

BIOSOLIDS EMS — ELEMENT 14.0

NONCONFORMANCE: PREVENTATIVE & CORRECTIVE ACTION



REVISION	EFFECTIVE DATE	APPROVAL SIGNATURE
15	October 06, 2021	

PURPOSE

Element 14.0 outlines the procedures that City of Fort Worth staff utilize to successfully identify, investigate, and correct any noncompliance with applicable regulatory requirements or nonconformance with Biosolids Management Program (BMP) procedures. Corrective action plans are developed to address any nonconformance identified during routine monitoring and measurement. A Corrective Action Notice (CAN) is a written form used to document the nonconformance, the root cause(s), the corrective action(s) being taken and any changes to policies, programs, plans, operational controls, or monitoring and measurement procedures that will prevent recurrence.

SCOPE

This element contains step-by-step procedures for identifying, investigating and taking corrective action(s) for nonconformance. Typical causes of EMS nonconformance include: 1) poor communication; 2) faulty or missing procedures; 3) equipment malfunction or lack of maintenance; 4) lack of training; 5) lack of understanding of an EMS requirement; and 6) not following an EMS requirement.

KEY WORDS

- Nonconformance
- Corrective Actions
- Preventative Actions

RESPONSIBILITY

Biosolids EMS Manager (Plant Operations), Biosolids EMS Manager (Contractor), Biosolids EMS Coordinator (Plant Operations), Assistant Director (Plant Operations), Superintendent (Plant Operations-Wastewater), Plant Manager (Plant Operations-Wastewater), Engineering Manager (Plant Operations), Assistant Superintendent (Plant Operations-Wastewater), Assistant Superintendent (Plant Operations-Maintenance), and the Pretreatment Manager (Customer Care) are responsible for addressing and resolving nonconformance issues.

PROCEDURE

The process for identifying, preventing and responding to nonconformance is an important mechanism for continual improvement within an organization. The procedures in this element outline how the Biosolids Program will address identified nonconformance, so that problem situations may be prevented from occurring and recurring.

Everyone who works within the biosolids value chain has a responsibility to identify and report nonconformance issues promptly to a supervisor/manager and the Biosolids EMS Manager whenever they are encountered. Any nonconformance with Best Management Practices (BMPs) and/or EMS Elements (including noncompliance with applicable regulatory requirements) must be addressed as follows:

Step By Step Process To Address Nonconformance

When a nonconformance issue arises the following basic steps are implemented:

1. Start a Corrective Action Notice (CAN)
2. Identify the problem.
3. Identify the root cause (investigate- why, where, what, when, who and how)?
4. Develop a solution.
5. Include steps to prevent a recurrence.

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6. Include steps to mitigate any actual or potentially significant environmental impacts.
7. Document the solution.
8. Communicate the solution.
9. Implement the solution.
10. Review your progress to ensure that corrective actions taken are effective.

Types of Nonconformance

A nonconformance is a deviation in the City of Fort Worth's established Biosolids Management Policy, the Environmental Management System (EMS), the Code of Good Practices principles, and/or the requirements of the EMS Elements. Nonconformance include circumstances that have the potential to create a noncompliance situation or significant environmental impact. A noncompliance is a deviation from, or violation of, federal, state and local laws, regulations and other compliance requirements applicable to the organization's biosolids management activities.

Two categories of nonconformance (major and minor) are recognized by the Biosolids EMS. The specific type of nonconformance is documented as part of the corrective action process.

- **Major Nonconformance**

A major nonconformance is an absence of, or significant failure to implement and/or maintain conformance to the requirements of the EMS, the TPDES Wastewater Permit or other regulatory standards. A major nonconformance can occur if a significant number of minor nonconformities in a given activity or against a given element, point to a systematic failure. Major nonconformities are those where important portions of an entire element are not addressed, have not been addressed adequately, or have not been effectively corrected in a timely manner. Major nonconformities also exist if an element is being disregarded during participant operations to the extent that a systematic failure occurs (ie., a noticeable effect on the participant's environmental compliance, environmental impacts, or the quality of the product being produced). Major non-conformities require timely and effective corrective action by the agency (usually within 90 days) and verification of corrective action by an accredited third party auditor.

- **Minor Nonconformance**

A minor nonconformance represents either a management system weakness, or a minor issue that could lead to a major nonconformance, if not addressed. Although minor nonconformities involve discrepancies within an element of the *EMS Manual* and commitment to comply with the *NBP's Code of Good Practice*- a systematic problem is not indicated. Minor non-conformities require timely and effective corrective action by the agency (usually within 30 days) and verification of corrective action by an accredited third party auditor.

Corrective Actions

Corrective Action Notices (CANs) are nonconformance reports designed to identify, track, manage, and complete (close) corrective actions for EMS deficiencies, in a timely manner. Some corrective actions can be addressed through "quick fix scenarios" that will only utilize the CAN form. However, some corrective actions may take a long period of time to complete due to the complexity of the solution or other related issues. Under such a scenario, if the identified corrective action meets SMART criteria (Specific, Measurable, Achievable, Relevant, Time-Bounded), then the EMS Coordinator will discuss the issue with the EMS Manager and determine if the corrective action should be made into a formal Goal & Objective. If it does not meet SMART criteria due to the project size, scope, funding, schedule, or other related issues then the corrective action will be moved to the Miscellaneous Project List (MPL). The project will remain on the MPL until SMART criteria are developed, after which it can be adopted as a Goal & Objective. See Element 5.0 for more information on the MPL.

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Tracking Corrective Action Notices

Open CANs will be reviewed on a quarterly basis by the Biosolids EMS Coordinator and/or the Biosolids EMS Manager to evaluate their status and make updates towards completion, if applicable. After open CANs have been reviewed, the date of review and person responsible for the review will be recorded on the Corrective Action Notice Review sheet that is housed in the Master Copy of the EMS Manual. Additional systems used to track progress in completing CANs and periodically updating their status to reflect completion include the following:

- Monthly Biosolids O&M Meeting - The City conducts regularly monthly scheduled operation and maintenance (O&M) meetings with the Biosolids Contractor. Attendees discuss program activities that include any outstanding issues associated with biosolids operations and land application activities (Refer to Elements 6.0 and 9.0).
- Corrective Action Notice (CAN) Master Listing - Once the CAN is closed out, the Biosolids EMS Coordinator records it in the electronic CAN Master Listing, files an electronic copy and files a hard copy in the Corrective Action Notice Binder.

During each internal audit, the auditor(s) evaluate all CANs from the previous reporting year (August 1-July 31) to ensure that each has been closed and the proposed solution has effectively resolved the issue. The auditor(s) also check for similar issues within the biosolids value chain to prevent future nonconformance issues. If additional nonconformance issues are identified during the audit, a CAN form is completed for each nonconformance to resolve the issue. The internal audit findings are summarized in the annual EMS Performance Report (Element 15.0), discussed with the EMS Management Team (Element 17.0) and provided to interested parties (Elements 6.0, 9.0 and 16.0).

REFERENCES

- BMP Guidance Manual (NBP, June 2011)
- Code of Good Practice (NBP, June 2011)
- Manual of Good Practice for Biosolids (NBP, June 2011)
- SOP Creation/Revision/Updates – VCWRF SOP PLNT 01.001 Standard Operating Procedures,
- Biosolids SOPs, Contractor SOPs

EMS Cross References

- Element 4.0 Legal and Other Requirements
- Element 5.0 Goals & Objectives
- Element 6.0 Public Participation In Planning
- Element 9.0 Communication & Public Outreach
- Element 10.0 Operational Control of Critical Control Points
- Element 13.0 Monitoring and Measurement
- Element 15.0 Biosolids Program and EMS Performance Report
- Element 16.0 EMS Internal Audit
- Element 17.0 Management Review

ATTACHMENTS

- Corrective Action Notice template
- Corrective Action Notice Review sheet

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REVISION HISTORY

Revision #	Date	Revision Description
15	10/06/2021	Revised the Responsibility and Procedure Sections
14	12/10/2020	Revised the Purpose, Scope, Procedure And Cross Reference Sections
13	03/31/2020	Update to Tracking Corrective Action Notice Progress section
12	10/14/2019	Updated CAP criteria
11	09/21/2018	Update to Responsibility section
10	09/27/2017	Updated procedure, updated references
09	07/29/2016	Merged element to new EMS format and updated procedure, updated CAN form, created CAN Review Sheet for CAN Binder
08	10/06/2014	Updated information regarding evaluation of CANs during internal audits
07	08/05/2013	Update references, included attachment list, updated Corrective Action Notice form
06	07/29/2011	Correct typographical errors and update procedures
05	11/16/2010	Update responsibilities & references
04	05/15/2008	Audit (YR2) 2007
03	06/29/2007	Audit (YR1) 2006
02	11/29/2004	2004 Issue
01	10/01/2004	Approval Draft
SR	01/30/2004	Issued for Status Review

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		CAN#	
Completed by:		Department/Division:	
Date:		Element/Location:	
Nonconformance Issue Major <input type="checkbox"/> Minor <input type="checkbox"/> Opportunity for Improvement <input type="checkbox"/>			
Description of Problem			
Is this a recurring problem? (Explain)			
Root Cause			
Recommended solution and measures to prevent reoccurrence and mitigate potential significant environmental impacts			

Person Responsible for Action: _____
 Scheduled Completion Date: _____
 Actual Completion Date: _____
 Close Out Date: _____
 Signature: _____
 Attachments: _____

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BIOSOLIDS EMS — ELEMENT 14.0 CORRECTIVE ACTION NOTICE REVIEW



Date of Review	Reviewed By