

## **APPENDIX D**

### **MANAGEMENT PROGRAMS**

*The following information on environmental management programs are only examples. The establishment of appropriate management programs can only be made after proper consideration of national, regional and local conditions and requirements.*

*However, environmental management programs should be developed to address the following:*

- *Compliance Assurance*
- *Material Management*
- *Utility Management*
- *Waste Minimization*

## Environmental Management Programs

**Significant Aspect:** All aspects determined significant based on legal requirements    **Champion:** EMR

**Department/Area(s):** All applicable    **Process/Activity:** All applicable

**Objective:** Maintain regulatory compliance    **Target:** Ongoing

**Program Plan:** Regulatory Compliance Program    **Date:** September 21, 1999

Task	Responsible Party	Schedule	Performance Monitoring	Key Characteristics/Operational Controls/Comments
Identify applicable legal & other requirements	Env. Coordinator	Oct. 99 & annually thereafter	List of legal & other requirements	Prepare list as specified in EP-007
Communicate legal & other requirement changes to applicable area or dept. managers	Env. Coordinator	Ongoing	Communication record	Prepare memoranda or email summarizing changes and provide to area or dept. managers per EP-007 & EP-010
Communicate legal & other requirement changes to applicable staff	Affected area or dept. managers	Ongoing	Communication record or meeting minutes	Report changes as specified in EP-010
Conduct internal compliance audits	EMR & Compliance audit team	As specified in audit schedule	Audit schedule, checklists, CARs & audit summary report	EMR reports non-compliances to Management Team
Prepare and maintain list of monitoring and reporting requirements & schedules. Conduct monitoring and submit required reports as specified by legal & other requirements.	Env. Coordinator	Ongoing	List of requirements & schedules, reports	List of monitoring and reporting requirements & schedules revised as needed. Reports to agencies reviewed & approved by EMR prior to submittal

*Facility/Plant Name* Environmental Management System Manual

**Program Plan:** Regulatory Compliance Program (cont.)

Task	Responsible Party	Schedule	Performance Monitoring	Key Characteristics/Operational Controls/Comments
Calibrate and maintain monitoring equipment as specified by legal & other requirements, and by manufacturer instructions	Affected area or dept. manager	Ongoing	Calibration & maintenance schedules and records	Affected areas & dept.'s maintain list of monitoring equipment and calibration & maintenance schedules. Corresponding records maintained by area or dept.
Prepare permit applications and revise permits as necessary	Env. Coordinator	Ongoing	Applications & permit conditions	Permit applications prepared per applicable legal & other requirements. Permit conditions monitored per list of monitoring and reporting requirements & schedules
Respond to agency inquiries	Env. Coordinator	Ongoing	Communication records	Communications conducted per EP-010
Use project method statements to assess impact of new installations or equipment on compliance	EMR	Ongoing after Oct. 99	Project Method Statements & Evaluation report	Method statements generated per EP-011. EMR prepares evaluation report and submits to Project Manager. Project must be modified if compliance not maintained
Ensure CFC/HCFC and PCB containing equipment are serviced and maintained according to applicable requirements	Affected area or dept. managers	Ongoing	Maintenance schedules & records	Affected areas or dept.'s maintain maintenance records
Review waste streams to ensure that waste materials are properly classified	Env. Coordinator	Per monitoring schedules	List of waste streams	This review must be completed at least every 6 mo.'s prior to aspect identification
Ensure hazardous waste accumulation areas are maintained per applicable requirements	Affected area or dept. managers	Per monitoring schedules	Inspection log	Completed inspection logs submitted to Env. Coordinator for review
Ensure proper handling and disposal of wastes	Env. Coordinator	Per monitoring schedules	Waste manifests, inspection logs	Records maintained by Env. Coordinator

### Environmental Management Programs

**Significant Aspect:** Materials identified as significant

**Champion:** EMR

**Department/Area(s):** All applicable

**Process/Activity:** All applicable

**Objective:** Manage significant materials

**Target:** Ongoing

**Program Plan:** Managed Material Program

**Date:** September 21, 1999

Task	Responsible Party	Schedule	Performance Monitoring	Key Characteristics/Operational Controls/Comments
Identify materials used by facility and determine significance	CFT	Oct. 99 & every 6 mo.	Data recorded on EF-002.01	Type and annual quantity of materials recorded per EP-002. Materials determined significant are "Managed Materials".
Track Managed Material usage by area/department	CFT	Monthly, beginning Nov. 99	Monthly usage record	Type and monthly quantity of Managed Materials by area department. Results reported to EMR.
Investigate feasibility of reducing Managed Material usage	CFT	Nov. 99 & every 6 mo.	Report of investigation	Report results of investigation, with recommendations, to EMR
As appropriate, develop plan for reducing the use of select Managed Materials per EMR direction	CFT	Dec. 99 & every 6 mo.	Reduction plan	Reduction plan submitted to EMR for approval.
Implement Managed Material usage reductions, as applicable	Affected area or dept. manager	Jan. 00 & upon issuance of new plan	Monthly usage record	Type and monthly quantity of Managed Materials by area department. Results reported to EMR.

*Facility/Plant Name* Environmental Management System Manual

**Program Plan:** Managed Material Program (cont.)

Task	Responsible Party	Schedule	Performance Monitoring	Key Characteristics/Operational Controls/Comments
Evaluate materials before they are used on-site	CFT & affected area or dept. manager	Ongoing	Evaluation record	Personnel who purchase materials for on-site use will establish a system approved by the CFT for evaluation and approval of materials before they are brought on-site. The established system will use EP-002 for the evaluation. Results of reviews are to be reported to EMR. Materials deemed too hazardous may be banned.

### Environmental Management Programs

**Significant Aspect:** Energy usage identified as significant

**Champion:** EMR

**Department/Area(s):** All applicable

**Process/Activity:** All applicable

**Objective:** Reduce energy

**Target:** 5% (rate basis & production normalized) from 1998 levels by Jan. 2002

**Program Plan:** Energy Reduction Program

**Date:** September 21, 1999

Task	Responsible Party	Schedule	Performance Monitoring	Key Characteristics/Operational Controls/Comments
Monitor Energy Usage	Controller	October through December 1999	Utility Bills	Rate of Usage reported monthly to Energy Team
Identify high potential energy users and energy type. Prioritize areas for energy savings principally based on feasibility of energy reduction potential.	CFT	January 2000 – February 2000 and update semi annually	Data recorded on EF-002.01	Type and rates of utility usage recorded per EP-002
Develop utility reduction plan to achieve energy usage objective & targets.	CFT	March 2000	Reduction plan	Plan submitted to Management Team by the EMR for approval
For energy process identified in utility plan and establish baseline and performance metrics to track.	Controller	April 2000, track monthly	Monthly utility bills	Rate of usage and actual vs baseline reported monthly to Utility Team
Implement reduction initiatives as specified in the plan	Affected area or dept. manager	As specified in reduction plan	Progress reports	CFT to monitor implementation progress and report findings each month to EMR

*Facility/Plant Name* Environmental Management System Manual

**Program Plan:** Energy Reduction Program (cont.)

Task	Responsible Party	Schedule	Performance Monitoring	Key Characteristics/Operational Controls/Comments
Use project method statements to assess impact of new installations or equipment on reduction initiatives	EMR	Ongoing after Oct. 99	Project Method Statements & Evaluation report	Method statements generated per EP-011. EMR prepares evaluation report and submits to Project Manager. Objective & targets may be modified if project utilization rates adversely affect reduction initiatives and project utilization cannot be changed.

For Training Purposes Only

### Environmental Management Programs

**Significant Aspect:** Solid & liquid wastes identified as significant

**Champion:** EMR

**Department/Area(s):** All applicable

**Process/Activity:** All applicable

**Objective:** Reduce solid & liquid wastes

**Target:** 5% (volume basis & production normalized) from 1998 levels by December 2000

**Program Plan:** Waste Minimization Program

**Date:** September 21, 1999

Task	Responsible Party	Schedule	Performance Monitoring	Key Characteristics/Operational Controls/Comments
Identify solid & liquid wastes generated by facility and determine significance	CFT	Oct. 99 & update every 6 mo.	Data recorded on EF-002.01	Types and annual quantities of wastes & emissions recorded per EP-002.
Evaluate current and potential waste minimization practices for significant solid & liquid wastes and air emissions (e.g., recycle, reuse, or change in process or practice to minimize, eliminate or substitute)	CFT	Nov. 99 & update every 6 mo.	Report of evaluation	Report results of evaluation, with recommendations, to EMR. Include a discussion of current waste and air emission minimization practices.
Select target waste streams and develop action plan to achieve 2000 target	CFT	Dec. 99 & every 6 mo.	Minimization plan	Minimization plan submitted to Management Team by EMR for approval.
Establish traceable performance metrics for chosen waste streams.	Affected area or dept. manager	Monthly	Monthly record	Types and monthly quantities of wastes & emissions by area or department. Results reported to EMR.
Implement minimization initiatives specified in the plan	Affected area or dept. manager	As specified in minimization plan	Progress reports	CFT to monitor implementation progress and report findings each month to EMR

*Facility/Plant Name* Environmental Management System Manual

**Program Plan:** Waste Minimization Program (cont.)

Task	Responsible Party	Schedule	Performance Monitoring	Key Characteristics/Operational Controls/Comments
Evaluate program effectiveness and need for program adjustments to meet target.	Waste Coordinator, CFT	Quarterly	CFT Minutes	Comparison between actual and baseline is monitored and effectiveness of program evaluated.
Develop annual report for management review to include summary and status of action plans.	EMR, CFT	August 2000 and August 2001	Report	EMR to present the report to the Management Team to assess progress of action plans and need for adjustments.
Use project method statements to assess impact of new installations or equipment on reduction initiatives	EMR	Ongoing after Oct. 99	Project Method Statements & Evaluation report	Method statements generated per EP-011. EMR prepares evaluation report and submits to Project Manager. Objective & targets may be modified if project utilization rates adversely affect reduction initiatives and project utilization cannot be changed.