



FORT GEORGE G. MEADE

Environmental Management System (EMS)

General Awareness Training - 2016



Introduction

Environmental Stewardship is the responsibility for environmental quality shared by all those whose actions affect the environment. Protecting the Environment is everyone's responsibility. Performing your job in an environmentally responsible way benefits us all by:

- Protecting the health of the surrounding ecosystem
- Preserving our land for future generations
- Being good neighbors to surrounding communities
- Ensuring regulatory compliance
- Saving money by decreasing wasted resources

Introduction (continued)

As a member of the Fort Meade community, you need to:

- Know how your job impacts the environment
- Adhere to operating procedures
- Know that the potential environmental impacts of departing from these operating procedures
- Know the environmental legal requirements of your job
- Know your organization's Environmental Officer who can assist you and your organization conform to the Fort Meade EMS

Why Do We Care?

Impacts to the environment from the normal day-to-day activities at this installation can be substantial. Through our Environmental Management System (EMS), Fort Meade strives to ensure that the impacts of our activities are beneficial rather than detrimental to the environment.



What is EMS?

- The management system which includes organizational structure, planning activities, responsibilities, practices, procedures, processes and resources for developing, implementing and achieving environmental objectives.
- An environmental management system brings together the people, policies, plans, review mechanisms, and procedures used to manage environmental issues.
- The International Organization for Standardization (ISO) has developed over 18,000 international standards on a variety of subjects. ISO 14001 standard provides the requirements for an EMS.
- Army adopts ISO 14001 EMS.



Why EMS?

- EMS is required by Executive Order 13423 “Strengthening Federal Environmental, Energy, and Transportation Management” signed on 24 Jan 2007.
- Executive Order 13514 “Federal Leadership in Environmental, Energy, and Economic Performance”, signed on 5 October 2009 by the President of the United States reaffirmed a commitment to EMS.



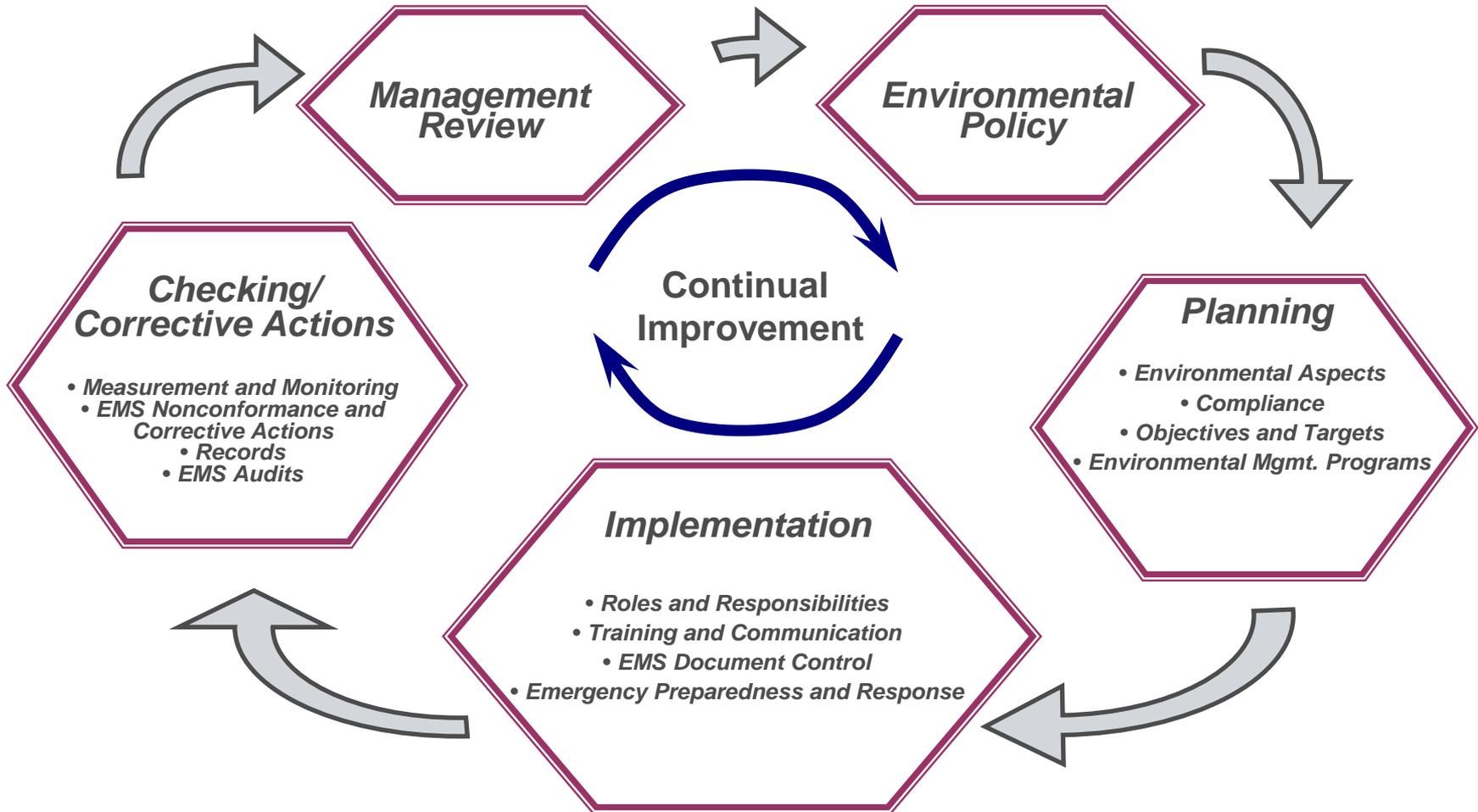
Army EMS

Strengthening Army Readiness Through Mission Focused Environmental Management System

- Mission-focused Army EMS turns a legal mandate into a tool to support mission accomplishment
- Supports the Army Transformation
- Makes environmental excellence a tool for mission planning and execution to support long-term stewardship
- Promotes sustainable operations
- Aims for improved overall performance and reduced costs



Elements of ISO 14001 EMS



An EMS is a **Continuing Process** Not An Event!

ISO 14001 EMS Major Concepts

An ISO 14001 EMS has many elements. For this awareness training, we are going to review three main elements:

1. Environmental Policy
2. Environmental Aspects
3. Environmental Impacts

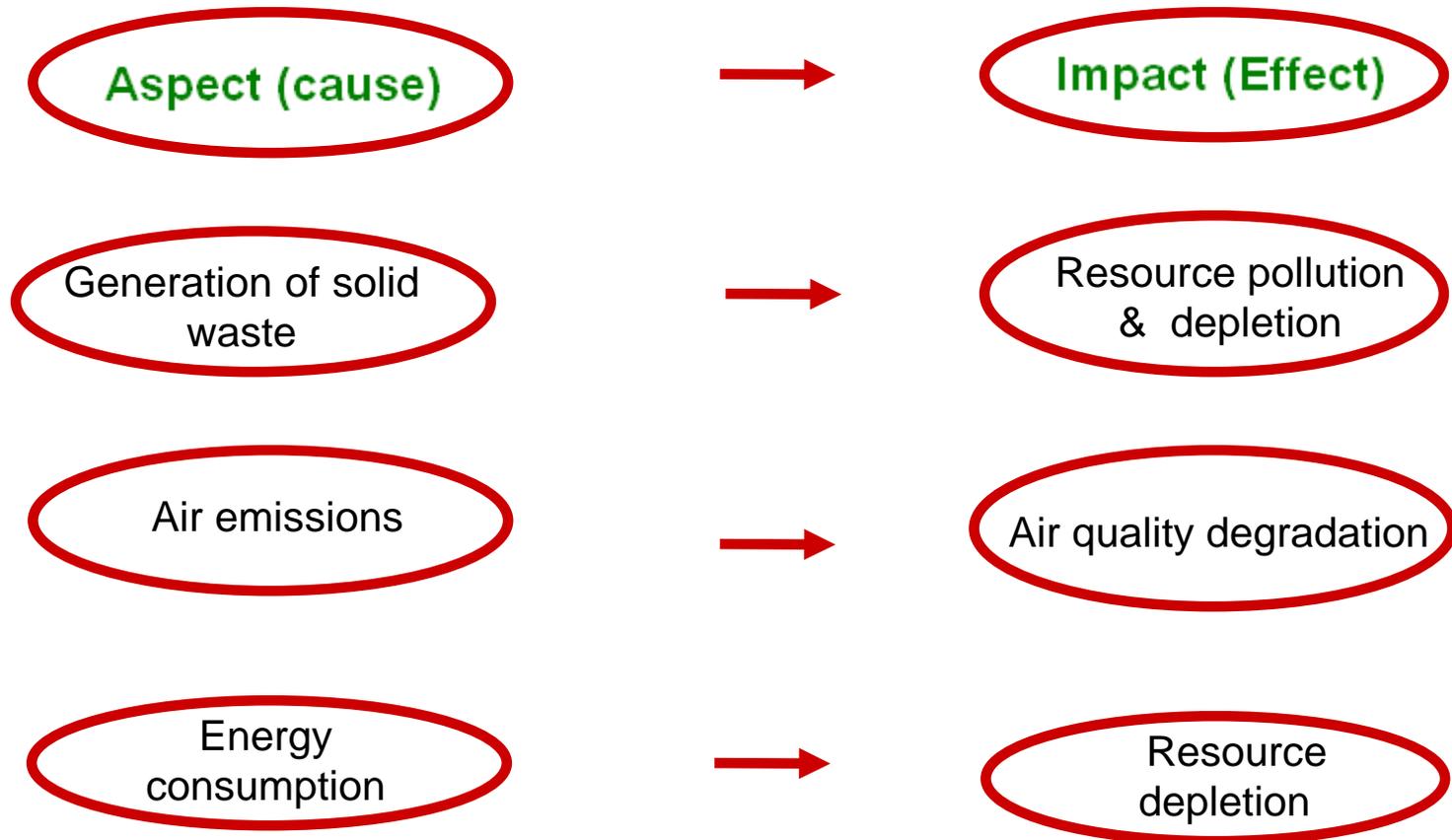
Fort Meade's Environmental Policy

The Environmental Policy describes Fort Meade's approach to sustainable environmental performance and management. Fort Meade personnel should understand that the Fort Meade Environmental Policy:

- Applies to all people that work on Fort Meade
- Commits to environmental compliance
- Commits to pollution prevention
- Commits to continual improvement
- Is available on the Fort Meade EMS website

Environmental Aspects & Impacts

Environmental aspects and impacts exist in a “**Cause and Effect**” relationship with each other. It is more prudent and efficient to manage “how” you interact with the environment (aspect) than to manage “what you have done to the environment (impact).



How Your Job May Affect the Environment

Your daily activities at work also have environmental impacts

- Even an office worker's activities have impacts: especially in the areas of consumption of electricity and water, and generation of solid waste



- Collectively, because of their sheer numbers, administrative/office job functions contribute heavily to the installation's most significant environmental aspects

“Did you know -----”

- On average, each one of us produces 4.4 pounds of solid waste each day. This adds up to almost a ton of trash per person, per year
- Americans throw away enough glass bottles and jars every two weeks to fill the 1,350-foot towers of the former World Trade Center. All of these jars are recyclable. Recycling one glass bottle not only saves the same amount of energy to power a 100-watt light bulb for 4 hours, but also creates 20 percent less air pollution and 50 percent less water pollution compared to producing a new bottle comprised of raw materials.
- A single quart of motor oil, if disposed of improperly, can contaminate up to 2,000,000 gallons of fresh water. Americans can reduce their dependence on imported oil by reusing old motor oil after it undergoes a recycling and re-refining process.
- If every American household recycled just one out of every ten plastic bottles they used, we'd keep 200 million pounds of the plastic out of landfills every year.



“Did you know -----”

- Each ton of recycled paper can save 17 trees, 380 gallons of oil, 3 cubic yards of landfill space, 4,000 kilowatts of energy and 7,000 gallons of water
- Recycling a single run of the Sunday newspaper saves an average of 75,000 trees. If every city in the United States recycled newspapers, the country saves about 250,000,000 trees yearly
- It takes 80-100 years for an aluminum can to decompose in a landfill. Recycling one aluminum can saves enough energy to run a 100-watt bulb for 20 hours, a computer for 3 hours, or a TV for 2 hours.
- Recycling aluminum saves 95% of the energy needed to produce new aluminum from raw materials. Energy saved from recycling one ton of aluminum is equal to the amount of electricity the average home uses over 10 years.
- Recycling steel and tin cans saves 74% of the energy used to produce them.



Fort Meade EMS Objectives & Targets “Recycling”

- **Objective 1:** Reduce Solid Waste going to municipal landfills
- **Target:** Increase recycling rate to 50% of general refuse (non Construction & Demolition waste) by the end of 2016



What the Installation is doing!

■ Increasing recycling awareness

- Outreach education activities
- Displays at on-post activities
- EMS Awareness training
- Post newspaper articles, Factsheet/pamphlet



New recycling centers distributed throughout Post

■ Providing resources for recycling

- Recycling Center/ Staff/ Pickup
- Recycling containers



Earth Day event (recycling tour)

■ Assessing recycling collection locations

■ Recycling C&D debris from construction projects

■ Monitoring & measuring tonnage quarterly

■ Sustainable Procurement



What you can do to support EMS!

- Recycle where you work and play on Fort Meade
- Request recycling containers for your workplace
- Request recycling containers for meetings, conferences, celebrations, changes of command, sporting events, etc.
- Ensure recyclable materials are directed to an appropriate container
- No off-post trash in post dumpsters
- Tell your Environmental Officer/Supervisor when you see problems or opportunities to improve recycling
- Encourage others to recycle; when in doubt recycle
- **RECYCLE! RECYCLE! RECYCLE!**



Did you know... About Ft. Meade Waste Generation?

Ft Meade generated a total of 5050 tons of waste in 2015;
but over 2,012 tons of waste was recycled.

That is 39% and we can do much better with your help!



Fort Meade Recycling Facility, Bldg. 2250 Rock Avenue



Fort Meade Recyclable Items

- Paper: computer paper, white ledger, colored ledger, tab cards, corrugated cardboard, newspaper, mixed waste paper & miscellaneous waste paper
- Plastic: plastic bottles, jugs, vinyl bottles such as cooking oil, salad dressing, mouthwash, etc.
- Glass: color-separated and mixed color
- Metal: aluminum beverage cans, clean aluminum scrap & aluminum foil, tin-coated steel containers (canned food, soup cans, etc.), bimetal containers such as peanut cans
- Miscellaneous Recyclables: lead-acid batteries & household batteries which are handled by the DPW Environmental Division



What is wrong in these pictures?



Recyclable cardboard box in the regular trash dumpster



Recyclable soda cans in the trash

Recyclable plastic bottle in the regular trash dumpster

DUMPSTER RULES

RECYCLABLE ITEMS PROHIBITED!!

- NO bottles, plastic containers, cans, glass, or jars
- NO cardboard, office/copy paper or newspaper
- NO electronics, CDs, batteries or toner cartridges

Also, NO Fort Meade residential housing trash or off-post trash

**VIOLATORS will be subject to
ADMINISTRATIVE ACTION**

For more information: 301-677-9674

Please Remove Caps from Plastic Bottles and Drain all Liquids Prior to Placing them into Recycling Bin



Why should we recycle?



- Recycling is a required Army program
- Recycling saves limited space available in landfills and avoids disposal costs
- Recyclables are reused by industry to produce new products without the need to utilize natural resources
- We pay for every pound of trash sent off-post to a landfill. In a typical year, Fort Meade disposes of approximately 5,300 tons of a total solid waste at a cost of \$425,000
- Most recyclables collected throughout post are sold at the current market price. In recent years, we recycled approximately 2,300 tons/year earning funds that help to offset the cost of operating a Qualified Recycling Program (QRP).
- Disposal cost savings from recycling in FY15 were \$108,600

“Sustainable Procurement ” (previously Green Procurement)

Showing preference for purchasing products that are:

- Made with Recycled Content
- Made with Bio-based Products
- Energy and Water Efficient
- Alternative Fuels or Vehicles
- Renewable Energy Sources
- Sustainable Building Materials
- Without Ozone-Depleting Substances (ODS) and Priority Chemicals
- EPEAT-registered Electronic Equipment
- Environmentally Preferable



Sustainable Procurement encourages federal purchasers to make environmental benefits a key part of their purchasing decisions.

Benefits

- Helps Fort Meade reach our recycling goals
- Uses products that are healthier for the workforce
- Saves energy and natural resources
- Reduces disposal costs and hazards
- Saves money

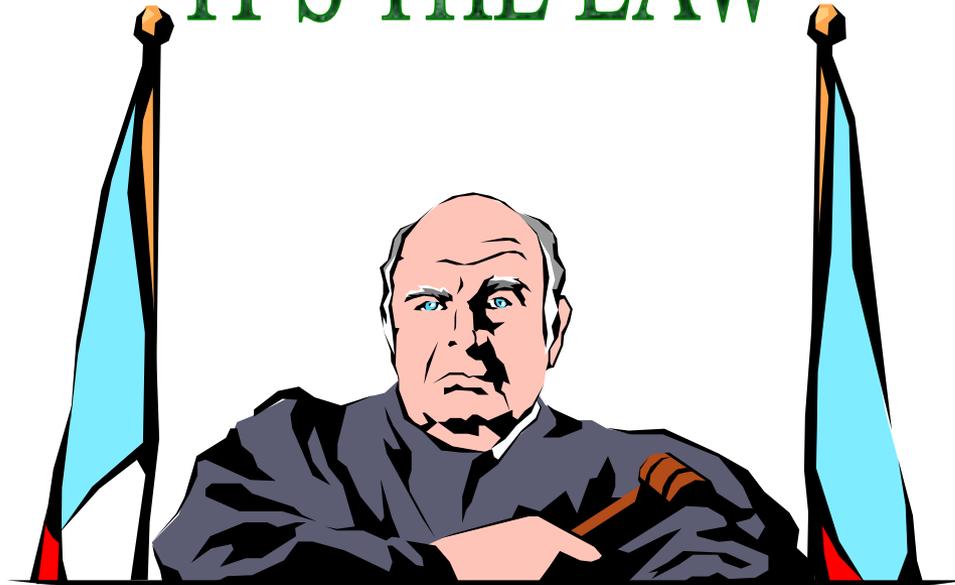


Regulatory Requirements

IT'S THE LAW
IT'S THE LAW

Resource
Conservation
and Recovery Act
of 1976

Federal
Acquisition
Regulations



Executive Orders
13423 and 13514

Energy Policy Act 2005

2002 Farm Bill

DOD GP Program Policy

Applicability

Sustainable Procurement applies to:

- All purchases regardless of method or vendor
- All contracts
- Tenant activities
- Non-appropriated fund activities

If your purchase or contract is funded with Federal dollars, these requirements apply to you!



**Service
Contract**

Green Products in the Office

Examples:

- Copy Paper – Recycled Content
- Fax Machine – Energy Star
- File Folders – Recycled Content
- Plastic Binders – Recycled Content
- Fire extinguisher – SNAP (ozone alternatives)
- Carpet – Recycled Content or Biobased
- Light fixtures – Energy Star
- Trash cans – Recycled Content



EMS Objective & Target “Transportation”

- **Objective**: Reduce vehicle emissions and fossil fuel consumption by reducing single occupant vehicles (SOVs) passing through Fort Meade gates during morning and evening rush hours
- **Targets**: Decrease percentage of SOVs to 80%

Fort Meade Shuttle



Is this our future?

- Fort Meade continues to grow!!!
- You as an individual have a choice to make a difference and reduce congestion by participating in carpooling, taking mass transit, working a compressed schedule, and teleworking when possible
- Take part in incentive program for mass transit



What the Installation is doing?

- Transportation Incentive Program (up to \$255 per month) & free shuttle service between Odenton Train Station & Fort Meade
- Encouraging employees to carpool, vanpool and take mass transit
- Providing Federal employees compressed work schedules (in non-furlough conditions)
- Offering Telework from home.
- Advertising transportation alternatives
 - Publishing post newspaper articles; distributing fact sheet/pamphlet; EMS awareness training
- Monitoring & measuring transportation network
 - Coordinating with Installation Transportation Group to ensure continuous improvement

What you can do?

- Utilize Transportation Incentive Program & free shuttle service between Odenton MARC Train Station & Fort Meade
- Carpool, vanpool, take mass transit
 - Go to FMWR ride sharing web site to post classified ads to find a carpool partner?
(<http://www.ftmeademwr.com/>)
- Utilize compressed / telework schedules
- Educate others about alternate transportation opportunities
- Bike or walk to work

Why seek alternatives to SOVs?

- Save money on fuel
- Reduce road congestion & save commute time
- Reduce air pollution
- Reduce vehicle “wear & tear”
- Reduce roadway degradation and save tax payers money
- Mass transit riders can: *relax, read, socialize, surf the Internet, catch up on email, or sleep*
- Exercise



Bike to Work!

- Bicycle & Walk-thru gate at the Rock Avenue / Odenton Road access point. Open to registered pedestrians and cyclists 24/7.



- 10 bike lockers installed just inside the gate. Riders can use the lockers on a first-come, first-served basis to store their bicycles overnight (must provide own lock).

Why do I need to be involved?

An effective Environmental Management System requires the participation of **all installation personnel**, because everyone's activities can impact the environment. The success of the Fort Meade EMS depends on **YOU**.

Everyone's
Management
System



*This is why we like to refer to our “EMS” as
Everyone’s Management System!*

Summary

Every soldier, civilian employee, community member and support contractor of Fort Meade must:

1. Know that EMS is the Management System we use to implement the Commander's Environmental Policy
2. Know the basic contents of the Policy Letter
 - Commitment to comply with environmental laws and regulations applicable to our operations
 - Commitment to prevent pollution
 - Commitment to continual improvement
3. Know the Fort Meade EMS Objectives & Targets
 - Reduce solid waste generation and increase Recycling
 - Reduce single occupant vehicles and increase car/van pool and mass transit

EVERYONE PLAYS A ROLE AND HAS A RESPONSIBILITY FOR CONTINUAL IMPROVEMENT THROUGH EMS TO SUSTAIN THE MISSION AT FORT MEADE

For More information

- Environmental Management System:
 - DPW Environmental Division at (301) 677-9648

- Recycling:
 - DPW Recycling Facility at (301) 677-9605

- Transportation Incentive Program:
 - Resource Management Office at (301) 677-5813



Congratulations!

You have successfully completed the
Fort George G. Meade EMS Awareness Training.

In order to print a certificate for your files, please go to:

<http://www.ftmeade.army.mil/directorates/dpw/environment/training/index.html>

Select the link for "Certificate of Completion – General Awareness Training"

This is an editable PowerPoint document that allows you to insert your name and date prior to printing a hard copy for your records.

Please provide feedback regarding this training and/or suggestions to help continually improve Fort Meade's EMS to Mr. Jim Ayers at

james.r.ayers30.civ@mail.mil