

2008 Re-Verification Audit Findings

Below is an overview of the findings from the 2008 re-verification audit of the City of Los Angeles Biosolids Environmental Management System (EMS).

The audit was conducted by an independent audit firm KEMA. The audit firm re-verified the City's EMS and recommended continued certification in the National Biosolids Partnership's EMS program at the Platinum Level status.

EMS Strengths

During the audit, the auditor noted the following strengths in the City's biosolids management system:

- An active public outreach program is in place that has several benefits (e.g. Measure E, TIRE project)
- Improved control methods at Green Acres have been introduced, including inspections, continuous surveillance.
- Use of biosolids at the Green Acres farm is well monitored
- Positive feedback was received from all interested parties interviewed about LA City being honest and forthright about their biosolids practices.

EMS Outcomes

The auditor also found that the city's biosolids program is improving through the use of the management system and identified the following improvement outcomes in the program since the last third party audit that was conducted in 2006.

Quality Practices

- Operations at both Hyperion and Terminal Island are now able to produce Class A biosolids consistently. In addition to improved product quality, this has provided significant cost benefit and suitability for additional uses.
- Development of standard operating procedures has improved operating practices and captured operator knowledge.

Environmental Performance

- The LA City pretreatment program & SIU inspections have contributed to a 20% reduction in mercury content in biosolids.

Regulatory Compliance

- Continued 100% regulatory compliance with more stringent and demanding legal requirements, including local ordinances.

Relations with Interested Parties

- The effectiveness of LA City's communication channels have improved as demonstrated by positive feedback received from Measure E and an increase in interested parties requesting information about the biosolids program.

EMS Nonconformances

During the audit, KEMA identified five nonconformances with respect to the audit criteria indicated below. Review of these nonconformances determined that they do not represent a

system deficiency. The City has prepared corrective action plans to address each nonconformance and the auditor has reviewed those plans and found them to be acceptable. The actions taken to address each nonconformance will be verified during the next scheduled third party audit.

- **08-03E** – NBP EMS Element 5 requires that biosolids objectives be measurable. Some biosolids objectives in 2007-8 and 2008-9 are not stated in a way that allows the improvement to be measured.
- **08-04E** / NBP EMS Element 5 require that action plans be developed for each biosolids objective. Action plans have not been developed for those biosolids (EMS) objectives that are not directly related to Division goals.
- **08-08E** – NBP EMS Element 14 requires that root cause be identified for nonconformances and LA City requires a responsible person be identified for taking corrective / preventive action. Corrective actions 07-01I, 02I, 04I and 05I do not fully identify root cause or clearly indicate the person(s) responsible for taking and verifying corrective action.
- **08-09E** – NBP EMS Element 17 requires that Management Reviews address performance relative to policy commitments and the continuing suitability, adequacy and effectiveness of the management system. The most recent management review (5/28/08) does not discuss performance against policy commitments or make any conclusion and/or recommendation about the suitability, adequacy and effectiveness of the management system. In addition, management reviews have not "addressed public comments received", as required by LA City Element 6.
- **08-12E** – LA City's definition of critical control points and operational controls (glossary) requires that they address "legal, quality and public acceptance requirements." The critical control points and operational controls and related monitoring and measurement identified by LA City (EMS Manual elements 3, 10, & 13, respectively) do not make clear reference to legal, quality or public acceptance requirements.

Continual Improvements

KEMA observed several opportunities for improvement in the City of Los Angeles' biosolids EMS. The City is not obligated to taken any action on these items but will consider them when discussing and making improvements to the management system.

- The Biosolids EMS Manual could be simplified and shortened.
- Material Safety Data Sheets at the Green Acres Farm could be reviewed / updated more frequently.
- Efforts in place to ensure compliance with SJVAPCD 4565 could provide an opportunity to further demonstrate LA City's commitment to compliance.
- Requirements for contractor performance in conforming to the LA City Biosolids EMS could be more specific to ensure understanding of each key requirement and desired outcome (e.g. compliance, public acceptance, operational controls).
- The process for defining critical control points and operational controls, which is currently separated into various parts of the EMS Manual, could be integrated into one process that includes consideration of best practices and how operational controls are used.

- It could help to identify how the need for review of operational controls is determined necessary. Does the EMS Coordinator make that decision or is it initiated by BAT, or some other method?
- Separation of documents requiring control from records requiring control could help in simplifying the requirements and communicating control methods needed.
- The EMS process for "Preventive and Corrective Action" could be useful in investigating the cause of emergency incidents, implementing appropriate preventive / corrective action and recording the effectiveness of that action.
- Independent audits of the biosolids management system could be performed more frequently than every 2 years to help identify system improvement opportunities.
- The EMS Corrective and Preventive Action process could be analyzed to help identify and prevent repeating causes.

To view the complete audit report access our website at

http://www.lacity.org/SAN/biosolidsems/program_performance/audits_results.htm

If you have any questions or comments on the re-verification audit findings please contact us at 310-648-5877 or via e-mail at san.biosolidsems@lacity.org.