



# Environmental Management System (EMS)





## Environmental Management System (EMS)



- Framework for managing an organization's environmental responsibilities so they become more efficient
- Environmental considerations or requirements integrated into day-to-day practices and overall operations
- The EMS helps to ensure compliance and to continuously improve overall environmental performance
- All post organizations are integrated into the EMS (fence-line-to-fence-line)
- The EMS includes measurable environmental goals, objectives, and targets that are reviewed and updated annually
- EMS is a system of continuous improvement according to the following general principles:

Identify  $\rightarrow$  Plan  $\rightarrow$  Do  $\rightarrow$  Check  $\rightarrow$  Act







**Ultimate Goal: Sustainability** 

















EMS required by:

- Executive Order (EO) 13693, Federal Leadership in Environmental, Energy, and Economic Performance, to be implemented and maintained at each U.S. Federal agency (to include the Department of Defense), signed 8 October 2009
- Die EO 13514 was substituted by EO 13693, Planning for Federal Sustainability in the next Decade, signed 19 March 2015.
- ISO 14001 is a specific EMS framework
  - International Organization for Standardization (ISO) developed several voluntary international standards for management of different types of systems
  - ISO 14001 is a systematic approach to environmental management or a "systems approach" for achievement of continual improvement

### EMS shall be implemented fence line to fence line





Bismarck Kaserne; DSN 467-2158 / CIV 09802-83-2158

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EMS allows the USAG Ansbach to achieve and demonstrate sound environmental stewardship by controlling the environmental impacts of USAG Ansbach activities, products, and services

Why Implementing EMS?

- EMS creates consistent processes throughout the USAG Ansbach
- EMS reduces USAG Ansbach operating costs
- EMS fosters planning rather than reaction
- EMS enhances the USAG Ansbach public image
- EMS sustains mission readiness





As a person working for the USAG Ansbach, or working in the footprint of USAG Ansbach, you must be made aware of the following:

- The importance of conformity with the USAG Ansbach Environmental Policy and with the USAG Ansbach EMS
- ✓ The significant environmental aspects and the related actual or potential environmental impacts associated with your work, and the environmental benefits of improved personal performance
- Your roles and responsibilities in achieving conformity with the requirements of the USAG Ansbach EMS; and
- The potential consequences of departure from specified procedures



With this Environmental Policy, the USAG Ansbach commits to:

- "Comply with all applicable environmental policies, laws, regulations, and other requirements"
- "Continually identify potential sources of pollution and commit to the prevention of pollution to meet or exceed U.S. Army goals."

 "Set objectives and targets to reduce our environmental impacts through our environmental management programs. Review progress toward the environmental objectives and targets annually during the conduct of EMS management reviews."



The USAG Ansbach commits to:

- Strive to fully integrate relevant environmental considerations into all installation activities, business decisions, and standard work practices and procedures so environmental awareness and compliance are a routing part of the way we conduct business."
- "Actively pursue continual improvement in organizational environmental management systems"
- "Continually measures performance to assess system effectiveness through internal and external environmental assessments"





The USAG Ansbach Commander has designated an EMS Management Representative (EMS MR) to provide oversight of the implementation of the USAG Ansbach EMS EMS Management Representative (EMS MR)

DSN 467-2968

For the coordination of the implementation and maintenance an EMS Coordinator (EMS Cor) was appointed from the Commander: EMS Coordinator (EMS Cor) DSN 467-2774

The **EMS MR** and **EMS Cor** are the USAG Ansbach individuals to contact should you have questions, comments, or concerns in regard to the USAG EMS



## EMS Cross-functional Team (CFT)



- The USAG Ansbach Commander has designated an EMS Implementation Cross-functional Team (CFT) to actively implement the USAG Ansbach EMS
- EMS CFT includes representatives from across USAG functional areas and directorates and supports the EMSMR and EMSC in accomplishing EMS implementation tasks
- EMS CFT Members are tasked with, or volunteer for, specific responsibilities and coordinate or actively address EMS implementation tasks
- EMS CFT Members are expected to communicate EMS information to/from their respective functional areas and directorates



## USAG Ansbach EMS Organization











- ASPECT: An element of an organization's activities, products, or services that can interact with the environment
- IMPACT: Any change to the environment, whether adverse or beneficial, wholly or partly resulting from an organization's activities, products, or services
- In summary:
  - ASPECT = the cause
  - IMPACT = the effect





An environmental aspect is the element of the USAG Ansbach's activities or products or services that can interact with the environment

A <u>significant</u> environmental aspect has or can have a <u>significant</u> environmental impact.

An environmental impact is any change to the environment, whether adverse or beneficial, wholly or partially resulting from the USAG Ansbach environmental aspects



Sample of a garrison activity:

### Car Washing

- The aspects for the activity above are:
  - Use of material (Soap, Cleaner)
  - Energy and Water consumption
  - Production of Waste Water



## What is an Environmental Impact?



- The possible impact for the activity Car Washing could be:
  - Depletion of Resources (Water, Energy, Material)
  - Contamination of surface water
  - Possible hazardous material spills



Another sample together with objectives and targets:

Significant Aspect (cause):	Impact (effect):
Generation of hazardous waste	Disposal of hazardous waste
Objective: Reduce the overall amount of HW generated by 5% in FY10	<ul> <li>Exemplary Targets:</li> <li>Reduce generation of waste fuel</li> <li>Provide at least 1 training class a year/EO</li> <li>Substitute at least one HM per year with environmentally friendly product</li> <li>Continuously provide awareness training</li> </ul>







- USAG Ansbach has identified 11 significant aspects as part of the EMS implementation process based on:
  - Frequency
  - Environmental Impact
  - Mission Impact
  - Regulatory Impact
  - Community Concerns
- The following have been identified as significant aspects:
  - 1. Product Procurement
  - 2. Soil/GW contamination
  - 3. Energy Consumption
  - 4. Water Consumption
  - 5. Noise Generation
  - 6. Fuel Consumption

- 7. Air Emissions
- 8. Spill to Water/Soil
- 9. HW Generation
- 10. Erosion
- 11. Endangered Species



# Our Most Significant Aspects



## **Energy Consumption**



## **Green Procurement**



### Water Consumption









- Reduce energy consumption by 3%.
- Reduce water consumption by 2%.
- Implement a Green Procurement Program (GPP).
  - **DEFAC** Project
  - Housing Project Urlas



What are your responsibilities with the USAG Ansbach EMS?

Be knowledgeable of the USAG Ansbach Environmental Policy, adhere to the USAG Ansbach Environmental Policy

Share knowledge of your activity-specific operations and the associated environmental aspects and impacts with USAG Ansbach EMS Implementation <u>CFT</u> members

Be knowledgeable of the significant environmental aspects and impacts of your activity-specific operations and strive to <u>eliminate / minimize</u> any negative environmental impacts

Understand and follow standard procedures and operational controls that are applicable and appropriate to your activity-specific operations



What are your responsibilities with the USAG Ansbach EMS?

Inform your superior(s) of <u>changes</u> in your activity-specific operations that may result in new or changed environmental aspects or impacts

Identify opportunities for <u>improvement</u> to the USAG Ansbach EMS based on your experience with its implementation and share these opportunities with USAG Ansbach EMS Implementation CFT members

Educate those individuals around you about your activity-specific environmental aspects and impacts







- EMS documents include information for managing the overall EMS as well as operational controls relating to the significant aspects
- All official versions of EMS documents are maintained on the Garrison's share portal:

#### https://home.army.mil/sites/eur/Ger/Ans/dpw/Envir onmental/default.aspx

- The Master Document List includes all the controlled documents associated with the EMS and the date of the most recent revision
- Personnel should check the portal regularly to ensure that they have the most recent version of all documents prior to use
  - This is especially important for forms to make sure that the correct version is used each time one is completed



## **Checking and Feedback Process**



- Monitoring and Measuring of Key Characteristic, e.g Energy consumption, waste generation, and the Garrisons Goals
- Compliance Evaluation (EPAS)
  - **Corrective Actions**



Internal/ external Audits







Annual senior management reviews.

Items to be reviewed:

- Audit results
- Policy
- Environmental objectives and targets achievement
- Preventive and corrective action implementation
- Communication from external parties



#### Essential to continual improvement!







- USAG Ansbach uses its EMS as a framework to:
  - Ensure more efficient management of the installation's environmental programs;
  - Help the installation stay in compliance with regulatory requirements; and
  - Help continuously improve overall environmental performance.
- Ansbach's EMS is mission-focused and integrated into all installation activities
- EMS conformance is essential to continued success of the environmental programs
- The EMS status is checked annually through the internal EMS audit and internal EPAS as well as through the annual Management Review.





• Nonconformance with the USAG Ansbach EMS may result in environmental consequences (e.g., pollution to soil, pollution to groundwater, upset / disturbance of wastewater treatment facilities, unnecessary or unplanned expenditures)

• It is important to report nonconformance to the USAG Ansbach EMSMR to allow for an appropriate review of the nonconformance and for corrective actions to be implemented







- Everyone in the USAG Ansbach community is part of, and contributes to the USAG Ansbach EMS
- Everyone must work together to ensure the activities, products, and services of the USAG Ansbach do not have negative impacts on the environment
- Everyone is responsible for ensuring good environmental stewardship

#### **Everybody's Management System**







- Know How Your Job Can Impact the Environment
  - Determine the possible environmental impacts of your activities
- Work Procedures

 Review the most current procedures, objectives and targets, ensure they are understood and easy to locate

- Emergency Response Procedures
  - Know what to do in the event of an emergency
- Reduce your use of resources
  - Water and electricity turn off when not in use!
- Reuse materials
  - Office supplies reuse extra pages as scrap paper



# More Things You Can Do...



- Recycle
  - Scrap metal, aluminum cans, plastic, paper and glass bottles

## Purchasing

- If you purchase items, purchase them in accordance with the Affirmative Procurement Plan (buy recycled products!)

- Report spills to the Fire Department and EMD
- Where to find more information on EMS
  - DPW share portal when available
  - Ansbach web page (outdated at the moment)







#### EMS Management Representative (EMS MR) CIV 09802-83-2968 DSN 467-2968

or

EMS Coordinator (EMS Cor) CIV 09802-83-2774 DSN 467-2774

https://home.army.mil/sites/eur/Ger/Ans/dpw/Environmental/default.aspx