

REDSTONE ARSENAL ENVIRONMENTAL MANAGEMENT SYSTEM MANUAL

1.0 Scope

INTRODUCTION

An Environmental Management System (EMS) represents a systematic approach to ensuring that environmental aspects and impacts are well managed in the organization. The EMS at US Army Garrison - Redstone follows the ISO 14001 organizing structure and the requirements identified Army Regulation 200-1, Environmental Sustainability and Stewardship, and other Army and DOD laws and regulations.

Scope:

The Redstone Environmental Management System (EMS) applies to all organizations, functions, and activities within the boundaries of Redstone Arsenal excluding properties owned by Marshall Space Flight Center (NASA). This includes the Redstone Arsenal offices, staff elements, tenants, and contractors and their subcontractors.

Within each Section the requirements are identified and each provides information and guidance for:

- Purpose
- Roles and Responsibilities
- Procedures
- References and Related Documents

A means of monitoring the development and maintenance of each requirement is established through an Audit Log.

The intent of this Manual is not to create a new parallel program for the organization. Its emphasis is on continual improvement - improvements that will be realized through a management process that drives best practices. These include:

- Build EMS awareness
- Identify and unify current and functioning environmental management practices
- Taking Action for continual improvements

Actions taken reference current practices and drive the full implementation and on-going maintenance of each EMS element.

Using the information provided in the Manual, the organization will focus on the development and maintenance of an EMS that reinforces the US Army Garrison - Redstone Environmental Policy and helps to continuously identify and reduce risk to the environment. The system will identify appropriate EMS operations based on risk and regulatory issues and installation requirements.

This Manual is an inherent component of the organization's EMS and is maintained as a document by the Directorate of Public Works, Environmental Management Division. This Manual is reviewed annually and whenever changes are required to ensure the installation's EMS is effective, efficient, and drives continual improvements. This Manual is maintained by the EMS representative.

2.0 Normative reference

No normative references are cited. This clause is included in order to retain clause numbering identical with the previous edition (ISO 14001:1996).

3.0 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

3.1

auditor
person with the competence to conduct an audit

3.2
continual improvement
recurring process of enhancing the environmental management system in order to achieve improvements in overall environmental performance consistent with the organization's environmental policy.

NOTE The process need not take place in all areas of activity simultaneously.

3.3
corrective action
action to eliminate the cause of a detected nonconformity.

3.4
document
information and its supporting medium

NOTE 1 The medium can be paper, magnetic, electronic or optical computer disc, photograph or master sample, or a combination thereof.

NOTE 2 Adapted from ISO 9000:2000, 3.7.2.

3.5
environment
surroundings in which an organization operates, including air, water, land, natural resources, flora, fauna, humans, and their interrelation.

NOTE: Surroundings in this context extend from within an organization to the global system.

3.6
environmental aspect
element of an organization's activities or products or services that can interact with the environment

NOTE A significant environmental aspect has or can have a significant environmental impact.

3.7
environmental impact
any change to the environment, whether adverse or beneficial, wholly or partially resulting from an organization's environmental aspects

3.8
environmental management system EMS
part of an organization's management system used to develop and implement its environmental policy and manage its environmental aspects.

NOTE 1 A management system is a set of interrelated elements used to establish policy and objectives and to achieve those objectives.

NOTE 2 A management system includes organizational structure, planning activities, responsibilities, practices, procedures (3.19), processes and resources.

3.9
environmental objective
overall environmental goal, consistent with the environmental policy (3.11), that an organization (3.16) sets itself to achieve

3.10

environmental performance
measurable results of an organization's (3.16) management of its environmental aspects (3.6)

NOTE In the context of environmental management systems (3.8), results can be measured against the organization's (3.16) environmental policy (3.11), environmental objectives (3.9), environmental targets (3.12) and other environmental performance requirements.

3.11
environmental policy
overall intentions and direction of an organization related to its environmental performance as formally expressed by top management

NOTE The environmental policy provides a framework for action and for the setting of environmental objectives and environmental targets.

3.12
environmental target
detailed performance requirement, applicable to the organization (3.16) or parts thereof, that arises from the environmental objectives (3.9) and that needs to be set and met in order to achieve those objectives

3.13
Interested party
person or group concerned with or affected by the environmental performance of an organization.

3.14
Internal audit
systematic, independent and documented process for obtaining audit evidence and evaluating it objectively to determine the extent to which the environmental management system audit criteria set by the organization are fulfilled

NOTE In many cases, particularly in smaller organizations, independence can be demonstrated by the freedom from responsibility for the activity being audited.

3.15
nonconformity
non-fulfilment of a requirement

3.16
organization
company, corporation, firm, enterprise, authority or institution, or part or combination thereof, whether incorporated or not, public or private, that has its own functions and administration

NOTE For organizations with more than one operating unit, a single operating unit may be defined as an organization.

3.17
preventive action
action to eliminate the cause of a potential nonconformity (3.15)

3.18
prevention of pollution
use of processes, practices, techniques, materials, products, services or energy to avoid, reduce or control (separately or in combination) the creation, emission or discharge of any type of pollutant or waste, in order to reduce adverse environmental impacts (3.7)

NOTE Prevention of pollution can include source reduction or elimination, process, product or service changes, efficient use of resources, material and energy substitution, reuse, recovery, recycling, reclamation and treatment.

3.19 procedure
specified way to carry out an activity or a process

NOTE Procedures can be documented or not.

3.20
record
document (3.4) stating results achieved or providing evidence of activities performed

4.0 Environmental Management System requirements

4.1 General requirements

This manual will describe the various aspects of the Redstone Arsenal

The Redstone Environmental Management System (EMS) applies to all organizations, functions, and activities within the boundaries of Redstone Arsenal excluding properties owned by Marshall Space Flight Center (NASA). This includes the Redstone Arsenal offices, staff elements, tenants, and contractors and their subcontractors.

4.2 Environmental policy

The US Army Garrison Environmental Policy (Policy) is endorsed by the Garrison Commander. The policy covers all activities at the Redstone Arsenal facility. The Policy includes a commitment to continual improvement and prevention of pollution, as well as a commitment to meet or exceed relevant environmental legislation, regulations and other requirements. The Policy will be reviewed annually by top management, communicated to all employees and made available to the public in accordance with the Environmental Communication procedure.

US Army Garrison environmental policy is:

POLICY: Team Redstone is committed to complying with environmental laws and regulations, the prevention of pollution, and continually improving the system for managing these requirements.

DISCUSSION: This policy was established to promote mission objectives on Redstone Arsenal while continually upgrading environmental performance/support.

The policy is addressed to:

TO: All US Army Garrison - Redstone employees, directors, divisions, offices, and customer organizations operating on Redstone Arsenal and supported by the Garrison

4.3 Planning

4.3.1 Environmental aspects

The U.S. Army Garrison - Redstone, Chief of the Environmental Management Division (EMD) in coordination with EMD branch chiefs initially identified the list of significant environmental aspects based on historical knowledge and experience of the environmental program in place at Redstone Arsenal. 18 aspects of the environment were initially identified that could have a significant impact on the environment.

The above management team will consider any suggestions in writing to the initial list for addition or deletion within a 30-day timeframe. Suggestions will be reviewed and documented for acceptance and rejection based on the procedures that follow. The team will review the list of aspects as necessary and document if they are changed.

All operations under the control and/or influence of the organization which constitute the full scope of EMS will be considered. Existing practice inventories and organizational charts will be considered.

Significant aspects will be managed within the context of the installation EMS and applied

to the organizational operations.

A plan for each aspect (Aspect Management Plan) will be developed that meets the requirements necessary to conform to the ISO 14001.

4.3.2 Legal and other requirements

US Army Garrison - Redstone identifies and maintains a registry of all legal and other requirements. Legal requirements include federal, state and local requirements along with customer and Redstone Arsenal defined requirements. Legal and other requirements are reviewed on yearly basis to assess Redstone Arsenal compliance. Legal requirements are reviewed keeping the organization's environmental aspects in mind. All legal and other requirements identified are taken into the consideration in establishing, implementing and maintaining the organization's EMS.

Each Aspect Management Plan has a section for listing the Legal requirements. It is the responsibility of each Aspect Management Plan subject matter expert to list the legal requirements in the plan.

4.3.3 Objectives, targets and programme(s)

The Environmental Branch Chiefs in coordination with each aspect subject matter expert are responsible for the initial determination of objectives and targets which are based on the Policy. The Chief of Environmental Management Division shall approve the objectives and targets.

The Environmental Management Representative shall review this procedure annually for its effectiveness in meeting EMS commitments.

A list of Environmental Objectives and Targets must be developed and maintained. These will be listed in each Aspect Management Plan. Each subject matter expert is responsible for working with the branch chief to develop the Environmental Objectives and Targets. Objectives and targets must be reviewed periodically. Reviews should consider the means by which objectives and targets are being accomplished, the continued applicability of the objective and target in light of changes or modifications to the EMS or mission priorities.

When an objective and target has not been met or cannot be achieved in the specific time scale, the objective will be changed and recorded by the subject matter expert

A program of task must be developed for each significant aspect objective and target identified.

Each program must be documented and specify the person(s) responsible for achieving objective and target, the actions by which the objective and target are achieved, effective date/timeframe by which actions are to be achieve.

Resources will be identified for managing aspects and its objectives and targets and budget requirements identified in each Aspect Management Plan.

When objectives and actions have not been met, consideration for bringing additional resources to be bear to achieve the objective and accomplish the associated actions should be considered, such as, reallocating funds from dormant and/or cancelled projects. This review should be integrated within the Management Review process.

4.4 Implementation and operation

4.4.1 Resources, roles, responsibility and authority

The Garrison Commander has designated the Chief of the environmental Management Division as the Environmental Management Representative. The Environmental Chief has been given signature for most documents and correspondence from the division.

The Chief, Environmental Management Division shall identify and maintain the means to define document and communicate resources, roles, responsibility and authority. The Environmental Management Representative shall review this procedure annually for its

effectiveness in meeting EMS commitments.

Resources, roles and responsibility, and authority must be documented and identified. It is the responsibility of the subject matter experts and branch chiefs to identify the resources necessary to meet the minimum objects and targets that have been set in each aspect management plan. Resource include both human capital needs and financial resources required to meet the requirements. The subject matter experts should also list responsibilities in each Aspect Management from the operators up to the Senior Managers.

4.4.2 Competence, training and awareness

There are many ways on Redstone Arsenal to communicate awareness about the management and execution of the different environmental programs on Redstone Arsenal. The Environmental Management Division works with the Garrison Public Affairs Office to explain some of the aspects of the environmental program with articles published in the Redstone Rocket, a weekly newspaper made available to anyone on Redstone Arsenal. Once the article is published it is collected and kept in a scrapbook for proof of the awareness program. Subject matter experts and supervisors are encouraged to take every available opportunity to use this media for making employees of Redstone Arsenal.

Another method of mass communication for awareness for the environmental programs is the Redstone Webpage posted on the internet. All environmental employees are encouraged to post the web address shortcut to their email signature block. When environmental management representative is responsible for the EMS content of the environmental page. Each Environmental Management Division Branch Chief is responsible for the content of their section of the Environmental Web site.

Yet another method for mass communication to be used for awareness is through the Army email system. This should be used for sending small amounts of information about the program to all employees on Redstone Arsenal. Anyone wishing to increase awareness with this method should submit the information to the Chief, Environmental Division office who will then send it to the PAO for publishing to the Redstone masses.

The Garrison Environmental subject matter experts also use opportunities to prepare briefings and talks about their programs to smaller groups. The subject are encouraged to use every available opportunity.

Each aspect management plan has a section to identify what training is required for that particular aspect. The subject matter expert is responsible for researching the legal requirement found in laws, regulation and permits. For each legal requirement listed in this section the SME will also list available resources for acquiring the training, how folks on Redstone are acquiring the training and what documentation is needed to prove the requirement has been met. The SME will also list where the documentation is kept at.

4.4.3 Communication

The Garrison Environmental Management Division uses letters, memorandums, and/or e-mails for official correspondence. The EMD has established a web page as a means for communication of the EMS and other environmental programs on Redstone Arsenal. All official correspondence about the environmental program is signed by the Chief of the Environmental Division. All correspondences is scanned and entered into a searchable database where it can be retrieved by all EMD employees.

All incoming correspondence is scanned and entered into a database for easy retrieval. The secretary distributes the work to the appropriate person or subject matter expert to deal with and assigned a suspense date if it is required. Suspense are tracked by a database to ensure they are answered on time.

All communication about the environmental program on RSA is the responsibility of the Garrison EMD.

4.4.4 Documentation

Per the requirements of the 14001 standard, the Garrison Environmental Division has documented several aspects of the EMS. The environmental policy is documented in this supplemented Environmental (EMS) Manual. The objectives and targets are documented in each

aspect management plan. A description of the scope of Redstone Arsenal Environmental Management System within this EMS Manual. A description of the main elements of the EMS is the main purpose of the documentation contained herein the Environmental Manual. Documents and records required by ISO 14001 and also the documents and records that are necessary to ensure the effective planning, operation and control of processes that relate to its significant environmental aspects are identified as Environmental Aspect Management Plans and kept on the internal server available to all Environmental Management Division employees.

The EMS documentation is kept in database form. As any changes are made to the content of the Environmental Management System manual or any of the Aspect Management Plans the changes are tracked by the database. The database also keeps track of who makes the changes. Whenever one of these plans is printed a date is printed at the bottom of each page. The latest version of the manual can be obtained by contacting the Chief of the Environmental Management Division office.

4.4.5 Control of documents

Per the requirements of the 14001 standard, the Garrison Environmental Division has documented several aspects of the EMS. The environmental policy is documented in this Environmental (EMS) Manual. The objectives and targets are documented in each aspect management plan. A description of the scope of Redstone Arsenal Environmental Management System within this EMS Manual. A description of the main elements of the EMS is the main purpose of the documentation contained herein the Environmental Manual. Documents and records required by ISO 14001 and also the documents and records that are necessary to ensure the effective planning, operation and control of processes that relate to its significant environmental aspects are identified as Environmental Aspect Management Plans and kept on the internal server available to all Environmental Management Division employees.

The EMS documentation is kept in database form. As any changes are made to the content of the Environmental Management System manual or any of the Aspect Management Plans the changes are tracked by the database. The database also keeps track of who makes the changes. Whenever one of these plans is printed a date is printed at the bottom of each page. The latest version of the manual can be obtained by contacting the Chief of the Environmental Management Division office.

4.4.6 Operational control

The Chief, Environmental Division shall ensure operational control are developed and maintained for operations under control and out of control. Operation controls are listed in the Aspect Management Plans in the section for that and it is the responsibility of the subject matter experts and branch chiefs to ensure these are listed and kept updated.

Operational controls are methods, systems, processes, and equipment that safeguard the environment. These can be special containers, containment or isolation arrangements, alarms and automatic shutdown mechanisms, communication requirements, instructions and procedures, training programs, etc.

The laws and then the regulations are the most comprehensive controls for most aspects. The laws and regulations may require additional operational controls be written and on site to help guide the operators to successfully complete the requirements of the laws. (Remember that environmental regulations were written as instruction by the executive Branches of government, on how to implement the environmental laws). In addition if monitoring of the aspect indicates more operation controls are needed to better help understand what is to be accomplished then they will be identified and prepared. Additional operational controls can be in the form of Standard Operation Procedures (SOPs), Letter of Instructions (LOIs), plans, training, written instructions, checklist, forms, or even verbal instruction. Laws and regulations that apply to this aspect are listed in legal section of the aspect management plan.

Operational control may be integrated within Army Technical Manuals, Army Environmental Program Management Plans, Regulatory permits, and/or be supported by Standard Operating Procedures (SOPs), work instructions or other appropriate worksheets or forms.

For contractors working on-site the primary Army Contracting Officers (Contracting Officer Representatives) or project manager in DPW shall ensure that practices are established for the management and/or mitigation of the environmental impacts as identified in the NEPA process. Operational control identification, development and maintenance should be referenced in Contract and/or Scope of Work (or other means by which services are provided) requirements. Contractors should be held responsible and accountable through one or more of the following environmental management system checking process:

Operational Control monitoring is identified in the Aspect Management Plan under operational control. Operational control should be monitored for their appropriateness and effectiveness on a regular schedule. If it is determined that current operational control is inadequate, existing control should be modified on new control established within a reasonable time frame.

4.4.7 Emergency preparedness and response

US Army Garrison Redstone has an environmental procedure to identify the potential for and to respond to environmental accidents and emergency situations, and for preventing and mitigating the environmental impacts that may be associated with them. Emergency methods are reviewed by the Environmental Management Representative on an annual basis and after the occurrence of accidents or emergency situations.

An amended version of the Redstone Arsenal Contingency Plan, dated December 2012 was published This plan includes the Spill Prevention Control and Countermeasures Plan (SPCCP) and the All Hazards Plan (Annex V). This plan is required under the Clean Water Act and the Resource Conservation Recovery Act (RCRA). The primary change to the Contingency Plan is the addition of the "All Hazards Plan". It provides information and direction for management of spills other than petroleum products. Most of the other changes to this document are organizational name changes, personnel name changes, and a few term changes (i.e. Qualified Individual (QI) was changed to On Scene Coordinator (OSC)). The aboveground storage tank and cooking oil tanks tables were also updated. Many of the latter changes were in coordination with the Installation Operation Command (IOC) and this included the addition of the Serious Incident Report (SIR) page to the Red Plan portion of the document. A complete list of changes is located on the "Change 3" page of the document, which is located near the front section of the Contingency Plan.

The Environmental Management Division keeps copies of these plans and publishes them on the Garrison web page for use by others on Redstone Arsenal.

4.5 Checking

4.5.1 Monitoring and measurement

The organization is in compliance with monitoring and measurement requirements as stated in ISO 14001. All process and procedures that require monitoring and measurement are referenced in the Aspect Management Plan for each aspect of the environment. . It is the responsibility of the subject matter expert for each management plan to research permits, legal requirements and plans to determine which monitoring and measurement requirements are and ensure they are identified in the aspect management plan. The subject experts are also responsible for identifying the required calibration of the monitoring and measuring equipment

All data is collected by the US Army Garrison Environmental Management Division for analysis and reporting to regulatory to meet requirements of permits, regulations and plans.

The Environmental Management Representative shall review this procedure annually for its effectiveness in meeting EMS commitments.

4.5.2 Evaluation of compliance

The EMD maintains an Internal Assessment Plan (IAP). The plan identifies organizational areas and aspects that need inspections and track when the last area was inspected and when the next inspection is due. All finding are entered into a database at the completion of the inspection. The findings are sent to the organization responsible for operations where the findings occurred. The Internal Assessment Plan (IAP) is normally updated annually.

Compliance inspections are performed to assess compliance to applicable legal and other requirements listed in each aspect management plan.

Regulatory compliance assessment shall consider: permit, license or registration compliance reporting, monitoring, record keeping; and management and training requirements as applicable to: air emissions created, waste water discharged, waste produced (solid, hazardous and non-hazardous), natural resource use (water and raw materials), cultural or historical resources affected (include community issues), and local issues (including noise) and EPAS media surveys.

The air program requires a self-certification of compliance. This is accomplished by sending operators of emission points a questionnaire that they are required to sign and return. This is holding the operator responsible for compliance with the source they are responsible for.

All records of these inspection are kept by the Chief, of the Environmental Management Division.

4.5.2.1 Evaluate compliance with applicable legal requirements

The EMD maintains an Internal Assessment Plan (IAP). The plan identifies organizational areas and aspects that need inspections and track when the last area was inspected and when the next inspection is due. All finding are entered into a database at the completion of the inspection. The findings are sent to the organization responsible for operations where the findings occurred. The Internal Assessment Plan (IAP) is normally updated annually.

Compliance inspections are performed to assess compliance to applicable legal and other requirements listed in each aspect management plan.

Regulatory compliance assessment shall consider: permit, license or registration compliance reporting, monitoring, record keeping; and management and training requirements as applicable to: air emissions created, waste water discharged, waste produced (solid, hazardous and non-hazardous), natural resource use (water and raw materials), cultural or historical resources affected (include community issues), and local issues (including noise) and EPAS media surveys.

The air program requires a self-certification of compliance. This is accomplished by sending operators of emission points a questionnaire that they are required to sign and return. This is holding the operator responsible for compliance with the source they are responsible for.

All records of these inspection are kept by the Chief, of the Environmental Management Division.

4.5.2.2 Evaluate compliance with other requirements

The organization shall evaluate compliance with other requirements to which it subscribes. The organization may wish to combine this evaluation with the evaluation of legal compliance referred to in 4.5.2.1 or to establish a separate procedure(s).

The organization shall keep records of the results of the periodic evaluations.

4.5.3 Nonconformity, corrective action and preventive action

Purpose: To identify the process by which non-conformity are handled, corrective and preventive actions are developed and managed.

The Chief, Environmental Management Division shall develop procedures on preparing and managing non-conformity, corrective and preventive action. The Environmental Management Representative shall review this procedure annually for its effectiveness in meeting EMS commitments.

After doing a compliance evaluation the head of the organization evaluation is sent a report of the finding. The EPAS database is used to track corrective actions and any other form of replies made by the organization that was inspected.

The action to correct non conformity is left to the organization responsible for the non conformity. The non conforming organization is also expected to determine the root cause of the non conformity. The Garrison EMD is available for consultation and guidance. EMD is tracking to ensure mitigation is developed and executed.

The EMD personnel have the job of investigation of nonconformity and determine the cause. They work with the EMD Branch Chief they work under who recommends a solution to the Chief, EMD. The chief, EMD makes a determination of actions based on information above. The Chief EMD is responsible to see that actions are executed to avoid reoccurrence in the future.

EMD would record the results during the next inspection and should note the results of any preventive actions that have been taken.

There is no system for receiving the effectiveness of corrective and preventive actions taken.

Actions taken are appropriate to the magnitude of the problem.

Changes to documentation is made when necessary.

4.5.4 Control of records

EMD has established a method to maintain records as necessary to demonstrate conformity to the requirements of its environmental management system and of this International Standard, and the results achieved.

Records of results achieved or activities performed are maintained in several forms: Some are written reports to higher headquarters, some are web base databases; some are internal; and some records are kept on site.

Most records to include records of communications are scanned and turned into digital form. For correspondence all incoming and outgoing correspondence is stored in the database listing the point of contacts and the subjects. All EMD employees have access to these records which can be easily found using a search function. All other data records and are converted to digital and kept on a server accessible to all EMD employees.

Because the records are kept in digital form they legible, identifiable and traceable.

Each Aspect Management Plan has sections to list all required plans and records for that specific aspect. It is the responsibility of the subject matter experts assigned the aspect plan to keep these requirements current and complete.

4.5.5 Internal audit

Internal system audits are conducted to ensure that the EMS conforms to environmental management arrangements including the requirements of the ISO Standard, and to determine that the EMS has been properly implemented and maintained. All numbered elements of ISO 14001 will be audited internally over the three year environmental performance assessment system (EPAS) audit cycle.

To begin an internal audit the auditor will first read and understand the RSA EMS Manual and the ISO 14001 standard. The auditor will need to particularly understand the sections of the manual that pertain to the areas to be audited. In addition, the auditor will read and understand the "Redstone Arsenal Internal EMS Audit Training Primer" provided by the US Army Environmental Command. The RSA EMS Manual can be obtained from the RSA EMS Microsoft Access Database and the ISO standard and EMS Audit Training Primer can be obtained from the RSA Environmental Management Representative. Next the auditor will prepare an audit plan which states which ISO elements will be covered during the audit. A template of an audit plan can be viewed in the RSA EMS database.

The auditor should begin the audit by checking the written procedures/description in the EMS manual against the requirements of the ISO 14001 standard. The EMS manual is organized in a similar manner to the elements of the ISO 14001 standard. The auditor will then

determine if the section in the EMS manual meets the requirements of the ISO standard. If the EMS manual contains deficiencies when compared to the ISO standard the auditor will discuss the deficiencies with the Environmental Management Representative. If no deficiencies are found, the auditor will begin verifying that the items mentioned in the EMS manual are properly implemented and that these items conform to the arrangements as stated in the manual. Verification of these items will likely require additional document and record reviews as well as interviews of certain subject matter experts. Appendix A of the "Redstone Arsenal Internal EMS Audit Training Primer" can be used to help determine what documents and records to look at as well as potential personnel to interview. After the audit process is complete, the auditor will write findings for each ISO element covered during the audit. Any deviation from procedures or requirements of the standard is defined as an audit finding. Findings are categorized into four categories: conformance, minor non-conformance, major non-conformance, or observation. After findings are written they should be included in the audit report and presented to the Environmental Management Representative. A template of the audit report can be viewed in the RSA EMS database

4.6 Management review

Purpose: To identify the process by which Management Reviews are performed and the EMS is assessed for its effectiveness and efficiency in meeting the Environmental Policy and improving environmental performance

Top Management reviews are done during Redstone Arsenal Environmental Quality Control Committee meetings when necessary. The Environmental Quality Control Committee is chaired by the Redstone Arsenal Garrison Commander. Invitations to the EQCC are sent to organizations top management. Management usually send their top environmental manager to the meeting.

Input to management reviews shall include:

- a) results of internal audits and evaluations of compliance with legal requirements and with other requirements
- b) communications from external interested parties, including complaints,
- c) the environmental performance of the organization,
- d) the extent to which objectives and targets have been met,
- e) status of corrective and preventive actions,
- f) follow-up actions from previous management reviews,
- g) changing circumstances, including developments in legal and other requirements related to its environmental aspects, and
- h) recommendations for improvement.

Not all of the above inputs need to be reviewed at the same time but they should be tracked such that all inputs are reviewed during the three year cycle.

The outputs from management reviews shall include any decisions and actions related to possible changes to environmental policy, objectives, targets and other elements of the environmental management system, consistent with the commitment to continual improvement.

Records of the EQCC meetings are being kept in a database for easy retrieval. Because they are stored in digital form they stay legible, identifiable and traceable.