



# ***Sierra Army Depot***

***ISO 14001***

***Environmental Management  
System (EMS)  
Awareness Training***



***~ protecting our environment is  
everyone's responsibility ~***





# ISO 14001 Overview



ISO 14001 is an internationally accepted standard that defines the requirements for establishing, implementing and operating an Environmental Management System.

An Environmental Management System (EMS) is a program framework that allows an organization to consistently **control its significant impacts** on the environment, **reduce the risk of pollution** incidents, **ensure compliance** with relevant environmental regulations and **continually improve** its processes and operations.



# Executive Orders



EO 13423, signed 01/24/2007; Sec. 3. *Duties of Heads of Agencies*. In implementing the policy set forth in this order, **the head of each agency shall:**

- (b) implement within the agency **environmental management systems (EMS)** at all appropriate organizational levels to ensure:
  - (i) use of EMS as the primary management approach for addressing environmental aspects of internal agency operations and activities;
  - (ii) **establishment of agency objectives and targets**, and
  - (iii) **measure performance** in the implementation of this order.

EO 13693, signed 03/19/2015, supersedes EO 13423 and states that it continues to be the policy of the United States that agencies shall increase efficiency and improve their environmental performance through continued implementation of formal Environmental Management Systems (EMS).



# ISO 14001



## ***Certification Benefits***

- Reduces resource use like energy, water, etc.
- Reduces solid and hazardous waste disposal costs and problems
- Reduces pollution
- Getting recognition as a “green” company on a domestic and international level – gives competitive advantage
- Drives performance improvement and improves efficiency
- Ensures compliance to legal requirements
- Reduces liability
- Potentially saves SIAD from paying heavy legal penalties for noncompliance





# ***Sierra Army Depot Environmental Policy 200-2 (paraphrased)***



Sierra Army Depot (SIAD) considers the environment to be of paramount importance and is committed to leadership and stewardship in **protection of the environment and workplace safety**. Environmental management is based on **continual improvement, sustainability, hazard identification and control (aspect/impact identification), and pollution prevention** in furtherance of our goal of protecting our environment and our workers.

SIAD **complies with federal, state, and local regulations, policies and procedures**. SIAD **reviews environmental objectives and targets annually** or when new types of work are received.

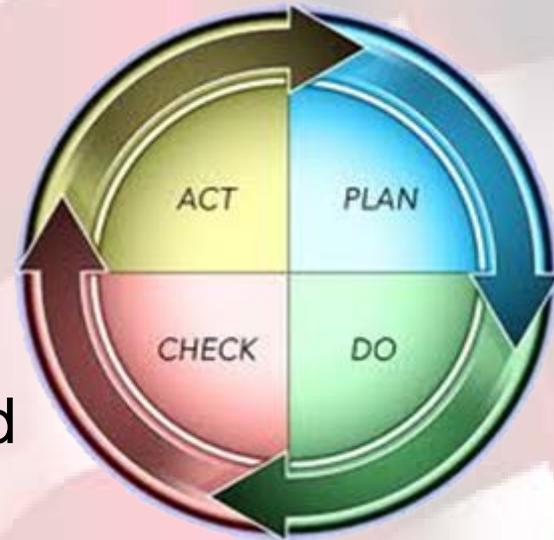
This environmental policy is documented, implemented, maintained and communicated to all persons working for or on behalf of the organization and is available to the public.



# EMS Overview



- “Plan” what you will Do
- “Do” according to your Plan
- “Check” to see if what you did worked
- “Act” to change or improve the part of your Plan or Do that did not give you the results you intended
- **Key Concept of ISO 14001:** “Say what you do, Do what you say, and document what you did!” **If you do not document it, it did not happen.**





# ***Environmental Aspects and Impacts Definitions***



- Environment:** Surroundings in which organizations, personnel, etc., operate and have influence on, including air, water, land, natural resources and their relation.
- Environmental Aspect: (WHAT)** element of your work activities, products or services can interact with the environment.
- Environmental Impact: (HOW)** can those aspects (elements) change the environment, whether adverse or beneficial, resulting from an organization's work activities, products or services.



# ***Environmental Aspects and Impacts Examples***



***Everybody at SIAD has a role and responsibility managing the EMS program. Ensure you perform tasks in an environmentally safe manner!***

- Environmental Aspects:** Recyclables (wood products, metal banding, paper, ink/printer cartridges, lead acid batteries, etc.); hazardous materials (oil, fuels, chemicals, etc.); hazardous waste; utilities (electricity, water, etc.); forklift/equipment use, painting activities, etc.
- Environmental Impacts:** Solid waste going to the landfill (reduced landfill lifespan, soil), hazardous material/waste spills (impacts soil, groundwater), energy and water conservation, equipment fuels, oils, exhaust, volatile organic compound emissions [VOCs].





# ***Environmental Aspects and Impacts Examples***



- Hazardous materials in storage, flammable storage cabinets.
- Calibration of measuring, weighing and monitoring equipment. Equipment not operating properly could have an adverse impact.
- Hazardous waste is an environmental aspect that would be an environmental impact if spilled or released and would be a nonconformance if not labeled, improperly labeled or improperly stored.
- Paint / Blast booth filter changes are environmental aspects because they minimize air emissions (impacts).



# Potential Significant Environmental Aspect Areas



Hazardous Waste Management  
*(all work areas)*

Landfill *(solid waste diversion)*

Hazardous Material Storage  
*(igloo areas)*

Recycling Area *(recyclable materials)*

Base Support Shops *(heavy equipment usage)*

DOIM (Information Mgmt) *(e-waste)*

Fire Department *(emergency preparedness & response)*

Paint/Blast Booths *(air emissions)*

Drinking Water *(water testing)*

Tactical Vehicle/Asset Storage Areas  
*(leaking assets/equipment)*

Facilities & Equip. Maint. *(motor pool)*





# ***Objectives, Targets and Programs Definitions***



***Systematic process to achieve continual improvement.***

- Environmental Objective:*** *An environmental goal to be achieved.*
  
- Environmental Target:*** *Measurable performance requirement to be met to achieve the Environmental Objective.*



# ***FY16 Objectives and Targets***

## **Hazardous Waste Reduction**

### **Objective:**

Reduce hazardous waste generated by SIAD activities by diverting recyclable materials to SIAD recycling programs.

### **Target:**

Reduce annual hazardous waste generation by 15% each fiscal year.



# ***FY16 Objectives and Targets***



## **Landfill Solid Waste Diversion**

### **Objective:**

Reduce solid waste going to the landfill by diverting scrap wood material to SIAD recycling programs.

### **Target:**

Divert scrap wood solid waste from the SIAD landfill by 25% each fiscal year.



## ***5.3 Organizational Roles, Responsibilities and Authorities***



SIAD Top Management has appointed the **Environmental Chief as the Environmental Management Representative (EMR)** with the responsibility and authority to ensure:

- Environmental management system requirements are established, implemented and maintained in accordance with ISO 14001 international standards.
- Reporting to Top Management on the performance of the environmental management system for review including recommendations for improvement.



## 7.5.3 Control



# *of Documented Information*

- Must establish, implement and maintain a procedure to
  - Periodically review, update and re-approve documents (organization “plans” are Standard Operating Procedures (SOPs), Desk Guides, forms, etc.)
  - Ensure current versions are available at points of use and form numbers are applied if required
  - Documents must remain legible
  - Documents of external origin are identified and controlled
  - Prevent unintended use of obsolete documents



# 8.1 Operational Planning and Control



**Plan and carry out processes to prevent and minimize impacts to the environment**

- Each organization must establish, implement and maintain documented procedures (SOPs, Desk Guides, etc.) to control situations where the lack of documented procedures could lead to deviations and nonconformities
- Procedures must include steps to identify and control environmental impacts of the organizations activities
- Procedures and requirements must be communicated to suppliers and contractors





# 8.2 *Emergency Preparedness and Response*



## **Procedures for identifying and managing emergencies that can have environmental impacts**

- Establish, implement and maintain procedures to identify potential emergency situations and accidents
- Respond to actual emergency situations and accidents, and prevent or control adverse environmental impacts
- Review and revise procedures, especially after an accident or emergency occurs
- Periodically test procedures
- Document and critique test





# 8.2 Emergency Preparedness and Response – Post the current Spill Procedures card at work areas and at all hazardous waste accumulation areas



## SPILL PROCEDURES

In the event of a spill of any amount of chemicals, petroleum products, hazardous material, or residues from process operations, paint operations, etc., the following actions shall be taken by the individual causing, witnessing, or discovering the spill:

1. Evacuate personnel from the immediate area as necessary.
2. Notify Security by calling: **911**
3. Security will then notify the following in the order listed:

<b>Fire Department</b>	<b>x4911</b>	<b>-or-</b>	<b>x4309</b>
<b>Safety</b>	<b>x4234</b>		
<b>Environmental</b>	<b>x4381</b>	<b>-or-</b>	<b>x4235 -or- x4622</b>



4. Non-emergency spills, call: **x4381 -or- x4235 -or- x4622**
5. **If it is safe to do so and within your level of training**, stop the spill from spreading by:
  - closing any open valves or levers, or;
  - berming the spill with absorbent material, spill socks, spill dikes, or soil.

❖ Contact Environmental for any information or assistance completing your mission in an environmentally safe manner.

530-827-4381	x4381	Environmental Protection Specialist
530-827-4235	x4235	Hazardous Waste Program Manager
530-827-4622	x4622	Chief, Environmental

Rev. 06 October 2010



# ***10.1 Nonconformity, Corrective Action and Preventive Action Definitions***

**Systematic approach to identifying problems**

- **Nonconformity** - non-fulfillment of a requirement
- **Corrective action** - action to eliminate the cause of a detected nonconformity
- **Preventive action** - action to prevent the cause of a potential nonconformity

**Your Role! Self identify problems, document them and correct them in a manner so they will not occur again**



# *Examples of EMS Issues*



- What do you do and who do you call in case of a spill of hazardous material or hazardous waste?
- Reduce, reuse, recycle!
- I have an expired can of hazardous material, what should I do with it? Know where your waste accumulation area is located!
- What should I do with hazardous wastes? Dispose of properly in accordance with federal, state and/or local regulations.
- Do I have a SOP, Desk Guide or JHA for my process or operation? If not, why not? Make sure procedures include steps to control environmental impacts!
- Evacuation drills are required three times each year. Are you doing them and know where you keep the records.
- Who is responsible for ensuring SIAD's EMS is successful? We all are!



# Recyclables...



Containers for specific types of recyclables and undesirables. Large recycling containers for banding, cardboard and wood. Other recyclable metals are collected separately.



← Metal Banding only



Cardboard only →



← Wood only



# ...and Trash



Containers for specific types of landfill acceptable trash and landfill undesirables. Make sure YOU use the correct container! Using the incorrect container could result in YOU dumpster diving!

Landfill trash  
only →

← Undesirable  
trash only

Landfill trash  
only →





# *Environmental Management Team*

- Environmental Management Representative (EMR)/EMS Team Leader/Environmental Chief x4622
  
- Environmental Management System Program Manager x4787

This training presentation is available at:  
I:\\_All Sierra Army Depot Employee's\EMS Program\EMS  
Training & Information\ISO 14001 EMS Awareness Training  
and  
the Sierra Army Depot website.



# Remember...

Protecting our **environment** is  
**EVERYONE'S** responsibility

**Questions/Comments?**

