

XXX

**ISO 14001 - Environmental
Management System Manual**

Prepared By:
Approved By:

Signature: _____ **Date:** _____

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SECTION I - INTRODUCTION

XXX located atfacility description

In order to improve management of environmental issues related to these operations and sites, XXX has implemented an ISO 14001 environmental management system. This Environmental Management System (EMS) manual presents the environmental policy, structure of the management system, and related documents.

The EMS is designed according to the requirements set forth by the ISO-14001 Standard. Sections 4.2-4.6 parallel the ISO-14001 Standard number scheme. Each of these sections provide specific information or instructions necessary for complying with the requirements in the ISO-14001 Standard.

SECTION II - DISTRIBUTION, REVISION, AND CONTROL

The controlled version of the EMS manual can be accessed on the computer system at ???. There will be a “Master Copy” in hard copy form maintained by the EMS Coordinator. This copy shall have the signature of the Management Representative and the date of approval. Any part of the manual in hard copy form, other than the master copy and controlled copies issued per the distribution list, shall be considered “UNCONTROLLED” and will have “*****THIS IS AN UNCONTROLLED COPY OF A CONTROLLED DOCUMENT*****” automatically inserted at the bottom of each page when printed.

- The **EMS Team** will review the EMS manual for changes annually in **October**.
- The **EMS Coordinator** will make all requested revisions to the manual and obtain approval from top management as needed throughout the year as well as a result of the EMS team review in October.
- The **EMS Coordinator** shall conduct distribution of this manual manually.

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SECTION 4.2 - ENVIRONMENTAL POLICY

XXX’ top management has defined its environmental policy.

ENVIRONMENTAL POLICY

XXX.

- The **EMS Team** will review the policy annually and any revisions will be adopted in **November**.
- The **EMS Coordinator** will make the EMS Policy available to the public upon request. The policy will be communicated to all XXX’ employees through training events.

SECTION 4.3 - PLANNING

Definitions to be used during planning stages.

Environmental Aspects - Elements of the organization’s activities, products or services that can interact with the environment.

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

Significant Environmental Aspect - An environmental aspect that has or can have a significant environmental impact.

4.3.1 Environmental Aspects

XXX has identified all known environmental aspects and related impacts of our activities and products that we can control and have influence over in order to determine which can have a significant impact on the environment.

- The list of environmental aspects and related impacts will be reviewed at least annually in **November** by the **EMS Team** to identify the significant aspects. New aspects and impacts may need to be identified and ranked more frequently if modified or new activities occur during the year.
- The **EMS Team** will use the aspect procedure **below** and related documents to carry out the identification and significance ranking of aspects and associated impacts.

Environmental Aspect and Impact Analysis and Ranking Procedure

- 1) Identify the environmental aspects and impacts of its activities, products, or services that it can control and over which it can be expected to have influence and record those on **Environmental Aspect and Impact Ranking Form ###**.

2) When identifying aspects and impacts the **EMS Team** should consider environmental aspects related to air emissions, discharge of liquid waste, disposal of solid waste, land and water contamination, use of raw material and natural resources, as well as local and community issues. These issues should be considered for normal as well as abnormal operating conditions.

Table X

	Low (1)	Medium (2)	High (3)
Severity	Little impact to environment and/or no danger to the health of humans or wildlife	Danger of non-life threatening health effects to humans or wildlife, or short term effects on the environment (reversible < 1yr)	Potentially life threatening or life altering to humans or wildlife, or significant long term effects on the environment (reversible > 1yr)
Frequency	Less than monthly	Monthly to weekly	Weekly to daily
Quantity	Pounds per year	Tons per year	Tons per month

- 3) After identifying the aspects and associated impacts the **EMS Team** should rank the associated aspects and impacts for severity of occurrence, frequency of occurrence and quantity. **Table X** should be used to establish a rank.
- 4) Aspects that received a **3** for any individual category or and overall **6 or higher** for the total rank will be evaluated for significance by the **EMS Team**. The **EMS Team** will use the ranking of the associated impacts along with knowledge of the potential scale of impact, probability of occurrence, and knowledge of daily operations to determine the significance of the associated aspect. The **EMS Team** should record in the comments section why the associated aspect has been determined significant.

4.3.2 Legal and Other Requirements

XXX is required to comply with a variety of legal and other requirements that are applicable to the environmental aspects of its activities, products or services.

- The **EMS Coordinator** is responsible for keeping up to date on legal and other requirements and communicating information to affected parties.
- The **EMS Coordinator** is responsible for handling issues related to permitting, reporting, and auditing requirements.
- The **EMS Coordinator** will up date Tables 1-4 as needed.

Table 1 Regulatory & Other Requirements

Permits	Agency/Organization	Expiration Date	Location	Retention
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Table 2 Record Keeping & Reporting Requirements

Records	Agency/Organization	Frequency	Location	Retention

Table 3 External Auditing

Audit Issue	Agency/Organization	Frequency	Location	Retention

The **EMS Coordinator** shall utilize resources identified in Table 4 to monitor legal and other requirements.

Table 4

Requirement	Agency/Organization	Resources

4.3.3 Objectives and Targets

XXX has established and maintains documented environmental objectives and targets.

- The **EMS Coordinator** will maintain a listing of documented environmental objectives and targets (**Document ##**).
- The **EMS Team** will establish environmental objectives and targets annually during **December**.
- The **EMS Team** will consider at least the following information when developing new objectives and targets: legal and other requirements, significant environmental aspects and impacts, prevention of pollution, technological options, financial, operational, and business requirements, **XXX**' environmental policy, and views of interested parties.

4.3.4 Environmental Management Programs

XXX has developed an environmental management program (**Document #**). This program is established to assist in achieving the objectives and targets and includes the designation of responsibility for achieving the objectives and targets at each relevant function and level of organization and means and time-frame by which they are to be achieved. Projects that relate to new developments and new or modified activities, products or services, the program shall be amended where relevant to ensure that environmental management applies to such projects.

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- The **EMS Team** with the approval of **top management** will designate responsibilities, means, and time frames for individual objectives and targets.
- **Top Management** will review the progress on objectives and targets **quarterly** and approve new objectives and targets in **December**.

SECTION 4.4 - IMPLEMENTATION & OPERATION

4.4.1 Structure and Responsibility

XXX has defined, documented and communicated the roles, responsibility and authority of personnel in order to facilitate effective environmental management. These roles and responsibilities are identified in Table 5.

Table 5 Roles and Responsibilities

Role	Responsible Party	Responsibility
Top Management	XXX	Assure adequate human, training, technological, and financial resources are available to implement and control EMS resources
EMS Team	XXX	Assist in the continual improvement of the EMS as defined in the EMS manual
EMS Coordinator / Management Representative	XXX	Assure the EMS requirements are established, implemented and maintained.

4.4.2 Training, Awareness and Competence

XXX has identified training needs of all employees in relation to its environmental management system. **Table 7** provides a listing of the operating procedures and those employees that require training on them

Table 7

- The **EMS Team** is responsible for training all existing and new employees on the environmental policy.
- The **EMS Team** is responsible for making all existing and new employees whose work activities may create a significant impact upon the environment aware of:
 - The importance of conformance with the environmental policy and procedures and with the requirements of the Environmental Management System;
 - The significant environmental impacts, actual or potential of their work activities and the environmental benefits of improved personal performance;
 - Their roles and responsibilities in achieving conformance with the environmental policy and procedures

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and with the requirements of the Environmental Management System, including emergency preparedness and response requirements;

- The potential consequences of departure from specified operating procedures.

- The **EMS Team** is responsible for evaluating the competence of personnel performing the tasks, which can cause a significant environmental impact on the environment, on the basis of appropriate education, training, and/or experience. Competence will be evaluated by **?????**.
- The **EMS Coordinator** will maintain all training records at **?????**.
- The **EMS Coordinator** will assure all training requirements identified for contract personnel will be established under the terms of contract or handled directly. Follow-up will be done annually to evaluate conformance with the contract.

4.4.3 Communication

XXX has developed procedures for handling internal communications between the various levels and functions of the organization and external communications with interested parties. Top Management of **XXX** has decided to **???** provide a list to any requesting interested parties.

- The **EMS Coordinator** is responsible for communicating information relative to the EMS to affected **XXX** employees.
- All external request related to environmental issues will be referred to the **EMS Coordinator**.

4.4.4 Environmental Management System Documentation

XXX has developed an EMS documentation system that is organized in a four-tier structure

EMS Manual	Level 1
EMS Procedures	Level 2
Standard Operating Procedures/Work Instructions	Level 3
Forms/Records	Level 4

Each of these levels will provide direction to relative documents in other levels.

4.4.5 Document Control

XXX has established a Document Control System that controls all documents and data that relate to satisfying the elements of the ISO 14001 standard and ensures: they can be located; they are periodically reviewed, revised as necessary and approved for adequacy by authorized personnel; the current versions of relevant documents are available at all locations where operations could significantly impact the environment; obsolete documents are assured against accidental use and those retained for legal or

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knowledge preservation suitably identified; and they are legible, dated, readily identifiable and properly stored.

- The **EMS Coordinator** will control the development or modification of any EMS documents. EMS documents shall include: title, document #, origination date, revision #, and names and numbers for any related forms and/or procedures. All EMS procedures must also include the previous items as well as the following: effective date, corresponding ISO Standard and EMS Manual requirements, and person responsible for preparation and an approval signature.

The origination date represents the date the first documented procedure went into effect under the EMS system. The revision date is the date the document was revised. The effective date the date when the newly approved document becomes effective (training should be complete). Revision #s begin with 0, which is the first documented version of this document under the EMS system and are updated subsequently as revisions are made. The document # will be defined used as such **???**

- The **EMS Coordinator** will assure all records will be uniquely identifiable by the form number and date completed. Records will be maintained according to requirements of their corresponding procedures and listed in the document control matrixes.
- The **EMS Coordinator**, or designee, will be responsible for moving obsolete electronic versions of a document to the obsolete file and placing new documents on the **?? drive** once the document has been submitted as approved.
- The **EMS Coordinator**, or designee, will replace existing hard copies of any controlled documents, which have been revised. Controlled procedures will have a statement in the footer that states “******Controlled copies of this document are on green paper or are on the computer network ?? drive******”
- All controlled copies of controlled documents shall be copied onto **green paper**. Any documents other than the original signed document, which is not on **green paper**, is not a controlled copy.
- The **EMS Coordinator** will assure all documents made **obsolete** by revised or new documents will be stamped “Obsolete” or will be discarded. Hard copies of obsolete procedures will be maintained in the EMS Coordinators obsolete files. Locations and retention times for obsolete documents will be maintained on the **document control/training matrixes** listed above in the reference material section.
- The **EMS Coordinator** will assure that all new or revised external documents that are referred to in procedures, if appropriate, will be listed in the document control matrixes listed above on the reference section. The document control matrix will include at a minimum the name of the reference material and location.

4.4.6 Operational Control

XXX has identified operations and activities associated with the identified significant environmental aspects. All operating procedures are identified in the document control / training matrix (**Table ???**).

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- The **EMS Team** shall plan these activities, including maintenance, in order to ensure they are carried out under specified conditions by: establishing and maintaining documented standard procedures to cover situations where their absence could lead to deviations from the environmental policy, objectives and targets; stipulating operating criteria in the procedures; establishing and maintaining procedures related to supplies and services used by the plant and communicating relevant procedures and requirements to suppliers and contractors.

4.4.7 Emergency Preparedness and Response

XXX has developed an emergency response plan (**Procedure #**). The plan identifies the potential for accidents and emergency situations and the corresponding response. The plan also considers the prevention and mitigation of any environmental impacts associated with accidents or emergency situations.

These plans shall be reviewed at least every three years or after the occurrence of an emergency.

SECTION 4.5 CHECKING AND CORRECTIVE ACTION

4.5.1 Monitoring and Measurement

XXX has established and maintains a system for measuring and monitoring the key characteristics of our operations that can have a significant impact on the environment. This system includes recording information to track performance, relevant operational controls and conformance with the established objectives and targets.

- The **EMS Team** will monitor the following environmental performance indicators ??? ...
- The **EMS Team** will assure monitoring equipment shall be calibrated and maintained and records kept.
- The **EMS Team** will periodically evaluate compliance with relevant environmental legislation and regulation using the following procedure.

4.5.2 Non-Conformance and Corrective Action

XXX has established and maintains a procedure (**Procedure ##**) to determine the need for and implementing corrective and preventative actions.

- All employees are empowered to report any nonconformities relating to environmental impacts.
- Corrective and preventative actions are taken to eliminate the causes of actual or potential nonconformities and are appropriate to the magnitude of problems and commensurate with the environmental impact.
- Changes to documented procedures resulting from corrective or preventative actions are recorded.

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4.5.3 Records Management

XXX has established procedures for identification, maintenance, and disposition of all environmental records. These records are kept to demonstrate conformance to **XXX**' EMS, the ISO 14001 standard and applicable regulations. Environmental records are legible, identifiable, and traceable to the corresponding activity or product involved. Environmental records are stored in a way that they are retrievable and protected against damage, deterioration or loss. The retention times for all environmental records are established and recorded.

- The **EMS Coordinator** will maintain a list of environmental records **Table X**.

4.5.4 Environmental Management System Audits

XXX has established and maintains procedures to carry out periodic audits of the environmental management system. The EMS audit procedure will determine the scope, frequency, methodology, and responsibility for the audits. The purpose of audits is to determine if the EMS has been properly implemented and maintained. Results of the EMS audits are reviewed with the Top Management.

Audit Procedure ##

SECTION 4.6 MANAGEMENT REVIEW

- The **Top Management** reviews the EMS quarterly to ensure continuing suitability, adequacy, and effectiveness of the EMS. This review is documented.
- The **Top Management** addresses the possible need for changes to the policy, objectives, and other elements of the EMS. Observations, conclusions and recommendations are document for necessary action and changes.