

Environmental Management System (EMS) Summary for Solid Waste Planning Area Pilots

An Environmental Management System (EMS) is a set of processes and procedures developed by an organization to proactively manage its environmental impacts. An EMS is based on the continual improvement cycle of “plan, do, check, and act.” Many organizations use an EMS to not only identify and evaluate environmental legal requirements, but to reduce overall environmental impacts and associated regulatory compliance risks. An EMS can also be used to reduce costs and inefficiencies, prevent work disruptions, improve worker morale and generate positive public perception.

The general steps of an EMS are:

- Plan – An environmental policy for the organization is established. Legal requirements are identified as well as the environmental priorities (or impacts) of the organization. Environmental objectives and targets are developed along with the associated schedules and responsibilities.
- Do – The organization implements its environmental policy and associated environmental objectives and targets. This is accomplished through training, communication, documentation, environmental controls and emergency response planning.
- Check – A review of the EMS and environmental compliance is conducted and the results are evaluated. Any gaps in the EMS or compliance are documented and corrected.
- Act – The EMS is reviewed with senior management with a discussion of accomplishments of the organization as well as any compliance or system weaknesses. Revisions to the EMS are made as necessary.



Iowa House File 2570 has established an EMS Pilot Program for six solid waste planning areas. Each Pilot organization will implement an EMS which focuses on the following six components: Yard Waste Management, Hazardous Household Waste Collection, Water Quality Improvement, Greenhouse Gas Reduction, Recycling Services, and Environmental Education. Iowa DNR has defined the ten major elements of the EMS in the attached document, “Elements of HF 2570’s EMS.”

ELEMENTS of HF 2570's EMS

There are 3 main overarching elements.

1. Environmental Policy Statement: Statement by the organization of its intentions and principles in relation to its overall environmental performance which provides a framework for action and for the setting of its environmental objectives and targets, and its commitment to continual improvement through the EMS.
2. Environmental Impacts: The organization identifies and evaluates the actual or potential impacts to the environment, whether adverse or beneficial, from its activities, services and facilities. During the evaluation process, significant impacts to the environment are determined.
3. Legal and other requirements: The organization must identify the legal requirements for its operations and facilities, including relevant environmental laws, regulations and permits, and worker health and safety regulations, and have a process for tracking any changes in these requirements.

The following 7 elements would be applied to each of the 6 plan components (Yard Waste Management, Hazardous Household Waste Collection, Water Quality Improvement, Greenhouse Gas Reduction, Recycling Services, Environmental Education):

4. Objectives and Targets: The organization establishes objectives relevant to its policy, environmental issues and impacts previously identified, the views of interested parties, and other factors. Targets necessary for achieving the stated objectives are also established. A target is much more detailed than its objective and must be quantifiable.
5. Action Plan: Actions necessary to achieve the objectives and targets. The plan includes identifying the individuals and/or organizations responsible for carrying out specific tasks, timelines for completion of each step in the plan, and a schedule for periodically reviewing and updating, as conditions dictate, the objectives and targets.
6. Identify key resources and additional needs: As part of reviewing the draft of the action plan, conduct an inventory of key resources needed to carry out and complete the action plan. Resources may include fiscal matters, specific skills, facilities, partners, and additional needs. Upon completion of the inventory the action plan may need to be adjusted accordingly.
7. Communication/Training/Awareness: Establish processes for internal and external communication. External communication will include reaching out to those groups and organizations that have been identified as having an interest, stake, or role in the organization's ongoing EMS program. There must also be procedures for

receiving and responding to relevant communication from external interested parties. Internal communication is directed to individuals, organizations and entities that have a role or responsibility within the action plan. Internal communication includes a process to ensure that all responsible parties are familiar with the EMS and have the training necessary to capably execute their roles.

8. **Monitoring and Measurement:** A documented process for monitoring key activities and measuring performance related to the specific environmental objective and target.
9. **Assessment:** The organization must have documented procedures for assessing the function of each component and its effectiveness of and conformance with the EMS plan. Assessment is the process of drawing conclusions from the performance measurements.
10. **Reevaluation and modification:** The reevaluation and modification element is an activity that allows an organization to improve and strengthen the EMS on an ongoing basis. This element considers areas where the EMS has met, exceeded, or failed to meet expectations. Identify root causes of those outcomes, and develop additional goals and activities appropriate to each. It's an opportunity to realize the organization's commitment to continuous improvement and should not be looked upon negatively.