

Environmental Management System Manual



Approval:	<u>Tech. Svcs. Dept.</u>	Original Issue Date:	<u>01/01/2007</u>	No.	<u>Level I</u>
Owner:	<u>Tech. Svcs. Dept.</u>	Revision Date:	<u>1/31/12</u>	Page:	<u>2</u> of <u>9</u>

EMS Manual Level I Procedure Revision Record

Revision No.	Section	Details	Date
1	Table 1	Deleted Assistant Operations Manager	12/28/07
2	Att. B	Deleted Senior Manager, Admin. Svcs.	7/25/08
3	4.4.1	Revised title to reflect ISO 14001:2004	12/10/08
4	Att. B, Table 1 and 4.4.1	Revised titles / organizational structure	8/12/10
5	Table 1	Revised responsibility for ENV-8	9/20/10
6	4.4.5	Hard copy and/or electronic format	9/28/10
7	Att. B	Revised organizational structure	10/14/10
8	Att. B, Table 1	Revised titles	4/15/11
9	Level I, Scope, 4.3.1 and 4.3.2	Scope covers permitted facilities; Modified aspects and legal requirements.	5/20/11
10	Cover	LCSWMA Logo Modified	11/28/11
11	Level 1	Modified RRF to WTE Facility Name	1/31/12

Approval:	<u>Tech. Svcs. Dept.</u>	Original Issue Date:	<u>01/01/2007</u>	No.	<u>Level I</u>
Owner:	<u>Tech. Svcs. Dept.</u>	Revision Date:	<u>1/31/12</u>	Page:	<u>3</u> of <u>9</u>

PURPOSE:

The following summary describes the Lancaster County Solid Waste Management Authority environmental management system (EMS), providing direction and cross-reference to related EMS documentation. The EMS has been prepared in accordance with the requirements of ISO 14001:2004.

SCOPE:

The scope of the EMS includes the activities, products and services of Lancaster County Solid Waste Management Authority (LCSWMA), which includes the Waste to Energy Facility* (WTE), the Transfer Station (including transfer operations, administration, household hazardous waste collection, consolidation and transportation, and the Maintenance Facility), the Creswell Landfill, and the Frey Farm Landfill (including the landfill gas-to-energy site). LCSWMA operates an integrated system for the collection, transport, resource recovery and disposal of municipal and residual waste. Throughout this manual, the reference to LCSWMA encompasses the permitted facilities referenced above and all associated operations.

*Waste to Energy Facility (WTE) was formerly referenced as the Resource Recovery Facility (RRF). All WTE Facility permits and some EMS Documents identify this site as the RRF. Either WTE or RRF may be used to identify this site until all document updates and permit renewals are complete.

Environmental Policy (ISO 14001, 4.2)

The following documented Environmental Policy (included as Attachment A), which has been endorsed and supported by top management, is maintained and has been communicated to all employees and persons working on behalf of the organization. This policy is available to the public upon request in accordance with established communication procedures (ENV-05).

Planning (ISO 14001, 4.3)

Environmental Aspects (ISO 14001, 4.3.1)

A procedure has been established and implemented to identify the environmental aspects of the organization’s activities and products that it can control and over which it can be expected to have an influence (ENV-01). The procedure includes a process for qualitatively evaluating environmental aspects to determine those that have or can have significant impacts on the environment. Those aspects related to significant impacts are considered in setting the organization’s environmental objectives and serve as the basis for the development of operational control procedures. They are also closely associated with legal

Approval:	<u>Tech. Svcs. Dept.</u>	Original Issue Date:	<u>01/01/2007</u>	No.	<u>Level I</u>
Owner:	<u>Tech. Svcs. Dept.</u>	Revision Date:	<u>1/31/12</u>	Page:	<u>4</u> of <u>9</u>

and other requirements (ENV-02) to be followed during operational control procedures. Aspects data are maintained through periodic review and may be modified as a result of changing environmental regulations or aspects associated with LCSWMA operations. Planning for potential environmental aspects and related impacts associated with new or modified activities and services at LCSWMA facilities is completed through the project environmental review (ENV-15) procedure.

Legal and Other Requirements (ISO 14001, 4.3.2)

Procedures are maintained to identify and provide access to legal and other requirements to which the organization subscribes that are directly applicable to the environmental aspects of its activities, products and services (ENV-02). The procedure provides for identifying, anticipating and planning for regulatory changes and/or pending regulatory requirements, in-line with the organization's commitment to compliance. The "other" requirements to which LCSWMA subscribes include any policies or voluntary standards.

Objectives, Targets and Programs (ISO 14001, 4.3.3)

Procedure ENV-03 has been implemented for establishing and maintaining documented environmental objectives and targets for purposes of continually improving the EMS. The procedure includes provisions for the consideration of legal and other requirements, significant environmental aspects, technological options, financial, operational and business requirements and the views of interested parties when establishing and reviewing EMS objectives. The objectives and targets are consistent with the environmental policy including the commitment to prevention of pollution, compliance with legal and other environmental requirements and continual improvement.

Environmental Management Programs (EMPs) are project management plans, for achieving objectives and targets as specified in ENV-03. At a minimum, the programs include:

- Designation of the responsibility for achieving objectives and targets at each relevant function and level of the organization.
- The means and time frame by which they are to be achieved.

The procedure includes provisions for the review of new and/or modified activities and products to ensure they are taken into consideration in establishing and/or modifying management programs.

Approval:	<u>Tech. Svcs. Dept.</u>	Original Issue Date:	<u>01/01/2007</u>	No.	<u>Level I</u>
Owner:	<u>Tech. Svcs. Dept.</u>	Revision Date:	<u>1/31/12</u>	Page:	<u>5</u> of <u>9</u>

Implementation and Operations (ISO 14001, 4.4)

Resources, Roles, Responsibility and Authority (ISO 14001, 4.4.1)

The roles, responsibilities and authorities of key personnel are defined, documented and communicated in order to facilitate effective environmental management as depicted on Table 1, Responsibility Summary. An organizational chart has been prepared which provides the general EMS structure of the organization (Attachment B). Management personnel are responsible for providing resources within their functional areas essential to the implementation and control of the EMS. These resources include human resources, specialized skills, technology, and financial resources.

Senior Management has appointed the Senior Manager, Technical Services and/or Environmental Compliance Manager (Technical Services Department) as the management representatives who, irrespective of other responsibilities, have responsibility and authority for:

- Ensuring that the EMS requirements are established, implemented, and maintained in accordance with this policy document.
- Reporting on the performance of the environmental management system to Senior Management and making recommendations for its continual improvement.

Competence, Training and Awareness (ISO 14001, 4.4.2)

Procedures are maintained for identifying training needs (ENV-04). All personnel whose work may create a significant impact upon the environment receive appropriate training as specified in established procedures.

Procedures are maintained to make personnel at each relevant function and levels aware of:

- The importance of conformance with the environmental policy, procedures and the requirements of the EMS.
- 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, procedures, and requirements of the EMS including emergency preparedness and response requirements.

Approval:	<u>Tech. Svcs. Dept.</u>	Original Issue Date:	<u>01/01/2007</u>	No.	<u>Level I</u>
Owner:	<u>Tech. Svcs. Dept.</u>	Revision Date:	<u>1/31/12</u>	Page:	<u>6</u> of <u>9</u>

- The potential consequences of departure from specified operating procedures.

The procedure provides for ensuring the competency of personnel performing tasks, which can cause significant environmental impacts, based on appropriate education, training and/or experience.

Communication (ISO 14001, 4.4.3)

Procedures for communication of environmental issues have been established and maintained (ENV-05). Procedures are maintained for:

- Internal communications between various levels and functions of the organization.
- Receiving documentation and responding to relevant communications from external interested parties.

LCSWMA will evaluate communications on their significant environmental aspects for each request, or as required by law.

Environmental Management System Documentation (ISO 14001, 4.4.4)

LCSWMA maintains a four-tier system of EMS documentation as follows:

- EMS Manual Level I Procedures (this document)
- EMS Manual level II Procedures (15 documents designated as “ENVs”)
- Environmental Work Instructions (aka Standard Operating Procedures – SOPs)
- Environmental Records

This information is maintained in both electronic and paper form as specified in procedures ENV-06 and ENV-12 (Document Control and Control of Records, respectively).

The core elements of the EMS and their interaction as well as direction to related documentation are defined in the EMS Manual.

Document Control (ISO 14001, 4.4.5)

A procedure (ENV-06) is maintained for controlling all documents required by the EMS to ensure that:

- They can be located.
- They are periodically reviewed and revised as necessary and approved for adequacy by authorized personnel.

Approval:	<u>Tech. Svcs. Dept.</u>	Original Issue Date:	<u>01/01/2007</u>	No.	<u>Level I</u>
Owner:	<u>Tech. Svcs. Dept.</u>	Revision Date:	<u>1/31/12</u>	Page:	<u>7</u> of <u>9</u>

- The current versions of relevant documents are available at all locations where operations essential to the effective functioning of the system are performed.
- Obsolete documents are promptly removed from all points of issue and points of use, or otherwise guarded against unintended use.
- Obsolete documents retained for legal and/or knowledge preservation purposes are identified.

Documentation is maintained either in electronic and/or hardcopy format such that it is legible, dated (with dates of revision) and readily identifiable. It is maintained in an orderly manner with retention periods specified.

Procedures are maintained defining responsibilities for, and methods of, creation and modification of all documents within the system.

Operational Control (ISO 14001, 4.4.6)

In accordance with ENV-07, operational controls have been established associated with the identified significant environmental aspects of operations and activities in line with the environmental policy objectives and targets. These activities, including maintenance, are planned in order to ensure that they are carried out under specified conditions.

Documented procedures are maintained to cover situations where their absence could lead to deviations from the environmental policy and the objectives and targets.

Documented procedures exist for communicating relevant procedures and requirements to suppliers and contractors (ENV-15).

Emergency Preparedness and Response (ISO 14001, 4.4.7)

Procedures are maintained for identifying the potential for, and responding to accidents and emergency situations, and for preventing and mitigating the associated environmental impacts (ENV-08).

Emergency preparedness and response procedures are reviewed and revised after the occurrence of accidents or emergency situations, or as deemed necessary.

Periodic tests of the emergency preparedness and response procedures are conducted.

Approval:	<u>Tech. Svcs. Dept.</u>	Original Issue Date:	<u>01/01/2007</u>	No.	<u>Level I</u>
Owner:	<u>Tech. Svcs. Dept.</u>	Revision Date:	<u>1/31/12</u>	Page:	<u>8</u> of <u>9</u>

Checking and Corrective Action (ISO 14001, 4.5)

Monitoring and Measurement (ISO 14001, 4.5.1)

Documented procedures are maintained to regularly monitor and measure the key characteristics of operations and activities that can have a significant impact on the environment (ENV-09). These procedures include provisions for recording information to track performance, relevant operational controls, and conformance with established objectives and targets.

Related monitoring equipment used to monitor environmental characteristics of the site is calibrated and maintained and records of this process retained according to records control procedures (ENV-12).

Evaluation of Compliance (ISO 14001, 4.5.2)

A documented procedure (ENV-10) is maintained, which describes the process for conducting periodic evaluations of compliance with relevant environmental legislation, regulations, and other requirements to which the organization subscribes.

Non-Conformance and Corrective and Preventive Action (ISO 14001, 4.5.3)

Documented procedures are maintained for defining responsibility and authority for handling and investigating non-conformances, taking action to mitigate any impacts caused, and for initiating and completing corrections and preventive actions (ENV-11).

Changes in the documented procedures resulting from corrective and preventive actions are implemented and recorded.

Records (ISO 14001, 4.5.4)

A procedure has been developed for the identification, maintenance, and disposition of environmental records (ENV-12). These records include training records and the results of audits and reviews.

The records are maintained such that they are legible, identifiable and traceable to the relevant activity, product or service. They are stored and maintained in such a way that they are readily retrievable and protected against damage, deterioration or loss. Retention times are established and recorded.

Records are maintained to demonstrate conformance to the requirements of the ISO 14001 standard and the LCSWMA's EMS.

Approval:	<u>Tech. Svcs. Dept.</u>	Original Issue Date:	<u>01/01/2007</u>	No.	<u>Level I</u>
Owner:	<u>Tech. Svcs. Dept.</u>	Revision Date:	<u>1/31/12</u>	Page:	<u>9</u> of <u>9</u>

Environmental Management System Audit (ISO 14001, 4.5.5)

Documented procedures are maintained to define the environmental management system audit program (ENV-13). The program requires periodic audits be carried out in order to determine whether or not the EMS:

- Conforms to the requirements of ISO 14001 and this Environmental Management System Manual.
- Is implemented and maintained.

Information on the results of audits is one of the inputs to the formal management review.

The audit program and schedule are based on the environmental importance of activities and the results of previous audits. The audit procedures include audit scope, frequency, methodologies, responsibilities and requirements for conducting and reporting results.

Management Review (ISO 14001, 4.6)

A documented procedure exists for the review of the EMS by Senior Management to ensure its continuing suitability, adequacy and effectiveness (ENV-14). The management review meetings are documented.

The management review addresses the possible need for changes to policy, objectives, and other elements of the EMS in light of EMS audit results, changing circumstances, and the commitment to continual improvement.