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Overview of Environmental Management Systems

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Overview of Environmental Management Systems

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An **Environmental Management System (EMS)** provides a systematic way to review and improve operations for better <u>environmental performance</u>. An **EMS** can help an operation better meet or exceed its compliance requirements. It can also help an operation use resources more effectively and streamline operations, thereby reducing costs and becoming more competitive.



BIG IDEA

An **EMS** is a framework for managing those significant **environmental aspects** you can control and those over which you have influence.

A commonly used framework for an **EMS** is the one developed by the American National Standards Institute (ANSI) and the International Organization for Standardization (ISO) for the ANSI/ISO 14001 standard. Established in 1996, this framework is the official international standard for an **EMS**. While the **Agriculture Environmental Management System (AEMS)** recommended by USU Extension is based on the ANSI/ISO 14001 approach, the process does not provide for meeting all the requirements of that standard.

The five main stages of an **EMS**, as defined by the ANSI/ISO 14001 standard, are:

• Commitment and policy: the owner/operator commits to environmental improvement and establishes an environmental policy for the operation.

BIG IDEA

Continuously identifying and reducing risks leads to improved competitiveness and environmental performance.

• **Planning:** the owner/operator conducts a review of the operation, identifies legal requirements and environmental concerns, establishes objectives, evaluates alternatives, sets targets, and devises a plan for meeting those targets.

- **Implementation:** the owner/operator follows through with the plan by establishing responsibilities, training, communication, documentation, operating procedures, and an emergency plan to ensure that <u>environmental targets</u> are met.
- **Check:** the owner/operator monitors the operation to evaluate whether the targets are being met, and if not, takes <u>corrective action</u>.
- **Review:** the EMS is modified to optimize its effectiveness. The review stage creates a loop of continuous improvement for the operation.

The advantage of adopting the **EMS** is that it enables you to consider and plan for managing the environmental risk of your operation's products, processes and services. Many methods and tools have been developed that will help you to compare alternatives to identify the least cost, best performing and lowest environmental impact options. The **EMS** approach will help you do the following:



- practice pollution prevention,
- use resources efficiently,
- > avoid shifting problems from one waste stream to another,
- understand the risks associated with using both regulated and unregulated chemicals.
- integrate management of worker safety and health requirements with management of environmental concerns,
- > practice extended product and process responsibility, and
- > manage system change in addressing environmental concerns.

Thus, by adopting this approach, you can develop an **EMS** that helps you continuously identify and reduce risk to people and the environment. By focusing on reducing risk and more effective resource use, improvements in environmental performance will be built into your **EMS**.

USU Extension's AEMS program provides methods and tools to help agriculture operators consider risk reduction when answering the following questions:

- > How does you operation impact the environment?
- Which environmental impacts are significant?
- How can your operation improve its environmental performance?

If you have comments or want to know more about the AEMS program, please contact John D. Harrison at idh@cc.usu.edu or (435) 797-3396.

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