



Division of Operations Environmental Implementation Procedure
Bureau: Highway Maintenance

Date: 2/10/11

Procedure EIP-11
Operational Controls

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Revision: 3.1

PURPOSE:

The purpose of this Environmental Implementation Procedure (EIP) is to establish, implement, communicate, and maintain documented procedures and systems to: 1) control activities and critical processes associated with significant environmental aspects and impacts, and 2) ensure that the EMS as a whole encompasses day-to-day environmental management activities.

DEFINITIONS:

Operational Controls - protective strategies designed to prevent routine or accidental environmental damage, minimize environmental impacts, and maintain regulatory compliance. Operational controls can include physical systems and engineering controls (i.e., locks on valves, secondary containment structures). They most often include administrative systems and controls such as written standard operating procedures, policies, work instructions, signage and diagrams, routine inspections, and training programs.

RESPONSIBILITY:

Office of Stewardship and Compliance (OSC):

- Provide oversight and assist Bureaus establish, document, and implement operational controls.

Director/Bureau Administrator:

- Advocate that personnel under his/her supervision are trained to understand the importance of, and follow procedures related to, operational controls.
- Advocate that adequate resources are available to implement operational controls.

Bureau EMS Team:

- Lead Bureau efforts to identify, implement, communicate, and document needed operational controls.

Bureau Employees:

- Understand and follow the Bureau's operational controls procedures and understand how they serve to minimize environmental impacts and risks, and maintain compliance with regulatory requirements.
- Provide information to the EMS team about any changes in Bureau activities that could change the effectiveness or need for operational controls.



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DOCUMENTS AND RECORDS:

- EIP-11-Form 11a Operational Controls Matrix

PROCEDURE:

1. The Bureau EMS Team reviews the list of activities and operations having significant aspects and impacts.
2. The Bureau EMS Team identify and list the operational control strategies currently in place to manage each activity or operation in the Operational Controls Matrix (EIP-11-Form 11a). Include relevant information gathered in Steps 3 and 4 of EIP-10: Monitoring and Measurement, and relevant legal or regulatory considerations identified in EIP-3: Legal and Regulatory Requirements.
3. For each identified activity, the Bureau EMS Team evaluates existing written operational control procedures and work instructions for adequacy and effectiveness.

Seek to modify existing job instructions or safety procedures to include related environmental issues. Some operational controls may not need to be formalized into written procedures or work instructions if point-of-use instructions or materials are deemed sufficient for the activity. For example, a physical barrier or sign may be an effective control against unauthorized entry into a hazardous waste storage area.

Consider the consequences to: EMS commitments, regulatory compliance, environment, and employee and public health and safety if the control was not in place or failed to function correctly. For example, if the identified operational control procedure for spill response at a satellite location relies on employees taking immediate action to respond to a spill, what would be the consequences if a fuel release occurs when no qualified employees are present? In this case, the operational control procedure may need to be modified to confirm that environmental and employee safety risks are minimized and regulatory compliance is maintained.

4. To the greatest extent possible, written operational control procedures should be developed and maintained by Bureau employees and managers who work with the specific process or activity. If an operational control is developed and/or maintained by someone else, input and coordination from individuals who work with the process is



needed. The Bureau EMS Team should assist employees and managers in this process.

Written control procedures should:

- Provide adequate control of the activity, product, or service.
- Avoid duplication with other procedures.
- Be simple, easy to follow, and user-friendly.
- Be communicated to suppliers and contractors, as appropriate, based on their interactions with the activity.

As appropriate to the activity, written procedures should spell out:

- Specific operating criteria that cover both normal and abnormal operating conditions (i.e., proper handling, storage, disposal, emergency shut down, and response procedures).
- Safety and hazard-abatement equipment and systems.
- Safety measures to take in case of emergency.
- Specific equipment and conditions that must be controlled including any special safety and environmental requirements.
- Routine maintenance procedures to be implemented to provide continued functioning and regulatory compliance.
- Training requirements as applicable.
- Recordkeeping and documentation requirements.

Considerations when developing operational controls:

- Written procedures can be maintained in a separate environmental manual or with other operations and maintenance documents.
- Review and update procedures periodically to confirm they remain current and reflect actual operating procedures and conditions.
- Procedures can be used as effective training tools to provide consistency, quality, and reinforce the EMS framework with staff.
- Operational controls can be created for activities that are important to the Bureau's mission and do not have significant environmental aspects or impacts.

5. Environmental requirements and impacts to the EMS should be evaluated during the planning, design, and/or implementation of any changes that may take place in Bureau buildings, processes, maintenance activities, or other operations. At the planning stage of any substantive changes, the Bureau EMS Team reviews the operations and



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incorporate environmental requirements and EMS considerations in new operations and EMS documentation.

- 6. The Bureau EMS Coordinator maintains all documentation and key records generated as part of this EIP in accordance with EIP-9: Documentation, Document Control, and Records Management.

Approved: 	Revision #: <u>3.1</u>
Name _____ State Maint Engineer	Revision Date: <u>2/10/11</u>
Title _____	Supersedes Revision #: _____ 3.0 _____
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