



**National Biosolids Partnership
Biosolids EMS Verification Audit Report**

**New England Organics / Hawk Ridge Compost Facility
Portland, Maine**

Report Date: January 31, 2009

Audit Conducted and Reported By

KEMA-Registered Quality, Inc., Chalfont PA

Auditors: Mr. Jon Shaver - Biosolids EMS Lead Auditor

Audit Dates

Documentation Review – November 1, 2008

Onsite audit – January 5 to 7, 2009

Review and Approval

Report Prepared By: Jon Shaver, Biosolids EMS Lead Auditor

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1. SUMMARY

KEMA-Registered Quality Inc. (KEMA) conducted an audit of the biosolids management system being used by New England Organics (NEO) in managing biosolids activities at their Hawk Ridge Compost Facility in Unity Plantation, Maine. This audit was performed on behalf of the National Biosolids Partnership (NBP) and requested by NEO and covered the entire biosolids value chain, as practiced by NEO. The audit included a review of EMS Documentation (completed November 1, 2008) and onsite analysis of biosolids management processes and practices (performed January 5 to 7, 2009).

The primary purpose of the audit was to verify that the system being used by NEO in managing its biosolids activities meets the expectations and requirements of the National Biosolids Partnership's Biosolids EMS Program, particularly the 17 EMS Elements (audit criteria). The audit was also intended to verify that the NEO biosolids management system is functioning effectively.

During the course of this audit 6 minor nonconformances were identified with respect to the requirements of the NBP's EMS Elements. KEMA's Lead Auditor has reviewed NEO's corrective action plans for those nonconformances and found them to be acceptable.

As a result of this audit, KEMA has verified that the biosolids management system being used by New England Organics in managing biosolids activities associated with the Hawk Ridge Compost Facility meets the expectations and requirements of the NBP EMS Elements. Certification of that biosolids management system within the NBP Biosolids EMS Program is recommended.

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2. BACKGROUND

2A. Agency Details

Preparer Name: New England Organics District (referred to as NEO in this report)

Facility: Hawk Ridge Compost Facility, Unity Plantation, Maine

Volume of Biosolids Compost Produced = 90K cu yd / year

Number of Employees = 44

2B. Audit Purpose and Criteria

The purposes of this audit were to verify that the management system being used by NEO in managing its biosolids activities:

- Conforms to expectations and requirements of the National Biosolids Partnership (NBP) Environmental Management System for Biosolids standard, comprised of 17 EMS Elements
- Is functioning as intended, that is practices and procedures are being performed as documented
- Is producing desired results (outcomes)

The criteria for this audit were the requirements specified in the National Biosolids Partnership EMS Elements (May 2002).

2C. Audit Scope

This Verification Audit covered the entire biosolids value chain as practiced by NEO, including procurement (from generators), transportation, composting, finished compost management, product sale & distribution, facility site management. Special attention was given to practices and management activities that directly support biosolids-related operations, processes and activities.

Audit activities included:

- Review of NEO Biosolids Management System Documentation (Biosolids Program Manual)
- EMS processes used by NEO in managing it's biosolids activities, covering requirements of the 17 EMS Elements.
- Testing of pertinent transactions to assess the health and functionality of the management system
- Interviews with interested parties, including customers, regulators and neighbors
- Examination of outcomes NEO is achieving through the use of their biosolids management system

Biosolids Use Sites Audited

Hawk Ridge Compost Facility (HRCF)

Contractors Interviewed

Gnome Landscaping
Pinkham Plantation

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2D. Audit Phases and Timing

The complete audit included two “phases, as described below. This report is a combined report for all phases of this audit.

Phase 1 – KEMA’s Lead Auditor reviewed NEO’s Management System Documentation (referred to as the Biosolids Management System Manual). The results of that review (see Appendices to this report) were reported to NEO on November 1, 2008.

Phase 2 – KEMA performed an onsite audit of NEOs full biosolids management system, including processes used at the Hawk Ridge Compost Facility and related contractor control processes. This part of the audit was conducted January 5 to 7, 2009.

2E. Audit Methodology

KEMA’s standard management system auditing practices were used. The KEMA “process auditing” approach assesses each system process being used by NEO in managing its biosolids activities for conformance with all applicable requirements of the NBP EMS Elements. Audits were performed by interviewing key personnel involved in each process, observing practices in place and reviewing pertinent documentation.

2F. Auditors

The National Biosolids Partnership contracted KEMA-Registered Quality Inc. to perform this audit on their behalf. The audit was conducted on behalf of KEMA by Mr. Jon Shaver. Mr. Shaver is certified by the National Biosolids Partnership as a Biosolids EMS Lead Auditor and Biosolids Auditor.

KEMA asserts that our firm and auditor have a fully independent relationship with New England Organics, meeting criteria established by the National Biosolids Partnership for Third Party Audit Companies and Third Party Auditors.

2G. Definitions and References

Definition of Terms

Major Nonconformance – an omission from requirements and/or other departure that represents, or could cause, a systemic failure and/or a departure from the Biosolids Policy.

Minor Nonconformance – an isolated departure from requirements that does not represent a systemic failure.

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

Corrective Action Plan – a plan developed by the agency being audited to correct a nonconformance and/or prevent that nonconformance from re-occurring.

References

The following documents were used as references during this audit:

- NEO Biosolids Management System Manual (as provided to KEMA in October 2008)
- National Biosolids Partnership “EMS for Biosolids” standard (May 2002)
- National Biosolids Partnership Biosolids EMS Auditor Guidance (August 2007)
- National Biosolids Partnership Code of Good Practice
- National Biosolids Partnership Manual of Good Practice

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3. SUMMARY OF AUDIT RESULTS

The following summarizes results of this audit. Detailed results for each process audited are described in Section 4 of this report.

3A Strengths Observed

During this audit, the Audit Team observed the following strengths in NEO's biosolids management system:

- Overall orderliness and housekeeping at the Hawk Ridge facility is good considering the materials being handled.
- Stakeholders interviewed (including customers, regulators and neighbors) are consistent in praising NEO communications, information and response to concerns.
- Identifying and tracking incidents / events is a good way to determine multiple types of related issues.

3B Outcomes

NEO reported the following outcomes from the use of an environmental management system approach to managing their biosolids program in the past 3 years: KEMA examined these outcomes and agree that they represent gains achieved by the use of the NEO biosolids EMS.

Regulatory Compliance

- Electronic filing of regulatory permit info has resulted in better access to information and submission of those reports (confirmed in discussion with regulators).

Environmental Performance

- Efforts to reduce energy use have resulted in 10% decrease in total energy costs in 2008. Projects continue, including installation of direct 3-phase power lines.
- Installation of a scrubber has all but eliminated NH₃ emissions, resulting in less toxic gas emissions, reduced odors and reduced nitrates.

Biosolids Quality Practices

- Product improvements have resulted from desire for diversity, reduced use of bulking agents.
- Development of SOPs and cross training has improved employee skills & versatility.
- Communication about environmental management system have improved contractor awareness (i.e. transportation) about how they can affect management system results

Interested Party Relations

- Development of a “quality assurance plan” has improved customer relations (verified in discussions with customers). This has also led to improved customer complaint tracking, response and analysis to develop better internal communication and understanding of customer issues.

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3C Nonconformances

At the conclusion of this audit the following nonconformances found by KEMA with respect to the expectations and requirements of the NBP Biosolids EMS Elements remained open. NEO has prepared corrective action plans for each nonconformance and KEMA's Lead Auditor reviewed and approved those plans for implementation. The effectiveness of the corrective action taken by NEO will be reviewed during the next Third Party Audit.

Minor Nonconformance JS/09-01/Element 1 NBP EMS Element 1 requires that activities assigned to contractors be described and included within the management system. Roles and responsibilities of contractors within the NEO management system, including transportation haulers and resellers, are not clearly defined.

Minor Nonconformance JS/09-02/Element 5 NBP EMS Element 5 requires that biosolids objectives be measurable and that action plans be established for achieving objectives. Some objectives identified for 2008 and 2009 (e.g. "review quality analyses", "complete energy audit") do not identify the measurable improvement target and no action plans are in place for achieving some objectives.

Minor Nonconformance JS/09-03/Element 10 NBP EMS Element 10 requires that procedures used to control operations incorporate legal and other requirements and be used to control environmental impacts. Standard operating procedures being used by NEO do not state compliance requirements and do not clearly reference potential environmental impacts.

Minor Nonconformance JS/09-04/Element 12 NBP EMS Element 12 requires that biosolids program documents be controlled. The Hawk Ridge "Emergency Action Plan" contains several handwritten modifications and notes, leading to uncertainty about the approval of this document and indicating it is not being controlled.

Minor Nonconformance JS/09-05/Element 14 NBP EMS Element 14 requires that corrective action plans for addressing nonconformances include root cause identification. Corrective and preventive action worksheets for some findings from the 7/08 internal audit do not include a root cause analysis or show a "closed loop" verification of effective correction.

Minor Nonconformance JS/09-06/Element 16 NBP EMS Element 16 requires that internal audits be used to help determine effectiveness in meeting policy commitments and cover activities performed by contractors. The only internal audit of the biosolids management system conducted in 2008 (July 2008) did not specifically address effectiveness in meeting policy commitments and did not cover control of activities performed by resellers on behalf of NEO.

3D Opportunities

The following "opportunities" for improving the NEO Biosolids Management Program were identified during the audit. They are based on the Auditors experience only and there is no requirement for action by NEO in response to these observations.

1. The NEO Biosolids Management System Documentation (i.e. manual) could be simplified and more practical in reflecting actual practices, particularly in areas of critical control points, operational controls & emergency preparedness.

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2. Ensuring “excellent” relationships with “all” stakeholders, as stated in the Policy, is unnecessarily difficult. The word “all” could be removed without losing the essence of that commitment.
3. The process for identifying improvement goals & objectives could more clearly show the link to overall desired outcomes and inputs from various sources (such as stakeholders and corporate inputs).
4. The Communications Program being used by NEO within their management system could more clearly reflect actual practices used in communicating with different external persons such as customers, generators, regulators and the public.
5. Respirators at Hawk Ridge could be in better condition.
6. An electronic data-base preventive maintenance program could help in identifying trends and developing predictive maintenance for equipment.

3E Transaction Tests

The following transactions were tested to confirm that the EMS responded dynamically and effectively to them.

- A new improvement objective to reduce energy use in 2009 is well understood by personnel, including their individual contribution to achieving the objective and action plans established.
- The requirement to provide EMS Awareness training to newly hired personnel was adapted into the full orientation program for new employees.
- Tracking “incidents / events” resulted in several operating changes, including equipment maintenance and modification of SOPs.

The NEO biosolids program was found to have satisfactorily responded in each of the above situations by adapting operational controls and ensuring responsibilities are understood.

3F Verification Conclusion

Based on the results of our audit, KEMA issues the following verification statement for the EMS being used by New England Organics in managing its biosolids activities associated with the Hawk Ridge Compost Facility:

“The New England Organics Hawk Ridge Compost Facility has been independently verified by KEMA-Registered Quality Inc. as having an effective biosolids environmental management system that supports continual improvement in environmental performance, meeting regulatory compliance obligations, utilizing good management practices and creating meaningful opportunities for public participation and is in conformance with the requirements of the National Biosolids Partnership.”

3G 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

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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 send an e-mail to: edemichele@wef.org.

NEO may appeal the manner in which this audit was conducted and/or any findings directly to KEMA by contacting KEMA's headquarters at 4377 County Line Road, Chalfont PA. KEMA will review any such appeal to verify that the audit and/or any findings are consistent with acceptable management system auditing practices.

3H Requests / Agreements

NBP requires that interim audits of an agency's Biosolids Management System be conducted annually to verify the effectiveness of the management system and its continuing conformance with NBP requirements. Interim Audit #1 will occur in November / December 2009 (actual dates to be determined) and be performed as a third party audit. NEO will make arrangements for that audit through the National Biosolids Partnership.

A program for interim audits of the NEO biosolids management system has been prepared and agreed by KEMA and NEO. The scope of interim audits will be consistent with that Audit Program and other requirements of the NBP Biosolids EMS Program.

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4. DETAILED AUDIT RESULTS

The following describes the results of KEMA's audit of each management system process used by NEO in managing biosolids activities and the level of conformance of that process with all applicable requirements of the EMS Elements. Nonconformances remaining open are noted. NEO has prepared Corrective Action Plans for those nonconformances that KEMA has approved.

4A. EMS Documentation Review

New England Organics' Biosolids Management Manual and supporting documents describe the management system that New England Organics uses in managing its biosolids-related activities. Results of KEMA's review of this documentation as part of this audit are included in the appendix of this report.

Audit Results

Review of the EMS Manual and other documentation found that documentation meets NBP expectations and conform to applicable requirements of the EMS Elements, except as noted below

Minor Nonconformance JS/09-01/Element 1 NBP EMS Element 1 requires that activities assigned to contractors be described and included within the management system. Roles and responsibilities of contractors within the NEO management system, including transportation haulers and resellers, are not clearly defined in the management system documentation.

In addition, the following opportunities were noted:

- The NEO documentation (i.e. Biosolids Management System manual) could be simplified to make it more practical and understandable by all employees, particularly in areas of critical control points, operational controls & emergency preparedness.

4B. Biosolids Use - Composting Operations

Processes within the composting operation include Receiving (procedure), composting and transportation management. Additional processes at the Hawk Ridge facility include maintenance and emergency preparedness.

Generators transport solids to the HR facility, where the material is received (or not) based on quality analysis. Composting operations are consistent with identified critical control points. SOPs and other operational controls are in place as identified in the BMS Manual. Operators are qualified through experience and training and are familiar with the intentions of critical control points and operational controls. Operations monitoring, including significant environmental impacts (e.g. energy use) and regulatory requirements is done daily through tests and review of operating data by operations management. Maintenance includes regular preventive maintenance and review of equipment maintenance trends. Neighbors and customers interviewed are satisfied with the operation at Hawk Ridge.

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/09-03/Element 10 NBP EMS Element 10 requires that procedures used to control operations incorporate legal and other requirements and be used to control environmental impacts. Standard operating procedures being used by NEO do not state (or

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reference) compliance requirements or potential significant environmental impacts that require control.

In addition, the following opportunities were noted:

- Respirators at Hawk Ridge could be in better condition.
- An electronic data-base preventive maintenance program could help in identifying trends and developing predictive maintenance for equipment.

4C. Communication Program

NEO has developed an external communication program that includes identification of stakeholders (such as customers and suppliers / generators) and other interested parties (e.g. neighbors, regulators) and e-mail communication of their biosolids policy and information about biosolids and their compost products. Information is also presented at Trade Shows and in response to requests. Internal communication about the biosolids management system occurs through training. Strategic plans are communicated annually to each employee and quarterly updates on progress are posted on bulletin boards.

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 Communications Program being used by NEO within their management system could more clearly reflect actual practices used in communicating with different external persons such as customers, generators, regulators and the public.

4D. Competency, Awareness & Training

NEO personnel, including new employees, receive awareness training about the biosolids management system and key concepts / requirements in the system. Personnel are qualified for their roles / responsibilities based on experience and observation of performance during the initial 3 to 6 months on the job. Deficiencies are addressed through re-training and/or continuing on the job observation.

Audit Results

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

4E. Compliance (with legal & other requirements)

Applicable legal requirements, including Federal and State regulations and permits, are listed in the BMS Manual. A “compliance calendar” is used as a key part of monitoring & reporting performance in meeting ongoing regulatory requirements. Operating data is reviewed by Regulatory Affairs personnel to verify compliance and internal audits are used to confirm practices are consistent with legal requirements. Any concerns are addressed through the Corrective / Preventive Action Process. State of Maine biosolids regulators interviewed are satisfied with NEO’s regulatory reporting and communications.

Audit Results

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

4F. Contractor Control

Contractors involved in the NEO biosolids program include generators (suppliers) of biosolids, including transportation, and compost product resellers. Transportation contractors are qualified through sub-contract agreements and proof of insurance. Contracts are agreed with generators, including supply arrangements and product quality requirements. Sales agreements are prepared with resellers based on purchase arrangements.

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/09-01/Element 1 NBP EMS Element 1 requires that activities assigned to contractors be described and included within the management system. Roles and responsibilities of contractors within the NEO management system, including transportation haulers and resellers, are not clearly defined.

In addition, the following opportunities were noted:

- Resellers and Distributors could be considered as contractors within the scope of the biosolids management system and included in internal audits (representative).

4G. Critical Control Points & Operational Controls (Identification)

The NEO biosolids value chain includes procurement, transportation, active composting, finished compost management, product sales & distribution and facility site management. Critical control points define locations and activities within this chain for controlling quality, environmental performance, regulatory compliance and stakeholder relations. These critical control points and related operational controls, including procedures, skills, O&M information and other controls, are identified and reviewed by operations personnel and listed in the Biosolids Management Program Manual. Critical control points are consistent in scope with the Manual of Good Practice, Appx F.

Audit Results

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

4H. Corrective and Preventive Action

Identified noncompliances and nonconformances found during audits are addressed through a formal Corrective Action Process, including required action, responsibilities and timing. The status of corrective actions is monitored by the EMS Coordinator and actions not completed as intended are addressed by the Management Team.

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/09-05/Element 14 NBP EMS Element 14 requires that corrective action plans for addressing nonconformances include root cause identification.

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Corrective and preventive action worksheets for some findings from the 7/08 internal audit do not include a root cause analysis or show a “closed loop” verification of effective correction.

4I. Document Control & Recordkeeping

Documents and records requiring control are identified and reviewed as stated in the BMS Manual. Operations records are kept electronically. Documents requiring controlled are reviewed and updated annually. Records are readily accessible.

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 12 NBP EMS Element 12 requires that biosolids program documents be controlled. The Hawk Ridge “Emergency Action Plan” contains several handwritten modifications and notes, leading to uncertainty about the approval of this document and indicating it is not being controlled.

In addition, the following opportunities were noted:

- Procedures for controlling documents and controlling records could be simplified.

4J. Emergency Preparedness

Emergency plans are gathered together in one binder, including Response Plans for Extremely Hazardous Materials, Emergency Action Plans and SPCC Plans. These plans are reviewed annually and updated as needed and discussed with local emergency responders. A drill was held in 2006 and several operators have Hazwoper “Operations Level” training. Emergency equipment is readily available and inspected monthly.

Audit Results

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

4K. EMS Planning & Public Participation

The NEO Biosolids Management System was developed to help continually improve product quality, environmental performance, regulatory compliance, stakeholder relations and financial results. The General Manager is responsible for overall performance of the management system and assigned responsibility for monitoring and reporting on its performance to the Compliance Mgr. Monthly meetings of the management team discuss performance of the system and progress against desired results, particularly goals for the system.

Audit Results

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

4L. Goals & Objectives

Goals for the biosolids management system are based on desired outcomes for regulatory compliance, product quality, environmental performance and stakeholder interests, including input from interested parties received during the year. Specific objectives designed to help meet those

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goals are established annually by the management team. Progress in meeting objectives is reviewed by the Environmental Staff and NEO Management Team.

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/09-02/Element 5

NBP EMS Element 5 requires that biosolids objectives be measurable and that action plans be established for achieving objectives. Some objectives identified for 2008 and 2009 (e.g. “review quality analyses”, “complete energy audit”) do not identify the measurable improvement target and no action plans are in place for achieving some objectives.

In addition, the following opportunities were noted:

- The process for identifying improvement goals & objectives could more clearly show the link to overall desired outcomes and inputs from various sources (such as stakeholders and corporate inputs).

4M. Internal Audits

An internal audit was conducted 7/21/08 by a team qualified by the EMS Coordinator. The audit was used to compare actual practices with requirements of the NBP EMS Elements. Findings from this audit were addressed through the Corrective and Preventive 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:

Minor Nonconformance JS/09-06/Element 16 NBP EMS Element 16 requires that internal audits be used to help determine effectiveness in meeting policy commitments and cover activities performed by contractors. The only internal audit of the biosolids management system conducted in 2008 (July 2008) did not specifically address effectiveness in meeting policy commitments and did not cover control of activities performed by resellers on behalf of NEO.

4N. Management Involvement (incl Policy, Mgmt Review)

Management’s intent in developing a management system approach is to have a way to help continually improve compost quality, environmental performance, regulatory compliance, stakeholder involvement and financial results for their business. A Directors’ meeting in 2007 began strategic planning for the management system and set the “biosolids management policy” as a fundamental commitment for the system. Management reviews comprised of monthly reports from the Director-Regulatory Affairs are used to monitor system performance, with monthly meetings used to plan and direct the system.

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:

- Ensuring “excellent” relationships with “all” stakeholders, as stated in the Policy, is unnecessarily difficult. The word “all” could be removed without losing the essence of that commitment.

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40. Product Sale & Distribution

Compost product is sold to various end-users and resellers in Maine, New Hampshire and Massachusetts for agriculture uses (e.g. landscaping). The fact that the product contains biosolids is noted on the label. Customers and resellers interviewed are happy with the product and service NEO is providing. NEO sales personnel visit customers and users to confirm proper handling and use of the product and the capability of new customers to properly handle the composted product is verified before an initial sale.

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/09-01/Element 1 NBP EMS Element 1 requires that activities assigned to contractors be described and included within the management system. Roles and responsibilities of contractors within the NEO management system, including transportation haulers and resellers, are not clearly defined.

In addition, the following opportunities were noted:

- Resellers and Distributors could be considered as contractors within the scope of the biosolids management system and included in internal audits (representative).

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APPENDICES

Appx 1 List of Audit Participants

The following personnel participated in this audit. Where necessary, other employees provided additional explanations.

NEO

George Belmont	HRCF Facility Mgr
Roger Buker	Yard Foreman
James Ecker	General Manager
John Kelly	Dir Product Sales
Thomas Pitts	Controller
Melanie Solmos	Mgr Mktg & sales
Jim Stevens	Operator
Ann Thayer	Dir Regulatory & Technical
Bob Trombley	Trucking Mgr
Mary Waring	Compliance Mgr (+ EMS Coordinator)

Other

Peter Cook	Maine DEP
Mark King	Maine DEP
Neil Hutchins	Gnome Landscaping (customer)
Buzz Pinkham	Pinkham Plantation (customer)
Mac Richardson	LAWPCA

Observers

Betty Marchessault	LAWPCA
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Appx 2 Documentation / Objective Evidence Reviewed

Action Plan & Tracking 2008, 2009
Biosolids for Agriculture pamphlet
CARs (various)
Casella Annual Report 2008
Compliance Calendar 2008
Compliance calendar 2008 & 2009
Corrective / Preventive action tracking spreadsheet
Critical Control Points table 3.1
Earthlife Compost brochure
Earthlife News spring 2008
Emergency Action Plan –Hawk Ridge Compost Facility
Emergency Preparedness Procedures (various)
Emergency Response Plan – Extremely Hazardous Materials
EMS Corrective Action summary
EMS planning calendar
Facility Safety Inspection Checklist 5/4/08
Generator Survey 7/10/07
Goals & Objectives 2008 & 2009
Hawk Ridge Compost Production & QC Plan 6/29/06
HRCF compliance evaluation by Casella 7/20/07
HRCF Metals & Nutrients data
Incident event tracking 2008
Internal audit report 7/21/08
NEO Services Company Profile
New Employee Checklist 2008
PMG bill stuffer
Preventive Maintenance inspection checklist (various)
Residual Mgmt Service Agreement (Town of Seabrook) 11/3/08
SPCC Plan 10/10/07
Spill Control Plan 9/07
Standard Operating Procedures (various)
Third Quarter 2008 report to ME DEP
Update on Regulatory & Technical issues 9/08

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Appx 3 **Desk Audit Findings (by EMS Element)**

The following “observations” and “comments” were made during the review of the New England Organics EMS Documentation (Biosolids Management System Manual). Results of that review were reported to New England Organics on 11/1/08. “Observations” can lead to EMS nonconformances if not corrected. “Comments” are for consideration only and do not require action.

Note – many of these “observations” were corrected following this documentation review. Those not corrected were included in nonconformances identified above.

Element 1 – Documentation of EMS for Biosolids

The NEO Biosolids Program / EMS Manual describes procedures it uses to manage its biosolids activities. The manual is organized into 17 “Elements” that correspond sequentially to the NBP EMS Elements. Each “element” in the manual has a unique name, issue & revision dates and approval.

Observations

See observations included in discussion for each element.

Comments

- There is no description of the purpose of the EMS or the interaction of processes within it.
- Authority of the Director Regulatory & Technical to approve the Policy and to approve the Program Manual is not stated and the authority of the EMS Coordinator to approve the latest manual revision is also not stated.
- The “EMS Program” with which subcontractors are required to comply (per Element 1) is not defined

Element 2 - Biosolids Management Policy

The NEO Biosolids Program / EMS Manual Element 2 provides the Biosolids Management Policy Statement. The NBP Code of Good Practice is referenced.

Observations

None – see comments below

Comments

- It is not clear how the Biosolids Policy is incorporated into biosolids programs, procedures and practice other than through various communications & revising contracts

Element 3 - Critical Control Points

The NEO Biosolids Program / EMS Manual Element 3 (Critical Control Points) defines critical control points and related environmental impacts and operational controls. Appendix 3A lists critical control points and operational controls.

Observations

None

Comments

None

Element 4 - Legal and Other Requirements

The NEO Biosolids Program / EMS Manual Element 4 describes procedures and responsibilities for identifying and tracking applicable legal and other requirements. Table 4.1 lists legal and other requirements.

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Observations

1. The list of applicable legal & other requirements does not include OSHA or DOT requirements, which are likely applicable to NEO biosolids activities.
2. There is no written procedure that describes how applicable legal and other requirements are incorporated into the EMS and operational controls.
3. There is no procedure for identifying “other” requirements.

Comments

- The distinction between legal requirements and other requirements could be more clearly described.
- It is not clear from Elements 4 or 13 how NEO ensures compliance with legal and other requirements.

Element 5 - Goals and Objectives for Continual Improvement

The NEO Biosolids Program / EMS Manual Element 5 describes procedures and responsibilities for developing biosolids goals and objectives and monitoring in achieving them. Appendix 5B provides an EMS Workplan.

Observations

None – see comments below

Comments

- Biosolids goals are presented like short term objectives, while biosolids objectives are presented more like action plan steps to achieve the goal – very unusual. Setting action plans for “goals” and not for “objectives” is also unusual.
- It is not clear how biosolids goals and objectives are integrated into other EMS elements and biosolids activities.
- Measurability is time-related for 19 of 20 objectives. Continual improvement could be better tracked if measurability was described in more identifiable units (e.g. % change).
- The Action Plan & Tracking Template indicates that some objectives have been completed, however these have not been removed from the list of apparently current objectives.
- It is not clear what “resources available” means in the Tracking Template.

Element 6 - Public Participation in Planning

The NEO Biosolids Program / EMS Manual Element 6 describes procedures and responsibilities for public involvement in biosolids program planning. Table 6.1 provides public participation mechanisms.

Observations

None – see comments below

Comments

- It is not clear how public participation is used in planning the biosolids program.
- While many different opportunities are available for public participation in the EMS, there is no clear indication of what New England Organics does with input received to help plan and improve their EMS.
- Involving interested parties in third party audit process is not mentioned in EMS Manual Element 6 or 9.

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Element 7 - Roles and Responsibilities

The NEO Biosolids Program / EMS Manual Element 7 describes roles and responsibilities within the biosolids program.

Observations

4. Appointment of EMS Coordinator and authorization for the responsibilities and authorities of that position are not stated in the EMS Documentation.
5. The individual with responsibility for the biosolids program is not identified.

Comments

- Responsibilities of the Director – Regulatory & Technical Affairs are not stated.
- Responsibilities for controlling contractors are not mentioned in Element 7.
- Responsibilities of the EMS Coordinator are described throughout the EMS Manual, however there is no summary or other description of EMS Coordinator role and responsibilities in Manual Element 7.
- There is no indication in the Manual as to how resource needs are identified and provided.

Element 8 - Training

The NEO Biosolids Program / EMS Manual Element 8 describes training plans and requirements within the NEO biosolids program.

Observations

None – see comments below

Comments

- There is no mention of how NEO ensures new / reassigned employees receive necessary training
- There is no mention as to how employee competency in performing their job tasks is assessed.
- Element 8 indicates that NEO trains contractors. It is not clear if contractors are required to train their own personnel involved in biosolids activities, as required by EMS Elements.

Element 9 - Communication

The NEO Biosolids Program / EMS Manual Element 9 describes requirements and procedures for communication about biosolids program activities.

Observations

6. Making information available “upon request” or when “initiated by interested parties” (per Element 9) is not proactive.
7. There is no clear description or procedure for communicating internally or with contractors about the biosolids program / EMS.

Comments

- NEO states they will respond to inquiries & requests from “interested parties and other individuals”, however it is not clear who has responsibility for doing this, or ensuring it is done as required.
- Making “an effort” does not ensure timely response to inquiries by interested parties.
- It is not clear how relevant information about biosolids management activities is communicated to employees and to contractors.

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Element 10 - Operational Control of Critical Control Points

The NEO Biosolids Program / EMS Manual Element 10 describes requirements for controlling operations within the biosolids program scope.

Observations

8. Several operational controls identified in the Manual Table 3.1 are noted as not written or pending and, therefore, assumed to not be in place.

Comments

- Element 10 says operational controls are used to ensure critical control points are effectively managed, however except for an inference (environmental outcomes) there is no indication what “effectively managed” means or is intended to achieve.
- There is no indication of how NEO ensures contractors establish operational controls consistent with their roles and responsibilities.
- A significant number of operational controls are identified. The NEO manual says these are reviewed at least annually, which may become difficult and unnecessary to do regularly.

Element 11 - Emergency Preparedness and Response

The NEO Biosolids Program / EMS Manual Element 11 describes requirements and procedures for emergency preparedness and response related to biosolids program activities.

Observations

9. The EMS Manual says transportation contractors are not required to have emergency plans for their offsite activities. This is not consistent with the statement (manual Element 11) that a “policy” (undefined) is used to ensure they do have such plans and with requirements of the NBP EMS Elements.

Comments

- EMS Manual says emergency plans reviewed / updated at least every year, but does not state how this is done or who has responsibility.
- There is no reference in the EMS Manual for how NEO ensures emergency equipment is readily available.

Element 12 - EMS Documentation, Document Control and Recordkeeping

The NEO Biosolids Program / EMS Manual Element 12 describes requirements and procedures for controlling documents and records used in managing biosolids program activities.

Observations

10. The list of documents requiring control is incomplete. From the discussion in Manual Element 12, SOPs and emergency plans require control.
11. The document control procedure does not state how NEO ensures documents requiring control are available and can be easily located, or how authority for approving those documents is assigned / authorized.
12. There are no written procedures for controlling records required by the EMS other than monitoring & measurement activities.
13. Records requiring control are not identified other than those related to monitoring & measurement. For instance the need to control training records and corrective action records is not stated.

Comments

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- It is unusual that documents requiring control do not include job descriptions, agreements with contractors and some documents of external origin, such as regulations. This will require explanation.
- It is not clear what “document retention date” referred to in Element 12 means or what these dates are.
- Requirements for reviewing / updating SOPs are not stated.
- The list of documents requiring control does not include SOPs (clearly stated as requiring control) and other docs that usually require control (such as emergency plans)
- There is no reference in the EMS Manual to contractor document control & recordkeeping requirements.

Element 13 - Monitoring and Measurement

The NEO Biosolids Program / EMS Manual Element 13 describes requirements and procedures for monitoring and measuring biosolids program activities.

Observations

14. While various items are listed as requiring monitoring and measurement (Table 3.1) there is no indication of how these or other monitoring is done to ensure compliance with legal and other requirements.

Comments

- Responsibilities for conducting monitoring & measurement are not stated, other than Dir Regulatory & Technical Affairs being responsible for monitoring progress towards goals & objectives.
- It is unusual that M/M is reviewed annually. More likely this is done at least daily.
- There is no indication how monitoring / measurement records other than analytical data and progress towards goals and objectives are recorded.

Element 14 - Nonconformances: Preventive and Corrective Action

The NEO Biosolids Program / EMS Manual Element 14 describes requirements and procedures for identifying, correcting and preventing nonconformances in biosolids program activities. A “Corrective Action Worksheet Form is included.

Observations

15. There is no written procedure for investigating and correcting / preventing regulatory noncompliances other than a reference (Element 14) to operating permit nonconformances.

Comments

- Element 14 says the corrective & preventive action process is used to address “conformance issues that may arise from monitoring / measurement activities”, however there is no procedure stated for identifying / investigating / correcting / preventing those nonconformances.
- There is no mention of how corrective action plans address need for changes to policies, programs, plans, operational controls and monitoring/measurement procedures.
- The Preventive and Corrective Action procedure does not indicate what happens if action taken is not effective.
- It does not appear that the CAPA process is used to correct problems such as emergency incidents or lack of progress towards goals / objectives.
- Correcting minor nonconformances within 30 days of third party audit is unnecessarily restrictive.

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Element 15 - Biosolids Program Periodic Performance Report

The NEO Biosolids Program / EMS Manual Element 15 describes requirements for preparing Biosolids Management Program Performance Reports.

Observations

None – this Element not included in scope of the Verification Audit

Element 16 - Internal EMS Audits

The NEO Biosolids Program / EMS Manual Element 16 describes requirements and procedures for conducting internal audits of biosolids program activities. The report of internal audit conducted in July 2008 was provided to the auditor and included in this review.

Observations

16. The internal audit conducted in July 2008 did not make any determination about whether NEO is effectively meeting its biosolids policy commitments or about effectiveness in achieving biosolids goals and objectives.

Comments

- The scope of internal audits is stated as “program activities completed during the previous operating period”. It is not clear what this means and it appears to be incomplete in achieving the intended purpose to “determine biosolids program effectiveness”.
- The report of July 2008 internal audit is still in “draft” form. Does that mean it has not been completed or reported?
- The purpose of the internal audit conducted in July 2008 is not stated in the audit report.

Element 17 - Periodic Management Review of Performance

The NEO Biosolids Program / EMS Manual Element 17 describes requirements and procedures for conducting management reviews of biosolids program suitability, adequacy and effectiveness..

Observations

None – see comments below

Comments

- There is no indication in Element 17 that performance relative to policy commitments is discussed during management reviews.

END OF REPORT