



MONITORING & MEASURING

Region 8 Sustainability & Environmental Management System

| | |
|----------------------------------|---|
| SYSTEM PROCEDURE | Last Revision Date: 06/29/2012 |
| Title: Monitoring & Measuring | File Name: 11 Monitoring and Measuring "Month-Date Year".doc |

1.0 Purpose

Measuring and monitoring allows GSA to determine whether progress is being made towards achieving GSA's Sustainability & Environmental Management System (SEMS) objectives and targets (reference: *GSA Region 8 SEMS System Procedure Document: Environmental Aspects, Objectives & Targets, and Environmental Management Program Plans*).

2.0 Scope

GSA tracks performance measures that are associated with SEMS and its key operational functions that can have a significant environmental impact. Performance measures are tracked to:

1. Maintain and analyze GSA's SEMS monitoring and measuring activities pertaining to:
 - SEMS: Training, communications, aspects, document control.
 - GSA commitments: Policy and Directives
 - Legal obligations: Executive Orders (e.g. EO 13423) and Acts of Congress (e.g. Energy Policy Act of 2005, Energy Independence & Security Act of 2007, RCRA).
 - Calibration records.
 - Objectives and targets: Energy and water usage, frequency and severity of environmental incidents (e.g. spills, stormwater discharges), and waste disposal and recycling.
 - Track equipment performance: Boilers, chillers and other equipment
2. Plan and implement improvement measures on a continual basis.

This System Procedure applies to all GSA staff that needs to track performance measures.

3.0 Forms Used

- *Environmental Management Program (EMP) Planning Form*
- *Environmental Procedures Needs Assessments Form*
 - *This Form is also referred to as the Environmental Procedures Inventory and Gap Analysis Form; prior to 2008, the Form and Inventory were referred to as "Operational Controls"*

4.0 Acronyms, Abbreviations and Definitions



Environmental Aspect: Is any element of an organization's activities, products and services that can interact with the environment.

Environmental Management Program (EMP): A program established, implemented and maintained by the organization for achieving its SEMS objectives and targets. EMP Plans include the means, time frames, resources and personnel responsible for achieving the objectives and targets.

Environmental Objective: Overall environmental goal, arising from the GSA Environmental Policy, that GSA sets itself to achieve and which is quantified, where practicable.

Environmental Target: Detailed performance goals pertaining to and supporting, a specific objective. Targets need to be set and met in order to achieve environmental objectives. Targets should be quantitative, realistic, linked to a source and measurable.

Metrics: A measurable system of parameters or methods of quantitatively assessing a process that requires periodic assessment.

Outcome measure: Measures that look at **results** or **impacts** of a process or activity, such as the amount of waste generated or the number of spills that took place.

Process measure: Measures that look at “upstream” factors, such as the amount of paint used per unit of product or the number of employees trained on a topic.

5.0 Procedure

5.1 Assess Tracked Performance Measures

5.1.1 Identify the Significant Environmental Aspects; this is presented in the *GSA Region 8 SEMS System Procedure Document: Environmental Aspects, Objectives & Targets, and Environmental Management Program Plans*.

- Significant Environmental Aspects are identified on the *Environmental Procedures Needs Assessments Form*; an Environmental Procedures Inventory and Gap Analysis.

5.1.2 GSA needs to manage its significant environmental aspects, achieve objectives and targets [Environmental Management Program (EMP) Plans], and improve environmental performance.

- Identify what must be monitored and measured:
Target metrics are to be specific with measurable goals proposed wherever practicable. Target metrics should have either qualitative or quantitative performance indicators to measure progress.
- Decide what indicators/metrics are appropriate:



Performance indicators (metrics) will be tracked as part of the EMP Plans, to ensure that objectives and targets are attainable within specified time-frames.

- 5.1.3 The business areas and/or individual(s) with designated responsibility perform the necessary monitoring and measurement activities on a regular basis.

5.2 Verify Monitoring Equipment Accuracy

When necessary to ensure valid results, measuring equipment should be calibrated or verified at specified intervals, or prior to use, against measurement standards traceable to international or national measurement standards. If no such standards exist, the basis used for calibration should be recorded.

- 5.2.1 When monitoring equipment is used to fulfill requirements outlined in Environmental Procedures, equipment is calibrated and maintained at the frequency required by the manufacturer.
- 5.2.2 Contractors who calibrate monitoring and measuring equipment provide a written service report after completion of work, confirming that the equipment has been properly calibrated and is acceptable for use. Contractors are requested to notify the appropriate Region 8 Manager of any "out of tolerance" or non-conformance conditions.
- 5.2.3 GSA ensures that calibrated or verified monitoring and measurement equipment is used and maintained and will retain associated records.
- 5.2.4 Out-of calibration equipment is not used.

5.3 Data Collection

Data at the GSA are collected by several methods:

- 5.3.1 Data are collected manually or electronically by recording measurements from either instruments or in-place dedicated meters.
- 5.3.2 Data are also submitted directly from utility providers through their invoices.

5.4 Data Storage

Data at the GSA are stored by several methods:

- 5.4.1 Data that are manually collected in spreadsheets and stored by the



MONITORING & MEASURING

Region 8 Sustainability & Environmental Management System

Building Manager or designated person on the GSA server.

5.4.2 Data that are submitted through utility invoices is stored in the UPPS database or GSA Finance websites.

5.5 Data Analysis

Top management needs data and information as part of the management review process to determine if GSA is achieving its environmental goals, its objectives and targets, and its policy commitments. Data at the GSA are analyzed by several methods:

5.5.1 Data stored in spreadsheets on the GSA servers are analyzed by various formulas to assess the amounts of resources utilized, and waste generated or recycled by the GSA. The manual spreadsheets track various aspects of the SEMS including training, permits, non-conformance reporting and documentation.

5.5.2 The utility usage is analyzed through the National Energy & Water Management Center (NEWMC), Energy Usage Analysis System (EUAS) database system at [euas.gsa.gov] that pulls the raw data from the UPPS. A regional automated advanced metering system is in construction.

- Review reading and contact the utility in question should a reading differ significantly from the same month of the previous year or is obviously incorrect. Note actions taken and results on the spreadsheet.

6.0 Records Management

- Performance measures for targets including, but not limited to, reductions in water and energy usage, air emissions, chemical use, environmental incidents
- Calibration records
- Inspection records

7.0 References

- *GSA Fiscal Year 2008, Draft Project Plan, GSA Responsibilities under Executive Order 13423, January 24, 2007; September 24, 2007*
- *GSA Region 8 SEMS System Procedure Document: Environmental Aspects, Objectives & Targets, and Environmental Management Program Plans*
- *GSA Region 8 SEMS System Procedure Document: Environmental Procedures*
- *ISO 14001:2004, "Environmental management systems -- Requirements with guidance for use"*
 - *subclause 4.5.1 and A.5.1 "Monitoring and measurement"*



MONITORING & MEASURING

Region 8 Sustainability & Environmental Management System

8.0 Appendices

None

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| 06/22/2007 | Update | Erik Petrovskis |
| 09/20/2007 | Update - Site Specific Information added | Robert Melvin, Sue Grant |
| 03/11/2008 | Update - Site Specific Information [response to audit] | Robert Melvin, Sue Grant |
| 06/29/2012 | Updated 5.3, 5.4, and 5.5 | Erik Petrovskis |



REGULATORY COMPLIANCE REVIEW

Region 8 Sustainability & Environmental Management System

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| SYSTEM PROCEDURE | Last Revision Date: 06/29/2012 |
| Title: Regulatory Compliance Review | File Name: 12 Regulatory Compliance Review " <i>Month-Date Year</i> ".doc |

1.0 Purpose

GSA is committed to maintaining compliance with all environmental legal requirements. The purpose of this System Procedure is to demonstrate Regional compliance with federal, state and local environmental legal requirements.

2.0 Scope

This System Procedure addresses regulatory compliance review conducted for the GSA Region 8 SEMS. This procedure applies to GSA staff who conduct environmental reviews, such as Management Analysis Review System (MARS).

3.0 Forms Used

- Management Analysis Review System (MARS) Review

4.0 Acronyms, Abbreviations and Definitions

Management Analysis Review System (MARS) Review: A tool for the GSA managers to monitor, assess and improve regional property management operations. A self audit, conducted every two years, in response to the Office of Management and Budget Circular A-123. The review checklists focuses on: Administrative, Childcare, Concessions, Custodial, Security, Energy, Occupancy Administration, Lease Management, Maintenance, Measures, Procurement, Repair & Alteration, Fire Protection and Life Safety Program Management, and Environmental, Health and Safety (EH&S).

Non-compliance: Failure to meet an environmental legal requirement

Non-conformance: Deviation from an environmental management system requirement

5.0 Procedure

- 5.1 Regional management is responsible for planning, scheduling, and implementing environmental regulatory compliance reviews, including the identification of required resources.
- 5.2 Regional management identifies an Assessment Team and appoints a Team Leader. Regional management provides the resources and authority required for the Team to successfully carry out its responsibilities on an ongoing basis.



REGULATORY COMPLIANCE REVIEW

Region 8 Sustainability & Environmental Management System

- 5.3 The Assessment Team develops and maintains the environmental compliance assurance program through the MARS form.
- 5.4 During a compliance review, the Assessment Team completes the MARS form. The Team promptly notifies Regional management of any possible regulatory non-compliance.
- 5.5 The Team reviews possible regulatory non-compliance issues with the responsible and accountable business area or department representative. The team also prepares a Corrective Action Request (CAR) identifying the issue(s), corrective and/or preventive actions required, and the individuals responsible for completing the actions. Regional management concurs with the CAR before its issuance.
- 5.6 Upon completion of the corrective and/or preventive actions, the business area or department manager acknowledges completion of these actions by signing the original CAR and returning it to regional management.
- 5.7 Corrective and preventive actions are verified in a timely manner by a member of the Assessment Team. Potential non-compliance issues receive prompt attention and timely corrective and preventive action. When full compliance is determined or corrective/preventive actions are accepted, the Assessment Team Leader signs the original CAR and maintains the record.
- 5.8 Regional management regularly reviews open CAR's that are based on regulatory non-compliance.

6.0 Records Management

Records, including CAR's, relating to potential or actual non-compliance issues are treated as confidential and kept separate from those relating to internal EMS audits. All audit records are marked "Environmental Audit Report: Privileged Document" and distributed only to individuals with a need to know their contents in order to assess, respond to, or remedy a potential or actual non-conformance.

- Completed MARS forms

7.0 References

- *ISO 14001:2004, "Environmental management systems -- Requirements with guidance for use"*

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REGULATORY COMPLIANCE REVIEW

Region 8 Sustainability & Environmental Management System

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| 06/15/2007 | Update | Erik Petrovskis |
| 09/17/2007 | Update - Site Specific Information | Robert Melvin [Format change only] |
| 01/07/2008 | Update - Site Specific Information [response to audit] | Robert Melvin [Format change only] |
| 03/11/2008 | Format update | Robert Melvin |
| 06/29/2012 | Minor edits, removed references to ERI | Erik Petrovskis |



CORRECTIVE AND PREVENTIVE ACTION

Region 8 Sustainability & Environmental Management System

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|--|---|
| SYSTEM PROCEDURE | Last Revision Date: 06/29/2012 |
| Title: Corrective and Preventive Action | File Name: 14 Corrective & Preventive Action "Month-Date Year".doc |

1.0 Purpose

The purpose of this System Procedure is to outline the process for defining responsibility and authority for investigating and handling Sustainability & Environmental Management System (SEMS) nonconformities, whether actual or potential, and for taking action. Action is to mitigate impacts resulting from non-conformities, and for initiating and completing Corrective and Preventive Action Requests (CAR).

2.0 Scope

This procedure addresses both Corrective and Preventive Actions to mitigate impact to the environment. This is the mechanism used to identify, address and correct non-conformities by anyone who discovers an action and during an internal audit conducted for the GSA SEMS. In the event of a non-conformity being discovered, a CAR is prepared. This procedure applies to all GSA Public Buildings Services personnel and contractors in Region 8. Implementation of the investigative phase and close out of a CAR applies to the SEMS Project Team and internal auditor.

3.0 Forms Used

- *Corrective and Preventive Action Request Form*
- *Corrective and Preventive Action Request (CAR) Status Log Form*

4.0 Acronyms, Abbreviations and Definitions

Corrective Action: Actions taken to address existing nonconformance with the SEMS or regulatory noncompliance. Any action(s) taken to eliminate the root cause(s) of an existing environmental nonconformance in order to prevent recurrence.

Nonconformance: A deviation from the GSA Regional SEMS requirements. Nonconformances may be identified through internal or external EMS audits, Environmental Management Representative (EMR) audits, monitoring and measuring, inspections, management reviews, and problems noted during day-to-day operation of the EMS.

Preventive Action: Action taken to address potential and/or future nonconformances with the EMS or regulatory noncompliance.

Observation: Item noted addressing SEMS improvement. Issues that can be expediently corrected or are outside the scope of the SEMS, such as health and safety issues.



CORRECTIVE AND PREVENTIVE ACTION

Region 8 Sustainability & Environmental Management System

Root cause: The underlying reason for the occurrence of a problem.

5.0 Procedure

5.1 Nonconformances and/or the need for preventive or corrective action may be identified through several means, including but not limited to, the following:

| | | |
|----------------------|-----------------------|-----------------------------|
| • Internal audits, | • compliance reviews, | • walk-through inspections, |
| • random encounters, | • management reviews, | • employee comments. |

Nonconformances may be of an actual or perceived nature that may, will or does impact the environment.

5.2 A CAR (Attachment B) is typically initiated by a GSA SEMS audit team member, SEMS Core Team member or auditor. Other GSA employees may initiate a CAR. The author of a CAR forwards it to the SEMS Project Manager.

Auditee: May include an individual or GSA Team in which the nonconformance applies. Auditee generally applies to an individual who is audited.

Auditor: Person with the competence to conduct an audit. Competence is generally met by training and experience. Completing an external ISO 14001 Lead Auditor course is a common way to demonstrate competence.

The Auditor/Verifier and Responsible Party should be separate individuals.

| When to Initiate a CAR | When NOT to Initiate a CAR |
|---|---|
| <ul style="list-style-type: none"> • Discovery of nonconformity: <ul style="list-style-type: none"> ○ During an audit ○ Random encounter • Opportunity for Preventative Action • At the discretion of the EMR | <ul style="list-style-type: none"> • Modification or correction of grammar and spelling in documents; minor document edits • To address administrative issues |

A CAR is used to initiate an investigation. The CAR documents the cause(s), evaluates the need for action(s) to prevent nonconformity(ies) and implementing appropriate actions designed to avoid their occurrence or reoccurrence.

5.3 The SEMS Core Team records and tracks the CAR on the “*Corrective and Preventive Action Request (CAR) Status Log Form*”.

5.4 The SEMS Project Manager or designee notifies the Environmental Manager Representative (EMR) of any compliance issues.

5.5 The Corrective and Preventive Actions investigation is conducted by the “Responsible Party”.



Responsible party: Anyone who is qualified to assess the situation. This generally refers to a member of an Action Team, Property Manager, Building Manager or designee.

The Auditor/Verifier and Responsible Party should be separate individuals.

The “Responsible Party” investigates and identifies the root cause(s).

The root cause is not necessarily the history of what transpired. Try to focus on the singularity of the problem, such as: lack of training, lack of communications, the environmental procedure failed to adequately address, etc.

The “Responsible Party” writes a corrective action plan, if needed and returns the CAR to the SEMS Core Team. The SEMS Core Team logs the response into the “*Corrective and Preventive Action Request Status Log Form*” and sends a copy to the CAR initiator.

- 5.6 The SEMS Core Team or other qualified individual familiar with the nonconformance verifies that the actions taken are appropriate to the magnitude of the problem(s) and the environmental impact(s) encountered. The verifier evaluates adequacy, effectiveness and completeness of the corrective action. The completed CAR is forwarded to the SEMS Project Team for tracking.

Verifier: The person who is qualified to assess whether the Corrective or Preventative Action is appropriate to the environmental problem initially discovered. The auditor can also be the verifier.

The Auditor/Verifier and Responsible Party should be separate individuals.

- 5.7 If the corrective action is not adequate, the CAR remains open for follow-up by the EMR or designee.
- 5.8 When the corrective action is adequate, the GSA will ensure that any necessary changes are made to environmental management system documentation. GSA will establish procedures, issue memorandums or use any other mechanism to address and correct problems discovered that impact the environment. Documentation needs to be appropriate to the level of action required.

6.0 Records Management

CARs and the “*Corrective and Preventive Action Request Status Log Form*” are retained by the SEMS Project Team.

7.0 References



CORRECTIVE AND PREVENTIVE ACTION

Region 8 Sustainability & Environmental Management System

- *GSA Region 8 SEMS System Procedure Document: Internal Audit*
- *ISO 14001:2004, “Environmental management systems -- Requirements with guidance for use”*
 - *subclause 4.5.3 and A.5.3 “Nonconformity Corrective Actions & Preventive Actions”*
 - *subclause 4.5.5 and A.5.5 “Internal Audit”*

8.0 Appendices

Attachment A: *Corrective and Preventive Action Request (CAR) flowchart*

Attachment B: *Corrective and Preventive Action Request Form*

Attachment C: *Corrective and Preventive Action Request (CAR) Status Log Form*



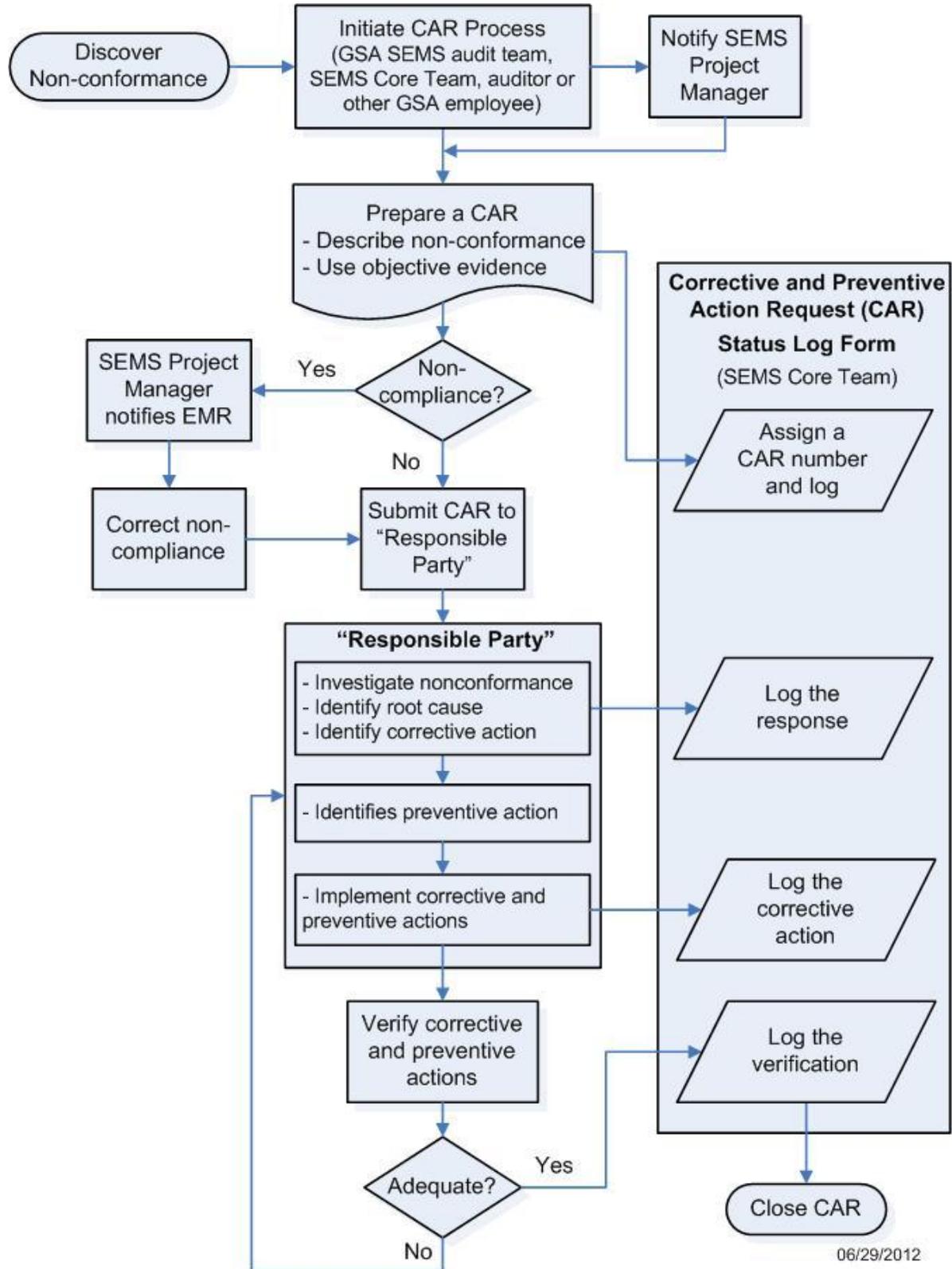
CORRECTIVE AND PREVENTIVE ACTION

Region 8 Sustainability & Environmental Management System

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| 06/15/2007 | Update | Erik Petrovskis |
| 09/14/2007 | Update - Site Specific Information added | Erik Petroskis, Robert Melvin |
| 02/01/2008 | Update - Site Specific Information [response to audit] | Robert Melvin |
| 03/10/2008 | 03/06/2008 Review comments [Erik Petrovskis, Ph.D, P.E] | Robert Melvin |
| 07/09/2009 | Update in response to CAR#36: Better defined Root Cause Better defined Roles Revise "Status Log Form" | Robert Melvin |
| 06/29/2012 | Updated responsibilities | Erik Petrovskis |

Attachment A: *Corrective and Preventive Action Request (CAR) flowchart*





CORRECTIVE AND PREVENTIVE ACTION

Region 8 Sustainability & Environmental Management System

Attachment B: Corrective and Preventive Action Request Form



CORRECTIVE AND PREVENTIVE ACTION REQUEST (CAR)

Region 8 Sustainability & Environmental Management System

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|--|--|-----------------------------|--|
| Audited Business Area/Department: | | CAR No: | |
| <i>Audit Date:</i> | | <i>Auditor(s):</i> | |
| <i>Auditee(s):</i> | | <i>Date:</i> | |
| Description of Non-Conformance: | | Root Cause Analysis: | |
| | | | |
| EMS Element: | | | |
| Corrective Action: | | | |
| | | | |
| Date of Implementation: | | Responsible party: | |
| Preventive Action: | | | |
| | | | |
| Date of Implementation: | | Responsible party: | |
| Verification: | | | |
| | | | |
| Date of Verification: | | Verified by: | |
| <i>Auditor (signed):</i> | | <i>Date:</i> | |



INTERNAL AUDIT

Region 8 Sustainability & Environmental Management System

| | |
|--------------------------|---|
| SYSTEM PROCEDURE | Last Revision Date: 06/29/2012 |
| Title: Internal Audit | File Name: 13 Internal Audit "Month-Date Year".doc |

1.0 Purpose

The purpose of this System Procedure is to ensure that the Region 8 GSA audits its Sustainability & Environmental Management System (SEMS) on a periodic basis.

2.0 Scope

The SEMS internal audit focuses on the System Procedures and Environmental Procedures; known as Operational Controls as per ISO 14001. Internal audits provide a complete and comprehensive review, ensuring that the SEMS has been properly implemented and maintained. Through audits, continual improvement of the SEMS is achieved. When needed, Corrective and Preventive Actions occur. This System Procedure applies to all GSA personnel and contractors working in Region 8.

3.0 Forms Used

- *SEMS Audit Plan*
- *SEMS Audit Checklist(s)*

4.0 Acronyms, Abbreviations and Definitions

Auditee: Individual audited.

Auditor: Audit team member performing the audit.

Audit Criteria: Policies, practices, procedures, or other requirements against which the auditor compares objective evidence about the subject matter.

Corrective and Preventive Action Request (CAR): Identifies observed non-conformances.

Finding: An existing condition supported by objective evidence.

Lead Auditor: Member of the audit team who is responsible for ensuring the success of the audit process. Typically the most qualified member of the auditing team.

Non-compliance: Failure to meet an environmental legal requirement.

Non-conformance: A deviation from the Region’s SEMS requirements.

Objective Evidence: Qualitative or quantitative information, records, or statements of fact pertaining to the existence and state of implementation of an EMS element, which is based on a measurement or test, and that can be verified.

5.0 Procedure

5.1 The Environmental Management Representative (EMR) or designee plans, schedules, and implements the SEMS audit process (i.e. planning, conducting,



INTERNAL AUDIT

Region 8 Sustainability & Environmental Management System

reporting results and retaining associated records). The SEMS Audit Plan is used to define the scope, criteria and schedule of the audit.

In the event that GSA wishes to combine audits of its SEMS with environmental compliance audits, the intent and scope will be clearly defined.

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| Guidance for Environmental Management Systems auditing is given in ISO 19011. |
|---|

- 5.2 Audit frequency is established on a priority basis, taking into account previous audit results and the environmental importance of the business operation. Audits should be conducted every 12 to 24 months.

| |
|---|
| EMS internal audits are conducted at planned intervals to <ol style="list-style-type: none">1) determine whether the EMS<ol style="list-style-type: none">a) conforms to planned arrangements for environmental management, including the requirements of ISO 14001, andb) has been properly implemented and is maintained, and2) provide information on the results of audits to management. |
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(Source: ISO 14001:2004)

- 5.3 Audits are conducted by trained personnel, competent and in a position to do so impartially and objectively. Training typically includes an ISO 14001 auditing course. Auditors may not have responsibility within the area or department to be audited, as documented on the SEMS Audit Plan. Audits may be conducted by external consultants.

- 5.4 A member of the audit team is designated as the Lead Auditor. The Lead Auditor is responsible for the following:

- Organizing the request for and collation of pre-audit information, if necessary,
- Reviewing previous audit results,
- Developing or reviewing the SEMS Audit Checklist(s) and
- Organizing and directing the audit team members.

- 5.5 Using the SEMS Audit Checklist(s), the audit team assesses conformance to the SEMS requirements by visiting the facility or building identified in the Audit Plan, conducting interviews with personnel and reviewing relevant documentation. Objective evidence is identified that supports observations in the audit to the extent possible.

- 5.6 The audit team promptly notifies the EMR or designee of any possible regulatory non-compliance.

- 5.7 Upon completion of the internal audit, the audit team reviews their findings with



INTERNAL AUDIT

Region 8 Sustainability & Environmental Management System

the auditee and the responsible and accountable business area or department representative. Non-conformance findings initiate Corrective and Preventive Action Requests (CAR) per the SEMS System Procedure: Corrective and Preventive Action.

- 5.8 The EMR or designee is responsible for communicating results of the SEMS Audit to regional management. A summary of audit findings should be presented at the SEMS Management Review.

6.0 Records Management

The SEMS Audit Plan and completed SEMS checklists are retained by the SEMS Project Team. Auditees may retain copies of audit records.

7.0 References

- *GSA Region 8 SEMS System Procedure Document: Corrective and Preventive Action*
- *GSA Region 8 SEMS System Procedure Document: Document Control and Records Management*
- *ISO 14001:2004, “Environmental management systems – Requirements with guidance for use”*
 - *subclause 4.5.3 “Nonconformity Corrective Actions & Preventive Actions”*
 - *subclause 4.5.5 and A.5.5 “Internal Audit”*
- *ISO 19011:2002, “Guidelines for quality and/or environmental management systems auditing”*

8.0 Appendices

Attachment A: *Internal Audit flowchart*

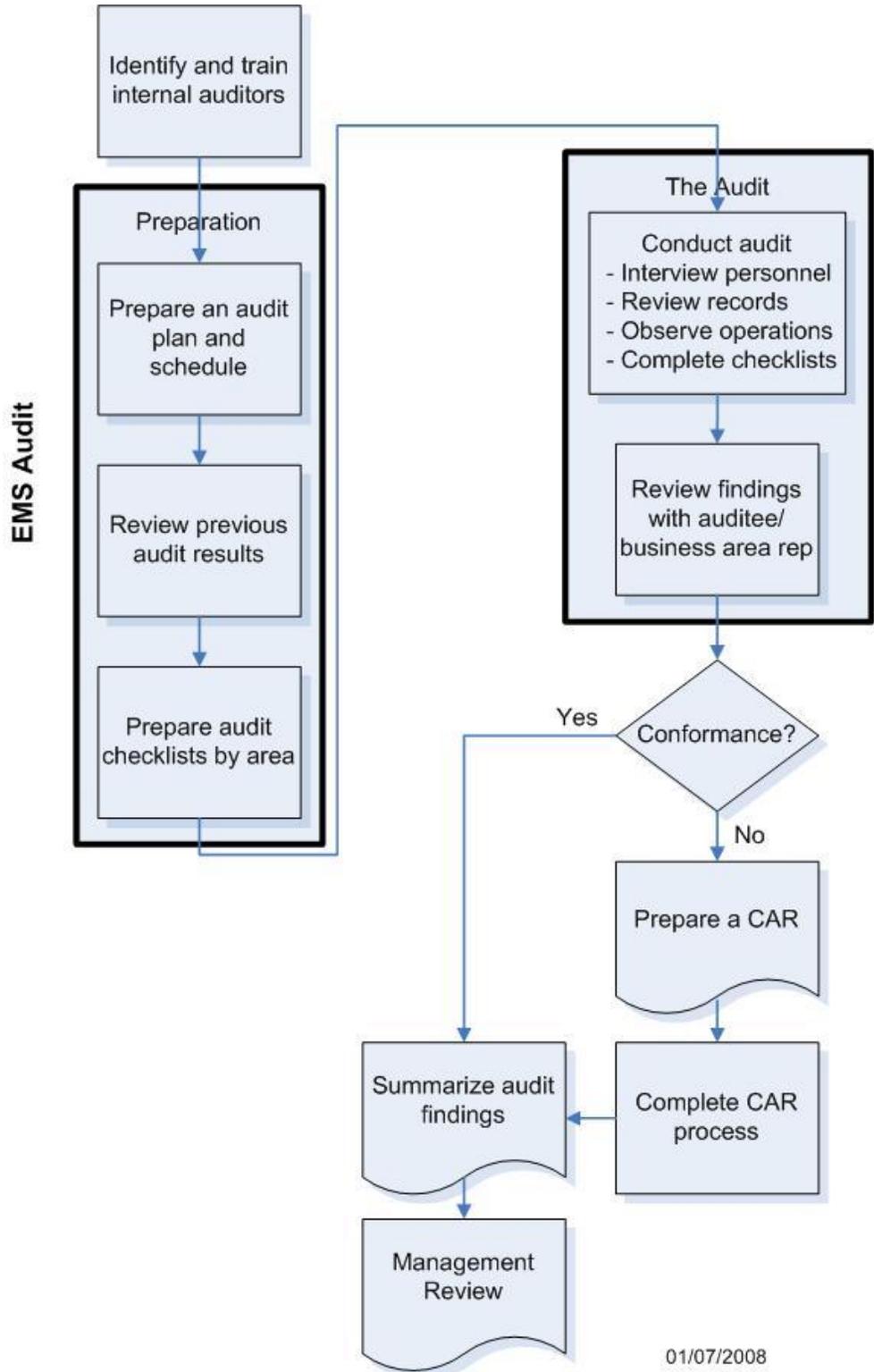
Attachment B: *SEMS Audit Plan Form*

Attachment C: *SEMS Audit Checklist(s)*

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| 06/15/2007 | Update | Erik Petrovskis |
| 09/14/2007 | Update – Site Specific Information | Erik Petrovskis, [Reformatted by Robert Melvin] |
| 01/17/2008 | Update – Site Specific Information [response to audit] | Robert Melvin [addressed and incorporated Erik Petrovskis, Ph.D, P.E. review comments] |
| 03/10/2008 | Format update | Robert Melvin |
| 06/29/2012 | Revised audit frequency | Erik Petrovskis |

Attachment A: Internal Audit flowchart



01/07/2008



Attachment B: SEMS Audit Plan Form



EMS AUDIT PLAN
Region 8 Sustainability & Environmental Management System

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|--|
| 1. Audit Date: |
| 2. Audit Scope: |
| 3. Audit Objective(s): |
| 4. Open items from previous audit(s)/non-conformances: |

Audit Team Assignment

| | |
|---------------|--|
| Lead Auditor: | |
| Auditors: | |

| EMS Element | Action Teams | Project Team | Contracting |
|---|--------------|--------------|-------------|
| Environmental Policy | | | |
| Aspects | | | |
| Environmental Legal and Other Requirements | | | |
| Environmental Management Programs | | | |
| Environmental Training | | | |
| Environmental Procedures [Operational Controls] | | | |
| Information Management, Communication and Documentation | | | |
| Regulatory Compliance Review | | | |
| Responsibility, Authority, and Accountability | | | |
| EMS Audits | | | |
| Corrective and Preventive Action | | | |
| Monitoring and Measuring | | | |
| Management Review | | | |

| Action Team | Audit Schedule | | | |
|----------------------------|----------------|---------|------|------|
| | Auditor | Auditee | Date | Time |
| Air Emissions | | | | |
| Site Remediation | | | | |
| Construction Demolition | | | | |
| Waste | | | | |
| Contracting | | | | |
| Green Building Maintenance | | | | |
| Water Usage | | | | |
| Energy Usage | | | | |
| Stormwater | | | | |

Note: These assignments are tentative and subject to adjustment based on audit activities.

Approved by: _____
 Signature: _____ Date: _____



Attachment C: SEMS Audit Checklist(s)

- 90-day Storage Area checklist.doc
- Asbestos abatement.doc
- Awareness Checklist.doc
- Boiler emissions.doc
- Chemical storage and disposal checklist.doc
- Chiller emissions.doc
- Commuter vehicles.doc
- Construction Waste Flowchart Checklist.doc
- Construction, Excav Haz Waste Checklist.doc
- Contracting checklist.doc
- Drinking water lead testing checklist.doc
- EMS Checklist.doc
- Energy Checklist.doc
- Environmental Divestiture checklist.doc
- Excavation Permit.doc
- Facility solid waste checklist.doc
- Fugitive Dust Checklist.doc
- Green purchasing.doc
- Grounds - chemical usage checklist.doc
- Grounds - water usage checklist.doc
- PCB Management.doc
- Pre-Demo Inspection Checklist.doc
- Recycling checklist.doc
- Sanitary sewer discharge checklist.doc
- Spill Response Checklist.doc
- Stormwater Checklist.doc

Blank Audit Checklists stored on the GSA Region 8 shared server.



MANAGEMENT REVIEW

Region 8 Sustainability & Environmental Management System

| | |
|-----------------------------|--|
| SYSTEM PROCEDURE | Last Revision Date: 06/29/2012 |
| Title: Management Review | File Name: 15 Management Review "Month-Date Year".doc |

1.0 Purpose

The purpose of this System Procedure is to describe the process by which regional management periodically reviews the Sustainability & Environmental Management system (SEMS) to ensure its continuing suitability, adequacy and effectiveness.

The review addresses the potential need for changes to policies, procedures, and other elements of the SEMS based on the results of environmental audits, changing circumstances in the Region, and the commitment to continual improvement. The results of the management review are documented.

2.0 Scope

This procedure addresses Management Reviews conducted for the GSA Region 8 SEMS.

3.0 Forms Used

None

4.0 Acronyms, Abbreviations and Definitions

Adequacy: Sufficient, legally and reasonably, for the intended purpose or stated requirements.

Effectiveness: Capable of achieving the desired results.

Environmental Management Program (EMP): A program established, implemented and maintained by the organization for achieving its SEMS objectives and targets. EMP Plans include the means, time frames, resources and personnel responsible for achieving the objectives and targets.

Environmental Management Representative (EMR): A designated GSA Region 8 government employee given authority to ensure that the SEMS is maintained and who reports on the performance of the SEMS to the executive administration.

Suitability: Suited to or for, well fitted for the purpose, appropriate for the occasion.

5.0 Procedure

5.1 The Environmental Management Representative (EMR) is responsible for ensuring that a SEMS Management Review is conducted every 12 to 24 months at the discretion of regional management.



MANAGEMENT REVIEW

Region 8 Sustainability & Environmental Management System

5.2 The EMR or designee is responsible for scheduling, organizing, and for arranging for participation in the SEMS Management Review meeting. Management personnel with executive responsibility participate in the SEMS Management Review.

5.2.1 During the SEMS Management Review, the EMR or designee ensures that the appropriate elements of the SEMS are reviewed, and highlight significant SEMS issues (e.g. new environmental regulations or environmental issues, on-going deficiencies in the SEMS, new significant environmental aspects).

“The management review should cover the scope of the environmental management system, although not all elements of the environmental management system need to be reviewed at once and the review process may take place over a period of time.” (ISO 14001:2004, subclause A.6 Management Review)

5.2.2 The Management Review includes, at a minimum, consideration of the following:

- Follow-up actions from previous management reviews
- Environmental policy and significant environmental aspects and modifications to aspects
- Objectives, targets and Environmental Management Program (EMP) Plans
- SEMS audit reports, compliance reviews and Environmental Management Review results
- Status of corrective and preventive actions
- Revisions to environmental management documentation
- Current and likely future changes in legal and other requirements
- Changes in Central Office and regional environmental strategy or requirements
- Concerns of interested parties, including complaints
- New and emerging environmental issues of relevance to the Region
- Changing circumstances and changes to the portfolio that may affect the SEMS
- Corrective actions and proposed changes, improvements, or updates to the SEMS that demonstrate the commitment to continual improvement, and
- Opportunities for improvement

5.3 The EMR or designee prepares meeting minutes of the Management Review, documenting findings and recommendations for improvement, including changes to the SEMS.



MANAGEMENT REVIEW

Region 8 Sustainability & Environmental Management System

6.0 Records Management

- SEMS Management Review meeting minutes.

7.0 References

- *ISO 14001:2004, “Environmental management systems – Requirements with guidance for use”*
 - *subclause 4.6 and A.6 “Management Review”*

8.0 Appendices

None

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