

Using an Environmental Management System (EMS) to Meet Transportation Challenges and Opportunities

AASHTO Workshop #2

Building an EMS in Your State DOT Using the EMS Process Roadmap – Part 2

WORKSHOP #1
Building an EMS in Your State DOT Using the EMS Process Roadmap

This second Workshop is being conducted to further assist DOT personnel understand the AASHTO EMS Process Roadmap and learn how the Roadmap can be implemented in DOTs.

WORKSHOP INSTRUCTIONS

The information presented on the following pages provides specific instructions to help in applying EMS Process Roadmap Steps 6 through 11 to DOT activities. Following is General Information to be reviewed before moving to the detailed step-by-step instructions.

1. As with the first Workshop, your Team will be asked to share information on its efforts and findings during a panel discussion with other EMS Workshop participants. The individual selected for the first Workshop may continue this role or another representative of the Team could be selected.

See Item 7 for a list of questions that may be addressed when reviewing your Team's efforts during the panel discussion.

2. Worksheets are provided at the end of the detailed instructions for EMS Process Roadmap Steps 6 through 11. These worksheets are provided for your convenience in taking notes and keeping track of your Team's efforts.
3. The focus activity identified in the first Workshop will continue to be used in this Workshop.
4. Continue with and build upon the information and decisions from the first Workshop in applying Steps 6 through 11 of the EMS Process Roadmap.
5. The time allotted for each workshop is believed to be adequate to work through the assigned steps of the EMS Process Roadmap. However, to help the Team complete each step of the EMS Process Roadmap we offer the following suggested schedule:

2:45 – 3:00	Step 6, Identify improvements to achieve EMS objectives.
3:00 – 3:15	Step 7, Assign responsibilities for developing procedures, processes, and tools.
3:15 – 3:30	Step 8, Identify personnel affected by the EMS.
3:30 – 3:45	Step 9, Identify EMS training needs, responsibilities, and schedule.
3:45 – 4:00	Steps 10A and 10B, Review performance and progress.
4:00 – 4:15	Step 11, Conduct senior management review.

6. Workshop participants are encouraged to use the results of and the thought processes used in the workshop exercises to help develop and implement an EMS in your own DOT.

WORKSHOP #2 (cont'd) – Building an EMS

WORKSHOP INSTRUCTIONS (cont'd)

7. Following are items and questions to consider when reviewing your Team's efforts during the Panel Discussion.
- Plan for questions from other participants.
 - The focus will be on what you have learned from applying EMS Process Roadmap Steps 6 through 11.

 - Briefly describe your Team's:
 - Procedures, processes, tools, and initiatives in-place and to be developed;
 - Assignment of responsibilities and the basis(es) for the assignments;
 - Employees to be covered by the EMS and the role(s) that each group plays in implementing the EMS;
 - The means to monitor progress and performance; and
 - The key points that senior management would need or in which they would be interested.
 - Regarding the last sub-bullet above on senior management review, describe any distinctions between management interests and performance information needs. Why are there these distinctions? How would your Team explain and justify this information to senior management?
 - Describe any barriers that could affect EMS implementation (in particular Steps 6 through 11) and potential solutions to overcome these barriers?
 - How did you reach a consensus on specific elements (e.g., needed procedures, existing initiatives, employees to be involved, training needs, and performance and progress monitoring) of the EMS? What formed the basis(es) for this consensus?
 - How would you apply what you've learned in applying Steps 6 through 11 to your own DOT?
 - With the focus on understanding and learning how to implement Steps 6 through 11 of the EMS Process Roadmap, what are some key points that you would like to share with other Teams or would like to hear other Teams discuss?

WORKSHOP #2 (cont'd) – Building an EMS

WORKSHOP INSTRUCTIONS (All steps will focus on the activity or facility selected in Workshop 1.)

6. Identify improvements to achieve EMS objectives

Continue the analysis begun in Step 5, identify gaps/needs for procedures, processes, and tools.

- Identify the desired procedures, processes, and tools that will:
 - Address the issues and opportunities of the specific aspects selected in Step 1,
 - Achieve the environmental and business benefits identified in Step 2,
 - Fulfill the actions, objectives, and targets established in Step 3, and
 - Meet the commitments and expectations of management determined in Step 4.
- Keep in mind the EMS attributes:
 - Consistency,
 - Repeatability,
 - Adaptability and flexibility (to accommodate various situations),
 - Integrated with existing actions (see Step 5), and
 - Easily understood by the user.

PLEASE NOTE: This Step, in conjunction with Step 5, provides the means to move the DOT from “what is in place” to “what should be used.”

7. Assign responsibility for developing enhanced or new procedures, processes, and tools.

Identify personnel for an EMS Development Team who will help in the development AND implementation of the EMS procedures, processes, and tools.

- Identify a Team leader (this may be the EMS Manager) who will coordinate Team activities and maintain the Team’s focus on “results.”
- The Team should be small enough to be manageable and meet routinely.
- Set a clear, agreed upon time table for Team efforts.
- The Team should represent all levels and units affected by the EMS.

PLEASE NOTE: The EMS Development Team can support identification of the desired EMS procedures, processes, and tools (see Step 6). In this case, Steps 6 and 7 would progress concurrently.

WORKSHOP #2 (cont'd) – Building an EMS

WORKSHOP INSTRUCTIONS (All steps will focus on the activity or facility selected in Workshop 1.)

8. Identify personnel (by title) affected by EMS, define responsibilities, and communicate responsibilities.

The EMS Development Team identifies ALL personnel who would play a role in implementing, or following, the EMS procedures, processes, and tools.

- Develop BRIEF responsibility statements for the identified personnel.
- The responsibility statements should be related to the actions required by the procedures, processes, and tools.
- Identify the means by which these responsibilities will be communicated.
- Establish a schedule for communicating the environmental responsibilities.
- Determine who will communicate the responsibilities (Note: may be based on existing personnel practices).

PLEASE NOTE: Incorporate these statements of environmental responsibility into existing performance review/job description practices.

PLEASE NOTE: These activities may proceed concurrently with Steps 6 and 7.

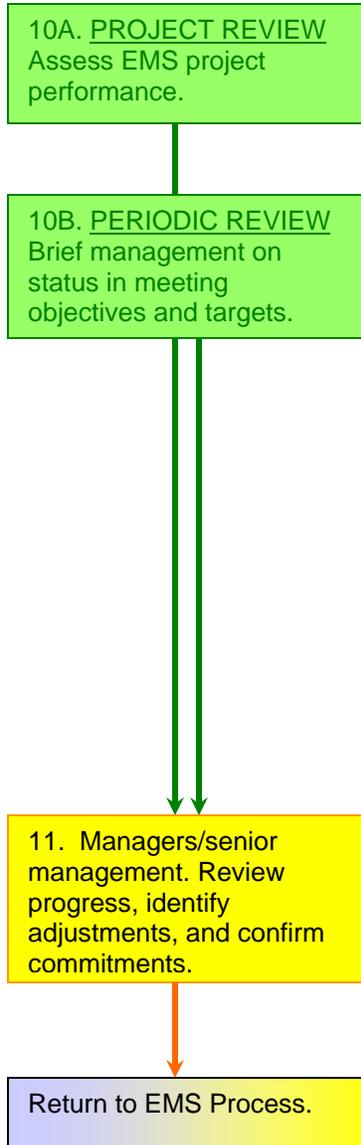
9. Identify EMS-related training needs, responsibilities and schedule. Conduct the training.

The EMS Development Team develops a training program.

- Determine the training type and content that would best achieve implementation of the EMS procedures, processes, and tools.
 - Consider the intended audience (different types and content may be needed).
- Determine the training schedule/frequency.
- Identify existing training materials, schedules, and/or programs (refer to Step 5) that could be adapted for EMS use or to which EMS content could be added.
- Identify the presenter(s) for the training.
- Develop the training materials. This could be performed by:
 - The EMS Development Team,
 - A subgroup of the Team, or
 - Others identified by the EMS Manager and Team.
- Present the training to the intended recipients and in accordance with the established schedule.

WORKSHOP #2 (cont'd) – Building an EMS

WORKSHOP INSTRUCTIONS (All steps will focus on the activity or facility selected in Workshop 1.)



Monitor EMS progress and performance.

- The EMS Manager and EMS Development Team identify criteria and schedule that can be used to assess EMS progress and performance on an ongoing basis. Refer to:
 - The actions, objectives, and targets from Step 3;
 - The benefits identified in Step 2; and,
 - The management commitments and expectations identified in Step 4.
- Develop a progress summary report for senior management and present the report.
- Identify problems that may occur during EMS development and implementation and the means by which they could be overcome (either as they occur or before they occur).
 - Include these solutions in the management report.
 - Identify actions that may require management comment or action.
- The EMS Manager and Development Team identify criteria and develop a report format that will be used to assess overall success of the EMS project. Refer to Steps 2, 3, and 4.
- Submit the project review report to senior management.
 - Characterize lessons learned and successes.
 - Identify opportunities for improving upon and/or expanding EMS efforts within or beyond the current organizational unit (refer to Steps 1 through 3).

Senior management review progress and performance and set course of action.

- The EMS Manager submits the progress report, reviews progress, and identifies any problems and suggested corrections.
- Management identify, commit to, and assign responsibility(ies) for next actions.
- The EMS Manager submits the project review report.
 - Identify opportunities/next steps.
 - Review how lessons learned to be incorporated in next actions.
 - Solicits management commitment to next actions.
- Management identify, commit to, and assign responsibility(ies) for next actions.

WORKSHOP #2 (cont'd) – Building an EMS

EMS PROCESS ROADMAP WORKSHEETS

Continue with and build upon the efforts of the first Workshop.

6. Identify improvements to achieve EMS objectives

Desired Procedure, Process, Tool	Available or Adaptable		Who's Responsible	When Due
	Yes	No		

7. Assign responsibility for developing enhanced or new procedures, processes, and tools.

EMS Development Team Members

WORKSHOP #2 (cont'd) – Building an EMS

EMS PROCESS ROADMAP WORKSHEETS (cont'd)

8. Identify personnel (by title) affected by EMS, define responsibilities, and communicate responsibilities.

Personnel Responsible Under EMS

9. Identify EMS-related training needs, responsibilities and schedule. Conduct the training.

Training Type/Content	Available or Adaptable for Use		Who's to Attend	When Provided
	Yes	No		

WORKSHOP #2 (cont'd) – Building an EMS

EMS PROCESS ROADMAP WORKSHEETS (cont'd)

10A. PROJECT REVIEW

Assess EMS project performance.

10B. PERIODIC REVIEW

Brief management on status in meeting objectives and targets.

Progress Review Criteria, Potential Problems, Suggested Solutions

Project Success Criteria, Anticipated Lessons Learned, Expected Opportunities for Expanded or Additional Efforts

11. Managers/senior management. Review progress, identify adjustments, and confirm commitments.

Describe what you would expect management's reaction to be to the expanded or additional efforts.

Describe what you would do to convince management to move forward.

WORKSHOP #2 (cont'd) – Building an EMS

COMMENTS:

Describe any issues or highlights from your workgroup exercise that can be shared with the other workgroups and that would help others in developing an EMS.