



**National Biosolids Partnership
Biosolids EMS Interim Audit Report**

**City of Raleigh Public Utilities Department
Raleigh, North Carolina**

Audit Report Date: December 24, 2007

Audit Conducted By:

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

Auditors: Mr. Jon Shaver, Biosolids EMS Lead Auditor

Audit Dates: November 28 - 30, 2007

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

Approved By: KEMA-Registered Quality, Inc.



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1. SUMMARY

KEMA-Registered Quality Inc. (KEMA) conducted an independent audit of the environmental management system (EMS) being used by the City of Raleigh Public Utilities Department (CORPUD) in managing its biosolids program. The audit was performed November 28 to 30, 2007 at the request of the National Biosolids Partnership and was interim audit #1 following verification of the CORPUD biosolids program in December 2006.

The purposes of this audit were to:

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

1A. Audit Scope and Methodology

The CORPUD biosolids program 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 scope of this audit included the following, consistent with NBP requirements for biosolids EMS interim audits and the overall audit program agreed to by KEMA and CORPUD.

1. Verification of open nonconformances from previous KEMA audits
2. Examination of outcomes being achieved in the areas of regulatory compliance, interested party relations, environmental performance and quality practices.
3. Review of significant changes affecting the biosolids program, including documentation.
4. Continuing Management System Dynamics, including review of effectiveness for
 - Goals and Objectives Process
 - Communications Program
 - Corrective and Preventive Action Process
 - Management Involvement (including Management Review Process)
5. Process Audits:
 - Biosolids Policy
 - Biosolids Stabilization, Conditioning & Handling
 - Communications
 - Corrective & Preventive Action
 - Critical Control Points (Identification)
 - EMS Planning & Public Participation

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- Goals & Objectives
- Internal EMS Audits
- Management Involvement & Review

“Reviews” are conducted to assess the overall effectiveness of the process being addressed. “Audits” are conducted to verify conformance with expectations and requirements of all applicable requirements of the EMS Elements. Both reviews and audits are performed using sampling techniques by interviewing key persons involved in each process, observing practices in place and reviewing pertinent documents and records. Interviews with representative interested parties are included, as arranged by CORPUD.

This audit was conducted by qualified auditors following NBP Auditor Guidance (August 2007) and KEMA’s Biosolids EMS Audit Planning Guide. Using sampling techniques, the auditor observed practices in place, interviewed key persons and reviewed pertinent documents and records to assess the systematic performance of the process being audited and the consistency of biosolids management practices with CORPUD written procedures.

1B. Summary of Audit Findings

EMS Strengths

During this audit KEMA noted the following strengths in the CORPUD biosolids program.

- The Management Team (formerly EMS Team) allows cross-functional representation in planning and implementing system concepts.
- An effective “Management of Change” procedure has been implemented for planning significant changes and their effect on the management system.
- Several employees have demonstrated commitment to continually improving their competency and performance.

EMS Outcomes

The CORPUD biosolids program is improving through the use of their EMS approach to managing the program. Recent outcomes in the areas of regulatory compliance, environmental performance, relations with interested parties and biosolids quality practices are described in the “Detailed Audit Results” section of this report.

Nonconformances

During this audit, KEMA found five (5) minor nonconformances with respect to the audit criteria. These nonconformances are described in the “Audit Results” section of this report. Review of these nonconformances determined that they are not related and do not represent a systemic deficiency.

Corrective Action Plans prepared by CORPUD addressing each nonconformance identified were reviewed by KEMA’s Lead Auditor and found acceptable. Verification of the effectiveness of corrective actions taken will occur during the next scheduled third party audit.

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Opportunities for Improvement

KEMA noted opportunities for improvement in the CORPUD biosolids program that are described in the "Detailed Audit Results" section of this report.

1C. Verification Statement

Based on the results of this audit, KEMA has verified the management system for CORPUD biosolids program continues to meet the expectations and requirements of NBP's Biosolids EMS Program.

1D. Agreements

CORPUD will prepare written plans for correcting the nonconformances identified during this audit and to send them to KEMA's Lead Auditor by December 31, 2007 (30 days from this audit). KEMA will review these plans for consistency with NBP requirements and, if acceptable, approve them for implementation in correcting the nonconformances. CORPUD 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. CORPUD and KEMA have agreed that the next audit (interim audit #2) would be a third party audit. CORPUD will arrange with NBP for that interim audit to occur before December 15, 2008.

An audit program for the 4 interim audits between verification (2006) and re-verification (planned 2011) has been agreed upon by CORPUD and KEMA. This current audit is consistent with that program.

1E. 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 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).

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2. AUDIT DETAILS

2A. Local Agency Details

Agency Name: City of Raleigh Public Utilities Department (referred to as CORPUD in this report)

Facility: Neuse River Wastewater Treatment Plant, Raleigh, North Carolina

Volume of Wastewater Treated = 45 MGD average, 60 MGD (capacity)

Biosolids Produced = 45,000 wet tons per year Class A, 1,500 dry tons per day Class B (planned)

Number of Employees = 96

Biosolids Production Sites Audited: Neuse River Wastewater Treatment Plant, Raleigh, North Carolina

2B. Audit Team

The National Biosolids Partnership assigned KEMA-Registered Quality Inc. to perform this audit on their behalf. Mr. Jon Shaver arranged and conducted the audit for KEMA. Mr. Shaver is certified by NBP as a Biosolids EMS Lead Auditor and Biosolids Auditor. KEMA asserts that our firm and auditors have an independent relationship with the City of Raleigh Public Utilities Department that meets criteria established by the National Biosolids Partnership for Third Party Audit Companies and Auditors.

2C. Reference Materials

The following documents were used as references during this audit:

- CORPUD EMS Manual (current version)

- National Biosolids Partnership "EMS for Biosolids" standard (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

2D. Definitions of Audit Findings & Required Corrective Action

Major Nonconformance – 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.

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

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

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3. AUDIT RESULTS

3A. Significant Changes

CORPUD did not advise NBP and KEMA of any significant changes in the past year affecting their biosolids program and/or critical control points. Changes that were made include addition of jet mixing to the aeration system and resumption in the use of a digester (previously used as a storage vessel) for aerobic digestion and addition of two new biosolids loading hoppers. In addition CORPUD resumed production of Class B biosolids and the auditor determined that this required audit since it was not included in the Verification Audit. Some organizational changes have also occurred, including appointment of an Assistant Reuse Superintendent and a Land Management Supervisor.

3B. EMS Outcomes

Regulatory Compliance

- Metal content in EQ biosolids continues well below regulatory ceiling

Environmental Performance

- 100% beneficial reuse of biosolids continues
- Development of Master Plan has led to environmental impact assessment for various technical options considered for future growth.

Interested Party Relations

- Acceptance by users of "Raleigh Plus" material continues to expand.

Quality Practices

- Addition of product transfer hoppers has increased operating flexibility, improved productivity and eliminated potential for cross contamination of biosolids.
- Conversion of storage tanks to digesters and addition of jet mixers has increased efficiency and flexibility, showing a batch to batch improvement in quality and resulting in substantial energy cost decrease (approx \$100K/yr).

3C. Summary of Audit Results by EMS Element

The following summarizes the results of this audit related to the 17 EMS Elements. Details of the process audits are described in Section 4 of this report.

EMS Element	Status (@ 11/30/07)	Nonconformances (corrective action plans in place and approved)
1. Documentation of EMS for Biosolids	Conforms	None

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EMS Element	Status (@ 11/30/07)	Nonconformances (corrective action plans in place and approved)
2. Biosolids Management Policy	Conforms	None
3. Identification of Critical Control Points	Conforms	None
4. Legal and Other Requirements	Conforms	None
5. Goals and Objectives for Continual Improvement	Conforms	None
6. Public Participation in Planning	Conforms	None
7. Roles and Responsibilities	Conforms	None
8. Training	Conforms	None
9. Communication	Conforms	None
10. Operational Control of Critical Control Points	Conforms	None
11. Emergency Preparedness and Response	Conforms	None
12. EMS Documentation, Document Control and Recordkeeping	Conforms	None
13. Monitoring and Measurement	Conforms	None
14. Nonconformances: Preventive and Corrective Action	Minor Nonconformance	<u>Minor Nonconformance JS/07-01/ Elem 14</u> Not all formal corrective action plans that are apparently closed show the person authorizing the closure or the conclusion for verifying effective completion of the actions.
15. Biosolids Program Periodic Performance Report	Minor Nonconformance	<u>Minor Nonconformance JS/07-02/ Elem 15</u> The biosolids program performance report for 2006 has not been made available on the CORPUD website, as required by internal procedures.

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EMS Element	Status (@ 11/30/07)	Nonconformances (corrective action plans in place and approved)
16. Internal EMS Audits	Minor Nonconformance	<p><u>Minor Nonconformance JS/07-03/ Elem 16</u> Internal audits have not addressed policy commitment and therefore are not fully consistent with EMS Manual procedures.</p> <p><u>Minor Nonconformance JS/07-04/ Elem 16</u> Internal audit reports do not make a conclusion related to the stated purpose of the audits (“to verify effectiveness of the system process”).</p>
17. Periodic Management Review of Performance	Minor Nonconformance	<p><u>Minor Nonconformance JS/07-05/ Elem 17</u> Management Reviews do not clearly address performance against policy commitments or make a conclusion about the suitability, adequacy and effectiveness of the biosolids program / EMS and it is not clear how recommendations for improvement resulting from the management reviews are being implemented.</p>

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4. DETAILED AUDIT RESULTS

The National Biosolids Partnership Biosolids EMS Auditor Guidance was used as a guide in performing each of the reviews and audits described below.

4A. Review of Open Nonconformances

KEMA auditors reviewed corrective action taken in response to the following nonconformances that remained open from the third party Interim Audit conducted by KEMA in September 2006.

Minor Nonconformance JS&MW /06-01 (Element 5) Progress in completing action plans for achieving objectives / targets is being tracked during management reviews, however no records exist.

Corrective Action: Review of action taken by CORPUD in response to the above finding determined that the status of objectives for 2007 is now being tracked during quarterly EMS Team meetings and during individual performance reviews. This nonconformance is now closed.

Minor Nonconformance JS&MW /06-02

There are several emergency plans in place for various events, but EMS Documentation does not reference all plans, making it unclear how the various emergency plans are used and relate to each other.

Corrective Action: Review of action taken by CORPUD in response to the above finding determined that a comprehensive Emergency Plans Manual, including emergency procedures, the status of objectives for 2007 is now being tracked during EMS Team meetings and during individual performance reviews. This nonconformance is now closed.

Minor Nonconformance JS&MW /06-03

Requirements for McGill Environmental Services state that the Emergency Operation Plan needs to be implemented, however that plan addresses only transportation situations, indicating that contractor requirements for developing emergency plans have not been fully implemented.

Corrective Action: Review of action taken by CORPUD in response to the above finding determined that McGill Environmental (contractor) has prepared an Emergency Action Plan that includes response to biosolids spill, that is acceptable to CORPUD (per CORPUD internal audit 8/6/07). This nonconformance is now closed.

Minor Nonconformance JS&MW /06-04

Some key documents (e.g. emergency plans, some SOPs) are not being fully controlled (dated, approved, reviewed).

Corrective Action: Review of action taken by CORPUD in response to the above finding determined that the EMS document control procedure was revised to include notification of reviews and approvals. Documents that require control include Emergency Plans. This nonconformance is now closed.

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Minor Nonconformance JS&MW /06-05

Relatively few formal Corrective Actions have been reported and those in place are recent and limited in scope, indicating that the Corrective and Preventive Action process is not being fully used.

Corrective Action: Review of action taken by CORPUD in response to the above finding determined that the Corrective and Preventive Action Process is now more fully used. 29 formal corrective actions were issued in 2007, of which 25 were completed and 4 are in progress. This nonconformance is now closed.

Minor Nonconformance JS&MW /06-07

Management reviews have not fully assessed the performance of management system processes

Corrective Action: Review of action taken by CORPUD in response to the above finding determined that the EMS Team is reviewing the effectiveness of their biosolids program and environmental management system during quarterly management review meetings. This nonconformance is now closed.

Minor Nonconformance JS&MW /06-08

Internal audits to date have not provided conclusions about the effectiveness in meeting policy requirements or the performance of the goals and objectives process and have not audited documentation as stipulated by the CORPUD EMS requirements.

Corrective Action: Review of action taken by CORPUD in response to the above finding determined that several internal audits have been conducted during the year and these have, to some extent, addressed performance in meeting policy commitments. There are no conclusions or summary of performance against policy. Since some policy commitments are addressed in internal audits this nonconformance is now closed, however the following related nonconformance was identified.

Minor Nonconformance JS/07-03/ Elem 16 Internal audits have not addressed policy commitment and, therefore, are not fully consistent with EMS Manual procedures.

4B. Management System Dynamics Review

The "Management System Dynamics Review" is performed by KEMA to assess the effectiveness of key processes within the biosolids program and to evaluate the extent to which significant changes that have occurred are incorporated into the management system.

Significant Changes

Critical control points and operational controls for the addition of jet mixing, the modification of a digester and the addition of loading hoppers and scales have been developed and implemented and personnel are trained in operating the equipment. Two new members of the EMS Team appointed in the past year have received training in the management system as it applies to the biosolids program.

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Communications Program

A proactive and effective external communications program is in place. CORPUD hold an annual stakeholders meeting that is open to the public and have proactively held open meetings in an attempt to communicate publicly about previous (2002 and prior) biosolids application compliance issues and discuss plans to remedy the results, including related concerns about groundwater. Regulators interviewed stated that CORPUD are keeping them informed about environmental performance and are submitting complete reports on time. The Neusse Riverkeeper commented that, while there are disagreements between himself and CORPUD over groundwater issues, the lines of communication are in place and he feels he is informed by CORPUD and included in communications with interested stakeholders.

Corrective and Preventive Action

The formal CAPA process is used to address findings from internal and third party audits, and noncompliances. In total 29 formal corrective actions were issued in 2007, of which 25 were completed and 4 are in progress. The Corrective Action Request procedure was used effectively to correct all open nonconformances from previous third party audits and from internal audits.

Goals and Objectives Process

Improvement objectives are developed annually and progress is monitored quarterly. Objectives for 2007 have been achieved with one exception, which was not controllable. New objectives have been planned for 2008 and action plans are being developed to achieve these objectives.

Management Involvement Process (including Management Review)

The EMS Team meets quarterly to discuss biosolids program performance and adopt changes by consensus and records are kept. A review of overall biosolids program performance is reported annually.

Results

Review of the effectiveness of the above processes determined that they are being applied as expected by NBP.

4C. Review of EMS Documentation Changes

Description

The CORPUD EMS Manual describes management system procedures for the biosolids program. It continues to be structured according to the EMS Elements, with some Elements combined (e.g. Public Participation and Communication). No major changes have occurred since last year, however the manual was reviewed and minor changes made in November 2007. Changes in the documentation were sampled and found to meet NBP expectations and conform to applicable requirements of the EMS Elements.

Opportunity for Improvement

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- A description of how the various parts of the biosolids management program interact could help in understanding how the management system functions to achieve overall desired results.

4D. Audit –Biosolids Policy

The official Biosolids Policy remains as approved by Council in 2004. To make this easier for personnel to understand and follow a Biosolids Policy Statement has been developed and made available to the public via the internet and posted throughout the plant and included in employee training programs. This Policy Statement corresponds to the commitments in the Policy, including commitment to follow the Principles of the Code of Good Practice. It also includes commitments to provide an exemplary program for “customers” and to help “protect the environment and public health”. This process was found to meet NBP expectations and conform to applicable requirements of the EMS Elements.

Opportunity for Improvement

- A description of the meaning of policy commitments related to “customers” and “public health” could help in developing understanding and participation in meeting these commitments.

4E. Audit - Biosolids Stabilization, Conditioning & Handling

Material produced in the solids operations includes dewatered sludge, Class A biosolids and Class B biosolids. Scheduling is done to ensure various end use options remain viable. The dewatered sludge is concentrated on filter presses and loaded from hoppers. Class A & B biosolids are produced by thickening and digesting (aerobic) the primary sludge and holding until lab tests confirm the material is acceptable for land application use. Operators are well aware of the operational controls in place, including a SCADA automated control system and written operating procedures (DOPs). This process was found to meet NBP expectations and conform to applicable requirements of the EMS Elements.

4F. Audit - Communications

Internal communication about the biosolids program is done through training and at Safety Committee meetings. In addition, all members of management participate in EMS Team meetings to discuss and look for improvements in the management system. External communication occurs through public meetings (e.g. annual Stakeholder meetings), newsletters and through communications to an interested party list that anyone can join. This process was found to meet NBP expectations and conform to applicable requirements of the EMS Elements, except as noted below.

Minor Nonconformance JS/07-02/ Elem 15 The biosolids program performance report for 2006 has not been made available on the CORPUD website, as required by internal procedures.

Opportunity for Improvement

- A survey (or similar feedback method) could help in determining performance in “providing an exemplary ... program for customers” required by the biosolids policy statement.

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- The lack of public attendance at stakeholder meetings could be investigated to determine if public concerns are being adequately addressed.

4G. Audit – Corrective & Preventive Action Process

The CAPA process includes informal corrective actions used to address immediate deficiencies and formal corrective actions to address identified noncompliances and nonconformances found during internal and third party audits. The process has been used to address 29 separate nonconformances in 2007. No noncompliances were identified during 2007 that needed formal corrective action. This process was found to meet NBP expectations and conform to applicable requirements of the EMS Elements, except as noted below.

Minor Nonconformance JS/07-01/ Elem 14 Not all formal corrective action plans that are apparently closed show the person authorizing the closure or the conclusion for verifying effective completion of the actions.

Opportunity for Improvement

- The documented CAPA process (EMS Manual, 16) could be simplified and better reflect actual practices.

4H. Audit - Critical Control Points (Identification)

Critical control points within the biosolids program are identified in the EMS Manual (EI 3) in a table that includes environmental aspects and operational controls. The critical control points are consistent with the NBP Manual of Good Practice. This process was found to meet NBP expectations and conform to applicable requirements of the EMS Elements.

Opportunity for Improvement

- A simpler definition of “critical control points” could help in developing better understanding of how this concept is used in determining and implementing operational controls.

4I. Audit - EMS Planning & Public Participation

Public input into the CORPUD biosolids program is obtained directly in annual Stakeholder meetings, at various public hearings and during presentations at City Council meetings. A “Biosolids Master Plan” is being prepared addressing technology and end use options and will be available for public comment prior to approval. The EMS Team meets quarterly to discuss biosolids program effectiveness and to plan and implement improvements in this program. Personnel on this team include persons who attend the public meetings. This process was found to meet NBP expectations and conform to applicable requirements of the EMS Elements.

4J. Audit - Goals & Objectives

Improvement “objectives” and “targets” are set annually by the EMS Team, including a brief plan for achieving the targets. Responsibilities and timing are included in the plan. Progress in achieving these targets is monitored quarterly by the EMS Team. This process was found to meet NBP expectations and conform to applicable requirements of the EMS Elements.

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Opportunity for Improvement

- The status of improvement objectives could be noted as “on-target” or “off-target” to denote progress and could note any changes needed to ensure the objectives are being achieved.
- Improving culture was stated by CORPUD management as an important improvement result. A measurable target could help in working towards that improvement.
- The use of “key performance indicators” and measuring performance against these parameters could help in assessing and improving system performance.

4K. Audit - Internal EMS Audits Process

Internal audits are conducted approximately monthly to evaluate performance in meeting management system procedures stated in the CORPUD EMS Manual. Audit results are recorded and discussed at EMS Team meetings, including action plans to correct deficiencies found. This process was found to meet NBP expectations and conform to applicable requirements of the EMS Elements, except as noted below.

Minor Nonconformance JS/07-03/ Elem 16 Internal audits have not addressed policy commitment and therefore are not fully consistent with EMS Manual procedures.

Minor Nonconformance JS/07-04/ Elem 16 Internal audit reports do not make a conclusion related to the stated purpose of the audits (“to verify effectiveness of the system process”).

4L. Management Involvement & Review Process

The EMS Team, comprised of several members of CORPUD management, meets quarterly to discuss biosolids program performance. These meetings are coordinated by the EMS Coordinator and include set agenda topics and recommendations for improvement. The results of each meeting are recorded, including any changes planned in the management system. This process was found to meet NBP expectations and conform to applicable requirements of the EMS Elements, except as noted below.

Minor Nonconformance JS/07-05/ Elem 17 Management Reviews do not clearly address performance against policy commitments or make a conclusion about the suitability, adequacy and effectiveness of the biosolids program / EMS and it is not clear how recommendations for improvement resulting from the management reviews are being implemented.

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APPENDICES

List of Participants

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

NRWWTP Personnel Position

Burrell Brock	Industrial Pretreatment Coordinator
Dale Crisp	Public Utilities Director
Marla Dalton	Laboratory Supervisor
Winslow Davis	Operations Supervisor
Don Edwards	Residuals Coordinator
Glenn Evans	Plant Maintenance Supervisor
Marti Gibson	Environmental Coordinator / EMS Coordinator
Dab Hackney	Operator
Jesse Luper	Assistant Reuse Superintendent
Jason Waters	Land Management Supervisor
T.J. Lynch	NRWWTP Superintendent
Tony Mencome	PCTO / Internal Auditor
Tim Woody	Reuse Superintendent

Other

Judy Garrett	Environmental Chemist, NCDENR
Joe Gregory	Farm Service Agency
Mike Hom	Environmental Engineer, EPA Region 4
Dean Naujoks	Upper Neuse Riverkeeper, Neuse River Foundation
Jay Zimmerman	Environmental Program Supervisor – Div Water Quality, NCDENR

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List of Documents & Records Reviewed

Ag Application Site Inspection Forms (various)
Attachment D – special conditions for contractors (11/16/07)
Biosolids Newsletter (various issues)
Biosolids performance charts – production vs projected (Q2 & Q3 2007)
Biosolids Stakeholders meeting agenda (7/20/07)
Contractor internal audit report 5/21/07
Corrective Action Plans (various)
Design & Operations Overview Troubleshooting & contingencies 3/17/03
DOP Work Procedures (various)
EHS Policy Statement 7/23/04
Emergency Plans Manual (9/07)
EMS Annual report 2006 (6/30/07)
EMS Manual 8/19/07
EMS Team meeting minutes (9/17/07, 1/7/07)
Inspection tags – fire extinguishers, safety showers, eye wash, respirators (various)
Internal Audit Reports 8/6/07, 7/24/07, 5/21/07, 4/20/07, 4/10/07, 2/27/07
Laboratory Certificates (NELAP)
Management Review minutes 6/14/07
McGill Sludge Control Sheet 11-29-07
MSDS (various)
Objectives 2007 status report (6/14/07)
Objectives 2008 (11/16/07)
Operating charts (various)
Operations log book entries (various))
Stakeholders list (11/07)
Truck loading ticket station worksheet 11-29-07
Wastewater Treatment Performance Measures FY 04-07

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