

Lawrence Utilities Management System (LUMS)

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What is a Management System?

a standardized and comprehensive framework that help agencies maintain high standards of management, while identifying and acting on opportunities to improve.

Regulations are the Baseline – a management system is a commitment to go beyond voluntary

What is the LUMS?

A combined management system including:

- ISO 14001 Standard
- OHSAS 18001 Standard
- NBP EMS Standard



Agencies with a Management System commit to:

- Integrated approach to program management
- Going beyond simply meeting regulatory requirements
- A process of continual improvement
- Independent third party verification

How did we get to this point?

- The Wastewater Utility received certification for the National Biosolids Partnership Environmental Management system – 10/12/05
- ISO 14001 and OHSAS 18001 audits completed and certification achieved – 12/28/06
- Lawrence Utilities Management System expanded across the entire Department of Utilities, including water and wastewater

Deming Model

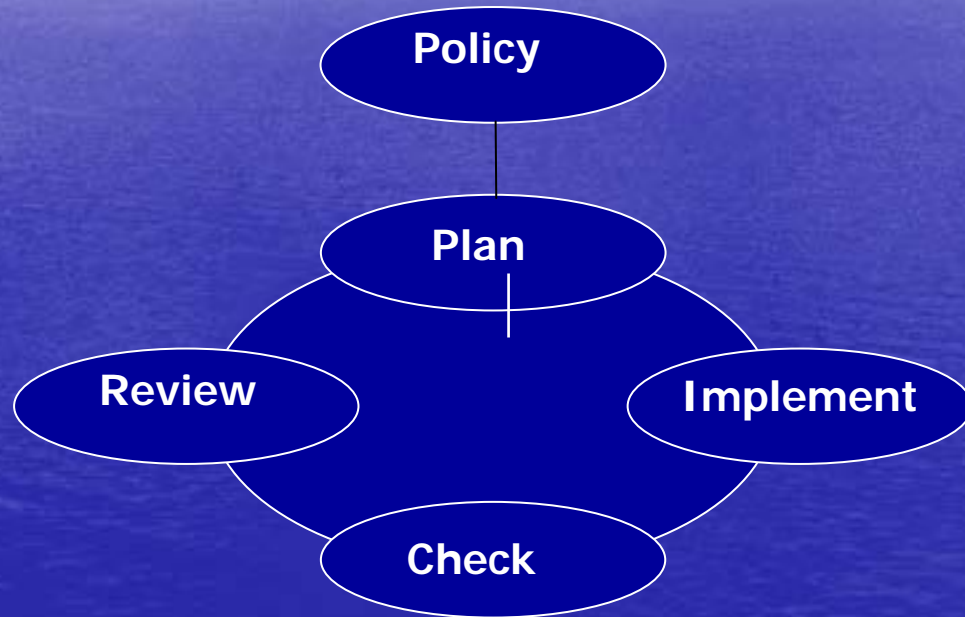
Policy

Planning

Implementation

Measurement &
Corrective Action

Management Review



Management System Structure

The LUMS is composed of 17 elements:

EMS Manual

Policy

Environmental Aspects/Safety &
Health Risks/Critical Control
Points

Legal & other Requirements

Goals & Targets for Continual
Improvement

Public Participation

Roles & Responsibilities

Training

Communication

Operational Controls

Emergency Preparedness &
Response

Documentation, Document
Control & Recordkeeping

Monitoring and Measurement

Nonconformances, Preventive
& Corrective Actions

Periodic Performance Reports

Internal Audit

Management Review

LUMS Manual

Documentation of management system

- Approved by management level with authority to commit people and resources
- Contain policy and required procedures
- Cover all environmental aspects/hazards/critical control points
- Defines responsibility for contractor activities
- Includes public participation, emergency response, communications

LUMS Policy

The City of Lawrence Wastewater Utility commits to:

- The prevention of pollution as it relates to the wastewater utility, the promotion of energy and resource conservation and the appropriate health and safety practices.
- Continual improvement in the management of the environment, health and safety of the wastewater utility, including development and implementation of goals and targets. The goals and targets will be set and reviewed for alignment with current City Commission goals.
- Comply with all applicable environmental laws, appropriate occupational health and safety practices, NBP Code of Good Practice, and any other requirements to which the organization subscribes.

Significant Environmental Aspects

- A significance ranking given to those actions taken during our day-to-day activities that impact the environment (positively or negatively)
- Includes occupational health and safety hazards and risks

Critical Control Points (CCP)

Activities, processes or events throughout the Biosolids Value Chain that control or influence the quality and management of biosolids and therefore the environment

Legal & Other Requirements

- Identification of legal and other requirements
- Procedure for adapting to changes

Goals and Targets for Continual Improvement

Include:

- Environmental Performance
- Identified/Potential Environmental Impacts
- Legal and Other Requirements
- Best Management Practices
- Occupational health and safety performance

Public Participation in Planning

- Proactive approach to involve interested parties
- Consistent with degree of current public interest, history of involvement, etc.
- Provide interested parties with meaningful opportunities to express views and consider those views.

Roles & Responsibilities

- Assign responsibilities
- Define and document roles and responsibilities of employees
- Provide resources necessary
- Define roles and responsibilities of contractors

Training

- Competence in performing assigned duties
- Awareness of LUMS to employees
- New and assigned employees
- Records of individual employee training
- Contractors shall establish their own training programs consistent with their roles and responsibilities

Communication

- Proactive communication plan
- Provides LUMS info to interested parties and public
- Procedure for receiving requests for info
- Process to ensure timely and complete response to inquiries
- Employees and contractors

Operational Controls

- Ordinances, procedures and monitoring used to ensure effective management of all environmental aspects/hazards/critical control points
- SOPs, work practices, training, experience
- Means of controlling the legal requirements
- Preventative maintenance
- Contractors shall establish operational controls consistent with roles and responsibilities

Emergency Preparedness & Response

- Response to accidents and emergency situations
- Review plan and update as necessary
- Contractors required to have emergency response plans

Examples – truck spills, equipment failure

Documentation, Document Control, and Recordkeeping

- Documents are available and locatable
- Created using document control
- Up-to-date
- Version #, effective date(s), references
- Approved by authorized personnel
- Records retained for a specific period of time

Monitoring and Measurement

- Process to test, check, observe or inspect the key parameters and characteristics of an activity
- Compliance with legal and other requirements
- Measure performance
- Track progress towards achieving goals and targets
- Contractors performance

Nonconformances: Preventive & Corrective Actions

- Investigation for nonconformances
- Identify cause
- Corrective action
- Document corrective action to prevent a recurrence.

LWWMS Program Performance Report

- At least annually
- Progress toward goals and targets
- Compliance with legal requirements
- Include activities by contractors
- Monitoring and measurement

Internal Audit

- Effectively meeting policy, LUMS requirements, and goals and targets
- Includes all activities and contractor activities
- Prepare corrective/preventive action plan resulting from the findings of audit

Management Review

Periodic review of Performance relative to:

- Policy commitments
- Goals and targets
- Performance measures

Must be documented

System Approach

- These 17 elements interact or work together. Somewhat like a cause and effect.

Audits

- **Internal EMS Audit** – systematic internal process to evaluate if agency's LUMS conforms to ISO 14001, OHSAS 18001, and NBP Standards
- **External 3rd Party Audit** – systematic audit of agency's management system performed by qualified 3rd party auditor using standardized protocol to verify if agency's system conforms to requirements.

LUMS Schedule

- We will continue to follow our management system
- We expect to “fine tune” the management system as we gain some experience with our LUMS
- Interim or surveillance audits for all three required annually by independent 3rd party.
- Re-verification required every 5 years for NBP EMS and every 3 years for ISO 14001 and OHSAS 18001

Benefits

- Better tracking of documentation and records
- Tool to show our job performance – recognize outstanding work that staff performs
- National Recognition
- Credibility and trust by interested parties
- Training Program
- Tool to increase communications between parties
- Third Party Audit is “value added”
- Help identify efficiencies, potential cost savings and opportunities for continual improvement
- Assist in informing the public of projects and wastewater utility activities
- Protection from outside forces and out of our control

