USAG RHEINLAND-PFALZ
Directorate of Public Works

Environmental Officer Handbook 2015

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Environmental Officer Handbook

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Preface

This Handbook is a tool to assist Environmental Officers (EO) to comply with German and US legal requirements, in conjunction with Army Regulation (AR) 200-1, dated 13 December 2007.

It also serves as a basic training tool for EOs. Regardless of the mission/areas of responsibilities, all EOs are required to read, understand and act according to chapters 1 - 4 when performing their daily duties. In addition, chapters 5 - 6 apply to Units where mission requires handling and storage of hazardous substances.

The digital version of the EO Handbook is regularly revised by the Environmental Management Division (EMD). Major changes in procedures and responsibilities are subject to re-approval by the Commander.

This EO Handbook is reviewed by:

Hans-Karl Betzhold
Chief EMD, DPW
USAG Rheinland-Pfalz

Approved by:

G. SHAWN WELLS, JR
COL, SC
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The Environmental Officer shall return this page to the Environmental Management Office. Environmental Officers handling hazardous substances shall add the valid Environmental Officer training certificate.

Statement

I hereby confirm that I received, read and fully understood the principles of the Environmental Officer Handbook.

_____ _____

Signature Date

PART ONE

Environmental Management System (EMS)

This EMS chapter provides all relevant EMS information allowing EOs to establish their own EMS structure and it functions as units EMS handbook if needed. Executive Order 13423, "Strengthening Federal Environmental, Energy and Transportation Management", (January 2007) directs federal agencies/organizations to develop and implement an Environmental Management System (EMS) that reflects the ISO 14001 framework. Executive Order 13514, "Federal Leadership in Environmental, Energy and Economic Performance" (October 2009) directs federal agencies/organizations to maintain the EMS.

The EMS pushes environmental responsibilities out to all members of the organization. It is the Garrison Commander's program and all Units play a decisive role in the maintenance of the System.

Chapter 1
Environmental Management System (EMS)

WHAT IS EMS

1-1. The EMS is to be used to identify and address agency environmental, transportation and energy issues as well as the impacts of activities, products or services on the natural environment. Incorporating environmental considerations into day-to-day operations and overall business processes will allow achieving and maintaining compliance with current environmental requirements and proactively manage future environmental issues that could impact mission sustainability.

Benefits of the EMS

1-2. Increases Unit's environmental awareness accounting:

- For improved legal environmental compliance, competency and performance and increased coordination of environmental issues between organizations.
- To facilitate recognition of environmental risks and pollution prevention, e.g. spill prevention, Hazardous Material storage.
- Improving efficiency, e.g. energy efficiency, increased recycling and waste reduction, resulting in fiscal efficiency or cost avoidance.

How to support the EMS?

1-3. It is the EO responsibility to ensure the Unit

- Conforms to the USAG-RP and/or Unit's EMS Policy.
- Is familiar with and conforms to the EMS requirements and processes implemented within the USAG-RP and described in the Garrison's EMS Handbook (for further information please contact EMD).
- Reflects Unit's and personal environmental performance.

EMS Components established by ISO 14001

1-4. The EMS uses the methodology known as "Plan-Do-Check-Act" (see picture below). It is designed to achieve continual improvement in the environmental performance and compliance of an organization.

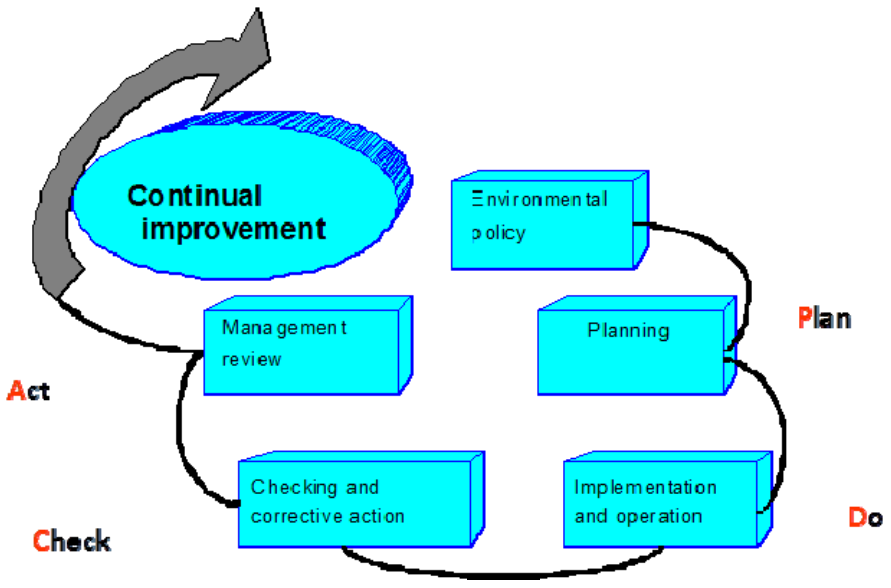


Figure 1-1. "Plan-Do-Check-Act"- model

This “Plan-Do-Check-Act” model consists of 5 basic phases:

- I. **Environmental Policy**: Describes the organization’s overall approach.
- **II. Planning (PLAN):** Identifies environmental aspects and develops objectives, targets and programs. Identifies and complies with legal and other requirements.
- **III. Implementation and Operation (DO):** Defines and assigns the necessary roles and resources to facilitate the EMS management and to ensure the effective implementation and control of the EMS. Investigates the essential requirements (e.g. training, communication, documentation) and implement appropriate processes to operate an EMS effectively.
- **IV. Checking and corrective action (CHECK):** Ensures key operations posing significant impact to the environment are being measured, monitored and evaluated on a regular basis. Conduct periodic surveys of the entire EMS processes and develop corrective actions to ensure the EMS remains effective.
- **V. Management review (ACT**): Conduct periodic reviews of the EMS and identify actions for a continual improvement of the system.

Chapter 2
Implementation of EMS

The figure 2 - 1 provides an overview guide to the handbook.

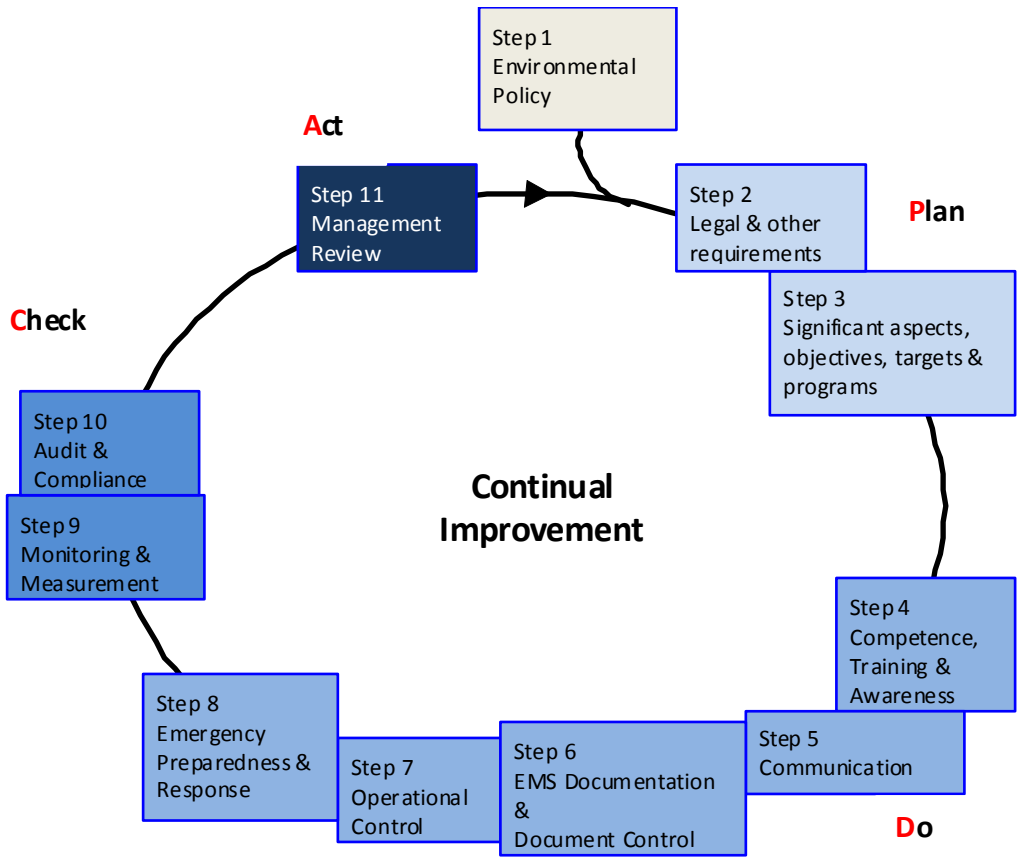


Figure 2-1. Steps of EMS

STEP 1: ENVIRONMENTAL POLICY

2-1. Each Unit is required to have an environmental policy which shall:

- Appropriately describe nature, scale, and environmental impacts of the Unit.
- Include a commitment to continual improvement and prevention of pollution.
- Include a commitment to relevant legal requirements.
- Provide a framework for setting and reviewing environmental objectives and targets.

2-2. The Unit's environmental policy has to comply with the Garrison's policy.

2-3. Alternatively, the Unit can adopt the Garrison's environmental policy. This policy is approved by the Garrison's Commander and published on the Garrison's official homepage at http://www.rp.army.mil/about/policies.html

To Do

- EO/Unit either develops an environmental policy or adopts the Garrison's.
- Unit Commander signs the Unit's environmental policy.
- EO communicates the environmental policy to the Unit members.

STEP 2: LEGAL & OTHER REQUIREMENTS (PLAN)

2-4. Each Unit is required to establish and maintain procedures to identify and access environmental regulations and guidance applicable to the job.

2-5. The US Army in Germany has to comply both with US and German laws (see Article 53 of the North Atlantic Treaty Organization (NATO) Status of Forces Agreement (SOFA) Supplementary Agreement (SA), 29 March 1998). The Final Governing Standards for Germany (FGS-G) were developed by comparing and adopting the more protective U.S. and German environmental laws and applicable international agreements. Where Host Nation law (HN) applies and standards are more protective than those contained in the FGS, then the applicable HN law takes precedence.

2-6. The FGS-G as well as a list of applicable legal and other requirements are maintained by and available at EMD.

To Do

- EO ensures compliance with applicable legal & other requirements. Upon request the EMD will advise the EO on this topic.
- If applicable, EO transmits copy of environmental operation permit/notification (e.g. paint spray booth, motor test stand) to EMD.
- EO requests EMD for assistance, when needed.

STEP 3: SIGNIFICANT ASPECTS, OBJECTIVES, TARGETS & PROGRAMS (PLAN)

2-7. Each unit is required to:

- Adopt the Garrison's significant aspects as needed, and add mission related significant environmental aspects as required.
- Establish or adopt objectives.
- Establish unit specific targets to meet objectives.
- What is an environmental aspect?

What is an environmental aspect?

2-8. Unit activities, products, and services that interact with/have an impact on the environment (e.g. hazardous substances, air emissions, energy consumption, etc.).

What is an environmental impact?

2-9. *A*ny change to the environment (adverse or beneficial) resulting from a Unit's environmental aspect (e.g. soil pollution, waste generation).

What is a significant environmental aspect?

2-10. Any aspect that might cause a significant environmental impact. The Garrison's environmental aspects are regularly re-evaluated and approved by the Garrison Commander. The result is introduced at the Environmental Quality Control Committee (EQCC) meeting, which is representing various command and Garrison activities.

Table 2-1. Examples for environmental impacts/aspects

Activity/Service	Environmental impact	Environmental aspect
vehicle maintenance	HW generation (-)	HW disposal
fuel dispensing	contamination of soil/water (-)	Soil/water pollution
engine test run	reduced air quality (-)	air emissions
upgrade engine test	reduction of air pollution (+)	air emission
office work	loss of natural resources (-)	energy consumption

What is an environmental objective?

2-11. An overall environmental goal that an organization sets itself to achieve (e.g. proper storing of hazardous material).

What is an environmental target?

2-12. The performance requirement that needs to be set and met in order to achieve the objectives (e.g. purchase of flammable cabinets and secondary containments).

What is an environmental program?

2-13. The determination of actions, responsibilities, resources and periods for obtaining the objectives (e.g. schedule environmental awareness training).

To Do

- EO is familiar with significant aspects, objectives & targets and supports the environmental program.
- EO evaluates Unit activities, products and services and how they impact the environment. Either the Unit develops a specific aspect assessment sheet or aspects are assessed during the environmental awareness training conducted by EMD. This documentation is part of the training records.

STEP 4: COMPETENCE, TRAINING & AWARENESS (DO)

2-14. Each Unit requires appropriate environmental competence, training and awareness.

2-15. All EO and Alternate are required to receive EO training in accordance with AR 200-1. Contact EMD for training information.

2-16. The EO acts as environmental trainer for Unit members for issues like:

- Handling of hazardous substances (e.g. proper storage, appropriate chemical substitutes, proper disposal/turn in), if appropriate.
- EMS requirements (e.g. documentation, significant aspects, environmental program).
- Environmental Awareness (e.g. recycling, waste reduction, saving resources).

2-17. To increase EMS Awareness, Garrison's EMS information is published on an EMS-flyer, available at EMD.

To Do

- EO hands out the Garrison's EMS information flyer to the Unit (e.g. by posting it on the bulletin board).
- EO provides EMS training to new personnel in a timely manner.
- For personnel whose work may create a significant impact on the environment (e.g. motor pool activities, medical services), the EO ensures that:
  - training requirements are identified
  - training is accomplished.
- EO maintains training certificates and other training records. Training records may be reviewed by EMS Auditors.

STEP 5: COMMUNICATION (DO)

2-18. Each Unit has to establish procedures to communicate EMS related information internally.

What is internal communication?

2-19. Addresses any flow of information within a Unit (e.g. information boards, briefings, meetings).

What is external communication?

2-20. Addresses any flow of information between a Unit and other organizations within the Army e.g. other military or tenant Units or Directorates.

To Do

- EO informs EMD about environmental related organizational changes, e.g. EO replacement.
- EO reports spills or other incidents to EMD.
- EO communicates EMS related information to Unit members, e.g. Environmental Newsletter, EMS flyer, training opportunities.

STEP 6: DOCUMENTATION & DOCUMENT CONTROL (DO)

2-21. Each Unit maintains controlled records or documents of environmental related procedures, equipment and work practices.

What is a document?

2-22. Information and its supporting medium, e.g. manuals, memoranda, Standard Operation Procedures (SOPs), Work Instructions (WI), EMS flyer, environmental policy.

What is a record?

2-23. Document stating results achieved or providing evidence of activities performed, e.g. hazardous material list, inspection reports, training records, list of permits.

What is a controlled document/record?

2-24. It provides at least information about the date of issue, the version, and the issuing authority. Templates for EMS related controlled documents are available at EMD.

What is document control?

2-25. Units will establish procedures to maintain environmental related documents and records. All environmental related documents need to be:

- Reviewed and updated as necessary.
- Approved.
- Distributed/communicated to Unit members as needed.
- Retrievably filed.

2-26. Minimum required documentation:

- The current environmental policy.
- The EO Handbook.
- The current EO-appointment letter.
- The current EO training certificates.
- The current USAG-RP EMS flyer.
- The current list of EMS relevant documents and records.

To Do

- EO identifies all environmental relevant documents/records available and needed in his/her area of responsibility by using EMS Form 445-1: "list of EMS relevant documents and records" in the Appendix L or similar.
- EO completes and updates legal compliance documents (e.g. documentation for equipment requiring HN permission or notification, such as water/oil separators, paint sprays booths, motor test cells, etc.). A copy of the document has to be provided to EMD.

STEP 7: OPERATIONAL CONTROL (DO)

2-27. Each Unit establishes implements and maintains work-related instructions (e.g. Standard Operation Procedures (SOPs), Operation Instructions (OI), Work Instructions (WI)) for mission activities or operations.

2-28. These instructions shall be consistent with the Garrison's/Units environmental policy, objectives and targets.

To Do

- EO implements, documents, regularly updates and communicates operational control procedures (e.g. energy conservation procedures, proper handling and use of hazardous material, buying "green").
- EO instructs new employees on work related operating instructions prior to start of work.

STEP 8: EMERGENCY PREPAREDNESS & RESPONSE (DO)

2-29. Each Unit is required to establish and maintain procedures to identify potential and to respond to emergency situations and accidents.

To Do

- EO ensures that emergency equipment (e.g. fire extinguishers, absorbent, spill kits, emergency showers, and eye wash stations) is ready to use and regularly inspected.
- EO is familiar with Chapter 3 of the EO Handbook, which deals with Spill Response.
- EO ensures that unit specific operational and emergency plans are up-to-date and readily available.
- EO conducts training and exercises to familiarize employees with the applicable emergency plans and procedures. Maintain the documentation of training and exercises. Contact the Directorates of Emergency Services (at ROB at DNS: 483-7442 or at Smith Barracks at DSN: 485-1580) for support.

STEP 9: MONITORING & MEASUREMENT (CHECK)

2-30. Each Unit ensures that calibrated or verified monitoring and measurement equipment is used (e.g. fire extinguishers, eye wash stations, oil level gauges, leakage indicators, emergency showers, etc.) and that appropriate instructions (SOPs/OIs/WIs) as well as equipment maintenance/inspection records are on hand.

To Do

- EO integrates equipment-related instruction or documents into the “list of EMS relevant documents and records” (for template see EMS Form 445-1 at Tab 11) or similar.
- EO or designated personnel in charge ensures all listed items are inspected as required.

STEP 10: AUDIT & COMPLIANCE (CHECK)

2-31. There are two types of environmental compliance audits to assess a Unit's compliance with applicable legal and other requirements, conducted as Environmental Performance Assessment and Assistance Survey (EPAAS):

- Internal EPAAS: EMD annually audits against FGS-G.
- External EPAAS: IMCOM-E audits every 3 years against FGS-G.

2-32. Compliance is checked through interviews, site visits and documentation review. An Audit Schedule and subject area of interest will be coordinated with each Unit. The EO is the Point of Contact (POC) for the Auditor and ensures that the area of interest is accessible.

2-33. EPAAS inspection teams review the environmental performance status of the USAGRP and for any non-compliance issue (finding) and they recommend corrective and/or preventive actions required to enhance compliance. All findings are communicated to the DWPW EMD and the Units for their further action. Findings also provide the basis for future targets and goals in regards to continual improvement.

2-34. In addition, EMD randomly inspects units to advice on potential non-compliance findings.

To Do

- EO has updated EMS relevant documents and records available (e.g. list of HAZMAT, List of equipment, valid nomination letters, training documents, SDSs).
- The EO resolves audit findings as directed/guided by the EMD.
- EO informs EMD upon completion of findings. EMD regularly requests the finding status update.

STEP 11: MANAGEMENT REVIEW (ACT)

2-35. Executive Order 13423 and DA policy require an annual Management Review in order to assess the opportunities for improvement. EMD will brief the USAG-RP Commander in regards to:

- Results of internal Audits and evaluation of compliance.
- Communication with external interested parties, including parties complaining.

- The environmental performance of the Units and the Garrison.
- The extent to which the environmental objectives and targets have been met.
- The status of corrective and preventive actions.
- The status of follow-up actions from previous Management Reviews.
- Organizational and legal updates related to the environmental aspects.
- Recommendations for improvement.

2-36. The results of the review are briefed at the EQCC and a copy/excerpt of the report can be requested at EMD.

PART Two

Energy Management

Chapter 3
Energy Management-Building Energy Monitors (BEM)

BUILDING ENERGY MONITORS (BEM)

3-1. Executive Order 13514 states that Federal Agencies should lead by example in energy conservation and increase energy efficiency. Improving the energy efficiency of buildings with retrofits and better design is only part of the answer. Energy reduction through education, awareness and involvement is the key to a successful energy management program.

3-2. Energy management needs support at all levels. With the SOP for Installation Coordinators from January 2011 the USAG Rheinland-Pfalz is mandating the assignment of Energy Monitors at building, unit and Installation level. This function is embedded in the function as Environmental Officer.

Role of the BEM

3-3. The BEM's primary responsibility is to help the Installation Energy Monitor achieve the objective of an energy efficient installation without an adverse impact on the mission or quality of life. It is important to ensure that people in the building are educated on how the building operates to provide a comfortable work environment and improve energy efficiency. The BEM needs to ensure that the building operates as efficiently as possible.

Training of the BEM

3-4. BEM training, available with the annual EO training, provides information and examples on what to look for during building inspections. The attached checklist provides guidance for building inspections. BEMs can modify the checklist to suit their needs.

To Do

Responsibilities of the BEM may include:

- Serving as building's point of contact.
- Monitoring the operation of the building.
- Recommending energy saving changes to the building's operating procedures.
- Calling in work orders for low cost maintenance and energy conservation opportunities (ECO's).
- Reporting problems with the building's heating and cooling systems.
- Incorporating water management into your conservation plan.
- Conducting monthly building inspections (see attached BEM checklist).

PART Three

Spill Response

Chapter 4
Pollution Incidents/Spills

SPILL RESPONSE

What is a spill?

4-1. A spill is a situation in which a hazardous substance is accidentally released.

Minor spill	Spill without safety, health or environmental hazard and spilled material can be contained single-handed. Contained release (spill that is contained inside an impervious berm, on an impervious surface or inside a building) that is not volatilized and is cleaned.
Significant spill	Spill with safety, health or environmental hazard and spilled material can be contained single-handed. Uncontained release to land or water in excess of the following quantities that requires notification to HN authorities: Hazardous Material (HM) or Hazardous Waste (HW) of any quantity in excess of the quantity listed in Appendix AP1 of the FGS. POL or liquid/semi liquid HM/HW in excess of 417 liters (110 gallons). Solid HM/HW in excess of 225 kg (500 lb) Combinations of POL and liquid, semi liquid and solid HM/HW in excess of 340 kg (750 lb). Regardless the above motioned quantities a spill is defined as significant spill, if it has a direct negative impact on health, safety and environment.

Figure 4-1 Minor and Major Spill

What to do in a case of a minor spill?

4-2. Employees handling HM/HW are qualified to clean up spills that are "incidental and/or minor", since they are expected to be familiar with the hazards of the materials they normally work with. If it is a minor spill (no safety, health or environmental hazard), clean it up immediately.

How does one clean up a spill?

4-3. Wherever HM/HW is handled a spill kit shall be at hand to clean up minor spills. Contents include absorbent socks, mats, pads, instructions etc. and are generally supplied in plastic pails or highly visible mobile wheeled bins.

Oil and water absorbent (sand and clay):
Put absorbent directly on the oil spill or around a storm drain.

Oil and water absorbent (powder):
Put absorbent directly on the oil spill. Don't use this under stormy weather conditions!

Exsorbet (product name) oil and oil-based paint absorbent (sand):
Put absorbent directly on the oil spill or around a storm drain.

Rolls and pillows:
Place rolls around spills, storm drains, and on cracks in floors.

Drain covers:
Place on the storm drain. Hazardous liquids will be prevented from entering the storm drain.

Figure 4-2. Examples of different types of sorbents, rolls and drain covers

Table 4-1. REACT, minor spill drill

1.	Remove the Source	Determine how the source of the spill can be stopped to limit the amount spilled.
2.	Envelop the spill	Circle the spill area with absorbent materials to stop the spread of the spill and to keep it from entering waterways
3.	Absorb/Accumulate	Use more absorbent material to soak up the spill from the spill area.
4.	Containerize/clean-up	If you are trained to do so, collect the contaminated soil and absorbent materials and place in an appropriate container.
5.	Tell your supervisor	Report what you spilled, where it occurred and what you did to respond to the spill. For intermediate or major spills, fill out a Spill Report Form

What to do in a case of a significant spill?

4-4. If the spill exceeds the scope of the employee's experience, training or equipment to respond, the employee must follow the appropriate procedures (Red Plan) to obtain assistance.

Table 4-2. Significant spill drill

1.	Report the Spill:	Call 112
		The report should contain the following information: Where: Exact location of spill/unit What: Name of spilled material How much: Amount of spill Who: Name of notifying person
2.	Determine safe actions	Stay on site until backup shows up. Keep uninvolved individuals away.
3.	Prepare the Report	See Appendix C

Preparation of a spill incident report

4-5. After a significant spill occurred prepare the report have it signed by supervisor and send to the Environmental Management Division within two days. An outline of the spill area should be attached. The EO can use the template report from Appendix C.

PART Four

Management of Hazardous Material and Hazardous Waste

Chapter 5
Hazardous Material (HM) Management

CLASSIFICATION AND IDENTIFICATION OF HAZARDOUS MATERIALS

5-1. All HM used or generated and discarded in USAG-RP operations must be identified and listed so that it can be managed in a manner that will not endanger human health or the environment.

What are Hazardous Materials?

5-2. HMs include all material which, because of its quantity, concentration, and/or physical, chemical, or infectious characteristics, may pose a substantial hazard to human health or the environment. That includes new HM, recyclable HM and expired HM, if the shelf life can be extended (see chapter **Error! Reference source not found.**). Munitions are excluded.

How does one find out if a material is hazardous?

5-3. Manufacturers of HMs are required to provide a clear warning or a respective hazard sign indication a specific risk or danger on the HM container. More detailed information on a HM is provided in the Safety Data Sheet (SDS) (see chapter 5 - 7).

5-4. As of 1st June 2015 all HM are labeled under the Globally Harmonized System of Classification and Labeling of Chemicals (GHS) (see chapter 5 - 5). The GHS is an internationally agreed-upon labeling system of HM. It is designed to replace the various classification and labeling

standards used in different countries by using consistent criteria for classification and labeling on a global level. Its development began at the United Nations (OECD), various governments and other stakeholders met at a United Nations conference. In the transition phase it will occur that HM will be labeled according to previous labeling systems.

Figure 5-1. Examples of Hazardous Material Labeling

GLOBALLY HARMONIZED SYSTEM

5-5. The Globally Harmonized System (GHS) standardized the way chemical-based hazards are communicated to workers, primarily through labeling and safety data sheets. The GHS classification covers physical, health and environmental hazards.

5-6. Some GHS label elements have been standardized (identical with no variation) and are directly related to the endpoints and hazard level. Other label elements are harmonized with common definitions and/or principles. HM label elements included in the GHS are:

- **Symbols (hazard pictograms):** Convey health, physical and environmental hazard information, assigned to a GHS hazard class and category. The label will include at least one of these nine pictogram symbols.
- **Signal Words:** "Danger" or "Warning" is used to emphasize hazards and indicate the relative level of severity of the hazard, assigned to a GHS hazard class and category.
- **Hazard Statements**: Standard phrases assigned to a hazard class and category that describe the nature of the hazard.
- **Precautionary Statements and Pictograms**: Measures to minimize or prevent adverse effects.

- **Product Identifier (ingredient disclosure):** Name or number used for a hazardous product on a label or in the SDS.
- **Supplier identification**: The name, address and telephone number should be provided on the label.
- **Supplemental information:** non-harmonized information.

Health Hazard
- Carcinogen
- Mutagenicity
- Reproductive Toxicity
- Respiratory Sensitizer
- Target Organ Toxicity
- Aspiration Toxicity

Flame
- Flammables
- Pyrophorics
- Self-Heating
- Emits Flammable Gas
- Self-Reactives
- Organic Peroxides

Exclamation Mark
- Irritant (skin and eye)
- Skin Sensitizer
- Acute Toxicity
- Narcotic Effects
- Respiratory Tract Irritant
- Hazardous to Ozone Layer (Non-Mandatory)

Gas Cylinder
- Gas Under Pressure

Corrosion
- Skin Corrosion/Burns
- Eye Damage
- Corrosive to Metal

Exploding Bomb
- Explosives
- Self-Reactives
- Organic Peroxides

Flame Over Circle
- Oxidizers

Environment
- Aquatic Toxicity

Skull & Crossbones
- Acute Toxicity (fatal or toxic)

Figure 5-2. Example of Hazard Pictograms

Figure 5-3. Example of HM Label with the different label elements

SAFETY DATA SHEET

5-7. The Safety Data Sheet (SDS) provides comprehensive information for use in workplace chemical management. Employers and workers use the SDS as sources of information about hazards and to obtain advice on safety precautions. The SDS is product related and, usually, is not able to provide information that is specific for any given workplace where the product may be used. However, the SDS information enables the employer to develop an active program of worker protection measures, including training, which is specific to the individual workplace and to consider any measures that may be necessary to protect the environment. Information in a SDS also provides a source of information for other target audiences such as those involved with the transport of dangerous goods, emergency responders, poison centers, those involved with the professional use of pesticides and consumers.

5-8. The SDS should contain 16 headings:

- SECTION 1: Identification of the substance/mixture and of the company/undertaking
- SECTION 2: Hazards identification
- SECTION 3: Composition/information on ingredients

- SECTION 4: First aid measures
- SECTION 5: Firefighting measures
- SECTION 6: Accidental release measures
- SECTION 7: Handling and storage
- SECTION 8: Exposure
- SECTION 9: Physical and chemical properties
- SECTION 10: Stability and reactivity
- SECTION 11: Toxicological information
- SECTION 12: Ecological information
- SECTION 13: Disposal considerations
- SECTION 14: Transport information
- SECTION 15: Regulatory information
- SECTION 16: Other information

5-9. Since the GHS is in place manufacturers are required to provide product information in Safety Data Sheets. But in the transition phase HM that was produced before 1st June 2015 might show up in the garrisons together with Material Safety Data Sheets (MSDS) and without the GHS labels.

5-10. The EO shall keep SDS for each HM at the working area readily accessible to all employees. Each SDS shall be in English or the predominant language of the workforce.

To Do

- Keep SDS of all HM accessible for all employees.
- Read SDS for safe use and storage and the case of an emergency.

HAZARDOUS MATERIAL STORAGE

5-11. Responsibilities and mandated practices surrounding the storage and management of HM are regulated by the GFGS Chapter 5

Where to store Hazardous Material?

5-12. HM have to be stored at facilities under the USAG-RP within a Hazardous Material Storage Area (HMSA). HM for daily use can be temporarily stored during operation on secondary containments or in flammable lockers outside the HMSA in the different work areas.

Note:

Generally, secondary containment system must be capable of containing 100 percent of the volume of the largest container or 10 percent of the total accumulated volume, whichever is greater. Spilled or leaked material and accumulated precipitation must be removed from the secondary containment system as soon as it is identified to prevent container corrosion or mixing with HMs. Accumulated precipitation must be checked prior to discharge to ensure it does not contain HM residues.

What is a Hazardous Material Storage Area (HMSA)?

A HMSA is an outdoor storage shed, storage warehouse, indoor storage room, garage or storage locker used for the purpose of storing HM. The requirements for a Hazardous Material Storage Area are:

5-13. HMSAs which accumulate and store ignitable or reactive HM must be located at least 50 feet (15 meters) inside the installation property boundary.

5-14. Sufficient security must exist at HMSAs to prevent uncontrolled accumulation of HM. Sufficient security would be lockable container, lockable fenced compound area, or facility.

- All HMSAs must be well ventilated.
- Material at HMSAs must not be located near drains that lead to sanitary or storm water sewers.
- Each HMSA must be capable of preventing environmental contamination due to container overfills or leaks. All containers for storing liquid HM must be either double-walled or have secondary containment systems.
- The USAG-RP ordinance forbids any outdoor storage of oils, ”poisons“ and pesticides on unsealed surfaces. Concrete surfaces are insufficient. Impermeable coatings or their equivalent are essential.
- Material stored outdoors during the normal course of activities shall be provided with protection from direct sunlight and precipitation by means of a roof.
- For incompatible materials, segregated containments must be provided by using either separate containment areas or by separately dike areas.

How to label a Hazardous Material Storage Area?

5-15. Depending on the HM stored, the corresponding yellow warning signs must be posted at the entrance to the HMSA:

Figure 5-4. Example of warning signs

5-16. Smoking shall be prohibited in areas where flammable materials are stored and/or handled. These areas shall be labeled with " No smoking or open flame within 50 feet - Rauchen und offene Flammen im Umkreis von 15 Metern verboten" signs.

Figure 5-5. No smoking signs

5-17. An overview how to label the HMSA can be found in the Appendix O.

Storage Area?

5-18. HM must be stored in such a way as to prevent chemical reactions which may cause heat, fire, explosion, pressure buildup, or the evolution of toxic or flammable decomposition products due to incompatible chemical reactions. For storage of materials that have more than one hazard (e.g. a material can be toxic and flammable) the physical/chemical hazard outweighs the health hazard, i.e. the toxic flammable needs to be stored with the flammables not with the toxics.

- Check the SDS for Segregation and Storage rules!

Segregation in lockers

5-19. Small HM containments can be stored in material safety lockers. Depending on the chemical and physical characteristics HM shall be grouped and allocated on the different shelves that the segregation of HMs is achieved at the best when only one material safety locker is present.

Segregation in indoor storage room, garage, connex etc.?

5-20. When HM is stored in a storage room HM containers shall be grouped and allocated in the room in a manner that the segregation of incompatible HM is achieved at the best. Hazardous liquids must be stored on separate secondary containments if incompatible.

What are the special requirements for the storage of compressed gases?

- Store cylinders in a HMSA but away from other HM.
- Store cylinders outside and at least 5 m from the building or behind 2m high protection wall.
- Store in a well ventilated gas storage building, shed or cage when possible.
- Segregate incompatible gases by a distance of at least 2m.
- Safeguard cylinders against tilting or knock-over with a chain or other protective measure.
- Keep the safety caps on and do not throw them away (cylinders without caps will not be taken back for refill).
- Keep the store locked.

What are the special requirements for the storage of water endangering substances?

5-21. At facilities that store, distribute, and/or handle water endangering substances the leaflet on the safe handling of water endangering substances needs to be posted. The leaflet is in the Appendix D.

5-22. Check the SDS if the units HM is water endangering.

To Do

- Keep HMSA under sufficient security to prevent uncontrolled access.
- Keep HMSA clean.
- Never store HW inside a HMSA.
- Segregate incompatible HM from each other and don't mix non-hazardous materials with HM. Check the SDS for segregation and storage rules.
- All HM must be stored "First in – First out". The material with the earliest expiration date needs to be used first.

EXCESS AND EXPIRED HAZARDOUS MATERIAL

5-23. In an effort to reduce the amount of HM needing disposal only purchase what is mission essential and order just in time.

What to do with expired Hazardous Materials?

5-24. Expired HM shall not be stored and used. But, the shelf life of HM can possibly be extended by checking web page https://headquarters.dla.mil/j-3/shelflife/.

5-25. When the shelf life of a material cannot be extended than dispose of the expired material.

What to do with no longer needed or excess but still serviceable Hazardous Materials?

5-26. The tenant unit TLSC-E, Supply Activity Europe runs a Hazardous Material Reuse Center (HMRC), which is basically equipped to accept serviceable excess HM (unopened containers only). However, there are some requirements to be considered prior turn-in:

- HMRC requires a list of excess to be turned-in with minimum information to clearly identify the product(s).
- The use of the spreadsheet in TAB 7 of the appendix is requested. Forward this list electronically to the SAE, EO at: klauspeter.fraenger.ln@mail.mil
- The SAE, EO and/or HMRC personnel decides, if HM can/will be accepted (based on storage space available and history of possible product flow). After HMRC's approval, the unit will be contacted to arrange a turn-in appointment.
- Compliance with Hazardous Cargo requirements is the delivering units' responsibility.

SAFETY PRECAUTIONS FOR HANDLING OF HAZARDOUS MATERIAL

5-27. For a safe handling and use of HM first read the Safety Data Sheet (SDS). The SDS provides workers and emergency personnel with procedures for handling or working with that substance in a safe manner. Employers and workers use the SDS as sources of information about hazards and to obtain advice on safety precautions.

5-28. Moreover, all safety advises need to be compiled in Operating Instructions (Betriebsanweisungen). Operating instructions are workspace-specific instructions that provide information on handling HM as well as information on risks for human health and the environment associated with

the HM. Units/activities are responsible for providing the specific operating instructions to their employees.

5-29. For a safe handling of HM personal protective equipment is normally required. Depending on the risks while handling a HM, the corresponding mandatory must be posted in the workspace.

5-30. Contact your Safety Office for advice on the safe handling of HM, personal protective equipment, operating instructions and labeling of the workspace.

To Do

- Keep and read SDS for a safe handling of HM.
- Keep and read operating instructions for a safe handling of HM.
- Use personal protective equipment as specified in the SDS/operating instruction.
- Post mandatory signs to call attention to safe action.
- Contact Safety Office for assistance to set up a safe work environment and to provide instructions and training.

INSPECTION AND RECORD KEEPING FOR HAZARDOUS MATERIAL MANAGEMENT

Inspections of HM storage and handling facilities

Inspections of the HMSA

5-31. All HMSA must be inspected by the EO weekly. Areas shall be examined for leaking containers, deterioration of containers, and the deterioration of secondary containments where the containers are placed, expired materials and proper labeling. Check if all liquid HM are stored in double walled containers or are placed on secondary containments. A checklist is attached in the Appendix J.

Inspections of the workspace where HM were handled/temporarily stored

5-32. Areas for the temporary storage of HM that is in use shall be inspected by the EO. Areas shall be examined for leaking containers, deterioration of containers, deterioration of secondary containments where the containers

are placed and if all liquid HM are stored in double walled containers or are placed on secondary containments.

Record keeping for Hazardous Material Management

Operating Instructions (Betriebsanweisungen)

5-33. Maintain operating Instructions for the safe use of the HM in the workspace.

Safety Data Sheets (SDS)

5-34. Maintain SDS of all HM readily accessible to all employees.

Inventory list

5-35. A detailed inventory list shall be updated annually or after any significant change in the amount and types of HM stored or used. This inventory list needs to be sent to EMD to be integrated in the Spill Prevention and Response Plan.

Authorized Use List (AUL)

5-36. Each unit shall keep a current AUL. The AUL is a list of all the materials in quantities that the unit is authorized to use per timeframe, approved by the Commander.

To Do

- Inspect HMSA weekly.
- Keep an Authorized Use List (AUL).
- Keep an annual inventory list.
- Keep all SDSs easily accessible.
- Provide employees with Operating Instructions (Betriebsanweisungen).

TRANSPORTATION OF HAZARDOUS MATERIAL

5-37. Hazardous Material may be transported on public roads according to the European Agreement concerning the International Carriage of Dangerous Goods by Road (ADR 2013; http://www.unece.org/trans/danger/publi/adr/adr2013/13contentse.htm).

5-38. The guide for international transport of dangerous goods in line with Globally Harmonized System can be found in: “Implementation through international legal instruments, recommendations, codes and guidelines.”

Chapter 6
Hazardous Waste (HW) Management

GENERATION, ACCUMULATION AND STORAGE OF HAZARDOUS WASTE

Generation, Accumulation and Storage of Hazardous Waste

6-1. All Hazardous Waste (HW) generated in USAG-RP operations must be identified and handled so that it can be managed in a manner that will not endanger human health or the environment.

What is Hazardous Waste?

6-2. HW includes all used, no longer usable, expired (if the shelf life cannot be extended) or spilled HM. Recyclable hazardous materials are also considered and handled as HW.

What to do with Hazardous Waste?

6-3. The actual organization, unit, or shop within USAG Rheinland-Pfalz that produces HW is responsible for properly managing HW. The generated HW shall be accumulated at a Hazardous Waste Accumulation Point (HWAP) at or near the point of generation.

What is a Hazardous Waste Accumulation Point (HWAP)?

6-4. A HWAP is an outdoor shed, indoor room, garage or other area used for the purpose of accumulating HW until the final removal by waste removal contractors. The location or relocation of a HWAP must be approved prior to its use by DPW/EMD. EOs are primarily responsible for the maintenance of the HWAPs. EMD is responsible to assist the EO with the setup of HWAPs.

What are the requirements for a Hazardous Waste Accumulation Point?

6-5. Sufficient security must exist at the main HWAPs to prevent uncontrolled accumulation of HW. Sufficient security would be lockable container, lockable fenced compound area, or facility. Only for daily use may be unsecured.

- HWAPs shall be kept clean.
- Absorbent material to clean up spills must be readily available on-site.

- Each HWAP must be capable of preventing environmental contamination due to container overfills or leaks. All containers for storing liquid HM must be either double-walled or have secondary containment systems.
- For incompatible HW, segregated containments must be provided by using separate containment areas or by separately dike areas.
- All HWAPs shall post sufficient warning signs:

How to label a Hazardous Waste Accumulation Point (HWAP)?

6-6. For the labeling of HW the same rules apply as for HM. Additionally, an overview on how to label the HWAP can be found (see Appendix N).

Warning signs

6-7. Depending on the HW stored, the corresponding yellow warning signs must be posted at the entrance to the HWAP (garage, connex etc.). In case the HW containers are directly visible when approaching the area no yellow warning signs were required in addition since the HW containers are already labeled by the disposal contractor.

No smoking or open flame

6-8. Smoking shall be prohibited in areas where flammable materials are stored and/or handled. These areas shall be labeled with “No smoking or open flame within 50 feet - Rauchen und offene Flammen im Umkreis von 15 Metern verboten” signs. This applies also to HWAPs.

Mandatory signs

6-9. Contact your Safety Office for advice on the safe handling of hazardous substances in general (HM and HW). Personal protective equipment, operating instructions and labeling of the workspace with mandatory signs might be required also for the HWAPs.

How is the HW pick-up managed?

6-10. Disposal procedure USAG Rheinland-Pfalz except for Baumholder: For final disposal HW will be picked up directly at HWAP by the disposal contractor using regular schedules. Empty containers will be provided in return. EO has to be present during the pickup and sign a receipt (Übernahmeschein/Begleitschein) when handing over HW to the disposal contractor. The disposal contractor will take care of the HW from there on. Copies of those documents will be kept at EMD for record keeping.

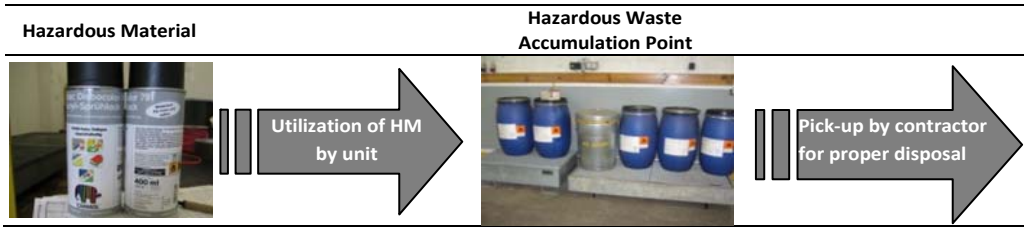


Figure 6-1. Disposal Process

6-11. Disposal procedure exclusively for Baumholder: Once a year the EO submits a HW profile sheet for each type of waste to the Hazardous Waste Storage Area (HWSA) with the projected annual volume. HW is either turned in to the HWSA by the unit or private persons or picked up at the HWAP by EMD personnel that manages the HWSA. The HW generating units and the receiving unit sign the HW Turn-In Sheet that details the type and amount of HW that was turned in. The disposal contractor picks up the HW at the HWSA. Übernahmeschein/Begleitschein is signed by EMD personal at the HWSA, who also keep all records.

What is a Hazardous Waste Storage Area (HWSA)?

6-12. Some installations at USAG Rheinland-Pfalz have a HWSA. HWSAs are defined as locations on a DoD installation where hazardous waste is collected and stored prior to shipment for treatment or disposal. Each HWSA is secured against unauthorized entry. It is owned and operated by EMD. Except in Baumholder the HWSA in USAG Rheinland-Pfalz are currently closed since the HW is picked-up directly at the HWAP (see chapter 6 - 10).

To Do

- Accumulate HW near the point of generation at a Hazardous Waste Accumulation Point (HWAP).
- During daily operations small amount of HW can be stored at a temporary HWAP but by end of the working day therein accumulated HW shall be removed to the main and secured HWAP.
- EO shall keep the HWAP clean and in compliance with regulations.
- Never transport HW from one installation to the other.
- EO has to sign a receipt when handing over HW to the disposal contractor.
- Make sure HWs are properly segregated.
- Never store HM together with HW.

HAZARDOUS WASTE CONTAINER MANAGEMENT

6-13. HW is collected either in containers for solid or liquid HW or in tank systems for liquid HW. HWAP shall be equipped with separate containers for each waste stream. Chemically incompatible wastes shall be appropriately segregated. All containers shall be labeled and placed on secondary containments when containing flammable or water endangering liquid HW. Containers shall be handled with care to prevent damage and spills.

How does one label Hazardous Waste containers?

6-14. HW container must be labeled with the common name of the waste and the GHS symbol for the respective hazard warning. Containers which are provided by the disposal contractor have all required labels. When units own other containers they are responsible for the correct labeling.

How does one store solid and liquid HW properly in containers?

6-15. For the collection of HW containers of different size and types can be used, depending on the amount and category of generated HW.

	Container type	Waste type
	Plastic drum (varying in size, but typically 55 gallon)	Solid waste (small containments or other small solid substances)
	Metal drum (typically 55 gallon)	Liquid waste
	1.1 container	Solid waste (containments or scrap without residues of liquid HW that could leak out of the waste container)
	ASP container (can be either the type for solids or the type for liquids)	Solid waste/liquid waste

Figure 6-2. Examples of different types containers

- Container shall be kept in the closed position at all times, unless adding or removing waste.
- All containers shall be stored and handled in a manner that prevents rupture or leaking.
- Container used for storage of flammable liquids shall be grounded during the transfer from one container into another.
- Containers used for the storage of liquids or solid waste with residues of liquids have to be placed on secondary containments, which have the capability to hold 10% of the total HW volume, or 100% of the total volume of the largest container, whichever is greater.
- Incompatible wastes shall be stored in segregated containers and shall not share secondary containment structures.
- Hazardous wastes shall not be placed in an unwashed container that previously held incompatible wastes.

How does one segregate Hazardous Waste?

6-16. Incompatible wastes shall be stored in segregated containers and shall not share secondary containment structures. For the segregation of HW the same rules apply as for the segregation of HM (see chapter 5). General rule is to keep each of the four major types of HW (ignitable, corrosive, toxic and oxidizers) separated from each other.

What do you have to be aware of when storing liquid HW in a tank system?

6-17. Some HWAPs are equipped with above ground or underground tank systems for the storage of liquids. At least once each operation day these tank systems must be inspected and recorded. Filling status of the tanks is checked on a regular basis by the disposal contractor (EMD in Baumholder). The tanks are emptied on a regular basis/ according to the filling status. Please contact EMD if you have a tank that has to be emptied promptly or if a new tank has to be included on the regular disposal tour of the contractor.

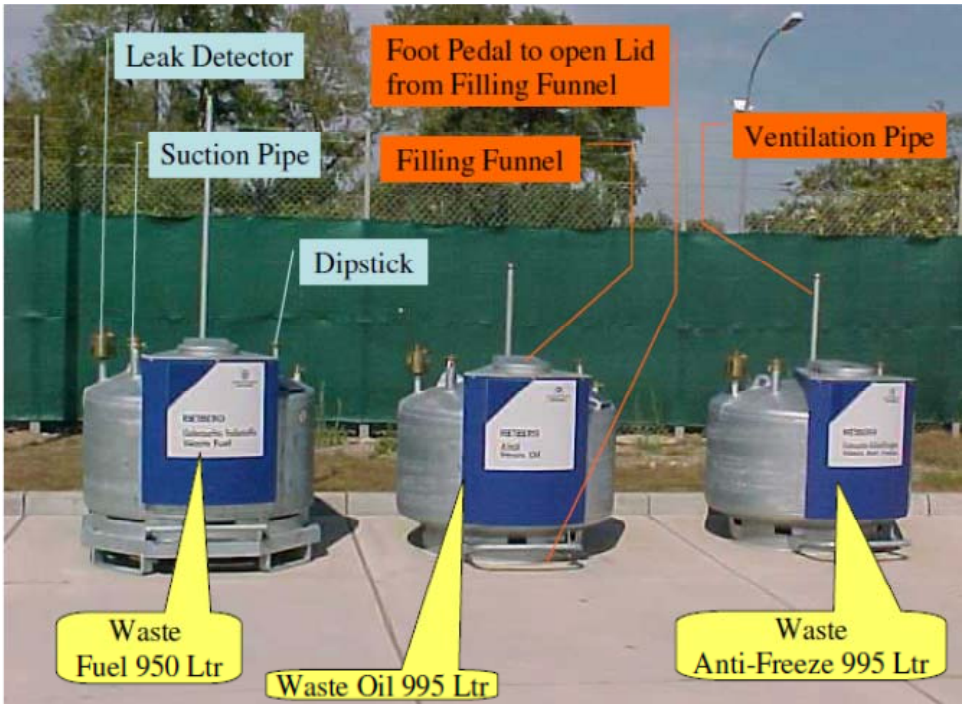


Figure 6-3. Example of above ground tank

Figure 6-4. Example of underground tank

6-18. At the above ground tanks the dipstick has to be read to identify the fill status of the tank. At the underground tanks the dipstick and/or the monitoring unit has to be read to identify the fill status of the tank (this applies not to Baumholder: EOs cannot access the dipsticks and gauges are sealed inside a non-accessible box).

INSPECTION AND RECORD KEEPING FOR HAZARDOUS WASTE MANAGEMENT

Inspection of HWAP

6-19. All HWAP should be inspected regularly by the EO for leaking containers, deterioration of containers, and the deterioration of secondary

containments where the containers are placed. EO should check also containers for proper segregation.

Inspection of tanks

6-20. EO/user of the tank must check the fill status of above ground tanks and underground tanks each operation day/whenever the tank is filled to prevent overflow/spills and to ensure that the tank is in a serviceable condition.

6-21. Tank checks need to be recorded on the checklist. A template checklist is attached in the Appendix I.

To Do

- Ensure the correct labeling of the containers, a sufficient separation of waste streams and segregation of HW.
- Ensure that the HW containers and secondary containments are in a good state to prevent spills.
- Ensure that containers are kept in the closed position, unless adding or removing waste.
- Check the fill status of tanks each operation day/whenever the tank is filled to prevent overflow/spills and to ensure that the tank is in a serviceable condition.
- Keep a tank checklist.

Chapter 7
Responsibilities and Points of Contact

RESPONSIBILITIES

All individuals in the U.S. Army Garrison Rheinland-Pfalz (USAG R-P) shall comply with guidance outlined in this handbook.

Garrison Commander (IAW AR 200-1)

- Direct units/tenants to nominate an Environmental Officer.

The Unit Commander is responsible for (IAW AR 200-1)

- Complying with installation policies, applicable Federal, State, and local environmental laws, regulations, Executive Orders, and overseas FGS.
- Reporting noncompliance and spills through appropriate channels to the Garrison.
- Appointing the Environmental Officer (EO) and alternate within the unit (see EO Appointment letter, App E).
- Ensuring that EO and alternate receive training as required and provided by USAG Rheinland-Pfalz Environmental Management Division (EMD).
- Supporting and complying with the installation-wide EMS.

The Environmental Officer is responsible for (IAW AER 200-1)

- Ensuring that the unit is in compliance with the Final Governing Standards for Germany (FGS-G) and all German and US legal requirements where applicable.
- Directly reporting to their superior, serving as the single POC for environmental matters, and having authority to direct other personnel in regard to environmental compliance.
- (For units handling Hazardous Substances) Taking or attending and successfully completing the online environmental officer training course within 60 days after being appointed. An annual refresher course is also required.

The Environmental Management Division is responsible for:

- Providing environmental training, as necessary.
- Assisting in solving environmental problems.
- Updating the EO Handbook.
- Ensuring that HS management is in compliance.
- Providing assistance to supporting garrison environmental officers and help clarify requirements.

POINTS OF CONTACT

Chief of Operation and Maintenance Division	493-4793
Solid Waste	493-4798
Chief of Environmental Division	493-4737
Hazardous Waste	493-4738
Chief of Facility Engineering Division	493-4777
Energy Manager	493-4783

Appendix A

Red Plan

Please keep a reprint of the current Red Plan always ready to hand. You will need it in the event of a spill or emergency to respond correctly.

The Red Plan

March 2015

In the event of a spill of a hazardous substance or hazardous waste at installations of the USAG Rheinland-Pfalz, this Red Plan serves as an immediate action tool to initiate the correct response in the earliest possible time.

The Red Plan is an Appendix of the USAG-Rheinland-Pfalz Spill Prevention and Response Plan (SPRP). The SPRP reinforces the Red Plan and provides in-depth information on spill prevention, response, notification, and cleanup procedures and is to be applied after appropriate notifications and response actions are underway.

Note:

It is recommended to laminate a double-sided reprint of Figure 1 or to keep it in a sheet protector, so that the responder can remove the document from the binder to have it on hand in the event of a spill.

INITIAL SPILL RESPONSE AND NOTIFICATION PROCEDURES

Report any spill that:
1) Enters or threatens water bodies, sewer, or soil
2) Poses a safety, health or environmental threat

If you cannot identify the spilled substance, contact the Fire Department (FD) or DPW Environmental Management Division (EMD) for instructions!

FD: 112

DPW EMD USAG RP: DSN 394-4737

DPW EMD USAG RP, Baumholder: DSN 485-6146

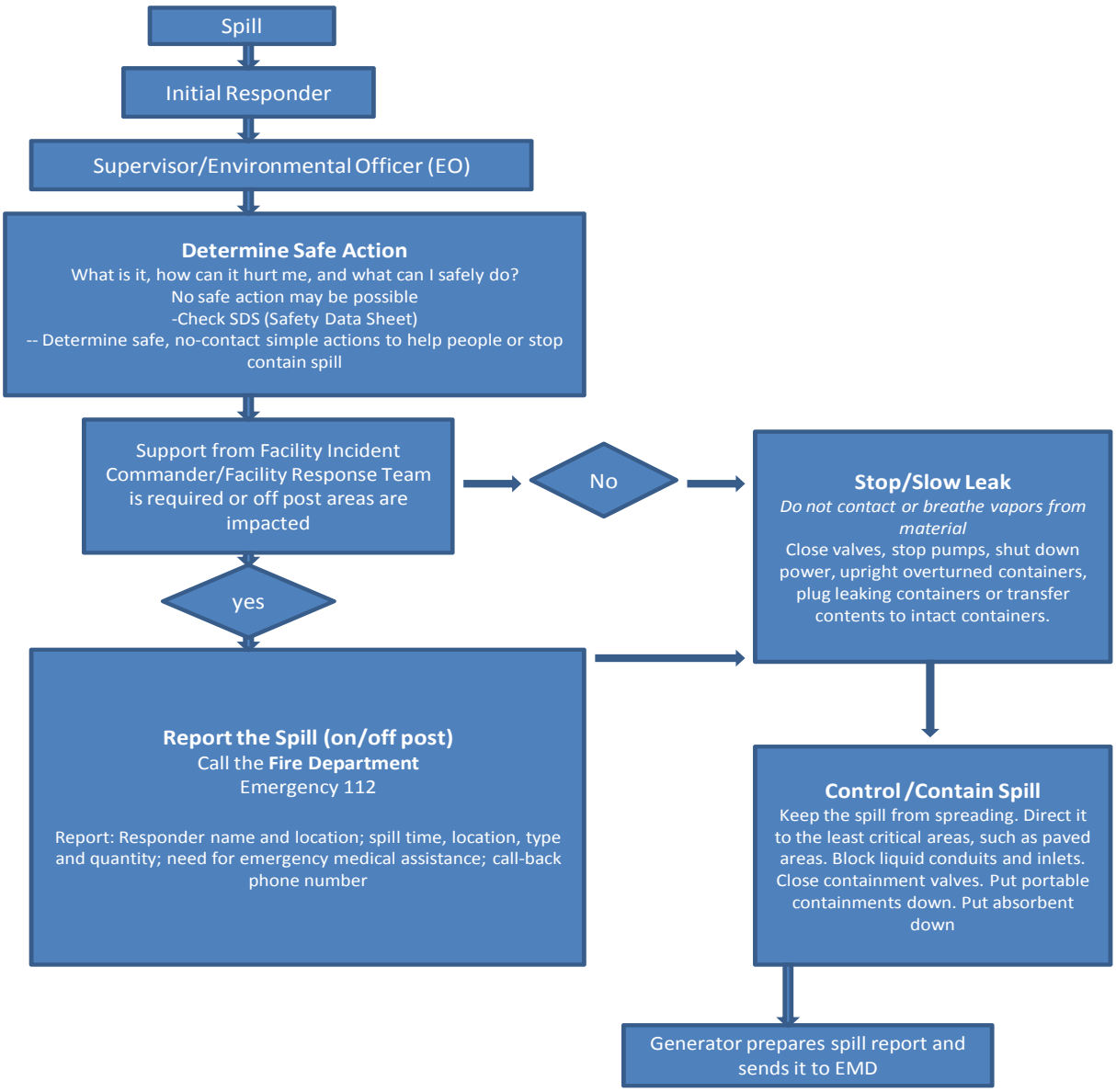


Figure A-1. Spill response and flow chart - English

Table A-1. POCs for spills or HM and HW emergences

	Position / Title	Address	Telephone No. (DSN & CIV)
USAG Rheinland-Pfalz Headquarters	**Commander**	**Pulaski Barracks, Bldg 2933**	**DSN 493-4135**
USAG Public Affairs Office (PAO)	**-**	**Pulaski Barracks, Bldg 2933**	**DSN 493-4213**
Directorate of Emergency Services	**Director**	**ROB, Bldg 164**	**DSN 493-4362 CIV 0631-3406-4362**
USAG Fire Department	**Chief or Respective**	**ROB, Bldg 164**	**112**
USAG Military Police	**-**	**-**	**DSN 114 CIV 0631-3406-114**
USAG Ambulance	**-**	**-**	**DSN 116 CIV 0631-3406-116**
Directorate of Public Works (DPW)	**Director**	**ROB, Bldg 164**	**DSN 493-1560 CIV 0631-3406-1560**
DPW Environmental Management Division (EMD)	**Chief**	**ROB, Bldg 164**	**DSN 493-4737 CIV 0631-3406-4737**
Spill Coordinator	**Fire Department**	**ROB, Bldg 164**	**DSN 117 CIV 0631-3406-117**
	EMD	**ROB, Bldg 164**	**DSN 493-4737 CIV 0631-3406-4737**
DPW Buildings and Grounds Branch	**Chief**	**ROB , Bldg 164**	**DSN 493-4793 CIV 0631-3406-4793**
DPW Utilities Branch	**Chief**	**ROB, Bldg 164**	**DSN 493-4799 CIV 0631-3406-4799**
DPW Service Orders	**-**	**Daenner Kaserne, Bldg 3106**	**DSN 483-7175 CIV 0631-411-7175**

Table A-1 List of Site Managers

	Position / Title	Address	Telephone No. (DSN)
DAENNER KASERNE	**Site Manager**		483-8127
KLEBER KASERNE	**Site Manager**		483-8127
PANZER KASERNE	**Site Manager**		484-8148
KAD	**Site Manager**		483-7197
PULASKI	**Site Manager**		493-4373
ROB	**Site Manager**		493-2224
LANDSTUHL	**Site Manager**		486-7183
MIESAU	**Site Manager**		481-3852
PIRMASENS	**Site Manager**		495-6472
SEMBACH KASERNE	**Site Manager**		496-7744
BAUMHOLDER	**Site Manager**		485-1510
GERMERSHEIM	**Site Manager**		378-3602
GRUENSTADT	**Site Manager**		378-3602
MANNHEIM	**Site Manager**		382-5353

Alarmplan

March 2015

Im Falle einer Verschuettung von Gefahrstoffen (HM) oder gefährlichen Abfällen (HW) in den Einrichtungen der USAG Rheinland-Pfalz, dient der vorliegende Alarmplan als Soforthilfsmittel, um die erforderlichen Gegen- und Kontrollmaßnahmen zum frühest möglichen Zeitpunkt in die Wege zu leiten.

Der Alarmplan ist eine Anlage zum USAG Rheinland Pfalz Spill Prevention and Response Plan (SPRP). Der SPRP ergänzt den Alarmplan und enthält spezifischere Informationen zu den Themen Unfallvermeidung, Reaktion auf Unfälle, Benachrichtigung der zuständigen Stellen, Sanierung und kommt zur Anwendung sobald die erforderlichen Gegen- und Kontrollmaßnahmen in die Wege geleitet sind.

Anmerkung:

Es wird empfohlen einen Ausdruck der Abbildung zu laminieren oder in einer Klarsichthülle aufzubewahren damit das Dokument vom Erstbekämpfer dem Ordner entnommen werden kann und die Informationen im Fall des Gefahrstoffunfalls zur Hand sind.

HANDLUNGSANWEISUNG FÜR ERSTBEKÄMPFER BEI GEFAHRSTOFFUNFÄLLEN

ALLE GEFAHRSTOFFUNFÄLLE MELDEN, DIE:

1) In Gewässer, die Kanalisation oder den Boden gelangen oder ein Gewässer gefährden
2) Ein Risiko für Sicherheit, Gesundheit oder Umwelt darstellen

Kann ein Gefahrstoff nicht identifiziert werden, US Feuerwehr oder DPW, Environmental Management Division (EMD) nach Instruktionen fragen!

FD: DSN 112

DPW EMD USAG RP: DSN 394-4737

DPW EMD USAG RP, Baumholder: DSN 485-6146

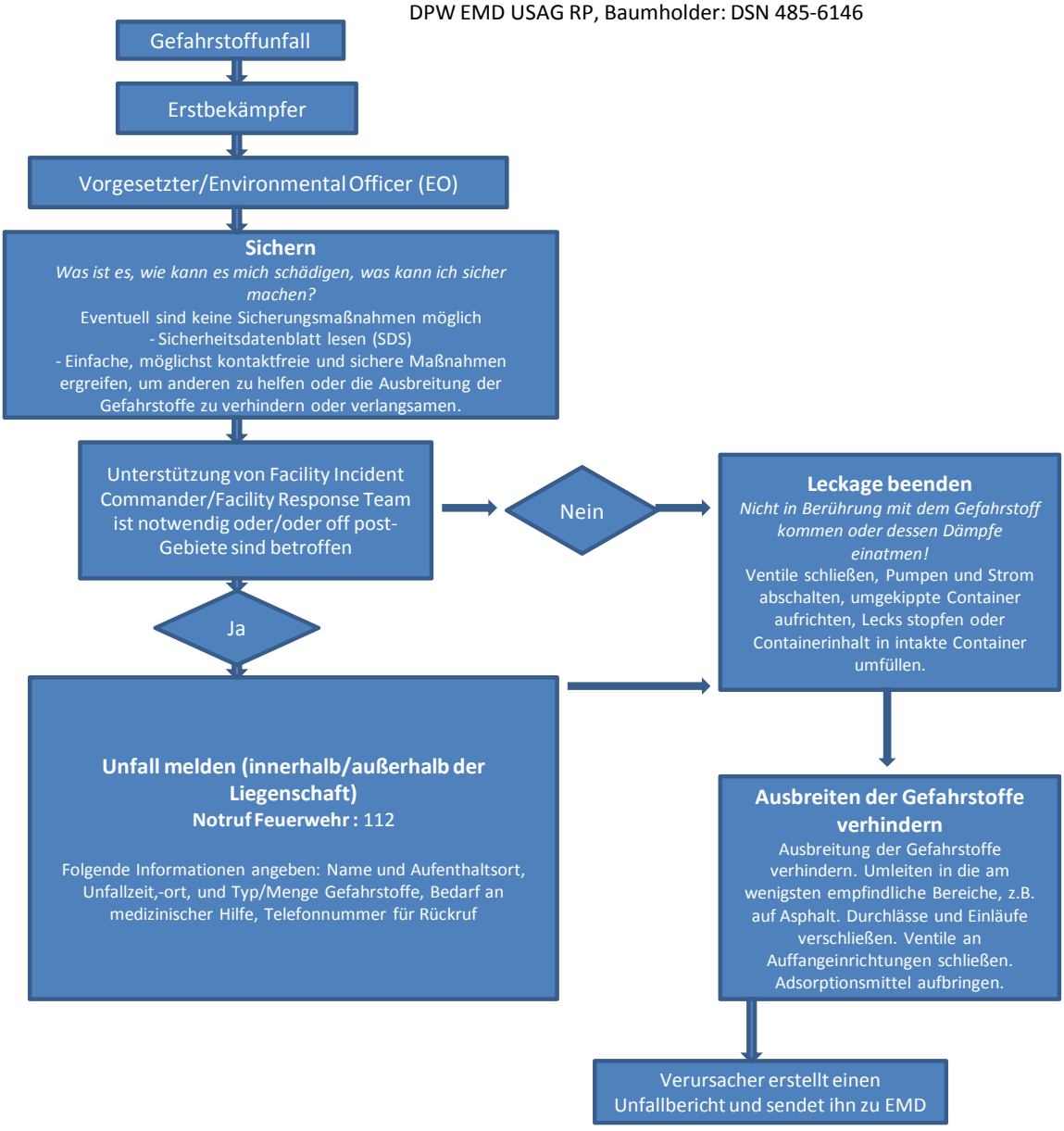


Figure A-2 Handlungsanweisung für Erstbekämpfer bei Gefahrstoffunfällen

Table A-2. Kontaktinformationen für den Fall eines Gefahrstoffunfalls

	Position / Titel	Adresse	Telefonnummer (DSN & CIV)
USAG Rheinland-Pfalz Headquarters	**Commander**	**Pulaski Barracks, Bldg 2933**	**DSN 493-4135**
USAG Public Affairs Office (PAO)	**-**	**Pulaski Barracks, Bldg 2933**	**DSN 493-4213**
Directorate of Emergency Services	**Director**	**ROB, Bldg 164**	**DSN 493-4362 CIV 0631-3406-4362**
USAG Fire Department	**Chief or Respective**	**ROB, Bldg 164**	**DSN 117 CIV 0631-3406-117**
USAG Military Police	**-**	**-**	**DSN 114 CIV 0631-3406-114**
USAG Ambulance	**-**	**-**	**DSN 116 CIV 0631-3406-116**
Directorate of Public Works (DPW)	**Director**	**ROB, Bldg 164**	**DSN 493-1560 CIV 0631-3406-1560**
DPW Environmental Management Division (EMD)	**Chief**	**ROB, Bldg 164**	**DSN 493-4737 CIV 0631-3406-4737**
Spill Coordinator	**Fire Department**	**ROB, Bldg 164**	**DSN 117 CIV 0631-3406-117**
	EMD	**ROB, Bldg 164**	**DSN 493-4737 CIV 0631-3406-4737**
DPW Buildings and Grounds Branch	**Chief**	**ROB, Bldg 164**	**DSN 493-4793 CIV 0631-3406-4793**
DPW Utilities Branch	**Chief**	**ROB, Bldg 164**	**DSN 493-4799 CIV 0631-3406-4799**
DPW Service Orders	**-**	**Daenner Kaserne, Bldg 3106**	**DSN 483-7175 CIV 0631-411-7175**

Table A-3 Liste der Site Manager

	Position / Titel		Telefon Nr. (DSN)
DAENNER KASERNE	**Site Manager**		483-8127
KLEBER KASERNE	**Site Manager**		483-8127
PANZER KASERNE	**Site Manager**		484-8148
KAD	**Site Manager**		483-7197
PULASKI	**Site Manager**		493-4373
ROB	**Site Manager**		493-2224
LANDSTUHL	**Site Manager**		486-7183
MIESAU	**Site Manager**		481-3852
PIRMASENS	**Site Manager**		495-6472
SEMBACH KASERNE	**Site Manager**		496-7744
BAUMHOLDER	**Site Manager**		485-1510
GERMERSHEIM	**Site Manager**		378-3602
GRUENSTADT	**Site Manager**		378-3602
MANNHEIM	**Site Manager**		382-5353

Appendix B
Site Specific Response Plan

Please keep the Spill Response Plan and the site specific information for the unit's buildings in the EO binder. It contains information of the event of a spill or emergency

Appendix C
Pollution Incident/Spill Report (Template)

Please keep the Spill Response Plan and the site specific information for the unit's buildings in the EO binder. It contains information of the event of a spill or emergency

Table C-1. Spill report – English

To be filled by generator

Date of release		*Time of release*	
Date spill was discovered		*Time spill was discovered*	
Name of on-scene coordinator		*Telephone*	
Personnel at the scene			
Location of release (attach sketch of location)			
Type of substance spilled		*Amount of substance spilled*	
Cause of incident and equipment/facility involved			
Impact on surrounding (water, wildlife, etc.)		*size of contamination*	
Injuries and/or property damage			
Corrective actions taken			
Corrective actions required			
Offices notified			
Extent of involvement by Host Nation civil offices			
Notes			

Prepared by (Name and Signature): _____

To be filled out by EMD

Date of report received	
Action required	
Notes	

Received by (Name and Signature): _____

Table C-2. Spill report - German

Auszufüllen vom Verursacher

Gefahrstoffunfalls fand statt am		*Uhrzeit*			
Gefahrstoffunfalls entdeckt am		*Uhrzeit*			
Name des Koordinators vor Ort			*Telefonnr.*		
Anwesende Personen					
Ort des Gefahrstoffunfalls (Skizze anfügen)					
Ausgetretene Substanz		*Menge der aus-getretenen Substanz*			
Ursache des Unfalls und betroffene Geräte/Anlagen					
Auswirkungen auf die Umwelt (Wasser, Boden, Lebewesen, etc.)		*Größe der Kontamination*			
Verletzte und/oder Sachschaden					
Getroffene Maßnahmen					
Notwendige Maßnahmen					
Benachrichtigte Dienststellen					
Ausmaß der Beteiligung der deutschen Behörden					
Sonstiges					

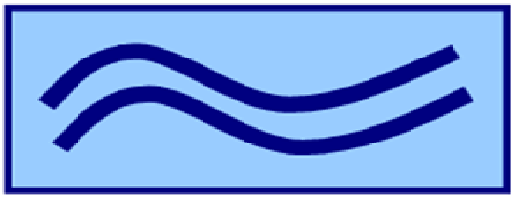
Bericht erstellt durch (Name und Unterschrift): _____

Auszufüllen von EMD

Bericht erhalten am	
Notwendige Maßnahmen	
Sonstiges	

Bericht angenommen durch (Name und Unterschrift): _____

Appendix D
Leaflet – Water Endangering Substances



Leaflet

Instructions for the Use and Safe Handling of Water Endangering Substances

in accordance with § 19g German Federal Water Act (Wasserhaushaltsgesetz - WHG) and § 9 No. 2 of the State Ordinance on Facilities Handling Water Endangering Substances and on Certified Expert Organizations (VAwS)

The facility can endanger the groundwater, creeks, rivers and lakes.

Observe the following:

1. Exercise care during operation!
2. Exercise care when filling or emptying!
3. Control all safety devices!
4. Maintenance conducted by specialized firms only!
5. Testing of facility by expert personnel only!
6. In case of danger take facility out of operation!
7. Report damage immediately to:

US Agencies

US Fire Department	DSN: **112**	
Environmental Division	DSN: **493-4737**	Civil: **0631-3406-4737**
Military Police	DSN: **110**	

Please inform your personnel of the following:

1. **Exercise care during operation!**

   Instruction manuals and authority certifications are provided for all containers and safety devices. These contain directions important for the operation of the facility and must be followed.

2. **Exercise care when filling and emptying!**

   Filling and emptying must be continuously supervised.

   Containers used for the storage of heating oil, diesel fuel, motor fuel, as well as of other liquid substances, may only be filled with the use of fixed line connectors and with an approved overflow protection device that interrupts the filling or sets off an acoustic alarm prior to reaching the maximum filling level.

   Containers used for the storage of heating oil and diesel fuel may only be filled from road tank cars and attached tanks when using an automatic shut-off or overflow prevention device.

   Prior to filling the container, the container capacity must be checked and it must be determined if safety devices, especially the overflow prevention device, are fully functional. During filling strict attention must be paid to ensure that the admissible operating overpressure is not exceeded so as to avoid bursting of the container and piping.

3. **Check all safety devices!**

   Safety and protection devices must be continuously operational. When it is impossible to accurately assess the condition of the facility, or remedy deficiencies, contact an expert (organization) authorized in accordance with § 19l of the German Federal Water Management Act (Wasserhaushaltsgesetz [WHG]).

4. **Maintenance only by expert companies!**

   For facilities exceeding a specific hazard category, installation, maintenance, repair, and cleaning may only be performed by an authorized expert. The authorized expert must provide evidence of his/her authorization upon request.

5. **Inspections only by certified experts!**

   Facilities that are subject to inspections must be inspected at the required time intervals by a certified expert of the operator's own accord and at the operator's own expense. All authority notifications concerning the facility, as well as the certificates and approvals obtained from the manufacturer must be provided to the certified expert prior to the inspection. Completeness of the documentation and remedy of deficiencies identified by the expert are the responsibility of the facility operator.

   Inspection intervals:

   1. Prior to commissioning, after a substantial modification, prior to re-commissioning after close-down for more than 1 year;

   2. Recurrent in intervals of 5 years at the most, in protection zones 2 ½ years.

   Commissioning on: .....
   Recurring inspection on: .....
   Recurring inspection on: .....
   Recurring inspection on: .....
   Recurring inspection on: .....
   Recurring inspection on: .....

6. **In case of danger, take facility out of operation!**

   The facility must be taken out of operation immediately in case of a breakdown or in the event of damage and, if necessary, if the discharge or the danger of the discharge of water endangering substances from the facility cannot otherwise be avoided or prevented.

7. **Report damage!**

   Leakage of water endangering substances must be reported immediately to the nearest police station, fire department, or water authority if the substances have entered or can potentially enter a surface water body, the subsoil, or the sewer system.

8. **Notify authorities!**

   Those responsible for notification to the appropriate authorities include the operator, driver, or the person who maintains, repairs, cleans, controls, or inspects a facility or has caused the discharge of the water endangering substance.

Figure D-1. Water endangering substances - leaflet

Appendix E
Appointment Letter (template at next page)

UNIT LETTERHEAD

UNIT OFFICE SYMBOL

MEMORANDUM FOR

SUBJECT: Appointment of Environmental Officers (EO)

Effective _____
(Date)

_____
_____
(Rank, Name First/Last) (DSN, email address)

is appointed as

Primary EO ☐ please check the appropriate box)

Alternate EO ☐

Sub EO ☐

for _____
_____
(Unit's Name) (Installation & Building No.)

Authority: AR 200-1 and AER 200-1.

Purpose: To perform duties of an environmental officer as outlined in above references.

Period: Until officially released from appointment.

Special Instructions: To be familiar with provisions of AR 200-1 and AER 200-1.

_____
Commanding Authority / Director

CF:
USAG-RP, ATTN: IMRP-PWE, Unit 23152, APO AE 09054-3152

Figure E-1. Sample of EO appointment letter

Appendix F
Training Certificates

Please keep all environmental related training certificates in the EO binder (example: initial EO Training, EO Refresher Training, EMS Awareness Training etc.)

Appendix G
Environmental Standard Operating Procedure (SOP)

Please keep all current SOPs in the EO binder where they can be easily accessed so that you can refer to them again at any time.

Appendix H
Authorized Use List (AUL)

Each unit shall keep a current AUL. The AUL is a list of all the materials in quantities that the unit is authorized to use, approved by the Commander

Appendix I
Spreadsheet for excess HM turn in document

Table I-1 Spreadsheet for excess HM turn-in document

Spreadsheet for excess HM turn-in document								
Unit Name:								
Location/Installation:								
POC (name, phone):								
DSN	Nomenclature	U/I	QTY	Lot/Batch	Manufacturer	MFD	Exp Date	Remarks

Forward this list electronically to the SAE, EO at: klauspeter.fraenger.ln@mail.mil

Appendix J
Tank Checklist

You can use the template on the next page. The checklist should be available at the tank.

Each tank has to be checked at least once each operating day by the USER.

If a tank fails the check for TANK CONDITION or LEAK DETECTION stop the flow of HW into the tank

Table J-1. Checklist for tank inspection

TANK ID (can be found on the identification plate) :	
This tank is for (waste type):	
Tank volume (liter or gallon)	

Date (Yyyymmdd)	*Name (Print)*	*Tank Condition**	*Fill Level**	*Leak Detection**	*Rearks*

Keep this record and have it available for site inspections !

***** If you found any deficiencies or if you are not sure what to check contact your Environmental officer or the Environmental Division (DSN : 493-4738/4739)

Appendix K
Inspection checklist for HWAP and HMSA

The units having Hazardous Waste Accumulation Points and Hazardous Material Storage Areas shall inspect them on a regular basis (EO Handbook, chapters 5 - 6). Please keep your completed and signed inspection checklists in the EO binder.

Weekly Checklist*: Hazardous Material Storage Area (HMSA)

*Areas where containers are stored must be inspected weekly for leaking and deteriorating containers as well as deterioration of the containment system caused by corrosion or other factors. Secondary containment systems will be inspected for defects and emptied of accumulated releases or retained stormwater.

Container Handling and Storage

- ☐ Containers holding HM are in good condition and free from severe rusting, bulging, or structural defects.
- ☐ Containers or secondary containment used to store HM are compatible with the materials stored.
- ☐ Containers are closed during storage.
- ☐ Incompatible materials were not placed in the same container or on the same secondary containment.

Area and secondary containments

- ☐ Area is clean and tidy.
- ☐ All liquid hazardous materials that are not in double-walled containers are stored on secondary containment systems.
- ☐ Secondary containments have a sufficient capacity to contain 10% of the volume of stored containers or the volume of the largest container, whichever is greater.
- ☐ Containments systems show no sign of deterioration.

Date Signature

Checklist*: Hazardous Waste Accumulation Point (HWAP)

*All criteria of "Use and Management of Containers," apply to HWAPs except for criterion "Weekly Inspections."

Container Handling and Storage

- ☐ Containers holding HW are in good condition and free from severe rusting, bulging, or structural defects.
- ☐ Containers used to store HW, including overpack containers, are compatible with the materials stored.
- ☐ Containers are closed during storage.
- ☐ Incompatible wastes were not placed in the same container.
- ☐ Tanks are checked each operation day (recorded on the tank ckecklist).

Area and secondary containments

- ☐ Area is clean and tidy.
- ☐ All liquid hazardous materials that are not in double-walled containers are stored on secondary containment systems.
- ☐ Secondary containments have a sufficient capacity to contain 10% of the volume of stored containers or the volume of the largest container, whichever is greater.
- ☐ Containments systems show no sign of deterioration.

Date Signature

Figure K-1. Checklists for HMSA and HWAP

Appendix L
EMS Policy

Please keep the EMS Garrison Policy as well Unit Environmental Policy in this binder.

Appendix M
EMS flyer and other relevant EMS documents and records

EMS flyer as well as all relevant EMS documents (EO Handbook, chapter 1 - 2) shall be kept in this binder.

Table M-1. Sample of the list of the EMS relevant documents and records

List of EMS relevant documents and records (EMS Form 445-1)

OU Name:

POC:

Revision date:

#	Title	Date of issue	Document Description (e.g. permission, MOI, SOP, WO, policy, etc)	POC	ARIMS	document location (Installation, Bldg., Room, … or path and filename for electronic files)	POC for archiving superseded document	Storage location for archived document	document archive period (Years)

Appendix N
Energy Monitors Checklists (template at next page)

The Building Energy Monitors (BEM) shall inspect their facilities monthly (EO Handbook, chapter D). Please keep your completed and signed inspection checklists in this binder.

USAG Rheinland-Pfalz

ENERGY MONITOR'S CHECKLIST

Installation: _____ Building # : _____

Building Energy Monitor: _____ Date: _____

	Possible Energy Violations				Corrective Action
Lighting		Yes	No	NA	
1	Lights left on in unoccupied areas	☐	☐	☐	BEM
2	Lights in use when daylight sufficient	☐	☐	☐	BEM
3	Exterior lights on during daytime	☐	☐	☐	SO
4	Lamp covers are dirty	☐	☐	☐	BEM
5	Light levels in corridors, stairwells too high	☐	☐	☐	SO + DPW
6	Lighting in work areas exceeds requirements for task	☐	☐	☐	SO
7	Light bulbs with excessive wattage in use	☐	☐	☐	SO
8	Lights over partitions, stacks, etc.	☐	☐	☐	SO
9	Excessive exterior illumination	☐	☐	☐	SO
Electrical Equipment					
1	Devices left running when not in use	☐	☐	☐	SO
2	Vending machine lights on after work hours	☐	☐	☐	SO
3	Air compressor pipes defect	☐	☐	☐	SO
Water					
1	Faucets leaking	☐	☐	☐	SO
2	Toilet tank running	☐	☐	☐	SO
3	Flow rates excessive (gallons per minute)	☐	☐	☐	SO
4	Warm water pipe insulation missing, damaged or not sufficient	☐	☐	☐	SO
5	Water leaks in pipes	☐	☐	☐	SO
Heating and Cooling					
1	Unconditioned areas not closed off	☐	☐	☐	BEM
2	Air Conditioners running after work hours	☐	☐	☐	BEM
3	Air vents obstructed	☐	☐	☐	BEM / SO
4	Windows and exterior doors left open (including vestibule doors)	☐	☐	☐	BEM
5	Room temperatures higher than 72°F during winter	☐	☐	☐	BEM / SO
6	Temperatures in air conditioned rooms lower than 78°F	☐	☐	☐	BEM / SO
7	Thermostats damaged	☐	☐	☐	SO
8	Radiators dirty	☐	☐	☐	SO
9	Air filters dirty	☐	☐	☐	SO
10	Pipe insulation missing or damaged	☐	☐	☐	SO
11	Electrical space heater in use	☐	☐	☐	DPW
12	Unauthorized personal air conditioner in use	☐	☐	☐	DPW
Refrigeration					
1	Seals on refrigerator doors damaged	☐	☐	☐	SO
2	Refrigerator / freezer needs defrosting	☐	☐	☐	BEM
3	More refrigerators in use than necessary	☐	☐	☐	SO
Building					
1	Broken windows and doors	☐	☐	☐	SO
2	Caulking around windows, doors and exterior joints cracked	☐	☐	☐	SO
3	Weather-stripping around windows and/or doors defective or missing	☐	☐	☐	SO
4	Exterior doors misaligned	☐	☐	☐	SO
5	Unoccupied buildings consume excessive amount of energy and water	☐	☐	☐	DPW

Abbreviations for Corrective Measures:

BEM: Building Energy Monitor **SO:** Service Order **DPW:** Directorate of Public Works

Comments:

Figure N-1. Energy Monitor's checklist - English

USAG Rheinland-Pfalz

ENERGY MONITOR'S CHECKLIST

Installation: _____ Gebäude-Nr.: _____

Building Energy Monitor: _____ Datum: _____

Mögliche Energie-Verschwendungen		Ja	Nein	NA	Korrektur-Maßnahmen
Beleuchtung					
1	Beleuchtung in unbenutzten Bereichen eingeschaltet	☐	☐	☐	BEM
2	Beleuchtung eingeschalted obwohl Tageslicht ausreichend wäre	☐	☐	☐	BEM
3	Außenbeleuchtung während des Tages eingeschlaltet	☐	☐	☐	SO
4	Lampengehäuse verschmutzt	☐	☐	☐	BEM
5	Beleuchtungsstärke in Treppenhäusern und Fluren zu hoch	☐	☐	☐	SO + DPW
6	Beleuchtung in Arbeitsbereichen übertrifft Erfordernisse	☐	☐	☐	SO
7	Leuchtmittel mit zu hoher Wattzahl im Gebrauch	☐	☐	☐	SO
8	Licht über Abtrennnungen, Stapeln etc.	☐	☐	☐	SO
9	Übermäßige Außenbeleuchtung	☐	☐	☐	SO
Elektrische Geräte					
1	Geräte eingeschaltet auch wenn nicht im Gebrauch	☐	☐	☐	SO
2	Beleuchtung in Warenautomaten nach der Arbeitszeit noch eingeschaltet	☐	☐	☐	SO
2	Kompressor-Leitungen defekt	☐	☐	☐	SO
Wasser					
1	Wasserhähne undicht	☐	☐	☐	SO
2	Toiletten Spühlkasten läuft	☐	☐	☐	SO
3	Wasserdurchfluss zu hoch	☐	☐	☐	SO
4	Rohrisolierung (Warmwasser) beschädigt, nicht vorhanden, ungenügend	☐	☐	☐	SO
5	Rohre undicht	☐	☐	☐	SO
Heizung und Klimatisierung					
1	Klimatisierte und nicht klimatisierte Bereiche nicht abgetrennt	☐	☐	☐	BEM
2	Klimaanlage nach Arbeitszeit noch eingeschaltet	☐	☐	☐	BEM
3	Lüftungsgitter blockiert	☐	☐	☐	BEM / SO
4	Fenster und Außentüren offen (einschließlich Windfang-Türen)	☐	☐	☐	BEM
5	Raum-Temperaturen über 22°C (72°F) während der Heizperiode	☐	☐	☐	BEM / SO
6	Temperaturen in klimatisierten Räumen unter 26°C (78°F)	☐	☐	☐	BEM / SO
7	Thermostat beschädigt	☐	☐	☐	SO
8	Radiatoren verschmutzt	☐	☐	☐	SO
9	Luftfilter verschmutzt	☐	☐	☐	SO
10	Rohrisolierung beschädigt oder nicht vorhanden	☐	☐	☐	SO
11	Elektro-Heizgeräte im Einsatz	☐	☐	☐	DPW
12	Klimagerät ohne Genehmigung im Einsatz	☐	☐	☐	DPW
Kühl- und Gefriergeräte					
1	Dichtungen am Kühlschrank beschädigt	☐	☐	☐	SO
2	Gefrierschrank / Kühlschrank muss enteist werden	☐	☐	☐	BEM
3	Mehr Kühlschränke als notwendig im Einsatz	☐	☐	☐	SO
Gebäude					
1	Beschädigte Fenster oder Türen	☐	☐	☐	SO
2	Dichtungen an Fenstern, Türen oder externen Verbindungen defekt	☐	☐	☐	SO
4	Außentüren nicht richtig ausgerichtet	☐	☐	☐	SO
5	Leere Gebäude benötigen zu viel Energie und Wasser	☐	☐	☐	DPW

Abkürzungen für Korrektur-Maßnahmen:

BEM: Building Energy Monitor **SO:** Service Order **DPW:** Directorate of Public Works

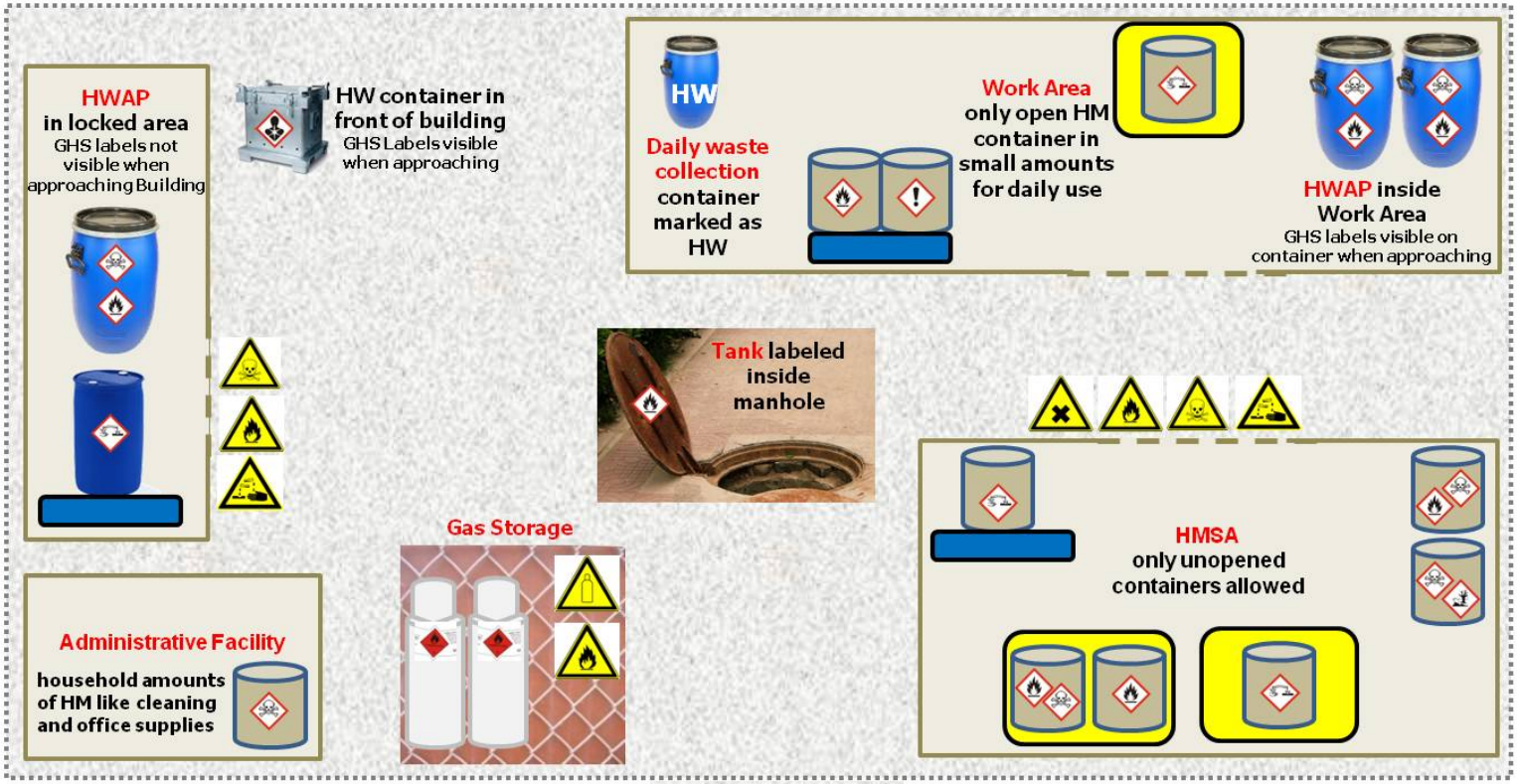
Bitte Rückseite für zusätzliche Anmerkungen bei

Comments:

Figure N-2. Energy monitor's checklist - German

Appendix O
Overview how to label HM/HW storage locations

Example Labeling of multiple Work Places, services hazardous substances, in a single secured/fenced in Work Area



All mandatory signs or other safety signs need to be described in the Operating Instruction/Betriebsanweisung and must be posted in the work area as needed in coordination with Safety Office.

HWAP Hazardous Waste Accumulation Point
HMSA Hazardous Material Storage Area

Storage Locker

Secondary Containment

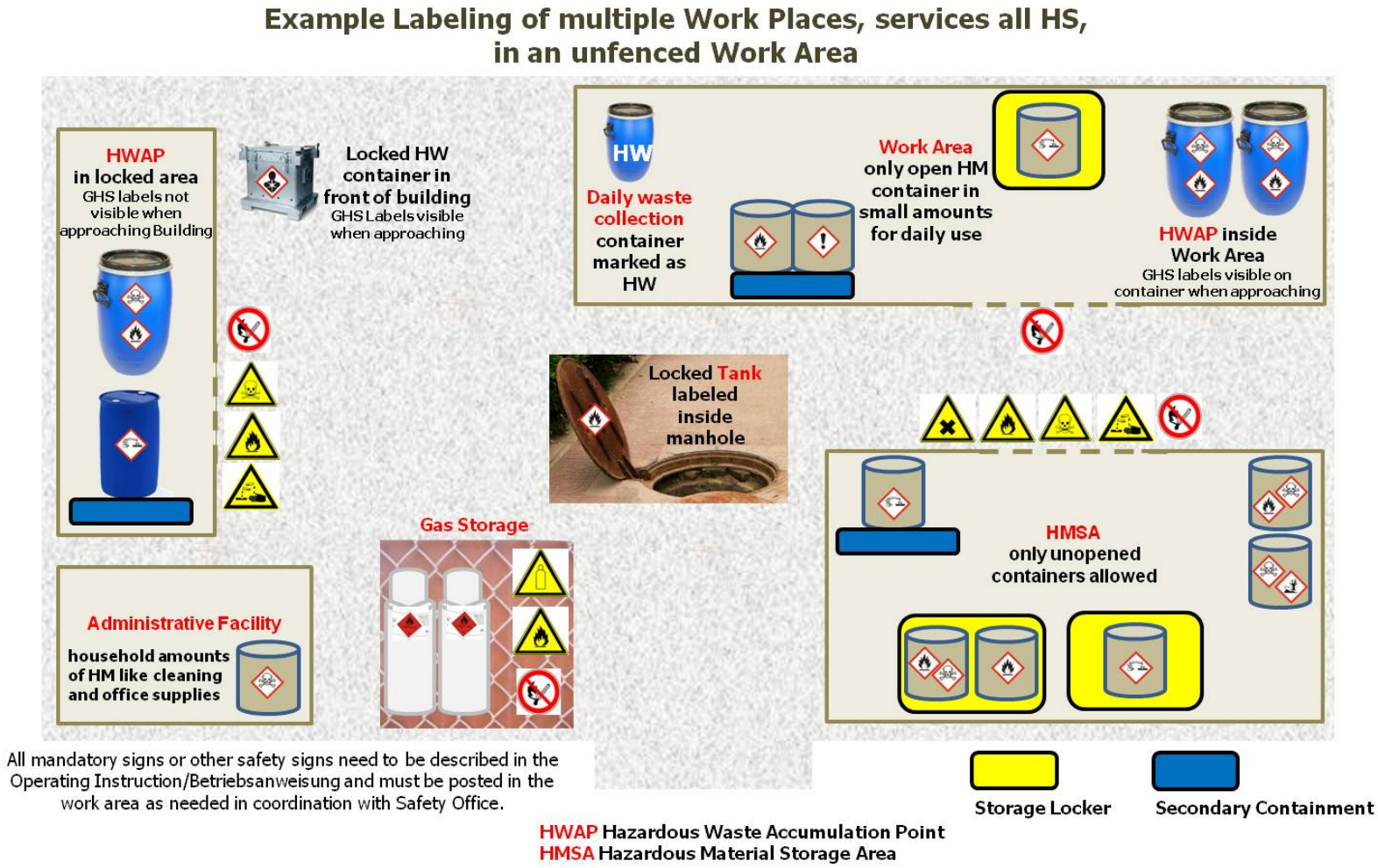


Figure O-1. Example labeling of multiple work places

Appendix P
Other Useful Information

Appendix Q
Glossary

ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
AOR	Area of Responsibility
AER 200-1	Army in Europe Regulation 200-1
ARIMS	Army Records Information Management System
AST	Aboveground Storage Tank
AUL	Authorized Use List
C/EMD	Chief of the Environmental Management Division
CFT	Cross Functional Team
CHWCP	Central Hazardous Waste Collection Point
DPW	Directorate of Public Works
EMD	Environmental Management Division
EMS	Environmental Management System
EO	Environmental Officer
EPAAS	Environmental Performance Assessment and Assistance System
EQCC	Environmental Quality Control Committee
FGS	Final Governing Standards
FGS-G	Final Governing Standards Germany
FIFO	First In – First Out
HM	Hazardous Material
HMCC	Hazardous Material Control Center
HMMP	Hazardous Material Management Plan
HW	Hazardous Waste
HWAP	Hazardous Waste Accumulation Point
HWSA	Hazardous Waste Storage Area
IAW	In Accordance With
IMCOM-E	United States Army Installation Management Command, Europe Region
ISO	International Organization for Standardization
LRC	Logistics Readiness Center
MOI	Memorandum of Instruction
MR	Management Representative

NLT	Not Later Than
OI	Operating Instruction
POL	Petroleum, Oil and Lubricants
SDS	Safety Data Sheet
SOP	Standard Operating Procedure
SPRP	Spill Prevention and Response Plan
USAG	United States Army Garrison
UST	Underground Storage Tank
WI	Work Instruction