

BIOSOLIDS EMS MANUAL

ELEMENT 16.0

INTERNAL EMS AUDIT



REVISION	EFFECTIVE DATE	APPROVAL SIGNATURE
13	August 02, 2016	

PURPOSE

The Internal EMS Audit is used to regularly analyze the EMS for biosolids to determine whether the Village Creek Water Reclamation Facility (VCWRF) is effectively meeting its Biosolids Management Policy, program requirements, and program goals and objectives.

SCOPE

This procedure applies to all EMS elements throughout the biosolids value chain.

KEY WORDS

- Environmental Management System (EMS) Audit
- Audit Criteria
- Audit Findings

RESPONSIBILITY

The Biosolids EMS Manager is responsible for:

- Selecting the audit team
- Determining audit scope
- Providing the list of resource personnel for the audit
- Preparing the necessary facilities for the audit
- Scheduling the necessary management interviews the audit requires

The Internal Audit Team is responsible for the following during the Internal Audit:

- Identifying the Lead Auditor and qualifications of auditors
- Preparing the audit agenda (if necessary)
- Conducting the audit
- Preparing the audit report.

The EMS Management Team, Biosolids Contractor and VCWRF personnel are responsible for:

- Participating in the Internal Audit when needed
- Acting on the Internal Audit Team when needed

PROCEDURE

Internal Audits

Internal audits are conducted by the City of Fort Worth and follow one of the following two formats as required by the EMS Planning Schedule (Located at the back of the EMS Manual).

- **Interim Audits**

If a third party auditor is not utilized then the City shall conduct interim audits that cover the biosolids EMS management activities performed by the Contractor and the City. City conducted interim audits are similar in scope and procedure to the National Biosolids Partnership (NBP) interim third party audits. Interim audits shall meet the following criteria:

- **Auditor Selection**

The Biosolids EMS Manager assigns personnel experienced with the NPB audit process to conduct the interim audits.

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- **Audit Plan**
Prior to the interim audit the Biosolids EMS Manager meets with the Audit Team to develop an audit plan.
 - **Identification of Lead Auditor & Auditor Qualifications**
The Audit Team selects the lead auditor. The lead auditor's qualifications must be stated.
 - **Auditor Criteria**
The Audit Team uses the criteria established in the National Biosolids Partnership Third Party Verification Auditor Guidance and associated updates.
 - **Audit Resource Personnel**
The Biosolids EMS Manager provides a list of resource personnel from Village Creek Water Reclamation Facility and from the EMS Team that aids the auditors.
 - **Facilities**
The Biosolids EMS Manager also coordinates the necessary facilities for the auditors and any personnel that the auditors would like to interview.
 - **Audit Scope:** The Interim Audit Team audits the identified Elements in the appropriate year and follows the Audit Schedule from Table 1 below.
- **Pre-Interim Audit**
The City conducts pre-interim audits prior to third party audits. Pre-interim audits focus on the biosolids program's overall environmental performance, its compliance status, EMS Goals & Objectives and an evaluation of all Corrective Action Notices (CANs) from the previous reporting year (August 1-July 31) up to the date of pre-interim audit. The City's pre-interim audit shall also verify that annual EMS Management Review Meetings and the Annual EMS Performance Reports have been completed.

Schedule

The NBP third party Interim and Verification audits occur as follows:

- Year 10 Reverification (third party audit required) & Pre-Interim Audit
- Year 11 Interim Audit (third party audit optional*)
- Year 12 Interim Audit (third party audit required) & Pre-Interim Audit
- Year 13 Interim Audit (third party audit optional*)
- Year 14 Interim Audit (third party audit required)& Pre-Interim Audit
- Year 15 Reverification (third party audit required) & Pre-Interim Audit

*If third party audit is utilized then the City must conduct a pre-interim audit

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Table 16.1: Audit Schedule for Interim Audits

Area	Element		YR10 (2015)	YR11 (2016)	YR12 (2017)	YR13 (2018)	YR14 (2019)	YR15 (2020)
			Re- verification 3 rd Party	Interim Audit (third party audit optional*)	Interim Audit (third party audit required)	Interim Audit (third party audit optional*)	Interim Audit (third party audit required)	Re- verification 3 rd Party
Policy	1.0	Documentation of EMS	X	X	X	X	X	X
	2.0	Biosolids Policy	X	X	X	X	X	X
Planning	3.0	Critical Control Points	X			X		X
	4.0	Legal & Other Requirements	X	X				X
	5.0	Goals & Objectives	X	X	X	X	X	X
	6.0	Public Participation in Planning	X	X	X			X
Implementation	7.0	Roles & Responsibilities	X	X				X
	8.0	Training	X		X			X
	9.0	Communication	X	X	X			X
	10.0	Operational Controls	X	X	X	X	X	X
	11.0	Emergency Preparedness & Response	X				X	X
	12.0	Document Control & Recordkeeping	X				X	X
Measurement & Corrective Action	13.0	Monitoring & Measurement	X			X		X
	14.0	Nonconformances: Preventative & Corrective Action	X	X	X	X	X	X
	15.0	Biosolids Program & EMS Performance Report	X	X	X	X	X	X
	16.0	Internal EMS Audit	X					X
Management Review	17.0	Periodic Management Review of Performance	X	X	X	X	X	X
Outcomes		Environmental Performance	X	X	X	X	X	X
		Regulatory Compliance		X	X	X	X	X
		Interested Party Relations		X	X	X	X	X
		Quality Practices		X	X	X	X	X
Open Nonconformances		Open Nonconformances		X	X	X	X	X

Shaded areas are required by "Elements of an EMS for Biosolids"
 *The City's pre-interim audits are required prior to third party audits. See page 2 for additional details.

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Audit Report & Findings

Once the Internal Audit Team completes the audit they compile and submit a report to the Biosolids EMS Manager. The report contains:

- A summary of findings based on audit criteria.
- Evidence of nonconformance and any recommended actions.
- Recommendations of methods to share results with employees, partners, and the public.

The City uses the results of their audits to comply with the five-year EMS audit plan.

Management Review of Audit Findings

The Biosolids EMS Manager reviews the report. If the interim audit finds any nonconformance issues, the Biosolids EMS Manager discusses the deficiency with the appropriate EMS_Management Team members, appropriate supervisor, employees or contractor in this area to verify the nonconformance issue.

Corrective Action Notice (CAN)

A Corrective Action Notice (CAN) form, as shown and described in Element 14.0, is completed for each nonconformance.

Preventive Measures & Recommended Solution

The Biosolids EMS Manager and the required personnel develop a schedule and a comprehensive correction action plan preventive measures and recommended solutions identified to correct any nonconformance found during the audit.

Notice of Audit Results to the Public

Once the EMS Management Team has reviewed the interim audit results and determined the best method(s) to convey the audit results, employees, partners, and the public are notified. The methods used to convey the internal audit results are consistent with the public participation and communication methods discussed in Elements 6.0 and 9.0.

The EMS Management Team provides approved schedules and action plans to correct any nonconformance found during the interim audit. These items are a direct result of the Management Review discussed in Element 17.0.

Third-Party Audit Results

The independent third-party audit results are handled in the same manner as described above. The EMS Management Team reviews the third-party audit results, issues approved schedules, preventive measures, and action plans to correct any nonconformance found and conveys the results to employees, partners, and the public.

Schedule

The City conducts either interim or pre-interim audits each year as described in "Internal Audits", Table 16.1: Audit Schedule for Interim Audits located within this element or the EMS Planning Schedule. The Biosolids EMS Manager incorporates the Internal Audit Report into the Biosolids Performance Report (Element 15.0) and the Biosolids Management Review (Element 17.0).

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REFERENCES

- BMP Guidance Manual, (NBP): <http://ww.weftec.org/Biosolids/page.aspx?id=7733>
- Code of Good Practice, (NBP): <http://ww.weftec.org/Biosolids/page.aspx?id=7733>
- Manual of Good Practice for Biosolids, (NBP): <http://ww.weftec.org/Biosolids/page.aspx?id=7733>
- Interim Audit Guidance, (NBP): <http://www.wef.org/Biosolids/page.aspx?id=7733>

EMS Cross References

- Element 6.0 Public Participation in Planning
- Element 9.0 Communication and Public Outreach
- Element 12.0 Documentation and Document Control
- Element 14.0 Nonconformance: Preventative and Corrective Action
- Element 15.0 Biosolids Program and EMS Performance Report
- Element 17.0 Periodic Management Review of Performance

REVISION HISTORY

Revision #	Date	Revision Description
13	08/02/2016	Merged element to new format, updated audit schedule (Table 16.1)
12	10/06/2014	Revised internal audit procedure to include evaluation of CANs
11	01/06/2014	Revise audit procedure in response to CAN 2013-16
10	08/26/2013	Update internal audit procedures in response to CAN 2013-05
09	08/05/2013	Updated references, procedures regarding pre-interim audits and audit report finding, updated Table 1
08	07/29/2011	Update Table 1
07	06/10/2011	Clarify interim and pre-interim audit requirements
06	11/16/2010	Update references and audit procedures (interim & internal)
05	06/29/2007	Audit (YR1) 2006
04	05/10/2006	Auditor revisions according to Management Review
03	05/26/2005	3 rd Party Audit Phase I Revisions
02	11/29/2004	2004 Issue
01	10/01/2004	Approval Draft
SR	01/30/2004	Issued for Status Review