

National Biosolids Partnership Biosolids EMS Audit Report

Interim Audit

Louisville & Jefferson County Metropolitan Sewer District Louisville, KY

<u>Audit Dates:</u> August 26 – 28, 2009

Audit Conducted By:

KEMA-Registered Quality, Inc. (Chalfont, PA)

Auditor: Mr. Jon Shaver, Biosolids EMS Lead Auditor

Report Written By: Jon Shaver, Biosolids EMS Lead Auditor / Biosolids Auditor

Report Date: October 15, 2009

Reviewed By: Louisville and Jefferson County MSD

Approved By: Pierre Salle, President KEMA-Registered Quality Inc.



Louisville & Jefferson County Metropolitan Sewer District, Louisville KY Interim Audit #1, August 26 – 28, 2009

Table of Contents

1.	EXEC	EXECUTIVE SUMMARY		
2.	AUDIT DETAILS			
	2A.	Local Agency Details	4	
	2B.	Audit Team	4	
	2C.	Audit Scope and Methodology	4	
	2D.	Reference Materials	5	
	2E.	Definitions of Audit Findings & Required Corrective Action	5	
3.	SUMMARY OF AUDIT RESULTS			
	3A.	EMS Strengths	6	
	3B.	Outcomes	6	
	3C.	Nonconformances	6	
	3D.	Opportunities for Improvement	7	
	3E.	Verification Statement	7	
	3F.	Appeals	7	
	3G.	Agreements	8	
4.	AUDIT OBSERVATIONS + RESULTS			
	4A	Significant Changes	9	
	4B	Review of Open Nonconformances	9	
	4C	Audit - Communication Program	10	
	4D	Audit - Competency, Awareness & Training		
	4E	Audit - Corrective & Preventive Action	11	
	4F	Audit - Critical Control Points & Operational Controls	11	
	4G	Audit - EMS Planning	12	
	4H	Audit - Goals & Objectives	12	
	41	Audit - Maintenance	13	
	4J	Audit - Management Involvement (incl Policy, Mgmt Review)	13	
	4K	Audit - Internal Audits	13	
	4L	Audit - Solids Stabilization, Conditioning & Handling	14	
APPENDICES			15	
	List of	Participants	15	
	List of Documents & Records Reviewed			



Louisville & Jefferson County Metropolitan Sewer District, Louisville KY Interim Audit #1, August 26 – 28, 2009

1. EXECUTIVE SUMMARY

KEMA-Registered Quality Inc. (KEMA) conducted an independent audit of the environmental management system (EMS) being used by Louisville & Jefferson County Metropolitan Sewer District (MSD) in managing its biosolids program. The audit was conducted August 26 to 28, 2009 at the request of the National Biosolids Partnership and was interim audit #1 following verification of the MSD biosolids program in August 2008.

The purposes of this audit were to:

- Verify that the biosolids EMS being used by MSD conforms to expectations and requirements of the National Biosolids Partnership (NBP) Environmental Management System for Biosolids, comprised of 17 EMS Elements
- Confirm that the MSD biosolids management program is functioning as intended, with practices and procedures being performed as documented.
- Examine outcomes MSD is achieving by using a systematic approach for managing their biosolids program.

During the audit KEMA reviewed several processes and activities used by MSD in managing its biosolids program and assessed the conformance of these processes with expectations and requirements of the National Biosolids Partnership EMS Elements. This scope of the audit was consistent with the interim audit program agreed upon by MSD and KEMA.

The audit determined that:

- The management system is generating positive outcomes, particularly in improved LG product quality, improved pretreatment controls and establishing measurable performance indicators.
- The MSD biosolids management system meets requirements of NBP's EMS Elements with four minor exceptions (minor nonconformances). This level of nonconformance is considered normal for a relatively new management system,
- One minor nonconformance from prior third party audits remains open. That nonconformance is being worked on and lack of correction does not represent a systemic problem. All other nonconformances have been closed.
- Several "opportunities for improvement" were noted, particularly for simplifying the management system for better understanding and use.

As a result of this audit, KEMA has verified that the biosolids management system being used by MSD meets the expectations and requirements of the NBP EMS Elements and we recommend continuing certification of that management system within NBP's Biosolids EMS Program.



Louisville & Jefferson County Metropolitan Sewer District, Louisville KY Interim Audit #1, August 26 – 28, 2009

2. AUDIT DETAILS

2A. Local Agency Details

Agency Name: Louisville & Jefferson County Metropolitan Sewer District (referred to as MSD in this report)

Number of Employees = 120

Biosolids Production Sites Audited: Morris Forman Wastewater Treatment Plant, Louisville KY

Volume of Wastewater Treated = 120 MGD (average), permitted to 300MGD

Biosolids Produced = 80 dry tons per day Class A EQ

2B. Audit Team

The National Biosolids Partnership assigned KEMA-Registered Quality Inc. to perform this audit on their behalf. Mr. Jon Shaver conducted the audit for KEMA. Mr. Shaver is certified by NBP as a Biosolids EMS Lead Auditor and Biosolids Auditor. KEMA and auditors have an independent relationship with Louisville & Jefferson County Metropolitan Sewer District that meets criteria established by the National Biosolids Partnership for Third Party Audit Companies and Auditors.

2C. Audit Scope and Methodology

The scope of this audit covered parts of the MSD biosolids program, which encompasses pretreatment, biosolids stabilization, storage and transportation and end use / disposition, with special attention to practices and management activities that directly support biosolids-related operations, processes and activities.

The audit included the following topics, consistent with NBP requirements for biosolids EMS interim audits and the overall audit program agreed to by KEMA and EWA.

- 1. Review of significant changes
- 2. Verification of open nonconformances from previous KEMA audits
- 3. Review of effectiveness for the following processes:
 - Management Involvement & Review
 - Goals & Objectives
 - Corrective and Preventive Action
- 4. Full audits of the following processes:
 - EMS Planning & Public Participation
 - Biosolids Program Goals & Objectives
 - Communication Program
 - Management Involvement (incl Policy, Mgmt Review)
 - Identification of Critical Control Points & Operational Controls
 - Competency, Awareness & Training
 - Solids Stabilization, Conditioning & Handling



Louisville & Jefferson County Metropolitan Sewer District, Louisville KY Interim Audit #1, August 26 – 28, 2009

- Internal Audits
- Corrective & Preventive Action
- 5. Examination of outcomes being achieved by MSD in the areas of regulatory compliance, interested party relations, environmental performance and quality practices.

The audit was conducted by interviewing key personnel involved in the MSD biosolids program and each process, observing practices in place and reviewing pertinent documents and records. Interested parties were interviewed and transaction tests were performed to verify management system effectiveness. It was performed using sampling techniques in a manner that is consistent with the NBP Auditor Guidance (August 2007) and KEMA's Biosolids EMS Audit Planning Guide.

2D. Reference Materials

The following documents were used as references during this audit:

EWA EMS Manual (current version)

National Biosolids Partnership "EMS Elements" (May 2002)

National Biosolids Partnership Biosolids EMS Third Party Auditor Guidance (August 2007)

National Biosolids Partnership Code of Good Practice

National Biosolids Partnership Manual of Good Practice

2E. Definitions of Audit Findings & Required Corrective Action

<u>Major Nonconformance</u> – a serious omission from requirements and/or other departure that represents, or could cause, a systemic failure. Major nonconformances must be corrected within 90 days for verification to proceed.

<u>Minor Nonconformance</u> – an isolated departure from requirements that does not represent a systemic failure. Minor nonconformances require timely and effective correction and verification by a Third Party Auditor.

<u>Opportunity</u> (for improvement) – possible improvement in the EMS based on auditor observations. There is no obligation for action in response to these observations.



Louisville & Jefferson County Metropolitan Sewer District, Louisville KY Interim Audit #1, August 26 – 28, 2009

3. SUMMARY OF AUDIT RESULTS

3A. EMS Strengths

During this audit KEMA noted the following strengths in the MSD biosolids management system.

- It is clear that the EMS Coordinator is dedicated to developing an EMS that is consistent with NBP requirements and is putting effort into doing that.
- The working relationship between MSD and A-J Inc. (marketing contractor) is an excellent example of how contractor relationships can be mutually beneficial.
- Internal audit program is well organized and includes personnel from various areas of the plant.

3B. Outcomes

The MSD biosolids program is improving through the use of their management system. The following outcomes within the past two years were confirmed.

Regulatory Compliance

Response to high nickel event – increased sampling, greater awareness of potential contaminants

Interested Party Relations

Gold Award from NACWA (zero permit violations 2007 & 2008) – national recognition, continuing improved credibility and public perception

Truck routes changes in response to public input – improved public acceptance

Quality Practices

Better communication between Departments – shared responsibilities, improved morale

Training focus on wet or dry side of plant – more in-depth process expertise

Improved measurability – maintenance PMs for instance

Environmental Performance

FOG Program – certified haulers, less FOG into plant

Product characteristics have improved (smaller particle size) – product more marketable for beneficial reuse

Implement "9 Minimum Controls" – industries more involved, continue to conform with consent decree

3C. Nonconformances

During this audit, KEMA found four (4) minor nonconformances with respect to the audit criteria, as described below and in the "Audit Results" section of this report. Review of these nonconformances



Louisville & Jefferson County Metropolitan Sewer District, Louisville KY Interim Audit #1, August 26 – 28, 2009

determined that they do not represent a systemic deficiency. KEMA's Lead Auditor reviewed Corrective Action Plans prepared by MSD addressing each nonconformance and found them acceptable. The effectiveness of corrective actions will be verified during the next third party audit (currently planned for August 2010).

Minor Nonconformance JS/09-01/Element 1 NBP EMS Element 1 requires that the management system be documented in an EMS Manual (or equivalent). The EMS Manual has some procedures that do not reflect actual practice (e.g. corrective action) and some that are not clear or sufficient (e.g. goals & objectives).

Minor Nonconformance JS/09-02/Element 5 NBP EMS Element 5 requires that biosolids objectives for improvement be measurable. Some improvement objectives in place within the biosolids program are not sufficiently measurable (e.g. "maintain or improve pretreatment compliance levels", "monitor public participation list").

Minor Nonconformance JS/09-03/Element 9 NBP EMS Element 9 requires that information about biosolids activities and the Biosolids Management Policy be communicated to employees. Outdated goals and objectives are posted on plant bulleting boards and some plant personnel do not recognize the term "Code of Good Practice" or its meaning as part of the biosolids policy. Internal communication of these management system essentials is not effective.

Minor Nonconformance JS/09-04/Element 17 NBP EMS Element 17 requires that records of management reviews include documentation of follow-up actions. The management review conducted May 7, 2009 includes a decision to "see more focus on the critical areas of the Morris Forman plant", however there is no follow-up action plan, responsibilities or timing noted for implementing this decision.

3D. Opportunities for Improvement

Opportunities for improving the MSD biosolids program are described in the "Detailed Audit Results" section of this report.

3E. Verification Statement

Based on the results of this audit, KEMA has verified the management system for MSD biosolids program continues to meet the expectations and requirements of the National Biosolids Partnership Biosolids EMS Program. Continuing certification within the NBP Biosolids EMS Program is recommended.

3F. Appeals

The NBP provides an appeals process for biosolids organizations and interested parties that disagree with the findings of a third party EMS audit. The verification appeals process involves an Appeals Board; representing a balance of biosolids management interested parties, including an environmental advocacy group, and wastewater industry professionals. An appeal must be submitted within 30 days of the official verification decision or interim audit decision by the Audit



Louisville & Jefferson County Metropolitan Sewer District, Louisville KY Interim Audit #1, August 26 – 28, 2009

Company. Anyone who may need help in understanding the appeals process should contact the National Biosolids Partnership staff, Mr. Eugene DeMichele at 703-684-2438, or by e-mail: edemichele@wef.org.

An appeal process is available to persons concerned about the methods and/or scope of this audit. Further information about this appeal process can be obtained directly from KEMA (contact Pierre Salle, pierre.salle@kema.com or Jon Shaver jon.shaver@kema.com) or from NBP (contact Eugene DeMichele, edemichele@wef.org).

3G. Agreements

MSD has developed written plans for correcting all nonconformances found during this audit. KEMA's Lead Auditor has reviewed those corrective action plans and determined that once effectively implemented they will correct the deficiency identified in the nonconformance. MSD will implement the approved plans in a timely manner and review the corrections internally within 6 months. The effectiveness of actions taken to correct nonconformances will be verified during the next assigned third party audit.

MSD and KEMA have agreed that the next interim audit will occur prior to August 31, 2010. That audit can be conducted as a third party audit, or MSD may perform that audit as a self assessment if desired. The scope will be consistent with the Interim Audits Program agreed by MSD and KEMA. MSD will make arrangements for that audit through the National Biosolids Partnership.



Louisville & Jefferson County Metropolitan Sewer District, Louisville KY Interim Audit #1, August 26 – 28, 2009

4. AUDIT OBSERVATIONS + RESULTS

Observations and results of individual audits performed are described below. The National Biosolids Partnership Biosolids EMS Auditor Guidance (August 2007) and the KEMA Audit Planning Guide for Biosolids EMS Audits were used as guides in performing each audit

4A Significant Changes

Significant changes in the past year:

- Alex Novak appointed Director of Operations
- Waste Management Inc. contracted to handle special waste & trash

The Lead Auditor determined that these changes were implemented in a manner that is consistent with current EMS concepts & no further auditing is necessary.

4B Review of Open Nonconformances

Corrective action taken by MSD in response to nonconformances found in the previous third party audit were reviewed for effectiveness. Results of those reviews are summarized below.

<u>Minor Nonconformance 08-01/Element 1</u> EMS documentation is not consistent with NBP requirements in some areas:

- Each Element has been approved by an individual, however the authority of that individual is not clearly described or referenced.
- The "fenceline" included in documentation infers the EMS does not extend to external biosolids transportation and use. Exclusion of "biosolids use / disposal" is not consistent with MSD EMS Element 1 and with NBP requirements.

Corrective Action: MSD modified their "Biosolids Management Manual" to provide a written description of their Biosolids EMS. The manual is structured to group elements that the EMS Coordinator has determined to be similar. Deficiencies noted in the above nonconformance have been corrected. This nonconformance is now closed.

Review of corrective action for this nonconformance also resulted in the following finding:

Minor Nonconformance JS/09-01/Element 1 NBP EMS Element 1 requires that the management system be documented in an EMS Manual (or equivalent). The EMS Manual has some procedures that do not reflect actual practice (e.g. corrective action) and some that are not clear or readily understood by MSD employees (e.g. goals & objectives).

<u>Minor Nonconformance 08-02/Element 2</u> It is not clear how performance against policy commitments is monitored or assessed to ensure these commitments are integrated into MSD activities.



Louisville & Jefferson County Metropolitan Sewer District, Louisville KY Interim Audit #1, August 26 – 28, 2009

Corrective Action: MSD has implemented a procedure to have the Core Team periodically evaluate their performance against Policy commitments. Such an evaluation has been done. This nonconformance is now closed.

Minor Nonconformance 08-03/Element 3 The description of critical control points in MSD EMS Manual (El 3 - scope) does not include the need to meet public acceptance requirements,.

Corrective Action: MSD is in the process of assessing and revising critical control points & will include public acceptance criteria as part of that evaluation. This nonconformance is not yet completed and remains open.

Minor Nonconformance 08-07/Element 17

Management reviews do not specifically address suitability and adequacy of the EMS.

Corrective Action: Management reviews conducted by the Executive Team include assessment of EMS suitability, adequacy & effectiveness. This nonconformance is now closed.

<u>Minor Nonconformance 08-08/Element 12</u> As currently structured, the EMS Manual and SOPs accessed online can be changed without authority, meaning the documents in use may not be fully controlled by the proper authority.

Corrective Action: MSD has limited authority to modify their manual to Core Team only. Such changes are made after discussion by the Core Team. This nonconformance is now closed.

4C Audit - Communication Program

Information is provided to the public upon request and is available from the MSD website. A Biosolids Program Performance Report was issued in April 2009. The truck route for biosolids shipments was determined with public input. The Director holds town meetings weekly to provide the public with information and opportunities to give input. Internal communication occurs through daily planning meetings, shift meetings, informal discussions with the EMS Coordinator and training. Interested parties interviewed (including federal and state regulators and a user of MSD biosolids) were positive about the biosolids program and communication channels in place..

Audit Results

Review of the process described above found it meets NBP expectations and conforms to applicable requirements of the EMS Elements, except as noted below:

Minor Nonconformance JS/09-03/Element 9 NBP EMS Element 9 requires that information about biosolids activities and the Biosolids Management Policy be communicated to employees. Outdated goals and objectives are posted on plant bulleting boards and some plant personnel do not recognize the term "Code of Good Practice" or its meaning as part of the biosolids policy. Internal communication of these management system essentials is not effective.



Louisville & Jefferson County Metropolitan Sewer District, Louisville KY Interim Audit #1, August 26 – 28, 2009

4D Audit - Competency, Awareness & Training

Operations training focuses on either the "dry" side or "wet" side of the plant. Doing this has enabled more in-depth training and operator knowledge. New employees receive orientation training that include EMS Awareness. Job task qualifications and competency requirements are set in Job Descriptions and an ABC National Standard is being adopted. Performance is assessed during annual reviews.

Audit Results

Review of the process described above found it meets NBP expectations and conforms to applicable requirements of the EMS Elements, except as noted below:

4E Audit - Corrective & Preventive Action

The Core Team determines if events or findings should be handled using the EMS Corrective and Preventive Action Process. To date, the process has been used mostly to address internal and external audit findings. Some incident investigations require use of the CAPA process if the Core Team deems this is needed. An incident involving high nickel levels in incoming material was detected using existing procedures & effectively handled using the EMS Corrective Action Process.

Audit Results

Review of the process described above found it meets NBP expectations and conforms to applicable requirements of the EMS Elements, except as noted below:

In addition, the following opportunities were noted:

 The CAPA database could be organized in a way that enables corrective actions not completed as required to be identified.

4F Audit - Critical Control Points & Operational Controls

Critical control points are used to manage biosolids quality and environmental impacts. They are identified in the Biosolids Management Manual and reviewed annually by the Core Team. Associated legal and other requirements, operational controls (+ SOPs), monitoring / measurement responsibilities and potential environmental impacts are also identified.

Audit Results

Review of the process described above found it meets NBP expectations and conforms to applicable requirements of the EMS Elements.:

In addition, the following opportunities were noted:

- The list of critical control points could be simplified by considering requirements for compliance, public acceptance, quality and control of environmental impacts associated with the value chain category.
- The critical control point "Class A/EQ Sales & Distribution" is not sufficiently detailed to enable controls to be identified.



Louisville & Jefferson County Metropolitan Sewer District, Louisville KY Interim Audit #1, August 26 – 28, 2009

 Several SOPs noted as operational controls in the list of critical control points & operational controls do not exist.

4G Audit - EMS Planning

The cross-department "Core Team" meets bi-weekly to discuss the EMS and its principles. This enables interaction between departments to be discussed. A contractor "expectations" document has been added based on Core Team discussion. Action was taken to try to reduce dust during spreading in response to public input. An odor survey form was sent to interested parties & results are being used in planning the biosolids program. In addition, several local associations and fairs are attended. The Federal Regulator interviewed during this audit would like to have MSD do research on emerging contaminants not currently regulated.

Audit Results

Review of the process described above found it meets NBP expectations and conforms to applicable requirements of the EMS Elements.:

In addition, the following opportunities were noted:

- Participation in Community Advisory Panel (CAP) or Local Emergency Planning Committee (LEPC) could help expand external communications and obtain improvement input.
- Arrangements for contracting removal of hazardous waste could be expedited to minimize risk of noncompliance.
- Research on content (if any) of emerging contaminants (e.g. perfluorinated compounds) as suggested by EPA could help in planning future biosolids program requirements.

4H Audit - Goals & Objectives

The Core Team sets goals and objectives for the MSD biosolids program during meetings attended by various functions involved in the value chain, including key contractors. Action plans are developed to address achievement of the each objective and these plans include responsibility and timing. The Core Team monitors progress in achieving each objective and determines if additional or alternate action is needed.

Audit Results

Review of the processes described above found they meets NBP expectations and conform to applicable requirements of the EMS Elements, except as noted below:

Minor Nonconformance JS/09-02/Element 5 NBP EMS Element 5 requires that biosolids objectives for improvement be measurable. Some improvement objectives in place within the biosolids program are not sufficiently measurable (e.g. "maintain or improve pretreatment compliance levels", "monitor public participation list").

In addition, the following opportunities were noted:

 Biosolids goals and objectives could be more meaningful if timing for goals was a 5 to 10 year period and timing for objectives was a 1 to 2 year period.



Louisville & Jefferson County Metropolitan Sewer District, Louisville KY Interim Audit #1, August 26 – 28, 2009

4I Audit - Maintenance

An effective preventive maintenance program is in place & a move towards predictive maintenance is underway. Performance measures such as % PMs completed, are used.

Audit Results

Review of the process described above found it meets NBP expectations and conforms to applicable requirements of the EMS Elements.:

4J Audit - Management Involvement (incl Policy, Mgmt Review)

The Biosolids Policy (approved 2005) provides direction and commitments for the MSD biosolids program. Executive management is aware of and supports the EMS initiative and reviews performance at least annually. Executive meetings occur weekly and the MSD Board meets biweekly. Discussions include biosolids program.

Audit Results

Review of the process described above found it meets NBP expectations and conforms to applicable requirements of the EMS Elements, except as noted below:

Minor Nonconformance JS/09-04/Element 17 NBP EMS Element 17 requires that records of management reviews include documentation of follow-up actions. The management review conducted May 7, 2009 includes a decision to "see more focus on the critical areas of the Morris Forman plant", however there is no follow-up action plan, responsibilities or timing noted for implementing this decision.

In addition, the following opportunities were noted:

- Management Reviews could be simplified by considering the reviews to be a process that includes Core Team meetings, LG & Board meetings, as well as Executive meetings, each covering various aspects of biosolids program performance and recommendations / directions for improvement.
- Explanation of the meaning of key parts of the Biosolids Management Policy could help develop understanding of these commitments.

4K Audit - Internal Audits

Internal audits are planned by the Core Team and conducted quarterly. Their purpose is to verify that documented practices are in place for the biosolids program. Audit reports are submitted to Executive Management and reviewed during management reviews.

Audit Results

Review of the process described above found it meets NBP expectations and conforms to applicable requirements of the EMS Elements, except as noted below:

In addition, the following opportunities were noted:



Louisville & Jefferson County Metropolitan Sewer District, Louisville KY Interim Audit #1, August 26 – 28, 2009

Internal audit reports could note conclusions from the audit that relate to the audit purpose(s)

4L Audit - Solids Stabilization, Conditioning & Handling

Solids are digested, dewatered, centrifuged prior to drying (94% dry). After drying the pellets are filtered to obtain desired sizing, cooled and stored prior to shipment to end use sites. Critical control points are in use and correctly identified. Operators are aware operational control needs and SOPs, including regulatory requirements, quality requirements and desire to minimize environmental impacts. A great deal of communication occurs between operations personnel and Sales Agent to ensure quality.

Audit Results

Review of the process described above found they it meets NBP expectations and conforms to applicable requirements of the EMS Elements:



Louisville & Jefferson County Metropolitan Sewer District, Louisville KY Interim Audit #1, August 26 – 28, 2009

APPENDICES

List of Participants

The following persons participated in this audit. Other persons provided additional explanations, as needed.

<u>Name</u>	<u>Position</u>	<u>Organization</u>
Saeed Assef	Dir Infrastructure	MSD
Robert Bates	Process Manager – Solids	MSD
Brian Bingham	Dir Regulatory Services	MSD
Greg Brewton	Maintenance Electrician	MSD
Robin Burch	Process Support Technician	MSD
Loretta English	Laboratory Manager	MSD
Joeseph Falleri	Process Supervisor	MSD
Lisa Gaus	Pretreatment Administrator	MSD
Marion Gee	Dir Finance	MSD
Tony Glore	Training & Performance Administrator	
Troy Henderson	Internal Audit Team	MSD
Adriane Niehoff	Internal Auditor	MSD
Alex Novak	Director of Operations	MSD
Larry Ramsey	Mechanical Supervisor	MSD
Rob Roy	Maintenance Planner	MSD
McKinley Reed	Maintenance Manager	MSD
Jenni Schelling	Internal Auditor	MSD
Sharon Worley	Technical Services Engineer	MSD

Contractors

Clarke Fennimore Sales Agent A-J Inc,

Interested Parties

Tom FereeFarer / Land OwnerCentral IndianaJeff HarmonBiosolids CoordinatorIndiana DEQMike HomRegional Biosolids CoordinatorUSEPA

List of Documents & Records Reviewed

Biosolids Management Plan (5 year)

Biosolids Management Program Performance Report 4/10/09

Biosolids Policy 6/23/05

CARE Plan for haulers rev 3/4/09

Corrective / Preventive Action Plan Spreadsheet

Daily Status Report 8/27/09

Dryer Pellet Tracking Sheet 8/26/09

Incident investigation + Corrective action plan - high nickel event 4/1/09



Louisville & Jefferson County Metropolitan Sewer District, Louisville KY Interim Audit #1, August 26 – 28, 2009

Internal audit report 7/27/09
LG Product Brochure
List of critical control points & operational controls (rev 7/22/09)
List of Goals & Objectives 7/23/09
Management Review minutes 5/7/09
Operator Certificates (various)
Public Outreach log
Reliability Test Operational Guide
SOPs (various)
Training records (various)

END OF REPORT