citation of the applied regulation as a basis of finding). | Determine whether any new regulations have been issued since the finalization of the manual.  Determine whether the Federal facility has activities or facilities that are regulated but not addressed in the checklists.  Verify that the Federal facility is in compliance with all applicable and newly issued regulations. |  |  |

| REGULATORY   | REVIEWER CHECKS:  |
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| REQUIREMENTS:  | August 2000   |
| T4.1<br>LEAD-BASED PAINT   | (NOTE: These Rules are applicable to all individuals and firms engaged in lead-based paint activities, except persons who perform these activities within residential dwellings that they own and live in. Each department, agency, and instrumentality of the executive, legislative, and judicial branches of the State of Georgia having jurisdiction over any property or facility, or engaged in any activity resulting, or which may result, in a lead-based paint hazard, and each officer, agent, or employee thereof, will comply with all requirements, both substantive and procedural, regarding lead-based paint, lead-based paint activities, and lead-based paint hazards. These Rules do not require the mandatory abatement of lead-based paint (RSG 391-3-2401).) |
| <b>T4.1.1</b> Individuals and firms conducting lead-based paint activities must meet certification requirements (RSG 391-3-2405(1)(h) and (2)(f)) [Revised July 1999].                                     | Verify that no person or lead firm conducts lead-based paint activities unless certified by the Division and in possession of a Division-issued certification card or certificate.  Verify that all firms performing any lead-based paint activity are certified by the Division.   |
| T4.1.2 Individuals and firms conducting lead-based paint activities in target housing or child-occupied facilities must meet specific requirements (RSG 391-3-2406(1)(a) through (d)) [Revised July 1999]. | (NOTE: These requirements apply to lead-based paint activities for target housing and child-occupied facilities.)  Verify that persons performing lead-based paint activities work for a certified lead firm.  Verify that no person or firm engages in a lead-based paint abatement project prior to notifying the Division and receiving a notice to proceed from the Division.  Verify that, for each inspection, risk assessment, or lead hazard screen conducted, the lead inspector or lead risk assessor submits an inspection report or risk assessment report to the party for which services are rendered, and the Division, if requested.  Verify that the report is submitted within 30 days of the activity.   |

| REGULATORY  | REVIEWER CHECKS:   |  |  |
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| <b>REQUIREMENTS:</b>  | August 2000  |  |  |
| LEAD-BASED PAINT<br>MANAGEMENT  |  |  |  |
| T4.2.   |  |  |  |
| Missing Checklist Items   |  |  |  |
| <b>T4.2.1.GA.</b> Federal facilities are required to comply with all applicable state regulatory requirements not contained in this checklist (a finding under this checklist item will have the citation of the applied regulation as a basis of finding). | Determine whether any new regulations have been issued since the finalization of the manual.  Determine whether the Federal facility has activities or facilities that are regulated but not addressed in the checklists.  Verify that the Federal facility is in compliance with all applicable and newly issued regulations. |  |  |

### **SECTION 12**

#### WASTEWATER MANAGEMENT

#### Georgia Supplement, August 2000

This section covers the state requirements for Wastewater Management and is intended to supplement the U.S. TEAM Guide. Refer to the U.S. TEAM Guide and the DOD Component Supplements for Federal, DOD, and service-specific requirements.

#### **Definitions**

- Act the Georgia Water Quality Control Act, as amended (Rules of the State of Georgia (RSG) 391-3-6-.11(2)).
- *Additive* an approved commercial product added to an on-site sewage system to enhance the performance of the system (RSG 290-5-26-.02) [Added September 1998].
- Aerobic Digestion the biochemical decomposition of organic matter in sewage sludge into CO<sub>2</sub> and water by microorganisms in the presence of air (RSG 391-3-6-.17(2)).
- Agricultural Land land on which a food crop, feed crop, or a fiber crop is grown. This includes land used as pasture (RSG 391-3-6-.17(2)).
- Agronomic Rate the sludge application rate based on a dry weight basis determined: (RSG 391-3-6-.17(2))
  - 1. to provide the amount of nitrogen needed by the food crop, feed crop, fiber crop, cover crop, or vegetation grown on the land
  - 2. to minimize the amount of nitrogen in the sewage sludge that passes below the root zone of the crop or vegetation grown on the land to the groundwater.
- Anaerobic Digestion the biochemical decomposition of organic matter in sewage sludge into methane gas and carbon dioxide by microorganisms in the absence of air (RSG 391-3-6-.17(2)).
- Animal Unit (AU) a unit of measurement for any swine feeding operation calculated by the number of swine weighing over 25 kilograms (approximately 55 pounds) multiplied by 0.4 (RSG 391-3-6-.20) [Added August 2000].
- Annual Average Stream Flow that flow measured daily at the nearest listed U.S. Geologic Survey stream gauge, averaged for the entire period of record, and adjusted by comparison to the size of the drainage area in which the discharge is located (RSG 391-3-6-.06(2)).
- Annual Pollutant Loading Rate the maximum amount of a pollutant that may be applied to a unit area of land during a 365-day period (RSG 391-3-6-.17(2)).
- Annual Sludge Application Rate the maximum amount of sewage sludge (dry weight basis) that may be applied to a unit area of land during a 365-day period (RSG 391-3-6-.17(2)).
- Applied the person who applies bulk sewage sludge to the land (RSG 391-3-6-.17(2)).
- Aquaculture Project any point source that meets the criteria set forth in the Federal Regulations, 40 CFR 122.25 (RSG 391-3-6-.06(2)).

- Associated With Industrial Activity any industrial activity or industrial facility identified in 40 CFR 122.26(B)(14) (RSG 391-3-6-.16(3)).
- *Biosolids* any sewage sludge, as defined in 396-3-6-.17(2)(gg), that fulfills all requirements under this chapter, and is used in a beneficial manner (RSG 391-3-6-.17(2)).
- *Blender* any mechanical device capable of reducing sewage solids into a finely divided state such that a liquid disinfecting agent may be effectively dispersed throughout the blended sewage (RSG 391-3-6-.04(2)).
- *Board* or *Board of Examiners* the State Board of Examiners for Certification of Water and Wastewater Treatment Plant Operators and Laboratory Analysts (RSG 750-2-.01) [Added July 1999].
- *Boat* any vessel or watercraft whether moved by oars, paddles, sails, or other power mechanism, inboard or outboard, or any other vessel or structure floating upon the waters of this state whether or not capable of self-locomotion, including, but not limited to, cabin cruisers, houseboats, barges, and similar floating objects (RSG 391-3-6-.04(2)).
- *Buffer* a natural or enhanced vegetated area with no or limited minor land disturbances, such as trails and picnic areas. Specific buffer uses may be defined by local governments consistent with these criteria (RSG 391-3-16-.01(2)(a)).
- Building Sewer that part of the horizontal piping of a building drainage system beyond the building drain which receives the discharge from the building drain and conveys it to a public sewer, private sewer, on-site sewage management system, or other disposal (RSG 290-5-26-.02) [Added September 1998].
- Bulk Sewage Sludge or Bulk Biosolids sewage sludge that is not sold or given away in a bag or other container for application to the land (RSG 391-3-6-.17(2)).
- Central On-site Sewage Management System an on-site sewage management system serving more than one building, business, residence, or other facility designed or used for human occupancy or congregation (RSG 290-5-26-.02) [Added September 1998].
- *Closure Plan* the plan approved by the Division for clean up and closure of the swine feeding operation and associated waste storage and disposal facilities (RSG 391-3-6-.20) [Added August 2000].
- Community Subsurface Treatment System any system which treats primarily domestic wastewater other than those serving single family residences or non-domestic sewage systems (RSG 290-5-26-.02) [Added September 1998].
- Comprehensive Nutrient Management Plan (CNMP) a plan which identifies actions or priorities that will be followed to meet clearly defined nutrient management goals at an agricultural operation. Defining nutrient management goals and identifying measures and schedules for attaining the goals is critical to reducing threats to water quality and public health. CNMPs should address, at a minimum, feed management, manure handling and storage, land application of manure, land management, record keeping, and management of other utilization options. The Natural Resources Conservation Services (NRCS) Field Office Technical Guide (FOTG) is the primary technical reference for the development of CNMPs. It contains technical information about utilization and conservation of soil, water, air, plant, and animal resources. The FOTG used in an individual field office is localized to consider particular characteristics for the geographic area for which it is prepared. CNMP's are submitted to the Division for review and approval. They include emergency response planning and a closure plan for abandonment of any facility used for the treatment or storage of swine waste (RSG 391-3-6-.20) [Added August 2000].
- Concentrated Animal Feeding Operation any point source that meets the criteria set forth in the Federal Regulations, 40 CFR 122.23 (RSG 391-3-6-.06(2)).

- Concentrated Aquatic Animal Production Facility any point source which meets the criteria set forth in the Federal Regulations, 40 CFR 122.24 (RSG 391-3-6-.06(2)).
- Consistently Exceeding An Effluent Limitation a publicly owned treatment works (POTW) exceeding the 30-day average limit for biochemical oxygen demand or total suspended solids for at least 5 days out of each 7-day period during a total period of 180 consecutive days (RSG 391-3-6-.05(2)).
- Construction any placement, assembly, or installation of facilities or equipment (including contractual obligations to purchase such facilities or equipment) at the premises where such equipment will be used, including preparation work at such premises (RSG 391-3-6-.06(2)).
- Conventional System a system traditionally used composed of perforated pipe surrounded by gravel or stone
  masking for the infiltration of effluent into adjoining bottom and side soil areas (RSG 290-5-26-.02) [Added
  September 1998].
- Conventional Septic Tank System any septic tank, and conventional system as defined in (r), but does not include alternative or experimental systems (RSG 290-5-26-.02) [Added September 1998].
- Corridor all land within the buffer areas and other setback areas (RSG 391-3-16-.01(2)(b)).
- *County Board of Health* the County Board of Health established by the Georgia Health Code (O.C.G.A. 31-3-1) or its designee (RSG 290-5-26-.02) [Added September 1998].
- Cover Crop a temporary crop, such as winter rye or clover, planted to protect the soil from erosion and to provide humus or nitrogen when plowed under (RSG 391-3-6-.17(2)).
- *Cumulative Pollutant Loading Rate* the maximum amount of an inorganic pollutant that may be applied to an area of land (RSG 391-3-6-.17(2)).
- *Division* the Environmental Protection Division of the Georgia Department of Natural Resources (RSG 391-3-6-.06(2)).
- *Domestic Sewage* waste and wastewater from humans or from household operations that are discharged to or that otherwise enter a treatment works (RSG 391-3-6-.17(2)).
- Dry Weight Basis calculated on the basis of having been dried at 105 °C until reaching a constant mass (i.e., essentially 100 percent solids content) (RSG 391-3-6-.17(2)).
- Effluent Limitation any restriction or prohibition established under the Act on quantities, rates, or concentrations, or a combination thereof, of chemical, physical, biological, or other constituents that are discharged from point sources into the waters of the state, including but not limited to, schedules of compliance and whole effluent biological monitoring requirements (RSG 391-3-6-.06(2)).
- Environmental Information Document an assessment of environmental impact of any proposed construction, upgrading or expansion of a wastewater treatment facility. This evaluation may include, but is not limited to, the impact of the proposed construction, upgrading, or expansion on air quality, flood plains, wetlands, noise pollution, water quality, cultural resources, and endangered or threatened species (RSG 391-3-6-.02(2)).
- Exceptional Quality Sludge sewage sludge that meets the pollutant concentrations in 391-3-6-.17(5) Table 3, one of the Class A pathogen requirements in 391-3-6-.17(7)(a), and one of the vector attraction reduction requirements in 391-3-6-.17(8)(a) through (h) (RSG 391-3-6-.17(2)).

- Existing Operation a swine feeding operation which was in operation prior to the effective date of this rule (RSG 391-3-6-.20) [Added August 2000].
- Facility any NPDES point source or any other system or activity that may be regulated by the Water Protection Branch of the EPD, including land application systems regulated under 391-3-6-.11, and industrial pretreatment systems regulated under 391-3-6-.08 (RSG 391-3-6-.17(2)).
- Failure a condition of an on-site sewage system that constitutes a public hazard by inadequate treatment and/or disposal of sewage (RSG 290-5-26-.02) [Added September 1998].
- Federal Act the Federal Water Pollution Control Act, also known as the Clean Water Act, as amended (RSG 391-3-6-.08(2)).
- Federal Marine Standard the performance standards for marine sanitation devices set forth at 40 CFR 140 (RSG 391-3-6-.04(2)).
- Feed Crops crops produced primarily for consumption by animals (RSG 391-3-6-.17(2)).
- *Food Crops* crops consumed by humans. These include, but are not limited to, fruits, vegetables, and tobacco (RSG 391-3-6-.17(2)).
- Forest a tract of land thick with trees and underbrush (RSG 391-3-6-.17(2)).
- General Permit an NPDES permit issued under Title 40 of the Code of Federal Regulations (40 CFR), Part 122.28 authorizing a category of discharges under the Federal Clean Water Act (Federal Act) within a geographical area (RSG 391-3-6-.15(2)).
- *Hazardous Waste* any solid waste which has been defined as a hazardous waste in regulations, promulgated by the administrator of the United States Environmental Protection Agency pursuant to the Federal Act, which are in force and effect on 1 February 1988, codified as 40 C.F.R. Section 261.3 (RSG 391-3-16-.03(2)(a)).
- Hydraulic Loading Rate the rate at which wastes or wastewaters are discharged to a land disposal or land treatment system, expressed in volume per unit area per unit time or depth of water per unit area per unit time (RSG 391-3-6-.11(2)).
- *Impervious Surface* a man-made structure or surface which prevents the infiltration of storm water into the ground below the structure or surface. Examples are buildings, roads, driveways, parking lots, decks, swimming pools, or patios (RSG 391-3-16-.01(2)(c)).
- *Indirect Discharger* the following definitions apply: (RSG 391-3-6-.08(2))
  - 1. a nondomestic discharger introducing pollutants to a POTW (RSG 391-3-6-.06(2)).
  - 2. the introduction of pollutants into a POTW from any nondomestic source regulated under Section 307(b), (c), or (d) of the Federal Act.
- *Individual Permit* an NPDES permit applied for and issued in accordance with paragraph 391-3-6-.06 of this Chapter (RSG 391-3-6-.20) [Added August 2000].
- *Industrial User* any person discharging or proposing to discharge any pollutant into a POTW and then into waters of the state; considered a source of indirect discharge (RSG 391-3-6-.08(2)).
- Interference or Interfere a discharge that, alone or in conjunction with a discharge or discharges from other sources, inhibits or disrupts a POTW's sewer system, treatment processes, or operations, or its sludge processes, including use or disposal thereof; and such discharge is a cause of a violation of any requirement of the POTW's NPDES Permit (including an increase in the magnitude or duration of a violation). The terms include prevention

- of sewage sludge use or disposal in accordance with Section 405 of the Federal Act, or any criteria, guidelines, or regulations developed pursuant to state or Federal water, land, or air protection laws (RSG 391-3-6-.08(2)).
- Land Application or Applied to the Land the spraying or spreading of sewage sludge on the land surface; the injection of sewage sludge below the land surface; or the incorporation of sewage sludge into the soil at agronomic rates for the purpose of soil conditioning or fertilization of crops or vegetation grown in the soil (RSG 391-3-6-.17(2)).
- Land Application System (LAS) any method of disposing of pollutants in which the pollutants are applied to the surface or beneath the surface of a parcel of land and which results in the pollutants percolating, infiltrating, or being absorbed into the soil and then into the waters of the state (RSG 391-3-6-.19(2)).
- Land Disposal System any method of disposing of pollutants in which the pollutants are applied to the surface or beneath the surface of a parcel of land and which results in the pollutants percolating, infiltrating, or being absorbed into the soil and then into the waters of the state. Land disposal systems exclude landfills and sanitary landfills but include ponds, basins, or lagoons used for disposal of wastes or wastewaters and used or intended to be used to prevent point discharge of pollutants into waters of the state. Septic tank systems, as defined in Chapter 270-5-25.01 and as approved by appropriate County Boards of Public Health, are not considered land disposal systems for purposes of Chapter 391-3-6-.11 (RSG 391-3-6-.11(2)).
- Land Disposal System Permit any permit issued by the Division to regulate the discharge of any pollutant into a land disposal or land treatment system (RSG 391-3-6-.11(2)).
- Land Treatment System any land disposal system in which vegetation on the site is used to remove some of the pollutants applied (RSG 391-3-6-.11(2)).
- Land With A High Potential for Public Exposure land that is frequently used by the public. This includes but is not limited to public parks, ball fields, cemeteries, plant nurseries, turf farms, and golf courses (RSG 391-3-6-.17(2)).
- Land With A Low Potential for Public Exposure land that the public uses infrequently. This includes, but is not limited to agricultural land, forest, and a reclamation site located in an unpopulated area (RSG 391-3-6-.17(2)).
- *Limitation* any restriction or prohibition established under the Act on quantities, rates, or concentrations, or a combination thereof, of chemical, physical, biological, or other constituents which are discharged from industrial users into a POTW and then into the waters of the state, including but not limited to schedules of compliance (RSG 391-3-6-.08(2)).
- Local Government the governing authority of a political subdivision (RSG 391-3-16-.03(2)(c)).
- *Major Discharger* as defined in EPA annual operating guidance for the EPA Regional Offices and the states and specifically listed in the annual state program plan (RSG 391-3-6-.06(2)).
- *Major Spill* means the following: (RSG 391-3-6-.05(2))
  - 1. the discharge of pollutants into the waters of the state by the POTW that exceeds the weekly average permitted effluent limit for biochemical oxygen demand (5-day) or total suspended solids by 50 percent or greater for any 1 day.
  - 2. any discharge of raw sewage that is in excess of 10,000 gal or results in water quality violations in the waters of the state.
- Manual For On-site Sewage Management Systems the technical handbook currently adopted and periodically
  updated which is used by the Department in the implementation of this chapter and is available for inspection at
  the appropriate State Office in Atlanta or at local Health Departments. Such Manual for On-site Sewage
  Management Systems and its provisions are herein adopted unless inconsistent with other provisions of law or

- regulation and is hereafter referred to as the "Manual" or "Manual for On-site Sewage Management Systems" (RSG 290-5-26-.02) [Added September 1998].
- *Marine Sanitation Devices* any equipment for installation on a boat that is designed to receive, retain, treat, or discharge sewage or any process to treat such sewage (RSG 391-3-6-.04(2)).
- *Marine Toilet* any toilet on or within any boat (RSG 391-3-6-.04(2)).
- Monthly Average the arithmetic mean of all measurements taken during the month (RSG 391-3-6-.17(2)).
- National Pretreatment Standard, Pretreatment Standard, or Standard any regulation containing pollutant discharge limits promulgated by the EPA in accordance with Section 307(b) and (c) of the Federal Act, which applies to industrial users. This term includes prohibited discharge limits established pursuant to 40 CFR 403.5 (RSG 391-3-6-.08(2)).
- Natural Resources Conservation Services (NRCS) an agency within the United States Department of Agriculture (RSG 391-3-6-.20) [Added August 2000].
- Natural Vegetative Buffer a river corridor containing the flora native to that area (RSG 391-3-16-.04(2)(e)).
- New Discharger any point source that meets the criteria set forth in the Federal Regulations, 40 CFR 122.29 (RSG 391-3-6-.06(2)).
- *New Operation* a swine feeding operation the construction or expansion of which is commenced on or after the effective date of this rule (RSG 391-3-6-.20) [Added August 2000].
- New Source the following definitions apply: (RSG 391-3-6-.08(2))
  - 1. any point source that meets the criteria set forth in the Federal Regulations, 40 CFR 122.29 (RSG 391-3-6-.06(2)).
  - 2. any building, structure, facility, or installation from which there is or may be a discharge of pollutants, the construction of which commenced after the publication of proposed pretreatment standards under Section 307(c) of the Federal Act, which will be applicable to such source if such standards are thereafter promulgated in accordance with that section provided:
    - a. the building, structure, facility, or installation is constructed at a site at which no other source is located
    - b. the building, structure, facility, or installation totally replaces the process or reduction equipment that causes the discharge of pollutants at an existing source
    - c. the production or wastewater generating processes of the building, structure, facility, or installation are substantially independent of an existing source at the same site. In determining whether these are substantially independent, factors such as the extent to which the new facility is integrated with the existing plant and the extent to which the new facility is engaged in the same general type of activity as the existing source should be considered.
  - 3. construction on a site at which an existing source is located results in a modification rather than a new source if the construction does not create a new building, structure, facility, or installation meeting the criteria of Sub-Paragraphs 391-3-6-.08(2)(i)1(ii) or (iii) but otherwise alters, replaces, or adds to existing process or production equipment.
  - 4. construction of a new source as defined under this Paragraph has commenced if the owner or operator has:
    - a. begun, or caused to begin as part of a continuous on-site construction program:
      - i. any placement, assembly, or installation of facilities or equipment
      - ii. significant site preparation work including clearing, excavation, or removal of existing buildings, structures, or facilities that is necessary for the placement, assembly, or installation of new source facilities or equipment.
    - b. entered into a binding contractual obligation for the purchase of facilities or equipment intended to be used in its operation within a reasonable time. Options to purchase or contracts that can be

terminated or modified without substantial loss, and contracts for feasibility, engineering, and design studies do not constitute a contractual obligation under this Paragraph.

- *Notice of Intent (NOI)* a form used by potential permittee to notify the Division, within a specified time, that they intend to comply with a general permit (RSG 391-3-6-.15(2)).
- *Notice of Termination (NOT)* a form used by a permittee to notify the Division that they wish to cease coverage under a general permit (RSG 391-3-6-.15(2)).
- *NPDES Permit Application* the application filed by any person with the Director for an NPDES Permit (RSG 391-3-6-.06(2)).
- *NPDES Permit* the permit issued by the Division to regulate the discharge of pollutants from any point source into the waters of the state (RSG 391-3-6-.06(2)).
- *NRCS Guidance* the latest editions of the NRCS Agricultural Waste Management Field Handbook, Part 651, FOTG Section IV Georgia, and other applicable publications of the NRCS (RSG 391-3-6-.20) [Added August 2000].
- On-site Sewage Management System a sewage management system other than a public or community sewage treatment system serving one or more buildings, mobile homes, recreational vehicles, residences, or other facilities designed or used for human occupancy or congregation. Such term shall include, without limitation, conventional and chamber septic tank systems, privies, and experimental and alternative on-site management systems which are designed to be physically incapable of a surface discharge of effluent that may be approved by the department (RSG 290-5-26-.02) [Added September 1998].
- *Operator* any person who performs operation duties, as defined by the Board, at wastewater treatment plants, wastewater collection systems, water distribution systems, public water supply systems, or water treatment plants (RSG 750-2-.01) [Added July 1999].
- Operator In Responsible Charge any operator who has direct general charge of the day-to-day field operation of a wastewater treatment plant, wastewater collection system, water distribution system, or public water supply system, and who is responsible for the quality of the treated water or wastewater effluent (RSG 750-2-.01) [Added July 1999].
- *Operation Duties* (RSG 750-2-.01) [Added July 1999]:
  - 1. for a wastewater treatment plant and for a water treatment plant means day-to-day process control decisions which may affect the treatment and, therefore, quality of the treated water and/or wastewater effluent; and
  - 2. for a wastewater collection system or for a water distribution system means the on-site supervision of the cleaning, maintaining, and repairing of the system.
- Other Container either an open or closed receptacle. This includes, but is not limited to, a bucket, a box, a carton, and a vehicle or trailer with a load capacity of 2,200 lb or less (RSG 391-3-6-.17(2)).
- Other Disposal Unit any device on or within any boat, other than marine toilet, that is intended for use in the disposal of human body wastes or sewage (RSG 391-3-6-.04(2)).
- *Owner* any person owning or operating any system for the disposal or treatment of pollutants (RSG 391-3-6-.02(2)).
- Pass Through a discharge that exits the POTW into waters of the state in quantities or concentrations that alone or in conjunction with a discharge or discharges from other sources, is a cause of a violation of any

- requirement of the POTW's NPDES Permit (including an increase in the magnitude or duration of a violation) (RSG 391-3-6-.08(2)).
- *Pathogenic Organisms* disease-causing organisms. These include, but are not limited to, certain bacteria, protozoa, viruses, and viable helminth ova (RSG 391-3-6-.17(2)).
- *Permit By Rule Or Deemed To Be Permitted* an issued non-NPDES permit in accordance with Division paragraph 391-3-.06.20(4) (RSG 391-3-6-.20) [Added August 2000].
- *Person* any individual, corporation, company, association, partnership, county, municipality, state agency, Federal agency, or facility or other entity (RSG 391-3-6-.08(2)).
- Perennial Stream a stream which flows throughout the whole year (RSG 391-3-16-.01(2)(d)).
- *POTW Pretreatment Program* or *Program* or *Approved POTW Pretreatment Program* a pretreatment program administered by a POTW that meets the criteria established in 40 CFR 403.8 and 403.9 and that has been approved by the Director (RSG 391-3-6-.09(2)).
- *Points* continuing education requirements by the Board as a condition of certificate renewal. The number of points awarded by the Board for a course or conference may or may not be the same as the number of contact hours in the course or conference (RSG 750-2-.01) [Added July 1999].
- *Pollutant* an organic substance, an inorganic substance, a combination of organic and inorganic substances, or a pathogenic organism that, after discharge and upon exposure, ingestion, inhalation, or assimilation into an organism either directly from the environment or indirectly by ingestion through the food chain, could, on the basis of information available to the Administrator of EPA, cause death, disease, behavioral abnormalities, cancer, genetic mutations, physiological malfunctions (including malfunction in reproduction), or physical deformations in either organisms or offspring of the organisms (RSG 391-3-6-.17(2)).
- *Pollutant Limit* a numerical value that describes the amount of a pollutant allowed per unit amount of sewage sludge (e.g., milligrams per kilogram of total solids); the amount of a pollutant that can be applied to a unit area of land (e.g., pounds per acre); or the volume of a material that can be applied to a unit area of land (e.g., gallons per acre) (RSG 391-3-6-.17(2)).
- *Pollution Susceptibility* the relative vulnerability of an aquifer to being polluted from spills, discharges, leaks, impoundments, applications of chemicals, injections, and other human activities in the recharge area (RSG 391-3-16-.02).
- *Pollution Susceptibility Maps* maps of relative vulnerability to pollution prepared by the Department of Natural Resources. Pollution susceptibility maps categorize the land areas of the State into areas having high, medium, and low groundwater pollution potential (RSG 391-3-16-.02).
- *Preparer* either the person who generates sewage sludge during the treatment of domestic sewage or a combination of domestic sewage and industrial wastewater in a treatment works or the person who derives a material from sewage sludge (RSG 391-3-6-.17(2)).
- Pretreatment the reduction of the amount of pollutants, the elimination of pollutants, or the alteration of the nature of pollutant properties in wastewater prior to or in lieu of discharging or otherwise introducing such pollutants into a POTW. The reduction or alteration may be obtained by physical, chemical, or biological processes, process changes, or by other means, except as prohibited by 40 CFR 403.6(d). Appropriate pretreatment technology includes control equipment, such as equalization tanks or facilities, for protection against surges or slug loadings that might interfere with or otherwise be incompatible with the POTW. However, where wastewater from a regulated process is mixed in an equalization facility with unregulated wastewater or

- with wastewater from another regulated process, the effluent from the equalization facility must meet an adjusted pretreatment limit calculated in accordance with 40 CFR 403.6(e) (RSG 391-3-6-.08(2)).
- *Pretreatment Permit* any permit issued by the EPD to regulate the discharge of pollutants from any industrial user into a POTW and the waters of the state (RSG 391-3-6-.08(2)).
- *Pretreatment Requirements* any substantive or procedural requirement related to pretreatment, other than a national pretreatment standard, imposed on an industrial user (RSG 391-3-6-.08(2)).
- *Process Control Decisions* decisions which may affect the treatment and, therefore, quality of the treated water and/or wastewater effluent (RSG 750-2-.01) [Added July 1999].
- *Professional Engineer* as used in this chapter, the term means the same as the definition contained in OCGA Section 43-15-2(10) (RSG 391-3-6-.02(2)).
- *Protected Mountain* all land area 2,200 ft or more above mean sea level, that has a percentage slope of 25 percent or greater for at least 500 ft horizontally, and includes the crests, summits, and ridge tops which lie at elevations higher than any such area (RSG 391-3-16-.03(2)(i)).
- Protected River any perennial river or watercourse with an average annual flow of at least 400 ft<sup>3</sup>/s. However, those segments of rivers covered by the Metropolitan River Protection Act or the Coastal Marshlands Protection Act are specifically excluded from the definition of a protected river. In coastal areas, the seaward limit of any protected river is the inland limit of the jurisdiction of the Coastal Marshlands Protection Act (RSG 391-3-16-.04(2)(j)).
- Publicly Owned Treatment Works (POTW) the city, town, county, district, association, or other public body created by or pursuant to state or Federal law that owns and operates a treatment works, and any sewers or other appurtenances that convey wastewater to the treatment works. The definition includes any devices and systems used in the storage, treatment, recycling, and reclamation of municipal sewage or industrial waste of a liquid nature (RSG 391-3-6-.09(2)).
- *Recharge Area* any portion of the earth's surface, where water infiltrates into the ground to replenish an aquifer (RSG 391-3-16-.02).
- *Reclamation Site* drastically disturbed land that is reclaimed using sewage sludge or a product derived from sewage sludge. This includes, but is not limited to, strip mines and construction sites (RSG 391-3-6-.17(2)).
- Reforestation Plan a plan, prepared by a registered forester, for replacing of harvested timber by replanting (as described in the Recommended Best Management Practices for Forestry in Georgia, published by the Georgia Forestry Commission) or by natural regenerative processes (such as coppicing, seed trees, etc.) (RSG 391-3-16-.03(2)(k)).
- River Corridor all land, inclusive of islands, not regulated under the Metropolitan River Protection Act (O.C.G.A. 12-5-440 through 12-5-457), or the Coastal Marshlands Protection Act (O.C.G.A. 12-5-280 through 12-5-293), in areas of a protected river and being within 100 ft horizontally on both sides of the river as measured from the riverbanks. The 100 ft buffer is measured horizontally from the uppermost part of the river bank, usually marked by a break in slope. Although not within the measured 100 ft wide buffer, the area between the top of the bank and the edge of the river is treated by local governments in the same manner as the river corridor. Because stream channels move due to natural processes such as meandering, river bank erosion, and jumping of channels, the river corridor may shift with time. For the purposes of these standards, the river corridor is fixed at its position at the beginning of each review period for local comprehensive plans. Any shift in the location of the protected river after the start of the review period will require a revision of the boundaries of the river corridor at the time of the next review by the Department of Community Affairs (RSG 391-3-16-.04(2)(m)).

- Segment a portion of a water quality planning area, the surface waters of which have common hydrologic characteristics (or flow regulation patterns); common natural physical, chemical, and biological characteristics and processes; and common reactions to external stresses, such as the discharge of pollutants. Segments will be classified as either a water quality segment or an effluent limitation segment as follows: (RSG 391-3-6-.06(2))
  - 1. Water quality segment. Any segment where it is known that water quality does not meet applicable water quality standards and/or is not expected to meet applicable water quality standards even after the application of the effluent limitations required by sections 301(b)(1)(B) and 301(b)(2)(A) of the Act.
  - 2. Effluent limitation segment. Any segment where it is known that water quality is meeting and will continue to meet applicable water quality standards or where there is adequate demonstration that water quality will meet applicable water quality standards after the application of the effluent limitations required by sections 301(b)(1)(B) and 301(b)(2)(A) of the Act.
- Separate Storm Sewer any point source that meets the criteria set forth in the Federal Regulations, 40 CFR 122.26 (RSG 391-3-6-.06(2)).

#### Sewage:

- 1. for the purposes of this paragraph only, means water-carried wastes, which are generated by human beings or their activities (RSG 391-3-6-.04(2)).
- 2. includes human excreta, all water carried wastes, and liquid household waste from residences or commercial and industrial establishments (RSG 290-5-26-.02) [Added September 1998].
- Sewage Treatment System a system that provides primary treatment and disposal, including absorption field components, devices, and appurtenances intended to be used for disposal of sewage by soil absorption, but does not include a conventional or chamber septic tank system. The system shall be designed to be physically incapable of a surface discharge of effluent (RSG 290-5-26-.02) [Added September 1998].
- Septic Tank an approved watertight tank designed or used to receive sewage from a building sewer and to effect separation and organic decomposition of sewage solids, and discharging sewage effluent to an absorption field or other management system (RSG 290-5-26-.02) [Added September 1998].
- Sewage Sludge solid, semisolid, or liquid residue generated during the treatment of domestic sewage or a combination of domestic sewage and industrial wastewater in a treatment works. Sewage sludge includes, but is not limited to, scum or solids removed in primary, secondary, or advanced wastewater treatment processes. Sewage sludge does not include ash generated during the firing of sewage sludge in a sewage sludge incinerator, grit and screenings generated during preliminary treatment of domestic sewage in a treatment works, treated effluent, or materials excluded from definition of "sewage sludge" by OCGA Sec. 12-5-30.3(a)(1) (RSG 391-3-6-.17(2)).
- Sewerage System any system for the treatment or disposal of pollutants including treatment works, pipe lines or conduits, pumping stations and force mains, and all other constructions, devices, and appliances appurtenant thereto, used for conducting pollutants to the point of ultimate disposal (RSG 391-3-6-.02(2)).
- Significant Industrial User any industrial user that: (RSG 391-3-6-.08(2))
  - 1. is subject to any categorical pretreatment standard promulgated by the EPA in accordance with Section 307(b) and (c) of the Federal Act
  - 2. has in its waste a toxic pollutant in toxic amounts as defined in standards issued under Section 307(a) of the Federal Act
  - 3. has a reasonable potential to significantly interfere with, either singly or in combination with other contributing industries, the treatment works or the quality of its effluent; or has a reasonable potential to violate any pretreatment standard or requirement
  - 4. discharges an average of 25,000 gal/day or more of process wastewater to the POTW (excluding sanitary, noncontact cooling and boiler blowdown wastewater)

- 5. contributes a process wastestream that makes up 5 percent or more of the average dry weather hydraulic or organic capacity of the POTW treatment plant.
- *Significant Noncompliance* for an industrial user means that its violation meets one or more of the following criteria: (RSG 391-3-6-.08(2))
  - 1. chronic violations of wastewater discharge limits, defined here as those in which 66 percent or more of all of the measurements taken during a 6-mo period exceed (by any magnitude) the daily maximum limit or the average limit for the same pollutant parameter
  - 2. Technical Review Criteria (TRC) violations, defined here as those in which 33 percent or more of all of the measurements for each pollutant parameter taken during a 6-mo period equal or exceed the product of the daily maximum limit or the average limit multiplied by the applicable TRC (TRC = 1.4 for BOD, TSS, fats, oil, and grease, and 1.2 for all other pollutants except pH)
  - 3. any other violation of a pretreatment effluent limit (daily maximum or longer-term average) that the Director determines has caused, alone or in combination with other discharges, interference or pass through (including endangering the health of POTW personnel or the general public)
  - 4. any discharge of a pollutant that has caused imminent endangerment to human health, welfare, or to the environment or has resulted in the POTW's exercise of its emergency authority to halt or prevent such a discharge
  - 5. failure to meet, within 90 days after the schedule date, a compliance schedule milestone contained in a control mechanism or enforcement order for starting construction, completing construction, or attaining final compliance
  - 6. failure to provide, within 30 days after the due date, required reports such as baseline monitoring reports, 90-day compliance reports, periodic self-monitoring reports, and reports on compliance with compliance schedules
  - 7. failure to accurately report noncompliance
  - 8. any other violations or group of violations that the Director determines will adversely affect POTW operation or violate applicable NPDES Permit effluent limitations and requirements.
- Significant Recharge Area those areas mapped by the Department of Natural Resources. Mapping of recharge areas is based on outcrop area, lithology, soil type and thickness, slope, density of lithologic contacts, geologic structure, the presence of karst, and potentiometric surface. Significant recharge areas are as follows in the various geologic provinces of Georgia: (RSG 391-3-16-.02)
  - 1. in the Valley and Ridge and in the Cumberland Plateau, significant recharge areas are outcrop areas of carbonate rock where low slope (less than 8 percent slope) conditions prevail. Such areas commonly are characterized by karst topography (eaves and sinkholes)
  - 2. in the Piedmont and in the Blue Ridge, rocks have little primary porosity, with most groundwater being stored in the overlying soils. The significant recharge areas are those with thicker soils. Field mapping indicates that thick soils in the Piedmont and Blue Ridge are characterized by a density of two or more geologic contacts per four square miles (source: 1976 1:500,000 Geologic Map of Georgia) and slopes lower than 8 percent
  - 3. in the Coastal Plain, the significant recharge areas are the surface outcroppings of the large and extensively used drinking water aquifers (e.g., the Floridian, the Clayton, etc.) and soils having high permeability according to the 1976 1:750,000 Soils Association Map of Georgia.
- Specific Oxygen Uptake Rate the mass of oxygen consumed per unit time per unit mass of total solids (dry weight basis) in the sewage sludge (RSG 391-3-6-.17(2)).
- *Stockpile* to place sewage sludge on land in piles or in any other manner that does not constitute application to the land as defined in 391-3-6-.17(2)(u) (RSG 391-3-6-.17(2)).
- Stormwater Point Source a conveyance or system of conveyances (including pipes, conduits, ditches, and channels or sheet flow which is later conveyed) primarily used for collecting and conveying stormwater runoff and which: (RSG 391-3-6-.16(3))
  - 1. is located at an urbanized area as designed by the Bureau of Census

- 2. discharges from lands or facilities used for public, industrial, or commercial activities
- 3. is designated under paragraph 391-3-6-.15(3)(d). Conveyances that discharge stormwater runoff combined with municipal sewage are point sources that must obtain NPDES permits, but are not "stormwater point sources."
- Submission a request to the EPD for approval of a POTW pretreatment program by a POTW (RSG 391-3-6-.09(2)).
- Supervision accountability for the work of the supervisee (RSG 750-2-.01) [Added July 1999].
- System all integral unit operations and processes, including conduits, appurtenances, machine, control elements, and laboratory functions (RSG 750-2-.01) [Added July 1999].
- System Wide Permit a general permit issued to a municipality or a group of municipalities (RSG 391-3-6-.16(3)).
- Swine Feeding Operation or Operation a lot or facility where swine have been, are, or will be stabled or confined or fed or maintained for a total of at least 45 days in any 12-month period, and the confinement areas do not sustain crops, vegetation, forage growth, or post-harvest residues in the normal growing season (RSG 391-3-6-.20) [Added August 2000].
- *Total Solids* the materials in sewage sludge that remain as residue when the sewage sludge is dried at 103 to 105 °C (RSG 391-3-6-.17(2)).
- *Trainee* an individual engaged in a training period. A trainee is not required to hold a certificate and may not perform operation duties or perform laboratory test, unless under the direct supervision of a certified operator or a certified laboratory analyst (RSG 750-2-.01) [Added July 1999].
- *Training Period* a period of time during which a trainee is learning operator or laboratory analyst duties under the direction of a certified operator or laboratory analyst (RSG 750-2-.01) [Added July 1999].
- Treat or Treatment of Sewage Sludge the preparation of sewage sludge for final use or disposal. This includes, but is not limited to, thickening, stabilization, and dewatering of sewage sludge. This does not include storage of sewage sludge (RSG 391-3-6-.17(2)).
- Treatment Requirement any restriction or prohibition established under the Act on quantities, rates, or concentrations, or a combination thereof, of chemical, physical, biological, or other constituents that are discharged into a land disposal or land treatment system and then into the waters of the state, including but not limited to schedules of compliance (RSG 391-3-6-.11(2)).
- Treatment Works either a Federally owned, publicly owned, or privately owned device or system used to treat, recycle, or reclaim either domestic sewage or a combination of domestic sewage and industrial wastewater (RSG 391-3-6-.17(2)).
- *Unstabilized Solids* organic materials in sewage sludge that have not been treated in either an aerobic or anaerobic treatment process (RSG 391-3-6-.17(2)).
- *Vector Attraction* the characteristic of sewage sludge that attracts rodents, flies, mosquitoes, or other organisms capable of transporting infectious agents (RSG 391-3-6-.17(2)).
- *Volatile Solids* the amount of the total solids in sewage sludge lost when the sewage sludge is combusted at 550 °C in the presence of excess air (RSG 391-3-6-.17(2)).

- Wastewater Collection System the system of sanitary sewers, pipes, manholes, pumps, and other such apparatus used to convey sewage to wastewater treatment plants (RSG 750-2-.01) [Added July 1999].
- Wastewater Treatment any biological, physical/chemical, or settling processes which remove pollutants from
  industrial or domestic wastewaters prior to discharge to a stream, sewer, or land. It includes only those
  processes permitted by the Division or an approved local government under the Georgia Water Quality Control
  Act or its successor. It excludes those processes that consist solely of one or more of the following: screening,
  pH adjustment, sedimentation processes without mechanical solids removal, septic tanks, grease traps or oilwater separators, unless specifically required in a permit (RSG 750-2-.01) [Added July 1999].
- Wastewater Treatment Facilities any device or system (including recycling and reclamation) used in the treatment of sewage or other waterborne waste or pollutants (RSG 391-3-6-.02(2)).
- Wastewater Treatment Plant the facilities provided for the treatment and disposal of wastewater, including industrial process wastewater, as classified by the Division (RSG 750-2-.01) [Added July 1999].
- Wastewater Treatment System the combination of a wastewater collection system and a wastewater treatment plant (RSG 750-2-.01) [Added July 1999].
- Water Supply Reservoir a governmentally owned impoundment of water for the primary purpose of providing water to one or more governmentally owned public drinking water systems. This excludes the multipurpose reservoirs owned by the U.S. Army Corps of Engineers (RSG 391-3-16-.01(2)(g)).
- Water Supply Watershed the area of land upstream of a governmentally owned public drinking water intake (RSG 391-3-16-.01(2)(h)).
- Water Supply Watershed Protection Plan a land use plan prepared and adopted by local governments for the protection of the quality of drinking water obtained from the watershed (RSG 391-3-16-.01(2)(i)).
- Wetland those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas. The ecological parameters for designating wetlands include hydric soils, hydrophytic vegetation, and hydrological conditions that involve a temporary or permanent source of water to cause soil saturation. Freshwater wetlands do not include any areas defined as "coastal marshlands" by the State Coastal Marshlands Protection Act (RSG 391-3-16-.03(2)(a)).
- Wetlands those areas that are inundated or saturated by surface water or groundwater at a frequency and duration to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas (RSG 391-3-6-.17(2)).

#### WASTEWATER MANAGEMENT GUIDANCE FOR GEORGIA CHECKLIST USERS

#### **REFER TO CHECKLIST ITEMS:**

Missing Checklist Items WA.2.1.GA.
Discharges to the Environment WA.5.1.GA.

Permits

NPDES WA.10.1.GA. and WA.10.2.GA.
State Permits WA.15.1.GA. through WA.15.4.GA.
Land Disposal Permits WA.15.5.GA. and WA.15.6.GA.
Treatment Works WA.20.1.GA. and WA.20.2.GA.
Operator Certification WA.20.3.GA. through WA.20.4.GA.

Discharges to a POTW/FOTW

Pretreatment Standards WA.30.1.GA. through WA.30.3.GA.
Other Discharges and Dischargers WA.95.1.GA. and WA.95.2.GA.
Swine Feeding Operations WA.95.3.GA. through WA.95.6.GA.

Individual Sewage Systems

Marine Facilities WA.100.1.GA.

General WA.100.2.GA. through WA.100.7.GA.

Septic Tanks WA.100.8.GA.

Land Application of Sludge

General WA.105.1.GA. through WA.105.4.GA.

Vectors and Pathogens WA.110.1.GA.
Monitoring WA.120.1.GA.
Recordkeeping and Reporting WA.125.1.GA.

Watershed Protection Programs/Recharge WA.150.1.GA through WA.150.19.GA.

**Programs** 

#### **GUIDANCE FOR APPENDIX USERS**

REFER TO APPENDIX NUMBERS: REFER TO APPENDIX TITLES:

12-1 Pollutant Limits for Sewage Sludge

| Georgia Supplement   |  |
|--|--|
| REGULATORY<br>REQUIREMENTS:  | REVIEWER CHECKS:<br>August 2000  |
| WA.2.<br>MISSING CHECKLIST<br>ITEMS  |  |
| WA.2.1.GA. Federal facilities are required to comply with all applicable state regulatory requirements not contained in this checklist (a finding under this checklist item will have the citation of the applied regulation as a basis of finding). | Determine whether any new regulations have been issued since the finalization of the manual.  Determine whether the Federal facility has activities or facilities that are regulated but not addressed in the checklists.  Verify that the Federal facility is in compliance with all applicable and newly issued regulations. |

| Georgia Supplement  |   |
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| REGULATORY<br>REQUIREMENTS:   | REVIEWER CHECKS: August 2000  |
| WA.5. DISCHARGES TO THE ENVIRONMENT   |   |
| WA.5.1.GA. Federal facilities that endanger the waters of the state because of a spill must meet notification standards (RSG) Section 391-3-605(3) through (3)(a)). | Verify that the Division is notified in person or by telephone in the event of any discharge of any substance that might produce toxic or taste and color or endanger downstream water users or property or endangers the waters of the state, or is so placed that it might flow, be washed, or fall into the waters of the state.  Verify that the Division is notified in person or by telephone when a major spill occurs in any POTW system.  Verify that when a spill occurs, all reasonable and necessary steps to prevent injury to property and downstream users of water are taken immediately. |

|   | Georgia Supplement  |  |
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| REGULATORY  | REVIEWER CHECKS:  |  |
| <b>REQUIREMENTS:</b>  | August 2000   |  |
| WA.10.<br>PERMITS   |   |  |
| NPDES   |   |  |
| WA.10.1.GA. Federal facilities with a NPDES permit or other discharge permit that are not in compliance with Federal and state regulations must meet compliance schedule standards (RSG 391-3-606(10)). | Determine if the Federal facility has a valid NPDES or other discharge permit.  Verify that the compliance schedule and interim dates set forth in the permit by the Director are met.  Verify that within 14 days of an interim date of compliance or the final date of compliance, notification of compliance or noncompliance is submitted in writing to the Director.   |  |
| WA.10.2.GA. Notification requirements must be met for noncompliance with a NPDES permit effluent limitation (RSG 391-3-605(4)).   | Verify that, when any effluent limitation specified in the NPDES permit is exceeded, the Division is notified by an oral report within 24 h and by writing within 5 days of becoming aware of the noncompliant condition.  Verify that the written report contains the following information:  - a description of the noncompliance and its cause - the period or anticipated period of noncompliance - the steps being taken to reduce, eliminate, and prevent recurrence of the noncomplying discharge. |  |

| REVIEWER CHECKS:   |
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| August 2000  |
| (NOTE: 391-3-615 and 391-3-616 cover permit requirements for Non-Storm Water General Permit Requirements and Storm Water Permit Requirements, respectively. Storm water point sources are point sources subject to the NPDES permit program. The Director may issue an NPDES permit or permits for discharges into waters of the State from a storm water source covering all conveyances which are part of that storm water point source.)                |
| Verify that all discharges into a stormwater point source are covered by an individual permit, an area-wide permit, or a permit issued to the operator of that portion of the system that directly discharges into the waters of the state.  Verify that all permit standards for limitations, monitoring, recordkeeping, and reporting are met.   |
| (NOTE: Where there is more than one owner or operator of a storm water point source, any or all discharges into that storm water point source may be identified in the application submitted by the owner/operator of the portion of the storm water point source that discharges directly into waters of the State. Any permit covering more than one owner/operator will identify the effluent limitations, if any, which apply to each owner/operator.) |
| Verify that all pollutants receive such treatment or corrective action to comply with the terms and conditions of the permit.  Verify that all engineering reports, plans, specifications, and other material submitted to the Division are prepared by a professional engineer competent in the field of sewage and industrial waste treatment.   |
| Verify that all discharge permit standards for monitoring, recording, and reporting are met.   |
| Verify that, for general permits that do not require submittal of monitoring reports at least annually, all instances of noncompliance are reported to the Director at least annually.   |
| Verify that a valid pollutant discharge permit has been obtained for the discharge of pollutants into the waters of the state.  Verify that written approval from the Division has been obtained for the discharge of pollutants from a nonpoint source into the waters of the state.  |
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| Georgia Supplement  |   |
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| REGULATORY REVIEWER CHECKS:   |   |
| REQUIREMENTS:   | August 2000   |
| WA.15.4.GA. The permitted discharge of pollutants must meet permit conditions and terms (RSG 391-3-606 (4)(a) and (b), and (11)).   | of pollutants from a nonpoint source into the waters of the state.  Verify that the nonpoint discharge of pollutants with written approval use best management practices to minimize the introduction of the pollutants into the waters of the state.  Verify that a valid permit has been obtained for the operation of treatment works that could discharge into the waters of the state, excluding discharges that result from acts of God.  Verify that approval has been obtained from the Director prior to transferring a permit.  Verify that all pollutants comply with the terms and conditions of the permit.  (NOTE: Calculations of effluent limits and standards must be made in accordance with the provisions of 40 CFR 122.44 and 122.45.)  Verify that all monitoring, recordkeeping, and reporting requirements specified in the permit are met.  Verify that all records of monitoring activities and results are maintained for a minimum of 3 yr.  Verify that for authorized discharges for which monitoring is required, all required monitoring activities are reported to the Division at least once per year.  (NOTE: The Director may require more frequent reporting and that records be maintained for longer than 3 yr.) |
| <b>WA.15.5.GA.</b> The discharge of pollutants into land disposal or land treatment systems and then into waters of the state must have a valid land disposal permit (RSG 391-3-611(3)) [Moved here August 2000]. | NOTE: This checklist item moved here from WA.95.1.GA.)  (NOTE: An NPDES permit and not a land disposal permit must be obtained for land disposal or land treatment systems that employ overland flow, subsurface drain fields, or other techniques with a point discharge into the surface waters of the state. A pretreatment permit must be obtained for a POTW that employs land disposal or land treatment systems.)  Verify that a land disposal permit has been obtained if the Federal facility discharges domestic, municipal, commercial, or industrial wastes or wastewaters into   |

| Georgia Supplement  |  |
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| REGULATORY<br>REQUIREMENTS:   | REVIEWER CHECKS: August 2000   |
| ingenin, in it  | a land disposal or land treatment system and then into the waters of the state.  |
| WA.15.6.GA. Permitted land disposal must meet specific permit conditions (RSG 391-3-611(4), (7), and (8)) [Moved here August 2000]. | (NOTE: This checklist item moved here from WA.95.2.GA.)  Verify that discharged pollutants into a land disposal or land treatment system receive treatment or corrective action to ensure compliance with terms and conditions of the issued land disposal system permit.  Verify that any pollutants that are being discharged or are intended to be discharged to a land disposal or land treatment system in amounts or concentrations that could be toxic or otherwise harmful to humans or biota if those pollutants mingle with waters of the state, or in amounts or concentrations that could reduce or impair the usefulness or operation of the land disposal or land treatment system, must receive such treatment as specified in the permit prior to being discharged to the land disposal or land treatment system.  Verify that the permitted land disposal activities that are not in compliance with applicable pollutant treatment requirements and limitations or other permit conditions meet compliance schedule and interim dates in the permit and by the Director.  Verify that within 14 days of an interim date of compliance or the final date of compliance, notification of the compliance or noncompliance is submitted in writing to the Director.  Verify that the monitoring, recording, and reporting requirements in the permit are met.  Verify that the records of monitoring activities and the results are retained for a minimum of 3 yr.  Verify that for land disposal activities for which discharges are required to be monitored, all required monitoring activities are reported to the Division at least once per year. |

| COMPLIANCE CATEGORY:  |
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| WASTEWATER MANAGEMENT |
| Georgia Supplement    |

| Georgia Supplement  |   |
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| REGULATORY<br>REQUIREMENTS:   | REVIEWER CHECKS:<br>August 2000   |
| WA.20.<br>TREATMENT WORKS   |   |
| WA.20.1.GA. Public notification and monitoring requirements must be met by POTWs that discover a major spill (RSG 391-3-605(3)(b) and (c)).                 | Verify that POTWs with major spills publish a notice of the spill in the legal organ of the County where the spill occurred within 7 days after the spill.  Verify that the public notice includes the following:  - the date of the spill - location and cause of the spill - estimated volume discharged and name of receiving waters - corrective action taken to mitigate or reduce adverse effects of the spill.  Verify that the POTW immediately establishes a monitoring program of the waters affected by a major spill or by consistently exceeding an effluent limit.  Verify that the POTW continues the monitoring program for at least 1 yr.  Verify that the monitoring program includes an upstream sampling point as well as sufficient downstream location to accurately characterize the impact of the spill.  Verify that the following parameters are monitored in the receiving stream:  - dissolved oxygen - fecal coliform bacteria - pH - temperature.  Verify that the results of the monitoring are submitted to the Division and all downstream public agencies using the affected waters as a source of public water supply.  (NOTE: The Division may determine additional monitoring parameters. Monitoring and reporting frequency is determined by the Division.) |
| <b>WA.20.2.GA.</b> Approval must be obtained for the construction, modification, or alteration of a sewage system (RSG 391-3-602(3)(a), (b), (f), and (g)). | Verify that approval from the Division is obtained prior to constructing, modifying, or altering a sewage system.  Verify that engineering materials submitted to the Division are prepared by a Professional Engineer competent in the treatment of water pollution.  Verify that all proposed lift stations are approved by the Division.  Verify that all construction, upgrading, or expansion of publicly owned wastewater   |

| COMPLIANCE CATEGORY: WASTEWATER MANAGEMENT Georgia Supplement                  |   |
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| REGULATORY<br>REQUIREMENTS:  | REVIEWER CHECKS: August 2000  |
|  | treatment facilities within the state submit an Environmental Information Document.   |
| Operator Certification   | (NOTE: Operators and Laboratory Analysts will be certified as follows:  - Biological Wastewater Treatment System Operator Class I, II, III, or IV  - Industrial Wastewater Treatment System Operator  - Wastewater Collection System Operator  - Wastewater Laboratory Analyst.)  |
| WA.20.3.GA. Operators and  | Verify that biological wastewater treatment system operators are certified.   |
| lab analysts must be certified (RSG 750-301 and 750-501) [Added July 1999].    | (NOTE: Each industrial wastewater treatment or pretreatment facility is required to have only one operator in responsible charge obtain a certification.)   |
|  | Verify that wastewater collection system are certified.   |
|  | (NOTE: Each industrial wastewater collection system or distribution system is required to have only one operator in responsible charge obtain a certification.)   |
|  | Verify that all laboratory analysts are certified.  |
|  | (NOTE: Any industrial wastewater or pretreatment plant is required to have only one responsible analyst obtain such certification, with any other analyst in that facility supervised by that person.)  |
|  | <ul> <li>(NOTE: The following are operational activities that do not require further certification:         <ul> <li>Certified Class I, II, or III Biological Wastewater Treatment System Operators may operate wastewater collection systems without further certification</li> <li>Certified Class I, II, or III Biological Wastewater Treatment System Operators may operate industrial wastewater treatment plants without further certification.)</li> </ul> </li> </ul> |
|  | Verify that certified Industrial Wastewater Treatment System operators operate industrial wastewater treatment plants and/or appurtenant collection systems only.   |
|  | Verify that certified Class IV Wastewater Treatment System Operators operate only Class IV Wastewater Treatment Systems and those collection systems appurtenant to Class IV Wastewater Treatment Systems.  |
| WA.20.4.GA. Operators in responsible charge must meet additional certification | Verify that the operator who is in responsible charge of wastewater treatment system holds a certificate of a class equal to or higher than the class of the plant or system being operated.  |

| COMPLIANCE CATEGORY:<br>WASTEWATER MANAGEMENT<br>Georgia Supplement |                              |  |
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| REGULATORY<br>REQUIREMENTS:   | REVIEWER CHECKS: August 2000 |  |
| requirements (RSG 750-302) [Added July 1999].                       | system being operated.       |  |

| COMPLIANCE CATEGORY:  |
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| WASTEWATER MANAGEMENT |
| Georgia Supplement    |

| Georgia Supplement   |   |
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| REGULATORY   | REVIEWER CHECKS:  |
| REQUIREMENTS:  | August 2000   |
| DISCHARGES TO A<br>POTW/FOTW   |   |
| WA.30. PRETREATMENT STANDARDS  |   |
| WA.30.1.GA. A valid pretreatment permit is required for the discharge or proposed discharge of any pollutant from a significant source into a POTW and then into the waters of the state (RSG 391-3-608(3) and (4)). | Verify that a valid pretreatment permit has been obtained for the discharge or proposed discharge of any pollutant from a significant source into a POTW and then into the waters of the state.   |
|  | Verify that discharged pollutants receive the required pretreatment or corrective action to comply with the terms and conditions of the pretreatment permit and the following:  |
|  | <ul> <li>any applicable state water quality standards, POTW effluent limitations, local discharge limitations, general and specific prohibitions, dilution prohibition as specified in 40 CFR 403.6(d), pretreatment standards and requirements, or schedule of compliance</li> <li>any applicable Federal regulations</li> <li>to ensure there is no interference with the operation of a POTW or pass through of pollutants untreated.</li> </ul>   |
| WA.30.2.GA. Discharges for which a valid pretreatment permit has been obtained must meet permit conditions (RSG 391-3-608(8)(a) through (d)).  | Verify that the permit conditions are met.  (NOTE: No pretreatment permit will be issued authorizing the discharge into a POTW and then into the waters of the state of any radiological, chemical, or biological warfare agent, or high-level radioactive waste.)  Verify that compliance schedule and interim dates are met for permitted discharges that are not in compliance with applicable pretreatment standards and limitations or other permit conditions.  Verify that within 14 days of an interim date of compliance or the final date of compliance, notification of compliance or noncompliance is submitted in writing to the Director.  Verify that all monitoring, recording, and reporting requirements specified in the permit are met.  Verify that the records of monitoring activities and the results are retained for a minimum of 3 yr. |

| Georgia Supplement  |  |
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| REGULATORY<br>REQUIREMENTS:   | REVIEWER CHECKS: August 2000   |
|   | Verify that for discharges for which monitoring is required, all monitoring activities are reported to the Division at least twice per year.  (NOTE: The Division may require an increase in reporting frequency or monitoring records be retained for more than 3 yr.)  |
| WA.30.3.GA. POTWs must meet pretreatment program standards (RSG 391-3-609(3)(a) through (c); and (10)). | Verify that POTWs that meet the following criteria have established a POTW pretreatment program:  - have a total design flow greater than 5 million gal/day (mgd) - receive pollutants from industrial users that may pass through untreated or interfere with the operation of the POTW - are required by Federal requirements to have a pretreatment program.  (NOTE: The Director may require POTWs with a total design flow of 5 mgd or less to develop a POTW pretreatment program.)  Verify that POTWs required to have a pretreatment program, obtain approval of the program no later than 3 yr after the reissuance or modification of its existing NPDES permit.  Verify that each POTW pretreatment program provides the Division with a report that describes POTW program activities, submitted no later than 1 yr after approval of the POTW's pretreatment program and at least annually thereafter, including, at a minimum, the information required in 40 CFR 403.12(i). |

|  | Ocorgia Supplement  |
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| REGULATORY   | REVIEWER CHECKS:  |
| REQUIREMENTS:  | August 2000   |
| WA.95.<br>OTHER DISCHARGES<br>AND DISCHARGERS  |   |
| <b>WA.95.1.GA.</b> [Moved August 2000].  | (NOTE: This checklist item moved to WA.15.5.GA.)  |
| <b>WA.95.2.GA.</b> [Moved August 2000].  | (NOTE: This checklist item moved to WA.15.6.GA.)  |
| Swine Feeding Operations   |   |
| WA.95.3.GA. Swine feeding operations must meet permit requirements (RSG 391-3-620(3)) [Added August 2000]. | Verify that any swine feeding operation with greater than 300 animal units (AU) obtain a permit from the Division.  |
|  | (NOTE: Any swine feeding operation with 300 AU or less is not required to obtain a permit, but remains subject to applicable sections of the Act.)  |
|  | (NOTE: Two or more swine feeding operations under common ownership are considered to be a single operation subject to this paragraph if they adjoin each other (are contiguous) or if they use a common area system for the disposal of wastes.)  |
|  | (NOTE: The sale, lease, or other transfer of ownership or operating control of any swine feeding operation with greater than 3000 AU to any other corporate or partnership entity or to any individual person or persons unrelated by blood, marriage, or adoption to the existing operator will require that a new permit be applied for, in accordance with the applicable paragraph or paragraphs of this rule.) |
| WA.95.4.GA. Swine feeding operations operating under a permit-by-rule must meet                            | Verify that any swine feeding operation with 301 to 1000 AU operated under a permit by rule meets the requirements of this checklist item.  |
| specific requirements (RSG 391-3-620(4)) [Added  | Verify that there is no discharge of pollutants from the operation into surface waters of the State.  |
| August 2000].  | Verify that by 31 October 2002, new operations have waste storage and disposal systems in operation that have been designed and constructed in accordance with  |

| Georgia Supplement  |  |
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| REGULATORY<br>REQUIREMENTS:   | REVIEWER CHECKS: August 2000   |
|   | NRCS guidance.   |
|   | Verify that by 31 October 2001, the operation submits a Comprehensive Nutrient Management Plan (CNMP) for the swine feeding operation to the Division for approval, and implements the approved CNMP not later than 31 October 2002.   |
|   | Verify that the operation has a certified operator by 31 October 2001 who is trained and certified.  |
|   | Verify that new operations re designed and constructed to handle the runoff from a 25-year, 24-hour storm event without an overflow from the storage lagoon.   |
|   | Verify that new operations located within significant ground water recharge areas are provided with either a compacted clay or synthetic liner such that the vertical hydraulic conductivity does not exceed 5 x 10 <sup>-7</sup> cm/sec or other criteria as determined by the Division.  |
|   | Verify that new barns, new lagoons, and new waste disposal systems for new swine feeding operations started after the effective date of this rule with 301 to 1000 AU, or for existing swine feeding operations that are expanding production so that they will have 301 to 1000 AU after the effective date of this rule, are not located within a 100-year flood plain.  |
|   | Verify that all existing, new, or expanding swine feeding operations with 301 to 1000 AU, submit a registration form to the Division, on or before 31 October 2000.  |
| WA.95.5.GA. Swine feeding operations must ensure wastes receive treatment (RSG 391-3-620(9)) [Added August 2000]. | Verify that permitted swine feeding operations ensure that all wastes from a swine feeding operation receive such treatment or corrective action so as to ensure compliance with the terms and conditions of the permit by rule or individual permit.  |
| WA.95.6.GA. Swine feeding operations must specific closure requirements (RSG 391-3-620(12)) [Added August 2000].  | Verify that the closure of new swine feeding operations with more than 3000 AU includes the following:  - the sampling, analysis, and reporting of results of all remaining livestock waste, including any sludge and the top 6 inches of any lagoon soil liner  - the removal of all remaining livestock waste, including sludge, and the removal of a minimum 6-inch thickness of soil throughout all lagoon interiors |
|   | <ul> <li>the application of all such wastes to crop land or pasture at agronomic rates</li> <li>the removal of all associated appurtenances, including but not limited to transfer lines, ramps, pumping ports, and any other waste conveyance structures</li> </ul>   |

| <b>COMPLIANCE CATEGORY:</b> |
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| WASTEWATER MANAGEMENT       |
| Georgia Supplement          |

| WASTEWATER MANAGEMENT Georgia Supplement |   |
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| REGULATORY<br>REQUIREMENTS:              | REVIEWER CHECKS: August 2000  |
|  | <ul> <li>the management of any impounded precipitation in any remaining excavations if the excavations are not immediately filled and returned to the preconstruction condition</li> <li>all monitoring wells are filled, plugged and sealed in accordance with procedure approved by the Division.</li> <li>Verify that new swine feeding operations with more than 3000 AU submit a detailed closure plan for clean up and closure of the swine management facility with the permit application.</li> </ul> |

| Georgia Supplement   |  |
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| REGULATORY   | REVIEWER CHECKS:   |
| REQUIREMENTS:  | August 2000  |
| WA.100.<br>INDIVIDUAL SEWAGE<br>SYSTEMS  |  |
| Marine Facilities  |  |
| WA.100.1.GA. Marine toilets or disposal units on boats that operate on the waters of the State must meet specific standards (RSG 391-3-604(3) and (4)). [Revised July 1999]. | Verify that, except on ocean going vessels of 20 tons displacement or more, marine toilets or other disposal units located on or within any boat operated on waters of the State have a suitable marine sanitation device securely affixed to the interior discharge toilet. |
|  | Verify that, except on ocean going vessels of 20 tons displacement or more, all sewage passing into or through the marine toilet or other disposal unit is discharged solely to a marine sanitation device.  |
|  | Verify that all discharges from marine sanitation devices into or upon the waters of the State are in compliance with Federal marine standards.  |
|  | Verify that vessels operating on the following lakes do not have a marine toilet unless the toilet discharges only into a holding tank located on the vessel:  |
|  | - Allatoona Lake - Lake Blackshear - Lake Blue Ridge - Clarks Hill Lake - Hartwell Lake - Hartwell Lake - Lake Sidney Lanier - Lake Oconee - Lake Seminole - Lake Sinclair - Richard B. Russell Lake - Walter F. George Reservoir - West Point Lake.                         |
|  | Verify that the holding tank is certified by the Department.   |
|  | Verify that the certification is affixed to the holding tank.  |
|  | Verify that marine toilet holding tanks are properly vented to the outside air in such fashion as not to foul the interior of the boat structure.  |
|  | Verify that only those chemicals approved by the Division are added to marine  |

| Georgia Supplement   |  |
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| REGULATORY<br>REQUIREMENTS:  | REVIEWER CHECKS: August 2000   |
|  | toilet holding tanks.  |
|  | Verify that the contents of marine toilet holding tanks are disposed of only through onshore facilities approved by the Division.  |
| General  |  |
| WA.100.2.GA. Sewage management systems must be provided (RSG 290-5-2603(1)) [Added September                                 | Verify that where public or community sewage treatment systems are not available, an approved on-site sewage management system is provided sufficient for persons normally expected to use or frequent the building, residence, or other property for 2 hours or more.                   |
| 1998].   | Verify that if an existing on-site sewage system fails, immediate connection is made to a public or community sewerage system, if such a system is available.  |
|  | Verify that any facility that produces a waste stream with BODs and TSS (total suspended solids) higher than 200 mg/L pretreats the waste to reduce the BODs and TSS to 200 mg/L or below before disposal through a conventional or chamber septic tank system.                          |
| WA.100.3.GA. Construction of on-site sewage management systems must be permitted (RSG 290-5-2603(2)) [Added September 1998]. | Verify that prior to the physical development of a lot or structure where an on-site sewage management system will be utilized, or to the installation of a new on-site sewage management system or component, a construction permit is obtained from the County Board of Health.        |
| WA.100.4.GA. New on-site sewage management systems must be inspected (RSG 290-5-2603(4)) [Added September 1998].             | Verify that prior to covering or using a new on-site sewage management system, a final inspection has been made by the County Board of Health to determine compliance with the provisions of the construction permit and written approval has been issued by the County Board of Health. |
|  | (NOTE: A copy of the final inspection of an on-site sewage management system will be provided to the owner, builder, developer or agent, whichever is appropriate.)  |
|  | (NOTE: Grading, filling, digging trash pits, or other landscaping or construction activities on the lot subsequent to final inspection by the County Board of Health which may adversely affect the on-site sewage management system will render the approval void.)                     |

| Georgia Supplement  |  |
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| REGULATORY  | REVIEWER CHECKS:   |
| REQUIREMENTS:   | August 2000  |
| WA.100.5.GA. Persons engaging in septage removal must be permitted (RSG 290-5-2611(1)) [Added September 1998].  | Verify that no person engages in the removal or disposal of the contents of septic tanks, pit privies, or other on-site sewage management or experimental systems without having first applied for and obtained a septage removal permit from the Department or County Board of Health.  |
| WA.100.6.GA. Septic tank contractors must be certified (RSG 290-5-2617(1)) [Added September 1998].  | Verify that individuals performing services related to site approval, the design, location, installation, inspection, and maintenance of on-site sewage management system, are certified by the Department.  |
| WA.100.7.GA. On-site sewage management systems must meet maintenance and operating requirements (RSG 290-5-2618(1) through (3)) [Added September 1998]. | Verify that the Federal facility does not allow the unapproved discharge or spillage of sewage.  Verify that no on-site sewage management system is used or maintained in such a manner that will allow the seepage or discharge of effluent from such system to the ground surface, to a water course, drainage ditch, open trench, canal, storm drain or storm sewer, water well, abandoned well, lake, stream, river, estuary, groundwater, or other body of water.  Verify that on-site sewage management systems are maintained in accordance with the criteria established in the Department's current "Manual for On-site Sewage Management Systems."  Verify that sewage system additives which are used to enhance the operation of an on-site sewage management system are approved by the Department, and that no strong bases, acids, or organic solvents are used in the operation of the system. |
| Septic Tanks  |  |
| WA.100.8.GA. Septic tanks must meet specific design and construction standards (RSG 290-5-2605) [Added September 1998].                                 | Verify that septic tanks shall provide a minimum of 24 hours of retention and are designed to equal or exceed minimum design and construction criteria established by the Department as published in the current manual for on-site sewage management systems.  Verify septic tanks are installed:   |
|   | <ul> <li>no less than 50 ft from existing or proposed wells/springs, sink holes, or suction water lines</li> </ul>   |

| COMPLIANCE CATEGORY:  |
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| WASTEWATER MANAGEMENT |
| Georgia Supplement    |

| Georgia Supplement          |  |
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| REGULATORY<br>REQUIREMENTS: | REVIEWER CHECKS: August 2000   |
| REQUIREMENTS.               | - downgrade from wells/or springs if physically possible - no less than 25 ft from lakes, ponds, streams, water courses, or oth impoundments - no less than 10 ft from pressure water supply lines, or less than 10 ft from property line - no less than 15 ft from a drainage ditch or embankment - so as to provide ready access for necessary maintenance.  Verify that the liquid capacity of septic tanks for single family dwellings is 100 gallons for one to four bedroom homes and 250 additional gallons for each bedroom over four.  Verify that septic tank capacity is increased by 50 percent where garbage grinde are to be used.  Verify that septic tanks are constructed or installed level, on a foundation that we prevent settling, and that backfill is placed so that a stable fill results and undustrain on the tank is avoided.  Verify that all openings and manholes are constructed to prevent the entrance of surface water. |

| <b>COMPLIANCE CATEGORY:</b> |
|-----------------------------|
| WASTEWATER MANAGEMENT       |
| Georgia Supplement          |

| WASTEWATER MANAGEMENT Georgia Supplement   |  |
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| REGULATORY<br>REQUIREMENTS:  | REVIEWER CHECKS: August 2000   |
| LAND APPLICATION OF<br>SLUDGE  |  |
| WA.105.<br>GENERAL   | (NOTE: The land application of sludge requirements apply to any person who prepares sewage sludge for land application or who applies sewage sludge to the land, to any sewage sludge applied to the land, and to the land on which sewage sludge is applied. These requirements do not apply to the following:  - processes used to treat sewage or processes used to treat sewage sludge before final use or disposal  - sewage sludge determined to be hazardous in accordance with 40 CFR 261  - grit and screenings generated during preliminary treatment of domestic sewage or a combination of domestic sewage and industrial wastewater in a treatment works  - sludge generated during treatment of process wastewater at an industrial facility unless the facility is covered under an industrial pretreatment permit  - disposal of sewage sludge by means other than land application at agronomic rates with the exception of sewage sludge applied to reclamation sites  - domestic, commercial, or industrial septage, or any mixture thereof  - sludge generated during treatment of drinking water  - sewage sludge with a concentration of PCBs equal to or greater than 50 mg/kg of total solids (dry weight basis)  - the incineration of sewage sludge  - ash generated during the firing of sewage sludge in a sewage sludge incinerator (RSG 391-3-617(3)(a) and (b)).) |
| WA.105.1.GA. All facilities that generate sewage sludge from the treatment of domestic (or industrial) sewage must obtain either an NPDES permit or a land application system (LAS) permit, or a local or state pretreatment permit (RSG 391-3-617(3)(c) and (4)). | Verify that all facilities that generate sewage sludge from the treatment of domestic (or industrial) sewage have obtained the appropriate NPDES permit, land application system (LAS) permit, or local or state pretreatment permit.  Verify that the conditions specified in the permit are met.  Verify that any person who prepares sewage sludge ensures that the applicable state requirements are met when the sewage sludge is land applied, fired in a sewage sludge incinerator, or disposed of by any means other than landfilling in an approved municipal solid waste landfill.   |
|  | (NOTE: The operator of any treatment process that results in the derivation of compost from sewage sludge must obtain a Solid Waste Handling Permit, unless the composting operation is part of a treatment works already regulated by an NPDES, LAS, or other permit from the Division. The operator of any treatment process that consists of heat drying or incinerating sewage sludge must obtain an Air Quality Permit. If sewage sludge is ultimately disposed of by land application or surface disposal, and is not beneficially used as a recovered material, the operator of the site must obtain a Solid Waste Handling Permit.)  |

| WASTEWATER MANAGEMENT Georgia Supplement  |   |  |
|---|---|--|
| REGULATORY<br>REQUIREMENTS:   | REVIEWER CHECKS: August 2000  |  |
| WA.105.2.GA. Pollutant limits must be met for sewage sludge land applications (RSG 391-3-617(5)).                 | <ul> <li>Verify that for bulk sewage sludge and sewage sludge sold or given away in a bag or other container complies with the pollutant ceiling concentration limits in Table 1 (see Appendix 12-1), as well as the following:</li> <li>bulk sewage sludge applied to agricultural land, forests, public contact sites, or reclamation sites complies with either the cumulative pollutant loading rates in Table 2 (see Appendix 12-1) or the pollutant concentration limits in Table 3 (see Appendix 12-1)</li> <li>bulk sewage sludge applied to lawns and home gardens complies with the pollutant concentration limits in Table 3 (see Appendix 12-1)</li> <li>sewage sludge sold or given away in bags or other containers comply with the pollutant concentration limits in Table 3 (see Appendix 12-1) or the annual sewage sludge application rates, which are based on the annual pollutant loading rates in Table 4 (see Appendix 12-1).</li> </ul>     |  |
| WA.105.3.GA. The land application of sewage sludge must meet specific requirements (RSG 391-3-617(9)).            | Verify that no person land applies sewage sludge except in accordance with the applicable Federal and state requirements, the requirements specified in the permit, and any additional requirements as determined by the Division.  Verify that no person land applies bulk sewage sludge to any site on which any of the cumulative pollutant loading rates in Table 2 (see Appendix 12-1) have been reached.  Verify that no person land applies bulk sewage sludge to a site on which the nitrogen requirements have been met for the calendar year.  Verify that the preparer provides the person who land applies bulk sewage sludge written notification of the analytical results obtained in accordance with the monitoring requirements (see WA.120.GA.).  Verify that any person that land applies bulk sewage sludge subject to the cumulative pollutant loading rates provides written notice to the Division before the initial application to a site. |  |
| WA.105.4.GA. The land application of sewage sludge must meet specific management requirements (RSG 391-3-617(9)). | Verify that bulk sewage sludge is not applied to the land if it is likely to adversely affect a threatened or endangered species listed under the Federal Endangered Species Act or its designated critical habitat.  Verify that bulk sewage sludge is not applied to an agricultural land, forest, a public contact site, or a reclamation site that is flooded, frozen, or snow covered so that the bulk sewage sludge enters a wetland, or other waters of the state, except as provided in a permit issued pursuant to the Georgia Water Quality Act.  |  |

| Georgia Supplement          |   |
|-----------------------------|---|
| REGULATORY<br>REQUIREMENTS: | REVIEWER CHECKS: August 2000  |
| -                           | Verify that bulk sewage sludge is not land applied at greater than agronomic rates except on reclamation sites.   |
|                             | Verify that sewage sludge that is sold or given away in a bag or other container for land application has a label affixed to the bag or other container or an information sheet is provided to the person who receives the sewage sludge, containing the following information:   |
|                             | <ul> <li>the name and address of the person who prepared the sewage sludge</li> <li>a statement that application of the sewage sludge to the land is prohibited except in accordance with the instructions on the label or information sheet</li> <li>the annual sludge application rate that does not cause any of the annual pollutant loading rates to be exceeded</li> <li>any additional information required by Georgia Department of Agriculture rules.</li> </ul> |
|                             | Verify that under no circumstances is sewage sludge stockpiled at a land application site.  |

| Georgia Supplement   |   |  |
|--|---|--|
| REGULATORY<br>REQUIREMENTS:  | REVIEWER CHECKS: August 2000  |  |
| LAND APPLICATION OF<br>SLUDGE  |   |  |
| WA.110.<br>VECTORS AND<br>PATHOGENS  |   |  |
| WA.110.1.GA. Pathogen and vector reduction requirements must be met for sewage | Verify that only Class A sewage sludge is applied to a lawn or home garden or sold or given away in a bag or other container for application to the land.   |  |
| sludge (RSG 391-3-617(6) and (8)).   | Verify that sewage sludge that is applied to the land meets one of the following vector attraction reduction requirements:  |  |
|  | <ul> <li>the mass of volatile solids in the sewage sludge is reduced by at least 38 percent</li> <li>if the mass of volatile solids in an anaerobically digested sewage sludge cannot be reduced by at least 38 percent, vector attraction reduction is demonstrated by anaerobic digestion</li> <li>if the mass of volatile solids in an aerobically digested sewage sludge cannot be reduced by at least 38 percent, vector attraction reduction is demonstrated by aerobic digestion</li> <li>the specific oxygen uptake rate for sewage sludge treated in an aerobic process is equal to or less than 1.5 mg oxygen/h per gram of total solids (dry weight basis) at 20 °C</li> <li>sewage sludge is treated in an aerobic process for at least 14 days, during which the temperature of the sludge is maintained above 40 °C with the average temperature above 45 °C</li> <li>sewage sludge pH is raised to 12 standard units or higher by addition of alkaline material and remains at 12 standard units or higher for 2 h and then 11.5 standard units or higher for an additional 22 h without the addition of more alkaline material</li> <li>if sewage sludge does not contain unstabilized solids generated in a primary wastewater treatment process, the percent solids is equal to or greater than 75 percent based on the moisture content and total solids before mixing with other materials</li> <li>if sewage sludge contains unstabilized solids generated in a primary wastewater treatment process, the percent solids is equal to or greater than 90 percent based on the moisture content and total solids before mixing with other materials.</li> <li>Verify that bulk sewage sludge that is applied to agricultural land, forests, public contact sites, or reclamation sites meets one of the following vector attraction reduction requirements:</li> </ul> |  |

| Georgia Supplement          |  |
|-----------------------------|--|
| REGULATORY<br>REQUIREMENTS: | REVIEWER CHECKS: August 2000   |
|                             | <ul> <li>injection of sewage sludge: <ul> <li>sewage sludge is injected below the surface of the land</li> <li>no significant amount of the sewage sludge is present on the land surface within 1 h after the sewage sludge is injected</li> <li>Class A sewage sludge is injected below the land surface within 8 h after being discharged from the pathogen treatment process</li> <li>incorporation of sewage sludge: <ul> <li>sewage sludge is incorporated into the soil within 6 h after land application</li> <li>Class A sewage sludge that is to be incorporated into the soil is applied to the land within 8 h after being discharged from the pathogen treatment process.</li> </ul> </li> </ul></li></ul> |

|   | Georgia Supplement  |
|---|---|
| REGULATORY  | REVIEWER CHECKS:  |
| REQUIREMENTS:   | August 2000   |
| LAND APPLICATION OF<br>SLUDGE   |   |
| WA.120.<br>MONITORING   |   |
| WA.120.1.GA. The land application of sewage sludge must meet monitoring requirements (RSG 391-3-617(11)). | Verify that the pollutants listed in Appendix 12-1, the pathogen density requirements, and the vector attraction reduction requirements, and any additional parameters contained in the permit are monitored at the frequency listed below:  - 0 - 300 dry tons/yr, once per year - 300 - 1600 dry tons/yr, once per quarter - 1600 - 16,000 dry tons/yr, once every 2 mo - more than 16,000 dry tons/yr, once per month  (NOTE: The amount of sewage sludge refers to the amount of bulk sewage sludge (dry weight) applied to the land or the amount of sewage sludge (dry weight) received by a preparer that sells or otherwise distributes sewage sludge in a bag or other container for application to the land.) |

|  | Georgia Supplement   |   |  |
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| LAND APPLICATION OF SLUDGE  WA.125. RECORDKEEPING AND REPORTING  WA.125.1.GA. The land Verify that persons that prepare bulk sewage sludge for land application or who   |  |   |  |
| RECORDKEEPING AND REPORTING  WA.125.1.GA. The land Verify that persons that prepare bulk sewage sludge for land application or who   | LAND APPLICATION OF  |   |  |
|  | RECORDKEEPING AND  |   |  |
| information for 5 yr:  - the concentration of each pollutant listed in Appendix 12-1 and an additional parameters required by the permit  - certification statement that the vector and pathogen attraction reduction requirements have been met  - a description of how either the Class A or Class B pathogen requirements are met  - a description of how the vector attraction reduction requirement is met  - the annual sludge application rate that does not cause the annual pollution loading rates to be exceeded, if sewage sludge is sold or given away in a bayor other container  - all other information required as described in the permit.  Verify that the person that land applies bulk sewage sludge maintains the following information indefinitely (for the first five items) and for 5 yr (for the last five items):  - the location, by either street address or latitude and longitude, for each site on which the sewage sludge is applied  - the number of acres on which sewage sludge is applied for each site  - the date and time of each application of sewage sludge for each site  - the date and time of each application of sewage sludge for each site  - the amount of sewage sludge, in dry tons, applied to each site  - the amount of sewage sludge, in dry tons, applied to each site  - the amount of sewage sludge, in dry tons, applied to each site  - the certification statement that the vector and pathogen attraction reduction requirements have been met  - a description of how the management practices are met for each land application site  - a description of how the site restrictions are met for each land application site  - a description of how the site restrictions are met for each land application site  - a description of how the site restrictions are met for each land application site  - a description of how the site restrictions are met for each land application site  - a description of how the site restrictions are met for each land application site | WA.125.1.GA. The land application of sewage sludge must meet recordkeeping and reporting requirements (RSG | <ul> <li>the concentration of each pollutant listed in Appendix 12-1 and any additional parameters required by the permit</li> <li>certification statement that the vector and pathogen attraction reduction requirements have been met</li> <li>a description of how either the Class A or Class B pathogen requirements are met</li> <li>a description of how the vector attraction reduction requirement is met</li> <li>the annual sludge application rate that does not cause the annual pollution loading rates to be exceeded, if sewage sludge is sold or given away in a bag or other container</li> <li>all other information required as described in the permit.</li> <li>Verify that the person that land applies bulk sewage sludge maintains the following information indefinitely (for the first five items) and for 5 yr (for the last five items):</li> <li>the location, by either street address or latitude and longitude, for each site on which the sewage sludge is applied</li> <li>the number of acres on which sewage sludge is applied for each site</li> <li>the date and time of each application of sewage sludge for each site</li> <li>for bulk sewage sludge subject to the cumulative pollutant loading rates in Table 2 (see Appendix 12-1), the cumulative amount of each pollutant listed in pounds per acre for each site</li> <li>the amount of sewage sludge, in dry tons, applied to each site</li> <li>the certification statement that the vector and pathogen attraction reduction requirements have been met</li> <li>a description of how the management practices are met for each land application site</li> <li>a description of how the vector attraction reduction requirements are met, if</li> </ul> |  |

| <b>COMPLIANCE CATEGORY:</b> |
|-----------------------------|
| WASTEWATER MANAGEMENT       |
| Georgia Supplement          |

| Georgia Supplement          |   |
|-----------------------------|---|
| REGULATORY<br>REQUIREMENTS: | REVIEWER CHECKS: August 2000  |
|                             | Verify that each facility or person that generates sewage sludge submits to the Division an annual report containing the applicable information required in the above recordkeeping requirements by 31 January for the previous calendar year.  Verify that any facility that generates sewage sludge submits to the Division a monthly report of the volume and concentration, or weight in dry pounds, of solids removed from the facility during that month. |

| COMPLIANCE CATEGORY:  |
|-----------------------|
| WASTEWATER MANAGEMENT |
| Georgia Supplement    |

| Georgia Supplement   |   |
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| REGULATORY DECLUDEMENTS.   | REVIEWER CHECKS:  |
| REQUIREMENTS:  WA.150 WATERSHED PROTECTION PROGRAMS/RECHARGE PROGRAMS  | August 2000   |
| Watershed Protection   | (NOTE: These watershed criteria apply only to watersheds used for public drinking water supply. Exceptions may be allowed for watersheds providing secondary or emergency sources of water and as provided by the local governing unit. These criteria are to be the basis for local water supply watershed protection plans. All existing or proposed withdrawals for public water supply must be approved by the Department of Natural Resources (RSG 391-3-1601(3) and (5)).)  |
| WA.150.1.GA. The corridors of all perennial streams in a large water supply watershed tributary to a water supply reservoir within a 7 mi radius of the reservoir boundary must be protected (RSG 391-3-1601(6)) [Added September 1997]. | Verify that the corridors of all perennial streams in a large water supply watershed tributary to a water supply reservoir within a 7 mi radius of the reservoir boundary are protected as follows:  - a buffer is maintained for a distance of 100 ft on both sides of the stream as measured from the stream banks - no impervious surface is constructed within a 150 ft setback area on both sides of the stream as measured from the stream banks - no septic tanks or septic tank drainfields exist within a 150 ft setback area on both sides of the stream as measured from the stream banks. |
| WA.150.2.GA. Small water supply watersheds must be protected (RSG 391-3-1601(7)(c)) [Added September 1997].  | Verify that new sanitary landfills in a small water supply watershed allowed have synthetic liners and leachate collection systems.  Verify that no new hazardous waste treatment or disposal facilities are constructed within a small water supply watershed.  Verify that the impervious surface area, including all public and private structures, utilities, or facilities, of the entire water supply watershed is limited to either 25 percent or the existing amount, whichever is greater.   |
| WA.150.3.GA. The perennial stream corridors of a small water supply watershed within a 7 mi radius upstream of a governmentally  | Verify that the perennial stream corridors of a small water supply watershed within a 7 mi radius upstream of a governmentally owned public drinking water supply intake or water supply reservoir are protected as follows:  - a buffer is maintained for a distance of 100 ft on both sides of the stream as  |

| Georgia Supplement   |  |
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| REGULATORY   | REVIEWER CHECKS:   |
| REQUIREMENTS:  | August 2000  |
| owned public drinking water supply intake or water supply reservoir must be protected (RSG 391-3-1601(7)(b)) [Added September 1997].                       | measured from the stream banks  - no impervious surface is constructed within a 150 ft setback area on both sides of the stream as measured from the stream banks  - no septic tanks or septic tank drainfields exist within a 150 ft setback area on both sides of the stream as measured from the stream banks.  |
|  | Verify that the perennial stream corridors within a small water supply watershed and outside a 7 mi radius upstream of a governmentally owned public drinking water supply intake or water supply reservoir are protected as follows:  |
|  | <ul> <li>a buffer is maintained for a distance of 50 ft on both sides of the stream as measured from the stream banks</li> <li>no impervious surface is constructed within a 75 ft setback area on both sides of the stream as measured from the stream banks</li> <li>no septic tanks or septic tank drainfields exist within a 75 ft setback area on both sides of the stream as measured from the stream banks.</li> </ul>  |
| WA.150.4.GA. Wastes in significant recharge areas must be handled in accordance with specific requirements (RSG 391-3-1602(3)(a) through (c) and (e)).     | (NOTE: In significant recharge areas the Department will not issue permits for new sanitary landfills not having synthetic liners and leachate collection systems or any new permits for the land disposal of hazardous wastes.)  Verify that, in significant recharge areas, new facilities with a Department-issued permit to treat, store, or dispose of hazardous waste perform such operations on an impermeable pad having a spill and leak collection system. |
|  | Verify that, in significant recharge areas, new agricultural waste impoundment sites are lined if they are within:   |
|  | <ul> <li>a high pollution susceptibility area</li> <li>a medium pollution susceptibility area and exceed 15 acre-ft</li> <li>a low pollution susceptibility area and exceed 50 acre-ft.</li> </ul>   |
| WA.150.5.GA. Aboveground storage tanks used in significant recharge areas must be handled in accordance with specific requirements (RSG 391-3-1602(3)(d)). | Verify that, in significant recharge areas, new aboveground chemical or petroleum storage tanks, having a minimum volume of 660 gal, have secondary containment for 110 percent of the volume of such tanks or 110 percent of the volume of the largest tank in a cluster of tanks.  (NOTE: Tasks used for agricultural purposes are exempt.)  |
| WA.150.6.GA. Construction in significant recharge areas must be in accordance with specific requirements (RSG  | Verify that, in significant recharge areas, there is no construction of any building or mobile home to be served by a septic tank unless the county health department first approves the proposed septic tank installation.  |

| Georgia Supplement   |  |
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| REGULATORY   | REVIEWER CHECKS:   |
| REQUIREMENTS:  | August 2000  |
| 391-3-1602(3)(j), (n), and (o)).   | Verify that, in areas with high pollution susceptibility, there is no construction of permanent storm water infiltration basins.   |
|  | Verify that, in areas with high pollution susceptibility, new wastewater treatment basins have an impermeable liner.   |
| WA.150.7.GA. Certain uses of wetlands are prohibited (RSG 391-3-1603(3)(e) [Added September 1997].   | Verify that the following are not located in wetlands:  -receiving areas for toxic or hazardous waste or other contaminants -hazardous or sanitary waste landfills -other uses unapproved by the local government.   |
| WA.150.8.GA. Certain uses of river corridors are prohibited (RSG 391-3-1604(d) and (g through j)) [Added September 1997].                          | Verify that the following are not located in river corridors:  - septic tanks or septic tank drainfields within river corridors - handling areas for receiving and storage of hazardous waste unless the area meets all Federal and state laws and regulations for the handling and transport of hazardous waste and performs its operations on impermeable surfaces having spill and leak protection systems - hazardous waste or solid waste landfills - other uses unapproved by local governments. |
| WA.150.9.GA. Hazardous waste handling areas located in river corridors must meet specific requirements (RSG 391-3-1604(g)) [Added September 1997]. | Verify that handling areas for receiving and storage of hazardous waste are not located in river corridors unless the area is a port facility that meets all Federal and state laws and regulations for the handling and transport of hazardous waste and performs its operations on impermeable surfaces having spill and leak protection systems.  |
| WA.150.10.GA. A natural vegetative buffer must be maintained on river corridors (RSG 391-3-1604(a) and (k)) [Added September 1997].                | Verify that any Federal facility that contains a river corridor within its boundaries maintains a natural vegetative buffer.  Verify that the natural vegetative buffer is restored as quickly as possible following any land-disturbing activity within the river corridor.   |
| WA.150.11.GA. Single family dwellings located in the natural vegetative buffer of a river corridor must meet                                       | Verify that single-family dwellings within the buffer area are in compliance with all local zoning regulations.  Verify that each single-family dwelling located within the buffer area is the sole  |

| Georgia Supplement  |   |
|---|---|
| REGULATORY  | REVIEWER CHECKS:  |
| REQUIREMENTS:   | August 2000   |
| specific requirements (RSG 391-3-1604) [Added   | occupant of a tract of land measuring at least 2 acres.   |
| September 1997].  | Verify that septic tank drainfields are not located within the buffer area.   |
|   | (NOTE: Septic tanks serving such dwellings may be located within the buffer area.)  |
| WA.150.12.GA. Certain uses of protected mountains are prohibited (RSG 391-3-1605(4)(k) through (p)) [Added September 1997].                               | Verify that the following are not located on a protected mountain:  - handling areas for receiving and storage of hazardous waste - hazardous waste or solid waste disposal facilities - other uses unapproved by local governments.  |
|   | (NOTE: Agriculture and forestry may be permitted on protected mountains provided that it is consistent with the best management practices established by the Georgia Forestry Commission or the Georgia Soil and Water Conservation Commission, all state and Federal laws, and all regulations promulgated by the Georgia Department of Agriculture.)  |
|   | NOTE: Mining activity may be allowed on protected mountains, if such activity is permitted by the Department of Natural Resources.)   |
| WA.150.13.GA. Construction on a protected mountain must preserve trees (RSG 391-3-1605(4)(i) and (j)) [Added September 1997].                             | Verify that any application for a building permit to construct a commercial structure on a protected mountain contains a detailed landscaping plan.  Verify that, during a land-disturbing activity, no more than 50 percent of the existing trees which exceed 8 in. in diameter as measured at a point on such a tree 4.5 ft above the surface of the ground are removed, unless a reforestation plan developed by a registered forester has been filed.  |
| WA.150.14.GA. Single-family dwellings on a protected mountain must meet specific construction requirements (RSG 391-3-1605(4)(f)) [Added September 1997]. | <ul> <li>Verify that single-family dwellings located on a protected mountain are not constructed at a density of more than one per acre.</li> <li>Verify that the acre is no less than 100 ft wide at the building site.</li> <li>(NOTE: This density restriction does not apply to the following land: <ul> <li>lots of less than 1 acre if such a lot was, as of 1 July 1991, owned and described as a discrete parcel of real property according to the instrument of title of the person or persons owning the lot on 1 July 1991</li> <li>lots that were, as of 1 July 1991, shown as a discrete parcel of real property on a plat of survey properly recorded in the real property records of the clerk of superior court by the person or persons owning the lot on 1 July 1991</li> </ul> </li> </ul> |

| COMPLIANCE CATEGORY:<br>WASTEWATER MANAGEMENT<br>Georgia Supplement   |  |
|---|--|
| REGULATORY<br>REQUIREMENTS:   | REVIEWER CHECKS: August 2000   |
|   | - land which was contained in or subject to any master plan, planned unit development, special approved development plan, or any other development plan if such plan was filed with and approved by the local governing authority prior to 1 July 1991, pursuant to a duly enacted planning and zoning ordinance.)   |
| WA.150.15.GA. Multi-<br>family dwellings on a<br>protected mountain must meet   | Verify that, multi-family dwellings located on a protected mountain are not constructed at a density of more than six per acre.  |
| specific construction requirements (RSG 391-3-1605(4)(g)) [Added September  | Verify that, in the absence of a public water supply and sewerage system, multi-<br>family dwellings located on a protected mountain are not constructed at a density<br>of more than four per acre.   |
| 1997].  | Verify that the acre is no less than 100 feet wide at the building site.   |
| WA.150.16.GA. Structures on a protected mountain must meet specific height requirements (RSG 391-3-1605(4)(h)) [Added September 1997].                  | Verify that structures located on a protected mountain do not extend more than 40 ft, as measured from the highest point at which the foundation of such structure intersects the ground, above the uppermost point of the crest, summit, or ridge top of the protected mountain on which the structure is constructed.  (NOTE: This height restriction does not apply to water, radio, or television towers; to any equipment for the transmission of electricity, to minor vertical projections of a parent building, including chimneys, flagpoles, flues, spires, steeples, belfries, cupolas, antennas, poles, wires; or to windmills.) |
| Significant Recharge Areas  |  |
| WA.150.17.GA. Wastes in significant recharge areas must be handled in accordance with specific requirements (RSG 391-3-1602(3)(a) through (c) and (e)). | (NOTE: In significant recharge areas the Department will not issue permits for new sanitary landfills not having synthetic liners and leachate collection systems or any new permits for the land disposal of hazardous wastes.)   |
|   | Verify that, in significant recharge areas, new facilities with a Department-issued permit to treat, store, or dispose of hazardous waste perform such operations on an impermeable pad having a spill and leak collection system.   |
|   | Verify that, in significant recharge areas, new agricultural waste impoundment sites are lined if they are within:   |
|   | <ul> <li>- a high pollution susceptibility area</li> <li>- a medium pollution susceptibility area and exceed 15 acre-ft</li> <li>- a low pollution susceptibility area and exceed 50 acre-ft.</li> </ul>   |

### **COMPLIANCE CATEGORY:** WASTEWATER MANAGEMENT

| Georgia Supplement   |   |
|--|---|
| REGULATORY<br>REQUIREMENTS:  | REVIEWER CHECKS: August 2000  |
| WA.150.18.GA. Above ground storage tanks used in significant recharge areas must be handled in accordance with specific requirements (RSG 391-3-1602(3)(d)). | Verify that, in significant recharge areas, new above-ground chemical or petroleum storage tanks, having a minimum volume of 660 gal, have secondary containment for 110 percent of the volume of such tanks or 110 percent of the volume of the largest tank in a cluster of tanks.  (NOTE: Such tanks used for agricultural purposes are exempt.)   |
| WA.150.19.GA. Construction in significant recharge areas must be in accordance with specific requirements (RSG 391-3-1602(3)(j), (n), and (o)).              | Verify that, in significant recharge areas, there is no construction of any building or mobile home to be served by a septic tank unless the county health department first approves the proposed septic tank installation.  Verify that, in areas with high pollution susceptibility, there is no construction of permanent storm water infiltration basins.  Verify that, in areas with high pollution susceptibility, new wastewater treatment basins have an impermeable liner. |

### Appendix 12-1

**Pollutant Limits for Sewage Sludge** (Source: RSG 391-3-6-.17(5), Tables 1 through 4)

Table 1 **Ceiling Concentration Limits** 

**Pollutant Ceiling Concentration (mg/kg)\*** 

| Arsenic    | 75   |
|------------|------|
| Cadmium    | 85   |
| Chromium   | 3000 |
| Copper     | 4300 |
| Lead       | 840  |
| Mercury    | 57   |
| Molybdenum | 75   |
| Nickel     | 420  |
| Selenium   | 100  |
| Zinc       | 7500 |

<sup>\*</sup> Dry Basis

 Table 2
 Cumulative Pollutant Loading Rates

| Pollutant | Cumulative Pollutant Loading Rate (lb/acre) |
|-----------|---|
| Arsenic   | 37  |
| Cadmium   | 35  |
| Chromium  | 2677  |
| Copper    | 1338  |
| Lead      | 268   |
| Mercury   | 15  |
| Nickel    | 375   |
| Selenium  | 89  |
| Zinc      | 2498  |

 Table 3
 Pollutant Concentrations

| Pollutant | Monthly Average Concentrations (mg/kg)* |
|-----------|---|
| Arsenic   | 41                                      |
| Cadmium   | 39                                      |
| Chromium  | 1200                                    |
| Copper    | 1500                                    |
| Lead      | 300                                     |
| Mercury   | 17                                      |
| Nickel    | 420                                     |
| Selenium  | 36                                      |
| Zinc      | 2800                                    |

<sup>\*</sup> Dry Basis

 Table 4
 Annual Pollutant Loading Rates

| Pollutant | Annual Pollutant Loading Rate (lb/acre/yr) |
|-----------|--|
| Arsenic   | 1.8  |
| Cadmium   | 1.7  |
| Chromium  | 134  |
| Copper    | 67   |
| Lead      | 13   |
| Mercury   | 0.76                                       |
| Nickel    | 19   |
| Selenium  | 4.5  |
| Zinc      | 125  |

#### **SECTION 13**

#### WATER QUALITY MANAGEMENT

#### Georgia Supplement, August 2000

This section covers the state requirements for Water Quality Management and is intended to supplement the U.S. TEAM Guide. Refer to the U.S. TEAM Guide and the DOD Component Supplements for Federal, DOD, and service-specific requirements.

#### **Definitions**

- Abandoned Well a well for which use has been permanently discontinued or that is in a state of disrepair such that it cannot be used for its intended purpose or for observation purposes (Rules of the State of Georgia (RSG) 391-3-6-.13(2)).
- Act the Georgia Safe Drinking Water Act of 1977 (RSG 391-3-5-.02).
- Action Level the concentration of lead or copper in water specified in Rule 391-3-5-.25 that determines, in some cases, the treatment requirements specified in this Chapter that a water system is required to complete (RSG 391-3-5-.02).
- Aquifer the following definitions apply:
  - 1. any stratum or zone of rock beneath the surface of the earth capable of containing water or producing water from a well (RSG 391-3-5-.02).
  - 2. a geological formation, group of formations, or part of a formation that is capable of yielding water to a well or spring (RSG 391-3-6-.13(2)).
- Aquifer Testing a controlled pumping test of a well lasting at least 24 continuous hours in which the water level and the pumping rate are monitored at closely spaced intervals and the water level is monitored for at least as long a time following the test as the duration of the test (RSG 391-3-5-.02).
- Area of Review the area surrounding an injection well or field where migration of the injection and/or formation fluid into an underground source of drinking water may occur (RSG 391-3-6-.13(2)).
- *Basin* that area within one of the 14 river drainages listed below comprising the sum of the watersheds within that basin (RSG 391-3-6-.07(2)):
  - 1. Allatum
  - 2. Chattahoochee
  - 3. Coosa
  - 4. Flint
  - 5. Ochlockonee
  - 6. Ocmulgee
  - 7. Oconee
  - 8. Ogeechee
  - 9. St. Marys
  - 10. Satilla
  - 11. Savannah
  - 12. Suwannee
  - 13. Tallapoosa
  - 14. Tennessee.

- Best Available Technology (BAT) the best technology, treatment techniques, or other means promulgated by EPA and adopted by the Division. In promulgating BAT the EPA examines the efficacy under field conditions and not solely under laboratory conditions, and takes costs into consideration when determining what technology or treatment technique is available (RSG 391-3-5-.02).
- *Board* or *Board of Examiners* the State Board of Examiners for Certification of Water and Wastewater Treatment Plant Operators and Laboratory Analysts (RSG 750-2-.01) [Added July 1999].
- Buffer a natural or enhanced vegetated area with no or limited minor land disturbances, such as trails and picnic areas (RSG 391-3-16-.01(2)) [Added September 1997].
- Casing the following definitions apply:
  - 1. the tubular material used to shut off or exclude a stratum or strata and to protect against entrance of contaminants during the expected life of the well (RSG 391-3-5-.02).
  - 2. a pipe or tubing of appropriate material of varying diameter and weight, lowered into a borehole during or after drilling in order to support the sides of the hole and thus prevent the walls from caving, to prevent loss of drilling mud into porous ground or to prevent water, gas, or other fluid from entering or leaving the hole (RSG 391-3-6-.13(2)).
- *Coagulation* a process using coagulant chemicals and mixing by which colloidal and suspended materials are destabilized and agglomerated into flocs (RSG 391-3-5-.02).
- Coastal Waters those littoral recreational waters on the ocean side of the Georgia coast (RSG 391-3-6-.03(3)).
- Community Water System (CWS) a public water system that serves at least 15 service connections used by year-round residents or regularly serves at least 25 year-round residents (RSG 391-3-5-.02).
- Compliance Cycle the 9-yr calendar year cycle during which public water systems must monitor. Each
  compliance cycle consists of 3-yr compliance periods. The first compliance cycle began 1 January 1993 (RSG
  391-3-5-.02).
- *Compliance Period* a 3-yr calendar year period within a compliance cycle. Each compliance cycle has three 3-yr compliance periods (RSG 391-3-5-.02).
- *Confining Zone* a geological formation, group of formations, or part of a formation that is capable of limiting fluid movement above or below an injection zone (RSG 391-3-6-.13(2)).
- Confirmation Sample a sample analysis or analyses taken to verify the results of an original analysis. Each sample for the analysis shall be taken or measured at the same location in the water system as the original sample. The results of the confirmation samples shall be averaged with the original sample to determine compliance (RSG 391-3-5-.02).
- *Confined Aquifer* an aquifer that is separated from the land surface by a significant zone of low permeability that prevents surface recharge or pollutants from readily reaching the aquifer (RSG 391-3-5-.02).
- *Confluent Growth* a continuous bacterial growth covering the entire filtration area of a membrane filter, or a portion thereof, in which bacterial colonies are not discrete (RSG 391-3-5-.02).
- *Contaminant* any physical, chemical, biological, or radiological substance or matter in water (RSG 391-3-5-.02 and 391-3-6-.13(2)).
- *Conventional Filtration Treatment* a series of processes including coagulation flocculation, sedimentation, and filtration resulting in substantial particulate removal (RSG 391-3-5-.02).

- Corridor all land within the buffer areas and other setback areas (391-3-16-.01(2)) [Added September 1997].
- *Corrosion Inhibitor* a substance capable of reducing the corrosivity of water toward metal plumbing materials, especially lead and copper, by forming a protective film on the interior surface of those materials (RSG 391-3-5-.02).
- Cross-Connection any physical arrangement whereby a public water supply is connected, directly or indirectly, with any other water supply system, sewer, drain, conduit, pool, storage reservoir, plumbing fixture, or other device that contains or may contain contaminated water, sewage or other waste, or liquid of unknown or unsafe quality which may be capable of imparting contamination to the public water supply as the result of backflow. By-pass arrangements, jumper connections, removable sections, swivel or changeable devices, and other temporary or permanent devices through which or because of which backflow could occur are considered to be cross-connections (RSG 391-3-5-.02).
- *CT* is the product of "residual disinfectant concentration" (C) in milligrams per liter determined before or at the first customer tap where water is provided for human consumption, and the corresponding "disinfectant contact time" (T) in minutes (RSG 391-3-5-.02).
- Department the Department of Natural Resources of the State of Georgia (RSG 391-3-5-.02).
- Diatomaceous Earth Filtration a process resulting in substantial particulate removal in which (1) a precoat cake of diatomaceous earth filter media is deposited on a support membrane (septum), and (2) while the water is filtered by passing through the cake on the septum, additional filter media known as the body feed is continuously added to feed water to maintain the permeability of the filter cake (RSG 391-3-5-.02).
- *Direct Filtration* a series of processes including coagulation and filtration but excluding sedimentation resulting insubstantial particulate removal (RSG 391-3-5-.02).
- *Director* the Director of the Environmental Protection Division, Department of Natural Resources of the State of Georgia, or his designee (RSG 391-3-5-.02 and 391-3-6-.07(2)).
- *Disinfectant* any oxidant, including but not limited to, chlorine, chlorine dioxide, chloramines, and ozone added to water in any part of the treatment or distribution process, that is intended to kill or inactivate pathogenic microorganisms (RSG 391-3-5-.02).
- Disinfectant Contact Time ("T" in CT calculations) the time in minutes that it takes for water to move from the point of disinfectant application or the previous point where residual disinfectant concentration ("C") is measured (RSG 391-3-5-.02).
- *Disinfection* a process that inactivates pathogenic organisms in water by chemical oxidants or equivalent agents (RSG 391-3-5-.02).
- Disposal Well a well used for the disposal of waste into a subsurface stratum (RSG 391-3-6-.13(2)).
- Diversion a turning aside or altering of the natural course of surface water (RSG 391-3-6-.07(2)).
- *Division* the Environmental Protection Division, Department of Natural Resources of the State of Georgia (RSG 391-3-5-.02).
- *Domestic and Personal Uses* uses for drinking, cooking, washing, sanitary purposes, and all health related activities (RSG 391-3-6-.07(2)).

- Domestic or Other Nondistribution System Plumbing Problem a coliform contamination problem in a public water system with more than one service connection that is limited to the specific service connection from the coliform-positive sample was taken (RSG 391-3-5-.02).
- Dose Equivalent the product of the absorbed dose from ionizing radiation and such factors as account for
  differences in biological effectiveness due to the type of radiation and its distribution in the body as specified by
  the International Commission on Radiological Units and Measurements (RSG 391-3-5-.02).
- *Drinking Water* water supplied for domestic use or human consumption from a public water system (RSG 391-3-5-.02) [Revised September 1998].
- Effective Corrosion Inhibitor Residual the purpose of compliance with Rule 391-3-5-.25, means a concentration sufficient to form a protective film on the interior walls of a pipe (RSG 391-3-5-.02).
- Entry Point the sample point where after treatment drinking water enters the distribution system. For purposes of the Act and the Rules, "entry point" shall be defined as a sample location anywhere on the finished water line after treatment, up to and including the first service or customer tap (RSG 391-3-5-.02) [Revised September 1998].
- Exempted Aquifer an aquifer or its portion that meets the criteria in the definition of underground source of drinking water but which has been exempted according to the procedures in Rule 391-3-6-.13(4) of this Chapter (RSG 391-3-6-.13(2)).
- Exemption approval from the Division affording a public water system, existing as of the effective date of these rules, an extended time for compliance with a maximum contaminant level or treatment technique contained in a drinking water standard. An exemption pertains to noncompliance with a maximum contaminant level for reasons other than that instance when application of a generally available treatment method fails to adequately treat the raw water source (RSG 391-3-5-.02).
- Facility, Operation, or Activity any injection well or system (RSG 391-3-6-.13(2)).
- Farm Uses irrigation of any land used for general farming, forage, aquaculture, pasture, turf production, orchards, or tree and ornamental nurseries; provisions of water supply for farm animals, poultry farming, or any other activity conducted in the course of farming operations. Farm uses shall also include the processing of perishable agricultural products and the irrigation of recreational turf, except in the Chattahoochee River watershed upstream from the Peachtree Creek confluence, where irrigation of recreational turf shall not be considered a farm use (RSG 391-3-6-.07(2)).
- Federal Act the Federal Safe Drinking Water Act, P.L. 93-523 (RSG 391-3-5-.02).
- *Filtration* a process for removing particulate matter from water by passage through porous media (RSG 391-3-5-.02).
- *First Draw Sample* a 1-L sample of tap water collected in accordance with Rule 391-3-5-.25, that has been standing in the plumbing pipes at least 6 h and is collected without flushing the tap (RSG 391-3-5-.02).
- *Flocculation* a process to enhance agglomeration or collection of smaller floe particles into larger, more easily settleable particles by gentle stirring by hydraulic or mechanical means (RSG 391-3-5-.02).
- *Fluid* any material or substance which flows or moves whether in a semisolid, liquid, sludge, gas, or any other form or state (RSG 391-3-6-.13(2)).

- Formation a body of consolidated or unconsolidated rock characterized by a degree of lithologic homogeneity that is prevailingly, but not necessarily, tabular and is mappable on the earth's surface or traceable in the subsurface (RSG 391-3-6-.13(2)).
- Formation Fluid fluid present in a formation under natural conditions as opposed to introduced fluids, such as drilling mud (RSG 391-3-6-.13(2)).
- *Generator* any person, by site location, whose act or process produces hazardous waste identified or listed in Federal Regulations, 40 CFR Part 261 (RSG 391-3-6-.13(2)).
- Gross Alpha Particle Activity the total radioactivity due to alpha particle emission as inferred from measurements on a dry sample (RSG 391-3-5-.02).
- Gross Beta Particle Activity the total radioactivity due to beta particle emission as inferred from measurement on a dry sample (RSG 391-3-5-.02).
- *Groundwater* the following definitions apply:
  - 1. water obtained from wells and/or springs used as a source of water supply for a public water system (RSG 391-3-5-.02).
  - 2. water below the land surface in the zone of saturation (RSG 391-3-6-.13(2)).
- Groundwater Under the Direct Influence of Surface Water any water beneath the surface of the ground with:
  - 1. significant occurrence of insects or other microorganisms, algae, or large-diameter pathogens, such as *Giardia lamblia*
  - 2. significant and relatively rapid shifts in water characteristics such as turbidity, temperature, conductivity, or pH that closely correlate to climatological or surface water conditions (RSG 391-3-5-.02).
- *Grout* a mixture of not more than 6 gal of clear water to one 95-lb bag of Portland cement. The mixture may contain additives in proper amounts as necessary to reduce shrinkage and increase compatibility of the grout to injection and formation fluids (RSG 391-3-6-.13(2)).
- *Halogen* one of the chemical elements chlorine, bromine, or iodine (RSG 391-3-5-.02).
- *Hazardous Material* any chemical, substance, or material that is classified as Hazardous by the USEPA (CFR 40, part 261) (RSG 391-3-5-.02).
- *Hazardous Waste* a hazardous waste as defined by the Georgia Hazardous Waste Management Act, Georgia Laws 1979, p. 1127, et seq., and the rules adopted pursuant to the Act (RSG 391-3-6-.13(2)).
- *Hazardous Waste Management Facility* all contiguous land and structures, other appurtenances and improvements on the land used for treating, storing, or disposing of hazardous waster. A facility may consist of several treatment, storage, or disposal operational units (RSG 391-3-6-.13(2)).
- Health Hazards any conditions, devices, or practices in a water supply system or its operation that create or
  may create an imminent and substantial danger to the health and well-being of the water consumer (RSG 391-35-.02).
- Heterotrophic Plate Count formerly known as the standard plate count, a procedure for estimating the number of live heterotrophic bacteria in water. Unless stated otherwise, heterotrophic plate count refers to Method (9215 A), the pour plate method, as set forth in Standard Methods for the Examination of Water and Wastewater, American Public Health Association, 18th Edition, 1992, pp. 9-32 to 9-34 (RSG 391-3-5-.02).

- *Impervious Surface* a man-made structure or surface which prevents the infiltration of storm water into the ground below the structure or surface. Examples are buildings, roads, driveways, parking lots, decks, swimming pools, or patios (391-3-16-.01(2)) [Added September 1997].
- Impoundment the storing or retaining of surface water by whatever method or means (RSG 391-3-6-.07(2)).
- Initial Compliance Period the first full 3-yr compliance period that began 1 January 1993 (RSG 391-3-5-.02).
- *Injection* the subsurface emplacement of fluids (RSG 391-3-6-.13(2)).
- *Injection Well* a well into which fluids are being, or are intended to be, injected. The classification of injection wells is found in Appendix 13-1 (RSG 391-3-6-.13(2)).
- *Injection Zone* a geological formation, group of formations, or part of a formation receiving fluids through a well (RSG 391-3-6-.13(2)).
- *Inventory* the purpose of Rule 391-3-5-.40 means a written or computer data base listing of all potential sources of groundwater pollution located within a wellhead protection area (RSG 391-3-5-.02).
- Large Water Supply Watershed a watershed having 100 mi<sup>2</sup> or more of land within the drainage basin upstream of a governmentally owned public drinking water supply intake (RGNDR 391-3-16-.01(6)).
- *Large Water System* the purpose of Rule 391-3-5-.25 (Lead & Copper) a water system that serves more than 50,000 persons (RSG 391-3-5-.02).
- Lead Service Line a line made of lead that connects the discharge side of the water meter to the building inlet and any lead pigtail, gooseneck, or other fitting that is connected to such lead line (RSG 391-3-5-.02).
- Legionella a genus of bacteria, some species of which have caused a type of pneumonia called Legionnaires Disease (RSG 391-3-5-.02).
- Manmade Beta Particle and Photon Emitters all radionuclides emitting beta particles and/or photons listed in Maximum Permissible Body Burdens and Maximum Permissible Concentration of Radionuclides in Air or Water for Occupational Exposure, NBS Handbook 69, except the daughter products of thorium-232, uranium-235 and uranium-238 (RSG 391-3-5-.02).
- *Maximum Contaminant Level (MCL)* the maximum permissible level of a contaminant in water that is delivered to any user of a public water system (RSG 391-3-5-.02).
- *Maximum Contaminant Level Goal* the maximum level of a contaminant in drinking water at which no known or anticipated adverse effect on the health of persons would occur, and that allows an adequate margin of safety. Maximum contaminant level goals are nonenforceable health goals (RSG 391-3-5-.02).
- *Medium-Size Water System* the purpose of Rule 391-3-5-.25 (Lead & Copper), means a water system that serves greater than 3300 and less than or equal to 50,000 persons (RSG 391-3-5-.02).
- Minimum Community Population Determination for the purpose of the Act and the Rules means the minimum residential population shall be determined by a mathematical calculation of the total number of active residential service connections, multiplied by Georgia's average population per household, as published in the most recent Federal Census Bureau Statistics. Multiple residential units served by a single connection (master meter) shall be included in the determination of population for a water system (RSG 391-3-5-.02) [Added September 1998].

- Near the First Service Connection one of the 20 percent of all service connections in the entire system that is nearest the water supply treatment facility, as measured by water transport time within the distribution system (RSG 391-3-5-.02).
- Noncommunity Water System (NCWS) a public water system that provides piped water for human consumption to at least 15 service connections or that serves at least 25 individuals at least 60 days out of the year but which is not a community water system. A noncommunity water system may be further classified as a "nontransient, noncommunity water system" (RSG 391-3-5-.02).
- *Nontransient, Noncommunity Water System (NTNCWS)* a public water system that is not a community water system and that regularly serves at least 25 of the same persons over 6 mo/yr (RSG 391-3-5-.02).

#### • Operator:

- 1. the person responsible for the maintenance and operation of the public water system. A certified operator is an operator registered as a Water Treatment Plant Operator in the State of Georgia in accordance with the provisions of the Certification of Water and Wastewater Treatment Plant Operators and Laboratory Analysts Act (Georgia Laws 1969, pp. 272 et seq., as amended). For purposes of this Act a certified operator also includes persons involved with only the storage and distribution of drinking water (RSG 391-3-5-.02).
- 2. any person who performs operation duties, as defined by the Board, at wastewater treatment plants, wastewater collection systems, water distribution systems, public water supply systems, or water treatment plants (RSG 750-2-.01) [Added July 1999].
- Operator In Responsible Charge any operator who has direct general charge of the day-to-day field operation of a wastewater treatment plant, wastewater collection system, water distribution system, or public water supply system, and who is responsible for the quality of the treated water or wastewater effluent (RSG 750-2-.01) [Added July 1999].
- *Operation Duties* (RSG 750-2-.01) [Added July 1999]:
  - for a wastewater treatment plant and for a water treatment plant means day-to-day process control
    decisions which may affect the treatment and, therefore, quality of the treated water and/or wastewater
    effluent; and
  - 2. for a wastewater collection system or for a water distribution system means the on site supervision of the cleaning, maintaining, and repairing of the system.
- Optimal Corrosion Control Treatment as it applies to Rule 391-3-5-.25 (Lead & Copper) of this Rule, means the corrosion control treatment that minimizes the lead and copper concentrations at user's taps while ensuring that the treatment does not cause the water to violate any national primary drinking water regulation (RSG 391-3-5-.02).
- *Person* any individual, corporation, company, association, partnership, county, municipality, state agency, state authority, Federal agency, facility, or other entity (RSG 391-3-5-.02 and 391-3-6-.13(2)).
- *Perennial Stream* a stream which flows throughout the whole year as indicated on a USGS Quad map (391-3-16-.01(2)) [Added September 1997].
- *Picocurie* (*pCi*) that quantity of radioactive material producing 2.22 nuclear transformations/min (RSG 391-3-5-.02).
- *Plugging* the act or process of stopping the flow of all fluids, including water, oil, or gas into or out of a formation through a borehole or well penetrating that formation (RSG 391-3-6-.13(2)).
- *Point of Disinfection Application* is the point where the disinfectant is applied and water downstream of the point is not subject to recontamination by surface water runoff (RSG 391-3-5-.02).

- *Points* continuing education requirements by the Board as a condition of certificate renewal. The number of points awarded by the Board for a course or conference may or may not be the same as the number of contact hours in the course or conference (RSG 750-2-.01) [Added July 1999].
- *Process Control Decisions* decisions which may affect the treatment and, therefore, quality of the treated water and/or wastewater effluent (RSG 750-2-.01) [Added July 1999].
- *Professional Engineer* a person registered to practice professional engineering in the State of Georgia in accordance with the provisions of the Act governing the Practice of Professional Engineering in Georgia (Ga. Laws 1945, p. 294 et seq., as amended) (RSG 391-3-5-.02).
- *Professional Geologist* a person registered to practice professional geology in the State of Georgia in accordance with the provisions of the Registration of Geologists Act of 1975, (Code 1933, Sec. 84-2101a, enacted by the Georgia Legislature 1975, p. 163, 1) (RSG 391-3-5-.02).
- *Public Water Supply System* the system of pipes, structures, and facilities through which water is obtained and treated, to be offered to the public for household use or for any other public consumption (RSG 750-2-.01) [Added July 1999].
- Public Water System (PWS) a system that provides piped water to the public for human consumption through the pipes or other constructed conveyances, if such system has at least 15 service connections or regularly serves an average of 25 individuals daily at least 60 days out of the year. Such terms include:
  - 1. any collection, treatment, storage, and distribution facilities under control of the operator of such system and used primarily in connection with such system
  - any collection or pretreatment storage facilities not under such control that are used primarily in connection with such system. A PWS is either a "community water system," a "nontransient noncommunity water system," or a "transient noncommunity water system" (RSG 391-3-5-.02) [Revised September 1998].
- Radioactive Waste any waste that contains radioactive material (RSG 391-3-6-.13(2)).
- Raw Water water from a source of water supply or a proposed source of water supply that has not received any type of treatment to change the physical, chemical, biological, or radiological quality of the water (RSG 391-3-5-.02).
- *Rem* the unit of dose equivalent from ionizing radiation to the total body or any internal organ or organ system. A "millirem (norm)" is 1/1000 of a rem (RSG 391-3-5-.02).
- Repeat Compliance Period any subsequent compliance period after the initial compliance period (RSG 391-3-5-.02).
- Repeat Sample a sample that is collected and analyzed in response to a previous coliform-positive sample (RSG 391-3-5-.02).
- Reservoir Boundary the edge of a water supply reservoir defined by its normal pool level (391-3-16-.01(2)) [Added September 1997].
- Residual Disinfectant Concentration ("C" in CT Calculations) the concentration of disinfectant measured in milligrams per liter in a representative sample of water (RSG 391-3-5-.02).
- Sanitary Survey an onsite review of the water source, facilities, equipment, treatment, operation, and maintenance of a PWS for the purpose of evaluating the adequacy of each for producing and distributing safe drinking water (RSG 391-3-5-.02).

- Secondary Contact Recreation incidental contact with the water, wading, and occasional swimming (RSG 391-3-6-.03(3)).
- Sedimentation a process for removal of solids before filtration by gravity or separation (RSG 391-3-5-.02).
- Service Connection the point at which the water distribution main and the water service pipe, metered or unmetered, are connected to serve water to a residence or water customer (RSG 391-3-5-.02).
- Service Line Sample a 1-L sample of water collected in accordance with Rule 391-3-5-.25 that has been standing for at least 6 h in the service line (RSG 391-3-5-.02).
- Single Family Structure for the purpose of compliance with Rule 391-3-5-.25 (Lead & Copper), means a building constructed as a single-family residence that is currently used as either a residence or place of business (RSG 391-3-5-.02).
- *Site* the land or water area where any facility, operation, or activity is physically located or conducted, including adjacent land used in connection with the facility, operation, or activity (RSG 391-3-6-.13(2)).
- *Slow Sand Filtration* a process involving passage of raw water through a bed of sand at low velocity (generally less than 0.4 m/h) resulting in substantial particulate removal by physical and biological mechanisms (RSG 391-3-5-.02).
- Small Water Supply Watershed a watershed having less than 100 mi<sup>2</sup> of land within the drainage basin upstream of a governmentally owned public drinking water supply intake (RSG 391-3-16-.01(7)(a)).
- *Small Water System* for the purpose of Rule 391-3-5-.25 (Lead & Copper), means a water system that serves 3300 persons or fewer (RSG 391-3-5-.02).
- Source of Water Supply the waters of the state from which raw water is taken into a public water system to be treated and/or distributed.
- *Spring* a source of water supply that naturally issues forth for the first time from rock or soil onto the land or into a body of water (RSG 391-3-5-.02).
- Standard Sample the aliquot of finished drinking water that is examined for the presence of coliform bacteria (RSG 391-3-5-.02).
- Storage Tank or Tank any covered structure, such as clearwell, standpipe, reservoir, elevated tank, hydropneumatic tank, or other storage facility or combination thereof used to store drinking water (RSG 391-3-5-.02).
- *Stratum (Plural Strata)* a single sedimentary bed or layer, regardless of thickness, that consists of generally the same kind of rock material (RSG 391-3-6-.13(2)).
- Supervision accountability for the work of the supervisee (RSG 750-2-.01) [Added July 1999].
- Supplier of Water or Supplier any person who owns or operates a PWS (RSG 391-3-5-.02).
- Surface Water(s) of the State or Surface Water(s) -
  - 1. includes any and all rivers, streams, branches, creeks, ponds, tributary streams, drainage basins, natural lakes, artificial reservoirs and impoundments, and groundwater under the direct influence of surface water (RSG 391-3-5-.02).

- 2. any and all rivers, streams, creeks, branches, lakes, reservoirs, ponds, drainage systems, springs producing in excess of 100,000 gal/day, and all other bodies of surface water, natural or artificial, lying within or forming a part of the boundaries of the state that are not entirely confined and retained completely upon the property of a single individual, partnership, or corporation (RSG 391-3-6-.07(2)).
- *System* all integral unit operations and processes, including conduits, appurtenances, machine, control elements, and laboratory functions (RSG 750-2-.01) [Added July 1999].
- System With a Single Service Connection a system that supplies drinking water to consumers via a single service line (RSG 391-3-5-.02).
- *Total Trihalomethanes (TTHM)* the sum of the concentration in milligrams per liter of the trihalomethane compounds: trichloromethane (chloroform), dibromochloromethane, bromodichloromethane and tribromochloromethane, bromodichloromethane and tribromomethane (bromoform), rounded to two significant figures (RSG 391-3-5-.02) [Revised September 1998].
- *Too Numerous to Count* that the total number of bacterial colonies exceed 200 on a 47-mm diameter membrane filter used for coliform detection (RSG 391-3-5-.02).
- *Trainee* an individual engaged in a training period. A trainee is not required to hold a certificate and may not perform operation duties or perform laboratory tests, unless under the direct supervision of a certified operator or a certified laboratory analyst (RSG 750-2-.01) [Added July 1999].
- *Training Period* a period of time during which a trainee is learning operator or laboratory analyst duties under the direction of a certified operator or laboratory analyst (RSG 750-2-.01) [Added July 1999].
- Transient Noncommunity Water System (TNCWS) a PWS that is not a community water system or a nontransient noncommunity water system. A TNCWS provides piped water for human consumption to at least 15 service connections or which regularly serves at least 25 persons at least 60 days/yr (RSG 391-3-5-.02).
- Treatment Technique Requirement a requirement that specifies for a contaminant a specific treatment technique(s) which leads to a reduction in the level of such containment sufficient to comply with the requirements of these Rules (RSG 391-3-5-.02).
- *Trihalomethane (THM)* one of the family of organic compounds, named as derivatives of methane, wherein three of the four hydrogen atoms in methane are each substituted by a halogen atom in the molecular structure (RSG 391-3-5-.02).
- *Unconfined Aquifer* an aquifer that is not separated from the land surface by a significant zone of low permeability and, therefore, is more susceptible to pollution from the activities of mankind. Wellhead Protection Areas for unconfined aquifers are larger than such areas for confined aquifers (RSG 391-3-5-.02).
- *Underground Source of Drinking Water* all aquifers or portions of aquifers that are not exempted aquifers (RSG 391-3-6-.13(2)).
- *Utility* public or private water or sewer piping systems, water or sewer pumping stations, electric power lines, fuel pipelines, telephone lines, roads, driveways, bridges, river/lake access facilities, storm water systems, and railroads or other utilities identified by a local government (391-3-16-.01(2)) [Added September 1997].
- *Variance* approval from the Division affording a PWS an extended time for compliance with a maximum contaminant level or treatment technique contained in a drinking water standard. A variance pertains to noncompliance with a maximum contaminant level due to the inability to meet the maximum contaminant level even when a treatment method has been applied to a raw water source. The noncompliance is due to the quality of the raw water (RSG 391-3-5-.02).

- *Very Small Public Water Supply System* any public water supply system in this state which is a ground-water system serving a population of less than 1,000 (RSG 750-2-.01) [Added July 1999].
- *Virus* a microorganism of fecal origin that is infectious to humans by waterborne transmission (RSG 391-3-5-.02).
- Waterborne Disease Outbreak the significant occurrence of acute infectious illness, epidemiologically associated with the ingestion of water from a PWS that is deficient in treatment, as determined by the Division (RSG 391-3-5-.02).
- Water Distribution System the system of pipes, pumps, valves, and other such apparatus used to distribute water to the public.
- Waters or Waters of the State -
  - 1. includes any and all rivers, streams, creeks, branches, lakes, reservoirs, ponds, drainage systems, springs, wells, and all other bodies of surface or underground water, natural or artificial, of this state (RSG 391-3-5-.02).
  - 2. includes any and all rivers, streams, creeks, branches, reservoirs, ponds, drainage systems, springs, wells, and all other bodies of surface or subsurface water, natural or artificial, lying within or forming a part of the boundaries of the state that are not entirely confined and retained completely upon the property of a single individual, partnership, or corporation (RSG 391-3-6-.13(2)).
  - 3. any and all rivers, streams, creeks, branches, lakes, reservoirs, ponds, drainage systems, springs, wells, wetlands, and all other bodies of surface or subsurface water, natural or artificial, lying within or forming a part of the boundaries of the state that are not entirely confined and retained completely upon the property of a single individual, partnership, or corporation (RSG 391-3-6-.03(3)).
- Watershed the area of land draining into any given point of a basin (RSG 391-3-6-.07(2)).
- Water Supply Reservoir a governmentally owned impoundment of water for the primary purpose of providing water to one or more governmentally owned public drinking water systems. This excludes the multipurpose reservoirs owned by the U.S. Army Corps of Engineers (391-3-16-.01(2)) [Added September 1997].
- Water Supply Watershed the area of land upstream of a governmentally owned public drinking water intake (391-3-16-.01(2)) [Added September 1997].
- Water Supply Watershed Protection Plan a land use plan prepared and adopted by local governments for the protection of the quality of drinking water obtained from the watershed (391-3-16-.01(2)) [Added September 1997].
- Water Treatment Plant the portion of the water supply system which in some way alters the physical, chemical, or bacteriological quality of the water.
- Water Treatment System a public water supply system as classified by the Division and as defined in the Act.
- *Well* the following definitions apply:
  - 1. any excavation that is cored, bored, drilled, jetted, dug, or otherwise constructed for the purpose of locating, testing, or withdrawing groundwater (RSG 391-3-5-.02).
  - 2. a bored, drilled, or driven shaft, or a dug hole, that has a depth greater than the largest surface dimension (RSG 391-3-6-.13(2)).
- Wellhead Protection Area an area of potential groundwater recharge around a well that should be protected from surface and subsurface sources of manmade pollution in order to protect the quality of drinking water supplies (RSG 391-3-5-.02).

- Well Injection the subsurface emplacement of fluids through a bored, drilled, or driven well or through a dug well, where the depth of the dug well is greater than the largest surface dimension (RSG 391-3-6-.13(2)).
- Withdrawal the taking away of surface water from its natural course (RSG 391-3-6-.07(2)).

#### WATER QUALITY MANAGEMENT GUIDANCE FOR GEORGIA CHECKLIST USERS

#### **REFER TO CHECKLIST ITEMS:**

Missing Checklist Items WQ.2.1.GA.

Operators WQ.6.1.GA. and WQ.6.2.GA.

Sampling/Analysis WQ.7.1.GA.
Operations WQ.8.1.GA.

Public Water Systems

General WQ.10.1.GA. through WQ.10.7.GA. Monitoring/Sampling WQ.15.1.GA. through WQ.15.5.GA.

Disinfection and Filtration WQ.20.1.GA.

Notification and Reporting WQ.30.1.GA. and WQ.30.2.GA.

Requirements

Community Water Systems

Standards WQ.35.1.GA. through WQ.35.4.GA. Monitoring/Sampling WQ.40.1.GA. through WQ.40.12.GA.

Lead and Copper DELETED [Equivalent to Federal; September 1998]

Noncommunity Water Systems

Standards WQ.60.1.GA.
Monitoring/Sampling WQ.65.1.GA.

Nontransient Noncommunity Water Systems

Standards WQ.76.1.GA.

Monitoring/Sampling WQ.77.1.GA. through WQ.77.6.GA.

Lead and Copper DELETED [Equivalent to Federal; September 1998]

Drinking Water Well WQ.90.1.GA. and WQ.90.2.GA.

Injection Control Wells WQ.110.1.GA. through WQ.110.11.GA. Water Quality Standards WQ.115.1.GA. through WQ.115.10.GA. Water Use Permits WQ.120.1.GA. through WQ.120.8.GA.

| GUIDANCE FOR APPENDIX USERS |   |
|-----------------------------|---|
| REFER TO APPENDIX NUMBERS:  | REFER TO APPENDIX TITLES:   |
| 13-1                        | Classification of Injection Wells   |
| 13-2                        | Maximum Contaminant Levels for Inorganic Chemicals  |
| 13-3                        | Total Coliform Monitoring Frequency for Community Water Systems   |
| 13-4                        | Secondary Maximum Contaminant Levels  |
| 13-5                        | Maximum Contaminant Levels for Synthetic Organic Contaminants   |
| 13-6                        | Maximum Contaminant Levels for Volatile Organic Contaminants (VOCs)   |
| 13-7                        | Unregulated Volatile Organic Contaminants   |
| 13-8                        | Instream Concentrations of USEPA Toxic Priority<br>Pollutants Under 7-Day, 10-Year Minimum Flow or Higher<br>Stream Flow Conditions |
| 13-9                        | Instream Concentrations of USEPA Toxic Priority<br>Pollutants Under Annual Average or Higher Stream Flow<br>Conditions              |
| 13-10                       | Instream Concentrations of USEPA Toxic Priority<br>Pollutants: Acute and Chronic Criteria   |

| Georgia Supplement   |  |
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| REGULATORY REVIEWER CHECKS: REQUIREMENTS: August 2000  |  |
| WQ.2.<br>MISSING CHECKLIST<br>ITEMS  |  |
| WQ.2.1.GA. Federal facilities are required to comply with all applicable state regulatory requirements not contained in this checklist (a finding under this checklist item will have the citation of the applied regulation as a basis of finding). | Determine whether any new regulations have been issued since the finalization of the manual.  Determine whether the Federal facility has activities or facilities that are regulated but not addressed in the checklists.  Verify that the Federal facility is in compliance with all applicable and newly issued regulations. |

#### **COMPLIANCE CATEGORY:** WATER QUALITY MANAGEMENT Georgia Supplement REGULATORY **REVIEWER CHECKS: REQUIREMENTS:** August 2000 [Reorganized October 1999] **WQ.6. OPERATORS** WQ.6.1.GA. Operators and Verify that public water supply system operators are certified. lab analysts must be certified (RSG 750-3-.01 and 750-5-Verify that water distribution system operators are certified. .01) [Moved in structural Verify that all laboratory analysts are certified. reorganization WQ.5 of October 1999]. (NOTE: The following are operational activities that do not require further certification: - Certified Class I, II, or III Public Water Supply System Operators may operate water distribution systems without further certification - Certified Class I or II Public Water Supply System Operators may perform the duties of a water laboratory analyst and certified Class I and II Biological Wastewater Treatment System Operators may perform the duties of a wastewater laboratory analyst in conducting certain tests for reporting purposes as defined by the Board without further certification.) Verify that certified Class IV Very Small Water System operators operate only very small public water supply systems and those distribution systems appurtenant to Class IV Very Small Water Systems. WQ.6.2.GA. Verify that the operator who is in responsible charge of a public water supply Operators in responsible charge must meet system holds a certificate of a class equal to or higher than the class of the plant or additional certification system being operated. requirements (RSG 750-3-.02) [Moved structural in reorganization of WO.5 October 1999].

| Georgia Supplement   |  |
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| REGULATORY<br>REQUIREMENTS:  | REVIEWER CHECKS:<br>August 2000 [Reorganized October 1999]   |
| WQ.7.<br>SAMPLING/ANALYSIS   |  |
| WQ.7.1.GA. Only Division certified laboratories may be used for determining compliance with the drinking water maximum contaminant levels (MCLs) for public water systems (PWSs) (RSG 391-3-529(1) and (2)) [Moved in structural reorganization of WQ.5 October 1999]. | Verify that for the purpose of determining compliance with the MCLs, samples must be analyzed by a laboratory approved by the Division.  (NOTE: Measurements used solely for operational control, including but not limited to turbidity, free chlorine residual, temperature, pH, conductivity, calcium, alkalinity, orthophosphate, and silica may be performed by any person acceptable to the Division.) |

| Georgia Supprement   |  |
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| REGULATORY   | REVIEWER CHECKS:   |
| REQUIREMENTS:  | August 2000 [Reorganized October 1999]   |
| WQ.8.<br>OPERATIONS  |  |
| WQ.8.1.GA. Storage tanks that hold drinking water must meet specific requirements (RSG 391-3-511) [Moved in structural reorganization of WQ.5 October 1999]. | Verify that all storage tanks are provided with a permanent cover, screened vents and openings, overflow piping, and means of draining.  Verify that the paint used for the interior of a storage tank is Division approved.  Verify that repairs and renovations to existing storage tanks that may effect the  |
| WQ.5 October 1999].  | Verify that the storage tank is maintained to prevent contamination of the drinking water by infiltration or other means.  Verify that buried or semiburied storage tanks have the ground surface sloping away from the tank.  Verify that hydropneumatic pressure tanks are provided with devices for maintaining the air-water volume at the designed water level and working pressures.  Verify that all new storage tanks are cleaned, tested, for leakage, and are disinfected. |

#### **COMPLIANCE CATEGORY:** WATER QUALITY MANAGEMENT Georgia Supplement REGULATORY **REVIEWER CHECKS: REQUIREMENTS:** August 2000 PUBLIC WATER **SYSTEMS** WO.10. (NOTE: RSG 391-3-5 applies to all PWSs in Georgia, except those that: **GENERAL** - consist only of distribution and storage facilities (and does not have any collection and treatment facilities) - obtain all of its water from, but is not owned or operated by the owner or operator of a PWS - do not sell water to any person - are not a carrier that conveys passengers in intrastate commerce (RSG 391-3-5-.03).) WO.10.1.GA. Division Verify that no person erects, constructs, operates, or divides a PWS, or undertakes approval and a permit is substantial enlargements, extensions, additions, modifications, renovations, or required for the construction repairs to any PWS, including storage, distribution, purification, or treatment components, without first: and operation of a new PWS and substantial modifications to any existing PWS (RSG - obtaining a permit to operate a PWS - obtaining Division approval of: 391-3-5-.04(1), (2) and (3); and 391-3-5-.17(1)) [Revised - the source of water supply September 1998]. - the means and methods of treating, purifying, storing, and distributing Verify that before a person initiates construction of a new public water system or increases the capacity of an existing public water system, the person obtains the local government's approval for development of the project within its jurisdiction, prior to the submittal of the plans and specifications to the Division for approval. Verify that the terms and conditions of the permit to operate a PWS are met. (NOTE: Governmentally owned public water systems and water authorities with qualified staff and meeting operating criteria developed by the Division may, with prior approval from the Division, approve limited additions to the water system. These additions will be limited to water distribution lines to serve subdivisions, apartment complexes, and shopping centers. Additions approved by the water system must be reported annually in a format prescribed by the Division.) WQ.10.2.GA. All treatment Verify that all products added directly to drinking water for its treatment or introduced indirectly into drinking water through its contact with surfaces of chemicals and products used for drinking water must meet materials or products used for its treatment, storage, transmission, or distribution specific requirements (RSG does not adversely affect drinking water quality and public health. 391-3-5-.04(7)).

| Georgia Supplement   |  |
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| REGULATORY<br>REQUIREMENTS:  | REVIEWER CHECKS: August 2000   |
| 391-3-504(7)).   | Verify that all treatment chemicals that come into contact with drinking water are certified for conformance with American National Standards Institute/National Sanitation Foundation Standard (ANSI/NSF) 60 by an ANSI approved third-party certification program or laboratory.   |
|  | Verify that all products that come into contact with drinking water during its treatment, storage, transmission, or distribution are certified for conformance with ANSI/NSF 60 by an ANSI approved third-party certification program or laboratory.   |
| <b>WQ.10.3.GA.</b> The source of water supply for PWSs must meet specific requirements (RSG 391-3-506).                                      | Verify that the source of water supply for all PWSs has Division approval and has a valid groundwater or surface water withdrawal permit where applicable (see WQ.120.GA. for water use permits).  |
| WQ.10.4.GA. Public water distribution lines must meet specific requirements (RSG 391-3-510(1), (4), (6), (7), (9), (10), and (11)) [Citation | Verify that the distribution system is designed and the water lines sufficiently sized to furnish at all times the instantaneous demand flow of water required and maintained at all times a pressure of 20 psi at each service connection in the distribution system under all conditions of flow.                            |
| Revised September 1998].   | Verify that the distribution system is maintained to prevent contamination of the drinking water and to provide the required pressure and flow at all times.   |
|  | Verify that no water lines are installed in contaminated areas such as sanitary land-fills or dump areas.  |
|  | Verify that no water main or pipe passes through or comes into contact with any part of a sewer or sewer manhole.  |
|  | Verify that all new installed distribution mains and appurtenances are flushed, pressure tested, and disinfected.  |
|  | Verify that any pipe, solder, or flux which is used in the installation or repair of any public water distribution system is lead free with not more than 8.0 percent lead in pipes and fittings and not more than 0.2 percent lead in solders and flux, except for leaded joints necessary for the repair of cast iron pipes. |
|  | Verify that the supplier of water identifies and reports to the Division any lead pipe and/or lead service connections known to be installed in the distribution system.   |
| WQ.10.5.GA. Disinfection of PWSs must meet specific  | Verify that all new constructed PWSs, including extensions, additions, modifications, or repairs to existing PWSs including water mains, storage tanks,  |

| Georgia Supplement  |   |
|---|---|
| REGULATORY<br>REQUIREMENTS:   | REVIEWER CHECKS: August 2000  |
| requirements (RSG 391-3-512).   | treatment plants, wells, or any other pipes or parts of the system that may affect the quality of the drinking water that is delivered, treated, or stored are disinfected before being placed into service.  |
| WQ.10.6.GA. Specific requirements must be met for cross connections at PWSs (RSG 391-3-513(1)). | Verify that a PWS is not connected — directly or indirectly — with a nonpotable water system or nonpermitted water system, sewer, drain, conduit, pool, storage reservoir, plumbing fixture, or other device which contains or may contain contaminated water, liquid, gasses, sewage, or other waste of unknown or unsafe quality, that may be capable of imparting contamination to the PWS as the result of backflow, bypass arrangements, jumper connections, removable sections, swivel or changeover devices, or other temporary, permanent, or potential connections through or because of which backflow or backsiphonage could or would occur. |
| WQ.10.7.GA. Operating requirements must be met for PWSs (RSG 391-3-514(2),                      | Verify that the water is continually chlorinated to maintain a detectable residual of free chlorine in all parts of the distribution system in the recommended amount of at least 0.2 ppm.  |
| (4), (5), (6), (7), and (8))<br>[Revised September 1998].                                       | Verify that the supplier of water of a fluoridated PWS samples daily and analyzes the fluoride concentration of the drinking water.   |
|   | Verify that daily records of the analytical results are maintained.   |
|   | Verify that a supplier having a surface water source has a certified operator on duty at all times when the water plant is in operation.  |
|   | Verify that a supplier having a groundwater source under the direct influence of surface water has a certified operator on duty at all times when the water plant is in operation, unless otherwise approved by the Division.   |
|   | Verify that a supplier having only groundwater sources has a certified operator to comply with its classification.  |
|   | Verify that the supplier of water maintains daily records of the operation of the water treatment facility and water distribution system as may be required by the Division, including the amount of water treated daily, results of the performance of daily tests pertinent to the control of the water treatment processes, disinfectant residuals, and test performed in the water distribution system.   |
|   | Verify that all community water systems that have a surface water source with water treatment facilities and those PWSs having only a groundwater source or only a water distribution system and serving a population of more than 12,900 persons, has, or has available, the services of a microbiological laboratory certified by the Division to perform the microbiological tests necessary for compliance with the maximum microbiological contaminant levels.   |

|                             | COMPLIANCE CATEGORY: WATER QUALITY MANAGEMENT Georgia Supplement   |  |
|-----------------------------|--|--|
| REGULATORY<br>REQUIREMENTS: | REVIEWER CHECKS: August 2000   |  |
| ALL QUALITY (19)            | Verify that any laboratory equipment used to perform the microbiological tests at the PWS facility is kept is good working order at all times. |  |

| Georgia Supplement  |  |
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| REGULATORY  | REVIEWER CHECKS:   |
| REQUIREMENTS:   | August 2000  |
| PUBLIC WATER<br>SYSTEMS   |  |
| WQ.15.<br>MONITORING/<br>SAMPLING   |  |
| WQ.15.1.GA. Specific requirements must be met for inorganic contaminants at all PWSs (RSG 391-3-518(1)).                                    | Verify that the PWS does not exceed the MCLs for nitrate, nitrite, and total nitrate-nitrite listed in Appendix 13-2.  |
| WQ.15.2.GA. Specific requirements must be met for microbiological contaminants at PWSs (RSG 391-3-514(10), 391-3-518(4), and 391-3-523(1)). | Verify that the supplier of water collects routine drinking water samples for microbiological analysis at the treatment plant and at various points in the distribution system that are representative of the drinking water when three or more samples per month are required and at various points in the distribution system which are representative of the drinking water when only one or two samples per month are required.                        |
|   | Verify that PWSs collect total coliform samples at sites that are representative of water throughout the distribution system according to a written sampling siting plant that has been approved by the Division (taken at the appropriate frequency in Appendix 13-3).  |
|   | Verify that the PWS does not exceed the following MCLs for microbiological contaminants:   |
|   | <ul> <li>for a system that collects at least 40 samples per month, if no more than 5.0 percent of the samples collected during a month are total coliform-positive, the system is in compliance with the MCL for total coliform</li> <li>for a system that collects fewer than 40 samples per month, if no more than 1 sample collected during a month is total coliform-positive, the system is in compliance with the MCL for total coliform.</li> </ul> |
|   | (NOTE: The MCL for microbiological contaminants is based on the presence or absence of total coliforms in a sample, rather than coliform density.)   |
|   | Verify that the PWS determines compliance with the MCL for total coliforms for each month in which it is required to monitor for total coliforms.  |
|   | (NOTE: Any fecal coliform-positive repeat sample or E. Coli-positive repeat sample, or any total coliform-positive repeat sample following a fecal coliform-positive or E. coli-positive routine sample constitutes a violation of the MCL for   |

| Georgia Supplement   |   |
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| REGULATORY<br>REQUIREMENTS:  | REVIEWER CHECKS: August 2000  |
| 111 (02111111111111111111111111111111111   | total coliforms and requires that the public notification requirements are met.)  |
| WQ.15.3.GA. Specific requirements must be met for secondary maximum contaminants at all PWSs (RSG 391-3-519(1) and (2)). | Verify that the drinking water does not contain any contaminant that will adversely affect the odor or appearance of the drinking water and consequently may cause a substantial number of the persons served by the system to discontinue its use or that may adversely affect the public welfare.  Verify that the PWS does not exceed the secondary MCLs listed in Appendix 13-4.  |
| WQ.15.4.GA. The collection and analysis of samples at PWSs must meet specific requirements (RSG 391-3-521(13) and (14)). | Verify that each PWS monitors at the time designated by the Division during each compliance period.  Verify that all analyses conducted to determine compliance with maximum contaminant levels are in accordance with 40 CFR 141.23(k).  |
| WQ.15.5.GA. Sampling requirements must be met for nitrate and nitrite at PWSs (RSG 391-3-521(7), (8), and (9)(b)).       | Verify that community and nontransient, noncommunity water systems monitor to determine compliance with the MCLs for nitrate (see Appendix 13-2) at the following appropriate frequency:  - systems served by groundwater systems monitor annually, beginning 1 January 1993 - systems served by surface water monitor quarterly, beginning 1 January 1993 - the repeat monitoring frequency for groundwater systems is quarterly for at least 1 yr following any one sample in which the concentration is 50 percent of the MCL - after the initial round of quarterly sampling is completed, each system that is monitoring annually takes subsequent samples during the quarter or quarters that previously resulted in the highest analytical result - transient, noncommunity water systems monitor annually beginning 1 January 1993.  Verify that the PWS monitors to determine compliance with the MCLs for nitrite (see Appendix 13-2) at the following appropriate frequency: - systems collect one sample at each sampling point in the compliance period beginning 1 January 1993 - after the initial sample, systems where an analytical result for nitrite is less than 50 percent of the MCL monitor at the frequency specified by the Division - the repeat monitoring frequency for any water system is quarterly for at least 1 yr following any one sample in which the concentration is 50 percent or more of the MCL |

| COMPLIANCE CATEGORY:     |
|--------------------------|
| WATER QUALITY MANAGEMENT |
| Georgia Supplement       |

| Georgia Supplement          |   |
|-----------------------------|---|
| REGULATORY<br>REQUIREMENTS: | REVIEWER CHECKS: August 2000  |
|                             | <ul> <li>systems that are monitoring annually take each subsequent sample during the<br/>quarter or quarters that previously resulted in the highest analytical result.</li> </ul>  |
|                             | Verify that when the results of sampling for nitrate or nitrite indicate a level that is more than the MCL, confirmation samples are taken within 24 h of the system's receipt of notification of the analytical results of the first sample. |
|                             | (NOTE: Systems unable to comply with the 24-h sampling requirement must immediately notify the customers and collect and analyze a confirmation sample within 2 wk of notification of the results of the first sample.)                       |
|                             |   |

| WATER QUALITY MANAGEMENT Georgia Supplement  |   |  |
|--|---|--|
| REGULATORY<br>REQUIREMENTS:  | REVIEWER CHECKS: August 2000  |  |
| PUBLIC WATER<br>SYSTEMS  |   |  |
| WQ.20. DISINFECTION AND FILTRATION   |   |  |
| WQ.20.1.GA. The treatment of water for PWSs must meet specific requirements (RSG 391-3-509(i), (j), (p), and (q)). | Verify that all means and methods of treating, purifying, and storing water for PWSs are approved by the Division.  |  |
|  | Verify that sufficient space is provided for chemical storage.  |  |
|  | Verify that fluoridation equipment and chemicals, where used, are placed in a separate room or facility provided for that purpose.  |  |
|  | Verify that each PWS with a surface water source or a groundwater source under<br>the direct influence of surface water provides treatment which reliably achieves the<br>following:  |  |
|  | <ul> <li>at least 99.9 percent (3-log) removal and/or inactivation of <i>Giardia lamblia</i> cysts between a point where the raw water is not subject to recontamination by surface water runoff and a point downstream before or at the first customer</li> <li>at least 99.99 percent (4-log) removal and/or inactivation of viruses between</li> </ul> |  |
|  | a point where the raw water is not subject to recontamination by surface water runoff and a point downstream before or at the first customer.   |  |
|  | Verify that each PWS with a surface water source or a groundwater source under the direct influence of surface water continuously monitors the residual disinfectant concentration of the water entering the distribution system and the lowest value is recorded each day.   |  |
|  | Verify that the residual disinfectant concentration in the water entering the distribution system is not less than 0.2 mg/L for more than 4 h.  |  |
|  | Verify that if at any time the residual disinfectant concentration falls below 0.2 mg/L in a system using grab sampling, the system takes a grab sample every 4 h until the residual disinfectant concentration is equal to or greater than 0.2 mg/L.   |  |
|  | (NOTE: Systems serving 3300 or fewer persons may take grab samples in lieu of continuous monitoring for residual disinfectant concentration, at the following frequencies:  |  |
|  |   |  |

| <b>COMPLIANCE CATEGORY:</b> |
|-----------------------------|
| WATER QUALITY MANAGEMENT    |
| Georgia Supplement          |

| REGULATORY<br>REQUIREMENTS: | REVIEWER CHECKS: August 2000   |   |
|-----------------------------|--|---|
|                             | 1001 to 2500   | 3 |
|                             | 2501 to 3300   | 4 |
|                             | <sup>1</sup> The day's samples cannot be taken at the same time. The sampling interval subject to Division review and approval.) |   |
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| Georgia Supplement   |  |
|--|--|
| REGULATORY<br>REQUIREMENTS:  | REVIEWER CHECKS: August 2000   |
| PUBLIC WATER<br>SYSTEMS  |  |
| WQ.30. NOTIFICATION AND REPORTING REQUIREMENTS                         |  |
| WQ.30.1.GA. PWSs must meet recordkeeping requirements (RSG 391-3-515). | Verify that any supplier of water retains on its premises or at a convenient location near its premises, the following records:  |
|  | <ul> <li>the date, place, and time of sampling and the name of the person who collected the sample</li> <li>identification of the sample as to whether it was a routine distribution system sample, check sample, raw, or drinking water sample, or other special purpose sample</li> <li>date of analysis</li> <li>laboratory and person responsible for performing analysis</li> <li>the analytical technique/method used</li> <li>results of the analysis.</li> </ul> |
|  | Verify that records of action taken by the system to correct violations are kept for a period not less than 3 yr after the last action taken with respect to the particular violation involved.  |
|  | Verify that copies of any written reports, summaries, or communications relating to sanitary surveys of the system, conducted by the system itself, by a private consultant, or by any local, state, or Federal agency, are kept for a period not less than 10 yr after completion of the sanitary survey involved.  |
|  | Verify that records concerning a variance or exemption granted to the system are kept for a period of not less than 5 yr following the expiration of such variance or exemption.   |
|  | Verify that any system subject to the lead and copper requirements retain original records of all sampling data, analyses, reports, surveys, letters, evaluations, schedules, Division determinations, and any other information for no fewer than 12 yr.  |
| WQ.30.2.GA. PWS must meet reporting requirements (RSG 391-3-530).      | Verify that except where a shorter period is specified, the supplier of water reports to the Division the results of any test measurements or analysis as required within the following:   |
|  | - the first 10 days following the month in which the results are received  |

| WATER QUALITY MANAGEMENT Georgia Supplement |   |
|---|---|
| REGULATORY<br>REQUIREMENTS:                 | REVIEWER CHECKS: August 2000  |
|   | - the first 10 days following the end of the required monitoring period as stipulated by the Division, whichever is shortest.   |
|   | Verify that the supplier of water reports to the Division by telephone within 48 h or before the end of the next business day, whichever is earlier, followed by a written report, any failure to comply with any Safe Drinking Water rule including failure to comply with monitoring or treatment technique requirements. |
|   | Verify that each supplier of water, upon discovering that a waterborne disease outbreak potentially attributable to that water system has occurred, reports the occurrence to the Division within 48 h or before the end of the next business day, whichever is earlier, followed by a written report.                      |
|   | Verify that all water systems report all lead and copper information in accordance with 40 CFR 141.90.  |

| Georgia Supplement   |  |
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| REGULATORY<br>REQUIREMENTS:  | REVIEWER CHECKS:<br>August 2000  |
| COMMUNITY WATER<br>SYSTEM  |  |
| WQ.35.<br>STANDARDS  |  |
| WQ.35.1.GA. Inorganic and organic contaminants at community water systems must not exceed MCLs (RSG 391-3-518(1) and (2)). | Verify that the community water system does not exceed the MCLs for all inorganic contaminants listed in Appendix 13-2.  Verify that the community water system does not exceed the MCLs for all organic contaminants (synthetic organic chemicals and volatile organic contaminants) listed in Appendices 13-5 and 13-6.  |
| WQ.35.2.GA. Community water systems must not exceed the turbidity MCL (RSG 391-3-518(3)).                                  | Verify that the community water system does not exceed the MCL for turbidity of 0.5 turbidity unit, in at least 99 percent of the monthly measurements, and the maximum allowable level of 5 turbidity units is not exceeded at any time.  (NOTE: Up to 1 turbidity unit may be allowed if the supplier of water can demonstrate to the Division that the higher turbidity does not do any of the following:  - interfere with disinfection  - prevent maintenance of an effective disinfectant agent throughout the distribution system  - interfere with microbiological determinations.)  |
| WQ.35.3.GA. Community water systems must not exceed MCLs for radioactivity (RSG 391-3-518(5)).                             | Verify that the following MCLs for radium-226, radium-228, gross alpha particle radioactivity, beta particle, and photon radioactivity from manmade radionuclides are not exceeded at the community water system:  - for radium-226, radium-228, gross alpha particle radioactivity: - combined radium-226 and radium-228: 5 pCi/L - gross alpha particle activity (including radium-226 but excluding radon and uranium): 15 pCi/L - the average annual concentration of beta particle and photon radioactivity from manmade radionuclides in drinking water must not produce an annual dose equivalent to the total body or any internal organ greater than 4 mrem/yr, based on the following average annual concentrations: - Tritium in the total body, 20,000 pCi/L - Strontium-90 in bone marrow, 8 pCi/L. |

| COMPLIANCE CATEGORY:     |
|--------------------------|
| WATER QUALITY MANAGEMENT |
| Georgia Supplement       |

| Georgia Supplement  |   |
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| REGULATORY  | REVIEWER CHECKS:  |
| REQUIREMENTS:   | August 2000   |
| <b>WQ.35.4.GA.</b> Community water systems must meet specific requirement for trihalomethanes (RSG 391-3-518(6)). | Verify that, for community water systems serving a population of 10,000 or more individuals and which add a disinfectant (oxidant) to the water in any part of the drinking water treatment process, the MCL for total trihalomethanes (TTHM) of 0.10 mg/L is not exceeded. |

| Georgia Supplement   |   |
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| REGULATORY   | REVIEWER CHECKS:  |
| REQUIREMENTS:  | August 2000   |
| COMMUNITY WATER<br>SYSTEM  |   |
| WQ.40.<br>MONITORING/<br>SAMPLING  |   |
| WQ.40.1.GA. Sampling requirements must be met for turbidity at community water systems (RSG 391-3-520(1), (3), (4), and (5); and 391-3-532(1)) [Revised September 1998]. | (NOTE: This requirement applies only to PWSs that use water obtained in whole or in part from surface water sources or groundwater sources under the direct influence of surface water.)  |
|  | Verify that the supplier of water for a community water system collects and analyzes representative samples of filtered water at least every 4 h, for the purpose of making turbidity measurements to determine compliance with the MCL for turbidity of 0.5 turbidity unit in at least 95 percent of the monthly measurements. |
|  | Verify that if the results of the turbidity analysis indicates that the treatment technique requirement has been exceeded, the sampling and measurement is confirmed by resampling as soon as practicable and preferably within 1 h.  |
|  | Verify that if the repeat sample confirms that the treatment technique requirement has been exceeded, the supplier of water reports to the Division within 48 h or before the end of the next business day, whichever is earlier.   |
|  | Verify that if the monthly treatment technique requirement is exceeded, or if the maximum measured level exceeds 5 turbidity units, the supplier of water reports to the Division and notifies the public in accordance with 40 CFR Parts 141.32, 142.16(a), and 143.5.   |
| Inorganic Chemicals  |   |
| -  |   |
| WQ.40.2.GA. Sampling requirements must be met for inorganic chemicals at community water systems (RSG 391-3-521(1), (4), and (6)(a)                                      | (NOTE: Inorganic chemicals include, antimony, barium, beryllium, cadmium, chromium, cyanide, fluoride, mercury, nickel, selenium, and thallium.)  Verify that community water systems using groundwater sources meet the following sampling requirements for inorganic chemicals:   |
| and (g)).  | <ul> <li>sample at every entry point in the distribution system representative of each well after treatment or at entry points to the distribution system representative of each source after any application of treatment</li> <li>collect a minimum of one sample at each sampling point during each compli-</li> </ul>       |

# **COMPLIANCE CATEGORY:** WATER QUALITY MANAGEMENT **Georgia Supplement REVIEWER CHECKS:** REGULATORY **REQUIREMENTS:** August 2000 ance period beginning in the compliance period starting 1 January 1993 - samples are taken at the same sampling point unless conditions make another sampling point more representative of each source or treatment plant. Verify that community water systems using surface water sources solely or a combination of surface and groundwater sources meet the following sampling requirements: - take a minimum of one sample at every entry point to the distribution system representative of each source after treatment or at entry points to the distribution system representative of each source after any application of treatment - collect samples at each sampling point beginning in the compliance period starting 1 January 1993 - samples are taken at the same sampling point unless conditions make another sampling point more representative of each source or treatment plant. Verify that if the system draws water from more than one source and the sources are combined before distribution, the system samples at an entry point to the distribution system during periods of normal operating conditions when water is representative of all the sources being used. (NOTE: For systems having fewer than 150 service connections, the initial compliance period for monitoring for antimony, beryllium, cyanide, nickel, and thallium is 1 January 1996 through 31 December 1998.) Verify that systems that exceed an MCL monitor quarterly beginning in the next quarter after the violation occurred. WQ.40.3.GA. Sampling Verify that community water systems using surface water sources analyze for arsenic at yearly intervals. requirements must be met for arsenic at community water systems (RSG 391-3-5-.21(3)) Verify that community water systems using only ground water sources analyze for arsenic at 3 yr intervals. [Revised September 1998]. Verify that, if the result of an analysis indicates that the level arsenic exceeds 0.05 mg/L, the supplier of water reports to the Division in writing within 7 days and initiates three additional analyses at the same sampling point within one month. Verify that, when the average of four analyses made as a result of an exceedence of the 0.05 mg/L arsenic MCL, also exceeds the 0.05 mg/L MCL, the supplier of water notifies the Division and gives notice to the public. Verify that monitoring after public notification is at a frequency designated by the Division and continues until one of the following occurs:

#### **COMPLIANCE CATEGORY:** WATER QUALITY MANAGEMENT **Georgia Supplement** REGULATORY **REVIEWER CHECKS: REQUIREMENTS:** August 2000 - the MCL has not been exceeded in two successive samples - a monitoring schedule as a condition to a permit, variance, exception, or enforcement action becomes effective. Asbestos Verify that community water systems sample for asbestos at least once during the WQ.40.4.GA. Sampling requirements must be met for first 3-yr compliance period of each 9-yr compliance cycle beginning in the asbestos at community water compliance period starting 1 January 1993. 391-3-5systems (RSG Verify that systems vulnerable to asbestos contamination due solely to corrosion of .21(5)(a), (e), (f), (g), and asbestos-cement pipe take one sample at a tap served by the asbestos-cement pipe (h)). under conditions where asbestos contamination is most likely to occur. Verify that systems vulnerable to asbestos contamination due solely to source water meet the monitoring requirements applicable to inorganic chemicals (see WQ.40.GA., RSG 391-3-5-.21(4)). Verify that systems vulnerable to asbestos contamination due both to its source water and corrosion of asbestos-cement pipe take one sample at a tap served by asbestos-cement pipe and under conditions where asbestos contamination is most likely to occur. Verify that a water system which exceeds the MCL for asbestos monitor quarterly beginning in the next quarter after the violation has occurred. **Organic Chemicals** WQ.40.5.GA. Sampling Verify that community water systems collect samples to determine compliance with the MCLs for VOCs (see Appendix 13-6, contaminants 1 - 21). requirements must be met for VOCs at community water (RSG 391-3-5-Verify that groundwater systems take a minimum of one sample at every entry systems point to the distribution system which is representative of each well after treatment .22(1)(a) through (f), (j)(1) (each sample should be taken at the same sampling point unless conditions make and (5), (k), (n), and (o)). another sampling point more representative of each source, treatment plant, or within the distribution system). Verify that systems using surface (or combined surface/groundwater sources) sample at each point in the distribution system that is representative of each source after treatment or at entry points to the distribution system after any application of

treatment (each sample should be taken at the same sampling point unless

# **COMPLIANCE CATEGORY:** WATER QUALITY MANAGEMENT **Georgia Supplement** REGULATORY **REVIEWER CHECKS: REQUIREMENTS:** August 2000 conditions make another sampling point more representative of each source, treatment plant, or within the distribution system). Verify that if the system draws water from more than one source and the sources are combined before distribution, the supplier samples at an entry point to the distribution system during periods of normal conditions when water that is representative of all sources is being used. Verify that each community water supplier takes four consecutive quarterly samples at each sampling point during each compliance period. (NOTE: If the initial monitoring for VOCs listed in Appendix 13-6 was conducted prior to 31 December 1992, and the system did not detect any contaminant, then each ground and surface water system may take one sample annually.) (NOTE: After a minimum of 3 yr of annual sampling, the Division may allow groundwater systems with no previous detection of any VOC to take one sample during each compliance period.) Verify that if a contaminant listed in RSG 391-3-5-.18(2)(b) 1 - 21 (see Appendix 13-6) is detected at a level exceeding 0.0005 mg/L in any sample, the following requirements are met: - the system monitors quarterly at each sampling point which resulted in a detection - the groundwater systems that have detected one or more of the following two-carbon organic compounds, trichloroethylene, tetrachloroethylene, 1,2dichloroethane, 1,1,1-trichloroethane, cis-1,2-dichloroethaylene, trans-1,2dichloroethylene, or 1,1-dichloroethylene, monitor quarterly for vinyl chloride at each sampling point at which one or more of the two-carbon organic compounds was detected. Verify that a system that exceeds an MCL for VOCs monitors quarterly. Verify that compliance with the MCLs for VOCs is determined based on the analytical results obtained at each sampling point and are conducted in accordance with 40 CFR 141.24(f)(16).

**WQ.40.6.GA.** Sampling requirements must be met for synthetic organic chemicals at community water systems (RSG 391-3-5-.22(3)(a), (b), (c), (d), (g), (h), (k), and (l)).

Verify that community water systems collect samples to determine compliance with the MCLs for synthetic organic chemicals (see Appendix 13-5).

Verify that groundwater systems take a minimum of one sample at every entry point to the distribution system which is representative of each well after treatment (each sample should be taken at the same sampling point unless conditions make another sampling point more representative of each source, treatment plant, or within the distribution system).

# **COMPLIANCE CATEGORY:**

| WATER QUALITY MANAGEMENT Georgia Supplement |  |
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| REGULATORY<br>REQUIREMENTS:                 | REVIEWER CHECKS: August 2000   |
|   | Verify that systems using surface (or combined surface/groundwater sources) sample at each point in the distribution system that is representative of each source after treatment or at entry points to the distribution system after any application of treatment (each sample should be taken at the same sampling point unless conditions make another sampling point more representative of each source, treatment plant, or within the distribution system).  |
|   | Verify that if the system draws water from more than one source and the sources are combined before distribution, the supplier samples at an entry point to the distribution system during periods of normal conditions when water that is representative of all sources is being used.  |
|   | Verify that each community water supplier takes four consecutive quarterly samples at each sampling point during each compliance period, beginning with the compliance period starting 1 January 1993.   |
|   | Verify that each community water supplier samples at the following frequencies after the initial compliance period:  |
|   | <ul> <li>for systems serving more than 3300 persons that do not detect a contaminant in the initial compliance period, sampling frequency is a minimum of two quarterly samples in 1 yr during each repeat compliance period</li> <li>for systems serving less than or equal to 3300 persons that do not detect a contaminant in the initial compliance period, sampling frequency is a minimum of one sample during each repeat compliance period.</li> </ul>   |
|   | Verify that, if a synthetic organic contaminant listed in Appendix 13-5 is detected in any sample, the following requirements are met:   |
|   | <ul> <li>each system monitors quarterly at each sampling point which resulted in a detection</li> <li>after the Division determines the system is reliably and consistently below the MCL, the system may monitor annually during the quarter that previously yielded the highest analytical result</li> <li>if monitoring results in detection of one or more of certain related contaminants (aldicarb, aldicarb sulfone, aldicarb sulfoxide, heptachlor, and heptachlor epoxide), then subsequent monitoring is analyzed for all related contaminants.</li> </ul> |
|   | Verify that systems that exceed the MCLs for synthetic organic chemicals (see Appendix 13-5) monitor quarterly.  |
|   | Verify that compliance with the MCLs for synthetic organic chemicals is determined based on the analytical results obtained at each sampling point and are conducted in accordance with 40 CFR 141.24(h)(12-13).   |
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# **COMPLIANCE CATEGORY:**

| WATER QUALITY MANAGEMENT Georgia Supplement   |  |
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| REGULATORY<br>REQUIREMENTS:   | REVIEWER CHECKS: August 2000   |
| Total Trihalomethanes   | 1145401  |
| WQ.40.7.GA. Sampling requirements must be met for total trihalomethanes at community water systems (RSG 391-3-524(2)(a), (b), (c), (h), and (i)). | Verify that community water systems that serve a population of 10,000 or more individuals and that add a disinfectant (oxidant) in any part of the drinking water treatment process collects samples and analyzes for total trihalomethanes.  (NOTE: The minimum number of samples required to be taken for total trihalomethane analysis is based on the number of treatment plants used by the PWS.)  Verify that all samples taken within an established frequency are collected within a 24-h period.  Verify that for community water systems utilizing surface water sources in whole or in part, and for all community water systems utilizing only groundwater sources that have been determined by the Division, analyses for total trihalomethane is performed at quarterly intervals on at least four water samples for each treatment plant used by the water supply system.  Verify that at least 25 percent of the samples are taken at locations within the distribution system reflecting the maximum residence time of the water in the system, and the remaining 75 percent are taken at representative locations in the distribution system, taking into account the number of persons served, different sources of water, and different treatment methods employed.  Verify that the results of all analyses obtained each quarter are reported to the |
|   | Division within 30 days of the system's receipt of the results.  Verify that if the result of an analysis indicates that the level of total trihalomethanes exceeds the MCL, the results are reported to the Division within 7 days and three additional analyses are initiated within 1 mo.  Verify that when the average of samples covering any running 12-mo period exceeds the MCL, the water supplier reports to the Division and notifies the public in accordance with 40 CFR Parts 141.32, 142.16(a), and 143.5.  Verify that sampling and analyses are conducted in accordance with 40 CFR 141.30.   |
| Unregulated Contaminants  WQ.40.8.GA. Specific sampling requirements must be met for unregulated VOCs at community water systems                  | Verify that all community water systems monitor for the contaminants listed in Appendix 13-7 for unregulated VOCs, by 1 January 1996.  Verify that monitoring is repeated no less than every 5 yr from the dates of initial  |

| Georgia Supplement  |   |
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| REGULATORY<br>REQUIREMENTS:   | REVIEWER CHECKS: August 2000  |
| (RSG 391-3-526(1)).   | monitoring.   |
|   | Verify that community water systems using surface water sample at points in the distribution system representative of each source or at entry points to the distribution system after any application of treatment (the minimum number of samples is 1 yr of quarterly samples per water source).   |
|   | Verify that community water systems using groundwater sources sample at points of entry to the distribution system representative of each well after any application of treatment (the minimum number of samples is one sample per entry point to the distribution system).   |
|   | Verify that analysis for these requirements is only conducted by laboratories that have been approved and/or certified by the Division.   |
| WQ.40.9.GA. Sampling requirements must be met for unregulated organic and inorganic contaminants at community water systems | Verify that each community water system takes four consecutive quarterly samples at each sampling point for each of the following unregulated organic contaminants and reports the results to the Division: Aldrin, Butachlor, Carbaryl, Dicamba, Dieldrin, 3-Hydroxycarbofuran, Methomyl, Metolachlor, Metribuzin, and Propachlor.   |
| (RSG 391-3-526(2)).   | Verify that each community water system takes one sample at each sampling point for sulfate and reports the results to the Division.  |
|   | Verify that community water systems using groundwater sources take a minimum of one sample at every entry point to the distribution system representative of each well after any application of treatment (each sample must be taken at the same sampling point, unless conditions make another sampling point more representative of each source or treatment plant).                                |
|   | Verify that community water systems using surface water take a minimum of one sample at points in the distribution system representative of each source or at entry points to the distribution system after any application of treatment (each sample must be taken at the same sampling point, unless conditions make another sampling point more representative of each source or treatment plant). |
|   | Verify that if a system draws water from more than one source and the sources are combined before distribution, the system samples at an entry point to the distribution system during periods of normal operating conditions when water is representative of all the sources being used.   |
|   | Verify that analysis for these requirements is only conducted by laboratories that have been approved and/or certified by the Division.   |
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| Georgia Supplement   |  |
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| REGULATORY<br>REQUIREMENTS:  | REVIEWER CHECKS: August 2000   |
| Sodium   | August 2000  |
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| WQ.40.10.GA. Sampling requirements must be met for sodium at community water systems (RSG 391-3-526(3)). | Verify that the community water system collects and analyzes one sample per plant at the entry point of the distribution system for the determination of sodium concentration levels, according to the following requirements:  - systems served by surface water monitor annually for each source - systems served by groundwater systems monitor at least once every 3 yr for each source - the system reports the results of the analyses for sodium to the Division.  Verify that the supplier of water notifies appropriate local and state public health officials of the sodium levels by written notice by direct mail within 3 mo and a copy of each notice is sent to the Division within 10 days of its issuance.  Verify that analyses for sodium are performed in accordance with 40 CFR 141.41(d).  Verify that the initial analysis for sodium for new community water systems is completed within 1 yr from the effective date of the permit to operate. |
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| Radioactivity  |  |
| WQ.40.11.GA. Monitoring requirements must be met for   | Verify that community water systems analyze samples for gross alpha activity, radium-226, and radium-228 every 4 yr.   |
| gross alpha particle radioactivity at community water systems (RSG 391-3-527).                           | (NOTE: Compliance is based on the analysis of an annual composite of four consecutive quarterly samples, or the average of the analyses on four quarterly samples obtained at quarterly intervals.)  |
|  | Verify that if gross alpha activity exceeds 5 pCi/L, the same or equivalent sample is analyzed for radium-226.   |
|  | Verify that if the average annual MCL for gross alpha particle activity or total radium is exceeded, the community water system notifies the Division and notifies the public in accordance with 40 CFR Parts 141.32, 142.16(a), and 143.5.  |
|  | (NOTE: If the average annual MCL for gross alpha particle activity or total radium is exceeded, the community water system must monitor at quarterly intervals until the annual average concentration no longer exceeds the MCL.)  |
| WQ.40.12.GA. Monitoring  | Verify that community water systems utilizing surface water sources and serving  |

| Georgia Supplement  |  |
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| REGULATORY  | REVIEWER CHECKS:   |
| <b>REQUIREMENTS:</b>  | August 2000  |
| requirements must be met for manmade radioactivity at community water systems (RSG 391-3-527(2) and (4)). | more than 10,000 persons collect and analyze samples for manmade radioactive constituents (see WQ.35.GA.) by analysis of a composite of four consecutive quarterly samples, or analyses of four quarterly samples, conducted at least every 4 yr.  |
|   | Verify that if gross beta activity exceeds 50 pCi/L, an analysis is performed to determine the major manmade radioactive constituents present and the appropriate organ and total body doses to determine compliance with RSG 391-3-518(5) (see WQ.35.GA.).  |
|   | Verify that if the gross beta activity in a quarterly sample exceeds 15 pCi/L, the same or equivalent sample is analyzed for strontium-89 and cesium-134.  |
|   | Verify that community water systems utilizing waters contaminated by effluents from nuclear facilities, the system provides quarterly monitoring data on gross beta levels and iodine-131 radioactivity and annual monitoring for tritium and strontium-90 levels, and meets the following requirements:   |
|   | <ul> <li>if the gross beta particle activity exceeds 15 pCi/L, the same or an equivalent sample is analyzed for strontium-89 and cesium-134</li> <li>if the gross beta particle activity exceeds 50 pCi/L, an analysis is performed to identify the major radioactivity constituents present and the appropriate organ and total body doses are calculated to determine compliance</li> <li>for iodine-131, a composite of five consecutive daily samples is analyzed once each quarter</li> <li>annual monitoring for strontium-90 and tritium is conducted by means of the analysis of a composite sample consisting of four consecutive quarterly samples or the analyses of four quarterly samples.</li> </ul> |
|   | Verify that if the average annual MCL for manmade radioactivity is exceeded, the community water system gives notice to the Division and the public in accordance with 40 CFR Parts 141.32, 142.16(a), and 143.5, and monitors at monthly intervals until the concentration no longer exceeds the state drinking water standard.)  |
|   | (NOTE: The analytical methods for measurement of radioactivity must be in accordance with 40 CFR 141.)   |

| REGULATORY   | REVIEWER CHECKS:   |
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| REQUIREMENTS:  | August 2000  |
| NONCOMMUNITY<br>WATER SYSTEMS  |  |
| WQ.60.<br>STANDARDS  |  |
| WQ.60.1.GA. Noncommunity water systems must meet the MCL for turbidity (RSG 391-3-518(3)). | Verify that the noncommunity water system does not exceed the MCL for turbidity of 0.5 turbidity unit, in at least 99 percent of the monthly measurements, and the maximum allowable level of 5 turbidity units is not exceeded at any time.  (NOTE: Up to 1 turbidity unit may be allowed if the supplier of water can demonstrate to the Division that the higher turbidity does not do any of the following:  - interfere with disinfection  - prevent maintenance of an effective disinfectant agent throughout the distribution system  - interfere with microbiological determinations.) |

| Georgia Supplement  |  |
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| REGULATORY  | REVIEWER CHECKS:   |
| REQUIREMENTS:   | August 2000  |
| NONCOMMUNITY<br>WATER SYSTEMS   |  |
| WQ.65.<br>MONITORING/<br>SAMPLING   |  |
| WQ.65.1.GA. Sampling requirements must be met for turbidity at noncommunity water systems (RSG 391-3-5- | (NOTE: This requirement applies only to PWSs that use water obtained in whole or in part from surface water sources or groundwater sources under the direct influence of surface water.)   |
| .20(1), (3), (4), and (5); and 391-3-532(1)).   | Verify that the supplier of water for a noncommunity water system collects and analyzes representative samples of filtered water at least every 4 h, for the purpose of making turbidity measurements to determine compliance with the MCL for turbidity of 0.5 turbidity unit in at least 95 percent of the monthly measurements. |
|   | Verify that if the results of the turbidity analysis indicates that the treatment technique requirement has been exceeded, the sampling and measurement are confirmed by resampling as soon as practicable and preferably within 1 h.  |
|   | Verify that, if the repeat sample confirms that the treatment technique requirement has been exceeded, the supplier of water reports to the Division within 48 h or before the end of the next business day, whichever is earlier.   |
|   | Verify that if the monthly treatment technique requirement is exceeded, or if the maximum measured level exceeds 2 turbidity units, the supplier of water reports to the Division and notifies the public in accordance with 40 CFR Parts 141.32, 142.16(a), and 143.5.  |
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| REVIEWER CHECKS: August 2000  |
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| by that the nontransient, noncommunity water system does not exceed the sofor all inorganic contaminants listed in Appendix 13-2, except the MCL for ide and arsenic.  By that the nontransient, noncommunity water system does not exceed the sofor all organic contaminants (synthetic organic chemicals and volatile nic contaminants) listed in Appendices 13-5 and 13-6. |
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| WATER QUALITY MANAGEMENT Georgia Supplement  |   |
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| REGULATORY<br>REQUIREMENTS:  | REVIEWER CHECKS: August 2000  |
| NONTRANSIENT<br>NONCOMMUNITY<br>WATER SYSTEMS  |   |
| WQ.77.<br>MONITORING/<br>SAMPLING  |   |
| Inorganic Chemicals  |   |
| WQ.77.1.GA. Sampling requirements must be met for inorganic chemicals at nontransient, noncommunity water systems (RSG 391-3-521(1), (4), and (6)(a) and (g)). | <ul> <li>(NOTE: Inorganic chemicals include, antimony, barium, beryllium, cadmium, chromium, cyanide, fluoride, mercury, nickel, selenium, and thallium.)</li> <li>Verify that nontransient, noncommunity water systems using groundwater sources meet the following sampling requirements for inorganic chemicals: <ul> <li>sample at every entry point in the distribution system representative of each well after treatment or at entry points to the distribution system representative of each source after any application of treatment</li> <li>collect a minimum of one sample at each sampling point during each compliance period beginning in the compliance period starting 1 January 1993</li> <li>samples are taken at the same sampling point unless conditions make another sampling point more representative of each source or treatment plant.</li> </ul> </li> <li>Verify that nontransient, noncommunity water systems using surface water sources solely or a combination of surface and groundwater sources meet the following sampling requirements: <ul> <li>take a minimum of one sample at every entry point to the distribution system representative of each source after treatment or at entry points to the distribution system representative of each source after any application of treatment</li> <li>collect samples at each sampling point beginning in the compliance period starting 1 January 1993</li> <li>samples are taken at the same sampling point unless conditions make another sampling point more representative of each source or treatment plant.</li> </ul> </li> <li>Verify that if the system draws water from more than one source and the sources are combined before distribution, the system samples at an entry point to the distribution system during periods of normal operating conditions when water is representative of all the sources being used.</li> <li>(NOTE: For systems having fewer than 150 service connections, the initial</li> </ul> |

| Georgia Supplement   |  |
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| REGULATORY<br>REQUIREMENTS:  | REVIEWER CHECKS: August 2000   |
| 200  | compliance period for monitoring for antimony, beryllium, cyanide, nickel, and thallium is 1 January 1996 through 31 December 1998.)   |
|  | Verify that systems that exceed an MCL monitor quarterly beginning in the next quarter after the violation occurred.   |
| Asbestos   |  |
| WQ.77.2.GA. Sampling requirements must be met for asbestos at nontransient, noncommunity water systems   | Verify that nontransient, noncommunity water systems sample for asbestos at least once during the first 3-yr compliance period of each 9-yr compliance cycle beginning in the compliance period starting 1 January 1993.   |
| (RSG 391-3-521(5)(a), (e), (f), (g), and (h)).   | Verify that systems vulnerable to asbestos contamination due solely to corrosion of asbestos-cement pipe take one sample at a tap served by the asbestos-cement pipe under conditions where asbestos contamination is most likely to occur.  |
|  | Verify that systems vulnerable to asbestos contamination due solely to source water meet the monitoring requirements applicable to inorganic chemicals (see WQ.77.GA., RSG 391-3-521(4)).  |
|  | Verify that systems vulnerable to asbestos contamination due both to source water and corrosion of asbestos-cement pipe take one sample at a tap served by asbestos-cement pipe and under conditions where asbestos contamination is most likely to occur.   |
|  | Verify that a water system that exceeds the MCL for asbestos monitor quarterly beginning in the next quarter after the violation has occurred.   |
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| Organic Chemicals  |  |
| WQ.77.3.GA. Sampling requirements must be met for VOCs at nontransient, noncommunity water systems (RSG 391-3-522(1)(a) through (f), (j)(1) and (5), (k), (n), and (o)). | Verify that nontransient, noncommunity water systems collect samples to determine compliance with the MCLs for VOCs (see Appendix 13-6, contaminants 1 - 21).  |
|  | Verify that groundwater systems take a minimum of one sample at every entry point to the distribution system which is representative of each well after treatment (each sample should be taken at the same sampling point unless conditions make another sampling point more representative of each source, treatment plant, or within the distribution system). |
|  | Verify that systems using surface (or combined surface/groundwater sources)  |

# **COMPLIANCE CATEGORY:** WATER QUALITY MANAGEMENT **Georgia Supplement** REGULATORY **REVIEWER CHECKS: REQUIREMENTS:** August 2000 sample at each point in the distribution system that is representative of each source after treatment or at entry points to the distribution system after any application of treatment (each sample should be taken at the same sampling point unless conditions make another sampling point more representative of each source, treatment plant, or within the distribution system). Verify that if the system draws water from more than one source and the sources are combined before distribution, the supplier samples at an entry point to the distribution system during periods of normal conditions when water that is representative of all sources is being used. Verify that each nontransient, noncommunity water supplier takes four consecutive quarterly samples at each sampling point during each compliance period. (NOTE: If the initial monitoring for VOCs listed in Appendix 13-6 was conducted prior to 31 December 1992, and the system did not detect any contaminant, then each ground and surface water system may take one sample annually.) (NOTE: After a minimum of 3 yr of annual sampling, the Division may allow groundwater systems with no previous detection of any VOC to take one sample during each compliance period.) Verify that if a contaminant listed in RSG 391-3-5-.18(2)(b) 1 - 21 (see Appendix 13-6) is detected at a level exceeding 0.0005 mg/L in any sample, the following requirements are met: - the system monitors quarterly at each sampling point which resulted in a detection - the groundwater systems that have detected one or more of the following two-carbon organic compounds, trichloroethylene, tetrachloroethylene, 1,2dichloroethane, 1,1,1-trichloroethane, cis-1,2-dichloroethaylene, trans-1,2dichloroethylene, or 1,1-dichloroethylene, monitor quarterly for vinyl chloride at each sampling point at which one or more of the two-carbon organic compounds was detected. Verify that systems that exceed the MCLs for VOCs (see Appendix 13-6) monitor quarterly. Verify that compliance with the MCLs for VOCs is determined based on the analytical results obtained at each sampling point and are conducted in accordance

WQ.77.4.GA. Sampling requirements must be met for synthetic organic chemicals at nontransient, noncommunity water systems (RSG 391-3-5-

Verify that nontransient, noncommunity water systems collect samples to determine compliance with the MCLs for synthetic organic chemicals (see Appendix 13-5).

Verify that groundwater systems take a minimum of one sample at every entry

with 40 CFR 141.24(f)(16).

# COMPLIANCE CATEGORY:

| COMPLIANCE CATEGORY:<br>WATER QUALITY MANAGEMENT   |   |
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| Georgia Supplement                                 |   |
| REGULATORY<br>REQUIREMENTS:                        | REVIEWER CHECKS: August 2000  |
| .22(3)(a), (b), (c), (d), (g), (h), (k), and (l)). | point to the distribution system which is representative of each well after treatment (each sample should be taken at the same sampling point unless conditions make another sampling point more representative of each source, treatment plant, or within the distribution system).  |
|  | Verify that systems using surface (or combined surface/groundwater sources) sample at each point in the distribution system that is representative of each source after treatment or at entry points to the distribution system after any application of treatment (each sample should be taken at the same sampling point unless conditions make another sampling point more representative of each source, treatment plant, or within the distribution system).   |
|  | Verify that, if the system draws water from more than one source and the sources are combined before distribution, the supplier samples at an entry point to the distribution system during periods of normal conditions when water that is representative of all sources is being used.  |
|  | Verify that each nontransient, noncommunity water supplier takes four consecutive quarterly samples at each sampling point during each compliance period, beginning with the compliance period starting 1 January 1993.   |
|  | Verify that each nontransient, noncommunity water supplier samples at the following frequencies after the initial compliance period:  |
|  | <ul> <li>for systems serving more than 3300 persons which do not detect a contaminant in the initial compliance period, sampling frequency is a minimum of two quarterly samples in 1 yr during each repeat compliance period</li> <li>for systems serving less than or equal to 3300 persons which do not detect a contaminant in the initial compliance period, sampling frequency is a</li> </ul>  |
|  | minimum of one sample during each repeat compliance period.   |
|  | Verify that if a synthetic organic contaminant listed in Appendix 13-5 is detected in any sample, the following requirements are met:   |
|  | <ul> <li>each system monitors quarterly at each sampling point that resulted in a detection</li> <li>after the Division determines the system is reliably and consistently below the MCL, the system may monitor annually during the quarter that previously yielded the highest analytical result</li> <li>if monitoring results in detection of one or more of certain related contaminants (aldicarb, aldicarb sulfone, aldicarb sulfoxide, heptachlor, and heptachlor epoxide), then subsequent monitoring is analyzed for all related contaminants.</li> </ul> |
|  | Verify that systems that exceed the MCLs for synthetic organic chemicals (see Appendix 13-5) monitor quarterly.   |

Verify that compliance with the MCLs for synthetic organic chemicals is

| WATER QUALITY MANAGEMENT Georgia Supplement  |   |
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| REGULATORY<br>REQUIREMENTS:  | REVIEWER CHECKS: August 2000  |
|  | determined based on the analytical results obtained at each sampling point and are conducted in accordance with 40 CFR 141.24(h)(12-13).  |
| Unregulated Contaminants   |   |
| WQ.77.5.GA. Sampling requirements must be met for unregulated VOCs at non-   | Verify that all nontransient, noncommunity water systems monitor for the contaminants listed in Appendix 13-7 for unregulated VOCs, by the following dates:   |
| transient, noncommunity  | - over 10,000 persons served, 1 January 1993  |
| water systems (RSG 391-3-5-  | - 3300 to 10,000 persons served, 1 January 1994   |
| .26(1)).   | - less than 3300 persons served, 1 January 1996.  |
|  | Verify that monitoring is repeated no less than every 5 yr from the dates specified above.  |
|  | Verify that nontransient, noncommunity water systems using surface water sample at points in the distribution system representative of each source or at entry points to the distribution system after any application of treatment (the minimum number of samples is 1 yr of quarterly samples per water source).  |
|  | Verify that nontransient, noncommunity water systems using groundwater sources sample at points of entry to the distribution system representative of each well after any application of treatment (the minimum number of samples is one sample per entry point to the distribution system).  |
|  | Verify that analysis for these requirements is only conducted by laboratories that have been approved and/or certified by the Division.   |
| WQ.77.6.GA. Sampling requirements must be met for unregulated organic and inorganic contaminants at nontransient, noncommunity water systems (RSG 391-3-5- | Verify that each nontransient, noncommunity water system takes four consecutive quarterly samples at each sampling point for each of the following unregulated organic contaminants and reports the results to the Division: Aldrin, Butachlor, Carbaryl, Dicamba, Dieldrin, 3-Hydroxycarbofuran, Methomyl, Metolachlor, Metribuzin, and Propachlor.                                    |
| .26(2)).   | Verify that each nontransient, noncommunity water system takes one sample at each sampling point for sulfate and reports the results to the Division.   |
|  | Verify that nontransient, noncommunity water systems using groundwater sources take a minimum of one sample at every entry point to the distribution system representative of each well after any application of treatment (each sample must be taken at the same sampling point, unless conditions make another sampling point more representative of each source or treatment plant). |

# **COMPLIANCE CATEGORY:**

|                             | WATER QUALITY MANAGEMENT Georgia Supplement  |  |
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| REGULATORY<br>REQUIREMENTS: | REVIEWER CHECKS: August 2000   |  |
|                             | Verify that nontransient, noncommunity water systems using surface water take a minimum of one sample at points in the distribution system representative of each source or at entry points to the distribution system after any application of treatment (each sample must be taken at the same sampling point, unless conditions make another sampling point more representative of each source or treatment plant). |  |
|                             | Verify that if a system draws water from more than one source and the sources are combined before distribution, the system samples at an entry point to the distribution system during periods of normal operating conditions when water is representative of all the sources being used.  |  |
|                             | Verify that analysis for these requirements is only conducted by laboratories that have been approved and/or certified by the Division.  |  |

| Georgia Supplement  |  |
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| REGULATORY<br>REQUIREMENTS:   | REVIEWER CHECKS:<br>August 2000  |
| WQ.90.<br>DRINKING<br>WATER WELL  |  |
| WQ.90.1.GA. Wells to be used as a source of water supply for a PWS must meet specific requirements (RSG 391-3-507(1), (2), and (3)) [Revised September 1998]. | Verify that no well to be used as a source of water supply for a PWS is constructed without having first obtained Division approval.  (NOTE: Dug, bored, or jetted wells are prohibited for all new PWSs unless approved by the Division.)  Verify that each well is protected from contamination by surface waters and other sources of contamination.  |
|   | Verify that the location of wells is:  - generally at the highest point, and as far removed, and in a direction opposite to the ground water flow from any known or probable source of contamination as the general layout of the premises and surroundings will permit  - not less than 50 ft from a septic tank  - not less than 100 ft away from a septic tank absorption field  - not less than 10 ft away from a sewer  - not less than 1000 ft away from a solid waste disposal site and not in a direction where ground water flow from the site may be intercepted by the well  - as far removed as possible from all open abandoned wells  - not in the flood plain unless adequate protection is provided to prevent submergence of the well casing, pumps, and appurtenances. |
| WQ.90.2.GA. Springs to be used as a source of water supply for a PWS must meet specific requirements (RSG 391-3-508(1) through (6)).                          | Verify that a spring to be used as a source of water supply for a PWS is protected by an enclosed structure and meets the following requirements:  - the walls of the structure extend down to bedrock, or into the soil sufficiently to provide for a proper foundation to prevent surface water infiltration - all surface water runoff is diverted from the spring - the spring is protected from any entry of surface water - the overflow from the spring's enclosed structure is designed to prevent entrance of contaminants or animals - the pumping and water treatment facilities are enclosed in shelters that are of weather and vandal-proof construction - the spring area is secured as specified by the Division to prevent unauthorized entry.                          |

| Georgia Supplement   |   |
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| REGULATORY<br>REQUIREMENTS:  | REVIEWER CHECKS:<br>August 2000   |
| WQ.110.<br>INJECTION CONTROL<br>WELLS  | (NOTE: See Appendix 13-1 for the injection well classifications.)   |
| WQ.110.1.GA. Injection activities must not allow fluid to contaminate underground sources of drinking water (RSG 391-3-613 (5)). | Verify that no injection activity is constructed, operated, maintained, converted, plugged, abandoned, or conducted that allows fluid to contaminate underground sources of drinking water so that primary drinking water regulations are violated or the health of persons are adversely affected.                 |
| WQ.110.2.GA. Class I, II, or III injection wells must meet permit conditions (RSG 391-3-613(6)(a), (b), (8)(a), and              | Verify that an injection well permit has been obtained for the construction or operation of a Class I, II, or III injection well.  (NOTE: Class II well permits do not include exploration, drilling, and well  |
| (c)).  | construction for oil and/or gas production.)  |
|  | Verify that hazardous waste or radioactive wastes are not emplaced by well injection into the subsurface or waters of the State.  |
|  | Verify that the permit conditions are met.  |
|  | Verify that for injection wells with a corrective action permit condition, all required corrective actions are taken prior to beginning injection.  |
| WQ.110.3.GA. Reporting requirements must be met for injection wells not in compli-   | Verify that monitoring or information that indicates the following is reported for injection wells:   |
| ance with permit conditions (RSG 391-3-613 (8)(d)).  | <ul> <li>a contaminant that could endanger a fresh water zone or underground source of drinking water</li> <li>any noncompliance of a permit condition or malfunction of the injection system that may cause fluid migration into or between fresh water zones or underground sources of drinking water.</li> </ul> |
|  | Verify that noncompliance with a permit condition or a malfunction of the injection information is reported by telephone to the Director within 24 h and a written submission within 5 days of the oral notification.   |
|  | Verify that the written report contains the following:  |
|  | <ul> <li>a description of the noncompliance and its cause</li> <li>the period of the noncompliance</li> <li>the corrective action taken to reduce or eliminate the noncompliance</li> </ul>   |

| Georgia Supplement   |  |
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| REGULATORY<br>REQUIREMENTS:  | REVIEWER CHECKS: August 2000   |
| REQUIREMENTS:  | - the steps planned to prevent a recurrence of the noncompliance.  |
| WQ.110.4.GA. Injection wells must be operated within volume and pressure limitations (RSG 391-3-613(8)(f)).                          | Verify that the injection wells are operated so as not to exceed maximum injection volumes and pressures to assure the following:  - fractures are not initiated in the confining zone - injected fluids do not migrate into fresh water zones or underground sources of drinking water - formation fluids are not displaced into underground sources of drinking water.  (NOTE: The Director will establish such volumes and pressure limits as permit conditions.)                 |
| WQ.110.5.GA. Injections in wells must not be conducted prior to approval from the Director (RSG 391-3-613 (8)(g)).                   | Verify that a notice of completion of construction of an injection well is submitted to the Director.  Verify that written approval is obtained from the Director prior to beginning injections in wells.  |
| WQ.110.6.GA. Notification standards must be met for permitted Class I, II, or III injection wells (RSG 391-3-613(8)(h) through (j)). | Verify that the Director is notified in writing of any proposed abandonment of an injection well.  Verify that an application is submitted at least 90 days prior to the expiration date of an injection well permit or injection is ceased upon expiration of the permit.  Verify that the Director is notified in writing at least 30 days prior to the transfer of a permit.  |
| WQ.110.7.GA. Siting standards must be met for Class I or II wells (RSG 391-3-613 (10)).  | Verify that Class I wells are sited so that wells inject into a formation beneath the lowermost formation containing an underground source of drinking water within a 2 mi radius of the well bore or greater if determined by the Director.  Verify that Class II wells are sited so that they inject into a formation that is separated from an underground source of drinking water by a confining zone that is free of known open faults or fractures within the area of review. |
| WQ.110.8.GA. Specific plugging and abandoning  | Verify that the Director is notified in writing of an intent to abandon a Class I, II, or III permitted injection well at least 45 days prior to abandonment.  |

# COMPLIANCE CATEGORY: WATER QUALITY MANAGEMENT

| Georgia S | ıpplement |
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|  | Georgia Supplement  |
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| REGULATORY REQUIREMENTS:   | REVIEWER CHECKS: August 2000  |
| requirements must be met for Class I, II, or III wells (RSG 391-3-613 (14)).                 | or III permitted injection well at least 45 days prior to abandonment.  Verify that abandoned wells are plugged with cement so that fluids do not move either into or between underground sources of drinking water.  |
|  | Verify that the placement of cement in the well is accomplished by the balance method, dump bailer method, or two-plug method.  |
|  | Verify that the well to be cemented is in a state of static equilibrium with the mud weight equalized top to bottom, either by circulating the mud in the well at least once or by a Director approved comparable method prior to the placement of cement plugs.  |
|  | (NOTE: The Director may require groundwater monitoring after well abandonment.)   |
|  | Verify that certification is submitted to the Director that the injection well was plugged according to permitted procedures within 30 days of plugging.  |
| WQ.110.9.GA. Class IV injection wells must meet specific standards (RSG 391-3-613(3)(d)(3)). | Verify that hazardous or radioactive wastes are not emplaced by well injection into the subsurface or waters of the State through a Class IV injection well or any other well.  |
| WQ.110.10.GA. Permit conditions must be met for  | Verify that a valid permit has been obtained prior to construction of a Class V well.   |
| Class V injection wells (RSG 391-3-613(12)).   | Verify that Class V wells are sited so that injection fluid does not contaminate an underground source of drinking water.   |
|  | Verify that Class V wells are constructed as follows:   |
|  | <ul> <li>by a licensed water well contractor in the State of Georgia</li> <li>the casing extends at least 5 ft into the injection zone</li> <li>the annular space around the entire length of the case is grouted and sealed to prevent pollution by surface waters, other formation fluids, or pollutants into the formation above the injection zone</li> <li>any other construction requirements specified by the Director.</li> </ul> |
|  | Verify that the Director is notified in writing at least 30 days prior to the transfer of a permit.   |
|  | (NOTE: Permit conditions may include monitoring, testing, and reporting requirements.)  |

| Georgia Supplement   |  |  |
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| REGULATORY<br>REQUIREMENTS:  | REVIEWER CHECKS: August 2000   |  |
|  | Verify that wells that are plugged and abandoned are completely filled with cement grout.  |  |
| WQ.110.11.GA. Mechanical integrity requirements must be met for Class V wells (RSG 391-3-613(13)). | Verify that one of the following methods is used to evaluate the absence of detectable leaks:  - monitoring or annulus pressure - pressure test with liquid or gas.  Verify that the results of a temperature or noise log is used to determine the absence of detectable fluid movement into an underground source of drinking water.  Verify that reports of the results of mechanical integrity tests submitted to the Director, include a description of the test(s) and method(s) used. |  |

| Georgia Supplement  |   |  |
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| REGULATORY<br>REQUIREMENTS:   | REVIEWER CHECKS: August 2000  |  |
| WQ.115.<br>WATER QUALITY<br>STANDARDS   | 7 August 2000   |  |
| Surface Water Quality   |   |  |
| WQ.115.1.GA. The waters of the state must not be degraded (RSG 391-3-603(5)(a) through (e)) [Revised July 1999].  | Verify that all waters are free from materials associated with municipal or domestic sewage, industrial waste, or any other waste that settles to form putrescent, unsightly, or otherwise objectionable sludge deposits.  Verify that all waters are free from oil, scum, and floating debris associated with  |  |
|   | municipal or domestic sewage, industrial waste, or other discharges in unsightly amounts or amounts that interfere with legitimate water uses.  |  |
|   | Verify that all waters are free from material related to municipal, industrial, or other discharges that produce turbidity, color, odor, or other objectionable conditions that interfere with legitimate water uses.   |  |
|   | Verify that applicable State and Federal regulations for the discharge of radioactive substances are met at all times.  |  |
|   | Verify that all waters are free from turbidity which results in a substantial visual contrast in a water body due to a man-made activity.   |  |
|   | (NOTE: The upstream appearance of a body of water must be as observed at a point immediately upstream of a turbidity-causing man-made activity. That upstream appearance must be compared to a point which is located sufficiently downstream from the activity so as to provide an appropriate mixing zone. For land disturbing activities, proper design, installation, and maintenance of best management practices and compliance with issued permits shall constitute compliance.) |  |
| WQ.115.2.GA. Instream concentration requirements must be met for specific toxic pollutants (RSG 391-3-603(5)(e)(i) through (v)) [Revised September 1997]. | Verify that instream concentrations of the following chemical constituents which are considered to be other toxic pollutants of concern in the State of Georgia do not exceed the criteria indicated under 7-day, 10-yr minimum flow or higher stream flow conditions except within established mixing zones:  - Methoxyclor, 0.03 micrograms/L - 2,4-Dichlorphenoxyacetic acid, 70 micrograms/L - 2,4,5- Trichlorophenoxy propionic acid (TP Silvex), 50 micrograms/L.                 |  |

# **COMPLIANCE CATEGORY:** WATER QUALITY MANAGEMENT **Georgia Supplement REVIEWER CHECKS:** REGULATORY **REQUIREMENTS:** August 2000 Verify that all waters are free from toxic, corrosive, acidic, and caustic substances discharged from municipalities, industries, or other sources, such as nonpoint sources, in amounts, concentration, or combinations that are harmful to humans, animals, or aquatic life. Verify that instream concentrations of USEPA toxic priority pollutants do not exceed the criteria in Appendix 13-10 for acute criteria under 1-day, 10-yr minimum flow (1Q10) or higher stream flow conditions, or for chronic criteria under 7-day, 10-yr minimum flow or higher stream flow conditions, except within established mixing zones. Verify that instream concentrations of USEPA toxic priority pollutants do not exceed the criteria in Appendix 13-10 for acute criteria under 1-day, 10-yr minimum flow (1Q10) or higher stream flow conditions, or for chronic criteria under 7-day, 10-yr minimum flow or higher stream flow conditions, except within established mixing zones. Verify that instream concentrations of USEPA toxic priority pollutants do not exceed the criteria in Appendix 13-8 under 7-day, 10-yr minimum flow or higher stream flow conditions except within established mixing zones. Verify that instream concentrations of USEPA toxic priority pollutants do not exceed the criteria in Appendix 13-9 under annual average or higher stream conditions. Verify that instream concentrations of 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD) do not exceed 0.0000012 micrograms/L under long-term average stream flow conditions. (NOTE: Site specific criteria for asbestos will be determined on an as-needed basis through toxic pollutant monitoring.) WQ.115.3.GA. Approved Verify that, for waters approved as a source for public drinking water systems, at drinking water sources must least four fecal coliform samples are collected from a given sampling site over a meet specific requirements 30-day period at intervals not less than 24 h. (RSG 391-3-6-.03(6)(a)). Verify that from May through October fecal coliform samples do not exceed the following criteria based on a geometric mean analysis: - 200/100 mL - if nonhuman fecal coliform exceeds 200/100 mL occasionally: - 300/100 mL in lakes and reservoirs - 500/100 mL in free flowing fresh water streams.

the following criteria based on a geometric mean analysis:

Verify that from November through April fecal coliform samples do not exceed

# **COMPLIANCE CATEGORY:** WATER QUALITY MANAGEMENT Georgia Supplement REGULATORY **REVIEWER CHECKS: REQUIREMENTS:** August 2000 - 1000/100 mL - 4000/100 mL in any one sample. Verify that, for waters approved as a source for public drinking water systems and designated as trout streams, the daily average of dissolved oxygen is 6.0 mg/L and that the level never drops below 5.0 mg/L. Verify that, for waters approved as a source for public drinking water systems and supporting warm water species of fish, the daily average of dissolved oxygen is 5.0 mg/L and that the level never drops below 4.0 mg/L. Verify that, for waters approved as a source for public drinking water systems, the pH is within the range of 6.0 to 8.5. Verify that, for waters approved as a source for public drinking water systems, no material or substance exists in such concentrations, that after treatment by the public water treatment system, no substance's maximum contaminant level is exceeded. Verify that, for waters approved as a source for public drinking water systems, all of the following temperature requirements are met: - the water does not exceed 90 °F - receiving waters are not increased more than 5 °F above intake temperature, except in estuarine waters where the temperature cannot be increased by more than 1.5 °F - there is not elevation of the natural temperatures of streams designated as primary trout or smallmouth bass waters - the elevation of the natural temperatures of secondary trout waters does not exceed 2 °F. WQ.115.4.GA. Recreational Verify that, for waters classified as recreational use, at least four fecal coliform samples are collected from a given sampling site over a 30-day period at intervals use waters must meet specific 391-3-6not less than 24 h. standards (RSG .03(6)(b)). Verify that fecal coliform samples do not exceed the following criteria based on a geometric mean analysis: - coastal waters, 100/100 mL - all other recreational waters, 200/100 mL - if natural fecal coliform levels exceed 200/100 mL occasionally: - 300/100 mL in lakes and reservoirs - 500/100 mL in free flowing fresh water streams. Verify that, for waters classified as recreational use and designated as trout streams, the daily average of dissolved oxygen is 6.0 mg/L and that the level never

# **COMPLIANCE CATEGORY:** WATER QUALITY MANAGEMENT **Georgia Supplement** REGULATORY **REVIEWER CHECKS: REQUIREMENTS:** August 2000 drops below 5.0 mg/L. Verify that, for waters classified as recreational use which support warm water species of fish, the daily average of dissolved oxygen is 5.0 mg/L and that the level never drops below 4.0 mg/ L. Verify that, for waters classified as recreational use, the pH is within the range of 6.0 to 8.5. Verify that the recreational use waters meet the following temperature criteria: - the water does not exceed 90 °F - receiving waters are not increased more than 5 °F above intake temperature, except in estuarine waters where the temperature cannot be increased by more than 1.5 °F - there is not elevation of the natural temperatures of streams designated as primary trout or smallmouth bass waters - the elevation of the natural temperatures of secondary trout waters does not exceed 2 °F. WQ.115.5.GA. Water that Verify that, for waters classified for fishing including the propagation of fish, has been classified for fishing shellfish, game, or other aquatic life and designated as trout streams, the daily must meet specific standards average of dissolved oxygen is 6.0 mg/L and the level is never less than 5.0 mg/L. (RSG 391-3-6-.03(6)(c)). Verify that, for waters classified for fishing which support water species of fish, the daily average of dissolved oxygen is 5.0 mg/L and the level is never less than 4.0 mg/ L. Verify that for waters classified for fishing, the pH is within the range of 6.0 to Verify that for waters classified for fishing, at least four fecal coliform samples are collected from a given sampling site over a 30-day period at intervals of not less than 24 h. Verify that from May through October fecal coliform samples do not exceed the following criteria based on a geometric mean analysis: - 200/100 mL - if nonhuman fecal coliform exceeds 200/100 mL occasionally: - 300/100 mL in lakes and reservoirs - 500/100 mL in free flowing fresh water streams. Verify that from November through April fecal coliform samples do not exceed

the following criteria based on a geometric mean analysis:

# **COMPLIANCE CATEGORY:** WATER QUALITY MANAGEMENT **Georgia Supplement** REGULATORY **REVIEWER CHECKS: REQUIREMENTS:** August 2000 - 1000/100 mL - 4000/100 mL in any one sample. Verify that, for waters classified for fishing, all of the following temperature requirements are met: - the water does not exceed 90 °F - receiving waters are not increased more than 5 °F above intake temperature, except in estuarine waters where the temperature cannot be increased by more than 1.5 °F - there is not elevation of the natural temperatures of streams designated as primary trout or smallmouth bass waters - the elevation of the natural temperatures of secondary trout waters does not exceed 2 °F. (NOTE: Waters classified for coastal fishing will be assigned site specific dissolved oxygen criteria and the fishing use classification will apply for all other criteria.) WO.115.6.GA. Waters des-Verify that, for agricultural waters, dissolved oxygen levels are no less than 3.0 mg/L at any time. ignated as agricultural must meet specific standards (RSG Verify that, for agricultural waters, the pH is within the range 6.0 to 8.5. 391-3-6-.03 (6)(d)). Verify that, for agricultural waters, fecal coliform does not exceed a geometric mean of 5000/100 mL based on at least four samples collected from a given sampling site taken over a 30-day period at intervals not less than 24 h. Verify that both of the following temperature requirements are met: - water does not exceed 90 °F - receiving waters are not increased more than 5 °F above intake temperature except in estuarine waters, the increase is not more than 1.5 °F. WQ.115.7.GA. Waters des-Verify that, for waters designated as industrial, dissolved oxygen levels are no less than 3.0 mg/L at any time. ignated as industrial must meet specific standards (RSG 391-3-6-.03 (6)(e)). Verify that, for waters designated as industrial, the pH is within the range of 6.0 to 8.5. Verify that, for waters designated as industrial, the following temperature criteria are met: - the water does not exceed 90 °F - receiving waters are not increased more than 5 °F above intake temperature,

except in estuarine waters where the temperature cannot be increased by

| Georgia Supplement   |   |  |
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| REGULATORY<br>REQUIREMENTS:  | REVIEWER CHECKS: August 2000  |  |
|  | more than 1.5 °F.   |  |
| WQ.115.8.GA. Waters designated as navigational must meet specific standards (RSG                                       | Verify that, for waters designated as navigational, dissolved oxygen levels are no less than 3.0 mg/L at any time.  |  |
| 391-3-603 (6)(f)).   | Verify that, for waters designated as navigational, the pH is within the range of 6.0 to 8.5.   |  |
|  | Verify that, for waters designated as navigational, fecal coliform does not exceed a geometric mean of 5000/100 mL based on at least four samples collected from a given sampling site taken over a 30-day period at intervals not less than 24 h.    |  |
|  | Verify that, for waters designated as navigational, the following temperature criteria are met:   |  |
|  | <ul> <li>the water does not exceed 90 °F</li> <li>receiving waters are not increased more than 5 °F above intake temperature, except in estuarine waters where the temperature cannot be increased by more than 1.5 °F.</li> </ul>                    |  |
| WQ.115.9.GA. Waters designated as an urban stream must meet specific standards (RSG 391-3-603 (6)(i)).                 | Verify that, for waters designated as an urban stream, dissolved oxygen levels are no less than 3.0 mg/L at any time.   |  |
|  | Verify that, for waters designated as an urban stream, the pH is within the range of 6.0 to 8.5.  |  |
|  | Verify that, for waters designated as an urban stream, fecal coliform does not exceed a geometric mean of 2000/100 mL based on at least four samples collected from a given sampling site taken over a 30-day period at intervals not less than 24 h. |  |
|  | Verify that no single fecal coliform sample exceeds 5000/100 mL.  |  |
| WQ.115.10.GA. Waters designated as a "wild river" or "scenic river" must not be altered (RSG 391-3-603(6)(g) and (h)). | Verify that for waters designated as a "wild river" or a "scenic river," the natural water quality is not altered from any source.  |  |
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| Georgia Supplement  |  |  |
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| REGULATORY<br>REQUIREMENTS:   | REVIEWER CHECKS: August 2000   |  |
| WQ.120.<br>WATER USE PERMITS  |  |  |
| Surface Water Use Permits   |  |  |
| <b>WQ.120.1.GA.</b> A surface water use permit is required for the withdrawal, diversion, or impoundment of surface waters of the state (RSG 391-3-607(3) and (15)(e)). | <ul> <li>(NOTE: The following are exempt from the permit requirements:         <ul> <li>any water diversion accomplished as part of construction for transportation purposes that does not reduce the flow of surface waters in the diverted watercourse by more than 150,000 gal/day on a monthly average</li> <li>any reduction of flow of surface waters during a period of construction of an impoundment, including the initial filling of the impoundment</li> <li>any farm pond or farm impoundment constructed and managed for the sole purpose of fish, wildlife, recreation, or other farm uses.)</li> </ul> </li> </ul> |  |
|   | Verify that surface water withdrawal, diversion, or impoundment activities that meet the following criteria have a valid surface water use permit:   |  |
|   | <ul> <li>on a monthly average, withdraws more than 100,000 gal of surface water per day</li> <li>diverts surface water so as to reduce the flow by more than 100,000 gal/day at the point where the watercourse prior to diversion leaves the property on which the diversion occurs</li> <li>construct an impoundment that reduces the flow of surface water by more than 100,000 gal/day downstream of the impoundment.</li> </ul>   |  |
|   | Verify that the conditions of the water use permit are met.  |  |
|   | Verify that an annual water use report is submitted to the Division for the previous calendar year that includes the monthly average and maximum day use for each month for all permitted surface water withdrawal, diversion, or impoundment activities.  |  |
| <b>Groundwater Use Permits</b>  |  |  |
| WQ.120.2.GA. A valid groundwater use permit must be obtained for the withdrawal, obtaining, or utiliza-   | Verify a valid groundwater use permit has been obtained for the withdrawal, obtaining, or utilization of groundwater in excess of 100,000 gal/day, for any purpose except farm use or unless exempted by law or regulations.   |  |
| tion of groundwater in excess of 100,000 gal/day (RSG 391-  | (NOTE: Combinations of farm and nonfarm use or nonconsumptive groundwater use is considered nonfarm use unless otherwise determined by the Director.)  |  |

|  | Georgia Supplement  |
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| REGULATORY<br>REQUIREMENTS:  | REVIEWER CHECKS: August 2000  |
| 3-203 and 391-3-2.04(3)).  | use is considered nonfarm use unless otherwise determined by the Director.)   |
|  | Verify that a permit is obtained prior to withdrawing or using groundwater.   |
| WQ.120.3.GA. Groundwater uses must meet permit conditions (RSG 391-3-2-  | Verify that water withdrawn under a permit is used only for the purposes set forth in the permit.   |
| .06(4) through (6)).   | Verify that the permit conditions are met.  |
|  | Verify that the Division is notified by registered letter of any changes in the beneficial use or if greater amounts of water are to be withdrawn.  |
| <b>WQ.120.4.GA.</b> Reporting requirements must be met for permitted groundwater uses (RSG 391-3-208(1)).              | Verify that for permitted groundwater uses, except for farm use, a groundwater use report is submitted to the Division beginning 60 days after the permit's effective date and every month thereafter unless otherwise designated by the Division.  |
|  | Verify that the groundwater use report is submitted no later than 15 days after the reporting date.   |
|  | Verify that the groundwater use report includes the following:  |
|  | <ul> <li>permit holder and number</li> <li>beneficial use of groundwater used</li> <li>source of groundwater</li> <li>quantity of water used or withdrawn monthly from each aquifer(s)</li> <li>average hours pumped per day</li> <li>for a nonconsumptive use, the amount of water returned to the aquifer or groundwater system from which the water is withdrawn</li> <li>static and pumping levels of each aquifer utilized and the date the water levels were measured.</li> </ul> |
|  | Verify that water levels are measured during the last month of the reporting period.  |
| WQ.120.5.GA. Specific conductance analysis requirements must be met for permitted groundwater uses (RSG 319-3-208(2)). | Verify that specific conductance analysis of the groundwater from the well(s) are performed by a Division approved laboratory starting 60 days after the permit's effective date and annually thereafter unless otherwise specified by the Division.  Verify that a copy of the specific conductance analysis report is submitted to the Division not later than 15 days after the reporting date.  |
| WQ.120.6.GA. The with-   | Verify that a valid groundwater use permit has been obtained for the withdrawal of  |

|   | Georgia Supplement  |  |  |
|---|---|--|--|
| REGULATORY<br>REQUIREMENTS:   | REVIEWER CHECKS: August 2000  |  |  |
| drawal of groundwater in excess of 100,000 gal/day for dewatering the subsurface rock must have a valid permit (RSG 391-3-209). | water in excess of 100,000 gal/day for dewatering the subsurface rock for a period of greater than 60 days for any of the following purposes, unless otherwise specified by the Division:  - construction of trenches for sewer or water pipes - excavation for foundations - utility construction.  Verify that wells that dewater the subsurface rock to a depth greater than 30 ft are approved by the Division. |  |  |
|   | (NOTE: The withdrawal of water in excess of 100,000 gal/day for a period of not more than 60 days does not require a permit.)   |  |  |
| WQ.120.7.GA. Wells that are drilled as part of a testing program must meet specific requirements (RSG 391-3-2-                  | Verify that all information obtained from the testing program is submitted to the Division for wells that are drilled for the purpose of obtaining geologic and hydrologic information for the study of groundwater.  |  |  |
| .13 and 391-3-214(4)).  | Verify that prior approval from the Division is obtained for the testing program.   |  |  |
|   | Verify that test wells drilled and not developed for groundwater use and not used as observation wells are plugged and sealed in compliance with abandoned wells regulations.   |  |  |
|   | Verify that approved observation wells used for groundwater investigation or management not equipped with pumps are covered with a secure cap when measurements are not being made.   |  |  |
| WQ.120.8.GA. Abandoned wells must meet specific plugging and filling requirements (RSG 391-3-214).                              | Verify that any existing wells that meet any of the following criteria are plugged and sealed:  |  |  |
|   | <ul> <li>are abandoned wells that are no longer put to beneficial use</li> <li>are deemed by the Division to have potentially adverse effects on water users</li> <li>may result in physical or chemical impairment of the aquifer or groundwater system.</li> </ul>  |  |  |
|   | Verify that the Division is informed by a certified statement from the contractor within 30 days after sealing a well in accordance with Division approved procedures.  |  |  |
|   | (NOTE: Approved observation wells are not considered abandoned provided they are maintained for this purpose.)  |  |  |
|   |   |  |  |

#### **Classification of Injection Wells**

(Source: RSG 391-3-6-.13(3))

- (a) Class I Wells. This class consists of industrial and municipal disposal wells that inject fluids other than hazardous waste or radioactive waste below the lowermost formation containing, within 2 mi of the well bore (or greater distance if determined by the Director), an underground source of drinking water.
- (b) Class II Wells. This class consists of wells that inject fluids:
  - 1. which are brought to the surface in connection with conventional oil or natural gas production and which may be commingled with waste waters from gas plants which are an integral part of production operations, unless those waters are classified as a hazardous waste at the time of injection
  - 2. for enhanced recovery of oil or natural gas
  - 3. for storage of hydrocarbons which are liquid at standard temperature and pressure.
- (c) Class III Wells. This class consists of wells that inject fluids for the extraction of minerals including:
  - 1. individual or single family residential waste disposal systems such as domestic cesspools or septic systems
  - 2. nonresion mining of minerals, such as salt or potash.
- (d) Class IV Wells.
  - This class consists of injection wells used by generators of hazardous waste or of radioactive waste, by
    owners or operators of hazardous waste management facilities, or by owners or operators of radioactive
    waste disposal sites to dispose of hazardous waste or radioactive waste into the subsurface or ground
    water.
  - 2. Any septic tank well or cesspool used by generators of hazardous or radioactive waste, or by owners or operators of hazardous or radioactive waste management facilities, to dispose of fluids containing hazardous or radioactive wastes into the subsurface or ground water.
  - 3. The subsurface emplacement of hazardous waste or radioactive waste by well injection into the subsurface or waters of the State is hereby prohibited. No permit authorizing or establishing an effluent limitation inconsistent with the foregoing shall be issued.
- (e) Class V wells consist of all injection wells not included in Classes I, II, III, or IV. Class V wells include, but are not limited to:
  - 1. air conditioning return flow wells used to return to the supply aquifer or any aquifer the water used for heating or cooling in a heat pump
  - 2. cesspools including multiple dwelling, community or regional cesspools, or other devices that receive wastes which have an open bottom and sometimes have perforated sides
  - 3. cooling water return flow wells used to inject water previously used for cooling
  - 4. drainage wells used to drain surface fluid, primarily storm runoff, into a subsurface formation
  - 5. recharge wells used to replenish the water in an aquifer
  - 6. salt water intrusion barrier wells used to inject water into a fresh water aquifer to prevent the intrusion of salt water into the fresh water
  - 7. sand backfill and other backfill wells used to inject a mixture of water and sand, mill tailings, or other solids into mined out-portions of subsurface mines whether what is injected is a radioactive waste or not
  - 8. septic system wells used to inject the waste or effluent from a multiple dwelling business establishment, community or regional business establishment septic tank. The following are not subject to the provisions of this rule:
    - (1) individual or single family residential waste disposal systems, such as domestic cesspools or septic systems
    - (2) nonresidential cesspools, septic systems, or similar waste disposal systems if such systems are used solely for the disposal of sanitary waste and have the capacity to serve fewer than 20 persons a day.
  - 9. Subsidence control wells (not used for the purpose of oil or natural gas production) used to inject fluids into a nonoil gas producing zone to reduce or eliminate subsidence associated with the overdraft of fresh water
  - 10. Injection wells associated with the recovery of geothermal energy for heating, aquaculture and production of electric power
  - 11. Injection wells used for in situ recovery of lignite, coal, tar sands, and oil shale

| 12. Dry wells used wells. | for the injection | of wastes into | a subsurface fo | rmation, other than | Class I or Class IV |
|---------------------------|-------------------|----------------|-----------------|---------------------|---------------------|
|                           |                   |                |                 |                     |                     |
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|                           |                   |                |                 |                     |                     |
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|                           |                   |                |                 |                     |                     |
|                           |                   |                |                 |                     |                     |
|                           |                   |                |                 |                     |                     |

## **Maximum Contaminant Levels for Inorganic Chemicals**

(Source: RSG 391-3-5-.18(1)(a))

| MCL<br>(mg/L)       | Applicable<br>Systems  |
|---------------------|--|
| 0.006               | CWS, NTNCWS  |
| 0.05                | CWS  |
| 7 Million fibers/L  | CWS, NTNCWS  |
| longer than 10 m    |  |
| 2.0                 | CWS, NTNCWS  |
| 0.004               | CWS, NTNCWS  |
| 0.005               | CWS, NTNCWS  |
| 0.1                 | CWS, NTNCWS  |
| 0.2                 | CWS, NTNCWS  |
| 4.0                 | CWS  |
| See RSG 391-3-525   | CWS, NTNCWS  |
| Treatment Technique |  |
| 0.002               | CWS, NTNCWS  |
| 0.1                 | CWS, NTNCWS  |
| 10.0 (as N)         | CWS, NTNCWS, TNCWS   |
| 1.0 (as N)          | CWS, NTNCWS, TNCWS   |
| 10.0 (as N)         | CWS, NTNCWS, TNCWS   |
| 0.05                | CWS, NTNCWS  |
| 0.002               | CWS, NTNCWS  |
|                     | (mg/L)  0.006 0.05 7 Million fibers/L longer than 10 m 2.0 0.004 0.005 0.1 0.2 4.0 See RSG 391-3-525 Treatment Technique 0.002 0.1 10.0 (as N) 1.0 (as N) 10.0 (as N) 0.05 |

<sup>&</sup>lt;sup>1</sup>Effective date for fluoride was 2 October 1987. <sup>2</sup>Fluoride also has a secondary MCL (Rule 391-3-5-.19(2)). <sup>3</sup>Phase V chemicals, effective date 17 January 1994.

Appendix 13-3

# $\begin{tabular}{ll} \textbf{Total Coliform Monitoring Frequency for Community Water Systems} \\ (Source: RSG 391-3-5-.23(1)(b)) \end{tabular}$

| Population             | Minimum number of |
|------------------------|-------------------|
| Served                 | samples per month |
| 25 to 1,000            | 1                 |
| 1,001 to 2,500         | 2                 |
| 2,501 to 3,300         | 3                 |
| 3,301 to 4,100         | 4                 |
| 4,101 to 4,900         | 5                 |
| 4,901 to 5,800         | 6                 |
| 5,801 to 6,700         | 7                 |
| 6,701 to 7,600         | 8                 |
| 7,601 to 8,500         | 9                 |
| 8,501 to 12,900        | 10                |
| 12,901 to 17,200       | 15                |
| 17,201 to 21,500       | 20                |
| 21,501 to 25,000       | 25                |
| 25,001 to 33,000       | 30                |
| 33,001 to 41,000       | 40                |
| 41,001 to 50,000       | 50                |
| 50,001 to 59,000       | 60                |
| 59,001 to 70,000       | 70                |
| 70,001 to 83,000       | 80                |
| 83,001 to 96,000       | 90                |
| 96,001 to 130,000      | 100               |
| 130,001 to 220,000     | 120               |
| 220,001 to 320,000     | 150               |
| 320,001 to 450,000     | 180               |
| 450,001 to 600,000     | 210               |
| 600,001 to 780,000     | 240               |
| 780,001 to 970,000     | 270               |
| 970,001 to 1,230,000   | 300               |
| 1,230,001 to 1,520,000 | 330               |
| 1,520,001 to 1,850,000 | 360               |
| 1,850,001 to 2,270,000 | 390               |
| 2,270,001 to 3,020,000 | 420               |
| 3,020,001 to 3,960,000 | 450               |
| 3,960,001 or more      | 480               |
|                        |                   |

# **Secondary Maximum Contaminant Levels** (Source: RSG 391-3-5-.19(2))

| <b>Secondary Contaminant</b> | Level                   |
|------------------------------|-------------------------|
| Aluminum                     | 0.05 to 0.2 mg/L        |
| Chloride                     | 250 mg/L                |
| Color                        | 15 color units          |
| Copper                       | 1.0 mg/L                |
| Corrosivity                  | Noncorrosive            |
| Fluoride                     | 2.0 mg/L                |
| Foaming Agents               | 0.5 mg/L                |
| Iron                         | 0.3 mg/L                |
| Manganese (Mn)               | 0.05 mg/L               |
| Odor                         | 3 threshold odor number |
| Silver                       | 0.1 mg/L                |
| Sulfate                      | 250 mg/L                |
| Total dissolved solids (TDS) | 500 mg/L                |
| Zinc                         | 5.0 mg/L                |

# **Maximum Contaminant Levels for Synthetic Organic Contaminants**

(Source: RSG 391-3-5-.18(2)(a))

| Contaminant   | MCL<br>(mg/L)        |
|---|----------------------|
| Aldichlor<br>Aldicarb                                     | 0.002<br>Deferred    |
| Aldicarb sulfone Aldicarb sulfoxide                       | Deferred<br>Deferred |
| Atrazine  | 0.003                |
| Benzo(a)Pyrene <sup>1</sup>                               | 0.0002               |
| Carbofuran  | 0.04                 |
| Chlordane   | 0.002                |
| Dalapon <sup>1</sup>                                      | 0.2                  |
| Di(2-ethylhexyl) adipate <sup>1</sup>                     | 0.4                  |
| Di(2-ethylhexyl) phthalate <sup>1</sup>                   | 0.006                |
| Dibromochloropropane (DBCP)                               | 0.0002               |
| Dinoseb <sup>1</sup>                                      | 0.007<br>0.02        |
| Diquat <sup>1</sup><br>2,4-D                              | 0.02                 |
| Endothall <sup>1</sup>                                    | 0.07                 |
| Endomain Endrin <sup>1</sup>                              | 0.002                |
| Ethylene dibromide (EDB)                                  | 0.00005              |
| Glyphosate <sup>1</sup>                                   | 0.7                  |
| Heptachlor  | 0.0004               |
| Heptachlor Epoxide  | 0.0002               |
| Hexachlorobenzene <sup>1</sup>                            | 0.001                |
| Hexachlorocyclopentadiene <sup>1</sup>                    | 0.05                 |
| Lindane   | 0.0002               |
| Methoxychlor  | 0.04                 |
| Oxamyl (Vydate) <sup>1</sup>                              | 0.2                  |
| Pentachlorophenol   | 0.001                |
| Picloram <sup>1</sup> Polyablerinated hiphanyls (PCPs)    | 0.5<br>0.0005        |
| Polychlorinated biphenyls (PCBs)<br>Simazine <sup>1</sup> | 0.0003               |
| Toxaphene   | 0.004                |
| 2,4,5-TP (Silvex)   | 0.05                 |
| 2,3,7,8-TCDD (Dioxin) <sup>1</sup>                        | 3 x 10[-8]           |
|   |                      |

<sup>&</sup>lt;sup>1</sup> Phase V chemicals, effective date 17 January 1994.

# Maximum Contaminant Levels for Volatile Organic Contaminants (VOCs) (Source: RSG 391-3-5-.18(2)(b))

|    | Contaminant                         | MCL<br>(mg/L) |
|----|-------------------------------------|---------------|
| 1  | Vinyl chloride                      | 0.002         |
| 2  | Benzene                             | 0.005         |
| 3  | Carbon tetrachloride                | 0.005         |
| 4  | 1,2-Dichloroethane                  | 0.005         |
| 5  | Trichloroethylene                   | 0.005         |
| 6  | para-Dichlorobenzene                | 0.075         |
| 7  | 1,1-Dichloroethylene                | 0.007         |
| 8  | 1,1,1-Trichloroethane               | 0.2           |
| 9  | cis-1,2-Dichloroethylene            | 0.07          |
| 10 | 1,2-Dichloropropane                 | 0.005         |
| 11 | Ethylbenzene                        | 0.7           |
| 12 | Monochlorobenzene                   | 0.1           |
| 13 | o-Dichlorobenzene                   | 0.6           |
| 14 | Styrene                             | 0.1           |
| 15 | Tetrachloroethylene                 | 0.005         |
| 16 | Toluene                             | 1.0           |
| 17 | trans-1,2-Dichloroethylene          | 0.1           |
| 18 | Xylenes (total)                     | 10.0          |
| 19 | Dichloromethane <sup>1</sup>        | 0.005         |
| 20 | 1,2,4-Trichlorobenzene <sup>1</sup> | 1.07          |
| 21 | 1,1,2-Trichloroethane <sup>1</sup>  | 0.005         |

<sup>&</sup>lt;sup>1</sup> Phase V Chemicals, effective date 17 January 1994.

#### **Unregulated Volatile Organic Contaminants**

(Source: RSG 391-3-5-.26(1)(e) and (f))

### **Group III Unregulated Volatile Organic Contaminants**

Chloroform

Bromodichloromethane

Chlorodibromomethane

Bromoform

Dibromomethane

m-Dichlorobenzene

1,1-Dichloropropene

1,1-Dichloroethane

1.1.2.2-Tetrachloroethane

1,3-Dichloropropane

Chloromethane

Bromomethane

1,2,3-Trichloropropane

1,1,1,2-Tetrachloroethane

Chloroethane

2,2-Dichloropropane

o-Chlorotoluene

p-Chlorotoluene

Bromobenzene

1,3-Dichloropropene

#### **Group IV Unregulated Volatile Organic Contaminants**

1,2,4-Trimethylbenzene

1,2,3-Trichlorobenzene

n-Propylbenzene

n-Butylbenzene

Naphthalene

Hexachlorobutadiene

1,3,5-Trimethylbenzene

p-Isopropyltoluene

Isopropylbenzene

Tert-butylbenzene

Sec-butylbenzene

Fluorotrichloromethane

Dichlorofluoromethane

Bromochloromethane

## Instream Concentrations of USEPA Toxic Priority Pollutants Under 7-Day, 10-Year Minimum Flow or Higher Stream Flow Conditions

(Source: RSG 391-3-6-.03(5)(d)(iii))[Revised September 1997, Revised July 1999]

| Chlordane Freshwater Coastal and Marine Estuarine Waters  Cyanide Freshwater Coastal and Marine Estuarine Waters  Cyanide Freshwater Coastal and Marine Estuarine Waters  Dieldrin  4,4'-DDT  a-Endosulfan Freshwater Coastal and Marine Estuarine Waters  D-Endosulfan Freshwater Coastal and Marine Estuarine Waters  D-Endosulfan Freshwater Coastal and Marine Estuarine Waters  D-Endosulfan Freshwater Coastal and Marine Estuarine Waters  D-O056 µg/l* Coastal and Marine Estuarine Waters  D-0066 µg/l*  Endrin  D-002 µg/l*  Heptachlor Freshwater Coastal and Marine Estuarine Waters  D-0038 µg/l* D-0036 µg/l*  Heptachlor Epoxide Freshwater Coastal and Marine Estuarine Waters  D-0038 µg/l* D-0036 µg/l*  Lindane [Hexachlorocyclohexane (g-BHC-Gamma)]  Pentachlorophenol Freshwater  2.1 µg/l* | Chemical Constituent                | Instream Concentration (micrograms/L) |
|---|-------------------------------------|---------------------------------------|
| Coastal and Marine Estuarine Waters  Cyanide Freshwater Coastal and Marine Estuarine Waters  Dieldrin  0.0019 µg/l*  4,4'-DDT  a-Endosulfan Freshwater Coastal and Marine Estuarine Waters  0.056 µg/l*  Coastal and Marine Estuarine Waters  b-Endosulfan Freshwater Coastal and Marine Estuarine Waters  0.056 µg/l*  b-Endosulfan Freshwater Coastal and Marine Estuarine Waters  0.0087 µg/l*  Endrin  0.002 µg/l*  Heptachlor Freshwater Coastal and Marine Estuarine Waters  0.0038 µg/l*  Heptachlor Epoxide Freshwater Coastal and Marine Estuarine Waters  0.0038 µg/l*  Lindane [Hexachlorocyclohexane (g-BHC-Gamma)]  Pentachlorophenol  |                                     |                                       |
| Cyanide Freshwater Coastal and Marine Estuarine Waters  Dieldrin  4,4'-DDT  a-Endosulfan Freshwater Coastal and Marine Estuarine Waters  0.056 µg/l*  b-Endosulfan Freshwater Coastal and Marine Estuarine Waters  0.056 µg/l*  b-Endosulfan Freshwater Coastal and Marine Estuarine Waters  0.056 µg/l*  Coastal and Marine Estuarine Waters  0.0087 µg/l*  Endrin  0.002 µg/l*  Heptachlor Freshwater Coastal and Marine Estuarine Waters  0.0038 µg/l*  Coastal and Marine Estuarine Waters  0.0038 µg/l*  Heptachlor Epoxide Freshwater Coastal and Marine Estuarine Waters  0.0038 µg/l*  Lindane [Hexachlorocyclohexane (g-BHC-Gamma)]  Pentachlorophenol   | Freshwater                          | 0.0043 µg/l*                          |
| Freshwater Coastal and Marine Estuarine Waters  Dieldrin  0.0019 μg/l*  4,4'-DDT  0.001 μg/l*  a-Endosulfan Freshwater Coastal and Marine Estuarine Waters  0.056 μg/l* Coastal and Marine Estuarine Waters  b-Endosulfan Freshwater Coastal and Marine Estuarine Waters  0.056 μg/l* Coastal and Marine Estuarine Waters  0.0087 μg/l*  Endrin  0.002 μg/l*  Heptachlor Freshwater Coastal and Marine Estuarine Waters  0.0038 μg/l* Coastal and Marine Estuarine Waters  0.0038 μg/l*  Heptachlor Epoxide Freshwater Coastal and Marine Estuarine Waters  0.0038 μg/l*  Lindane [Hexachlorocyclohexane (g-BHC-Gamma)]  Pentachlorophenol  | Coastal and Marine Estuarine Waters | $0.004 \mu g/1*$                      |
| Coastal and Marine Estuarine Waters  Dieldrin  0.0019 μg/l*  4,4'-DDT  0.001 μg/l*  a-Endosulfan Freshwater Coastal and Marine Estuarine Waters  0.056 μg/l*  b-Endosulfan Freshwater Coastal and Marine Estuarine Waters  0.056 μg/l*  0.0087 μg/l*  Endrin  0.002 μg/l*  Heptachlor Freshwater Coastal and Marine Estuarine Waters  0.0038 μg/l* Coastal and Marine Estuarine Waters  0.0038 μg/l* Heptachlor Epoxide Freshwater Coastal and Marine Estuarine Waters  0.0038 μg/l*  Lindane [Hexachlorocyclohexane (g-BHC-Gamma)]  Pentachlorophenol  |                                     |                                       |
| Dieldrin  0.0019 μg/l*  4,4'-DDT  0.001 μg/l*  a-Endosulfan Freshwater Coastal and Marine Estuarine Waters  0.056 μg/l*  b-Endosulfan Freshwater Coastal and Marine Estuarine Waters  0.056 μg/l*  Coastal and Marine Estuarine Waters  0.0087 μg/l*  Endrin  0.002 μg/l*  Heptachlor Freshwater Coastal and Marine Estuarine Waters  0.0038 μg/l*  Coastal and Marine Estuarine Waters  0.0038 μg/l*  Heptachlor Epoxide Freshwater Coastal and Marine Estuarine Waters  0.0038 μg/l*  Lindane [Hexachlorocyclohexane (g-BHC-Gamma)]  Pentachlorophenol  |                                     | . •                                   |
| 4,4'-DDT  a-Endosulfan Freshwater Coastal and Marine Estuarine Waters  b-Endosulfan Freshwater Coastal and Marine Estuarine Waters  b-Endosulfan Freshwater Coastal and Marine Estuarine Waters  0.056 μg/l* 0.0087 μg/l*  Endrin  0.002 μg/l*  Heptachlor Freshwater Coastal and Marine Estuarine Waters  0.0038 μg/l* Coastal and Marine Estuarine Waters  0.0036 μg/l*  Heptachlor Epoxide Freshwater Coastal and Marine Estuarine Waters  0.0038 μg/l* 0.0036 μg/l*  Lindane [Hexachlorocyclohexane (g-BHC-Gamma)]  Pentachlorophenol   | Coastal and Marine Estuarine Waters | 1.0 μg/l*                             |
| a-Endosulfan Freshwater Coastal and Marine Estuarine Waters  b-Endosulfan Freshwater Coastal and Marine Estuarine Waters  0.0056 μg/l*  Coastal and Marine Estuarine Waters  0.0087 μg/l*  Endrin  0.002 μg/l*  Heptachlor Freshwater Coastal and Marine Estuarine Waters  0.0038 μg/l* Coastal and Marine Estuarine Waters  0.0036 μg/l*  Heptachlor Epoxide Freshwater Coastal and Marine Estuarine Waters  0.0038 μg/l*  Lindane [Hexachlorocyclohexane (g-BHC- Gamma)]  Pentachlorophenol   | Dieldrin                            | $0.0019~\mu g/l^*$                    |
| Freshwater Coastal and Marine Estuarine Waters  b-Endosulfan Freshwater Coastal and Marine Estuarine Waters  0.056 µg/l* 0.0056 µg/l* Coastal and Marine Estuarine Waters  0.0087 µg/l*  Endrin  0.002 µg/l*  Heptachlor Freshwater Coastal and Marine Estuarine Waters  0.0038 µg/l* Coastal and Marine Estuarine Waters  0.0038 µg/l* Heptachlor Epoxide Freshwater Coastal and Marine Estuarine Waters  0.0038 µg/l* Coastal and Marine Estuarine Waters  0.0036 µg/l*  Lindane [Hexachlorocyclohexane (g-BHC- Gamma)]  Pentachlorophenol  | 4,4'-DDT                            | 0.001 µg/l*                           |
| b-Endosulfan Freshwater Coastal and Marine Estuarine Waters  D.056 μg/l* Coastal and Marine Estuarine Waters  Endrin  O.002 μg/l*  Heptachlor Freshwater Coastal and Marine Estuarine Waters  O.0038 μg/l*  Coastal and Marine Estuarine Waters  D.0038 μg/l*  Heptachlor Epoxide Freshwater Coastal and Marine Estuarine Waters  O.0038 μg/l*  Lindane [Hexachlorocyclohexane (g-BHC-Gamma)]  Pentachlorophenol  | a-Endosulfan                        |                                       |
| b-Endosulfan Freshwater Coastal and Marine Estuarine Waters  Endrin  Heptachlor Freshwater Coastal and Marine Estuarine Waters  0.002 µg/l*  Heptachlor Freshwater Coastal and Marine Estuarine Waters  0.0038 µg/l*  Coastal and Marine Estuarine Waters  0.0038 µg/l*  Heptachlor Epoxide Freshwater 0.0038 µg/l* Coastal and Marine Estuarine Waters  0.0036 µg/l*  Lindane [Hexachlorocyclohexane (g-BHC- 0.08 µg/l*  Gamma)]  Pentachlorophenol  | Freshwater                          | 0.056 μg/l*                           |
| Freshwater Coastal and Marine Estuarine Waters  Endrin  0.002 µg/l*  Heptachlor Freshwater Coastal and Marine Estuarine Waters  0.0038 µg/l*  Coastal and Marine Estuarine Waters  0.0036 µg/l*  Heptachlor Epoxide Freshwater 0.0038 µg/l*  Coastal and Marine Estuarine Waters  0.0038 µg/l*  Lindane [Hexachlorocyclohexane (g-BHC- 0.08 µg/l*  Gamma)]  Pentachlorophenol   | Coastal and Marine Estuarine Waters | $0.0087~\mu g/l^*$                    |
| Coastal and Marine Estuarine Waters  Endrin  0.002 µg/l*  Heptachlor Freshwater Coastal and Marine Estuarine Waters  0.0038 µg/l* Coastal and Marine Estuarine Waters  0.0036 µg/l*  Heptachlor Epoxide Freshwater Coastal and Marine Estuarine Waters  0.0038 µg/l* Coastal and Marine Estuarine Waters  0.0036 µg/l*  Lindane [Hexachlorocyclohexane (g-BHC- 0.08 µg/l* Gamma)]  Pentachlorophenol  | b-Endosulfan                        |                                       |
| Endrin 0.002 μg/l*  Heptachlor Freshwater 0.0038 μg/l* Coastal and Marine Estuarine Waters 0.0036 μg/l*  Heptachlor Epoxide Freshwater 0.0038 μg/l* Coastal and Marine Estuarine Waters 0.0036 μg/l*  Lindane [Hexachlorocyclohexane (g-BHC- 0.08 μg/l* Gamma)]  Pentachlorophenol  | Freshwater                          | $0.056 \mu g/l^*$                     |
| Heptachlor Freshwater Coastal and Marine Estuarine Waters  Heptachlor Epoxide Freshwater Coastal and Marine Estuarine Waters  0.0038 μg/l*  Coastal and Marine Estuarine Waters  0.0038 μg/l*  Coastal and Marine Estuarine Waters  0.0036 μg/l*  Lindane [Hexachlorocyclohexane (g-BHC- 0.08 μg/l*  Gamma)]  Pentachlorophenol   | Coastal and Marine Estuarine Waters | 0.0087 µg/l*                          |
| Freshwater Coastal and Marine Estuarine Waters  Heptachlor Epoxide Freshwater Coastal and Marine Estuarine Waters  0.0038 µg/l*  0.0038 µg/l*  0.0038 µg/l*  0.0036 µg/l*  Lindane [Hexachlorocyclohexane (g-BHC- 0.08 µg/l*  Gamma)]  Pentachlorophenol  | Endrin                              | $0.002~\mu g/l^*$                     |
| Coastal and Marine Estuarine Waters  0.0036 µg/l*  Heptachlor Epoxide Freshwater Coastal and Marine Estuarine Waters  0.0038 µg/l* 0.0036 µg/l*  Lindane [Hexachlorocyclohexane (g-BHC- 0.08 µg/l* Gamma)]  Pentachlorophenol   | Heptachlor                          |                                       |
| Heptachlor Epoxide Freshwater Coastal and Marine Estuarine Waters  Lindane [Hexachlorocyclohexane (g-BHC- 0.08 µg/l* Gamma)]  Pentachlorophenol   | Freshwater                          |                                       |
| Freshwater Coastal and Marine Estuarine Waters  0.0038 µg/l* 0.0036 µg/l*  Lindane [Hexachlorocyclohexane (g-BHC- 0.08 µg/l*  Gamma)]  Pentachlorophenol  | Coastal and Marine Estuarine Waters | 0.0036 μg/l*                          |
| Coastal and Marine Estuarine Waters 0.0036 µg/l*  Lindane [Hexachlorocyclohexane (g-BHC- 0.08 µg/l* Gamma)]  Pentachlorophenol  | Heptachlor Epoxide                  |                                       |
| Lindane [Hexachlorocyclohexane (g-BHC- 0.08 µg/l* Gamma)]  Pentachlorophenol  |                                     | . •                                   |
| Gamma)] Pentachlorophenol   | Coastal and Marine Estuarine Waters | 0.0036 μg/l*                          |
| •   |                                     | 0.08 µg/l*                            |
| •   | Pentachlorophenol                   |                                       |
| 2.1 Mg/1  | <u> -</u>                           | 2.1 ug/l*                             |
| Coastal and Marine Estuarine Waters 7.9 µg/l*   |                                     |                                       |
|   |                                     |                                       |
| PCB-1016 0.014 μg/l   |                                     |                                       |
| PCB-1221 0.014 μg/l<br>PCB-1232 0.014 μg/l  |                                     |                                       |
| PCB-1232 0.014 µg/l   |                                     |                                       |
| PCB-1248 0.014 µg/l   |                                     | . 0                                   |
| PCB-1254 0.014 µg/l   |                                     |                                       |
| PCB-1260 0.014 µg/l   |                                     |                                       |

| Chemical Constituent | Instream Concentration (micrograms/L) |
|----------------------|---------------------------------------|
| Phenol               | 300 μg/l                              |
| Toxaphene            | 0.0002 μg/l*                          |

<sup>\*</sup> The in-stream criterion is lower than the EPD laboratory detection limits.

## Instream Concentrations of USEPA Toxic Priority Pollutants Under Annual Average or Higher Stream Flow Conditions

(Source: RSG 391-3-6-.03(5)(d)(iv))[Revised September 1997; Revised July 1999]

| Pollutant                         | Instream             |
|-----------------------------------|----------------------|
|                                   | Concentration        |
|                                   | (micrograms/L)       |
| 1. Acenaphthene                   | **                   |
| 2. Acenaphthylene                 | **                   |
| 3. Acrolein                       | 780 μg/l             |
| 4. Acrylonitrile                  | 0.665 μg/l           |
| 5. Aldrin                         | 0.000136 μg/l        |
| 6. Anthracene                     | 110000 μg/l          |
| 7. Antimony                       | 4308 µg/l            |
| 8. Arsenic                        | 50 μg/l              |
| 9. Benzidine                      | 0.000535 μg/l        |
| 10. Benzo(a)Anthracene            | 0.0311 µg/l          |
| 11. Benzo(a)Pyrene                | 0.0311 µg/l          |
| 12. 3,4-Benzofluoranthene         | 0.0311 µg/l          |
| 13. Benzene                       | 71.28 μg/l           |
| 14. Benzo(ghi)Perylene            | **                   |
| 15. Benzo(k)Fluoranthene          | 0.0311 µg/l          |
| 16. Beryllium                     | **                   |
| 17. a-BHC-Alpha                   | 0.0131 µg/l          |
| 18. b-BHC-Beta                    | $0.046~\mu g/l$      |
| 19. Bis(2-Chloroethyl)Ether       | 1.42 µg/l            |
| 20. Bis(2-Chloroisopropyl)Ether   | 170000 µg/l          |
| 21. Bis(2-Ethylhexyl)Phthalate    | 5.92 μg/l            |
| 22. Bromoform (Tribromomethane)   | 360 μg/l             |
| 23. Carbon Tetrachloride          | 4.42 µg/l            |
| 24. Chlorobenzene                 | $21000~\mu g/l$      |
| 25. Chlorodibromomethane          | 34 μg/l              |
| 26. 2-Chloroethylvinyl Ether      | **                   |
| 27. Chlordane                     | $0.000588 \ \mu g/l$ |
| 28. Chloroform (Trichloromethane) | 470.8 μg/l           |
| 29. 2-Chlorophenol                | **                   |
| 30. Chrysene                      | $0.0311 \ \mu g/l$   |
| 31. Dibenzo(a,h)Anthracene        | 0.0311 µg/l          |
| 32. Dichlorobromomethane          | 22 μg/l              |
| 33. 1,2-Dichloroethane            | 98.6 μg/l            |
| 34. 1,1-Dichloroethylene          | 3.2 μg/l             |
| 35. 1,3-Dichloropropylene (Cis)   | 1700 μg/l            |
| 36. 1,3-Dichloropropylene (Trans) | 1700 µg/l            |
| 37. 2,4-Dichlorophenol            | 790 μg/l             |
| 38. 1,2-Dichlorobenzene           | 17000 μg/l           |
| 39. 1,3-Dichlorobenzene           | 2600 μg/l            |

| Pollutant                           | Instream                  |
|-------------------------------------|---------------------------|
| Tonutunt                            | Concentration             |
|                                     | (micrograms/L)            |
| 40. 1,4-Dichlorobenzene             | 2600 μg/l                 |
| 41. 3,3'-Dichlorobenzidine          | 0.077 µg/l                |
| 42. 4,4'-DDT                        | 0.00059 μg/l              |
| 43. 4,4'-DDD                        | 0.00084 µg/l              |
| 44. 4,4'-DDE                        | 0.00059 µg/l              |
| 45. Dieldrin                        | 0.000144 µg/l             |
| 46. Diethyl Phthalate               | 120000 μg/l               |
| 47. Dimethyl Phthalate              | 2900000 µg/l              |
| 48. 2,4-Dimethylphenol              | **                        |
| 49. 2,4-Dinitrophenol               | 14264 μg/l                |
| 50. Di-n-Butyl Phthalate            | 12100 μg/l                |
| 51. 2,4-Dinitrotoluene              | 9.1 μg/l                  |
| 52. 1,2-Diphenylhydrazine           | 0.54 μg/l                 |
| 53. Endrin Aldehyde                 | 0.81 μg/l                 |
| 54. Endosulfan Sulfate              | 2.0 μg/l                  |
| 55. Ethylbenzene                    | 28718 µg/l                |
| 56. Fluoranthene                    | 370 μg/l                  |
| 57. Fluorene                        | 14000 μg/l                |
| 58. Heptachlor                      | $0.000214 \mu \text{g/l}$ |
| 59. Heptachlor Epoxide              | 0.00011 μg/l              |
| 60. Hexachlorobenzene               | 0.00077 μg/l              |
| 61. Hexachlorobutadiene             | 49.7 μg/l                 |
| 62. Hexachlorocyclopentadiene       | 17000 μg/l                |
| 63. Hexachloroethane                | 8.85 μg/l                 |
| 64. Indeno(1,2,3-cd)Pyrene          | 0.0311 µg/l               |
| 65. Isophorone                      | 600 μg/l                  |
| 66. Lindane [Hexachlorocyclohexane  | (g-                       |
| BHC-Gamma)] 0.0625 µg/l             | (6)                       |
| 67. Methyl Bromide (Bromomethane)   | 4000 μg/l                 |
| 68. Methyl Chloride (Chloromethane) | **                        |
| 69. Methylene Chloride              | **                        |
| 70. 2-Methyl-4,6-Dinitrophenol      | 765 μg/l                  |
| 71. 3-Methyl-4-Chlorophenol         | **                        |
| 72. Nitrobenzene                    | 1900 μg/l                 |
| 73. N-Nitrosodimethylamine          | 8.12 µg/l                 |
| 74. N-Nitrosodi-n-Propylamine       | **                        |
| 75. N-Nitrosodiphenylamine          | 16.2 μg/l                 |
| 76. PCB-1016                        | 0.00045 μg/l              |
| 77. PCB-1221                        | 0.00045 μg/l              |
| 78. PCB-1232                        | 0.00045 μg/l              |
| 79. PCB-1242                        | 0.00045 μg/l              |
| 80. PCB-1248                        | 0.00045 μg/l              |
| 81. PCB-1254                        | 0.00045 μg/l              |
| 82. PCB-1260                        | 0.00045 μg/l              |
| 83. Phenanthrene                    | **                        |
| 84. Phenol                          | 4,600,000 µg/l            |
| 85. Pyrene                          | 11,000 µg/l               |
| J                                   | ,~~~ r.b/-                |

| Pollutant                      | Instream<br>Concentration<br>(micrograms/L) |
|--------------------------------|---|
| 86. 1,1,2,2-Tetrachloroethane  | 10.8 μg/l                                   |
| 87. Tetrachloroethylene        | 8.85 µg/l                                   |
| 88. Thallium                   | 48 μg/l                                     |
| 89. Toluene                    | 200000 μg/l                                 |
| 90. 1,2-Trans-Dichloroethylene | **  |
| 91. 1,1,2-Trichloroethane      | 41.99 μg/l                                  |
| 92. Trichloroethylene          | 80.7 μg/l                                   |
| 93. 2,4,6-Trichlorophenol      | 6.5 μg/l                                    |
| 94. 1,2,4-Trichlorobenzene     | **  |
| 95. Vinyl Chloride             | 525 μg/l                                    |

<sup>\*\*</sup> These pollutants are addressed in 391-3-6-.06.

# Instream Concentrations of USEPA Toxic Priority Pollutants: Acute and Chronic Criteria

(Source: RSG 391-3-6-.03(5)(d)(ii))[Added July 1999]

Instream concentrations of the following chemical constituents listed by the U.S. Environmental Protection Agency as toxic priority pollutants shall not exceed the **acute criteria** indicated below under 1-day, 10-year minimum flow (1Q10) or higher stream flow conditions and shall not exceed the **chronic criteria** indicated below under 7-day, 10-year minimum flow (7Q10) or higher stream flow conditions except within established mixing zones or in accordance with procedures presented in 391-3-6-.06.

Unless otherwise specified, the criteria below are listed in their total recoverable form. Because most of the numeric criteria for the metals below are listed as the dissolved form, total recoverable concentrations of metals that are measured instream will need to be translated to the dissolved form in order to compare the instream data with the numeric criteria.

|   | Acute                    | Chronic                     |
|---|--------------------------|-----------------------------|
| 1. Arsenic                              | -                        |                             |
| (a) Freshwater                          | $50 \mu g/l^1$           | 50 μg/l <sup>1</sup>        |
| (b) Coastal and Marine Estuarine Waters | 69 µg/l                  | $36 \mu g/l^1$              |
| 2. Cadmium                              |                          |                             |
| (a) Freshwater                          | $1.7  \mu g/l^{1,2,3}$   | $0.62  \mu g/l^{1,2,3}$     |
| (b) Coastal and Marine Waters           | $43 \mu g/l$             | $9.2  \mu \text{g/l}^{1,2}$ |
| 3. Chromium III                         |                          |                             |
| (a) Freshwater                          | $310  \mu g/l^{1,3}$     | $100  \mu g/l^{1,3}$        |
| (b) Coastal and Marine Estuarine Waters |                          |                             |
| 4. Chromium (VI)                        |                          |                             |
| (a) Freshwater                          | $16 \mu g/l^1$           | 11 μg/l <sup>1</sup>        |
| (b) Coastal and Marine Estuarine Waters | $1,100  \mu g/l^1$       | $50 \mu g/l^1$              |
| 5. Copper                               |                          |                             |
| (a) Freshwater                          | $8.8 \mu g/l^{1,2,3}$    | $6.2 \mu g/l^{1,2,3}$       |
| (b) Coastal and Marine Estuarine Waters | $2.4  \mu g/l^{1,2}$     | $2.4  \mu g/l^{1,2}$        |
| 6. Lead                                 |                          |                             |
| (a) Freshwater                          | $30  \mu g/l^{1,3}$      | $1.2 \mu g/l^{1,2,3}$       |
| (b) Coastal and Marine Estuarine Waters | $130  \mu g/l^1$         | $5.3  \mu g/l^{1,2}$        |
| 7. Mercury                              |                          |                             |
| (a) Freshwater                          |                          | $0.012  \mu g/l^2$          |
| (b) Coastal and Marine Estuarine Waters |                          | $0.025  \mu g/l^2$          |
| 8. Nickel                               |                          |                             |
| (a) Freshwater                          | 790 μg/l <sup>1,3</sup>  | $88  \mu g/l^{1,3}$         |
| (b) Coastal and Marine Estuarine Waters | $74 \mu g/l^1$           | $8.2  \mu g/l^{1,2}$        |
| 9. Selenium                             |                          |                             |
| (a) Freshwater                          |                          | $5.0 \mu\mathrm{g/l}^2$     |
| (b) Coastal and Marine Estuarine Waters |                          | 71 μg/l <sup>1</sup>        |
| 10. Silver                              | <del></del> <sup>4</sup> | 4                           |
| 11. Zinc                                | 1.2                      |                             |
| (a) Freshwater                          | $64  \mu g/l^{1,3}$      | 58 μg/l <sup>1,3</sup>      |
| (b) Coastal and Marine Estuarine Waters | 90 μg/l <sup>1</sup>     | 81 μg/l <sup>1</sup>        |

#### **Cadmium**

```
acute criteria = e[(1.128(In(hardness)) - 3.828)] (1.136672 - [(In hardness)(0.041838)] \mug/l chronic criteria = e[(0.7852(In(hardness)) - 3.490)] (1.101672 - [(In hardness)(0.041838)] \mug/l
```

#### **Chromium III**

```
acute criteria = e[(0.8190(In(hardness)) + 3.688)] (0.316) \mu g/l
chronic criteria = e[(0.8190(In(hardness)) + 1.561)] (0.860) \mu g/l
```

#### Copper

```
acute criteria = e[(0.9422(In(hardness)) - 1.464)] (0.96) \mu g/l
chronic criteria = e[(0.8545(In(hardness)) - 1.465)] (0.96) \mu g/l
```

#### Lead

```
acute\ criteria = e[(1.273(In(hardness)) - 1.460)]\ (1.46203 - [(In\ hardness)(0.145712)]\ \mu g/l chronic\ criteria = e[(1.273(In(hardness)) - 4.705)]\ (1.46203 - [(In\ hardness)(0.145712)]\ \mu g/l
```

#### Nickel

```
acute criteria = e[(0.8460(In(hardness)) + 3.3612] (.998) \mu g/I
chronic criteria = e[(0.8460(In(hardness)) + 1.1645)] (.997) \mu g/I
```

#### Zinc

```
acute criteria = e[(0.8473(In(hardness)) + 0.6604] (0.978) \mu g/l
chronic criteria = e[(0.8473(In(hardness)) + 0.7614)] (0.986) \mu g/l
```

<sup>&</sup>lt;sup>1</sup> The in-stream criterion is expressed in terms of the dissolved fraction in the water column. Conversion factors used to calculate dissolved criteria are found in 40 CFR 131.36 and the Federal Register, Volume 60, No. 86, Thursday, May 4, 1995.

<sup>&</sup>lt;sup>2</sup> The in-stream criterion is lower than the EPD laboratory detection limits.

<sup>&</sup>lt;sup>3</sup> The aquatic life criteria for these metals are expressed as a function of total hardness (mg/l) in a water body. Values in the table above assume a hardness of 50 mg/l CaCO(3). For other hardness values, the following equations from 40 CFR 131.36 should be used. The minimum hardness allowed for use in these equations shall not be less than 25 mg/l, as calcium carbonate and the maximum shall not be greater than 400 mg/l as calcium carbonate.

<sup>&</sup>lt;sup>4</sup> This pollutant is addressed in 391-3-6-.06.