

DEQ EMS Implementation 2010

The DEQ Implementation Plan is a compilation activities, exercises, and procedures that are designed to improved environmental performance by DEQ. The report addresses activities to be conducted in order to avoid occurrence of and to reduce environmental impact from DEQ operations that have been identified to have significant environmental aspects (interactions).

Each year, an EMS Project Team is charged to develop an inventory of DEQ's environmental aspects and impacts, and to determine which aspects are potentially significant impacts. Four potentially significant environmental aspects related to DEQ internal operations, are energy use, water use, waste reduction, and travel, based on Executive Order 82 issued by the Governor. All Secretaries and all executive branch agencies and institutions are directed to increase the use of sustainability practices in order to reduce the costs of state government operations.

This Implementation Plan is considered a living document; hence, it is subject to scheduled, periodic amendments in the form of progress updates, activity additions, and activity removal upon completion. For additional information related to any of the implementation plan items, please contact EMS Manager (804-698-4029 or steve.coe@deq.virginia.gov).

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- D5. Track green purchasing by DEQ Facilities.

CHAPTER ONE

1. Individual Implementation Work Items

- 1.1 Environmental Policy** – The Environmental Policy is in place.
Responsible Party: EMS Manager
Date for Completion: 9/02/2007 **Status:** Complete
Comment: The DEQ Environmental Policy and the EMS Manual are posted on the DEQ Internet and Intranet for dissemination.
- 1.2 FY 2010 Budget** – Budget needs for agency EMS to be determined.
Responsible Party: EMS Manager
Date for Completion: 9/02/2009 **Status:** Complete
Comment: no specific budget for EMS activities
- 1.3 EMS Management Structure** – Director, EMS Management Team, EMS Project Team
Responsible Party: EMS Manager
Date for Completion: 10/01/2009 **Status:** Complete
Comment:
- 1.4 EMS Project Team Charter** – reviewed.
Responsible Party: EMS Manager.
Date for Completion: 10/01/2009 **Status:** Complete
Comment:
- 1.5 EMS Implementation Plan Assessment** – The **EMS Project Team** will undertake the next EMS assessment will take place in the first quarter of 2010.
Responsible Party: EMS Manager
Date for Completion: March 2010 **Status:** Pending
Comment:
- 1.6 EMS and Regulatory Compliance Audits** – The **EMS Project Team** has proposed that the EMS Audit requirement be handled by an internal committee established each year for this purpose.
Responsible Party: EMS Manager
Methods: On site audit of the EMS throughout DEQ
Date for Completion: 4/30/10 **Status:** Pending
Comment:
- 1.7 Records and Document Control Procedures** – The EMS structure requires that the organization establish and maintain procedures for the identification, maintenance, and disposition of environmental records and controlling the distribution of new EMS documents and removal of obsolete EMS documents.
To be done – Establish procedures for document control and records retention.
Responsible Party: EMS Manager
Methods: **General Guidance Procedure** is included in the EMS Manual
Date for Completion: 4/1/2010

Status: Pending

Comment:

- 1.8 Emergency Preparedness and Response (EPR)** – The EMS structure requires the organization to establish procedures for identifying the potential for emergency and accident situations, preparing response plans, and periodically testing response procedures.

Responsible Party(ies): DEQ Safety Office

Methods:

Date for Completion: 12/31/2009

Status: Complete

Comment:

- 1.9 Documentation** – The EMS structure requires organizations to establish information that describes the operation of the EMS. At the DEQ, this takes the form of an EMS Manual that has been completed

Responsible Party: EMS Manager

Date for Completions: 10/25/2009

Status: Complete

Comment:

- 1.10 Legal and Other Requirements** – The EMS structure requires organizations to establish and maintain a procedure for having access to environmental legal and other requirements. At the DEQ, the **EMS Project Team** has recommended that an archive of legal and other requirements be established as outlined in the EMS Manual.

To be done: Maintain Legal Archive

Responsible Party(ies): Director of Administration, Regional Directors, Policy Office, Regulatory Affairs Manager, and EMS Manager.

Methods: Compile and maintain an archive of environmental laws, regulations, ordinances, and other requirements. A key element of this task is to review local ordinances to determine if there are any that may affect the DEQ operations.

Date for Completion: annually

Status: Pending

Comment: Procedures for identifying and updating Legal and Other

Requirements are found in the EMS Manual and detailed procedures can be found in EMS Level II Documentation.

- 1.11 Internal Communications** – The EMS structure requires the establishment and maintenance of procedures for communicating throughout the organization about the EMS. The **EMS Project Team** recommends that this communication be a responsibility of the EMS Manager and the Public Affairs Manager.

Responsible Party(ies): EMS Lead - EMS Manager, Public Affairs Manager

Methods: DEQNET, direct e-mail, general awareness training, office staff meetings, functional unit staff meetings, details by programs to be determined.

Date for Completion : on-going

Status: Complete/Continuing

Comment: This is addressed in the EMS Manual

- 1.12 External Communications** – The EMS structure requires organizations to determine what information about the EMS it will furnish to external interested parties. At DEQ, it has been determined that for external communication, the information will be provided on the DEQ web site. This includes the EMS

Manual, the EMS Policy Statement, the EMA Implementation Plan and the Pollution Prevention Plan.

Responsible Party(ies): Bill Hayden

Date for Completion: on-going **Status:** Complete/Continuing

Comment:

1.13 Training Records – The EMS structure requires the establishment of a procedure for maintaining EMS training records.

Responsible Party(ies): Training Services Manager

Methods: Established and implemented a training records procedure.

Date for Completion: on-going **Status:** on-going

Comment: A general procedure is documented in the EMS Manual, Section 5.3.

1.14 Oversight – In order to ensure complete implementation and ongoing maintenance of the EMS, it is recommended that one individual be designated as responsible for providing management oversight of the EMS.

Responsible Party(ies): EMS Manager

Methods: Management Review

Means: 8 work hours/month

Date for Completion: on-going **Status:** on-going

Comment:

1.15 Agency-wide EMS Overview Training - The EMS structure requires that staff becomes familiar with the concept of environmental management systems and contents of the DEQ EMS

Responsible Party(ies): EMS Manager, EMS Project Team, Training Services Manager

Methods: training sessions in each regional and division office.

Date for Completion: Continuous **Status:** Continuous

Comment: An EMS overview is included in the New Employee Orientation Training sessions that are offered periodically. Overview material is posted on DEQNet.

2. Activities to be completed to apply for the VA DEQ VEEP Requirements.

2.1 Pollution Prevention Plan – The Virginia Environmental Excellence Program at the Environmental Enterprise (E2) level requires the establishment of a pollution prevention plan

Responsible Party(ies): EMS Manager, EMS Project Team

Methods: Review of aspects

Means:

Date for Completion: on-going **Status:** on-going

Comment:

2.2 VEEP Application and Annual Report –DEQ must report its accomplishments under the program.

Responsible Party(ies): EMS Manager

Methods: Annual data collection and reporting

Means:

Completions Date: April 1 of each year **Status:** Pending
Comment:

CHAPTER TWO

A. OBJECTIVES AND TARGETS

The EMS structure defines setting documented Objectives and Targets as an important element to be implemented in order to improve environmental performance. For 2010, the DEQ **Project Team** has identified energy use as a primary significant environmental impact, followed by waste use/conservation, waste minimization and recycling, and travel. The following are lists of integrated environmental objectives and targets to be implemented and achieved in order to reduce the level of impact among the four categories identified. Some of the implementation items may address more than one significant environmental aspect. They were developed to maximize outcome with the most efficient use of resources.

A1. Electrical and Thermal Energy Use: Improve Energy Conservation and Efficiency Within DEQ Facilities (Both Electrical and Thermal Energy) Where Possible.

A1.1 Evaluate any peak-hour provisions in power contracts.

Responsible Party(ies): General Services Manager

Date for Completion: on-going **Status:** underway

Methods: Review power contracts

Comment: All but two offices currently

A1.2 Ensure that DEQ facilities go into sleep mode when unoccupied

Responsible Party(ies): General Services Manager

Date for Completion: on-going **Status:** underway

Method: Review and update current practices to ensure electric power use efficiency

Comment: Working with DMME, DEQ will research possible power utility rate options and work with property managers. Any lease changes will have to come at the time of contract renewals.

A1.3 Review guidelines for cleaning crew shutdown of power and revise as necessary to ensure minimal power use at night.

Responsible Party(ies): General Services Manager

Date for Completion: on-going **Status:** underway

Method: Review and update current practices to ensure electric power use efficiency

Comment: Jay has confirmed that cleaning staff routinely cut off lights as they progress through the building

A1.4 Establish agency guideline/plan for energy conservation and develop procedures for periodic monitoring of and controlling deviation from energy conservation.

Responsible Party(ies): EMS Manager and General Services Manager

Date of Completion: on-going **Status:** on-going

Method: Staff development

Comment: Plan will be developed with aid of DMME.

A2. Water Conservation: Conserve water resources and reduce water where possible at each DEQ facility.

A2.1 Implement the water conservation plan developed by DEQ.
Responsible party: EMS Manager, General Services Manager and EMS Project Team
Date for completion: on-going **Status:** Underway
Methods: Each DEQ facility will implement procedures outlined in conservation plan. Water use billing reports will be assessed to determine progress.
Comments: Each facility has designated responsible parties to assure that the activities defined for water conservation are implemented.

A3. Energy Conservation and Procurement: Incorporate Procurement Language Supportive of DEQ EMS in Future Request for Proposal (RFP) Documents.

A3.1 Review for feasibility to make electric power use efficiency an element of RFPs for property leases.
Responsible Party(ies): General Services Manager
Date for Completion: on-going **Status :** on-going
Methods: Review and update current practices to ensure electric power use efficiency
Comment: The DGS's current RFP for leased space contains energy efficient lighting/electrical requirements. Any additional modification to RFP can be done to ensure further energy efficiency objective when a need for such a RFP arises. DGS would have to approve such language modification in the RFP. In the RFP, an Environmental Impact Study is also required.

A3.2 Examine feasibility of establishing a uniform eco-efficient policy on HVAC performance for DEQ facilities and make it a contractual requirement of leases, as appropriate.
Responsible Party(ies) : General Services Manager
Date for Completion: under review **Status :** under review
Methods: TBD
Comment:

A3.4 Make EMSs a consideration on RFPs for services.
Responsible Party(ies): Director of Administration
Date for Completion: On-going **Status :** Continuous
Methods: Introduce an EMS measurement criterion into RFPs
Comment: This consideration is a part of overall discussion and cooperative effort with DGS on EPP purchases.

A4. Waste Minimization and Recycling: Ensure training and outreach to staff on waste minimization strategies and recycling options for the offices.

A4.1 Promote efficient use of materials, such as paper, within the offices.
Responsible Party(ies): EMS Project Team members

Date for Completion: on-going **Status:** on-going
Methods: in-house and intra-agency emails and updates
Comment: Information and training is available on reuse strategies, double-side copying, electronic creation and management of documents and reports, and posting of often requested information on web site for reading and downloading as appropriate.

A4.2 Promote reuse of office materials, such as furniture and binders, within the offices.

Responsible Party(ies): EMS Project Team members
Date for Completion: on-going **Status:** on-going
Methods: in-house and intra-agency emails and updates
Comment: Information and training is available on reuse strategies.

A4.3 Promote recycling within the office.

Responsible Party(ies): EMS Project Team members
Date for Completion: on-going **Status:** on-going
Methods: in-house and intra-agency emails and updates
Comment: DEQ offices are recycling 31 different items as of 2009.

B. TRAINING

The EMS structure requires that employees whose job responsibilities could create a significant impact on the environment be trained and competent to carry out their responsibilities without unnecessarily triggering a significant environmental impact. The **EMS Project Team** has identified water conservation and energy use as the categories of significant environmental impact. The training activities are integrated and categorized by their resource and record keeping requirements and how they are delivered to allow for maximum delivery efficiency and effectiveness.

B1. Mandatory EMS Related Training to be Implemented Agency-Wide or to be Offered to a Large Segment of DEQ Staff and Would Require Certification of Completion and Training Record Documentation. This would have multiple deadlines for phasing in certain aspects of training. The training may be delivered through a classroom or an on-line setting but should be ultimately implemented and managed by the DEQ Training Services Office with the assistance of assigned individuals or offices. Subsequent to the first training cycle, the mandatory training will be delivered on an annual basis and to be offered to new employees at their orientation.

B1.1 Provide training to staff on water conservation techniques.

Responsible parties: This task is a component of the DEQ Training Services activities. Training Manager
Date for Completion: On-going **Status:** In-progress

B1.2 Provide electric power use efficiency training for DEQ employees, landlords, and their staffs.

Responsible Party(ies): This task is referred to the DEQ Training Services for inclusion in the EMS training.

Date for Completion: On-going

Status - In-Progress

Methods: Intranet/classroom

Comment: Two energy efficiency training materials have been posted on the DEQNet2. Training Services will need to develop the training material and to determine appropriate medium for dissemination of the information.

B1.3 Provide training to all DEQ personnel on thermal energy conservation

Responsible Party(ies): This task is referred to the DEQ Training Services for inclusion in the EMS training curriculum

Date for Completion: On-going

Status - In-Progress

Method: Design on-line training materials.

Comment: One thermal energy efficiency training material was posted on the DEQNet2. Training Services will need to develop the training material and to determine appropriate medium for dissemination of the information.

B1.4 Identify Training Needs to Renew EMS Awareness

Responsible Party(ies): EMS Project Team and DEQ Training Services for inclusion in the EMS training. Training Manager

Date for Completion: on-going **Status:** on-going

Method: Identify Training Needs and Design on-line training materials.

Comments: A renewed EMS awareness training program will be implemented to inform staff of the details of any changes in the EMS structure. Training will be completed within 90 days of availability of the training materials.

B2. Training to be delivered to Specific DEQ Staff Whose Role and Responsibility May Directly Impact Certain Significant Environmental Aspects Identified by the EMS Project Team. This training would require documented certification of completion in the staff's training record. The delivery of the training may or may not be conducted by the Training Services Office but it must document such training in the staff training record.

C. OPERATIONAL CONTROL

The EMS structure requires organizations to put in place operational control over activities that are associated with the identified significant environmental aspects in line with its policy, objectives, and targets. The EMS Management Workgroup has identified water use and electric energy use as categories of potentially significant environmental aspects. Following are the operational controls that are or need to be put in place to prevent and to reduce occurrence of negative impacts related to these significant aspects and to ensure that objectives and targets are achieved.

C1. **Water Conservation**

C1.1 **Continue with water conservation training as listed in Training Sections B1.1**

Methods: The EMS Management Team will provide oversight, use of EMS outreach and feedback, and through the EMS Project Team.

C2. **Ensure Energy Conservation Required by Executive Orders**

C2.1 **Continue with energy conservation training as listed in Training Sections B2.1. and B2.3.**

Methods: The EMS Management Team will provide oversight, and through the EMS Project Team.

C2.2 **To ensure future RFPs and facility leases contain language or content addressing or improving upon existing:**

- a) Eco-efficiency in HVAC performances. [Objectives & Targets Section A5.3]
- b) Building operation to go into sleep mode at night [Objectives & Targets Section A3.2].
- c) Guideline for cleaning crew shutdown of power [Objectives & Targets Section A3.3].
- d) Electric power use efficiency [Objectives & Targets Section A5.2].

Methods: Include in the RFPs evaluation and selection criteria in support of aforementioned items.

Comment:

D. MONITORING AND MEASUREMENT

The EMS structure requires that organizations establish and maintain documented procedures to monitor and measure the key characteristics of activities that are associated with the identified significant environmental aspects in line with its policy and objectives. The EMS Project Team has identified energy use as the category of potentially significant environmental aspects. Following are the monitoring and measuring activities related to this significant aspect. Within this section, there are monitoring and measurement activities that serve to establish baseline data for future evaluation. The other monitoring and measurement activities are means to identify deviation from objectives and targets and to assist operational control in meeting its purpose. In most cases, unless specified otherwise, the baseline data reflects fiscal year activities.

D1. Establish baseline and periodic Water Use by DEQ Facilities.

D1.1 Measure Water Use by each DEQ facility through water billing information.

Responsible Party: General Services Manager and designated facility managers

Date for completion: on-going **Status:** Underway

Method: Data from water billing will be collected and assessed monthly.

Comment: General Services Manager and designated facility managers.

D2. Establish Baseline and Periodic Electric and Thermal Energy Consumption by DEQ Facilities.

D2.1 Measure Electrical (Kilowatt) and Thermal Energy (Fuel) Consumption by DEQ Facilities.

Responsible Party(ies): General Services Manager

Date for Completion: annually, with 15% required by EO 48 by 2010, and an additional 5% by 2012.

Method: Refer to power company invoices and facility management billing records for fuel usage and report to EMS Project Team and DEQ LT.

Comment: Jay will collect records from building management on an established periodic basis with information breakdowns by month, in order to assist operational control activities. Jay maintains the procedures and data associated with baseline data collection activity.

D2.2 To monitor periodic electrical and thermal energy consumption level in accordance with the established monitoring plan.

Responsible Party(ies): General Services Manager

Date for Completion: On-going quarterly monitoring **Status:** Pending
reassignment of responsibilities.

Method: Review of Monthly Records

Comment: