



# Semtech Corporation

## *Environmental Management Manual*

*The environmental management manual set forth in this document shall define the scope of the environmental management system (EMS) implemented at Semtech Corporation headquartered in Camarillo, CA (hereafter referred to as "the organization" or Semtech) and compliance to the standards of ISO 14001:2004 (hereafter referred to as "ISO 14001").*

**Table of Contents**

<b>4 Environmental Management System Requirements .....</b>	<b>3</b>
4.1 General Requirements.....	3
4.2 Environmental Policy .....	3
4.3 Planning.....	4
4.3.1 Environmental Aspects and Hazard Identification .....	4
4.3.2 Legal and Other Requirements .....	5
4.3.3 Objectives, Targets and Programs.....	5
4.4 Implementation and Operation.....	6
4.4.1 Resources, Roles, Responsibility and Authority.....	6
4.4.2 Competence, Training and Awareness .....	6
4.4.3 Communication .....	6
4.4.4 Documentation .....	7
4.4.5 Control of documents .....	8
4.4.6 Operational Control.....	8
4.4.7 Emergency Preparedness and Response.....	9
4.5 Checking.....	9
4.5.1 Monitoring and Measurement.....	9
4.5.2 Evaluation of Compliance (4.5.2.1 and 4.5.2.2) .....	10
4.5.3 Nonconformity, Corrective Action, Preventive Action and Continuous Improvement .....	10
4.5.4 Control of Records .....	11
4.5.5 Internal Audit.....	11
4.6 Management Review .....	12
<b>Appendix I: QMS &amp; EMS Processes Interaction Map .....</b>	<b>13</b>
<b>Appendix II: EMS Documentation Reference .....</b>	<b>14</b>

## **4 Environmental Management System Requirements**

### ***4.1 General Requirements***

Semtech has created this Environmental Management System Manual to detail how the Environmental Management System has (EMS) been established, and how it will be documented, implemented and maintained on all relevant levels of the organization.

*The scope* of the EMS includes the design, development, manufacture, production, test and sales of commercial, military and industrial semiconductor components, modules, assemblies and associated products which occur at Semtech's corporate headquarters at 200 Flynn Road, Camarillo, California 93012.

### ***4.2 Environmental Policy***

**Semtech is committed to producing environmentally sustainable product, reducing environmental impacts and conserving resources. We have incorporated sound environmental practices in our processes from design all the way through production and distribution by:**

- ❖ **using sustainable products**
- ❖ **being efficient in energy usage and reduce consumption of paper, energy, water and fuel**
- ❖ **minimizing waste and increasing recycling**
- ❖ **keeping suppliers environmentally accountable**
- ❖ **helping customers minimize their carbon footprint by providing "green" enabling technology**
- ❖ **understanding and complying with customer, legal and other requirements**

### 4.3.1 Environmental Aspects and Hazard Identification

Semtech is committed to minimizing its environmental, health and safety impacts and does so by screening probable environmental aspects, identifying significant environmental impacts and setting forth environmental objectives. Semtech incorporates its environmental management programs together with the Corporate Quality Management.

#### Identification of Environmental Aspects

Semtech has developed procedures for screening probable and identifying significant environmental aspects.

On yearly basis, each department meets with Environmental Management Representative to review its key processes and identify probable environmental aspects. Once probable environmental aspects are identified, each item is scored according to the criteria set and defined in Identifying Environmental Aspects and Impacts procedure (SEMDOC000583).

Identified significant environmental aspects are then ranked and documented on the Significant Environmental Aspects List noting each department responsible/contributing to the identified environmental impact.

Management together with Environmental Management Representative discusses each significant aspect and devises environmental management programs aiming at ameliorating environmental impacts.

Each environmental management program is measurable and monitored on quarterly basis with the exception of legal compliance which is measured on yearly basis (review of Legal and Other Requirements is completed on yearly basis).

#### Responsible Functions/Business Unit

All managers together with Environmental Management Representative are responsible for insuring the effectiveness of this EMS element.

#### Reference Documents

Corporate EH&S Document; SEMDOC000583	Identifying Environmental Aspects and Impacts
Corporate EH&S Document; SEMTECH-001	Environmental Aspects Screening and Significance Form
Corporate EH&S Document; SEMTECH-002	Significant Environmental Aspects List
Corporate EH&S Document: SEMTECH-004	Semtech Objectives and Target

### 4.3.2 Legal and Other Requirements

Semtech identifies and maintains a registry of all legal and other requirements. Legal requirements include federal, state and local requirements along with customer and Semtech defined requirements.

Legal and other requirements are reviewed on yearly basis to assess Semtech 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.

#### Reference Documents

Corporate EH&S Document; SEMDOC000584	Environmental Compliance Legal Requirements Review
Corporate EH&S Document; SEMTECH-003	Legal and Other Requirements Review – FORM

### 4.3.3 Objectives, Targets and Programs

The organization has established, implemented and shall maintain a program to document the environmental objectives and targets on the Environmental Objectives and Targets list. The environmental objectives and targets shall be measurable and consistent with the environmental policy. The environmental objectives and targets shall also take into account the significant environmental aspects and hazards identification of the organization, technological options, financial, operational and business requirements and the views of interested parties.

The environmental objects and targets list shall include the departments responsible for achieving the specific environmental objective and/or target. This list and the status of the objectives shall be reviewed during the management review and revised accordingly.

#### Reference Documents

Corporate EH&S Document; SEMTECH – 004	Semtech Objectives and Target
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## **4.4 Implementation and Operation**

### **4.4.1 Resources, Roles, Responsibility and Authority**

The organization has made available resources such as human resources, organizational infrastructure, technology and financial resources to establish, implement, maintain and improve the EMS.

Roles, responsibilities and authorities are defined, documented and communicated in the organizational chart referenced in the Corporate Quality Manual. Furthermore the Corporate Quality Manager has been appointed as Semtech EMS Management Representative in order to ensure the EMS is maintained in accordance with the requirements of ISO 14001. The environmental representative shall report to top management on the performance of the EMS for review and recommendations for improvement, especially when establishing the inputs into the management review.

### **4.4.2 Competence, Training and Awareness**

The organization has identified its training needs associated with its environmental aspects and EMS in the Corporate General Training Procedure (KFID-4JCPZD) referenced in the Corporate Quality Manual. The organization provides training and keeps associated records and they are referenced in the Corporate Quality Manual.

#### Reference Documents

Corporate Document; KFID-4JCPZD	Corporate General Training Procedure
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### **4.4.3 Communication**

Internal Communication, as defined within ISO 9001 and ISO 14001, has been accepted and adopted by Semtech to ensure that appropriate communication processes are established and that such communication takes place regarding the effectiveness of the QMS and EMS. This is also further elaborated on in the Corporate Quality Manual.

The organization provides information about its environmental aspects and impacts upon request. However, Semtech may choose not to share the details about its environmental impacts and aspects if it deems the inquiry is unjustified.

The organization will not communicate its significant environmental aspects to potential clients unless it is specifically required as part of a job bid, even then top management will make the final decision on whether or not to communicate the organization's significant aspects.

Semtech's Customer Request process is the controlling media whereby customers can request environmental compliance data, submit compliance surveys, or request compliance review of their documents and requirements.

Through this process, Semtech's quality team gathers all supporting documents, completes surveys and prepares responses which are forwarded back to the customer.

Reference Documents

Corporate Quality Document; SEMDOC000724	Corporate Customer Request Procedure
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**4.4.4 Documentation**

Per the requirements of the 14001 standard, the organization has documented several aspects of the EMS. The environmental policy is documented in this supplemented Environmental (EMS) Manual and is posted at various onsite locations. The objectives and targets are documented on the Semtech Objectives and Targets form. A description of the scope of Semtech's environmental management system is documented 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 Health and Safety documents and kept on the internal server.

The interaction of key processes including both ISO 9001 and ISO 14001 are documented in the Corporate Quality Manual and attached in this EMS Manual. Appendix II of this Manual references all Semtech EMS documentation as it relates to ISO 14001 requirements.

#### 4.4.5 Control of documents

Section 1.4 of Semtech Corporate Quality Manual, Control of Documents, defines procedures in place for proper document control. This procedure addresses what is necessary for approving documents prior to use, reviewing and updating documents as necessary, re-approving documents, ensuring the changes and the current revision status of status of documents are identified, ensuring that relevant versions of applicable documents are available at points of use, ensuring the document remain legible and readily identifiable, ensuring that documents of external origin determined by the organization to be necessary for the planning and operation of the EMS are identified and their distribution control and for preventing the unintended use of obsolete documents and apply suitable identification to them if they are retained for any purpose.

##### Reference Documents

Corporate Document; PSAZ-5AFU9J	Corporate Change Control
Corporate Document; PSAZ-5AFNKG	Corporate Document Control

#### 4.4.6 Operational Control

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 organization has identified and planned those operations that are associated with the identified significant environment aspects consistent with the environmental policy and the objectives and targets to ensure they are carried out under specified conditions. Semtech Significant Environmental Aspect List (FORM SEMTECH-002 lists significant environmental aspects and identifies departments responsible for control methods for minimize the impact of the aspects.

##### Reference Documents

Corporate EH&S Document; SEMTECH-002	Significant Environmental Aspect List
Corporate EH&S Document; KFID-4N8SER	Semtech Hazardous Communication Procedure
Corporate EH&S Document; KFID-4K8LX9	Hazardous Waste Handling
Corporate EH&S Document; SEMDOC000660	Evaluating Vendors Affecting Environmental Aspects



#### 4.4.7 Emergency Preparedness and Response

Semtech is committed to safety and health of all of its employees. The organization has defined corporate safety policy in Corporate Illness and Injury Prevention Program (IIPP) and this includes procedure that outlines different emergency procedures. IIPP contains procedures for the following emergency and safety procedures:

- Emergency Procedures
- Enforcement and Disciplinary Policies and Procedures
- Health and Safety Training Program
- Accident Reporting and Investigation
- Hazard Abatement

##### Reference Documents

Corporate EH&S Document; SEMDOC000586	Semtech Injury & Illness Prevention Plan
Corporate EH&S Document: KFID-4N8SER	Semtech Hazardous Communications Procedure

#### 4.5 Checking

##### 4.5.1 Monitoring and Measurement

The organization is in compliance with monitoring and measurement requirements as stated in both ISO 9001 and ISO 14001. All process and procedures that require monitoring and measurement are referenced in the Corporate Quality Manual and include: Internal Audits, Calibration and On-Going Reliability Testing. Legal Review is referenced in section 4.3.2 of this EMS Manual. All measurement and monitoring of environmental objectives programs is documented in Semtech Objectives Programs Scorecard and conducted according to Semtech EMS Monitoring and Measurement procedure (SEMDOC000731).

In line with its QMS and EMS policies, the organization will work with its direct suppliers to assist in obtaining and maintaining their management systems to the requirements of both ISO 9001 and ISO 14001.

##### Reference Documents

Corporate EH&S Document; SEMDOC000731	Semtech EMS Monitoring and Measurement
Corporate EH&S Document; SEMTECH-006	Semtech EMS Objectives Programs Scorecard
Corporate Document; KFID-4KGKRU	Calibration Procedure
Corporate Document; PSAZ-5AMV6Y	Calibration Record - FORM

#### 4.5.2 Evaluation of Compliance (4.5.2.1 and 4.5.2.2)

The organization has created procedures for legal and other requirements review and internal auditing. Legal and other requirements review is noted in section 4.3.2 of this EMS Manual. Internal Auditing is referenced in 4.5.5 of this EMS Manual and further detailed in the Corporate Quality Manual section 17.2.

##### Reference Documents

Corporate EH&S Document; SEMDOC000584	Environmental Compliance Legal Requirements Review
Corporate EH&S Document; SEMTECH-003	Legal and Other Requirements Review – FORM
Corporate Document; KFID-4L3S3E	Corporate Internal Audit Program

#### 4.5.3 Nonconformity, Corrective Action, Preventive Action and Continuous Improvement

Semtech has in place procedures for non-conforming material, corrective and prevention actions, continuous improvement as required by ISO 9001 and ISO 14001. Corrective Action Request System as described in detail in section 18 of the Corporate Quality Manual and encompasses both requirements of ISO 9001 and ISO 14001.

Prevention Action System is described in detail in section 19 of the Corporate Quality Manual and encompasses requirements of both ISO 9001 and ISO 14001.

Actions are taken accordingly to the magnitude of the environmental impacts that are encountered as a result of the nonconformity and necessary changes, if any, will be made to the EMS.

Semtech Corporation embarks upon a model of continuous improvement. Such actions are clearly noted throughout our business processes.

Continuous Improvement is part of Semtech’s quality system as a proactive measure to improve efficiency, reduce costs, reduce environmental impact, and enhance product and services

Continuous Improvement is described in detail in section 11 of the Corporate Corrective Action, Preventive Action & Continuous Improvement procedure.

The continuous improvement process enables any one to plan, document and execute such a plan or project.

Reference Documents

Corporate Document; PSAZ-5AMMXS	Corrective Action, Preventive Action and Continuous Improvement
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**4.5.4 Control of Records**

The organization has created a procedure to address both document and record control as required by ISO 9001 and ISO 14001. Corporate Quality Manual describes has a detailed reference to Semtech policies, procedures and responsibilities. Documents and records are maintained to demonstrate conformity to the EMS and to ISO 14001.

Reference Documents

Corporate Document; KFID-4KWSAP	Control of Quality Records
Corporate Document; PSAZ-5AFU9J	Change Control Procedure
Corporate Document; SFBN-4SPNRU	Quality Records Database User Guide

**4.5.5 Internal Audit**

The organization has created a procedure for performing internal audit of the EMS and QMS at planned intervals to determine whether the EMS conforms to the planned arrangements of the EMS and to ISO 14001 and ISO 9001. Corporate Quality Manual section 17.2 outlines Internal Auditing Policies and Procedures.

It is the responsibility of the environmental representative to plan and conduct EMS internal audits as well as report results to the management and retain records. The environmental representative shall ensure objectivity and impartiality when selecting auditor for the internal audit.

Reference Documents

Corporate Document; KFID-4L3S3E	Corporate Internal Audit Program
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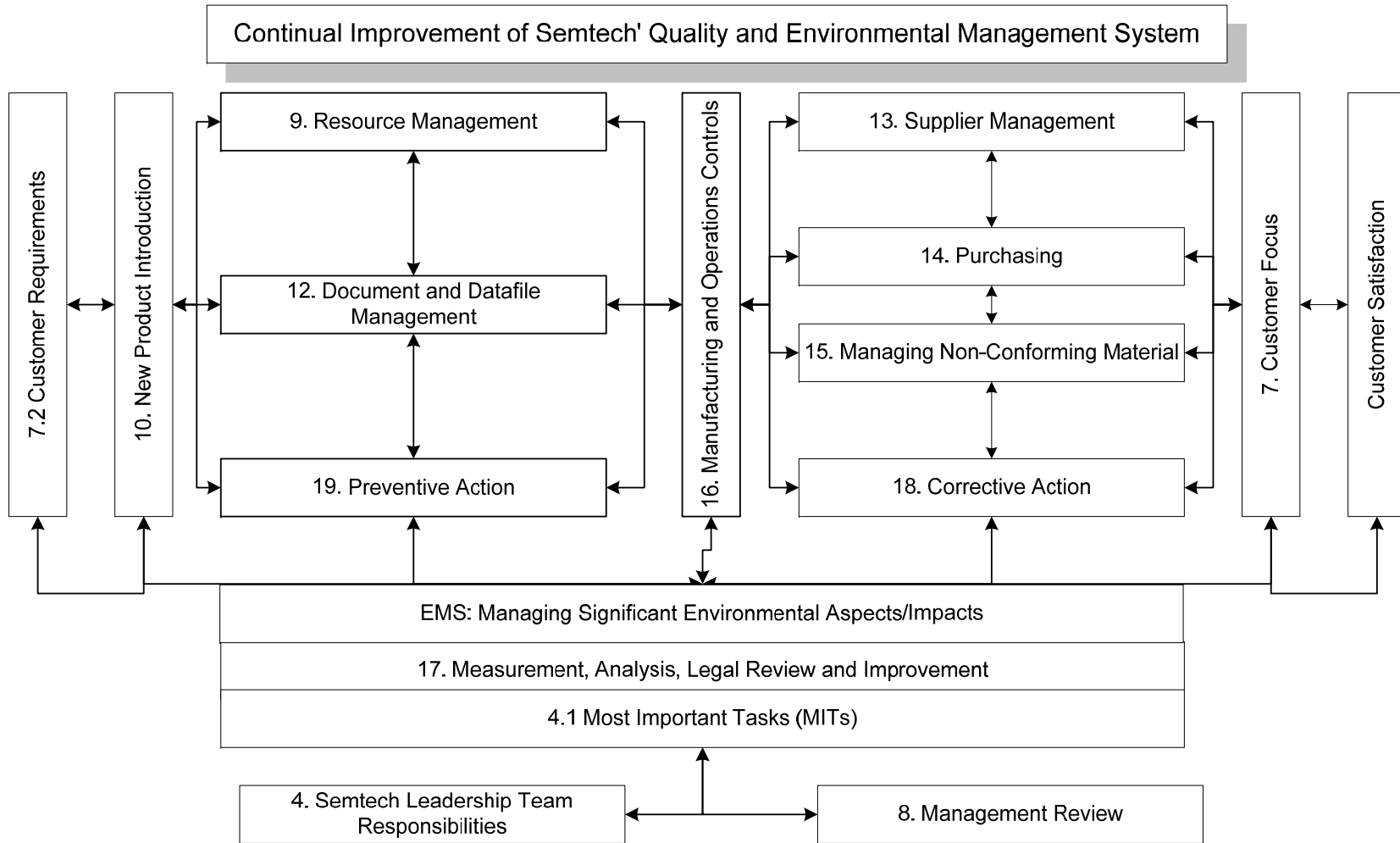
## ***4.6 Management Review***

Top Management reviews the organization's EMS as part of its regular quarterly business management system meetings. Management meetings are further defined in the Corporate Quality Manual. Corporate Management Review outlines inputs, outputs and documentation of quarterly business management system meetings.

### *Reference Documents*

Corporate Document; SFBN-4MFN3G	Corporate Management Review
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**Appendix I: QMS & EMS Processes Interaction Map**



**Appendix II: EMS Documentation Reference**

<b>ISO 14001:2004 Reference</b>	<b>EMS Document</b>
4.1 General Requirements	Environmental Management System Manual
4.2 Environmental Policy	Environmental Management System Manual
4.3 Planning	<i>title only</i>
4.3.1 Environmental Aspects and Hazard Identification	SEMDOC000583: Identifying Environmental Aspects and Impacts SEMTECH-001: Environmental Aspects Screening and Significance Form SEMTECH-002: Significant Environmental Aspects List EMTECH-004: Semtech Objectives and Target
4.3.2 Legal and Other Requirements	SEMDOC000584: Environmental Compliance Legal Requirements Review SEMTECH-003: Legal and Other Requirements Review – FORM
4.3.3 Objectives, Targets and Programs	EMTECH-004: Semtech Objectives and Target
4.4 Implementation and Operation	<i>title only</i>
4.4.1 Resources, Roles, Responsibility and Authority	Corporate Quality Manual
4.4.2 Competence, Training and Awareness	KFID-4JCPZD: Corporate General Training Procedure
4.4.3 Communication	Corporate Quality Manual SEMDOC000542 Corporate Customer Request Procedure SEMDOC000660 Evaluating Vendors Affecting Environmental Aspects
4.4.4 Documentation	Environmental Management System Manual
4.4.5 Control of documents	Corporate Quality Manual SFBN-4JAM6L: Corporate Documents: Database Instructions SFBN-4YWSTJ: Corporate Product Documents: Database Instructions PSAZ-5AFUCE: Standardize Guidelines for Specifications
4.4.6 Operational Control	SEMTECH-003: Significant Environmental Aspect List KFID-4N8SER: Hazardous Communication KFID-4K8LX9; : Hazardous Waste Handling SEMDOC000660; Evaluating Vendors Affecting Environmental Aspects

4.4.7	Emergency Preparedness and Response	SEMDOC000586; Semtech Illness and Injury Prevention Program
4.5	Checking	title only
4.5.1	Monitoring and Measurement	SEMDOC000731; Semtech EMS Monitoring and Measurement SEMTECH-006; Semtech EMS Objectives Programs Scorecard KFID-4KGKRU: Calibration Procedure PSAZ-5AMV6Y: Calibration Record - FORM
4.5.2	Evaluation of Compliance (4.5.2.1 and 4.5.2.2)	SEMDOC000584: Environmental Compliance Legal Requirements Review SEMTECH-003: Legal and Other Requirements Review – FORM KFID-4L3S3E: Corporate Internal Audit Program
4.5.3	Nonconformity, Corrective Action and Preventive Action	PSAZ-5AMMXS: Corrective Action and Preventive Action Procedure
4.5.4	Control of Records	Corporate Quality Manual KFID-4KWSAP: Control of Quality Records PSAZ-5AFU9J: Change Control Procedure SFBN-4SPNRU: Quality Records Database User Guide
4.4.5	Internal Audit	KFID-4L3S3E: Corporate Internal Audit Program SFBN-52ZS4J: Audit System: Database User's Guide
4.6	Management Review	Corporate Quality Manual SFBN-4MFN3G: Corporate Management Review