## Montana Voluntary Environmental Audit and Pollution Prevention Guide

## Regulatory Compliance and Waste Reduction Assistance



Produced by the Montana State University Extension Service Pollution Prevention Program

March 1998

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**Regulatory Compliance and Waste Reduction Assistance** 

Developed by the Montana State University Extension Service Montana Pollution Prevention Program in cooperation with the Montana Department of Environmental Quality Enforcement Division

March 1998

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#### DISCLAIMER

This guide was produced as a result of the 1997 Montana Legislature enacting the Voluntary Environmental Audit Act. It is intended for educational purposes only and is meant to provide a reference to the regulations potentially affecting businesses in Montana and to describe some of the pollution prevention options available. At the time of publication, all regulatory guidelines were as accurate as possible. Because laws and rules change often, you should have the facts and circumstances of your situation reviewed and verified by the appropriate regulatory agencies to ensure compliance. It is ultimately your responsibility to know and understand the health, safety, and environmental regulations that apply to your business.

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# Introduction: Environmental Audit Regulations & This Guide

#### INTRODUCTION

As a way to enhance environmental protection and environmental quality, the 1997 Montana Legislature enacted the *Voluntary Environmental Audit Act (Act)*. The Act was designed to provide incentives for businesses to *voluntarily* identify and remedy violations of state environmental laws (Title 75 and 80, Montana Code Annotated) enforced by the Montana Department of Environmental Quality, or the Montana Department of Agriculture. The Act was not intended to inhibit or to be a substitution for the legal regulatory agencies charged with protecting Montana's environment.

Note that this guide will focus on those laws and rules that are enforced by the Montana Department of Environmental Quality (DEQ) found in Title 75 of the *Montana Code Annotated* (*MCA*) and Title 17 of the *Administrative Rules of Montana* (ARM). For more information on how the Act applies to the laws and rules enforced by the Montana Department of Agriculture, call (406) 444-2944.

#### APPLICABILITY

Each environmental audit must be conducted in accordance with a written plan and must be designed to identify and prevent problems and to improve compliance with statutes, regulations, permits, and orders. To help you write this plan, you may want to review *Part II. Setting Up A Pollution Prevention Audit Program*, which discusses how to prepare a pollution prevention program and conduct an environmental audit.

An audit may be conducted on a periodic basis by an owner or operator of a business, an employee, or an independent contractor. The following are some examples of activities that do not qualify as voluntary environmental audits:

- Property appraisals
- Site investigations or assessments conducted as part of a property transfer
- Detection or discovery of spills and accidental releases of regulated materials or hazardous and deleterious substances
- Unit process analysis monitoring or evaluation conducted as part of standard operation and maintenance procedures

#### INCENTIVES FOR PERFORMING A VOLUNTARY ENVIRONMENTAL AUDIT

Since the audit is voluntary and not required by the DEQ, you may wonder why you should perform an audit and report any problems to the DEQ. There are two primary reasons for auditing your business:

- Improved environmental protection. Problems discovered during an audit can be corrected before they harm you, your co-workers, and the environment, or become a liability.
- Immunity to fines and penalties. By voluntarily coming forward with regulatory violations, the DEQ may grant you immunity to potentially applicable fines and penalties.

#### CONDITIONS

The following briefly describes the conditions and limitations that must be met to qualify for limited immunity from civil and administrative penalties for violations of environmental laws discovered during a voluntary environmental audit:

- 1. The disclosed violation must have been discovered during the course of a voluntary environmental audit.
- 2. Your business must satisfactorily demonstrate to the DEQ that the audit was not an isolated event, but one of a series of scheduled internal assessments. If a violation was found during the first voluntary audit, the DEQ may acknowledge immunity on a conditional basis.
- 3. The violation(s) must be voluntarily disclosed to the DEQ within 30 days of determining that a violation exists.
- 4. The violation must have been identified voluntarily and not through a legally mandated monitoring or sampling requirement prescribed by statute (law), regulation, permit, variance, judicial or administrative order, or consent agreement.
- 5. Your business must have disclosed the specific violation on the Environmental Audit Report Form (see *Appendix B. Environmental Audit Reporting Forms*). The completed report form and accompanying information must be postmarked, hand delivered, or received by express mail or special carrier delivery to the DEQ no later than 30 calendar days after the violation was determined to exist.
- 6. Your business must take appropriate action to prevent the recurrence of the disclosed violation(s).
- 7. Your business must willingly cooperate with the DEQ and provide information and requested by the DEQ to determine the nature, circumstances, seriousness, longevity, and significance of the disclosed violation. Note that the DEQ may not request a copy of the environmental audit.
- 8. Your business must also enter into a written compliance schedule that is negotiated with the DEQ to promptly correct the disclosed violation, unless the violation has been resolved to the DEQ's satisfaction at the time of disclosure.

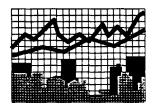
#### LIMITATIONS

Be aware that you may not be able to claim immunity if any of the following conditions exist:

- 1. Your business' corporate officials, managers, employees, or contractors knowingly or purposely committed the violation.
- 2. The violation was the result of gross negligence on the part of your business, including corporate officials, managers, employees, or contractors.
- 3. Your business has established a pattern of violating a specific state or federal environmental law, rule, regulation, permit, order, or compliance schedule within 3 years prior to the date of the disclosure at the same facility.
- 4. Immunity from violations would cause the state to not meet the requirements for any federally delegated environmental law or program for which the DEQ has assumed primacy.
- 5. The disclosed violation was discovered after the initiation of an administrative or judicial proceeding, investigation, inspection, or request for information related to the violation by the DEQ, the Department of Agriculture, or the Department of Justice.
- 6. Your business has not corrected the disclosed violation according to a compliance schedule negotiated with the DEQ.
- 7. The disclosed violation caused actual, substantial damage to the environment or public health (Voluntary Environmental Audit Act Implementation Guide, 1998).

#### HOW TO USE THIS GUIDE

The environmental audit process is a responsible, proactive way to pinpoint compliance problems in your business. An environmental audit can be useful at any time in the business life cycle -- while the business is in the planning stages, during regular business operations, and before an expansion, operating change, or purchase of a new business.



This guide was not designed to be a comprehensive, industry-specific document. It is a general approach to environmental compliance since it is intended for use by any type of business in any location in Montana. If you would like an industry-specific environmental audit, please contact the Montana Pollution Prevention Program, part of the Montana State University Extension Service, at (406) 994-345 1. Because we strongly encourage you to go beyond a minimal program, this guide also provides information sources and references that will help you expand your efforts.

The environmental audit checklists start with general regulatory requirements regarding:

- Hazardous waste
- Solid waste
- Motor vehicle recycling and disposal
- Underground storage tanks
- Water
- Air

The last parts of this guide focus on ways to prevent pollution by looking at energy conservation, housekeeping, inventory, waste segregation, and spill reduction. These parts discuss additional, non-regulatory efforts you can take to protect our state's water, air, soil, wildlife, and citizens.

As you and your co-workers go through a checklist, review each question carefully and check the appropriate box (keep track of questions your group comes up with on the last page of each checklist). Not all questions will be applicable to your business. Take notes on the questions that indicate you may have a violation or need further assistance. Contact the Montana Pollution Prevention Program or the appropriate local, state, or federal agency to help you answer these questions (agencies and telephone numbers can be found at the end of each part). Refer to the following for definitions of particular terms used in this part.

#### TERMS ASSOCIATED WITH THE ACT

Administrative Rules of Montana (ARM) - Regulations created by specific departments, such as the Department of Environmental Quality, involving the public who has the opportunity to comment upon the draft regulations.

Actual, substantial damage - Harm to the environment that was or could be measured with reasonable scientific certainty and that constitutes significant degradation of the environment or poses an increased risk of morbidity (disease) to humans.

Compliance - Acting in accordance with state laws and rules.

Code of Federal Regulations (CFR) - Regulations created by the federal government, such as the U.S. Environmental Protection Agency.

Environmental audit - Refers to a periodic, documented, voluntary internal assessment, evaluation, or review that is conducted by a business (see "Regulated Entity") or its consultant for the purpose of determining compliance with environmental law, rule, or permit enforced by the DEQ.

#### **TERMS ASSOCIATED WITH THE ACT, continued**

et seq. - Latin for "and the following." Used when citing a particular law or regulation that includes all the points and subpoints. For example: ARM 17.54.401 et seq. = ARM 17.54.401(1)(a), (2)(a), and (3).

Immunity - Exemption from applicable laws and regulations. Immunity may be limited or total.

Montana Code Annotated (MCA) - Laws created by the Montana Legislature by the passing of a bill

Periodic - Of a finite, reasonable duration (normally not more than 30 days) and occurring at regular intervals

Pollution Prevention - The design, manufacture, purchase, or use of materials to reduce the amount or toxicity of waste.

Regulated entity - Any person or organization, including a government agency, subject to state law outlined in Title 75 (regulated by the DEQ) or Title 80 (regulated by the Montana Department of Agriculture), MCA.

Source Reduction - See "Pollution Prevention."

United States Codes (USC) - Set of federal laws.

Violation - The intentional or unintentional act of breaking laws or regulations.

Waste Reduction (Minimization) - See "Pollution Prevention."

## Environmental Audit: Hazardous Waste

#### DEFINING HAZARDOUS WASTE

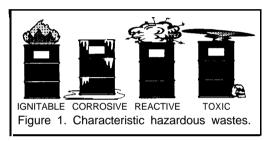
If your business generates waste it is your responsibility to determine if the waste is hazardous or non-hazardous. There are two types of hazardous waste (often referred to as regulated hazardous waste) defined by the U.S. Environmental Protection Agency (EPA): characteristic and listed.

In Montana, wastes meeting the definition of hazardous wastes are regulated by the Montana Department of Environmental Quality (DEQ) Air and Waste Management Bureau under the Montana Hazardous Waste Act (Montana Codes Annotated [WCA]) and the associated Administrative Rules of Montana (ARM).

#### Characteristic

A waste may be considered hazardous if it exhibits any one of the following characteristics: ignitable, corrosive, reactive, or toxic (Figure 1).

• Ignitable - A liquid with a flash point less than 140°F (60°C); a non-liquid capable of causing tire through friction, absorption of moisture, or spontaneous chemical changes; or a flammable compressed gas. Examples include certain solvents and mineral spirits.



- Corrosive An aqueous-based liquid with a pH of less than or equal to 2.0 or a pH of greater than or equal to 12.5. Examples include battery acid and alkaline cleaning solvents.
- Reactive An unstable substance that readily undergoes violent change; reacts violently with water (may generate toxic gases, vapors, or fumes, or explode); or is a cyanide or sulfide bearing waste which, when exposed to pH conditions between 2.0 and 12.5, can generate toxic gases, vapors, or fumes. Example includes hydrogen sulfide.
- Toxic A substance that is toxic due to the presence of metals or organic compounds. A test, called the Toxicity Characteristic Leaching Procedure (TCLP), simulates leaching of the contaminant through a landfill environment and into groundwater. EPA has established concentration limits for 40 constituents in the TCLP test. Examples include wastes with high metal (lead, silver, etc.) content, such as lead-based paint and hot tank wastes.

#### Listed

A waste can also be considered hazardous if it appears on any one of four lists of hazardous wastes contained in the federal Resource Conservation and Recovery Act (RCRA) regulations (available from the DEQ) and the Administrative Rules of Montana. These wastes contain toxic constituents that have been found to be harmful to human health and the environment. More than 400 chemicals can be found on these lists.

- F-Listed Wastes Waste derived from non-specific sources. Examples include certain halogenated solvents used in degreasing (tetrachloroethylene and methylene chloride) and non-halogenated solvents (xylene and acetone).
- K-Listed Wastes Waste derived from specific manufacturing processes. Examples include wastewater treatment sludge from the production of certain inorganic pigments.

• P-Listed (Acute) and U-Listed Wastes - Wastes that are discarded toxic chemical products or off-specification products and residues whose sole active ingredient is a listed waste. Acute (P-Listed) wastes are determined by EPA to be so dangerous that they are regulated more stringently than the previously mentioned hazardous waste. Examples include certain pesticides such as 2,4-Dinitrophenol (2,4-D).

#### EXEMPTIONS FROM HAZARDOUS WASTE REQUIREMENTS

It should be noted that there are wastes that meet the definition of a hazardous waste but are exempt from hazardous waste regulations. Instead, they are regulated under other state or federal regulations (discussed throughout this guide):

- Hazardous wastes generated in the home (for example oven cleaner and drain cleaner) Regulated as solid waste by the DEQ under the Administrative Rules of Montana (ARM). This exemption is not applicable to small businesses.
- Spent lead-acid batteries to be sent off-site for reclamation (for example vehicle batteries) Regulated as solid waste by the DEQ Community Services Bureau under ARM (see *Part 3. Environmental Audit: Solid Waste*).
- Scrap metal to be recycled Regulated as solid waste by the DEQ Community Services Bureau under ARM (see Part 3. Environmental Audit: Solid Waste).
- Asbestos to be disposed of Regulated as a hazardous air pollutant by the DEQ under the National Emission Standards for Hazardous Air Pollutants (see Part 3. Environmental Audit: Solid Waste).
- Polychlorinated biphenyls (PCBs) to be disposed of Regulated as a toxic substance by the EPA under the Toxic Substance Control Act (see Part 3. Environmental Audit: Solid Waste).
- Chlorofluorocarbons (CFCs) to be disposed of If used for refrigerants and destined for recycling, regulated as a volatile organic compound by the EPA under the Clean Air Act (see *Part 3. Environmental Audit: Solid Waste*). Non-refrigerant CFCs are not exempt from hazardous waste requirements (*The Small Business Handbook For Managing Hazardous Wastes*, 1997).

#### MONTANA'S USED OIL REQUIREMENTS

The Montana DEQ has adopted management standards for used oil that address potentially unsafe practices associated with improper storage of used oil, road oiling, and contamination of used oil from hazardous waste. The following is a brief description of used oil management terms:

- Used Oil Generator is any business that produces used oil through commercial or industrial operations, or that collects it from these operations or private households. Examples include vehicle repair shops and service stations.
- Used Oil Collection Center is any site or facility that accepts, aggregates, and stores used oil collected from used oil generators who bring used oil to the collection center in shipments of no more than 55 gallons and from do-it-yourselfers (residential customers).
- Used Oil Transporters are persons who transport used oil or collect used oil from more than one generator and transport the collected used oil, or operators of used oil transfer facilities.
- Used Oil Marketer is any person who directs shipment of off-specification used oil from their facility to a used oil burner or who first claims that the used oil destined for energy recovery meets used oil fuel specifications.
- Used Oil Transfer Facilities are transportation-related facilities (loading docks, parking lots) where shipments of used oil are held for more than 24 hours but not longer than 35 days during the normal course of transportation.

• Used Oil Processors and Re-refiners handle and store large quantities of used oil for a wide variety of purposes.

In general, used oil generators:

- Must keep storage tanks and containers in good condition
- Must label storage tanks and containers with the words "used oil"
- Must clean up any used oil spills or leaks to the environment
- Can burn used oil on-site in a used oil space heater
- Must use a transporter with an EPA Identification Number when shipping used oil off-site except when:
  - Self-transporting less than 55 gallons in personal or company vehicle
  - Self-transporting to an aggregation point owned by used oil generator
  - Transporting under Tolling (recycling) Arrangement, but must receive recycled lubricant or coolant back (Montana's New Used Oil Management Standards, 1995).

For more information on the specific requirements for used oil management contact the DEQ Air and Waste Management Bureau at (406) 444-3490.

#### MONTANA'S UNIVERSAL WASTE REQUIREMENTS

Based on EPA standards, the Montana DEQ adopted the Universal Waste Regulations to encourage the recycling of specific hazardous wastes in order to keep them out of the environment and waste management facilities. These wastes, if destined for recycling and not for disposal, are called universal wastes. (Note that household hazardous wastes are excluded from universal waste regulations; instead they are regulated under solid waste regulations.)

Universal wastes include:

- Spent batteries other than lead-acid batteries
- Spent or canceled pesticides that are subject to a recall or are collected or managed as part of a waste pesticide collection program
- Mercury-containing thermostats
- Spent electric tubes or bulbs that are hazardous due to heavy metals concentrations

The following is a brief description of universal waste management terms:

- Universal Waste Generator is any person, by site, whose act or process produces a universal waste or whose act first causes-a universal waste to become subject to regulation.
- Universal Waste Handler is a generator of universal waste, or the owner or operator of a facility who receives universal waste from other universal waste handlers, accumulates universal waste, and sends universal waste to another universal waste handler, to a destination facility, or to a foreign facility.
- Small Quantity Handler of Universal Waste means a universal waste handler who accumulates less than a total of 11,000 pounds (lbs) (5,000 kilograms [kg]) of universal waste at any time.
- Large Quantity Handler of Universal Waste is a universal waste handler who accumulates a total of 11,000 lbs (5,000 kg) or more of universal waste at any time. This designation is retained through the end of the calendar year in which the total of 11,000 lbs (5,000 kg) or more of universal waste is accumulated.
- Universal Waste Transporter transports universal waste by air, rail, highway, or water.
- Universal Destination Facility treats, recycles, or disposes of universal waste.

In general, universal waste generators:

- May not dispose of universal waste (by definition it must be recycled).
- May not intentionally dilute or treat universal waste.
- Must manage universal waste to prevent releases to air, water, or soil.
- Must immediately contain any releases of universal waste and clean up the releases according to all applicable hazardous waste requirements.
- Must inform employees regarding proper handling of universal waste and emergency response procedures.
- May transport universal waste only to other universal waste handlers, destination facilities, or foreign destinations (*Montana's Universal Waste Requirements*, 1997).

For more information on the specific requirements for universal waste management, contact the DEQ Air and Waste Management Bureau at (406) 444-3490.

#### DETERMINING YOUR GENERATOR STATUS

If your business creates regulated hazardous waste, you are considered a hazardous waste generator. There are three types of hazardous waste generators defined in federal and state hazardous waste regulations: conditionally exempt, small, and large. Your generator status depends on how much hazardous waste your business produces or accumulates each calendar month. For simplicity, calculate waste quantities in either pounds (lbs) or kilograms (kg). The Material Safety Data Sheet (MSDS) for each product should have conversion information for helping you convert liquids to pounds or kilograms (see *Part 10. Material Safety Data Sheets*).

#### Conditionally Exempt Generator

Conditionally exempt generators (CEGs) generate no more than 220 lbs (100 kg), or about 25 gallons (95 liters) of hazardous waste, or no more than 2.2 lbs (1 kg) of acute hazardous waste in any calendar month. To maintain this status, generators may store up to 2,200 lbs (1,000 kg) of hazardous waste on-site at any time. CEGs are required to meet much lighter regulatory requirements than small generators and large generators.

#### Small Generator

Small generators (SGs) generate between 220 and 2,200 lbs (100 and 1,000 kg) of hazardous waste, or no more than 2.2 lbs (1 kg) of acute hazardous waste in any calendar month. Accumulation of hazardous waste on-site may not exceed 180 days. If the waste must be transported greater than 200 miles (320 kilometers), the generator may store the waste for up to 270 days. A SG that accumulates up to 13,200 lbs (6,000 kg) of hazardous waste must comply with large generator requirements.

#### Large Generator

Large generators (LGs) generate 2,200 lbs (1,000 kg) or more of hazardous waste, or more than 2.2 lbs (1 kg) of acute hazardous waste, in any calendar month. Accumulation of hazardous waste may not exceed 90 days (beyond 90 days a storage permit may be required) (*The Small Business Handbook For Managing Hazardous Wastes*, 1997).

**Special** Note: Your generator size can change each month depending upon how much hazardous waste you produce. Therefore, it is important, to keep good records.

#### HAZARDOUS WASTE MANAGEMENT

Additional waste and safety hazards may be created if hazardous materials and wastes are managed improperly. When storing wastes:

- Clearly label the contents of all containers.
- Segregate hazardous waste from non-hazardous waste and raw materials.
- Avoid mixing wastes in storage containers to prevent dangerous chemical reactions.
- Use a locked, covered, indoor storage area with a concrete floor and curbs for spill containment.
- Regularly inspect containers for leaks and spills (at least once a week).
- Remove wastes as soon as possible.
- Keep good records about when wastes were generated and when they should be removed for reuse, recycling, treatment, or disposal (each generator type has specific storage requirements, which are described below).

The requirements for storing, recycling, treating, and disposing of hazardous wastes depend primarily on your generator size (discussed previously). The following is a brief description of the management requirements for hazardous waste generators. For a more complete description, refer to *The Small Business Handbook For Managing Hazardous Wastes* (1997) available from the Montana Department of Environmental Quality (DEQ) Air and Waste Management Bureau at (406) 444-3490.

#### Conditional. Exempt Generators (CEGs)

CEGs are required by the Administrative Rules of Montana (ARM) to:

- Identify all regulated hazardous wastes generated (see Appendix C. Sample Forms).
- Limit the amount of regulated hazardous waste generated in any month to less than 220 lbs (100 kg).
- CEGs do not have waste container labeling or accumulation time limit requirements unless they accumulate more than 2,200 lbs (1,000 kg) of hazardous waste. If CEGs accumulate more than 2,200 lbs (1,000 kg), they will lose their CEG status and have to meet SG or LG requirements for waste disposal (described below).
- Avoid generating more than 2.2 lbs (1 kg) of acute hazardous waste. If more than 2.2 lbs (1 kg) are produced, CEGs will lose their exempt status and have to meet LG requirements for waste disposal.
- Dispose of hazardous waste at one of the following facilities (lists available from the DEQ):
  A legitimate recycling facility.
  - A permitted treatment, storage, and disposal (TSD) facility.
  - A wastewater treatment plant in accordance with local and state water quality regulations and only if the facility owner/operator has approved.
  - A licensed Class II (municipal) solid waste management facility in accordance with state solid waste management regulations, only if the waste is a solid waste and with prior approval of the facility owner/operator.

#### Small Generators (SGs)

SGs are required by the Administrative Rules of Montana (ARM) to:

- Identify all hazardous waste generated (see Appendix C. Sample Forms).
- Obtain an EPA Identification Number (available from the DEQ).
- Mark containers of hazardous waste in accumulation areas clearly with words "Hazardous Waste" and an accumulation start date. SGs may store their hazardous waste on-site for up to 180 days (or up to 270 days if the waste must be transported further than 200 miles [322 kilometers] to a designated facility) without a permit from the DEQ. Satellite accumulation



containers must be marked with the words "Hazardous Waste," or with other words that identify the containers' contents.

- Maintain a logbook listing the type and amount of hazardous waste generated per month, what has been removed, etc.
- Have emergency response measures in place.
- Store and label hazardous waste appropriately.
- Manifest all hazardous waste sent off-site.
- Dispose of hazardous waste only at a permitted TSD Facility.

#### Large Generators (LGs)

LGs are required to follow all the above requirements for SGs, in addition to more stringent requirements not covered in this guide. For example, LGs can store their hazardous waste on-site for up to 90 days without a permit from the DEQ. Satellite accumulation containers must be marked with the words "Hazardous Waste," or other words that identify the contents of the containers. For more information, contact the DEQ Air and Waste Management Bureau at (406) 444-3490.

#### TERMS ASSOCIATED WITH HAZARDOUS WASTE

Accumulation Areas - Controlled areas where waste is accumulated in containers.

Chlorofluorocarbons (CFCs) - Chemicals used for refrigeration, air conditioning, aerosol sprays, and plastics. CFCs released into the atmosphere migrate high above the earth where they break down to form chlorine gas.

Disposal (in terms of hazardous waste) - The discharge, injection, deposit, dumping, spilling, leaking, or placing of any hazardous waste into or onto the land or water so that the hazardous waste or any constituent of it may enter the environment or be emitted into the air or discharged into any water system.

Environmental Protection Agency Identification Number - A 12-digit code used to identify the waste generator and assist in the tracking of waste management activities from the point of generation to the disposal facility.

Facility - All contiguous land and structures used for treating, storing, or disposing of hazardous waste.

- Flash Point Minimum liquid temperature at which a spark or flame causes an instantaneous flash in the vapor space above the liquid.
- Groundwater Water that occurs beneaththe surface of the earth, unsaturated soil, or the interstices of bedrock.
- Halogenated Solvent Solvents containing any of a group of five chemically-related nonmetallic elements (chlorine, bromine, fluorine, astatine, and iodine). Halogenated solvents containing chlorine are often referred to as chlorinated solvents. Halogenated solvents are usually very toxic to humans and the environment if improperly handled or disposed of.
- Hazardous Material A material that, because of its quantity, concentration, or physical, chemical, or infectious characteristics, may pose a threat to human health and the environment.

Hazardous Waste - A waste or combination of wastes that, because of its quantity, concentration or physical, chemical, or infectious characteristics, may pose a threat to human health and the environment.

Manifest - The shipping document, originated and signed by the generator, that is used to identify the hazardous waste, its quantity, origin, and destination.

Off-specification Used Oil - Used oil that exceeds regulatory limits for particular heavy metals and total halogens, and has a flash point less than 100°F (38°C).

#### **TERMS ASSOCIATED WITH HAZARDOUS WASTE, continued**

Satellite Accumulation Areas - Accumulation of wastes at or near the point of generation, which is under the direct control of the operator of the process generating the waste.

Specification Used Oil - Used oil that does not exceed regulatory limits for particular heavy metals and total halogens, and has a flash point greater than 100°F (38°C).

Storage - The actual or intended containment of wastes, either on a temporary basis or for a period of years,

Sump - Subsurface chamber, usually beneath a floor drain, designed to capture the solids in shop wastewater.

Transporter - A person engaged in the off-site transportation of hazardous waste by air, rail, highway, or water.

Treatment -A method, technique, or process, including neutralization, designed to change the physical, chemical, or biological character or composition of any hazardous waste to neutralize the waste or render it non-hazardous, safer for transport, amenable for recovery, amenable for storage, or reduced in volume.

TSD Facility -A treatment, storage, and disposal facility (see individual definitions above).

Universal Wastes - Specific hazardous wastes that are destined for recycling.

Used Oil Space Heater - A heater that is designed to have a maximum capacity of not more than 0.5 million Btu (British thermal unit) per hour and to vent combustion gases to the ambient air.

#### CHECKLIST INSTRUCTIONS

This checklist was designed to offer small business owners and managers insight into areas regulatory inspectors tend to focus on during an inspection. Applicable regulations have been cited to the left of each question. Although the questions without a legal reference may not be legally required, we strongly encourage you to read these questions for the suggestions or recommendations they address.

For each applicable question, circle the appropriate answer (yes, no, or not applicable) for your particular situation. Use the blank spaces to write notes and comments.

#### TIPS For Success

- Don't spend time on items that obviously have no relevance to your business.
- Be sure to talk to your co-workers and review files when answering some of these questions -- leave nothing to memory or chance.
- Write down what you see (or don't see) and what you think you should do about it.
- If you have any questions, contact the DEQ for assistance.

(Circle Appropriate Answer)

REGULATION	QUESTION					
ARM 17.54.303 <i>et seq.</i> Define a hazardous waste: listed or characteristic.	1. Does your business produce regulated hazardous waste? If no - The following questions may not apply to your business; however, go through them in case you produce hazardous waste in the future. If you have questions, review this part again or contact the DEQ Air and Waste Management Bureau at (406) 444-3490.	Yes No				
	<ul> <li>Pollution Prevention Tip: Take steps to avoid producing hazardous waste:</li> <li>Use less hazardous raw materials</li> <li>Modify the way you operate to eliminate the need to use hazardous materials</li> </ul>					
ARM 17.54.401 <i>et seq.</i> Define generator sizes: conditionally exempt, small, and large.	<ul> <li>2. Do you know what size hazardous waste generator your business is?</li> <li>If no - You may be out of compliance. If you generate hazardous waste, it is important for you to know your generator size so that you can follow proper management requirements. Contact the DEQ Air and Waste Management Bureau at (406) 444-3490 for assistance.</li> <li>Pollution Prevention Tip: <i>Strive to be a conditionally exempt generator because you will have less paperwork to fill out, regulations to comply with, and hazardous waste to dispose of.</i></li> </ul>	Yes No				
ARM 17.54.106 et <i>seq.</i> Define when a HWM permit is required.	<ul> <li>3. If you treat or dispose of any hazardous waste on-site, do you have a Hazardous Waste Management Permit?</li> <li>If no - You may be out of compliance. Contact the DEQ Air and Waste Management Bureau at (406) 444-3490 for assistance.</li> </ul>	Yes No				
ARM 17.54.136 et <i>seq.</i> Define when you need a permit for incinerating wastes.	<ul> <li>4. If you incinerate hazardous waste on-site, do you have a Hazardous Waste Management Permit?</li> <li>If no - You may be out of compliance. Contact the DEQ Air and Waste Management Bureau at (406) 444-3490 for assistance.</li> </ul>	Yes No				
ARM 17.54.146 <i>et seq.</i> Define when you need a permit for boilers and industrial furnaces.	<ol> <li>If you use an industrial furnace for disposing of hazardous waste, do you have a Hazardous Waste Management Permit?</li> <li>If no - You may be out of compliance. Contact the DEQ Air and Waste Management Bureau at (406) 444-3490 for assistance.</li> </ol>	Yes No				
ARM 17.54.402 (5)(a) CEG requirements for accumulation of wastes.	<ul> <li>6. If you are a conditionally exempt generator (CEG), do you know how long you can accumulate hazardous waste on-site without losing your CEG status?</li> <li>If no - CEGs have no time limit for storing hazardous waste on-site as long as no more than 2,200 lbs (1,000 kg) is stored. Contact the DEQ Air and Waste Management Bureau at (406) 444-3490 for assistance.</li> </ul>	Yes No				

ARM 17.54.402(5) et sec,	REGULATION	QUESTION	
<ul> <li>Beq., Onlons for managing CEG's hazardous waste.</li> <li>Jou contacted your local wastewater treatment plant (WWTP) to see what wastes can be disposed of down the drain?</li> <li>If no - WWTPs can handle many types of waste: however, too much or too strong a load could affect their plant. Always contact your WWTP operator prior to disposing of liquid wastes. Never pour chemicals down the drain if you are on a septic system -the chemicals could harm your system or contaminate the drain field and groundwater. You may also be subject to enforcement action.</li> <li>ARM 17.54.403(3) Requires generators to apply for an EPA Identification Number.</li> <li>Do you know if you need an EPA Identification Number?</li> <li>Yes No H no - If you plan to ship hazardous waste to a treatment, storage, or disposal (TSD) facility or you are a SG or LG, you must have an EPA Identification Number. Contact the DEQ Air and Waste Management Bureau at (406) 444-3490 for a form.</li> <li>ARM 17.54.408 et see, General requirements for manifesting hazardous waste for transport.</li> <li>ARM 17.54.415 et see, Packaging requirements for transporting hazardous waste.</li> <li>ARM 17.54.416 et see, Labeling requirements for marksofting hazardous waste.</li> <li>ARM 17.54.416 et see, Labeling requirements for marksofting mazardous waste.</li> <li>ARM 17.54.416 et see, Labeling requirements for manksofting hazardous waste.</li> <li>ARM 17.54.416 et see, Labeling requirements for marksofting mazardous waste.</li> <li>ARM 17.54.416 et see, Labeling requirements for marksofting mazardous waste.</li> <li>ARM 17.54.416 et see, Labeleng requirements for marksofting mazardous waste.</li> <li>AP CFR Part 172, Labeleng requirements.</li> <li>Yes No</li> <li>Yes</li></ul>	seq. Options for managing	treatment, storage, or disposal (TSD) facility? If no - CEGs also have the option to dispose of their hazardous waste at a legitimate recycling facility or a licensed Class II (municipal) solid waste management facility if the waste <i>is</i> a solid waste and the owner/operator of the facility will accept the waste. Contact the DEQ Air and Waste	Yes No
<ul> <li>Requires generators to apply for an EPA Identification Number.</li> <li>ARM 17.54.408 et seq. General requirements for manifesting hazardous waste, do you have a manifest?</li> <li>10. If you have hazardous waste, do you have a manifest?</li> <li>11. If you plan to transport or have someone else transport your hazardous waste, you need to manifest that waste. Maintain copies for your records. Contact the DEQ Air and Waste Management Bureau at (406) 444-3490 for a form.</li> <li>ARM 17.54.415 et seq. Packaging requirements for transporting hazardous waste.</li> <li>ARM 17.54.415 et seq. Packaging requirements for packaging waste.</li> <li>49 CFR Parts 173, 178, and 179 Federal requirements for packaging waste.</li> <li>ARM 17.54.416 et seq. Labeling requirements for packaging hazardous waste.</li> <li>49 CFR Part 172, Waste.</li> <li>40 CFR Part 172, Waste.</li> <li>41 for - You may be out of compliance. Contact the Federal Highway Administration at (406) 441-1220 for more information on state/federal waste.</li> <li>49 CFR Part 172, Waste.</li> <li>40 CFR Part 172, Waste.</li> <li>41 for - You may be out of compliance. Contact the Federal Highway Administration at (406) 441-1220 for more information on state/federal Highway Administration at (406) 441-1220 for more information on state/federal Highway Administration at (406) 441-1220 for more information on state/federal Highway Administration at (406) 441-1220 for more information on state/federal Highway Administration at (406) 441-1220 for more information on state/federal Highway Administration at (406) 441-1220 for more information on state/federal Highway Administration at (406) 441-1220 for more information on state/federal Highway Administration at (406) 441-1220 for more information on state/federal Highway Administration at (406) 441-1220 for more</li></ul>	seq. Options for managing	<ul><li>you contacted your local wastewater treatment plant (WWTP) to see what wastes can be disposed of down the drain?</li><li>If no - WWTPs can handle many types of waste; however, too much or too strong a load could affect their plant. Always contact your WWTP operator prior to disposing of liquid wastes. Never pour chemicals down the drain if you are on a septic system -the chemicals could harm your system or contaminate the drain field and groundwater. You may also be</li></ul>	Yes No
General requirements for manifesting hazardous waste for transport.transport hazardous waste, do you have a manifest?If no - If you plan to transport or have someone else transport your hazardous waste, you need to manifest that waste. Maintain copies for your records. Contact the DEQ Air and Waste Management Bureau at (406) 444-3490 for manifest forms.Yes NoARM 17.54.415 et seq. Packaging requirements for transporting hazardous waste.11. If you ship your hazardous waste off-site, is the waste packed according to U.S. Department of Transportation requirements?Yes No49 CFR Parts 173, T78, and 179 Federal requirements for packaging waste.12. If you ship your hazardous waste off-site, are the containers labeled according to U.S. Department of Transportation requirements.Yes No49 CFR Part 172, Subert EIf no - You may be out of compliance. Contact the Federal Highway Administration at (406) 441-1220 for more information on state/federal packaging to U.S. Department of Transportation requirements?Yes No49 CFR Part 172, Subert EIf no - You may be out of compliance. Contact the Federal Highway Administration at (406) 441-1220 for more information on state/federal packaging to U.S. Department of Transportation requirements?Yes No	Requires generators to apply for an EPA	If no - If you plan to ship hazardous waste to a treatment, storage, or disposal (TSD) facility or you are a SG or LG, you must have <i>an</i> EPA Identification Number. Contact the DEQ Air and Waste Management	Yes No
<ul> <li>Packaging requirements for transporting hazardous waste.</li> <li>49 CFR Parts 173, 178, and 179 Federal requirements for packaging waste.</li> <li>ARM 17.54.416 et seq Labeling requirements for transporting hazardous waste.</li> <li>49 CFR Part 172, Subsert F.</li> </ul>	General requirements for manifesting hazardous	transport hazardous waste, do you have a manifest? If no - If you plan to transport or have someone else transport your hazardous waste, you need to manifest that waste. Maintain copies for your records. Contact the DEQ Air and Waste Management Bureau at	Yes No
Labeling requirements for transporting hazardous waste.Iabeled according to U.S. Department of Transportation requirements?49 CFR Part 172, Subpart FIf no - You may be out of compliance. Contact the Federal Highway Administration at (406) 441-1220 for more information on state/federal	Packaging requirements for transporting hazardous waste. 49 CFR Parts 173, 178, and 179 Federal requirements for	according to U.S. Department of Transportation requirements? If no - You may be out of compliance. Contact the Federal Highway Administration at (406) 441-1220 for more information on state/federal	Yes No
Federal labeling poisonous) requirements.	Labeling requirements for transporting hazardous waste. 49 CFR Part 172, Subpart E	<ul><li>labeled according to U.S. Department of Transportation requirements?</li><li>If no - You may be out of compliance. Contact the Federal Highway Administration at (406) 441-1220 for more information on state/federal labeling (describes the materials characteristics, such as flammable or</li></ul>	Yes No

REGULATION	QUESTION		
ARM 17.54.417 <i>et seq.</i> Marking requirements for transporting hazardous waste.	13. Before shipping your hazardous waste off-site, are your containers marked according to U.S. Department of Transportation requirements?	Yes	No
49 CFR Part 172, Subpart D Federal marking requirements.	If no - You may be out of compliance. Contact the Federal Highway Administration at (406) 441-1220 for more information on state/federal marking (such as the material's identification number) requirements.		
ARM 17.54.418 et <i>seq.</i> Placard requirements for transporting hazardous waste.	14. If you transport your own hazardous waste off-site, is the vehicle placarded according to U.S. Department of Transportation requirements?	Yes	No
49 CFR Part 172, Subpart F Federal placard requirements.	If no - You may be out of compliance. You need to have the appropriate placards posted on the sides of the vehicle. Contact the Federal Highway Administration at (406) 441-1220 for more information on state/federal placard requirements.		
ARM 17.54.421(1) LG requirements for accumulation of wastes.	15. If you are a large generator (LO), do you monitor how much hazardous waste you accumulate on-site before it is removed?	Yes	No
	If no - You may be out of compliance. If you are a LG, you may store your hazardous waste on-site for no more than 90 days before it has to be removed. Contact the DEQ Air and Waste Management Bureau at (406) 444-3490 for assistance.		
ARM 17.54.421(2) SG requirements for accumulation of wastes.	16. If you are a small generator (SG), do you monitor how much hazardous waste you accumulate on-site before it is removed?	Yes	No
	If no - You may be out of compliance. To help keep your SG status, never accumulate more than 13,200 lbs (6,000 kg) of hazardous waste on-site for up to 180 days (or 270 days if waste has to be transported over 200 miles or 322 kilometers) before it is removed. Contact the DEQ Air and Waste Management Bureau at (406) 444-3490 for assistance.		
ARM 17.54.421(4) <i>et</i> seq. Storage requirements for	17. If you are a SG or LG, do you store your hazardous waste in labeled and properly dated containers or tanks?	Yes	No
hazardous waste.	If no - You may be out of compliance. Contact the DEQ Air and Waste Management Bureau at (406) 444-3490 for assistance.		
	Pollution Prevention Tip: /t's a good idea for a// businesses to follow these storage procedures to prevent pollution. Store only compatible wastes together. Regularly check containers for leaks, cleaning them up right away. Keep lids closed and store waste in a locked storage area.		
ARM 17.54.421(4) et seq. Storage requirements for	16. If you are a SG or LG, do you have an emergency response plan?	Yes	No
hazardous waste.	If no - You may be out of compliance. Contact the DEQ Air and Waste Management Bureau at (406) 444-3490 for assistance.		
	Pollution Prevention Tip: All your employees should be familiar with your emergency response plan and know what they should do in case of an emergency.		

REGULATION	QUESTION		
ARM 17.54.421(7) et seq. Satellite accumulation	19. If you store hazardous waste next to where you produce it, do you watch how much you accumulate?	Yes	No
requirements.	If no - You may be out of compliance. Large and small generators may accumulate as much as 55 gallons (208 liters) of hazardous waste or 1 quart (.95 liters) of acute hazardous waste in containers at or near the location where it is produced without a permit or being subject to time and waste quantity limits as long as the containers are labeled.		
ARM 17.54.421(9) Requirements for keeping up a logbook.	20. If you are a SG or LG that accumulates hazardous waste on-site, do you keep a logbook?	Yes	No
	If no - You may be out of compliance. To ensure compliance with accumulation requirements, you must keep a logbook that lists the hazardous waste generated per month, the quantity, the EPA hazardous waste number (i.e., F002), and which wastes were removed.		
ARM 17.54.425 et seq. Recordkeeping requirements.	21. If you generate hazardous waste, do you keep records of waste generated and copies of manifests, tests, and annual reports?	Yes	No
	If no - You may be out of compliance. Small Generators (SG) and Large Generators (LGs) must keep a copy of manifests, annual reports, and test results for at least three years. It is strongly recommended that Conditionally Exempt Generators (CEGs) comply with these requirements as well.		
ARM 17.54.426 et seq. Annual reporting requirements.	22. If you ship your hazardous waste off-site to a TSD facility, do you submit an annual report to the DEQ?	Yes	No
	If no - You may be out of compliance. An annual report is required of SGs and LGs if they ship hazardous waste off-site. The report should include at least your name, address, and EPA Identification Number; the name, address, and EPA Identification Number for each TSD facility used; the name and EPA Identification Number of each transporter used; and the types and quantities of waste generated. It is strongly recommended that CEGs comply with these requirements as well.		
ARM 17.54.440 Exemption for farmers with waste pesticides.	23. If you are a farmer, do you have waste pesticides that are hazardous' waste?	Yes	No
	If yes - Farmers are exempt from hazardous waste regulations provided the empty pesticide containers are triple-rinsed and the pesticide residues are disposed of on your own farm according to the directions on the container label.		
ARM 17.54.311 et <i>seq.</i> Universal waste	24. Do you have any universal waste on-site?	Yes	No
management.	If yes - Universal wastes include dry cell batteries, spent electric light tubes/bulbs, certain waste pesticides, and mercury-containing thermostats. By definition, universal wastes must be recycled. For assistance, contact the DEQ Air and Waste Management Bureau at (406) 444-3490.		

REGULATION	QUESTION	
ARM 17.54.309 et seq. Used oil management requirements.	25. Do you have used oil to get rid of? If yes - To prevent your used oil from becoming a hazardous waste, do not mix it with other wastes, such as cleaning solvents. Keep it in labeled and dated containers. The best management practices for off- specification used oil are to burn it for heat recovery in an approved used oil space heater or utility boiler, or take it to a local recycler. Regulations prohibit businesses from applying used oil as a road dust suppressant or disposing of it in a licensed solid waste management facility. For more information on used oil recycling, contact the Montana Pollution Prevention Program at (406) 994-3451 or the DEQ Air and Waste Management Bureau at (406) 444-3490.	Yes No
Section 75-10-451, MCA Requires halogenated solvent users to register with DEQ.	<ul><li>26. If you use 20 gallons (76 liters) or more per year of halogenated solvents for commercial or government purposes, have you registered with the DEQ?</li><li>If no - You may be out of compliance. You cannot use 20 gallons (76 liters) or more per year of halogenated solvents without being registered with the DEQ. You cannot sell or distribute 20 gallons (76 liters) or more per year of halogenated solvents unless the purchaser is registered with the DEQ. For more information, contact the DEQ Air and Waste Management Bureau at (406) 444-3490.</li></ul>	Yes No
	<ul><li>27. Have you checked with your local/county health department to see if there are any locally enforced hazardous waste laws or regulations you should be following?</li><li>If no - To be sure you are in compliance with all the applicable local/county laws or regulations, contact your local health department.</li></ul>	Yes No
	<ul><li>28. Have you checked with the EPA to see if there are any federally enforced hazardous waste laws or regulations you should be following?</li><li>If no - To be sure you are in compliance with all the applicable federal laws and regulations, contact the EPA-Montana Office at (406) 441-1130.</li></ul>	Yes No
	<ul><li>29. Are you interested in receiving a free business-specific <i>environmental audit checklist?</i></li><li>If yes - To help businesses comply with regulations specific to their industry, the Montana Pollution Prevention Program has developed a number of environmental audits for specific business types. For more information, contact the Montana Pollution Prevention Program at (406) 994-3451.</li></ul>	Yes No

#### POTENTIALLY APPLICABLE RULES & REGULATIONS

- Section 75-10-401 et seq., MCA Montana Hazardous Waste Act (state)
- Section 75-10-451, MCA Halogenated Solvent Users Registration Act (state)
- ARM 23.7.111 et seq. Uniform Fire Code (state)
- ARM 17.54.101 et seq. Hazardous Waste Management (state)
- ARM 17.54.309 et seq. Used Oil Management (state)

- ARM 17.54.311 et seq. Universal Waste Management (state)
- 40 CFR Part 261 et seq. Hazardous Waste Management (federal)
- 40 CFR Part 273 et seq. Universal Waste Management (federal)
- Emergency Planning and Community Right-to-Know Act of 1986 (federal) 40 CFR Part 355 Section 301-303 Emergency planning
  - 40 CFR Part 355 Section 301-303 Emergency planning 40 CFR Part 355 Section 304 - Emergency release notification
  - 40 CFR Part 355 Section 311-312 Community right-to-know reporting requirements
  - 40 CFR Part 355 Section 313 Toxic chemical release reporting emissions inventory
- 49 CFR Part 172, Subpart D Marking requirements for transporting hazardous waste (federal)
- 49 CFR Part 172, Subpart E Labeling requirements for transporting hazardous waste (federal)
- 49 CFR Part 172, Subpart F Placard requirements for transporting hazardous waste (federal)
- 49 CFR Parts 173, 178, and 179 Packaging requirements for transporting hazardous waste (federal)

#### SOURCES OF ASSISTANCE

- EPA Montana Office 301 South Park, Drawer 10096 Helena, Montana 59626 (406) 441-1130
- Gretchen Rupp, P.E. Environmental Engineer/Specialist MSU Extension Service P.O. Box 173580 Bozeman, Montana 59717-3580 (406) 994-1748
- Local Health Department Check your local telephone directory
- Local Sanitarian's Office Check your local telephone directory
- Local Wastewater Treatment Plant Check your local telephone directory

- MT Department of Environmental Quality Air and Waste Management Bureau P.O. Box 200901 Helena, Montana 59620-0901 (406) 444-3490 (main number)
- RCRA/Superfund Hotline (800) 424-9346
- U.S. Department of Transportation Federal Highway Administration 301 South Park, Drawer 10096 Helena, Montana 59626 (406) 441-1220

Your Additional Questions:

Hazardous Waste - Page 18

## Environmental Audit: Solid Waste

#### DEFINING SOLID WASTE

Solid waste can be defined as all putrescible and non-putrescible wastes, including garbage, ashes, construction and demolition wastes, dead animals, tires, appliances, concrete, and wood waste. In general, solid waste does not include regulated hazardous waste (see *Part 2. Environmental Audit: Hazardous Waste* for more information), sewage, wastewater, mining wastes, and forestry slash. Wastes meeting the definition of a solid waste are regulated under the Solid *Waste Management Act (Montana Codes Annotated [MCA])* and the associated *Administrative Rules of Montana (ARM)* by the Montana Department of Environmental Quality (DEQ) Community Services Bureau (Waste Management Section).

#### SOLID WASTE MANAGEMENT OPTIONS

In Montana, there are a number of management options available for small business solid waste. Businesses can take steps to avoid producing waste in the first place (referred to as pollution prevention) or reuse or recycle leftover materials to reduce waste generation. As a last resort, businesses can dispose of waste in a licensed solid waste management facility.

#### Pollution Prevention

Pollution prevention (also known as waste reduction or source reduction) involves the on-going examination of how a business operates with the goal of minimizing all types of waste produced. If you don't produce waste in the first place, you don't have to spend time and money to store and dispose of it properly. At this time, there are no laws or regulations requiring small businesses to practice pollution prevention; however, pollution prevention helps create a safe work environment, reduces your operating costs, and protects Montana's air, water, and soil.

#### Reuse

Reusing leftover material is a sensible way to reduce the amount of waste you have to dispose of. You can reuse materials on-site or find another business that could reuse your leftover materials. The Montana Material Exchange (MME) is a program designed to help businesses reuse materials. The MME is coordinated by the MSU Extension Service Solid Waste and Pollution Prevention Programs in cooperation with the Montana Chamber of Commerce. By advertising lists of available and wanted materials, the MME matches businesses having unneeded but usable materials with businesses that can use the materials. For more information, contact the MME at (406) 994-3451. At this time, there are no laws or regulations requiring businesses to reuse leftover material.

#### Recycle

The recycling of waste material is also an option for businesses in Montana. Recycling can involve the collection, storage, sorting, crushing, shredding, baling, bulking, or chipping of recyclable material. Most businesses throughout the state can recycle glass, plastics, cardboard, newspaper, office paper, metal, used oil, antifreeze, or yard waste (via composting). There are over 100 private and non-profit recycling centers in over 59 cities and towns in Montana. Due to the constantly changing market for recyclables, what is recyclable and how much you are paid (if anything) for your recyclables can vary from week to week. At this time, there are no laws or regulations requiring businesses to recycle

waste material. However, if you recycle material on-site, you may need to comply with particular solid waste laws and regulations discussed in the following checklist.

#### Disposal

While pollution prevention, reuse, and recycling all play a role in solid waste management in Montana, most solid waste is landfilled.

The major types of solid waste management facilities licensed by the DEQ Community Services Bureau include:

- Class II Solid Waste Management Facilities Transfer stations, incinerators, or landfills designed to accept all types of solid waste: municipal waste, non-hazardous industrial wastes, inert materials, construction and demolition wastes, and asphalt. Note *that rural solid waste container sites are regulated by their particular county government.*
- Class III Solid Waste Management Facilities Landfills designed to accept inert materials such as rock, soil, untreated wood waste, and tires. Another example is a burn site licensed to accept only untreated wood waste.
- Class IV Solid Waste Management Facilities Landfills designed to accept only inert materials, construction and demolition wastes, and asphalt. No residential or industrial waste is allowed, Class IV facilities are regulated almost as stringently as Class II facilities.
- Large Composting Facilities Cornposting operations that are over two acres in size, accept over 10,000 cubic yards of yard waste plus sewage sludge and other wastes, and produce more than 1,000 tons of finished product annually. Small Composting Facilities are smaller in size, accept only yard waste, produce less than 1,000 tons of compost, and are required only to be registered (but not licensed) with the DEQ.
- Solid Waste Management System Soil Treatment Facilities Also known as landfarms, these facilities are designed to bioremediate petroleum-contaminated soils from underground or aboveground storage tank leaks or gasoline spills and sump solids from vehicle service station shops and car washes.

#### TERMS ASSOCIATED WITH SOLID WASTE

Ballast - A transformer found in fluorescent light fixtures. Older ones may contain polychlorinated biphenyls (PCBs)

Capacitor - A small device used to store electrical charge that allows motors to run more efficiently. Capacitors containing PCBs may be found in air conditioners, furnaces, and ballasts made prior to 1978.

Chlorofluorocarbons (CFCs) - A group of synthetic compounds that contain chlorine, fluorine, and carbon. Used as a cooling agent in refrigeration devices and in aerosol propellants and insulation.

Compost - The controlled microbial decomposition of organic matter, such as yard waste and food scraps, in the presence of oxygen into a humus- or soil-like material.

Container Site - A location with refuse containers for the collection of solid waste generated by more than one household or firm. Generally open to the public, container sites collect more than 10 cubic yards of solid waste.

Disposal (in terms of solid waste) - The discharge, injection, deposit, dumping, spilling, leaking, or placing of any solid waste into or onto the land so that the solid waste or any constituent of it may enter the environment or be emitted into the air or discharged into any water system.

Hydrochlorofluorocarbons (HCFCs) - A group of synthetic compounds containing chlorine, fluorine, carbon, and hydrogen, developed to replace CFCs.

#### **TERMS ASSOCIATED WITH SOLID WASTE, continued**

- Incineration -The controlled burning of municipal solid waste to reduce volume and, in some cases, to recover energy.
- Infectious Medical Waste Waste capable of producing infectious disease. Infectious waste includes human pathological waste, sharps, cultures and stocks of infectious agents, and waste human blood.
- Landfarm Using a combination of oxygen, moisture content, temperature, and naturally-occurring soil microorganisms to break down contaminants in soil.
- Landfill -The disposal of solid waste at engineered facilities in a series of compacted layers on land and the daily covering of the waste with soil. Fill areas are managed in such a way as to prevent nuisances or public health hazards. There are three types of landfills licensed in Montana: Class II (mixed municipal solid waste), Class III (inert wastes such as dirt and rock), and Class IV (construction and demolition waste).
- Leachate -A liquid that has entered, passed through, or emerged from solid waste.
- Pollution Prevention The design, manufacture, purchase, or use of materials to reduce the amount or toxicity of waste.
- Recycle The process by which materials are collected, reprocessed or remanufactured, and reused.
- Polychlorinated biphenyls (PCBs) A group of synthetic organic compounds used for a variety of industrial applications due to their stability, resistance to corrosion, and inertness. PCBs are highly persistent in the environment, which leads to accumulation in the food chain.
- Reuse The use of a material more than once in its same form, either for the same purpose or for a different purpose.
- Run-off Any rainwater, leachate, or other liquid that drains over the land from any part of a facility.
- Run-on -Any rainwater, leachate, or other liquid that drains over the land onto any part of a facility.
- Solid Waste All putrescible and non-putrescible wastes, including garbage, rubbish, sludge from sewage treatment plants, dead animals, appliances, construction and demolition debris, and wood waste,
- Source Reduction See "Pollution Prevention."
- Storage The actual or intended containment of wastes, either on a temporary basis or for a period of years.
- Transfer Station A solid waste management facility that can have a combination of structures, machinery, or devices, where solid waste is taken from collection vehicles (public, commercial, or private) and placed in other transportation units for movement to another solid waste management facility.
- Waste Reduction (Minimization) See "Pollution Prevention."
- Waste Tire Means a tire that is no longer suitable for its original intended purpose because of wear, damage, or defect.
- White Goods Discarded appliances, such as refrigerators, freezers, ranges, water heaters, and air conditioners.
- Yard Waste Leaves, grass clippings, prunings, and other natural organic matter discarded from yards, gardens, parks, etc.

#### CHECKLIST INSTRUCTIONS

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For each applicable question, circle the appropriate answer (yes, no, or nor applicable) for your particular situation. Use the blank spaces to write notes and comments.

#### Tips For Success

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- Write down what you see (or don't see) and what you think you should do about it.
- If you have any questions contact the DEQ for assistance.

QUESTION REGULATION Yes No 1. If you dispose of solid waste on your business property, do you Section 75-10-221(I), have a solid waste management facility license? MCA License requirements for solid waste disposal on-site. If no - You may be out of compliance. Contact the DEQ Community Services Bureau at (406) 444-4400 for more information. Yes No 2. If you compost waste from your business on-site, have you ARM 17.50.412(2)-(3) Composting permit and checked to see if you need to register with the DEQ or obtain a license requirements. license? If no - You may be out of compliance. If you are a small composting operation, composting only yard waste in a designated area less than two acres, you may need to register with the DEQ Community Services Bureau. Large composters who compost sewage sludge and yard waste in an area larger than two acres, and produce large quantities of compost (more than 1,000 tons), must be licensed with the DEQ Community Services Bureau (444-4400). ARM 17.50.412(5) 3. If you store, recycle, recover, or dispose of waste tires on your Yes No Tire management and business property, do you have a solid waste management license requirements facility license? discussed. If no - You may be out of compliance. Used tire management must be at a licensed solid waste management facility. For more information, contact the DEQ Community Services Bureau at (406) 444-4400. 4. Does your business produce petroleumcontaminated soils Yes No (from leaking underground storage tanks)? If yes - If the petroleum contamination has impacted or could impact surface water or groundwater, contact the DEQ Water Protection Bureau at (406) 444-3080 right away. Contaminated soils may be landfarmed onsite or at a permitted landfarm site. Contact the DEQ Hazardous Waste Site Cleanup Bureau at (406) 444-5970 for more information (see Part 5. Environmental Audit: Underground Storage Tanks). Pollution Prevention Tip: Regularly monitor aboveground and underground storage tanks to prevent leaks and spills from contaminating soil and possibly threatening surface water and groundwater supplies. 5. Does your business produce sump solids (such as from car washes and service shops)? If yes - Sump solids must be tested to determine if hazardous or not. If non-hazardous, sump solids may be landfarmed on-site or at a permitted landfarm site. Hazardous sump solids must be disposed of as a hazardous waste. Contact the DEQ Hazardous Waste Site Cleanup Bureau at (406) 444-5970 for more information. Pollution Prevention Tip: Regularly monitor sumps to prevent unwanted chemicals from being dumped into them.

REGULATION	QUESTION		
Section 75-10-1006(2), MCA License requirements for generators of infectious waste.	<ol> <li>If you are in the health care profession and transport or dispose of infectious waste, do you have the proper license or permit?</li> <li>If no - You may be out of compliance. Infectious waste is considered a solid waste capable of producing infectious disease. Therefore, health care facilities that transport or dispose of medical waste may need to obtain a permit to manage their wastes. Contact the DEQ Community Services Bureau at (406) 444-4400 for assistance.</li> </ol>	Yes	No
Section 75-10-1005 et <i>seq.</i> , MCA Proper procedures for managing infectious waste.	<ul> <li>7. If you are in the health care profession, do you know how to properly manage your infectious waste?</li> <li>If no - You may be out of compliance. Infectious waste must be separated from ordinary waste at the point of origin and stored in separate, distinct containers with bio-hazard warning labels until the waste is rendered non-infectious. For more information, contact the DEQ Community Services Bureau at (406) 444-4400.</li> </ul>	Yes	No
ARM 17.50.511(1)(m) (I), et <i>seq.</i> Prohibiting of fluids from solid waste management facilities.	<ol> <li>Are you aware that bulk liquid waste from businesses are not allowed in solid waste management facilities?</li> <li>If no - You may be out of compliance. If you have non-hazardous liquid waste and don't know how to dispose of it, contact your local solid waste management firm or your local wastewater treatment plant (see local telephone directory).</li> </ol>	Yes	No
	<ul> <li>9. Have you checked with your local/county health department to see if there are any locally enforced solid waste laws or regulations you should be following?</li> <li>If no - To be sure you are in compliance with all the applicable local/county laws or regulations, contact your local health department.</li> </ul>	Yes	No
40 CFR Part 61.112 et <i>seq.</i> National Emissions Standards for Hazardous Air Pollutants section about asbestos management.	<ul> <li>IO. Does your business have asbestos-containing material, such as asbestos ceiling panels or insulation, to be disposed of?</li> <li>If yes - There are two types of asbestos: friable and non-friable. Friable asbestos (crumples with hand pressure and is likely to emit fibers) can cause cancer and respiratory diseases. It requires special handling and disposal. Prior to disposal, contact your solid waste management firm to see if they have any special handling or disposal instructions. Non-friable asbestos (does not emit airborne fibers unless sanded or cut) usually does not require special handling or disposal. However, you should contact your solid waste management firm for disposal suggestions. For more information, contact the DEQ Air and Waste Management Bureau at (406) 444-3490.</li> </ul>	Yes	No
40 CFR Part 761 et <i>seq.</i> Toxic Substances Control Act section about PCB management.	<ul><li>11. Does your business produce waste containing polychlorinated biphenyls (PCBs), such as small capacitors or ballasts?</li><li>If yes -Wastes containing PCBs or radioactive materials require special handling due to their potential to harm human health and the environment. They are regulated as a special waste by the EPA. For more information call the EPA-Montana Office at (406) 441-1130.</li></ul>	Yes	No

REGULATION	QUESTION		
	12. Do you have clean fill to be disposed of?	Yes	No
	If yes - Clean fill can be dirt, sand, gravel, rocks, and rebar-free concrete. You will not need a solid waste management license as long as this clean fill is emplaced free of charge to the person placing the fill, in order to adjust or create topographic irregularities for agricultural or construction purposes. Asphalt, wood, and mixed construction debris are not clean fill.		
ARM 4.10.801 et <i>seq.</i>	13. Do you have waste pesticides to dispose of?	Yes	Nc
Empty pesticide container regulations. 7 USC Section 1, et <i>seq.</i> Federal Insecticide, Fungicide, and Rodenticide Act.	If yes - Waste pesticides cannot be disposed of in solid waste management facilities. They are regulated by the EPA under the Federal Insecticide, Fungicide, and Rodenticide Act. For more information, contact the EPA - Montana Office at (406) 441-1130. To help Montanans dispose of waste pesticides, the Montana Department of Agriculture holds waste pesticide collection events throughout the state. For more information, call (406) 444-2944.		
	Empty, triple-rinsed waste pesticide containers, if not reusable or recyclable in your area, can be disposed of in a licensed Class II solid waste management facility.		
	14. Do you keep solid non-hazardous and hazardous wastes separated?	Yes	No
	If no - By keeping hazardous waste separated from non-hazardous waste, you can prevent cross-contamination and reduce your hazardous waste disposal costs.		
	15. Do you have a recycling area in your business?	Yes	Nc
	If yes - To encourage recycling, locate recycling bins in visible and accessible locations throughout your business. Separate recyclables for easier recycling. Be careful not to contaminate recyclables or they may be rejected by the recycler.		
	16. Do you stockpile used automotive batteries for recycling?	Yes	No
	If yes - To prevent the acid from leaking out of stored batteries and potentially causing a worker safety hazard or polluting the environment, store batteries upright in a secure, covered location designed to contain spills and leaks. And don't store the batteries for too long (over six months) before recycling them.		
ARM 17.50.511(2)(i)	17. Do you have appliances to dispose of?	Yes	No
Requirement that landfills cannot violate the Clean Air Act 40 CFR Parts 50-99, Title VI Clean Air Act Section about CFCs.	If yes - Appliances are recyclable in Montana. Contact your local recycler, landfill, motor vehicle recycling center, or scrap dealer prior to disposal. Refrigerators may contain chlorofluorocarbons (CFCs) or small PCB capacitors that are regulated by the EPA. A release of CFCs into the environment is illegal in Montana; consequently the CFCs must be removed by an EPA-certified remover prior to recycling or disposal. For more information, contact the EPA - Montana Office at (406) 441-1130.		

ARM 17.54.309 *et seq.* Used oil management requirements. QUESTION

18. Do you have used oil to get rid of?

If yes - The best management practices for off-specification used oil are to burn it for heat recovery in an approved used oil space heater or utility boiler, or take it to a local recycler. Regulations prohibit businesses from applying used oil as a road dust suppressant or disposing of it in a licensed solid waste management facility. For more information on used oil recycling, contact the Montana Pollution Prevention Program at (406) 994-3451 or the DEQ Air and Waste Management Bureau at (406) 444-3490.

19. Do you have waste cooking fats to get rid of? Yes No

If yes - Waste shortening and cooking oils should be saved for refining. Contact your county sanitarian for a grease hauler in your area. Most solid waste management facilities prefer not to accept liquid cooking fats because they attract rodents and insects; therefore you should contact your local disposal facility for assistance. Don't pour cooking fat down the drain - it could be prohibited in some sewer districts (may cause problems for the wastewater treatment plant) and it could clog drains.

20.	Do	you	have	covered	garbage	containers?	Yes	No	2
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If no - To help reduce the chance of potentially hazardous liquid run-off from flowing out of your trash, keep precipitation and other liquids out of your garbage. Keep your bin lids shut or the bins under an overhang. Covered containers can also discourage insects and rodents.

21. Are you reusing or recycling as many materials or waste items Yes No as possible in your community?

If no - To reduce your waste disposal costs, try to reuse and recycle as much materials as possible. Contact the Montana Material Exchange at (406) 994-3451, your local second-hand stores, or community groups if you have any usable, leftover materials you would like to get rid of.

22. Are you interested in receiving a free business-specific Yes No environmental audit checklist?

If yes - To help businesses comply with regulations specific to their industry, the Montana Pollution Prevention Program has developed a number of environmental audits for specific business types. For more information, contact the Montana Pollution Prevention Program at (406) 994-3451.

#### POTENTIALLY APPLICABLE RULES & REGULATIONS

- Local Solid Waste Ordinances
- Section 75-10-201 et seq., MCA Solid Waste Management Act (state)
- Section 75-10-1001 et seq., MCA Infectious Waste Management Act (state)
- ARM 4.10.801 et seq. Rinsing and Disposing of Pesticide Containers (state)
- ARM 17.54.309 et seq. Used Oil Management (state)
- ARM 17.50.401 et seq. Solid Waste Management License and Operation (state)
- ARM 17.50.501 et seq. Refuse Disposal (state)

Yes No

- Resource Conservation and Recovery Act (federal)
- 40 CFR Part 61.112 et seq. National Emission Standards for Hazardous Air Pollutants (federal)
- 40 CFR Part 761 et seq. Toxic Substance Control Act (federal)
- 40 CFR Part 50-99, Titles I-VI Clean Air Act (federal)
- 7 USC Section 1, et seq. Federal Insecticide, Fungicide, and Rodenticide Act (federal)
- 29 CFR Part 1910.1030 et seq. Occupational Exposure to Bloodborne Pathogens Standards (federal)

#### SOURCES OF ASSISTANCE

- ☎ EPA Montana Office 301 South Park, Drawer 10096 Helena, Montana 59626 (406) 441-1130
- Local County Health Department Check your local telephone directory
- Local Sanitarian's Office Check your local telephone directory
- MT Department of Agriculture Agricultural Science Division
   P.O. Box 200201
   Helena, Montana 59620-0201
   (406) 444-2944
- MT Department of Environmental Quality P.O. Box 200901 Helena, Montana 59620-0901 Air and Waste Management Bureau (406) 444-3490 Community Services Bureau (406) 444-4400 Hazardous Waste Site Cleanup Bureau (406) 444-5970 Leak Reporting Hotline (800) 457-0568

- MT Department of Public Service Regulation Public Service Commission 1701 Prospect Avenue, Vista Building Helena, Montana 59620-2601 (406) 444-6199
- MT State University Extension Service P.O. Box 173580 Bozeman, Montana 59717-3580 Montana Pollution Prevention Program (888) 678-6872 (toll-free in MT) (406) 994-3451 Solid Waste Institute of Montana (406) 994-3451
- OSHA-Billings Area Office
   2900 Fourth Avenue North
   Billings, Montana 59102
   (800) 488-7087
   (406) 247-7494
- RCRA/Superfund Hotline (800) 424-9346

Your Additional Questions:

# Environmental Audit: Vehicle Recycling & Disposal

#### INTRODUCTION

If your business handles junk motor vehicles, there may be specific compliance issues that you should be familiar with. These particular laws and rules will be discussed in the following checklist. In Montana, junk motor vehicles are regulated by the Montana Department of Environmental Quality (DEQ) Community Services Bureau under *the Motor Vehicle Recycling and Disposal Act (Montana Codes Annotated [MCA])* and the associated Administrative Rules of Montana (ARM).

#### **TERMS ASSOCIATED WITH VEHICLE RECYCLING & DISPOSAL**

Chlorofluorocarbons (CFCs) - A group of synthetic compounds that contain chlorine, fluorine, and carbon Used as a cooling agent in refrigeration devices and in aerosol propellants and insulation.

- Component Part Means any identifiable part of a discarded, ruined, wrecked, or dismantled motor vehicle, including fenders, hoods, doors, frames, and tires.
- Junk Vehicle Means a discarded, ruined, wrecked, or dismantled motor vehicle, including component parts, that is not legally and validly licensed and remains inoperative or incapable of being driven.
- Shielding Means the construction or use of fencing or humanmade or natural barriers to conceal junk vehicles from public view.

Wrecking Facility - A facility buying, selling, or dealing in four or more vehicles per year, of a type required to be licensed, for the purpose of wrecking or dismantling. It could also be a facility that buys or sells component parts of a motor vehicle and deals in secondhand vehicle parts.

#### CHECKLIST INSTRUCTIONS

This checklist was designed to offer small business owners and managers insight into areas regulatory inspectors tend to focus on during an inspection. Applicable regulations have been cited to the left of each question. Although the questions without a legal reference may not be legally required, we strongly encourage you to read these questions for the suggestions or recommendations they address.

For each applicable question, circle the appropriate answer (yes, *no*, or *not applicable*) for your particular situation. Use the blank spaces to write notes and comments.

#### Tips For Success

- Don't spend time on items that obviously have no application to your business.
- Be sure to talk to your co-workers and review files when answering some of these questions -- leave nothing to memory or chance.
- Write down what you see (or don't see) and what you think you should do about it.
- If you have any questions contact the DEQ for assistance.

(Circle Appropriate Answer)

REGULATION	QUESTION			
Section 75-10502 and 511, MCA License requirements.	you have a motor vehicle wrecking facility license?			
	If no - You may be out of compliance. A person may not operate a motor vehicle wrecking facility or a motor vehicle graveyard without a license issued by the DEQ Community Services Bureau. For assistance call (406) 444-4400.			
Section 75-10-505, MCA and ARM	2. If you possesses one or more junk vehicles, are the vehicles shielded from public view?	Yes No		
17.50.202 et seq. Shielding and removal of junk vehicles requirements.	If no - You may be out of compliance. Any person possessing one or more junk vehicles, regardless of ownership, must shield the vehicles from public view or haul them to a licensed motor vehicle wrecking facility or vehicle graveyard. Shielding includes natural barriers as well as fencing or other humanmade barriers designed to conceal vehicles from public view.			
	3. Have you checked with your local/county health department to see if there are any locally enforced motor vehicle laws or regulations you should be following?	Yes No		
	If no - To be sure you are in compliance with all the applicable local/county laws or regulations, contact your local health department.			
	4. Are you interested in receiving a free business-specific environmental audit checklist?	Yes No		
	If yes - To help businesses comply with regulations specific to their industry, the Montana Pollution Prevention Program has developed an environmental audits for automotive repair shops and autobody shops. For copies, contact the Montana Pollution Prevention Program at (406) 994-4451.			

#### POTENTIALLY APPLICABLE RULES & REGULATIONS

- Local Motor Vehicle Ordinances
- Section 75-10-501 et seq., MCA Motor Vehicle Recycling and Disposal Act (state)
- ARM 17.50.201 et seq. Motor Vehicle Recycling and Disposal (state)
- 40 CFR Parts 50-99, Titles I-VI Clean Air Act (federal)

#### SOURCES OF ASSISTANCE

- Local County Health Department Check your local telephone directory
- Local Sanitarian's Office Check your local telephone directory
- MT Department of Environmental Quality Community Services Bureau
   P.O. Box 200901
   Helena, Montana 59620-0901
   (406) 444-4400

 MT State University Extension Service Montana Pollution Prevention Program P.O. Box 173580 Bozeman, Montana 59717-3580 (888) 678-6872 (toll-free in MT) (406) 994-345 1

Vehicle Recycling & Disposal - Page 32

# Environmental Audit: Underground Storage Tanks

#### INTRODUCTION

Tank installation and ownership has become more complicated over the years as our knowledge of the seriousness and scope of leaking underground storage systems increases. If your business stores petroleum or other chemical products in a tank, you should be aware of the compliance issues associated with owning a system, modifying or closing an existing system, or installing a new one. Proper tank system management now can help avert problems later.

Leaking underground storage tank systems can:

- Pollute groundwater -- a leak of one gallon of gasoline can render a million gallons of water undrinkable.
- Go unnoticed for years since the tanks are stored underground.
- Create potential health problems by the inhalation of fumes coming from the leaking tank.
- Create an explosion hazard due to the vapors migrating into buildings or under crawl spaces.
- Cost you thousands of dollars to define the extent of contamination and clean up the problem.

In Montana, the licensing, operation, installation, and removal of underground storage tank systems are regulated by the Montana Department of Environmental Quality (DEQ) Technical Services Bureau. The cleanup of leaking underground storage tank systems is regulated by the DEQ Hazardous Waste Site Cleanup Bureau. Both bureaus have authority under the *Montana Underground Storage Tank Act (Montana Codes Annotated [MCA])* and the *Administration Rules of Montana (ARM)*. Note that aboveground storage systems are regulated by the Montana Department of Justice (State Fire Marshal).

## TERMS ASSOCIATED WITH UNDERGROUND STORAGE TANKS

- Aboveground Storage Tank (AST) -Any one or a combination of tanks used to contain an accumulation of petroleum or petroleum products, the volume of which is 90% or more above ground level.
- Cathodic Protection A technique to prevent corrosion of a metal surface by making that surface the cathode of an electrochemical cell.
- Connected Piping Ail underground piping including valves, elbows, and joints attached to a tank system through which regulated substances flow.
- Free Product Refers to a regulated substance that hasn't dissolved in water (non-aqueous phase liquid).
- installer An individual who is engaged in the business of installation or closure of underground storage tanks.
- Landfarm The use of a combination of oxygen, moisture content, temperature, and naturally-occurring soil microorganisms to break down contaminants in soil.
- Release Any spilling, leaking, discharging, or disposing from a tank system into groundwater, surface water, or soils.

Uniform Fire Code - The edition of the Uniform Fire Code adopted by the state fire marshal (ARM 23.7.111).

#### TERMS ASSOCIATED WITH UNDERGROUND STORAGE TANKS, continued

Underground Storage Tank (UST) - One or a combination of tanks used to contain a regulated substance, the volume of which is 10% or more beneath the surface of the ground, and any underground pipes used to contain or transport a regulated substance and connected to a storage tank.

#### CHECKLIST INSTRUCTIONS

This checklist was designed to offer small business owners and managers insight into areas regulatory inspectors tend to focus on during an inspection. Applicable regulations have been cited to the left of each question. Although the questions without a legal reference may not be legally required, we strongly encourage you to read these questions for the suggestions or recommendations they address.

For each applicable question, circle the appropriate answer (yes, no, or not *applicable*) for your particular situation. Use the blank spaces to write notes and comments.

#### Tips For Success

- Don't spend time on items that obviously have no application to your business.
- Be sure to talk to your co-workers and review files when answering some of these questions -- leave nothing to memory or chance.
- Write down what you see (or don't see) and what you think you should do about it.
- If you have any questions contact the DEQ for assistance.

## Underground Storage Tank Checklist (Circle Appropriate Answer)

REGULATION	QUESTION	
ARM 17.56.902 et seq. Registration requirements for tanks.	1. Using the forms provided by DEQ, have you notified DEQ of all underground tanks and related piping at your business?	Yes No
	If no - You may be out of compliance. Notification forms are required to initially register each of your tanks and piping (including underground piping attached to aboveground storage tanks) with the DEQ Technical Services Bureau ([406] 4445970).	
ARM 17.56.1001 et <i>seq.</i> Registration fee payment schedule.	<ol> <li>Are all registration fees paid for all underground tanks and piping at your business?</li> <li>If no - You may be out of compliance. Annual registration fees must be paid to the DEQ Technical Services Bureau. A registration certificate and tags for your tank(s) are given in receipt of payment. For assistance, contact the DEQ Technical Services Bureau at (406) 444-5970.</li> </ol>	Yes No
ARM 17.56.1200 et seq. License requirements.	<ol> <li>If you install underground storage tank systems, do you have a regular installer license?</li> <li>If no - You may be out of compliance. If you install tank systems, you are required to have a regular installer license from the DEQ Technical Services Bureau. For more information, call (406) 444-5970.</li> </ol>	Yes No
ARM 17.56.1200 et seq. License requirements.	<ul><li>4. If you inspect underground storage tank systems, do you have an inspector license?</li><li>If no - You may be out of compliance. If you inspect tank systems, you are required to have an inspector license from the DEQ Technical Services Bureau. For more information, call (406) 444-5970.</li></ul>	Yes No
ARM 17.56.401 et <i>seq.</i> General requirements for release detection.	<ol> <li>If you own an underground storage tank system, do you have an approved method for detecting releases of stored materials?</li> <li>If no - You may be out of compliance. Owners and operators of new and existing underground storage tank systems must provide a method, or combination of methods, of release detection that can detect a release from any portion of the tank or the connected underground piping.</li> </ol>	Yes No
ARM 17.56.501 et <i>seq.</i> Release reporting, investigation, and confirmation requirements.	<ul> <li>6. If you know of or suspect a release of a regulated substance from your underground storage tank system, have you contacted the DEQ?</li> <li>If no - You may be out of compliance. Owners/operators seeking reimbursement from the Montana Petroleum Tank Release Cleanup Fund must report the existence of a suspected release to the DEQ by telephone within 24 hours. To report a release, call the Leak Reporting Hotline at (800) 457-0568. For more information, contact the DEQ Hazardous Waste Site Cleanup Bureau at (406) 444-5970.</li> <li>You must investigate and confirm all suspected releases within seven days of the discovery of the condition.</li> </ul>	Yes No

<ul> <li>ve a confirmed release of product from your</li> <li>Yes</li> <li>nd storage tank system, have you responded by</li> <li>rrective action?</li> <li>hay be out of compliance. Owners/operators seeking</li> <li>t from the Montana Petroleum Tank Release Cleanup Fund</li> <li>nse to a confirmed release from a tank or system and with</li> <li>the DEQ, take corrective action as discussed in ARM</li> <li>seq. To report a release, call the Leak Reporting Hotline at</li> <li>8. For more information, contact the DEQ Hazardous</li> <li>eanup Bureau at (406) 444-5970.</li> <li>Yes</li> <li>ank system?</li> <li>are that when an underground storage tank system is</li> <li>sed, owners and operators must continue operation and</li> <li>of corrosion protection and release detection. For more</li> <li>ontact the DEQ Technical Services Bureau at (406) 444-</li> </ul>	
t from the Montana Petroleum Tank Release Cleanup Fund nse to a confirmed release from a tank or system and with the DEQ, take corrective action as discussed in ARM seq. To report a release, call the Leak Reporting Hotline at 8. For more information, contact the DEQ Hazardous eanup Bureau at (406) 444-5970. Danning on temporarily closing an underground Yes ank system? are that when an underground storage tank system is used, owners and operators must continue operation and of corrosion protection and release detection. For more	No
ank system? are that when an underground storage tank system is used, owners and operators must continue operation and of corrosion protection and release detection. For more	No
sed, owners and operators must continue operation and of corrosion protection and release detection. For more	
aware of the performance standards required of all Yes berators of new underground storage tank systems? ay be out of compliance. To prevent releases due to re, corrosion, or spills and overfills, all owners/operators of must follow certain performance standards. This includes ak, piping, and spill and overfill prevention equipment to be re information, contact the DEQ Technical Services Bureau 970.	No
aware of the December 22, 1998 deadline for upgrading Yes and storage tanks and piping? ay be out of compliance. Tanks installed prior to 1988 are required to be upgraded with corrosion ill prevention, and overfill prevention by December 22, installed after December 22, 1988 are required to have ention, spill prevention, and overfill prevention at the time For more information, contact the DEQ Technical Services	No
	No
	1988 are required to be upgraded with corrosion Il prevention, and overfill prevention by December 22, installed after December 22, 1988 are required to have ention, spill prevention, and overfill prevention at the time For more information, contact the DEQ Technical Services 5) 444-5970.

REGULATION	QUESTION		
	12. Does your business produce petroleumcontaminated soils from leaking underground storage tanks?	Yes	No
	If yes - If the petroleum contamination has impacted or could impact surface water or groundwater, contact the DEQ Water Protection Bureau at (406) 444-3080 right away. Contaminated soils may be landfarmed on- site or at a permitted landfarm site. Contact the DEQ Hazardous Waste Site Cleanup Bureau at (406) 444-5970 for more information.		
	Pollution Prevention Tip: Regularly monitor underground storage tanks to prevent leaks and spills from contaminating soil and possibly threatening surface and groundwater supplies.		
	13. Have you checked with your local/county health department to see if there are any locally enforced underground storage tank system laws or regulations you should be following?	Yes	No
	If no - To be sure you are in compliance with all the applicable local/county laws or regulations, contact your local health department.		
	14. Are you interested in receiving a free business-specific environmental audit checklist?	Yes	No
	If yes - To help you comply with regulations specific to your industry, the Montana Pollution Prevention Program has developed a number of audits for specific business types. For more information, contact the Montana Pollution Prevention Program at (406) 994-3451.		

#### POTENTIALLY APPLICABLE RULES & REGULATIONS

- Section 75-10-501 et seq., MCA Montana Underground Storage Tank Act (state)
- ARM 17.56.101 et seq. Underground Storage Tanks (state)
- ARM 23.7.111 et seq. Uniform Fire Code (state)

#### SOURCES OF ASSISTANCE

- ✿ Local County Health Department Check your local telephone directory
- Local Sanitarian's Office Check your local telephone directory
- MT Department of Environmental Quality P.O. Box 200901 Helena, Montana 59620-0901 Technical Services Bureau or Hazardous Waste Site Cleanup Bureau (406) 444-5970 or 1420 Leak Reporting Hotline (800) 457-0568
- MT Department of Justice State Fire Marshal P.O. Box 201417 Helena, Montana 59620-1417 (406) 444-2050 \*See local phone directory for office nearest you
   MT State University Extension Service Montana Pollution Prevention Program P.O. Box 173580
  - Bozeman, Montana 59717-3580 (888) 678-6872 (toll-free in MT) (406) 994-3451

# Environmental Audit: Water Quality

#### INTRODUCTION

Because we all depend on a safe water supply, it is important to protect and conserve our water resources. For residential and commercial users, the quality of the water is as important as the quantity. To be suitable for human consumption, water supplies must not contain dangerous levels of contaminants such as hazardous chemicals, bacteria, salt, sediments, and human and animal wastes.

To help protect our water supplies, *the Montana Water Quality Act (Montana Codes Annotated [MCA])* and the applicable *Administrative Rules of Montana* (ARM), enforced by the Montana Department of Environmental Quality (DEQ) Water Protection Bureau, make it unlawful to pollute any state waters or put wastes in a place where they might pollute state waters.

## TERMS ASSOCIATED WITH WATER QUALITY

- Aquifer Any geologic formation, group of formations, or part of a formation capable of yielding significant quantities of groundwater to wells or springs.
- Discharge The addition of any pollutant to waters of the state.
- Groundwater Water occupying the empty spaces between rocks within a geologic layer and within the zone of saturation. Groundwater is the water that comes out of wells and springs.
- Nonpoint Source (NPS) Pollution source that does not discharge through a pipe or other defined outlet, but enters a water system in a diffuse pattern either over or through the ground.
- Oil-water Separator Device used to separate solid debris and free oils or other non-soluble chemicals from drain water before discharge.
- Point Source Pollution source that discharges through a confined and discrete outlet, including any pipe, ditch, or channel.
- Runoff Any rainwater, leachate, or other liquid that drains over the land from any part of a facility.
- Run-on Any rainwater, leachate, or other liquid that drains over the land onto any part of a facility.
- Septic System (relating to businesses) System designed to inject the waste or effluent from a multiple dwelling, business establishment, or community. May be considered a "Class V" injection well.
- State Waters A body of water, irrigation system, or drainage system, either on the surface or underground.
- Surface Water-Water on the surface of the ground, such as a stream, river, lake, pond, wetland, or irrigation ditch.

Wastewater - Spent or used water from an individual home, business, community, or farm that contains dissolved or suspended matter.

#### CHECKLIST INSTRUCTIONS

This checklist was designed to offer small business owners and managers insight into areas regulatory inspectors tend to focus on during an inspection. Applicable regulations have been cited to the left of each question. Although questions without a legal reference may not be legally required, we strongly encourage you to read these questions for the suggestions or recommendations they address.

For each applicable question, circle the appropriate answer (yes, *no*, or not *applicable*) for your particular situation. Use the blank spaces to write notes and comments.

#### Tips For Success

- Don't spend time on items that obviously have no application to your business.
- Be sure to talk to your co-workers and review files when answering some of these questions -- leave nothing to memory or chance.
- Write down what you see (or don't see) and what you think you should do about it.
- If you have any questions contact the DEQ for assistance.

# Water Quality Checklist (Circle Appropriate Answer)

REGULATION	QUESTION	
	1. Do you know where your wastewater goes?	Yes No
	If no - It is very important to know if your wastewater goes into a sump, a septic system, the wastewater treatment system, or state waters (groundwater, lake, river, etc.). You could be sitting on a "time bomb" if your wastewater contains hazardous materials and isn't being disposed of properly. For assistance, contact your county sanitarian's office.	
Section 75-5-101 et seq., MCA Requirements of the Montana Water Quality Act.	<ol> <li>Does your business discharge its wastewater into any state waters?</li> <li>If yes - You may need a permit from the DEQ Water Protection Bureau. For more information, call (406) 444-3080. Specific permits will be addressed later in this checklist.</li> </ol>	Yes No
ARM 17.30.1301 et seq. Requirements for MPDES permits.	<ul> <li>3. If you are planning to discharge sewage, industrial wastes, or other wastes into state surface <i>water</i>, do you have the appropriate permit from the DEQ?</li> <li>If no - You may be out of compliance. A Montana Pollutant Discharge Elimination System (MPDES) permit may be required. For assistance,</li> </ul>	Yes No
	contact the DEQ Water Protection Bureau at (406) 444-3080.	
ARM 17.30.1023 et seg. Requirements for MGWPCS permits.	4. If your business has been discharging waste into state groundwaters (by way of a sump, septic system, lagoon, etc.), do you have the appropriate permit(s)?	Yes No
40 CFR Parts 124, 144,146, and 147 Federal requirements for UIC permits.	If no - You may be out of compliance. The owner or operator of a business discharging waste into state groundwaters may be required to obtain a Montana Groundwater Pollution Control System (MGWPCS) permit. For more information, contact the DEQ Water Protection Bureau at (406) 444-3080.	
	Businesses disposing of nondomestic waste into a septic system may be operating a Class V injection well, which is regulated by the U.S. Environmental Protection Agency's Underground Injection Control (UIC) Program. A UIC permit may be required. For more information, contact the EPA - Montana Office at (406) 441-1140.	
ARM 17.30.637 et <i>seq.</i> Surface water quality standards.	5. Does your business take steps to prevent the discharge of wastes that might impact surface water quality standards?	Yes No
	<ul> <li>If no - You may be out of compliance. Businesses must manage their wastes so as not to: <ul> <li>Create objectionable sludge or emulsions beneath the water surface or upon shorelines.</li> <li>Create floating debris, scum, oil films, or other floating material.</li> <li>Produce odors, colors, or other conditions that might create a nuisance or make fish inedible.</li> <li>Harm human health or the environment.</li> </ul> </li> </ul>	
	For help, contact the DEQ Water Protection Bureau at (406) 444-3080.	

#### REGULATION

ARM 17.30.701 et *seq.* Nondegradation of water quality standards.

#### QUESTION

6. When working on a project that involves disrupting the ground Yes No surface, do you take steps to prevent soil erosion and surface run-off?

If no - You may be out of compliance. Surface run-off could pick up soil and other material as it flows off your site. This wastewater could pollute local water supplies if the wastewater were to come in contact with a stream or lake. Any person proposing an activity that may cause degradation of water quality is responsible for compliance with the Montana Water Quality Act. For more information, contact the DEQ Water Protection Bureau at (406) 444-3080.

Pollution Prevention Tip: By preventing potentially contaminated surface run-off from leaving your property, you can help prevent the contamination of surface water and groundwater systems. And by preventing liquids from flowing onto your site, you can prevent your property from becoming contaminated. Control devices and best management practices include ditches, earthen berms, and dikes.

Do you discharge wastewater to your local wastewater treatment Yes No plant (WWTP)?

If yes - WWTPs (also known as Publicly Owned Treatment Works or POTWs) can handle many different types of wastes coming into the system. However, too much or too strong a load could adversely affect the plant. If you plan to discharge any waste to the WWTP (via sanitary sewer), contact WWTP personnel first. Get their approval in writing to avoid future liability concerns.

6. Have you checked with your local/county health department to Yes No see if there are any locally enforced water quality laws or regulations you should be following?

If no - To be sure you are in compliance with all the applicable local/county laws or regulations, contact your local health department, Ask for information on water quality protection district and controlled groundwater area restrictions.

 Have you checked with the DEQ Water Protection Bureau to see Yes No if there are any other state or federally enforced water quality laws or regulations you should be following?

If no - To be sure you are in compliance with all the applicable state/federal laws or regulations, contact the DEQ Water Protection Bureau at (406) 444-3060.

 10. Do you fix leaks and drips as soon as they are detected?
 Yes No

 If no - This simple, low-cost step to conserving water can dramatically reduce your water and energy bills.
 Yes No

11. Do you turn off water when sudsing up hands at the sink? Yes No

If no - If everyone cooperates, this no-cost step to conserve water can dramatically reduce your water and energy bills.

REGULATION	QUESTION		
	12. Do you purchase waterconserving equipment?	Yes	No
	If no -When you need to replace equipment, such as dishwashers, purchase water-conserving equipment. Conserving water can lower your water and energy bills.		
	13. Have you installed low-flow toilets or toilet displacement devices?	Yes	No
	If no - Conventional toilets use 3.5 to 5 gallons (13.3 to 19 liters) of water per flush; however, low-flow models use 1.6 gallons (6 liters) or less. Plastic containers (such as milk jugs) can be filled with water or kitty litter and placed in a toilet tank to reduce the amount of water used per flush. More than one gallon of water can be saved per flush. A toilet dam, which holds back a reservoir of water when the toilet is flushed, can also be used with similar results.		
	14. Have you installed aerators on all faucets?	Yes	No
	If no - Faucet aerators break the flowing water from faucets into fine droplets and inject air while maintaining wetting effectiveness. Aerators are inexpensive and easy to install and can reduce the water used at a faucet by much as 60 percent without sacrificing a strong flow.		
	15. Have you installed an oil-water separator in your facility?	Yes	No
	If no - Oil-water separators can help reduce the amount of hazardous wastewater you have to dispose of by separating out the oil, which can then be recycled. For more information, contact Gretchen Rupp of the MSU Extension Service at (406) 994-1748.		
	Note that oil-water separators may be required in your area for your business type. Contact your local wastewater treatment plant or water quality district office for more information.		
	16. Do you water your lawn?	Yes	No
	If yes - To save water, be sure sprinklers are focused on the vegetation and not sidewalks or driveways. Run sprinklers early in the morning or late in the evening to reduce evaporation. Or install automatic shut-off controls to prevent overwatering. Consider planting native grass species that require less water.		
	17. Do you use a broom to clean floors and driveways?	Yes	No
	If no - To conserve water and prevent wastewater from becoming contaminated with solvents, grease, and other chemicals, use a broom to clean floors, sidewalks, and driveways.		

#### QUESTION

18. Do you purchase less hazardous materials?

If no - Substituting less hazardous materials can help reduce the toxicity of your wastewater and your hazardous waste disposal costs. The Material Safety Data Sheet for a product can help you determine if it may be hazardous. For more information, contact the Montana Pollution Prevention Program at (406) 994-3451.

19. Are you interested in receiving a free business-specific Yes No environmental audit checklist?

Yes No

If yes - To help businesses comply with regulations specific to their industry, the Montana Pollution Prevention Program has developed environmental audits for a variety of businesses. For a free copy, contact the Montana Pollution Prevention Program at (406) 994-3451.

#### POTENTIALLY APPLICABLE RULES & REGULATIONS

- Local Water Quality Ordinances
- Section 75-5-101 et seq., MCA Montana Water Quality Act (state)
- Section 75-5-1101 et seq., MCA Wastewater Treatment Revolving Fund Act (state)
- ARM 17.30.501 et seq. Mixing Zones in Surface and Ground Water (state)
- ARM 17.30.601 et seq. Surface Water Quality Standards and Procedures (state)
- ARM 17.30.701 et seq. Nondegradation of Water Quality (state)
- ARM 17.30.1001 et seq. Montana Ground Water Pollution Control System (state)
- ARM 17.30.1301 et seq. Montana Pollutant Discharge Elimination System (state)
- ARM 17.38.101 et seq. Public Water and Sewage System Requirements (state)
- Circular WQB-7 Montana Numeric Water Quality Standards (state)
- 40 CFR Parts 124, 144, 146, and 147 Underground Injection Control Program Requirements (federal)

#### SOURCES OF ASSISTANCE

- Confederated Salish and Kootenai Tribes Water Quality Program Environmental Protection Division P.O. Box 278 Pablo, Montana 59855 (406) 675-2700 ext. 369
- Gretchen Rupp, P.E. Environmental Engineer/Specialist MSU Extension Service P.O. Box 173580 Bozeman, Montana 59717-3580 (406) 994-1748
- Local Conservation District Check your local telephone directory
- Local County Health Department Check your local telephone directory
- Local Sanitarian's Office Check your local telephone directory
- Local Water Quality Protection District Check your local telephone directory

- MT Association of Conservation Districts 501 North Sanders Helena, Montana 59620 (406) 443-5711
- MT Department of Environmental Quality Water Protection Bureau
   P.O. Box 200901
   Helena, Montana 59620-0901
   (406) 444-3080
- MT Department of Natural Resources and Conservation
   *Conservation Districts Bureau* P.O. Box 201601
   Helena, Montana 59620-1601
   (406) 444-6667
- MT State University Extension Service Montana Pollution Prevention Program P.O. Box 173580 Bozeman, Montana 59717-3580 (888) 678-6872 (toll-free in MT) (406) 994-3451

EPA - Montana Office 301 South Park, Drawer 10096 Helena, Montana 59626 National Pollutant Discharge Elimination System (NPDES) Permit Information (406) 441-1130 Underground Injection Control Program (406) 441-1140

# Environmental Audit: Air Quality

## INTRODUCTION

The quality of both indoor and outdoor air can have a direct impact on the health and safety of your employees and the surrounding neighborhood. To help protect our air, the Montana Environmental Quality (DEQ) Air and Waste Management Bureau and the DEQ Pollution Prevention Bureau enforces the Montana Air Quality Act (Montana Codes Annotated [MCA]) and the applicable Administrative Rules of Montana (ARM). The Montana Air Quality Act is based on the Federal Clean Air Act.

## TERMS ASSOCIATED WITH AIR QUALITY

Air Pollutants - One or more air contaminants that are present in the atmosphere.

Ambient Air - That portion of the atmosphere, external to buildings, to which the general public has access.

Attainment Area - An area considered to have air quality as good as, or better than, state or federal ambient air quality standards.

Best Available Control Technology (BACT) - An emission limitation based on the maximum degree of emission reduction that (considering energy, environmental, and economic impacts, and other costs) is achievable through application of production processes and available methods, systems, and techniques.

Control Equipment - Any device or contrivance that prevents, removes, controls, or abates emissions.

Emission - The release of air contaminants into the ambient air.

- Fugitive Emissions Those emissions that could not reasonably pass through a stack, chimney, vent, or other functionally equivalent opening.
- Hazardous Air Pollutants (HAPs) Chemicals that cause adverse health effects including cancer, birth defects, nervous system damage, and possibly death. HAPs are listed in the Federal Clean Air Act.
- Incinerator Any single- or multiple-chambered combustion device that burns combustible materials in order to remove, destroy, dispose of, or reduce in volume all or any portion of the input material.
- Major Stationary Source Any stationary source of air pollutants that emits, or has the potential to emit, 100 tons (91 metric tons) or more per year of any pollutant regulated under state and federal clean air acts. It could also include any stationary source of air pollutants located in a serious particulate matter (PM-IO) nonattainment area that emits or could emit 70 tons (64 metric tons) per year or more of PM-IO.
- Nonattainment Area A geographic area in which the level of a particular air pollutant is higher than the level allowed by state and federal standards.
- Opacity The degree, expressed in percent, to which emissions reduce the transmission of light and obscure the view of an object in the background.

Open Burning - The combustion of any material directly in the open air.

Particulate Matter - Any material that is or has been airborne and exists as a liquid or a solid at standard conditions.

#### TERMS ASSOCIATED WITH AIR QUALITY, continued

PM-10 - Particulate matter with an aerodynamic diameter of less than or equal to a nominal 10 micrometers.

Stationary Source - Any building, structure, facility, or installation which emits or may emit any air pollutant subject to regulation under the Federal Clean Air Act.

Volatile Organic Compounds (VOCs) - Organic compounds that, if released into the atmosphere, can form ozone in the presence of heat and sunlight.

#### CHECKLIST INSTRUCTIONS

This checklist was designed to offer small business owners and managers insight into areas regulatory inspectors tend to focus on during an inspection. Applicable regulations have been cited to the left of each question. Although the questions without a legal reference may not be legally required, we strongly encourage you to read these questions for the suggestions or recommendations they address.

For each applicable question, circle the appropriate answer (yes, no, or not applicable) for your particular situation. Use the blank spaces to write notes and comments.

#### Tips For Success

- Don't spend time on items that obviously have no application to your business.
- Be sure to talk to your co-workers and review files when answering some of these questions -- leave nothing to memory or chance.
- Write down what you see (or don't see) and what you think you should do about it.
- If you have any questions contact the DEQ for assistance.

REGULATION	QUESTION	
ARM 17.8.705 et <i>seq.</i> Air quality permit requirements.	<ol> <li>If your business plans to construct, install, alter, or use any air contaminant source or stack associated with any source, do you have an air quality permit from the DEQ?</li> </ol>	Yes No
	If no - You may be out of compliance. An air quality permit may be required if you use, install, or modify any air contaminant source or stack. For more information, contact the DEQ Air and Waste Management Bureau at (406) 444-3490 or the DEQ Pollution Prevention Bureau at (406) 444-6697. Specific permits will be addressed later in this checklist.	
ARM 17.8.904 et seq. Preconstruction air quality permit requirements in a nonattainment area.	<ol> <li>If your business is planning to locate, or is already located, in a nonattainment area, do you have a preconstruction air quality permit from the DEQ?</li> </ol>	Yes No
	If no - You may be out of compliance. If you work in a designated non- attainment area, a preconstruction air quality permit may be required prior to construction from the DEQ Air and Waste Management Bureau. For more information, call (406) 444-3490 or the DEQ Pollution Prevention Bureau at (406) 4446697.	
ARM 17.8.1004(1) et <i>seq.</i> Preconstruction air quality permit requirements in an attainment area.	<ol> <li>If your business is locating in an attainment area and is planning a major process modification or structural modification, do you have a preconstruction air quality permit from the DEQ?</li> <li>If no - You may be out of compliance. If you work in a designated attainment area, a preconstruction air quality permit may be required from the DEQ Air and Waste Management Bureau prior to construction. For more information, call the DEQ Air and Waste Management Bureau at (406) 444-3490 or the DEQ Pollution Prevention Bureau at (406) 444- 6697.</li> </ol>	Yes No
ARM 17.8.604 <i>et seq.</i> Open burning permit requirements.	<ul> <li>4. If your business is considering disposing of solid waste by open burning, have you contacted the DEQ Air and Waste Management Bureau?</li> <li>If no - You may be out of compliance. If you openly burn solid waste, you may need an air quality open burning permit from the DEQ Air and Waste Management Bureau. <i>The open burning of hazardous waste, dead animals, tires, and certain other wastes is not an option.</i> For more information, call the DEQ Air and Waste Management Bureau at (406) 444-3490 or call the DEQ Pollution Prevention Bureau at (406) 444-6697.</li> </ul>	Yes No
ARM 17.8.610 <i>et seq.</i> Open burning permits for major opening burning sources.	<ol> <li>If your business burns large quantities of solid waste, do you have a major open burning permit?</li> <li>If no - You may be out of compliance. If you openly burn large quantities of solid waste, you may need an air quality major open burning permit from the DEQ Air and Waste Management Bureau. For more information, call the DEQ Air and Waste Management Bureau at (406) 444-3490 or the DEQ Pollution Prevention Bureau at (406) 444-6697.</li> </ol>	Yes No

REGULATION	QUESTION	
ARM 17.8.210-223 et seq. Ambient air quality standards for selected air pollutants.	6. If your business produces such air pollutants as particulates, lead, sulfur dioxide;nitrogen dioxide, oxides, volatile organic compounds, or carbon monoxide, are you in compliance with established state ambient air quality standards for those pollutants?	Yes No
	If no - You may be out of compliance. No business can cause or contribute to concentrations of particular air pollutants in the ambient air that would exceed state ambient air quality standards. For assistance, contact the DEQ Air and Waste Management Bureau at (406) 444-3490 or the DEQ Pollution Prevention Bureau at (406) 444-6697.	
ARM 17.6110 <i>et seq.</i> Malfunction notification requirements.	7. Did you know that if you have an air quality permit you must notify the DEQ whenever a malfunction occurs in your process equipment or air pollution control equipment?	Yes No
	If no - You may be out of compliance. The DEQ Air and Waste Management Bureau ([406] 444-3490) must be notified promptly by phone whenever a malfunction occurs that is expected to either create emissions in excess of any applicable emission limitation or continue more than four hours.	
	Pollution Prevention Tip: To he/p prevent malfunctions, perform routine inspections and regular maintenance on your equipment. This can also prolong the life of your equipment and save energy.	
ARM 17.8.111(I) Circumvention of air pollution control equipment	8. Has your business installed or used a device that concealed or diluted an emission of air contaminant that could have violated air quality regulations?	Yes No
	If yes - You may be out of compliance. No person can allow the installation or use of a device or means that, without reducing the amount of air pollution emitted, conceals or dilutes an emission that would normally violate air pollution control regulations. For more information, contact the DEQ Air and Waste Management Bureau at (406) 444-3490 or the DEQ Pollution Prevention Bureau at (406) 444-6697.	
ARM 17.8.111(2) Creation of a public nuisance.	9. Do you take steps to avoid creating emissions that could cause a public nuisance?	Yes No
	If no - You may be out of compliance. Avoid operating equipment that produces emissions (such as odors or particulates) so bad that a public nuisance is created. For more information, contact the DEQ Air and Waste Management Bureau at (406) 444-3490 or the DEQ Pollution Prevention Bureau at (406) 444-6697.	
ARM 17.9304 <i>et seq.</i> Visible air contaminant standards.	IO. Does your business take steps to prevent air emissions from obscuring the view of objects in the background (also known as opacity)?	Yes No
	If no - You may be out of compliance. Businesses cannot allow emissions that have an opacity greater than 20% (averaged over six consecutive minutes) to be discharged into the ambient air. For assistance, contact the DEQ Air and Waste Management Bureau at (406) 444-3490 or the DEQ Pollution Prevention Bureau at (406) 444-6697.	

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REGULATION	QUESTION		
ARM 17.8.308 et <i>seq.</i> Particulate matter from material handling.	II. Does your business take steps to control emissions of airborne particulate matter during material handling?	Yes	No
J	If no - You may be out of compliance. Businesses are required to take precautions to control emissions of airborne particulate matter during the production, handling, transportation, or storage of material; during the use of a street or road; or at a construction site. For more information, contact the DEQ Air and Waste Management Bureau at (406) 444-3490 or the DEQ Pollution Prevention Bureau at (406) 444-6697.		
ARM 17.8.309 et seq. Particulate matter and fuel burning equipment	12. Does your business take steps to control emissions of particulate matter caused by the combustion of fuel?	Yes	No
standards.	If no - You may be out of compliance. Businesses may be required to control emissions of particulate matter in excess of state standards caused by the combustion of fuel. For more information, contact the DEQ Air and Waste Management Bureau at (406) 444-3490 or the DEQ Pollution Prevention Bureau at (406) 444-6697.		
ARM 17.8.310 <i>et seq.</i> Particulate matter from industrial processes	13. Does your business take steps to control emissions of particulate matter during industrial processes?	Yes	No
	If no - You may be out of compliance. Businesses may be required to control emissions of particulate matter in excess of state standards from any operation, process, or activity. For more information, contact the DEQ Air and Waste Management Bureau at (406) 444-3490 or the DEQ Pollution Prevention Bureau at (406) 444-6697.		
ARM 17.8.315 <i>et seq.</i> Odor as a public nuisance.	14. Does your business take steps to prevent odors from migrating beyond your property line and causing a public nuisance?	Yes	N
	If no - You may be out of compliance. Businesses are required to control gases, vapors, or odors that might migrate beyond their property lines and create a public nuisance. For more information, contact the DEQ Air and Waste Management Bureau at (406) 444-3490 or the DEQ Pollution Prevention Bureau at (406) 444-6697.		
ARM 17.8.316 et <i>seq.</i> Incinerator regulations.	15. If your business uses an incinerator, has it been approved by the DEQ Air and Waste Management Bureau?	Yes	N
	If no - You may be out of compliance. Businesses using incinerators must follow state operational and emission standards. For assistance, contact the DEQ Air and Waste Management Bureau at (406) 444-3490 or the DEQ Pollution Prevention Bureau at (406) 444-6697.		
	16. Have you checked with the DEQ to see if there are specific rules that apply to your business type?	Yes	N
	If no - You may be out of compliance. The DEQ has adopted rules specific to certain businesses, such as drycleaners and wood finishers. To find out if this includes your business, contact the DEQ Air and Waste Management Bureau at (406) 444-3490 or the DEQ Pollution Prevention Bureau at (406) 444-6697.		

REGULATION	QUESTION	
	17. Have you checked with your local/county health department to see if there are any locally enforced air quality laws or regulations you should be following?	Yes No
	If no - To be sure you are in compliance with all the applicable local/county laws or regulations, contact your local health department.	
	18. Does your business use enclosed parts washers?	Yes No
	If no - Enclosed parts washers can reduce the amount of volatile organic compounds (VOCs) and hazardous air pollutants (HAPs) emitted by your business, creating a safer working environment for your employees and reducing the amount of solvent lost to evaporation.	
	19. Do you work in a well-ventilated area?	Yes No
	If no - When working with chemicals, be sure you have adequate ventilation to prevent employees from being asphyxiated by the fumes or creating a potentially flammable atmosphere.	
	20. Do you regularly inspect your ventilation system?	Yes No
	If no - Both indoor and ambient air quality can be improved by regular inspection and maintenance ventilation systems, such as cleaning or replacing filters and checking exhaust vents.	
	21. Do you know when personal protection is needed?	Yes No
	If no - The product label and Material Safety Data Sheet (see Part 70. Material Safety Data <i>Sheets</i> ) should advise you if you need to wear specific personal protection, such as aprons, ear plugs, or respirators For assistance, call the OSHA-Billings Area Office at (406) 247-7494.	
	22. Do you purchase materials made with less hazardous ingredients?	Yes No
	If no - Avoid products containing hazardous air pollutants (HAPs) and volatile organic compounds (VOCs) that could create indoor and outdoor air pollution.	
	23. Do you avoid purchasing products in aerosols?	Yes No
	If no - The propellent in aerosols can release ozone-depleting chemicals into the environment. A variety of durable rechargeable and pump alternatives are available and can save you money. Check with your distributor or contact the Montana Pollution Prevention Program at (406) 994-3451.	
	24. Do you keep lids on stored materials?	Yes No
	If no - By keeping lids secure, you can reduce evaporation and minimize indoor air pollution.	

#### QUESTION

25. Are you interested in receiving a free business-specific environmental audit checklist?

Yes No

If yes - To help businesses comply with regulations specific to their industry, the Montana Pollution Prevention Program has developed environmental audits for a variety of businesses. For a free copy, contact the Montana Pollution Prevention Program at (406) 994-3451.

## POTENTIALLY APPLICABLE RULES & REGULATIONS

- Local Air Quality Ordinances
- Section 75-2-101 et seq., MCA Montana Air Quality Act (state)
- ARM 17.8.101 et seq. Air and Water Quality Tax Certification (state)
- ARM 17.8.201 et seq. Ambient Air Quality (state)
- ARM 17.8.301 et seq. Emission Standards (state)
- ARM 17.8.401 et seq. Stack Heights and Dispersion Techniques (state)
- ARM 17.8501 et seq. Air Quality Permit Application, Operation, and Open Burning Fees (state)
- ARM 17.8.601 et seq. Open Burning (state)
- ARM 17.8.701 et seq. Permit, Construction, and Operation of Air Contaminant Sources
- ARM 17.8.801 et seq. Prevention of Significant Deterioration of Air Quality (state)
- ARM 17.8.901 et *seq.* Permit Requirements for Major Stationary Sources or Major Modifications Locating within Nonattainment Areas (state)
- ARM 17.8.1001 et *seq.* Preconstruction Permit Requirements for Major Stationary Sources or Major Modifications Locating within Attainment or Unclassified Areas (state)
- ARM 17.8.1101 et seq. Visibility Impact Assessment (state)
- ARM 17.8.1201 et *seq.* Operating Permit Program (state)
- ARM 17.8.1301 et seq. Conformity (state)
- 40 CFR Parts 50-99, Titles I-VI Clean Air Act (federal)

#### SOURCES OF ASSISTANCE

- Local County Health Department Check your local telephone directory
- Local Sanitarian's Office Check your local telephone directory

 MT Department of Environmental Quality P.O. Box 200901 Helena, Montana 59620-0901 Air and Waste Management Bureau (406) 444-3490 Pollution Prevention Bureau (800) 433-8773 (air-specific questions) or (406) 444-6697 MT State University Extension Service Montana Pollution Prevention Program P.O. Box 173580 Bozeman, Montana 59717-3580 (888) 678-6872 (toll-free in MT) (406) 994-3451 Occupation Safety and Health Administration (OSHA) - Billings Area Office 2900 Fourth Avenue North Billings, Montana 59102 (800) 488-7087 or (406) 247-7494 Stratospheric Ozone Information Hotline (800) 296-1996

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# Environmental Audit: Energy Conservation

#### INTRODUCTION

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In the previous parts, this guide concentrated on the general laws and rules that could affect your compliance status. The remainder of this guide will focus on how you could reduce the number of regulations your businesses has to comply with and save money. This part will discuss ways you can reduce the amount of energy used, resulting in:

- Improved productivity
- Reduced energy bills
- Increased profits

Keep in mind, using energy efficiently does not mean sacrificing comfort or productivity.

#### TERMS ASSOCIATED WITH ENERGY CONSERVATION

Energy - The ability to do work. Electricity is a form of energy that is transferred by moving electrons.

Energy Conservation - The careful management of energy used to prevent exploitation or waste.

Energy-Efficient - The productive use of energy without waste.

Lumen - The quantitative measure of a lamp's brightness. A 75 watt incandescent bulb has 1,200 lumens, whereas an 18 watt compact fluorescent bulb has 1,100 lumens.

Power - The rate at which energy is, or could be, transferred. Power is typically metered in kilowatts (1,000 watts).

Watt - A measure of how much electric energy is flowing, or can flow, through a particular electrical device or circuit in one hour.

#### CHECKLIST INSTRUCTIONS

This checklist was designed to offer small business owners and managers insight into ways to save money, conserve energy, and prevent pollution. For each applicable question, circle the appropriate answer (*yes, no,* or *not applicable*) for your particular situation. Use the blank spaces to write notes and comments.

NOTES	QUESTION	
	1. Do you regularly check windows and doors for leaks or broken panes?	Yes No
	If no -Whatever method you use to heat or cool your business, you can greatly reduce the load on the heating and cooling equipment by installing weatherstripping and draft-proofing windows and doors.	
	<ol> <li>Is your facility properly insulated for the climate in your geographic area?</li> </ol>	Yes No
	If no - If you are not sure how to respond to this question, contact your local power company and ask for an "Energy Audit," or call the Montana State University Extension Service Weatherization Program at (406) 994-3451.	
	3. Are employees encouraged to turn off lights and equipment when not in use?	Yes No
	If no - The simplest and cheapest way to conserve energy is to train employees to turn off lights and equipment when not in use and to open window blinds to utilize natural lighting.	
	4. If constructing a new building for your business, will it be designed to use natural lighting, and will energyefficient lighting and equipment be installed?	Yes No
	If no - Using natural lighting and energy-efficient equipment and lighting can dramatically lower your energy bill as well as make a better work environment.	
	5. Are energyefficient computers, printers, and photocopiers used in your business?	Yes No
	If no - When purchasing new equipment, select ones that have an automatic power-down function to save energy when not in use.	
	6. Have the water heater and related pipes in your building been insulated?	Yes No
	If no - Insulating water heaters and pipes can help reduce heat loss and conserves energy.	
	<ol><li>Have energy-efficient heating and cooling systems been installed in your building?</li></ol>	Yes No
	If no - Using energy-efficient systems can be one of the most effective ways to reduce energy bills and the pollution created by energy production.	

#### QUESTION

6. Do you close doors or shut off vents in unoccupied rooms to Yes No conserve energy?

If no - Why heat or cool a room that is not being occupied? Close vents or doors wherever possible to reduce the energy load on your cooling or heating system. Be sure to keep windows closed if using cooling or heating systems (be sure to allow for proper ventilation).

9. Are your business vehicles tuned up regularly?

Yes No

If no - Regular tune-ups can extend the life of your vehicles and improve their performance (better gas mileage for example).

#### SOURCES OF ASSISTANCE

- EPA Montana Office
   301 South Park, Drawer 10096
   Helena, Montana 59626
   (406) 441-1130
- EPA's Energy Star Computers Program Greens Lights 6202J 401 M Street SW Washington, D.C. 20460 (202) 775-6650
- EPA's Green Lights Program Greens Lights 6202J 401 M Street SW Washington, D.C. 20460 (202) 775-6650

- MT Department of Environmental Quality P.O. Box 200901 Helena, Montana 59620-0901 Pollution Prevention Bureau (406) 444-6697 Technical and Financial Assistance Bureau (406) 444-6697
- MT Power Company Local Offices Check your local telephone directory
- MT State University Extension Service Weatherization Program MSU Extension Service P.O. Box 173580 Bozeman, Montana 59717-3580 (406) 994-3451

# Housekeeping Recommendations

#### INTRODUCTION

Housekeeping refers to the general way you operate your business:

- How raw materials and equipment are purchased
- How inventory is tracked and used
- How materials and wastes are stored
- How often you inspect storage areas for leaks or spills
- How materials are used within your business
- How leftover and waste materials are managed

Part of good housekeeping includes taking steps to ensure a safe work environment for you and your employees. Specific state and federal regulations designed to make a safer working environment include:

- *The Montana Safety* Culture *Act* Administered by the Montana Department of Labor and Industry. Focuses on general workplace safety. For more information, contact the Montana Department of Labor and Industry at (406) 444-6401.
- *Chemical Hazard Communication Standards* Enforced by the United States Occupational Safety and Health Administration (OSHA). Focuses on educating personnel on how to protect themselves from work hazards. For more information, contact the OSHA Billings Area Office at (800) 488-7078.
- *Emergency Planning and Community Right-to-Know Act* Enforced by the United States Environmental Protection Agency (EPA). Establishes requirements for industry and government agencies regarding emergency planning and "community right-to-know" reporting on hazardous chemicals. For more information, contact the EPA Montana Office at (406) 441-1130.
- *Hazardous Waste Operations and Emergency Response Standards* Enforced by OSHA. Protects employees who work with hazardous waste. For more information, contact the OSHA - Billings Area Office at (800) 488-7078.

This guide will not go into further detail on the particular requirements for the acts and standards mentioned above. If you would like a checklist that focuses on safety issues, contact the OSHA - Billings Area Office at (800) 488-7078.

## CHECKLIST INSTRUCTIONS

This checklist was designed to offer small business owners and managers insight into ways to save money, practice good housekeeping, and prevent pollution. For each applicable question, circle the appropriate answer (*yes, no,* or *not applicable*) for your particular situation. Use the blank spaces to write notes and comments.

## Housekeeping Checklist (Circle Appropriate Answer)

<ol> <li>Do you buy only as much material as you need to get a job done?</li> </ol>	Yes No
If no - By purchasing only as much as you need, you can reduce the spoilage of expired materials and save storage space.	
2. Do you buy materials in bulk form?	Yes No
If no - Bulk materials are generally cheaper than individual containers and produce less packaging waste as long as you use the materials before they expire.	
3. Do you purchase less hazardous materials?	Yes No
If no - Substituting less hazardous materials in your business can reduce the amount of hazardous waste generated, reduce disposal costs, and minimize employee chemical exposure. Review the product's label and MSDS to help in your selection process.	
4. Are you purchasing products made with recycled materials?	Yes No
If no - Products made from recycled materials, such as plastic lumber benches made from recycled plastic containers, save on virgin materials and energy.	
5. Do you receive/ship goods in permanent, reusable containers?	Yes No
If no - Reusable containers can reduce waste disposal costs, save landfill space, and save valuable natural resources.	
6. Do you purchase reusable aprons, towels, cups, etc.?	Yes No
If no - Reusable materials last longer and save money - no need to buy new products and pay to dispose of the used ones. Industrial laundries can remove contaminants from cloth rags for reuse.	
7. Do you purchase materials that are recyclable?	Yes No
If no - Recycling such things as aluminum and steel cans, glass, and paper can lower disposal costs, save raw materials and energy, and often generate some revenue from the sale of recyclables.	
6. Do you purchase water-conserving equipment?	Yes No
If no -Water-conserving equipment such as low-flow toilets can reduce your monthly water bills, conserve local water supplies, and possibly conserve energy.	

NOTES	QUESTION		
	9. Do you buy energy-efficient equipment?	Yes	No
	If no - Energy-efficient equipment such as compact fluorescent lamps can reduce your energy and disposal bills (fluorescents last longer, so you have fewer lamps to buy and dispose of).		
	10. Do you keep good track of your inventory?	Yes	No
	If no - Keeping track of what is in your storage area can help prevent unnecessary duplication. Monitoring expiration dates can reduce the spoilage of expired materials and save money through reduced waste disposal fees.		
	11. Do you use materials on a first in/first out basis?	Yes	No
	If no - By using materials that came into your business first, you can help reduce the risk of having your supplies expire or become obsolete.		
	12. Do you accept free samples?	Yes	No
	If yes - Be wary -they may turn out to be hazardous and you may get stuck with the responsibility of proper disposal.		
	13. Do you test out-of-date materials before disposing of them?	Yes	No
	If no - Expiration dates are just estimates. Often the product is still good long after the labeled date. Find out if the expired or obsolete materials can be returned to the supplier.		
	14. Do you follow manufacturers' instructions when using materials?	Yes	No
	If no - To prevent waste and accidents, read and follow product instructions carefully. Use caution when mixing chemicals - make sure they are compatible.		
	15. Have all employees been trained to use hazardous materials properly?	Yes	No
	If no - Training on the proper use of hazardous materials can help prevent accidents, reduce waste, lower workers' compensation claims, and reduce your liability.		
	16. Do you check containers for leaks or spills?	Yes	No
	If no - Check containers regularly and clean up leaks and spills as soon as possible to reduce employee exposure to chemicals. It also prevents the needless waste of materials.		
	17. Do you keep lids closed?	Yes	No
	If no - By keeping lids closed, you can prevent the loss of product due to evaporation or spills and reduce employee exposure to chemicals.		

#### QUESTION

QUESTION		
16. Do you use materials in aerosol containers?	Yes	No
If yes - Avoid purchasing materials in aerosol containers. They can pose a health hazard, generate a lot of waste (both the can itself and the material left in the can), and may contain a potentially hazardous propellent. Check with your supplier for rechargeable compressed-air or pump dispensers that can be refilled and reused.		
19. If you use refillable containers to dispense bulk materials, are they labeled?	Yes	No
If no - Be sure all containers in your facility are clearly and accurately labeled to prevent misuse of a material.		
20. Are all your containers labeled?	Yes	No
If no - Labeling all containers, including waste containers, can prevent costly mistakes if the wrong chemicals are used or mixed together.		
21. Do you routinely perform maintenance on all equipment?	Yes	No
If no - A good maintenance program will prolong the life of your equipment, make the equipment run more efficiently, and create a safer environment.		
22. Do you have leftover, usable materials you no longer want?	Yes	No
If yes - If you have unwanted but usable materials, find another business that could use them. The Montana Material Exchange (MME) at (406) 994-3451 can help. The MME is a free service of the Montana Pollution Prevention Program and the Montana Chamber of Commerce.		
23. Are different waste types stored separately?	Yes	No
If no - Mixing a hazardous waste with other non-hazardous wastes can make the whole container hazardous. Check the products' Material Safety Data Sheets to ensure incompatible materials and wastes are not mixed or stored together.		

#### POTENTIALLY APPLICABLE RULES & REGULATIONS

- Section 75-10-451, MCA Halogenated Solvent Users Registration Act (state)
- ARM 23.7.111 et seq. Uniform Fire Code (state)
- Montana Safety Culture Act (MSCA) (state)
- 29 CFR Part 1910.120 Hazardous Waste Operations and Emergency Response Standard (federal)
- 29 CFR Part 1910.1200 Chemical Hazard Communication Standard (federal)
- Emergency Planning and Community Right-to-Know Act of 1986 (federal) 40 CFR Part 355 Section 301-303 - Emergency planning 40 CFR Part 355 Section 304 - Emergency release notification 40 CFR Part 355 Section 311-312 - Community right-to-know reporting requirements 40 CFR Part 355 Section 313 - Toxic chemical release reporting emissions inventory 40 CFR Parts 302, 355 and 372 - Compliance information

#### SOURCES OF ASSISTANCE

- Emergency Planning and Community Right-to-Know Information Hotline (800) 535-0202
- ┲ EPA Montana Office
   301 South Park, Drawer 10096
   Helena, Montana 59626
   (406) 441-1130
- MT Department of Environmental Quality P.O. Box 200901 Helena, Montana 59620-0901 (406) 444-2544 (main number)
- MT Department of Justice State Fire Marshal
   P.O. Box 201417
   303 North Roberts, 3rd Floor
   Helena, Montana 59620-1417
   (406) 444-2050
- MT Department of Labor and Industry P.O. Box 1728 Helena, Montana 59624-1728 (406) 444-6401

- MT State University Extension Service P.O. Box 173580 Bozeman, Montana 59717-3580 Montana Pollution Prevention Program (888) 678-6872 (toll-free in Montana) (406) 994-3451 Montana Material Exchange (406) 994-3451
- OSHA Billings Area Office 2900 Fourth Avenue North Billings, Montana 59102 (800) 488-7087 (406) 247-7494

## Material Safety Data Sheets

# 10

Does your business generate hazardous wastes? Did you know you are responsible for determining if the wastes you produce are hazardous and, if so, ensuring that they are handled properly? As environmental regulations continue to expand in scope and influence, it is increasingly important for businesses today to be pro-active in managing the materials they use and the wastes they generate. Three important elements of a pro-active business are:

- Know the regulations Stay abreast of the latest state and federal developments.
- Know the materials you use A Material Safety Data Sheet (MSDS) can be one tool for learning about the products you use and the wastes you generate.
- Minimize or prevent wastes Always be searching for ways you can reduce the amount of hazardous chemicals used and be looking for non-hazardous alternatives.

The following, based on the Montana Pollution Prevention Program's fact sheet entitled *MSDS Fact Sheet*, is designed to help you understand the MSDS. But it is important to realize that the MSDS is not always a complete source of information about product disposal practices. To find out more about the chemicals you use and what to do with them when they become a waste, contact the Montana Department of Environmental Quality Air and Waste Management Bureau at (406) 444-3490 or contact the Montana Pollution Prevention Program at (406) 994-3451.

General Rules for Identifying Product Hazards

- Buy products with information labels.
- Do not rely on the word "non-toxic" on a product label -- it may still contain hazardous ingredients.
- Read all sections of the MSDS before you use the product and follow precautionary advice.
- Do not consider the MSDS the whole source of hazardous information about a product.

#### INTRODUCING THE MSDS

An MSDS is typically a brief document that provides a variety of information about any product you purchase. All hazardous chemical manufacturers and distributors are required by the U.S. Occupational Safety and Health Association (OSHA) to provide an MSDS. The quality of this information may vary significantly depending upon the thoroughness of the manufacturer, yet it is up to you to assure you have MSDSs on file for every product you use at the workplace.

If an MSDS was not provided with the product itself, you may obtain a copy by writing to the manufacturer or the distributor. Employers who use, store, or manufacture hazardous materials are required by law to make the MSDS available to all employees who could be exposed to the material. Fines have been assessed on small businesses by OSHA for failure to have complete MSDS records available to employees.

The information on a material's MSDS can help you determine whether waste containing any of the material could be hazardous.

There are two important things to look for when reviewing an MSDS:

- Check to see that the MSDS is written with your intended use of the product in mind. For example, if a product is to be sprayed, but the MSDS only describes the characteristics of the product in powder or liquid form, request additional information.
- Check the date that the MSDS was prepared. If it does not provide a preparation date, or if is several years old, request an updated copy.

Keep in mind...

- Some wastes cannot be evaluated by using MSDSs.
- Some wastes are automatically listed as hazardous wastes (for example, still bottoms from drycleaning operations).

Not all MSDSs contain the same information, nor is there a standard format. You must be a detective! Look for hazard "tip-offs" based on the things you will learn in this part.

#### HOW DO I USE THE MSDS?

Although there is no standard MSDS procedure or structure, all MSDSs must contain the same basic information. There are eight main sections:

- Material manufacturer and identification Here you will find the name, address and emergency telephone number of the product's manufacturer. The chemical name, as well as the common name or trade name, of the product is given. If the product is a mixture of several chemicals, only its trade name will be listed.
- Hazardous ingredients/identity information Lists the product ingredients that have been determined to be hazardous. The percentage, by weight, of each ingredient is listed.
- Physical and chemical data Describes the physical characteristics of the product, such as its physical state (solid, liquid, or gas).
- Fire and explosion hazard data Describes the circumstances under which the product may ignite or explode, the recommended extinguishing media, and what special protective equipment may be required.
- Reactivity data Provides information on how the product will react under particular environmental conditions. Also tells which chemicals are incompatible with the product, and should not come into contact with it. Refer to this section when choosing safe storage conditions.
- Health hazard Provides a combined estimate of the total known hazards of the product and describes routes of exposure and effects of short- and long-term exposure.
- Precautions for safe handling and use Tells the safest known ways to store, use, and dispose of the material.
- Control measures Describes personal protective equipment, work practices, and ventilation procedures to use when working with the product (*MSDS Fact Sheet*, 1994).



It is important that you and your employees take hazardous materials very seriously. You should always be looking for ways to eliminate hazardous materials from your processing altogether.

## Setting Up A Pollution 11 Prevention Audit Program

#### INTRODUCTION

Pollution prevention (also known as source reduction or waste reduction) is the use of materials, processes, or practices that reduce or eliminate the creation of pollutants or wastes at the source. It includes:

- Conservation of natural resources.
- Changing the final product to make it more durable, reusable, or recyclable.
- Changing the material used in production, such as substituting less hazardous solvents.
- Changing the way products are made in order to avoid the use of hazardous materials and the generation of waste.
- Practicing good housekeeping methods such as by cleaning up spills and fixing leaks right away.
- Using equipment more efficiently.

Pollution prevention involves the on-going examination of how a business operates with the goal of minimizing all types of waste products. As illustrated in Figure 2, the top priority for minimizing waste is pollution prevention. Reuse, recycling, and treatment may also be included; however, they are lower in priority. The lowest priority for minimizing waste is disposal. Disposal methods include landfilling and incineration.

If you would like more information on preventing pollution and pollution prevention audit programs, contact the Montana Pollution Prevention Program at (406) 994-3451.

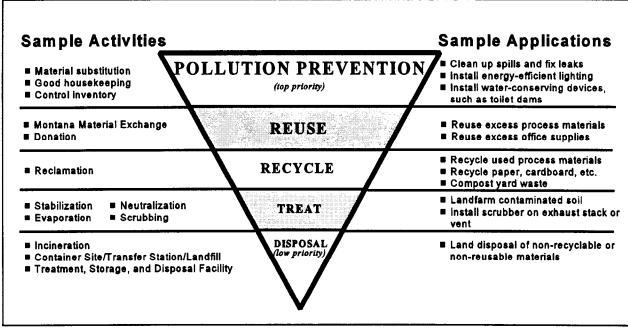


Figure 2. The hierarchy of waste management.

#### **BENEFITS**

By investing in pollution prevention, many businesses have:

- ✓ Reduced liability.
- ✓ Reduced regulatory burden and paperwork.
- ✓Reduced operating costs.
- ✓ Improved employee safety by minimizing exposure to hazardous materials.
- ✓ Improved morale by involving employees in the planning and implementation of pollution prevention ideas.
- ✓Enhanced public image.
- ✓ Reduced waste management and disposal costs.
- ✓ Increased productivity through more efficient use of raw materials.

#### GETTING STARTED

Pollution prevention begins by identifying ways to reduce or eliminate waste. This can be done by setting up a Pollution Prevention Audit Program. Specifically, the audit program involves the owners, managers, and employees looking carefully at how the business operates, its buildings and grounds, and its waste streams in order to identify and remedy violations of environmental laws and rules. Use the program to also find ways to reduce waste and create a safer work environment. The basic principles of setting up a program are outlined in Figure 3 and discussed in more detail below.

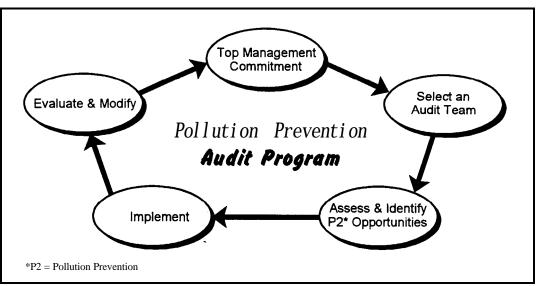


Figure 3. Elements of a pollution prevention audit program.

#### BEGIN AT THE TOP

The first step, which is critical to a successful audit program, is to get the business owner and managers to commit to pollution prevention. This commitment must then be embraced by the employees (Figure 4 is a sample policy statement). This could be accomplished by establishing incentive programs to encourage employee participation. It may be helpful to establish employee training programs focused on pollution prevention, hazardous material handling, and emergency response.

#### Management Policy Statement

At [business name], we are committed to excellence and leadership in protecting the environment. In keeping with this policy, our objectives are to eliminate or reduce wherever possible:

- Our potential for contaminating air, water, and soil
- Our release of toxic pollutants into the environment
- Our use of hazardous materials
- · Our generation of both solid and hazardous wastes

When the use of hazardous substances, generation of wastes, or release of wastes into the environment cannot be avoided, we are committed to minimizing any undesirable impacts on the air, water, and land. By successfully preventing pollution at its source, we can achieve cost savings, increase operational efficiency, improve the quality of our products and services, increase morale, and maintain a safe and healthy workplace for our employees.

Sincerely,

[Owner/Manager]

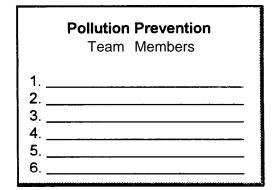
Figure 4. Sample pollution prevention policy statement (Pollution Prevention: A Guide to Program /mp/ementation, 1993).

#### SELECT AN AUDIT TEAM

An audit can be performed by a single person, a team of employees, or outside consultants. The team approach is recommended as it draws from a variety of perspectives and a broader knowledge base, and it is usually less expensive than hiring a consultant. Team members might include representatives from:

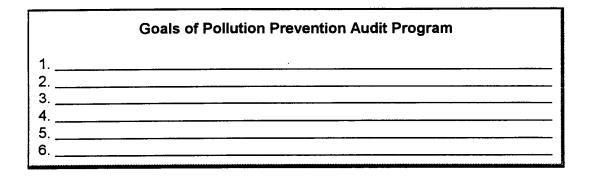
- Management
- •Engineering
- •Purchasing
- Budget/Finance
- Maintenance
- Production
- Waste management facility personnel

The interests and expertise each member brings to the team will produce different areas and levels of concern. For example, management is not always aware of, or familiar with, the daily operations and concerns of the production or maintenance crews.



Once you have a team that is committed to preventing pollution, discuss what types of goals are appropriate for your business. For example, a company may want to set an ultimate goal of always being in compliance with applicable local, state, and federal laws and regulations. Another goal may be to reduce waste by 25% by a certain date. Be sure to update the program's goals as they are achieved.

•~••



It is also important for the audit team to encourage employee participation and increase their awareness of pollution prevention efforts. Supervisors should discuss the status of the pollution prevention audit program at regular staff meetings and encourage group discussion of pollution prevention ideas. For a program to be successful, every employee has to accept the goals set forth by the audit team. As a way to help ease the natural resistance to change, you may find it helpful to encourage your employees and co-workers to comment on the program and suggest pollution prevention ideas of their own (*Pollution Prevention: A Guide to Program Implementation*, 1993).

#### **IDENTIFY & ASSESS POLLUTION PREVENTION OPPORTUNITIES**

The next step in implementing a pollution prevention audit program is to identify the materials and the processes used, as well as the sources, types, and amounts of hazardous and non-hazardous wastes generated in your business. Use the checklists found in this guide, Table 1, and the forms found in *Appendix* C. *Sample Forms* to help you. Use this information to pinpoint areas where your team needs to obtain further assistance, conduct more research, or focus its pollution prevention efforts. Refer to the last page of each part for the addresses and telephone numbers of assistance programs.

Next, identify potential source and waste reduction techniques for each product or process used and waste produced. All ideas generated during this step should be considered. Often the simplest or most far-fetched suggestions have the greatest positive impact.

After pollution prevention opportunities have been identified for your business, evaluate them and determine which ones should be considered for implementation. When evaluating your ideas, consider:

- Economic feasibility
  - Cost of alternative material
  - Cost of production modifications
  - Cost of disposal
- Liability and Worker's Compensation
- Regulatory requirements
- Technical feasibility of switching to the alternative
- Reuse and recycling opportunities
- Disposal options
  - Options may be limited depending upon the waste produced

Write down the pollution prevention ideas that you want to implement. You may want to use the sample forms in *Appendix* C. *Sample Forms,* calculating each pollution prevention measure's projected cost, savings, and payback period. These forms can be used to track your progress and indicate when the measures have been completed.

Table	1.	Areas	of	pollution	prevention	opportunities	for	businesses	in Montana.	
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	Pollution Prevention Opportunities							
Business Type	Air	Water	Energy	Solid Waste	Hazardous Waste			
Autobody Shop	~	~	~	~	V			
Auto Repair	~	~	~	<b>v</b>	~			
Bakery/Deli	~	~	۲ ۲	<b>v</b>	~			
Beauty	~	~	~	V	~			
Construction	~	~	<ul> <li>✓</li> </ul>	<b>v</b>	<ul> <li>✓</li> </ul>			
Dry Cleaning	~	~	~	~	~			
Gas Station	~	~	~	<b>v</b>	~			
Grocery	~	~	~	✓	~			
Health Care	~	~	~	~	~			
Hospitality	V	~	~	<b>v</b>	~			
Landscaping	~	~	~	~	~			
Office	<b>v</b>	~	~	<b>v</b>	~			
Photography	<b>v</b>	~	~	V	~			
Printing	· 🖌	~	~	<b>v</b>	~			
Retail	~	~	~	~	~			
Restaurant	<b>v</b>	~	~	~	~			
School	~	~	~	<b>v</b>	~			
Wood Finishing	5	~	~	<i>✓</i>	V			

#### IMPLEMENT YOUR IDEAS

With the audit complete and alternatives identified, you can focus on implementing your ideas. Start by developing a plan of implementation. The plan should address what pollution prevention ideas will be used, their costs and payback periods *(see* forms in *Appendix C. Sample Form)*, and when these changes will occur.

Implementation can be enhanced by quick victories with easy, low-cost, people-oriented solutions. For example, good housekeeping practices (described in **Part 9. Housekeeping Recommendations) can** often be the easiest and cheapest way to minimize waste and improve your image with customers and employees.

You may also find it easier to implement a few pollution prevention ideas at a time, especially if you are working on a tight budget. Keep track of how your pollution prevention audit program works, noting what was successful and what was not.

Be sure to notify all employees when you implement your ideas. It is very important to keep employees informed about when you will be implementing a new concept, how it will affect them, and how your program is progressing. As a way of introducing new techniques or methods to your employees, hold special pollution prevention training programs. You may want to include a pollution prevention orientation for new employees, regardless of their job function.

#### **EVALUATE & MODIFY**

After your pollution prevention audit program has been in place for a period of time, evaluate its successes and failures. Compare costs before and after implementation. Consider your program a success if you, for example, saved money, reduced the amount of waste generated, or reduced on-the-job injuries. If some implemented ideas did not work, get your team together to come up with some alternative solutions (*Pollution Prevention: A Guide to Program Implementation*, 1993).

As indicated in Figure 3, pollution prevention is a continuous process. You can perform an audit, implement an idea, or modify your program any time you want. As you complete each step, check it off the following list.

#### TOP MANAGEMENT COMMITMENT

- Create a written policy statement supporting pollution prevention activities Distribute statement to all employees
- Reward pollution prevention successes
- Increase employee awareness
- □ Educate employees

#### SELECT AN AUDIT TEAM

- Develop a pollution prevention team
- Commit to program implementation
- Set goals
- Encourage employee participation

#### **IDENTIFY & ASSESS POLLUTION PREVENTION OPPORTUNITIES**

- Gather background information
  - Raw materials
  - Production mechanisms
  - Process interrelationships
  - Waste generated
    - non-hazardous waste hazardous waste
- Characterize general processes in facility
- □ Fill out audit checklists
- □ Identify pollution prevention ideas
- Evaluate pollution prevention ideas
  - Economic feasibility
    - □ Liability

- Technical feasibility Regulatory requirements
- Reuse/recycling opportunities Disposal options

#### IMPLEMENT POLLUTION PREVENTION IDEAS

- Develop an implementation plan
  - List pollution prevention ideas to be implemented
  - □ Schedule
- □ for evaluation
- for implementation □ Increase employee awareness
- Educate/train employees
- D Provide orientation for new employees
- Keep records of successful and unsuccessful ideas

#### **EVALUATE & MODIFY POLLUTION PREVENTION AUDIT PROGRAM**

- Evaluate program
- Modify program as needed
- Rotate pollution prevention team members
- Increase employee awareness
- □ Conduct refresher training for employees
- D Publicize success stories (Pollution Prevention: A Guide to Program Implementation, 1993).

#### TERMS ASSOCIATED WITH POLLUTION PREVENTION

- **Compost** The controlled microbial decomposition of organic matter, such as yard waste and food scraps, in the presence of oxygen into a humus- or soil-like material.
- **Container Site** A location with refuse containers for the collection of solid waste generated by more than one household or firm, is generally open to the public, and collects more than 10 cubic yards of material.
- **Disposal** (in terms of hazardous waste) The discharge, injection, deposit, dumping, spilling, leaking, or placing of any hazardous waste into or onto the land or water so that the hazardous waste or any constituent of it may enter the environment or be emitted into the air or discharged into any water system.
- **Disposal** (in terms of solid waste) The discharge, injection, deposit, dumping, spilling, leaking, or placing of any solid waste into or onto the land so that the solid waste or any constituent of it may enter the environment or be emitted into the air or discharged into any water system.

Evaporation - To change into vapor.

- **Incineration -** The controlled burning of municipal solid waste to reduce volume and, in some cases, to recover energy.
- Landfarm The use of a combination of oxygen, moisture content, temperature, and naturally-occurring soil microorganisms to break down contaminants in soil.
- Landfill The disposal of solid waste at engineered facilities in a series of compacted layers on land and the daily covering of the waste with soil. Fill areas are managed in such a way as to prevent nuisances or public health hazards. There are three types of landfills licensed in Montana: Class II (mixed municipal solid waste), Class III (inert wastes such as dirt and rock), and Class IV (construction and demolition).
- Neutralization To render a chemical neither acidic nor basic.
- Pollution Prevention The design, manufacture, purchase, or use of materials to reduce the amount or toxicity of waste.

Reclamation - Means to restore or enhance the land-use capability of disturbed land.

Recycle - The process by which materials are collected, reprocessed or remanufactured, and reused.

- Reuse The use of a material more than once in its same form, either for the same purpose or for a different purpose.
- Solid Waste All putrescible and non-putrescible wastes, including garbage, rubbish, sludge from sewage treatment plants, dead animals, appliances, construction and demolition debris, and wood waste.

Source Reduction - See "Pollution Prevention."

Stabilization - To make or become resistant to changes of condition or position.

Storage - The actual or intended containment of wastes, either on a temporary basis or for a period of years.

**Treatment -** A method, technique, or process, including neutralization, designed to change the physical, chemical, or biological character or composition of any hazardous waste to neutralize the waste or render it non-hazardous, safer for transport, amenable for recovery, amenable for storage, or reduced in volume.

TSD Facility - A treatment, storage, and disposal facility (see individual definitions above).

**Transfer Station** - A solid waste management facility that can have a combination of structures, machinery, or devices, where solid waste is taken from collection vehicles (public, commercial, or private) and placed in other transportation units for movement to another solid waste management facility.

Waste Reduction (Minimization) - See "Pollution Prevention."

### Appendix A. Montana-Department of Environmental Quality Voluntary Environmental Audit Act Implementation Guide\*

\*Subject to change without notice. Contact the Montana Department of Environmental Quality Enforcement Division at (406) 444-0379 for most current version of guidelines.

Appendix A - Page 75

#### MONTANA DEPARTMENT OF ENVIRONMENTAL QUALITY

#### VOLUNTARY ENVIRONMENTAL AUDIT ACT IMPLEMENTATION GUIDE

#### Introduction

The 1997 Montana Legislature enacted the Environmental Audit Act (Act), Title 75, Chapter 1, Part 12, Montana Code Annotated. This guide explains the procedures that the Department of Environmental Quality (department) will use to implement the Act.

#### Applicability

The immunity provisions provided by the Act are only applicable to violations of Title 75 and Title 80, MCA and the rules promulgated thereunder. For the purposes of implementing the Act, the terms listed below have the following meaning:

1. "Actual, substantial damage" means harm to the environment that was or could be measured with reasonable scientific certainty and that constitutes significant degradation of the environment or poses an increased risk of morbidity to humans.

2. "Environmental audit" means a periodic, documented, voluntary internal assessment, evaluation, or review not required by law, rule or permit that is conducted by a regulated entity or its agent and initiated by the regulated entity for the purpose of determining compliance with environmental law, rule, or permit enforced by the department.

Each environmental audit must be conducted in accordance with a written plan and must be designed to identify and prevent noncompliance and to improve compliance with statutes, regulations, permits and orders. An audit may be conducted by an owner or operator, by an owner or operator's employee, or by an independent contractor. To be considered "periodic", environmental audits must be of a finite, reasonable duration (normally not more than 30 days), and must occur at regular intervals in accordance with a written schedule. The following are some examples of activities that do not qualify as an environmental audit:

property appraisals;

site investigations or assessments conducted as part of a property transfer,

- c. detection or discovery of spills and accidental releases of regulated materials or hazardous and deleterious substances,
- d. unit process analysis monitoring or evaluation conducted as part of standard operation and maintenance procedures.

3. "Regulated entity" means any person or organization, including a governmental agency, subject to the requirements of Title 75 or Title 80, MCA.

#### **Conditions**

The Act provides conditions and limitations against which eligibility for immunity must be evaluated. Through this implementations guide, the department has established criteria that can be used to assist in making the determination as to whether or not the statutory conditions and limitations have been satisfied. The following section describes these conditions and limitations

which must be met to qualify for immunity from civil and administrative penalties for violations of environmental laws discovered during an environmental audit.

1. The disclosed violation must have been discovered during the course of an environmental audit. A copy of the regulated entity's plan and schedule for environmental audits may be submitted to the department to demonstrate that the audits are periodic and conducted at regular intervals.

2. The regulated entity must satisfactorily demonstrate to the department that the audit was not an isolated event, but one of a series of scheduled internal assessments. Audits must be conducted to periodically and systematically evaluate the entity's capability to ensure compliance with environmental requirements. If a regulated entity discovers a violation during its initial environmental audit, the department may acknowledge immunity on a conditional basis. Immunity may be conditioned with the requirement that the regulated entity demonstrate that it has completed its second, regularly scheduled audit. In such instances, the department may request the regulated entity to waive the statute of limitations for the disclosed violation. When the regulated entity conducts the second, regularly scheduled audit, immunity will be acknowledged unconditionally.

3. The violations must be voluntarily disclosed to the department within 30 days of determining that a violation exists.

4. The violation must have been identified and disclosed voluntarily and not through a mandatory compliance reporting requirement prescribed by statute, rule, permit, variance, judicial or administrative order, or consent agreement.

5. The regulated entity must have disclosed the specific violation on the Voluntary Environmental Audit Report form. The completed report form and accompanying information must be postmarked, hand delivered, or received by express or special carrier delivery at the department no later than 30 calendar days after the violation was determined to exist.

6. The regulated entity must take appropriate action to prevent the reoccurrence of the disclosed violation(s).

7. The regulated entity must willingly cooperate with the department and provide such information as is necessary and requested by the department to determine the nature, circumstances, seriousness, longevity and significance of the disclosed violation. Cooperation includes, at a minimum, providing all requested documents, access to employees, and assistance in any further investigations into the violation and other related compliance problems. However, the department may not request a copy of the environmental audit.

8. The regulated entity must also agree to a written compliance schedule that is negotiated with the department to promptly correct the disclosed violation, unless the violation has been resolved to the department's satisfaction at the time of disclosure.

#### **Limitations**

The immunity provisions of the Act do not apply if any of the following conditions exist.

1. The regulated entity, including corporate officials, managers or employees or contractors, purposely or knowingly committed the violation.

2. The violation was the result of gross negligence of the regulated entity, including corporate officials, managers or employees or contractors.

3. The regulated entity has established a pattern of violating a specific state or federal environmental law, rule, regulation, permit, order or compliance schedule within 3 years before the date of the disclosure at the same facility. To constitute a pattern, the violations must be under the same statutory authority and be the same type of violation, such as repeated violations of a waste water discharge permit or repeatedly failing to monitor a stack emission, for example.

4. Immunity from the imposition of penalties would cause the state not to meet the delegation requirements for any federally delegated environmental law or program for which the department has assumed primacy.

5. The disclosed violation was discovered after the initiation of an administrative or judicial proceeding, investigation, inspection, or request for information related to the violation by the department, the Department of Agriculture or the Department of Justice.

6. The regulated entity has not corrected the disclosed violation according to a compliance schedule negotiated with the department.

7. The disclosed violation caused actual, substantial damage to the environment or public health.

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### Appendix B. Montana- Department of Environmental Quality Voluntary Environmental Audit Report Forms\*

\*Subject to change without notice. Contact the Montana Department of Environmental Quality Enforcement Division at (406) 444-0379 for most current version of forms.

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#### INSTRUCTIONS FOR COMPLETING THE

#### VOLUNTARY ENVIRONMENTAL AUDIT REPORT FORM

The Montana Environmental Audit Act, 75- 1- 1201, MCA, provides immunity from civil penalties to a regulated entity that voluntarily discloses violations discovered during an environmental compliance audit. To qualify for immunity, audit results must be submitted on a form obtained from the department. It may be necessary for the regulated entity to attach additional documentation to support mformation entered on the report form. Although the department may not request a copy of the audit report, the department may request all relevant facts and data that are needed to independently establish the nature and extent of the violation and to determine whether any damage that may have been created by the violation has been remedied. The following instructions are provided to assist in completion of the Department of Environmental Quality, Voluntary Environmental Audit Report Form.

1. Name, address and location of the facility:

List the name and mailing address of the facility that is reporting the violation and a description of the location of the facility if different from the mailing address.

2. Owner or operator:

List the complete name or names of all owners and operators of the facility. Give their addresses if different than the facility address.

3. Facility contact:

List the name and phone number of the person who is designated as the facility contact for the audit.

4. Federal tax identification number:

List the federal tax identification number. If the business does not have a federal identification number, list the Social Security Number of the owner or operator.

5. Name and address of person who conducted the audit:

Audits may be conducted by the regulated entity or its agent. If the audit was conducted by staff employed by the facility, list the name of the person(s) who conducted the audit. If the audit was conducted by a contractor, list the name and address of the contractor. Identify if the person is employed by the facility.

6. List the name, identification number and date issued of all current permits, licenses, authorizations or approvals issued to the facility by the department under the authority of Title 75 or Title 80, MCA:

The immunity provisions apply to the environmental laws included in Title 75 and Title 80, MCA. List the name, number and date issued of all current permits, authorizations, or approvals that have been issued by the department to the facility.

7. Was the audit a periodic, documented, voluntary internal assessment, evaluation, or review not required by law, rule, or permit that was conducted by your facility or your agent and initiated by your company for the purpose of determining compliance with environmental law, rule, or permit enforced by the department? Y N

Describe the purpose of the audit. To meet the definition of voluntary environmental audit, the audit must be periodic. This means that audits must be conducted on a regular basis over a period of time. To demonstrate that the audit was periodic, a copy of the regulated entity's plan and schedule for environmental audits may be submitted to the department.

8. Date(s) of this audit:

List the beginning and ending dates of this audit.

9. Dates of previous audits:

List the dates of any previous audits conducted by the current owner or operator at this facility.

10. Date of next scheduled audit: List the date of the next scheduled audit.

11. Was violation discovered during the environmental audit? Y N To qualify for immunity, violation must have been discovered as part of a voluntary environmental audit and not discovered by some other means of investigation or identification. Verify that the violations disclosed on this form were discovered during this audit by indicating yes or no.

12. Date(s) violation occurred:

List the date or dates that the violation occurred.

13. Date violation was determined to exist:

List the date the facility determined that a violation of a law, rule or permit existed.

14. Describe the location of the violation:

Provide a legal description and a narrative description of the location of the violation. Include any topographic maps, site maps or drawings as appropriate.

15. Describe the violation and any circumstances or conditions pertinent to the cause of the violation:

Provide a narrative description of the violation. Include any data, documents or evidence necessary to fully support the description, including a documentation of any circumstances or conditions related to the cause of the violation.

16. List the Montana statutes, rules or permit requirements violated: Identify the statutory and regulatory requirements that were violated. Include any specific permit limitations or requirements violated.

17. List/describe any previous violations at the facility under the same statute, rule or permit conditions, occurring over the period of the preceding three years.

List, by date of violation, and very briefly describe any previous violations at the facility for the ?-year time period, if such violations occurred under the same statute, rule or permit conditions as the violation` identified in item # 15.

18. Describe if the violation was knowingly committed or if it occurred as a result of gross negligence:

Provide a narrative to describe if the violation was knowingly committed by the regulated entity or if the violation occurred as a result of negligence on the part of the regulated entity.

19. Describe the compliance efforts made to correct or eliminate the violation: Describe any actions taken to correct or eliminate the violation or to remedy any damage caused by the violation.

20. Describe recommendations and a schedule for proposed compliance efforts, if necessary, to correct or eliminate the violation:

Describe any plans for actions to correct or eliminated the violation or to remedy damage caused by the violation.

21. Describe recommendations to prevent reoccurrence of the violation:

Describe any recommendations or actions that will be taken to prevent the reoccurrence of the violation and violations of a similar nature.

22. Describe any actual, substantial damage to human health or the environment caused by the violation:

Describe any release of materials to or changes in the quality of the environment that were the result of the violation. Describe any associated harm to human health. Provide all relevant documentation necessary to fully substantiate this description.

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December 1997

	epartment of En Environmental A		-
1. Name, address and location of the facilit	2. Owner or operator:		
3. Facility contact:		4. Federal tax	identification number:
5. Name and address of person who conduct Is this person an employee of the facility?		-	
5. List the name, identification number and issued to the facility by the department und		-	
Name	ID/Permit Number		Date Issued
7. Was the audit a periodic, documented, v or permit that was conducted by your facili determining compliance with environment	ty or your agent and in	nitiated by your c	company for the purpose of
B. Date(s) of this audit:	9. Dates of previous a	audits:	IO. Date of next scheduled audit:
11. Was violation discovered during the environmental audit? Y - N -	12. Date(s) violation	occurred:	13. Date violation was determined to exist:
14. Describe the location of the violation:			
15. Describe the violation and any circums	tances or conditions pe	ertinent to the car	use of the violation:
16. List the Montana statutes, rules, or perm	nit requirements violate	ed:	

17. List/o	describe any	previous	violations	at the	facility	under	the	same	statute,	rule	or permit	conditions,	occurring
over the	period of the	e precedin	g three ye	ars:									

19. Describe the compliance efforts made to correct or eliminate the violation:

violation:

22. Describe any actual, substantial damage to human health or the environment caused by the violation:

I hereby request acknowledgment of immunityfrom imposition of civil or administrative penalties as provided for under 75-1-1204. MCA. I certify that the above information is a true and correct representation of the facts and that I am authorized to submit this form on behalf of the facility listed.

Name: \_\_\_\_\_

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Title:\_\_\_\_\_

The completed report form and accompanying information must be postmarked, hand delivered or received by express or special carrier delivery at the department during regular business hours no later than 30 calendar days after the violation was determined to exist. Completed report forms should be sent to:

> Department of Environmental Quality **Enforcement Division** PO Box 200901 Helena, MT 59620-0901

#### DEPARTMENT OF ENVIRONMENTAL QUALITY

### CHECKLIST FOR THE EVALUATION OF VOLUNTARY ENVIRONMENTAL AUDIT REPORTS

Name of Regulated Entity

#### ECIS SEQ#

#	Requirement	Criteria used to determine if a requirement has been met	(Y/N)
1.	The Voluntary Environmental Audit must have been a self-initiated assessment or review that was not expressly required by statute, administrative rule, order, permit, license, or closure plan.	<ul><li>a) Was auditrequired by statute, rule, order, permit, license. or closure plan?</li><li>b) If yes, provide cite for the requirement:</li></ul>	(y / n) - If yes, immunity cannot be acknowledged. If no, go to #2
2.	The Voluntary Environmental Audit must have been performed by employees who were assigned the responsibility of performing such assessments, audits or reviews, or by a consultant engaged expressly and specifically for the purpose of performing an environmental audit to determine compliance with environmental laws.	<ul> <li>a) Who performed the audit?</li> <li>b) Was the audit performed by either the regulated entity or its contractor?</li> <li>c) Was the purpose of the audit to determine compliance with environmental laws?</li> </ul>	<ul> <li>( y / n ) -</li> <li>If yes, continue.</li> <li>If no, immunity</li> <li>cannot be</li> <li>acknowledged.</li> <li>( y / n ) -</li> <li>If yes, go to #3.</li> <li>If no, immunity</li> <li>cannot be</li> <li>acknowledged.</li> </ul>
5.	The Voluntary Environmental Audit must have been initiated after October 1, 1997.	<ul><li>a) Date audit was initiated?</li><li>b) Was the audit initiated after October 1, 1997?</li></ul>	(y / n > - If yes, go to #4. If no, immunity cannot be acknowledged.

#	Requirement	Criteria used to determine if a requirement has been met	(Y/N)
4.	The regulated entity must disclose the violation to DEQ within 30 days after the violation is determined to exist.	<ul><li>a) Date violation was determined to exist?</li><li>b) Date violation was disclosed to DEQ?</li></ul>	
		c) Was the violation disclosed within 30 days after it was determined to exist?	(y / n > - If yes, go to #5. If no, immunity cannot be acknowledged.
5.	Knowledge of the violation must have come from the voluntary environmental audit.	a) Did the regulated entity report that the violation was discovered during the voluntary environmental audit?	(y/n) If yes, go to b). If no, immunity cannot be acknowledged.
		b) Review DEQ permit and compliance files as appropriate to ascertain whether there had been any investigation or formal proceeding initiated prior to the date of the audit which dealt with the violation disclosed in the audit report. Was such an investigation or proceeding initiated prior to the audit?	(y / n) - If yes, immunity cannot be acknowledged. If no, go to X6.
6.	Disclosure can not be considered voluntary if the regulated entity is required to make the disclosure under a statute, rule, or permit.	Is disclosure of the reported violation required by a statute. rule. permit, or license? If yes, provide the appropriate cite:	(y / n > - If yes, immunity cannot be acknowledged. If no, go to #7.
7.	The regulated entity must provide sufficient details to enable DEQ to determine the particular law or requirement that was violated.	Has the regulated entity provided adequate documentation for DEQ to evaluate the violation and its cause. nature, extent, status, and impact?	(y / n) - If yes, go to #8. If no, go to #17.
8	The disclosed violation must be a violation of the provisions of Titles 75 or 80, MCA.	Is the disclosed violation a violation of the provisions of Title 75 or 80, or a violation of the rules implementing Titles 75 or 80, or a violation of the conditions of a permit or order previously issued under the provision of Title 75 or Title SO?	(y / n) - If yes, go to #9. If no, immunity cannot be acknowledged.
9.	The disclosed violation must not be part of a pattern of the same or very similar violations committed by the facility during the past 3 years.	Has the same or a very similar violation occurred at this facility, under the same ownership, within the past 3 years?	(y/n) - If yes, go to #IO. If no,go to #Il.

#	Requirement	Criteria used to determine if a requirement has been met	(Y/N)
10.		Based on the record of previous violations, does this violation fall within a "pattern" of violations?	( y / n > - If yes, immunity cannot be acknowledged. If no, goto II.
II.	The disclosed violation must not have been purposely or knowingly committed. It must not have resulted from gross negligence of the regulated entity.	a) Was the violation purposely or knowingly committed?	(y / n > - If yes, immunity cannot be acknowledged If no, go to b).
		b) Was the violation the result of gross negligence by the regulated entity?	(y / n) - If yes, immunity cannot be acknowledged If no, go to #12.
12.	The regulated entity must have either corrected the violation or negotiated a compliance schedule to return to compliance.	Did the regulated entity report that the violation had been corrected at the time of disclosure?	(y/n) - If yes, go to # 14. If no, go to # 13.
13.		What measures, if any. has the regulated entity taken to return to compliance?	Go to #18.
14.	The regulated entity must correct the violation to the satisfaction of the' department.	a) What measures has the regulated entity taken to return to compliance?	
		b) Has the regulated entity corrected the violation to the department's satisfaction?	(y/n) If yes, go to #15. If no, go to #18.
15.	The regulated entity must take steps to prevent the violation from reoccurring.	Has the regulated entity taken appropriate steps to prevent the violation from occurring again?	(y / n) - If yes, go to # 16. If no, immunity cannot be acknowledged.

#	R e q u i r e m e n t	Criteria used to determine if a requirement has been met	(Y/N)
16.	The disclosed violation must not have caused actual, substantial damage to the environment or public health.	Did the violation cause measurable, significant degradation of the environment or an increased risk of morbidity? If no, indicate how this decision was reached.	(y / n > - If yes, immunity cannot be acknowledged. If no, go to #19.
17.		Additional information is needed before the department's review can be completed. With input from assigned technical and legal staff, the ENFD Case Manager will prepare a letter to request the regulated entity to provide the needed information. Upon receipt of the requested information. the department will resume its review. If the regulated entity does not respond within the time frame provided in the department's request, immunity will be denied.	Upon receipt of the requested infor- mation, continue review by returning to the question of adequacy in item #7.
18.	If the violation had not been corrected at the time of disclosure, the regulated entity must negotiate a compliance schedule that will correct the violation.	a) Has the regulated entity negotiated a compliance schedule with DEQ that will return the facility to compliance?	(y / n > - If yes, proceed to b). If no, await comple- tion of negotiated schedule; if an ac- ceptable compliance schedule is not negotiated, immunity cannot be acknowledged
		b) Has the regulated entity reported that the violation has been corrected under the terms of the compliance agreement and schedule?	(y / n > - If yes, continue review by returning to the question in #14. If no, acknowledge- ment of immunity will be conditional; it must reference the need to comply with the schedule. Proceed to #15.
19.	The regulated entity must cooperate fully with DEQ in investigating the issues involved in the disclosure.	Has the regulated entity cooperated satisfactorily with DEQ during the investigation of the disclosed violation, in the negotiation of a compliance schedule, and in taking actions to correct the violation?	(y / n > - If yes, go to #20. If no, immunity cannot be acknowledged.

#	Requirement	Criteria used to determine if a requirement has been met	(Y/N)		
20.	Immunity can not be acknowledged if program primacy is jeopardized or the future delegation of program primacy will be threatened.	Will granting immunity for the disclosed violation jeopardize primacy or threaten future program delegation?	(y/n > - If yes, immunity cannot be acknowledged If no, go to #21.		
21.		If the above questions have been answered in a manner that leads to this box, the regulated entity has satisfied the statutory and technical requirements of the Voluntary Environmental Audit Act and may be immune from the imposition of administrative <i>or</i> civil penalties for the disclosed violation. The ENFD Case Manager will document the decision. The case manager will prepare the letter to be sent to the regulated entity informing it of the department's decision. The letter will be reviewed by the relevant division administrator, ENFD Administrator and assigned attorney prior to being put in final form. The letter will be signed by the department director or his designee.			

Notes/Comments (please refer to item #I:

ENFD Case Manager

Program Contact/Reviewer(S)

Legal Counsel Reviewer

Date Review Initiated \_\_\_\_\_ Date Review Completed/Tentative Immunity Determination Made \_\_\_\_\_

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Appendix C. Sample Forms

#### FORM 1. SAMPLE HAZARDOUS WASTE RECORDKEEPING FORM

To help you keep track of hazardous waste generated, use a form such as this one. This form would not replace an official manifest required for tracking the transportation and disposal of hazardous waste (manifests are available from the DEQ and EPA).

	Hazardous Waste Generation Form							
Location:			P	repared by: _				
Date:		<b></b>			Page	o f		
Date Generated	Waste	Quantity	Gas, Liquid or Solid	Hazardous Properties	Date Removed	Other Comments		
			· · · · · · · · · · · · · · · · · · ·					

#### FORM 2. POLLUTION PREVENTION IDEAS

List the potential pollution prevention measures your pollution prevention team discussed for your business. Be as specific as you can. It may help to prioritize your ideas from lowest to highest cost and to make a schedule for when the measures will be completed.

Check When Completed	Description	Project Cost	Projected Savings (per year)	Payback Period* (years)
~	Recycle office paper	\$1,800	\$2,000	<1

\*Projected Payback Period = Project Cost + Projected Savings Per Year

Name: \_\_\_\_\_

Date Completed:

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The materials listed above are available from the Montana State University Extension Service Pollution Prevention/Solid Waste Resource Library. For more information, contact the Montana Pollution Prevention Program toll-free in Montana at (888) 678-6872 or call (406) 994-3451.