

## **CASE STUDY 4**

### **Washington Department of Transportation (WSDOT) Environmental Management System**

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### Washington Department of Transportation (WSDOT) *Environmental Management System*

<b>STATUS</b>	Under Development
<b>FOCUS</b>	<p>WSDOT is developing an EMS to integrate environmental issues with program and project delivery. The initial focus is on:</p> <ul style="list-style-type: none"><li>• Construction,</li><li>• Parts of Maintenance and Operations,</li><li>• State Ferry System.</li></ul> <p>Initial efforts are concentrated on compliance and demonstrating compliance. The EMS will be expanded to all priority activities as resources allow.</p>
<b>DOT's BASIS FOR SELECTION OF FOCUS</b>	<p>WSDOT recognized the need to coordinate various environmental programs and the above areas presented some of the most immediate opportunities for improvement.</p> <p>The EMS builds on the environmental policy statement signed by Sec. MacDonald on September 26, 2001. That policy commits WSDOT to "implement and maintain an environmental management system that embraces all the Department's program functions." WSDOT expects the EMS to:</p> <ul style="list-style-type: none"><li>• Support the Department's regulatory compliance obligations,</li><li>• Demonstrate environmental stewardship,</li><li>• Improve the Department's credibility on environmental issues, and</li><li>• Help streamline the Department's environmental processes.</li></ul>
<b>RELEVANCE TO THE EMS PROCESS ROADMAP</b>	<p>In developing their EMS, WSDOT is using basic a basic Plan – Do – Check – Act approach. Their efforts will parallel the steps presented in the AASHTO EMS Process Roadmap.</p>
<b>ACCOMPLISHMENTS AND BENEFITS</b>	<p>WSDOT's planned EMS accomplishments to avoid or minimize the effects of noncompliance, save money, and improve relationships include:</p> <ul style="list-style-type: none"><li>• Provide for beneficial dialogue between core business activities and the environmental unit,</li><li>• Clarify roles and responsibilities,</li><li>• Establish systematic performances measurement,</li><li>• Identify quantifiable measures of environmental performance,</li><li>• Develop a clear path for reporting environmental performance, and</li><li>• Implement Compliance Assurance Procedures.</li></ul> <p>The benefits expected from these accomplishments include:</p> <ul style="list-style-type: none"><li>• Achieve more consistent compliance and an ability to demonstrate compliance,</li><li>• Measure recyclables and the use thereof,</li><li>• Demonstrate improved environmental performance, and</li><li>• Improve credibility with public and regulatory agencies.</li></ul>
<b>IMPLEMENTATION NEEDS</b>	<ul style="list-style-type: none"><li>• 80-90% of the EMS development will be completed by WSDOT staff.</li><li>• Current resources are not sufficient to address all WSDOT program functions, so the functions will be addressed as resources allow.</li></ul>

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#### IMPLEMENTATION NEEDS (cont'd)

- WSDOT will be extending monitoring protocols and emergency preparedness and response plans as part of activity-specific management programs.
- WSDOT also has plans to develop an information management system to support EMS, which will be called their Environmental Information Management System or EMIS. The first modules they plan to develop are tracking systems for NEPA/SEPA commitments, ESA commitments, and environmental permit terms and conditions. While developed over time, each module is intended to fully integrate with other modules to comprise a seamless information management system.

#### KEYS TO SUCCESS

- The keys which WSDOT has identified thus far include the following.
- Integrate the EMS into existing business systems, creating as little new programs as possible.
  - Ensure good communication between and through senior management to the EMS office.
  - Avoid the use of ISO terminology. Use familiar terms to describe the effort.
  - Develop “mock-ups” that describe how an EMS would function and what it would look like are very beneficial to senior management.
  - Visible and strong commitment from senior management is key to continuing efforts.
  - Build on existing successes and programs.
  - Continually identify and evaluate opportunities to expand the EMS throughout all departments.
  - Routinely (frequent as opposed to lengthy) communicate goals, objectives, plans, and successes.
  - Stress program maintenance along with implementation.

#### BACKGROUND, ADDITIONAL INFO

- WSDOT has committed to an environmental management system that embraces all the Department’s program functions, but the initial effort will be limited in scope to work within available funding.
- EMS is being used to manage the immediate and long-term environmental impacts of their activities and products, improve environmental protection, and reduce operational challenges
- WSDOT conducted an Activity/Impact (i.e., “Aspects”) Analysis, which included a series of workshops with WSDOT personnel. The report and database produced out of the workshops ranked activities and impacts by various criteria (e.g., frequency of activity, whether positive or negative impact, etc.) to aid WSDOT in prioritizing significance.
- WSDOT is coordinating with the Washington State Ferries (WSF), which is in the midst of developing an EMS for their operations, within the structure of their mandated Safety Management System.
- WSDOT will be extending monitoring protocols and emergency preparedness and response plans as part of activity-specific management programs.
- Constraint: Funding was limited---resolved by revising scope.
- Constraint: Cultural, convincing individuals in other areas that environmental is part of their job and that environmental is more than compliance.

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#### **BACKGROUND, ADDITIONAL INFO (cont'd)**

- The EMS is being integrated with existing management and environmental initiatives:
  - Erosion Control program,
  - Hazmat Handling,
  - 4D Manual (under ESA),
  - Wetland mitigation evaluation effort,
  - Environmental streamlining and compliance systems, and
- Environmental affairs works with other program offices to provide training and assist in integrating requirements into DOT specs and guidance documents.

#### **CONTACT(S)**

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#### **EXAMPLE TOOLS, PROCEDURES**

WSDOT's Compliance Assurance Procedures provide the foundation for fulfilling EMS goals of consistency, repeatability, and continual improvement in environmental performance. These procedures can be obtained from Mr. Warfield.

WSDOT's 4(d) Manual also provides an excellent example of a programmatic EMS. The web location for this Manual is [http://www.wsdot.wa.gov/biz/maintenance/4d\\_Rule/default.htm](http://www.wsdot.wa.gov/biz/maintenance/4d_Rule/default.htm).