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<b>Document Name:</b>	<b>Environmental Aspect Identification Procedure</b>		
<b>Document ID:</b>	EMS4.3.1-001	<b>Original Date:</b>	01 Feb 2004
<b>Revision No:</b>	4.0	<b>Revision Date:</b>	25 Aug 2009
<b>Document Owner:</b>	<b>Approval:</b> 		
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**1. INTRODUCTION:**

The USAG Hohenfels and JMRC Hohenfels have created an Environmental Management System (EMS) Implementation Cross Functional Team of representative personnel from activities, directorates, and tenants to implement and maintain the installation's EMS. This document with its annexes describes how the environmental aspects of facility operations are periodically identified and prioritized. The prioritized list of environmental aspects will assist the Environmental Quality Control Committee (EQCC) in establishing environmental goals and setting targets to support the USAG Hohenfels and JMRC joint environmental policy.

**2. PURPOSE:**

To provide a standard procedure for identifying the environmental aspects and associated environmental impacts of USAG Hohenfels and JMRC processes, activities, and services. Implementation of this procedure will ensure that environmental aspects and environmental impacts are identified and periodically reviewed in order to determine those aspects that are significant. The significant aspects will be ranked according to their environmental impact significance. Top priority significant aspects will be used to develop environmental objectives and targets, and to develop respectively refocus environmental management programs (EMPs) IAW EMS433\_000\_ObjTarEmp.doc.

**3. APPLICABILITY:**

This procedure applies to the EMS CFT developed during the EMS Implementation period and led by the Environmental Management System Representative (EMSR). This procedure applies indefinitely as the EQCC annually reviews significant environmental impacts resulting from facility operations, services and products.



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#### 4. DEFINITIONS:

Click on the hyperlink to access to the entire Glossary of EMS Terms and Definitions.

Environmental Aspect – An element of an organization’s activities, products, and services which can interact with the environment. An environmental aspect signifies the potential for an environmental impact, whether good or bad.

Environmental Impact - Any change to the environment, or to the health or safety of people, whether adverse or beneficial, wholly or partially resulting from an organization’s activities, products, or services.

Significant Environmental Impact - Any potential significant change (determined by installation procedure or established criteria) to the environment, wholly or partially resulting from the organization’s activities, products, or services.

Regulatory Impact – Impact significance rating factor based on the resulting regulatory exposure for the facility. The German Final Governing Standards (FGS) is the main legal standard.

Mission Impact Severity – Impact significance rating factor incorporating potential adverse effects on USAG Hohenfels -JMRC missions.

Frequency – Impact significance rating factor based on the likelihood and frequency of the impact. This factor is weighed most-heavily in determining which aspects and associated impacts are most significant for the facility.

EMS Implementation Cross-Functional Team (CFT) - A team appointed by the EQCC to review processes, activities and services and update the list of environmental aspects and impacts. The EMS CFT includes representatives from the directorates, tenants, and/or activities whose operations are representative of the entire facility or whose normal operations are likely to affect the environment.

#### 5. RESPONSIBILITIES AND TIMELINE:

The EMS CFT developed during the EMS Implementation period and led by the Environmental Management System Representative (EMSR) has the primary responsibility for the execution of this procedure including its annexes for conducting the environmental aspects and impacts analysis.

The organization/unit (O/U) being looked at should supply functional area expertise and supporting documentation. The goal for this EMS implementation effort is to capture the functional areas and identify their significant environmental aspects.



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CFT members received initial training to conduct environmental aspects and impacts analysis in February 2004. Their initial effort was to conduct the analysis of their parent organizations and functions. As this effort is completed, responsibility of conducting the ongoing analysis of organizations and functions was assigned to DPW ED. Currently, DPW ED executes the aspects identification and ranking process as described in this procedure. DPW ED maintains the Aspects Inventory database.

6. SUPPORTING DOCUMENTS

Document ID / Link to Document	Document Name
EMS431_A02_AspectsInv.mde	Aspects Inventory database
EMS431_A03_Readme.txt	USAG Hohenfels Aspects Inventory Database - Guidance for use
EMS431_F01_AspectsWrksht.xls	Aspects Worksheet (Sample)
EMS433_000_ObjTarEmp.doc	Procedure for setting up Environmental Objectives and Targets, and establishing Environmental Management Programs (EMP)
EMS441_000_RRRAuthority.doc	Environmental Management System (EMS) Procedure for Resources, Roles, Responsibility and Authority
EMS400_000_TOC.doc	Table of Contents of the USAG Hohenfels EMS Manual

7. PROCESS:

Environmental aspects are identified and ranked IAW –the following Aspects Identification and Ranking Process.

For each unit/organization including contractors one specific Aspects Worksheet (EMS431\_F01.xls) is filled in, and filed on the Doc Con system.

DPW ED maintains an Aspects Inventory database EMS431\_A02\_AspectsInv.mde filed on the DPW server. The database is used to:

- Maintain a current list of all units and organizations under the scope of EMS;
- Inventory all Garrison and JMRC Hohenfels activities, services, and products;
- Identify and rank the environmental aspects and environmental impacts; and



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- Establish a list of suggested significant aspects.

In future releases, the database shall cover unit and organizations POCs to include primary and alternate Environmental Officers (EO), as well as Unit Commanders/supervisors.

The basic steps of the aspects identification and ranking process are as follows:

1. Train reviewers on the identification, review, and prioritization of environmental aspects
2. Identify all Organizations and Units at Hohenfels with their mission and installation functional areas
3. Identify the major processes for each functional area and the associated activities, products, and services that have an environmental aspect
4. Review activities and assign environmental aspects and rank environmental impacts
5. Consolidate aspect worksheets and identify significant environmental aspects
6. Prioritize the list of environmental aspects
7. **Calculate the Impact Significance Score (Ranking System) and determine Significant Aspects**

The tracking of the process is done with the Aspects Inventory database (EMS431\_A02\_AspectsInv.mde) that works with the Form 01 - Aspects Worksheet (EMS431\_F01\_AspectsWrksht.xls). Both tracking tools are maintained at DPW ED and are filed on the Doc Con System.

### **Step 1: Train reviewers on the identification, review, and prioritization of environmental aspects**

Training will include a concise review of EMS aspects analysis, to be immediately followed by distribution of the procedure EMS431\_000\_Aspects.doc and the current or draft list of environmental aspects. Reviewers will be assigned to review / complete one or more aspect worksheets (EMS431\_F01\_AspectsWrksht.xls).

Note that the draft aspect worksheets as generated from the Aspects Inventory database contain a minimum number of potential environmental aspects for each O/U. A generalized list of environmental aspects for USAG-JMRC Hohenfels can also be provided. The general list of environmental aspects should be considered for each activity or operation, in addition to the draft list provided in the worksheets.

The EMSR will also review the procedures described below to assist reviewers in assigning a relative significance to each environmental impact.



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## **Step 2: Identify all Organizations and Units at Hohenfels with their mission and installation functional areas**

Functional areas will be defined on an organizational basis. A list of organizations and units (O/U) stationed on post is established and any changes that have an effect on the list (e.g., deployments, newcomers) are tracked in the Aspects Inventory database.

Examples for Organizations and Units: Directorates, divisions, branches, offices; tenants; and contractors having environmental impacts.

*NOTE: Units that come in during training rotations (training units) are tracked by **the term 'training units'**.*

Tools: Organizational and Function Manual, mission descriptions, organizational charts, tenants list, contractor list, MOUs, and MOAs, interviews with O/U supervisors/commanders and EOs.

## **Step 3: Identify the major processes for each functional area and the associated activities, products, and services that have an environmental aspect.**

*Note: In the following, activities, products, and services of an organization or unit (O/U) are referred to as 'activities'.*

The activities are identified for each O/U and will be added to the O/U-specific aspects worksheet. After consolidation of the data using the tool listed below, the worksheet will be imported into the database. For each O/U recorded in the database, the specific aspects worksheet can be generated. The exported worksheets for a specific unit will include all data that are required according to the Procedure EMS431\_000\_Aspects.doc.

Examples: training operations; aircraft, vehicle, and equipment operation; maintenance and cleaning (buildings, roads, runways, grounds, training areas, vehicles, aircraft, equipment, weapons); pesticide storage, use, and disposal; construction and renovation; hazardous material/POL storage, transportation, and use; medical/dental/ vet services; food services; retail food and goods services; packaging and un-packaging; drinking water collection, treatment, and distribution; landfill; quarry; contamination remediation and UXO de-duding, wastewater and stormwater collection and treatment; heat and steam production; electric power production and distribution (fixed and mobile); Hazardous Material Control Center; and administrative services.

Tools: Organization/unit interviews, mission statements, mission essential task lists, Army Readiness Training Evaluation Programs (ARTEPs), Environmental Performance Assessment System (EPAS) reports and corrective action plans, process flow charts and hazard analyses, Hazardous Waste Management Plan, hazardous waste accumulation points list, Hazardous Material Consolidation Program Implementation Study, Pollution Prevention Opportunity Assessment and Plan, Air Emissions Survey, storage tank inventory, spill reports, oil/water



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separator inventory, wash rack inventory, fueling stations inventory, solid waste container locations, USAG Hohenfels master plan, permits, and complaints.

#### **Step 4: Review activities and assign environmental aspects and rank environmental impacts**

Perform a detailed review of the activities and operations. At O/U level the review will be conducted as described in the internal Performance Assessment System Inspections (EMS433\_EMP02\_internal\_EPAS\_Inspection.doc). The detailed review should include discussions with facility personnel as necessary and a review of available data describing the activity/aspect. Additionally, the reviewer should address the relative significance of the environmental aspect and the associated impact by assigning impact rankings. Try to capture as much related quantitative information as possible to help determine significance.

*Note: The impact ranking system and the equation used to generate the impact significance scores is described in Step6 below.*

Environmental aspect examples: Air emissions; hazardous waste generation; solid waste generation; uncontrolled releases (leaching, erosion, etc); spills to water or soil; discharges (point and non-point) to ground and surface water; energy consumption or conservation; natural resource or raw material consumption or conservation; ecological resource degradation or conservation; cultural resources degradation or conservation; and generation of heat, light, noise, or other radiation.

Tools:

- Aspects Inventory database (EMS431\_A02\_AspectsInv.mde)
- Aspects Worksheet (EMS431\_F01\_AspectsWrksht.xls)

#### **Step 5: Consolidate aspect worksheets and identify significant environmental aspects**

Identify those environmental aspects that can reasonably be controlled or managed. For those aspects that can be controlled or managed, an impact significance score should be calculated using the factors and methodology described in Step6 below. The combined list will be sorted in a manner that highlights the most significant aspects and impacts. The prioritized list of environmental aspects may be sorted in any manner agreeable to the individual who is responsible for the aspects identification process (total weighted ranking, specific rankings, by activity, etc.).

Tool:

- U.S Army EMS Implementers Guide, Step 19

The EQCC will review, revise if needed, and approve the suggested significant aspects report as generated from the database. IAW the Procedure EMS433\_000\_ObjTarEmp.doc, the EQCC will consider approved significant aspects for establishing the Garrisons environmental



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objectives and quantifiable targets where practical, and to develop EMS environmental management programs (EMPs) to achieve these objectives and targets.

## Step 6 Prioritize the list of environmental aspects

After an environmental aspect and associated impact are identified, the impact will be assigned a relative environmental significance based on the factors A, B, C, D, and E, and the ranking system as explained below.

### 1. Determine Frequency of the impact:

Rate this impact significance rating factor based on the likelihood or frequency of the potential impact. Do NOT rate the frequency of how often the activity is performed. This factor is weighed most-heavily in determining which aspects and associated impacts are most significant for the facility.

5 = Continuous impact (on-going or daily basis)

4 = Frequent, more than once per month

3 = Infrequent, less than once per month but more than once per year, quarterly;

2 = Rare, such as once every year or two

1 = Impact is highly unlikely or has never occurred.

### 2. Determine Environmental Impact Severity:

Rank the severity of the environmental impact that can potentially occur.

Note: If Environmental Impact Severity is rated with a 5 (= Severe), the environmental aspect is considered as a significant aspect.

5 = Severe, immediate threat likely to result in widespread damage to human health or the environment; requires great effort to remediate or correct.

4 = Serious, no immediate health threat is likely but significantly damages the environment. Difficult but possible to remediate.

3 = Moderate, somewhat harmful, but correctable



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2 = Mild, small potential for harm to environment, correctable

1 = Insignificant, trivial harm and easily correctable

### 3. Determine Mission Impact Severity:

Rank to what degree the environmental impact results in any mission constraints or the organization cannot perform, produce, or provide the activity, product, or service at all.

Note: If Mission Impact Severity is rated with a 5 (= Critical), the environmental aspect is considered as a significant aspect.

5 = Critical. Loss of ability to accomplish critical mission or near mission failure

4 = Severely degraded mission capability or serious mission restrictions

3 = Moderate mission restrictions

2 = Minor mission impacts or restrictions

1 = Insignificant mission impacts or restrictions; alternative courses action are available

0 = No impact on mission, no restrictions

### 4. Determine Regulatory Risk:

Impacts subject to German FGS are automatically significant. Situations involving a high risk of noncompliance demand increased priority.

Note: If Regulatory Risk is rated with a 5 (= Non-compliance), the environmental aspect is considered as a significant aspect.

5 = Non-compliance condition. Actual or possible enforcement action or Notice of Violation

4 = Generally in compliance, but not well controlled or managed; some risk of non-compliance in future



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- 3 = In compliance, but under scrutiny by regulators
- 2 = In compliance, well controlled or managed, little regulator interest
- 1 = Not regulated, best management practice (BMP) applies
- 0 = No requirements apply

**5. Determine Community Concerns:**

Rank the severity level of community concerns when the environmental impact actually occurred.

- 4 = Public outcry or legal action
- 3 = Serious community concern, political or activist inquiries, intense negative media
- 2 = Moderate community concern, some media coverage
- 1 = Community is not currently concerned, but could become so
- 0 = Community is ambivalent or unconcerned

**6. Set Threshold for the Significance Score (EQCC Decision)**

The ranking system includes a threshold for the significance score to determine significant aspects. In case that a significance score that was calculated IAW Step 7 is higher than the current threshold, the environmental aspect will be considered as significant aspect.

The threshold is suggested by DPE ED on the basis of the aspects analysis and tracking results (currently 40). However, the decision for the threshold value is required by the EQCC.

**Step 7 - Calculate Impact Significance Score (Ranking System) and determine Significant Aspects**



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The ranking system uses the following equation to calculate the environmental impact significance scores:

<b>Significance Score</b>	=	<b>Frequency</b>	x	(	<b>Environmental Severity</b>	+	<b>Mission Severity</b>	)	+	<b>Regulatory Risk</b>	+	<b>Community Concern</b>
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8. DOCUMENT REVISION HISTORY

Revision No.	Date of Revision	Revision Summary
1.0	16 Aug 05	Exchanged "282 <sup>nd</sup> BSB" with "USAG Hohenfels"
2.0	23 Jan 06	Not documented
3.0	18 Feb 09	- Revised filename/document ID IAW new EMS Manual format/concept; - The EMS database defines training activities below 'training units' Step 4 added/linked to EMS433_EMP02_internal_EPAS_Inspection procedure
4.0	25 Aug 09	No changes