

Environmental Management System Specifications

INTRODUCTION

The General Motors Environmental Performance Criteria (GM EPC) are universal performance requirements designed to protect human health and the environment in accordance with the GM Global Environmental Policy, ENV-01.

GM EPC establish minimum baseline performance requirements and supplement applicable laws and regulations. Each GM Operating Unit must comply with the performance requirements of its applicable laws and regulations and to the GM EPC when these requirements are more protective of the environment.

Compliance with the GM EPCs will be verified through:

- Annual Self-Evaluations conducted by the GM Operating Unit,
- Periodic Validation directed by Regional Environmental Staff, and
- The global audit program performed by GM Audit Services (GMAS).

This GM EPC provides a common framework and specifications to assist GM Operating Units in implementing an environmental management system (EMS). The EMS specifications described within this document combine elements specified by the International Organization for Standardization (ISO) standard 14001 and GM. These are designed to help ensure intended performance with respect to external legal requirements, site objectives and targets, and corporate or business sector policies and strategies. Together they provide a common framework for GM Operating Units to understand how their activities interact with the environment and to improve management of these activities in an ongoing cycle. Upon implementation, the EMS shall be certified (unless noted otherwise) in conformance with ISO 14001 by a third-party accredited registrar. Compliance with the requirements of this GM EPC can be accomplished by the registration to ISO 14001, including specific GM requirements.

1 SCOPE - APPLICABILITY

- 1.1 As specified in GM EPC – Applicability Requirements, Document No. EPCQ-001.

2 NORMATIVE REFERENCES

- 2.1 International Standard ISO 14001, Environmental Management Systems - Specification with Guidance for Use, (current edition).

3 DEFINITIONS

Audit Team – The audit team consists of ‘off site’ GM professionals who are knowledgeable of GM environmental requirements and who can develop an understanding of the GM Operating Unit’s environmental management system and the EMS criteria to be audited. Auditors shall be independent of the environmental management system being audited.

Annual Self Declaration Audit – The Annual Self Declaration Audit is an independent review of at least a third of the GM Operating Units’ EMS system elements. At a minimum, audit activity and associated criteria for review is conducted in accordance to the Self Declaration Three Year Audit Plan.

[NOTE: The Annual Self Declaration Audit is the methodology in which a GM Operating Unit issues a statement based on its own determination that, upon review, its EMS conforms to the requirements of their ISO 14001 program.]

New GM Operating Unit – Is a newly established business entity as defined in Section 3, *GM Operating Unit*, in EPCQ-001; or is an indefinite cold shut down of an entity with no initial plans to re-start the facility, but the entity is re-activated at a later date.

Documented Environmental Risk Assessment - The non-manufacturing risk levels are defined through a documented environmental risk assessment process for each non-manufacturing site. The Documented Environmental Risk Assessment process should follow the common global template and specifies a non-manufacturing site as either: high-risk, medium-risk, or low-risk.

Relevant Legal or GM Requirements - Applicable legislative and regulatory environmental requirements that the organization identifies, through best professional judgment, where the use of either written procedures, operating criteria, or work instructions will facilitate compliance (Note: Not all regulatory and legislative environmental requirements may need the use of additional management systems to ensure compliance.

4 BASIC ENVIRONMENTAL MANAGEMENT SYSTEM REQUIREMENTS

- 4.1. All GM Operating Units as defined in EPCQ-001 are required to implement an Environmental Management System (EMS). All GM Operating Units, except those non-manufacturing locations classified as low-risk as demonstrated through a Documented Environmental Risk Assessment per Section 4.2, shall incorporate the following minimum requirements:
 - 4.1.1 The scope of the EMS shall include all manufacturing and non-manufacturing process operations and activities.
 - 4.1.2 GM Operating Units shall develop an environmental calendar to assist with compliance and conformance of applicable environmental requirements. At a minimum, the calendar shall include periodic sampling requirements as mandated by governing permits/licenses (e.g., if applicable, air, wastewater and storm water discharges emanating from the site), periodic monitoring as mandated by governing permits/licenses or legislation (e.g., storm water inspections, waste container inspections), periodic reports that are required to be submitted to governing agencies (e.g., if applicable, air emission reports, waste disposal information, water discharge report, etc.), permit/license renewal dates, and data reporting requirements mandated by a GM EPC.
 - 4.1.3 GM Operating Units shall have on file and have readily available copies of all applicable environmental permits/licenses (e.g., air emission permits, water discharge permits, water extraction permits, waste disposal approvals, etc.).
 - 4.1.4 To assist with response to potential environmental emergencies that can occur on site, GM Operating Units shall, at a minimum, identify and document contact information for facility

and divisional/corporate personnel and other resources who can assist with mitigating environmental emergencies that can occur at the site.

- 4.1.5 Each GM Operating Unit's EMS shall identify the roles and responsibilities of all parties that are involved with the site's EMS and provide appropriate training, as required.
 - 4.1.6 Each GM Operating Unit shall have processes in place to address management of change. Management of change examples include construction projects, new process installation, or changes in chemicals used.
 - 4.1.7 The GM Operating Unit must identify all Relevant Legal Requirements or GM Requirements and provide operational controls as required to achieve compliance or conformance.
 - 4.1.8 The EMS shall consider relevant Information Lifecycle Management (ILM) requirements for environmental records.
 - 4.1.9 The GM Operating Unit shall evaluate, at least annually, compliance with applicable environmental legislation, regulations, and other requirements, including the GM EPCs. Based on the results of such audits or on any other credible evidence of non-compliance, the GM Operating Unit shall take appropriate and timely corrective and preventive action to resolve deficiencies identified. The results of this evaluation shall be reviewed with the site's top management.
- 4.2 Non-manufacturing GM Operating Units determined as low-risk facilities by a Documented Environmental Risk Assessment shall implement a management system with the following elements:
- 4.2.1 Relevant Legal Requirements should be identified with appropriate operational controls established to ensure compliance. Roles and responsibilities for ensuring compliance should be addressed.
 - 4.2.2 A process for management of change shall be included to address changes in operations at low-risk non-manufacturing GM Operating Units as determined by a Documented Environmental Risk Assessment..
 - 4.2.3 A review of the Documented Environmental Risk Assessment for the site shall be performed annually to ensure the non-manufacturing GM Operating Unit remains low-risk.
- 4.3 In addition to meeting the requirements of Section 4.1, non-manufacturing GM Operating Units classified as high-risk as determined by a Documented Environmental Risk Assessment must also either meet the requirements in Section 5 below, or implement an equivalent environmental management system (e.g. including environmental performance statements into a site's Global Manufacturing System).
- 4.4 New GM Operating Units are required to be in conformance with applicable provisions of Section 4, within 12 months after the start of operation or the date of acquisition by GM.

5 ENVIRONMENTAL MANAGEMENT SYSTEM PERFORMANCE REQUIREMENTS FOR MANUFACTURING GM OPERATING UNITS

- 5.1 Each manufacturing GM Operating Unit must establish and maintain an environmental management system (EMS) which conforms to the elements of ISO 14001.
 - 5.1.1 New manufacturing GM Operating Units are required to be in conformance with these provisions within 24 months after the start of production or the date of acquisition by GM.
- 5.2 The scope of the GM Operating Unit's EMS shall include all manufacturing operations, processes, and activities.
- 5.3 Upon implementation, the EMS must be certified to ISO 14001 utilizing a third-party registrar (excluding GM Operating units that are using Self-Declaration to Conformance with the ISO 14001 Standards, as approved by the Environment and Sustainability Director).
- 5.4 The GM Operating Unit's programs to meet its objectives and targets shall be comprehended in the GM Operating Unit's business or technology planning process, whichever is appropriate. If a project or portion thereof relates to shutdown, phase-out, removal or demolition, the affected program(s) shall be amended where relevant to ensure that environmental management applies to such activities.
- 5.5 Specific requirements for GM Operating Units Self Declaring Conformance to the ISO 14001 Standards.
 - 5.5.1 Annual Self Declaration Audits shall be performed by auditors independent of the EMS System being audited.
 - 5.5.2 Annual Self Declaration Audits shall be conducted each calendar year. Annual Self Declaration Audits should generally be scheduled between 10 to 14 months apart.
 - 5.5.3 All aspects of the GM Operating Unit's EMS must be reviewed at least once every three years.
 - 5.5.4 Upon audit completion, the Audit Team shall prepare a Self-Declaration Audit Report. The Self Declaration Audit Report shall be presented to the GM Operating Unit's Environmental Management Representative with copies provided to the Regional Environmental Manager and Corporate ISO 14001 Coordinator.
 - 5.5.5 All non-conformances will be addressed in accordance with Regional ISO 14001 policy.
 - 5.5.6 In the event that a GM Operating Unit does not complete its Annual Self Declaration Audit and Major Non-conformances are found, the GM Operating Unit must have their ISO program audited by non-GM external auditors for the next three years. Each of these audits are to be complete reviews of the GM Operating Unit's EMS. These non-GM external auditors shall not be auditors from a Registrar Accreditation Board (RAB) certified third party registrar (e.g. DNV,BSI, IQSR, etc.) but shall be independent external auditors from one of GM's Tier Two service providers who can perform this audit service (e.g., TetraTech, ERM, etc).
- 5.6 Requirements for shutting down an EMS.
 - 5.6.1 Notification to the Regional Environmental Manager shall be made prior to suspending EMS activities.

- 5.6.2 The GM Operating Unit must consider public statements that it operates an EMS. The GM Operating Unit must notify entities issuing recognitions/awards dependent upon having an EMS that the GM Operating Unit will no longer maintain its EMS. *An example may be a GM Operating Unit being recognized as an Environmental Steward to the community it operates in. Part of the application for such recognition included a statement that the GM Operating Unit has an ISO 14001 system.*

6 GUIDANCE MANUAL AND TOOLS

- 6.1 A set of common procedures for GM operations is available as a template to assist GM operations with the implementation of ISO 14001. The procedures are available on GM Socrates at Environment & Sustainability Group Sharepoint sites.

Executive in Charge:

Executive Director, Global Regulatory Affairs and Environment, Energy & Safety Policy