



NAVFAC Mid-Atlantic PWD Great Lakes

2017 Annual Environmental Management System Awareness Training

April 2017

What is an Environmental Management System?



The Navy has evolved from a robust compliance and pollution prevention focused environmental process, to a continuous improvement based process aimed at long term mission sustainability and resource management. This focus will reduce mission impact on the environment while maintaining a high level of regulatory compliance.



What is an Environmental Management System?



- **An Environmental Management System (EMS) is defined as the following:**
- **A framework that allows an organization to consistently control the effects its operations or processes may have on the environment and to continually improve its operating procedures. A system that establishes a management framework so that an organization's impact on the environment can be systematically identified and reduced.**
- **That component of any organization's overall management systems that takes into account organizational structure, planning, activities, procedures, processes, and resources for developing, implementing, achieving, reviewing, and maintaining their environmental processes and policies.**
- **A continual cycle of planning, implementing, reviewing, and improving the processes and actions that an organization undertakes to meet its organizational and environmental goals.**

What is an Environmental Management System?



An EMS is designed to lead to continual improvement of an organization. The Navy has chosen to base their EMS on the International Organization for Standardization, ISO 14001 framework. The framework consists of four phases:

- ✓ Planning
- ✓ Implementing
- ✓ Checking
- ✓ Reviewing



What is an Environmental Management System?



The Navy's EMS Program derives much of its organization and process methodology from the ISO 14001 Standard.

- ISO 14001 requires that an organization determine its environmental aspects. An environmental aspect is identified as any element of the organization's activities, products, or services that can interact with the environment.

- Examples of environmental ASPECTS (activities, products, or services that can interact with the environment) include the following:
 - waste generation
 - energy consumption
 - paper consumption
 - hazardous materials usage

- After your organization identifies its environmental aspects, it can then determine how it impacts the environment. An environmental impact is defined as any change (complete or partial) to the environment, whether adverse or beneficial, resulting from the unit's functional mission or activities.

Environmental Aspects



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Examples of environmental IMPACTS (any change to the environment resulting from the unit's functional mission or activities) include the following:

- health and safety exposure
- use of landfill space
- use of natural resources
- generation of non-hazardous waste
- hearing impairment

Take a minute to think about the work activity within your unit. What environmental aspects and impacts do you believe are associated with your organization?

Why is EMS Important?



The benefits of implementing an environmental management system (EMS) and why they are so important to your unit are many. To reduce operational impact, the Navy is committed to focusing not only on what activities happen at your site, but also why they happen. Over time, the systematic identification and correction of the system's deficiency leads to better environmental and overall organizational performance and mission sustainability.

- An EMS provides an opportunity to assess how your unit manages environmental risks and to find better and more cost effective solutions.

Here are other examples of how the Navy EMS will help you and your organization:

- ❖ Long-term mission sustainability
- ❖ Decreasing environmental impact on the mission
- ❖ Reducing environmental impacts and preventing pollution
- ❖ Improving overall environmental performance and enhancing compliance
- ❖ Increasing efficiency of operations by reducing environmental-related costs
- ❖ Using material and resources more effectively to fulfill the mission
- ❖ Avoiding cost associated with clean-ups, fines and violations
- ❖ Complying with Executive Order 13693 "Planning for Federal Sustainability in the Next Decade" which will be discussed later.

Presidential Directive - EMS



On January 24, 2007, President Bush issued Executive Order 13423, Strengthening Federal Environmental, Energy, and Transportation Management. The executive order directs federal agencies to utilize the framework of their Environmental Management Systems to implement sustainable practices to facilitate the accomplishment of the following goals:

- VEHICLES:** Increase purchase of alternative fuel, hybrid, and plug-in hybrid vehicles when commercially available.
- PETROLEUM CONSERVATION:** Reduce petroleum consumption in fleet vehicles by 2% annually through 2015.
- ALTERNATIVE FUEL USE:** Increase alternative fuel consumption at least 10% annually.
- ENERGY EFFICIENCY:** Reduce energy intensity 30% by 2015.
- GREENHOUSE GASES:** Reduce greenhouse gas emissions through reduction of energy intensity by 3% annually or 30% by 2015



Presidential Directive - EMS



As per the Commander and Chief!

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RENEWABLE POWER: At least 50% of current renewable energy purchases must come from new renewable sources (in service after January 1, 1999).

BUILDING PERFORMANCE: Construct or renovate buildings in accordance with sustainability strategies, including resource conservation, reduction, and use; siting; and indoor environmental quality.

WATER CONSERVATION: Reduce water consumption intensity by 2% annually through 2015.

PROCUREMENT: Expand purchases of environmentally-sound goods and services, including biobased products.

POLLUTION PREVENTION: Reduce use of chemicals and toxic materials and purchase lower risk chemicals and toxic materials from top priority list.

ENVIRONMENTAL MANAGEMENT SYSTEMS: By 2010, increase to at least 2,500 the number of Federal operations that implement environmental management systems, up from about 1,000 today.

The Captains EMS Policy



To help everyone remember the policy, the following acronym can be used to summarize the key concepts:

C - Comply with all rules

A - Always improve

R - Reduce waste

E - Eliminate pollution



The Captains EMS Policy



What is our Environmental Policy?

Naval Station Great Lakes is committed to the protection of human health and the environment through education, pollution prevention, and the investment of resources necessary for continual improvement and compliance.

Our success in supporting current and future Navy operations depends on our ability to manage resources, anticipate change, and keep ahead of increasingly complex environmental regulations through prudent planning. Sustainability resource management, hazardous materials minimization, energy conservation, air and water quality and continuous process improvement are environmentally sound actions that contribute to the success of the Navy mission.

In concert with the accomplishment of our operation goals, Naval Station Great lakes will do the following:

- Support an Environmental Management System (EMS) to proactively address the environmental aspects of our mission.
- Ensure its EMS activities are sufficient to address the nature and scale of environmental impacts of the activities on base.
- Prevent pollution and actively seek to continually improvement it's EMS.
- Comply with all legal requirements and other applicable standards as outlined in our EMS and operate in a manner compatible with the environment.
- Undertake a structured process on a periodic basis to set environmental targets and review objectives for the EMS.
- Commit to documenting, implementing and maintaining the EMS.
- Ensure the scope of the EMS includes and is communicated to all persons and activities within the command's purview.
- Commit to open and honest communication with the public.

Your EMS Job Description!



- **As a person working for, or on behalf, of this installation, you are expected to know the following:**
- **Our Environmental Policy**
- **How your job duties impact the environment**
- **What procedures you must follow**
- **What to do in the event of an environmental emergency**
- **Your organization's significant environmental aspects**

What are my organization's objective and targets?

1. **Reduce Green House Gas Emissions by 6% compared to 2014.**
2. **Reduction in overall energy usage (MBTU/ft²) by 2.5%**
3. **Inspections of applicable Stormwater construction sites to 100%**

What should I do in the event of an environmental emergency?



If a spill occurs in your work area or if you discover a spill that has not been responded to, follow the steps below:

- If possible (without causing harm to yourself) contain and initiate clean-up of the spill. Clear the area of personnel to avoid unnecessary exposure.
- Call the Emergency Communications Center (ECC) and report the spill:
 - Naval Station Great Lakes Fire Department **(847) 688-3333**.
 - The ECC will ensure that all appropriate notifications are made.
- Remain at the scene until the Incident Commander (IC) and/or the Fire Department, arrives. The IC will assess the situation to determine if additional clean-up assistance is required.
- Inform your chain of command.

QUESTIONS?