The City of Los Angeles’ wastewater system serves over four million people in Los Angeles and 27 cities that contract for this public works service. The system is comprised of more than 6,500 miles of sewer pipelines and four wastewater treatment and water reclamation plants that can process over 550 million gallons of flow each day citywide. The City processes, recycles and renews 147 billion gallons of this wastewater annually into 24 billion gallons of recycled water for beneficial water conservation purposes and 245 thousand tons of biosolids a treated commodity. Biosolids are nutrient-rich organic material resulting from the treatment of domestic sewage at wastewater treatment facility and recycled as a soil amendment and fertilizer.

The City's biosolids management program is nationally recognized and has received the highest achievement (Platinum level) for biosolids management and environmental stewardship from the National Biosolids Partnership (NBP) that includes the National Association of Clean Water Agencies (NACWA), Water Environment Federation (WEF), and U.S. Environmental Protection Agency (EPA). For more than fourteen years the City of Los Angeles has maintained an environmentally sound biosolids land application program that meets and exceeds all enforceable local, state and federal regulations. For at least twenty years, the city has beneficially reused 100% of all biosolids produced.

The City completed its EMS interim audit from May 26 –June 5, 2009. The City requested through the NBP to conduct its own audit as a substitution for an external third party auditor. A team of trained City staff conducted the Internal Audit and used their independent judgment to analyze the City’s current biosolids practices. The audit results were reported to the Bureau of Sanitation management, the NBP, and independent audit firm, KEMA.

**WHY:** The goal of the audit is to ensure the City of Los Angeles’ Biosolids EMS conforms to the requirements of the NBP EMS Program.

**WHAT:** The “Year 1” interim audit of the City of Los Angeles’ Biosolids Environmental Management System (EMS) and biosolids program. The City requested to substitute an internal audit for the interim audit and the National Biosolids Partnership (NBP) approved the request. The scope of the interim audit is consistent with NBP requirements for the biosolids EMS interim audit and the overall audit program agreed to by independent auditor, KEMA, and the City.

**WHERE:** Audit was conducted at Hyperion Treatment Plant, Terminal Island Water Reclamation Plant and Griffith Park Compost Facility

**WHEN:** May 26 – June 5, 2009

**WHO:** Trained City of Los Angeles employees performed the audit.

**RESULTS:** Continued certification under NBP National Biosolids EMS program through September 2010. Two (2) minor non-conformances require corrective action and the City of Los Angeles will consider the suggested opportunities for improvement.

**SCOPE:** Reviews are performed to assess the overall program effectiveness of the EMS processes. Audits are conducted to verify conformance with NBP EMS requirements. The techniques used to conduct the audit are interviewing, observing, reviewing documents and records, and transaction testing. The scope included the following:

1. Review of corrective action process to address open nonconformances from previous audits (August 2008)
2. Examination of EMS outcomes (regulatory compliance, interested party relations, environmental performance, quality practices)
3. Review of Significant EMS changes, EMS manual changes, and Management Involvement
AUDIT FINDINGS:

EMS Strengths

- EMS Manual is well documented and organized
- Biosolids Management Policy is effectively used to guide the program and incorporated into City’s procedures and practices.
- Management continues to support the EMS and provide resources to ensure a healthy system.
- Truck Loading Standard Operating Procedures (SOPs) for both TIWRP and HTP were current and updated (document control page)
- Positive effort has been made to integrate EMS goals and objective with the Bureau of Sanitation strategic plan.
- The City’s EMS program is readily accessible to the public through its website and stakeholder meetings such as the IRP and other community meetings.
- Opportunity exists for interested parties to provide input on the City’s program.
- The City’s communications program has an effective process for assuring a timely response to public inquiries.
- Participants in the audit were knowledgeable about their responsibility as it relates to the Biosolids EMS and eager to share information to the auditors.
- Preparation and training for the internal audit was effective in guiding the auditors in the actual audit process. Audit planning was helpful in preparing the auditors.
- The internal audit went smoothly and the team’s ability to work together was exemplary.
- Management supported the need for the audit process by allocating the resources required to conduct a successful audit.
- The City’s biosolids EMS program is a mature and healthy system that continues to improve and surpass the expectations of the NBP which ensures that the City maintains its Platinum status as an environmental leader in biosolids management.

EMS Weaknesses

- Navigation (accessing documents) through BEDRTS is not user-friendly.
- Document hyperlinks during the time of the audit were not working
- HTP and TIWRP Truck Loading SOPs were not available on the Intranet.
- Biosolids EMS Goals and Objectives progress reporting format is not uniform.

EMS Nonconformances

The 2009 internal audit found no major nonconformance and two (2) minor nonconformances.

- 01-09I Element 3: City’s EMS procedures states that MRT will periodically review and update critical control points but no evidence was found in the management review summary that discussion was held or review done concerning the identification of critical control points.
- 02-09I Element 16: The EMS Manual Document Control Page had minor discrepancies such as missing dates, names in the date column, and preparation and approval dates were interchanged.

If you would like to review the audit report, assist in addressing the findings, or have any questions please contact us at 310-648-5877 or visit www.lacity.org/SAN/biosolidsems/index.htm

Continual Improvements

The audit team identified several opportunities for improvement in the City of Los Angeles’ biosolids EMS.

- Provide system to ensure that SOPs are available online via the internet.
- Use a uniform biosolids EMS goals and objectives progress reporting format such as the BOS Balanced Scoreboard.
- Review of meeting minutes indicates that some managers were not present during regular bi-monthly BAT meetings. Recommend more frequent attendance of managers in regular bi-monthly BAT meetings.
- Improve the Navigation system for BEDRTS.
- Develop a process to ensure that links associated with documents and records located in BEDRTS, such as SOPs are functioning and working properly.

As a covered entity under Title II of the Americans with Disabilities Act, the City of Los Angeles does not discriminate on the basis of disability and upon request will provide reasonable accommodation to ensure equal access to its programs, services and activities.”