

# Audit 101

Internal Auditor Training  
2013

SOLID WASTE Environmental  
Management  
System

*Committed to Continuous Improvement*



# From Iowa Administrative Code (IAC) 567 Chapter 111 – EMS Annual Reports

**“Audit”** means a planned, objective and documented **Assessment**, either done internally by the program participant or its designee or externally by an independent third party, to determine the performance of a planning or service area’s system in relation to the designation requirements.

The word Assessment was used in the Elements of EMS passed by Council. Audit is the “working” terminology used by participants and the department. Audit will be used in this document, but the two words shall be considered interchangeable.

# From IAC 567.111

- ◎ **111.6(6)** *Internal Audit.* A copy of the result of the latest internal Audit that includes the date(s) it was conducted and the identity of the Auditor(s) shall be provided as part of the report. An internal Audit shall be conducted each state fiscal year.
- ◎ **111.6(7)** *External Audit.* An external Audit shall occur each state fiscal year. The date of the latest external Audit or the date the Audit will take place, along with the identity and pertinent qualifications of the independent, third party Auditor(s) shall be provided. The results of the external Audit shall be incorporated into the report. The department has a prequalification process for external Auditors.

Just  
what  
are we  
auditing  
?

## Elements of HF 2570's EMS

There are 3 main overarching elements.

1. **Environmental Policy Statement:** Statement by the organization of its intentions and principles in relation to its overall environmental performance which provides a framework for action and for the setting of its environmental objectives and targets, and its commitment to *environmental compliance and* continual improvement through the EMS.
2. **Environmental Impacts:** The organization identifies and evaluates the actual or potential *aspects and* impacts to the environment, whether adverse or beneficial, from its activities, services and facilities. During the evaluation process, significant impacts to the environment are determined.
3. **Legal and other requirements:** The organization must identify the legal requirements for its operations and facilities, including relevant environmental laws, regulations and permits, and worker health and safety regulations, and have a process for tracking any changes in these requirements.

The following 7 elements would be applied to each of the 6 plan components (Yard Waste Management, Hazardous Household Waste Collection, Water Quality Improvement, Greenhouse Gas Reduction, Recycling Services, Environmental Education):

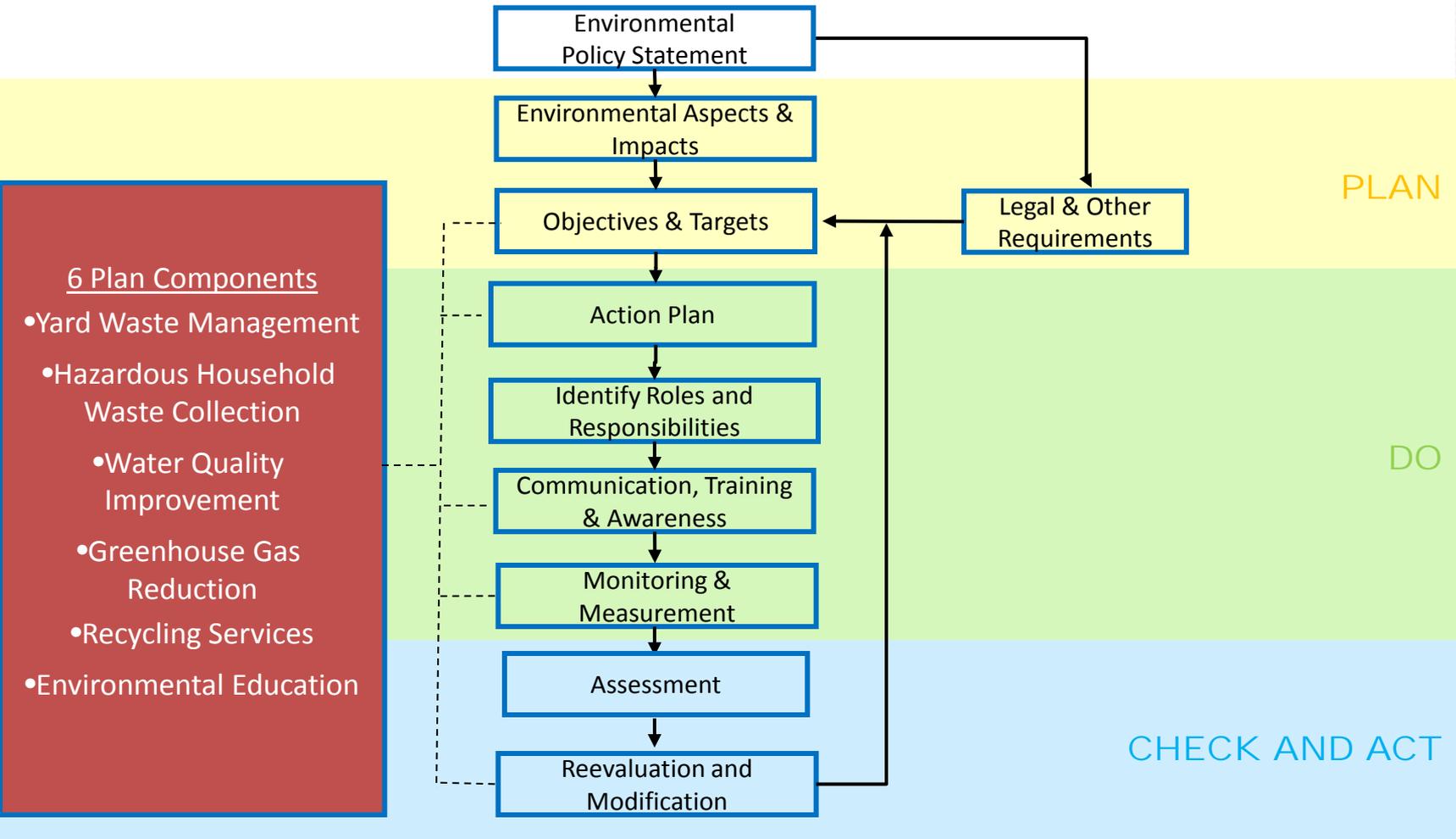
4. **Objectives and Targets:** The organization establishes objectives relevant to its policy, environmental issues and impacts previously identified, the views of interested parties, and other factors. Targets necessary for achieving the stated objectives are also established. A target is much more detailed than its objective and must be quantifiable.
5. **Action Plan:** Actions necessary to achieve the objectives and targets. The plan includes identifying the individuals and/or organizations responsible for carrying out specific tasks, timelines for completion of each step in the plan, and a schedule for periodically reviewing and updating, as conditions dictate, the objectives and targets. *As part of reviewing the draft of the action plan, conduct an inventory of key resources needed to carry out and complete the action plan. Resources may include staff, fiscal matters, specific skills, facilities, partners, and additional needs. Upon completion of the inventory the action plan may need to be adjusted accordingly.*
6. **Identify Roles and Responsibilities:** Responsibility for implementation of the elements of the EMS program need to be identified, documented, and communicated to relevant staff.
7. **Communication/Training/Awareness:** Establish processes for internal and external communication. External communication will include reaching out to those groups and organizations that have been identified as having an interest, stake, or role in the organization's ongoing EMS program. There must also be procedures for receiving and responding to relevant communication from external interested parties.  
Internal communication is directed to individuals, organizations and entities that have a role or responsibility within the action plan. *Training* includes a process to ensure that all responsible parties are familiar with the EMS and have the *skills* necessary to capably execute their roles.
8. **Monitoring and Measurement:** A documented process for monitoring key activities and measuring performance related to the specific environmental objective and target, *at a minimum*.
9. **Assessment:** The organization must have documented procedures for assessing the function of each component and its effectiveness of and conformance with the EMS plan. Assessment is the process of drawing conclusions from the performance measurements.
10. **Reevaluation and modification:** The reevaluation and modification element is an activity that allows an organization to improve and strengthen the EMS on an ongoing basis. This element considers areas where the EMS has met, exceeded, or failed to meet expectations *and these results are reviewed with management*. Identify root causes of those outcomes, and develop additional goals and activities appropriate to each. It's an opportunity to realize the organization's commitment to continuous improvement and should not be looked upon negatively.



## Elements of HF 2570's EMS

- 3 main overarching elements:
  - Environmental Policy Statement
  - Environmental Aspects & Impacts
  - Legal and Other Requirements
- The following 7 elements would be applied to each of the 6 plan components:
  - Objectives and Targets
  - Action Plan
  - Identify Roles and Responsibilities
  - Communication/Training/Awareness
  - Monitoring and Measurement
  - Assessment
  - Reevaluation and Modification

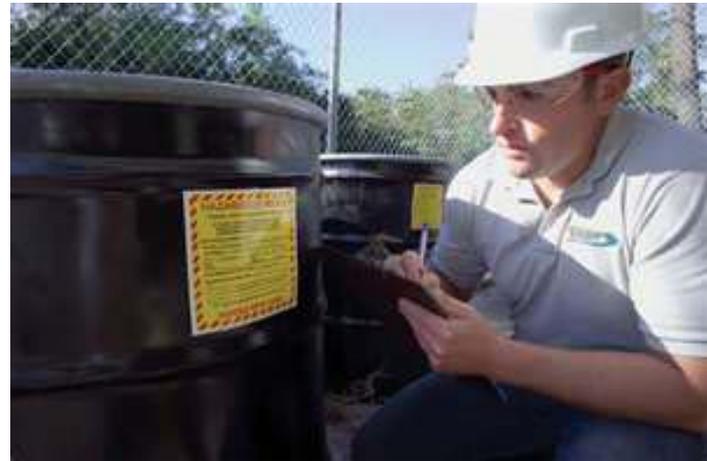
# Iowa EMS Framework (EMS Advisory Council/HF2570)



**EMS AUDIT IS THE WAY TO  
PROACTIVELY IDENTIFY  
WEAKNESS IN THE EMS  
AND THE ASSOCIATED  
ROOT CAUSE**

# EMS Elements Essentials for Audit

- “The organization must have documented procedures for assessing the function of each component and its effectiveness of and conformance with the EMS plan. Audit is the process of drawing conclusions from the performance measurements.”



# Audit

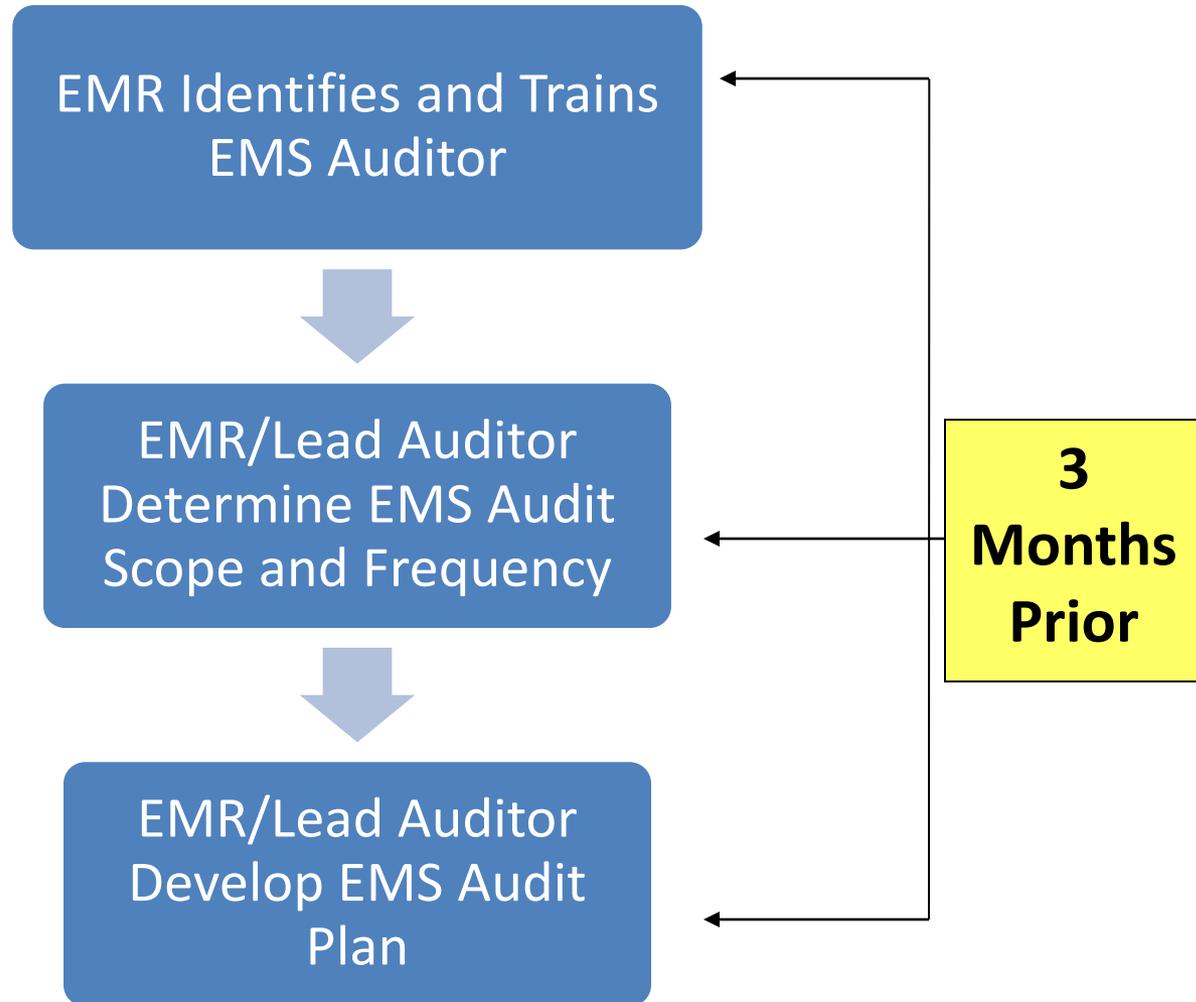
- ◎ Generally, Two Types of Audits
  - Compliance Audits
    - Determine Compliance with Local, State and Federal Laws and Regulations
      - Primarily a Paperwork Review and Site Observations
    - Correct Findings
  - EMS Audits
    - Determine Conformance with the EMS
      - Interviews, Paperwork Review, and Site Observations
    - Findings are Evaluated for Their “Root Cause” and Corrective Action is Then Implemented

# If You Are Used to Compliance Audits, What's Different About an EMS Audit?

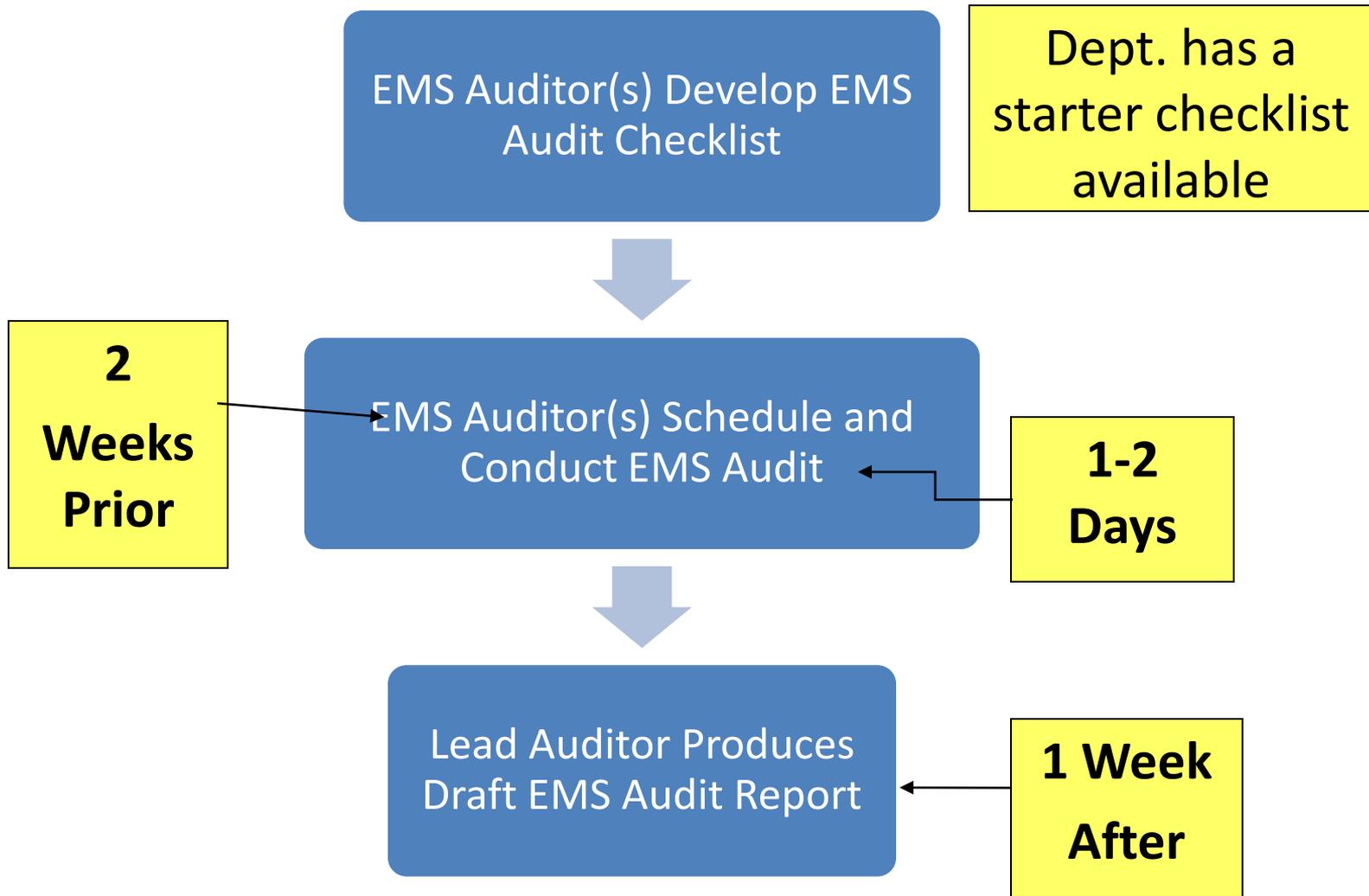
- ⦿ An EMS Audit is a Conversation with Staff Members About the EMS and Their Views of the Environment
- ⦿ An EMS Audit Seeks to Find Weaknesses and Strengths in the System
- ⦿ An EMS Audit is Not “Find and Fix” ...an EMS Audit Seeks to Identify the Root Cause

If You Develop an Effective EMS Audit Process It Will Drive Continual Improvement!

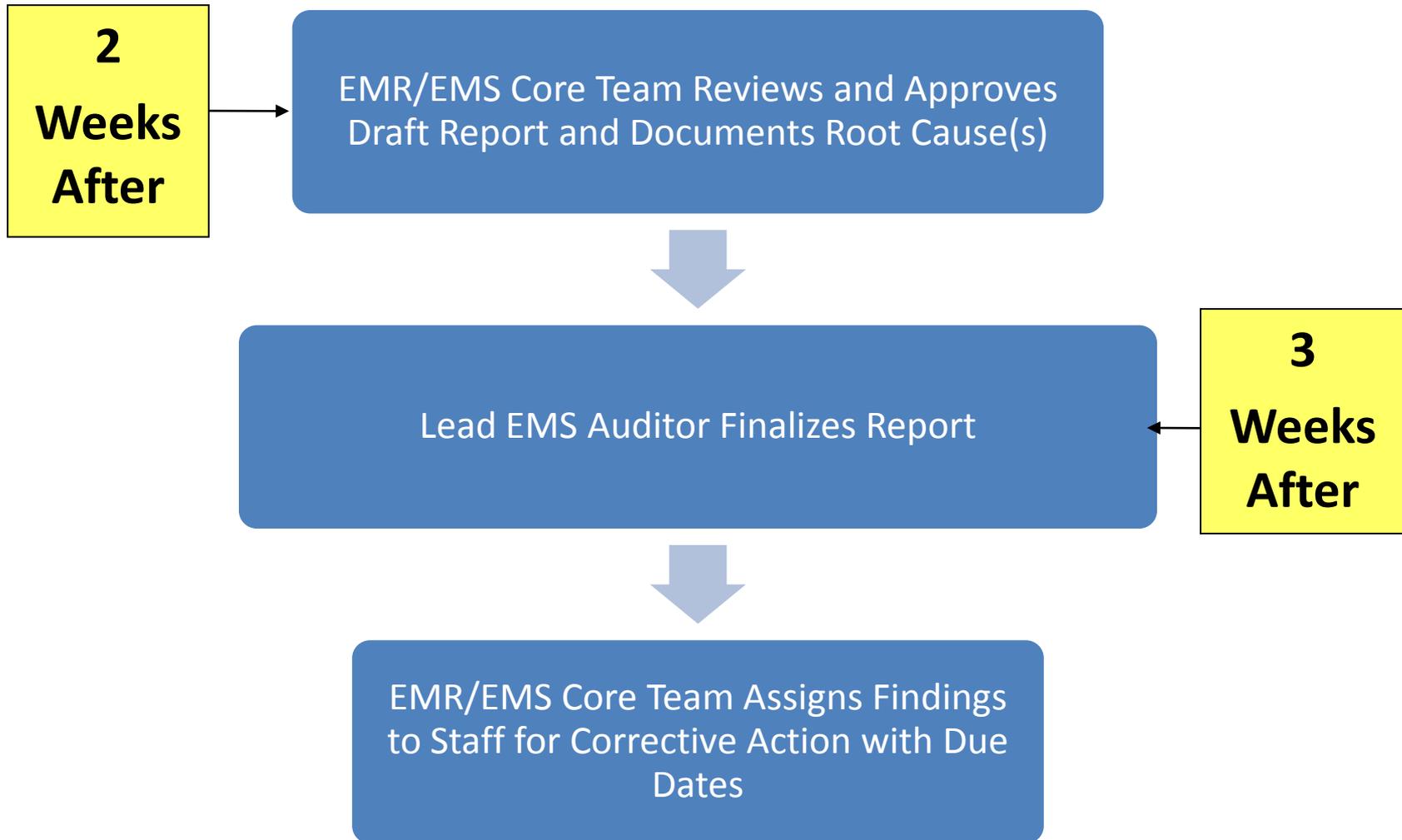
# EMS Audit Process



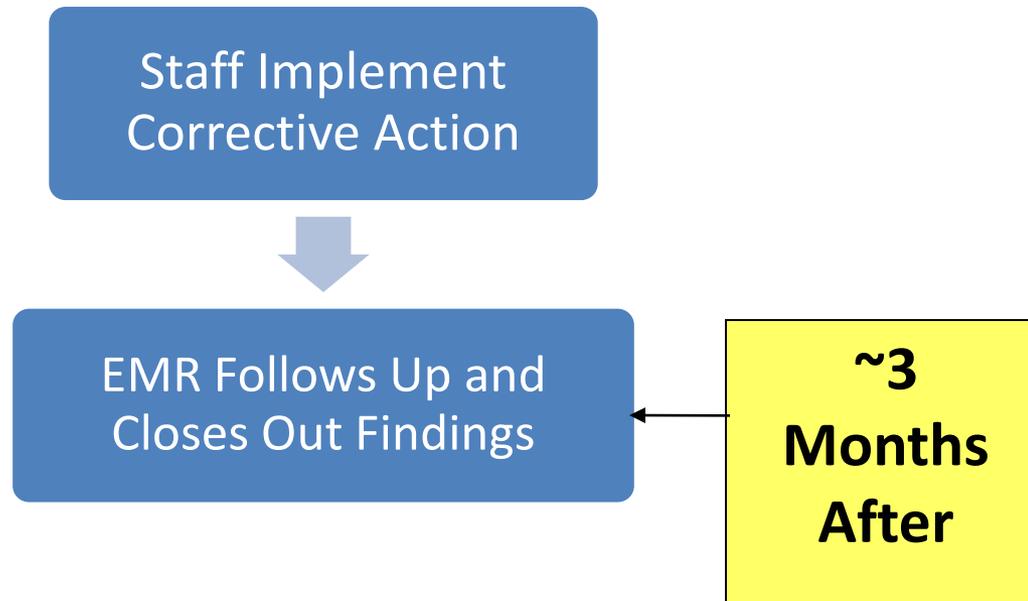
# EMS Audit Process



# EMS Audit Process



# EMS Audit Process



# Identify and Select Auditors

- ⦿ The Selection of Auditors Must Ensure that that Objectivity and Impartiality of the Audit Remains Intact!
  - Cannot Audit Your Own Work
    - No EMRs or EMS Core Team Members
- ⦿ Traits of a Good Auditor
  - No Fear
  - Conversationalist
  - Some Environmental Knowledge or Concern
  - Tactful

# Identify and Select Auditor(s)

- ⦿ Selecting an Auditor Can be Problematic
  - Small Organizations with Limited Staff
  - Everyone with Environmental Knowledge or Knowledge of the EMS is on the EMS Core Team
  - Availability of Time for the Auditor to Train and Conduct the Audit

**Remember, EMS is About  
Continual Improvement...Your EMS  
Audit Will Also Continually  
Improve**

# Identify and Select Auditor(s) - Suggestions

- ⦿ Think Outside the Box
  - Is There Someone from Outside Your Organization That May be Willing to Conduct the Audit (Other EMS participants?)
- ⦿ Consider Making it Prestigious to Be Selected as an Auditor
- ⦿ Use a New Staff Person
- ⦿ Consider Staff Outside the Fenceline



**IOWA**  
Department of  
Natural Resources

# Developing the EMS Audit Plan



G R E S H A M  
S M I T H   A N D  
P A R T N E R S

# EMS Audit Plan

- ⦿ The EMS Audit Plan Serves as a Planning Tool to Facilitate the Audit Process
- ⦿ The EMS Audit Plan Should
  - Document the Schedule
    - 9:00 – 10:00 – Interview the EMR
    - 10:00 – 11:00 – Review Records
  - Identify the Interviews, Records, and Documents that Are Needed to Verify the EMS is in Place and Working Effectively
    - “Evidence”
- ⦿ As Part of Audit Planning, Finalize Checklists

# Audit Checklist

Date: \_\_\_\_\_ Lead Auditor: \_\_\_\_\_

Facility: \_\_\_\_\_

Iowa EMS Element Description and Number	Audit Results						
	Senior Mgmt.	EMR/Core Team	Staff	Met	Partly Met	Not Met	Commendable
<b>1 Environmental Policy Statement</b>							
Has an Environmental Policy Statement been adopted by management?							
Does the policy provide the following:							
(1) commitment to environmental performance?							
(2) framework for action?							
(3) framework for setting objectives and targets?							
(4) commitment to continual improvement?							
Is it visible and communicated to staff?							
Are staff aware of the Policy?							

This form is available from DNR - see the final page of this presentation.

# Audit Plan Template

## Internal EMS Audit Plan

Date: \_\_\_\_\_

Preparer: \_\_\_\_\_

Facility: \_\_\_\_\_

Facility/Department/Area	EMS Element	Auditor(s)	Auditee(s)	Date and Time	Special Instructions

# Audit Plan Example

Internal EMS Audit Plan

Date: July 12, 2012

Preparer: Laura Fiffick

Facility: Cedar Rapids Fenceline (Multiple)

Facility/Department/Area	EMS Element	Auditor(s)	Auditee(s)	Time	Special Instructions
EMR	1,2,3,4,5,6,7,8,9,10	John Horaney Jennifer Ryan-Fencil	Marie DeVries	8:30 - 10:00	With document review
County Home Road	1, 2, 3, 4, 5, 6, 7	John Horaney Jennifer Ryan-Fencil	John Foster	30 minutes	Interview will be conducted during field visit (10 - 3:30)
Operations Manager	1, 2, 3, 4, 5, 6, 7	John Horaney Jennifer Ryan-Fencil	Jerry Olsten	30 minutes	Interview will be conducted during field visit (10 - 3:30)

# EMS Audit Plan Best Practices

- ⦿ The EMS Auditor Should Work with the EMR to Determine the Schedule and Necessary Interviews
- ⦿ Remember to Schedule Senior Management Interviews in Advance
- ⦿ Allow Flexibility in the Schedule – You Never Know Where the Audit Will Take You
- ⦿ The Flow of the Audit Plan is Up to the Auditor and EMR But Most Auditors:
  - Start with an Interview with the EMR and Document Review
  - The Site Observations and Interviews Confirm the Statements by the EMR and Commitments in the Documents



**IOWA**  
Department of  
Natural Resources

# Conducting the EMS Audit



G R E S H A M  
S M I T H   A N D  
P A R T N E R S

# Overall EMS Audit Schedule

- ⦿ Opening Meeting
  - Outline Schedule
  - Discuss Process and Expected Results
- ⦿ Conduct the Audit According to the Plan
  - Interviews
  - Document/Record Review
  - Field Observations
- ⦿ Closing Meeting
  - Disclose the Preliminary Findings of the Audit
- ⦿ Audit Report

The Goal of the Audit is to Collect Objective Evidence to Demonstrate the EMS is Working

# Assessing the 10 EMS Elements

- ⦿ Each of the 10 EMS Elements should be audited for conformance with “Elements of HF 2570’s EMS” each year.
  - Timing and schedule are up to you.
- ⦿ The Audit is a combination of interviews with staff, as well as review of documents and records, particularly monitoring and measurement results.

# Environmental Policy Statement

- ⦿ Does the document state the organization's environmental commitments?
- ⦿ Are staff aware of the policy statement?



Employees do not need to recite the policy. It is about knowing the organization's environmental commitments and how it affects their job.

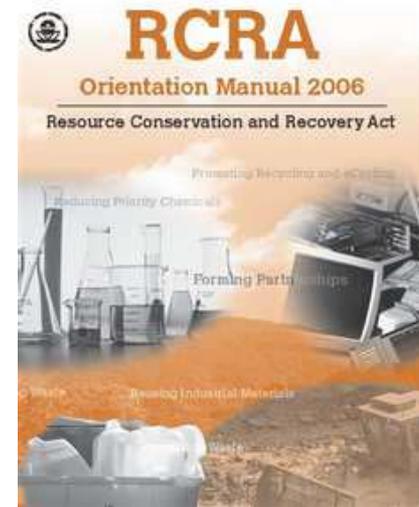
# Environmental Aspects and Impacts

- ⦿ Is there a Procedure and has the organization followed it?
- ⦿ Does the Environmental Aspects and Impacts List capture relevant activities within the fence line?
- ⦿ Have the six plan components (HHW, Yard Waste, GHG, Environmental Ed, Recycling, Water Quality) been considered significant?
- ⦿ Are staff aware of how their job responsibilities may affect the environment?

EMR needs to understand the process of identifying and selecting environmental aspects and impacts.

# Legal and Other Requirements

- Does the Procedure outline how Legal and Other Requirements are identified and tracked?
- How is the List updated?
- Check for OSHA (health and safety) requirements on the List.
- Speak with the compliance manager on how they manage requirements, keep records, and train staff.
- Are staff aware of environmental and safety requirements affecting their job?



Remember to conduct an Audit of conformance with EMS, not legal requirements.

# Objectives and Targets

- ⦿ How were the objectives and target developed and how are they reviewed and updated?
- ⦿ Check objectives for each of the six plan components.
- ⦿ Check that objectives have been set for significant aspects and impacts.
- ⦿ Are target quantifiable and include due dates?
- ⦿ Are environmental impacts being reduced?

- Speak with at least one person managing an objective and target. Discuss process of carrying out this task.
- Objectives and targets need to be concise, realistic, measurable, and time bound.

# Action Plan

- ⦿ Review each action plan for each objective and target and determine if they can achieve the result desired.
- ⦿ Are the action plans realistic?
- ⦿ Have changes been made due to resource availability?
- ⦿ If changes have been made, is the organization still on track to meet the objective?
- ⦿ Are due dates being met?
- ⦿ Are assigned staff aware and keeping track of progress?

An action plan should be developed into a step-by-step-process that rolls up to achieve the objective and target.



# Identify Roles and Responsibilities

- ⦿ Review the Roles and Responsibilities Matrix and ask about development.
- ⦿ How is the matrix updated and communicated to staff?
- ⦿ Does the matrix accurately reflect any changes in roles or responsibilities?
- ⦿ Are staff aware of their EMS related roles and responsibilities?

Roles and responsibilities can be communicated to staff through a variety of ways (posters, email, handouts).

# Communication/Training/Awareness

- ⦿ Review the Procedure. Does it outline internal, external communication and training?
- ⦿ What types of communication are in place?
- ⦿ Have requests, comments, and questions been responded to and addressed?
- ⦿ Have employees had the required training?
- ⦿ Are employees competent and aware of the EMS?
- ⦿ Is training working for the organization?

- Tracking training can be difficult.
- Lack of awareness is an indicator of an ineffective training program.



**EMS** Environmental Management System

EMS = Enhancing Environmental Stewardship

We demonstrate this through *regulatory compliance* and continual improvement in the following six categories:

- Yard Waste Management
- Household Hazardous waste collection
- Water Quality Improvement
- Greenhouse Gas Reduction
- Recycling Services
- Environmental Education



**PROTECT**  
OUR EARTH, HEALTH, SAFETY.  
Learn more at [www.wastecom.com/ehsms](http://www.wastecom.com/ehsms)

# Monitoring and Measurement

- ⦿ How metrics were identified?
- ⦿ Are metrics being tracked and recorded for objectives, targets, and action plans?
- ⦿ Are there any gaps in the metrics?
- ⦿ Do metrics reflect environmental performance?
- ⦿ Is monitoring equipment functioning properly?



The “gold star” of monitoring and measuring is when charts, graphs, tables, etc. are developed and show progress is being measured and tracked.

# Audit



- ⦿ Review the Audit process and verify steps are being followed in the Audit. It's fine to take a “recorder” along to write while Auditor asks questions.
- ⦿ Does the EMS Audit Checklist accurately reflect operations related to the EMS?
- ⦿ Does the Audit process appear to be in place and functioning?
- ⦿ Have all Audit reports been reviewed and finalized by the EMR/EMS Core Team?

Ask the EMR about the process and whether they think it is providing value.

# Reevaluation and Modification

- ⦿ Review previous Audit Report and ask about the process to follow up on any findings.
- ⦿ Have all findings been addressed and completed through a root cause analysis?
- ⦿ Is corrective action in place and effective?
- ⦿ Are any findings “open” from previous Audit?

- Check to see that the root cause analysis has been conducted, is adequate and corrected.
- Ask EMR about management review.
- Review documentation from the latest management review.

# Results of the EMS Audit

- Are the EMS Elements Implemented as Designed and Providing Benefit to the Organization?

## Terminology

Meets Requirements	Conformance
Partially Meets Requirements	Minor Non-conformance
Doesn't Meet Requirements	Major Non-conformance
Something to Note	Observation



# Conducting the EMS Audit - Best Practices

- ⦿ Use Your EMS Checklist!
- ⦿ Follow “Audit Trails”
- ⦿ Look for Objective Evidence and Record Results
- ⦿ Be Friendly and Patient
- ⦿ Consider Changing Terminology or Approach with Each Interview
- ⦿ Generally Explain the Process to Staff
- ⦿ Remember Everyone is Nervous
- ⦿ Communicate to the EMR During the Audit

**Remember, the EMS is About  
Continual Improvement and So is  
the EMS Audit**



**IOWA**  
Department of  
Natural Resources

# Audit Reporting



G R E S H A M  
S M I T H   A N D  
P A R T N E R S

# Audit Reporting

- ⦿ The Lead Auditor Will Prepare an Audit Report Documenting the Findings of the EMS
  - The results should also be discussed in the closing meeting
  - Each finding should be tied to one EMS element
- ⦿ The Report Should be Issued as a Draft to the EMR to Allow for Comments
- ⦿ The EMS Audit Report Should Document
  - The Audit Process
  - Evidence Collected
  - Findings of the EMS Audit
- ⦿ Recommend Using a Tabular Format

<p>4.3.1 Environmental aspects</p>	<p>Documentation/ Activities Reviewed:</p>	<p><b>3/12/09 SAN Administration and District 5.</b> The “Environmental Aspect List” was generated in Intellex 3/04/09. Aspects were reviewed with C. Ailey during the audit. Discussed the activities of the rut crew with Rosales. The rut crew repairs ruts in unimproved alleyways by filling ruts with flex base. The rut crew may also contact the responsible party for issues related to hazards, overgrown vegetation or trees in alleyways. SAN EMR informed the audit team via email on 3/17 that the rut crew is under “Admin activities” in Intellex.</p> <p><b>3/16/09 Special Services, District 1, and Recycling</b> Auditor verified that SAN has not missed any significant aspects of their operations at these three facilities.</p> <p><b>3/17/09 District 2</b> Auditor verified that SAN has not missed any significant aspects of their operations at this facility.</p> <p><b>3/23/09 District 3, District 4</b> Auditor verified that SAN has not missed any significant aspects of their operations at this facility.</p>
	<p>Results:</p>	<p><i>Audit evidence indicates that this element is implemented and maintained.</i></p>

## Environmental Management System Internal EMS Audit Results Form

**Facility:** Cedar Rapids Linn County Solid Waste Agency

**Auditors:** Jennifer Fencil, Heath Van Zee

**Date:** 10/5/2012

Iowa EMS Element Number and Description		Audit Results/Findings		
Number	Description	Evidence	Finding(s)	Iowa EMS Reference
1	Environmental Policy Statement	Reviewed EMS Policy Document, interviewed Compliance Manager and staff	Success: environmental policy posted in clear view in staff areas. Staff was aware of policy and knew where to find it. Now posted on Agency website.	
2	Environmental Impacts	Reviewed Environmental Aspects and Impacts List, interviewed Compliance Manager and staff	Opportunity for Improvement: Staff is aware of general environmental impacts of the Agency, but did not connect to their individual job activities.	

# Reevaluation and Modification

- ⦿ The Reevaluation of the EMS is conducted to address the findings from the Audit identified in the final report.
  - Identification of Which Element of the EMS Meets, Partially Meets, Failed to Meet, or Exceeded Expectations (Results of the EMS Audit)
- ⦿ EMR Responsibilities
  - Identify the Root Cause of Each of These Outcomes
  - Implement Corrective Action to Prevent Reoccurrence

NOTE: Information of Root Cause and Correction Action provided so the Auditor understands how the EMR will use the Audit for continual improvement



“To address this mistake we must use root-cause analysis. I’ll begin by saying it’s not my fault.”

# Root Cause Analysis

- ⦿ The Reevaluation Process Should Not Take a “Find and Fix” Approach

Finding	Corrective Action
55 Gallon Drum was Missing a Label	Place a Label on the Drum



# Root Cause Analysis

Finding	Root Cause	Corrective Action
55 Gallon Drum Was Missing a Label	The Shop Ran Out of Labels Because the Contract on the Price Agreement Expired.	Purchase Labels with Purchase Card. Notify Purchasing of the Importance of the Contract and the Resulting Compliance Problem. Train Staff on the Importance of Labeling and Notification to Management if Price Agreements Expire.

# Root Cause Analysis/Corrective Action

- ⦿ Usually Conducted by the EMR and/or Facility Manager
  - Five Why's is a Popular Tool for Identification of the Root Cause in an EMS
- ⦿ Receive Input on the Root Cause from Staff Knowledgeable About the Finding
- ⦿ Corrective Action Should be Identified Immediately Following the Root Cause
  - Assign Responsibilities and Due Dates
  - Follow Up!

# Recording and Tracking

The department developed a

## **CPAR (Corrective/Preventative Action Request/Work Order) Form**

The form is available for use by EMS participants and others to record and track Audit Findings or notable occurrences at a facility any time during the year.

Some participants use software to assist with tracking non-conformances.



Corrective/Preventive Action Request/Work Order		Circle One	
<input type="checkbox"/> Immediate Action <input type="checkbox"/> Hold for Meeting		Work Order    CPAR	
Refer to: Audit Finding/Comment <input type="checkbox"/> Other <input type="checkbox"/>			
Prepared by:		Date:	
Describe Problem:		Possible Solutions:	
What is the suspected cause?			
How was it discovered?:			
By whom?		Date of Discovery:	
ACTION TAKEN			
What is the root cause? (more room on back)	Date started:	Date completed:	
	Type:	Priority:	
How was the problem resolved?	<input type="checkbox"/> Air <input type="checkbox"/> Leachate <input type="checkbox"/> Groundwater <input type="checkbox"/> Cons. Practice <input type="checkbox"/> Maintenance <input type="checkbox"/> Other	<input type="checkbox"/> Urgent <input type="checkbox"/> Routine <input type="checkbox"/> Deferred	
	Attach map, reference points, coordinates, description on location.		
Who performed the work?:		Iowa EMS:	
Future action necessary to prevent recurrence:		<input type="checkbox"/> EMS Element # _____ <input type="checkbox"/> Education <input type="checkbox"/> GHG <input type="checkbox"/> HHW <input type="checkbox"/> Recycling <input type="checkbox"/> Water Quality <input type="checkbox"/> Yard Waste <input type="checkbox"/> Other <input type="checkbox"/> Health/Safety	
Benefit of compliance:/Consequence of non-compliance:			
Print Name and Initial:		Close Date:	

Return this form to \_\_\_\_\_

This form is available from DNR - see the final page of this presentation for information.



# Nonconformance and/or Corrective/Preventive Action: Nonconformance and/or Corrective/Preventive Action Details

Home Report Nonconformance and/or Corrective/Preventive Action Nonconformance and/or Corrective/Preventive Action List Corrective Actions List

[05196](#)

Unreasonable time frame to complete the training for 5000 officers within requested time

[05197](#)

Training methods were never established. Nor were methods in place to track training progress.

## Investigation Results

Training methods were never established. Nor were methods in place to track training progress.

Is Corrective Action required?

Yes

Corrective Actions implemented or to be implemented

Action No.	Type	Action Required	Person Responsible	Target Date	Completion Notes	Completion Date
<a href="#">01243</a>	Corrective	Begin EMS Training with new 2 year training cycle.	Monique Alex	Friday, September 30, 2011	Provided documentation regarding completed training for EMR, EMS Refresher Training, DOT Training, and Proper Spill Response Training complete.	Wednesday, January 13, 2010
<a href="#">01267</a>	Corrective	EMR will continue attending training classes. EMR has attended several classes, i.e., Spill Procedures, DOT, EMR Refresher Course.	Monique Alex	Tuesday, December 29, 2009	Several classes completed with OEQ. Sign in sheets provided.	Friday, January 22, 2010
<a href="#">01268</a>	Corrective	The Breeze System is in place to track all departmental personnel training. Any training outside of the Breeze system will be tracked with in a training log book by each EMS rep.	Monique Alex	Tuesday, December 29, 2009	Projected training schedule was made to reflect upcoming training, attached is the list DPD employees who have completed the training.	Tuesday, January 26, 2010

Investigated By

Alex, Monique

Date Investigated

Thursday, December 24, 2009

NOTE: Corrective/Preventive Action must be approved by the Nonconformance Coordinator before they will become active and the individuals responsible for completing these tasks will be notified.

Action(s) to be approved by

Westphal, Brittany

Target Approval Date

Thursday, December 31, 2009

## Use the following fields to approve the Corrective/Preventive Actions resulting from this Nonconformance Report

Approved By

Westphal, Brittany

Date Approved

Monday, December 28, 2009

Comments

Need to address corrective action for training records.

## Use the following fields to close this report after all of the above information has been completed.

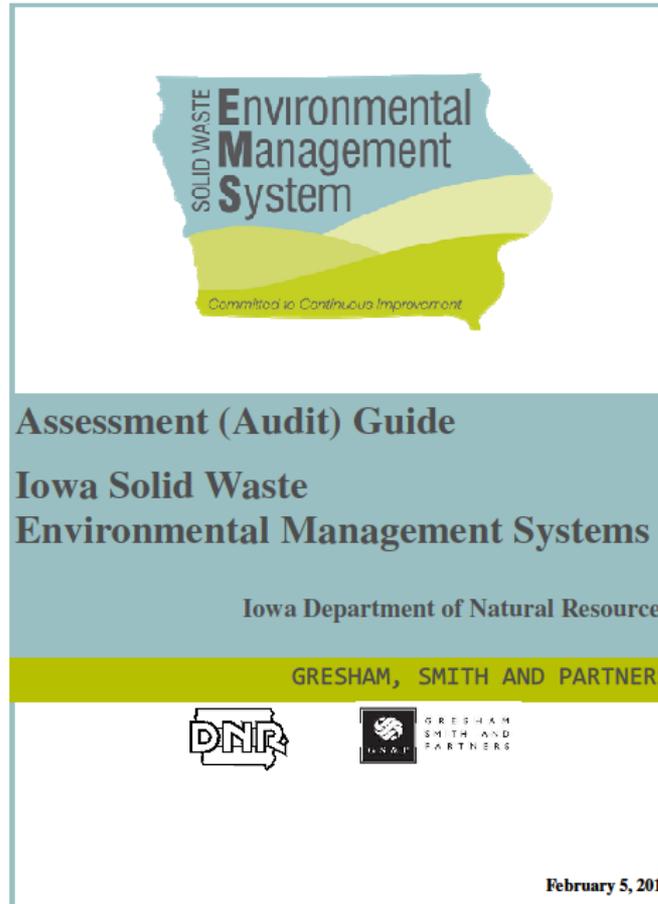
All Corrective Actions Verified and Effective?

Yes

Final Approver's Comments

Proposed corrective actions are complete, Carol Osgood of BV closed this nonconformance, and Kevin Overton confirmed effectiveness of corrective action on March 24, 2010 (see Message Center).

DNR and Gresham, Smith & Partners have developed an Audit Guide



This Guide is available from DNR - see the final page of this presentation.



# QUESTIONS?

For a copy of this presentation and documents:

[www.iowadnr.gov/swems](http://www.iowadnr.gov/swems)

Click on Solid Waste EMS Workshop Information under Resources



**SOLID WASTE** Environmental  
Management  
System

*Committed to Continuous Improvement*

Leslie Goldsmith  
515-281-8499  
leslie.goldsmith@dnr.iowa.gov