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Audit Strategies for Oil and Gas Facilities - RMEHSPG Q4

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Today's Topics

- > Audit Privilege Programs - State Level (CO & WY)
- > EPA's New Owner Audit Program from Exploration & Production Facilities
- > Audits - Lessons Learned and Practical Insights
- > Technical challenges faced by systems teams

Trinity's Services

EHS Regulatory Consulting

> Air quality services

- ❖ Air permitting and compliance
- ❖ Air dispersion modeling
- ❖ Source testing/emissions monitoring support
- ❖ Ambient and meteorological monitoring
- ❖ Air quality and transportation planning support

> Waste management

- ❖ Industrial and solid waste management
- ❖ Beneficial use and alternate fuels

> Water quality services

- ❖ Water quality permitting and compliance
- ❖ Water monitoring, sampling, and treatment analyses

> Chemical compliance services

- ❖ Chemical regulatory advisory
- ❖ Tier II/SO8 reporting
- ❖ TRI reporting
- ❖ Risk Management Program/ Process Safety Management
- ❖ TSCA
- ❖ ODS
- ❖ Spill/release

> NEPA/EIA support

> Noise and odor analysis

> Mobile sources and fuels support

> Industrial siting

Disclaimer

- > We are not attorneys, and are not dispensing legal advice
- > Air quality and other environmental requirements are dynamic - what we describe today may change.
- > Ensure you are downloading/utilizing the most recent guidance, forms, and versions of regulations prior to submitting anything to an agency.

State-Level Audit Programs

Common Elements of Self Disclosure and Audit Programs

- > Must be **VOLUNTARY**
- > Initial Notification
- > Prescriptive ongoing reporting/timelines
- > Corrective actions
- > Commitment to long-term compliance activities
- > Systematic improvements to decrease likelihood of future noncompliance
- > Reporting

State Level Audit Programs

Wyoming

- > Strongly encouraged by agency management
- > EPA agreement, “defers to state penalty mitigation for self-disclosures as long as state policy meets minimum requirements for Federal delegation.”
- > Steps:
 - ❖ Notify agency, include scope
 - ❖ 180 days to perform audit
 - ❖ 60 days to submit report, which is privileged & admissible only in limited circumstances
 - ◆ Scope, information gained, conclusions, exhibits
 - ◆ Analysis & implementation issues
 - ◆ Plan to correct noncompliance & prevent future noncompliance
- > Reporting violations mandatory
- > Penalties shall not be sought except in limited cases
- > Separate small business voluntary disclosure incentive

State Level Audit Programs

Colorado

- > Civil & administrative penalties waived if voluntarily disclosed
- > Agency checklist
 - ❖ Prompt disclosure
 - ❖ Voluntary self-evaluation
 - ❖ Diligent pursuit of compliance/correction (2 year maximum, possibility of extension)
 - ❖ Cooperation
 - ❖ Absence of imminent & substantial endangerment, serious harm
 - ❖ No unfair or excessive economic benefit
 - ❖ No criminal negligence
 - ❖ No history of serious violations
- > May result in formal orders to achieve compliance

EPA's Finalized New Owner Audit Program for Oil and Gas E&P Operations

EPA's New Owner Audit Program for E&P

- > Finalized March 29, 2019
 - ❖ <https://www.epa.gov/sites/production/files/2019-03/documents/ognewownerprogramauditagreement.pdf>
- > Can be claimed only by companies for facilities for which they had no responsibility for environmental compliance prior to date of acquisition
- > Limited to “oil and natural gas exploration and production facilities”
 - ❖ And limited to only those facilities listed in the notification to EPA

EPA's New Owner Audit Program for E&P

- > Does not replace or change EPA's Audit Policy (April 2000) or New Owner Audit Policy (August 1, 2008)
- > Does not automatically provide enforcement protection from state-level enforcement
- > Program was developed by EPA due to "significant noncompliance" from vapor control systems at E&P facilities

EPA's New Owner Audit Program for E&P - The Good

- > Provides Total Civil Penalty Mitigation:
 - ❖ Marks the first time that the agency has proposed complete penalty forgiveness - including mitigation of economic benefit penalties - for entities that disclose and correct violations in conformance with the guidelines
- > Streamlined Process:
 - ❖ More efficient disclosure of noncompliance through semi-annual reports
- > Mitigation of Risk:
 - ❖ Mitigate enforcement risk by proactively addressing vapor control design issues targeted by EPA enforcement initiatives for FY19
- > Transferrable:
 - ❖ Once agreement is finalized, It is transferrable to any subsequent owner

EPA's New Owner Audit Program for E&P - The Not So Good

- > Highly Prescriptive:
 - ❖ Requirements of the audit process require participating new owners to go beyond the requirements of applicable regulations of the CAA to mitigate emissions, especially from storage tanks
- > Potential Conflict with State Audit Programs:
 - ❖ If the new owners chooses to enter into an audit agreement with a state audit policy in lieu of agreement with EPA, EPA may take enforcement action with respect to violations that were not disclosed or disclosed but not corrected
- > Risks of Voluntary Disclosure:
 - ❖ Operational details that go into developing the required engineering studies could be made available publically through FOIA requests; sites could get onto the non-compliance radar

Audit Schedules

- > Notify EPA within 9 months or by March 29, 2019 (whichever is later) after acquisition date of entering into program
 - ❖ The date of acquisition cannot be earlier than March 29, 2018.
- > Completion time will be determined by EPA on a case-by-case basis
 - ❖ Scope of audit
 - ❖ Number of covered facilities
- > Operators will submit semi-annual progress reports for the duration of the audit

Audit Procedures

- > Within 60 days of effective date, submit to EPA:
 - ❖ Audit protocols
 - ❖ Audit checklists
 - ❖ Modeling guideline (discussed later)
 - ❖ Field survey SOP (discussed later)
- > EPA will provide input within 45 days
- > Company amend within 30 days of EPA's response

Corrective Actions - Three Categories

- > Violations Discovered Resulting from [Vapor Control System Engineering and Design Analysis/Field Survey]
 - ❖ Correct within 180 days of discovery; extension subject to EPA approval
- > Violations Discovered Resulting from [other issues not related to vapor control systems]
 - ❖ Correct within 60 days of discovery; extension subject to EPA approval
- > Immediate and Substantial Endangerment to Public Health or Welfare, or the Environment
 - ❖ “as expeditiously as possible”

Developing Audit Procedures

> Modeling Guideline

- ❖ Submit to EPA for approval/comment
- ❖ Documentation of procedures to determine Potential Minimum and Peak Instantaneous Vapor Flow Rate

> Engineering Design Standards

- ❖ Evaluation of whether vapor collection systems are appropriately sized
- ❖ Can be done by-site, or by-groups

Developing Audit Procedures (Con't)

- > Vapor Control System Field Survey Standard Operating Procedure (SOP)
 - ❖ Submit to EPA for approval/comment
 - ❖ Documented procedure for determining during field visits that vapor control systems are working properly
 - ❖ Include IR camera inspection procedures
 - ❖ Include procedure for component inspection

Developing Audit Procedures (Con't)

- > Vapor Control System Engineering Evaluation and Field Survey
 - ❖ Conduct surveys following SOP;
 - ❖ Conduct engineering analyses following Engineering Design Standards
- > Vapor Control System Modification and Verification
 - ❖ Increase capacity or decrease flow to vapor control systems
 - ❖ Make necessary modifications
 - ❖ Confirm during operation using IR camera and following SOP

Reporting

> Semi-annual Reports

- ❖ Due 15th day of the month following each six-month period
- ❖ List of facilities audited
- ❖ Summary of violations
- ❖ Summary or corrective actions
- ❖ List of any changes to the List of Facilities covered under the audit

Reporting (Con't)

> Final Report

- ❖ Due no later than 60 days following completion of Audit Program
- ❖ Compliance Summary including:
 - ◆ Measures to ensure future compliance
 - ◆ Estimated cost of returning to compliance
 - ◆ Estimated volume of pollutants reduced by corrective actions

Non-Air Auditing - Oil & Gas

Items to consider

> Non Air Auditing

- ❖ Environmental Site Assessments (ESA) under CERCLA - site reconnaissance portion (can be done prior to acquisitions)
- ❖ Spill Reports review + Spill Prevention Control and Countermeasures (SPCC) plan review
- ❖ National Pollution Discharge Elimination System (NPDES) permit reviews
 - ◆ Produced water discharge
 - ◆ Stormwater discharge
- ❖ MIT (Mechanical Integrity Testing) testing schedule for wells
- ❖ BLM and OGCC requirement reviews

Audits - Lessons Learned and Practical Insights

Performance of Audit Work

- > Three Main Components of an Audit Project
 - ❖ Scope and Planning (Pre-Site Visit)
 - ❖ Conducting the Audit (Site Visit)
 - ❖ Communicating Results (Post-Site Visit)



Know your scope

- > Take the time to clearly define!
- > What type of facilities will you include?
 - ❖ Wellsites, batteries
 - ❖ Warehouse/storage
 - ❖ Gathering, compression, pigging stations
 - ❖ Gas plants
- > Geographical area?

Know your scope (cont'd)

> Which requirements?

❖ Permits

- ◆ Limitations & Operating requirements
- ◆ Monitoring
- ◆ Recordkeeping (timeframe)
- ◆ Reporting

❖ Has everything been permitted that should have been?

- ◆ New, modified equipment/facilities
- ◆ Changing criteria over time

Know your scope (cont'd)

- > Which requirements (more to choose from!)
 - ❖ Federal rules (applicability AND compliance)
 - ◆ NSPS (0000/0000a, IIII, JJJJ, etc.)
 - ◆ NESHAP (HH, ZZZZ, etc.)
 - ◆ Greenhouse Gas reporting
 - ❖ State/local rules (opacity, equipment standards, emission inventories, nonattainment requirements)
- > Only specific elements?

Know your framework

- > Which jurisdictions?
 - ❖ States, Regions, Indian Country, EPA
 - ❖ How do they view audits? What statutes, regulations, & policies apply?
 - ❖ What timing commitments result?
- > Internal only?
- > How will confidentiality be protected & managed?

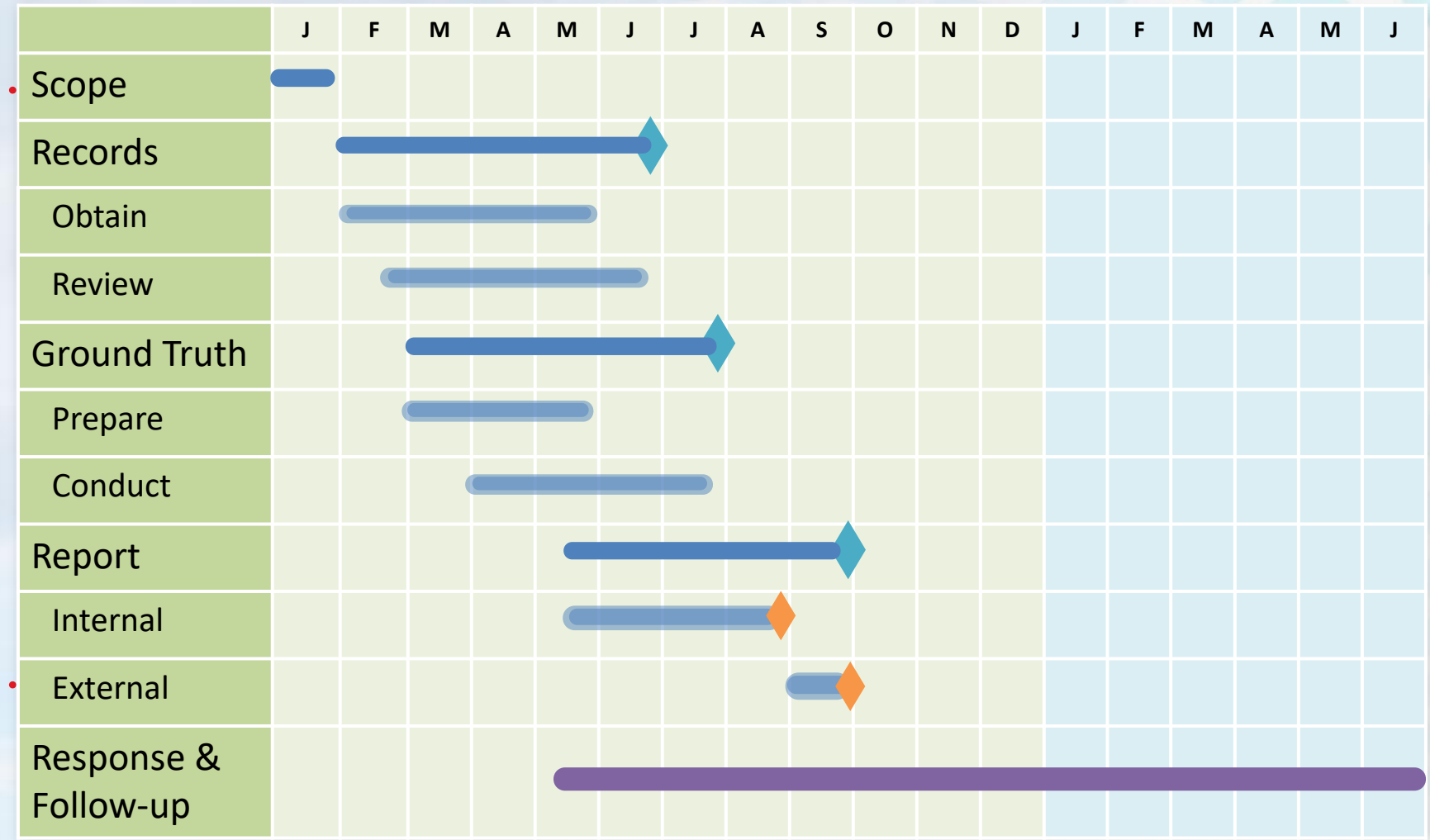
Determine approach

- > Records review only?
 - ❖ Supplement with phone/video interviews?
 - ❖ Examples
- > Level and amount of on-site review
 - ❖ Who needs to be available?
 - ❖ Pictures allowed?
 - ❖ Checking nameplates/serial numbers/equipment sizes?
 - ❖ Records on site?
 - ❖ Give a checklist/questions to someone else?

Make a milestone schedule

- > Ground Truth
 - ❖ Site visits
 - ❖ Staff interviews
- > Reporting
 - ❖ Internal & External
 - ❖ Options for corrective actions
 - ❖ Compliance milestone schedule
- > Response & Follow-Up Reporting
 - ❖ Expect this to be required until all issues resolved

Example Schedule



Orientation Tour

- > Familiarize with audit site
- > Maintain pace, note areas that will require more in depth inspection
- > Set time limit
- > Note path taken through audit site
- > Look for indicators of recent changes
- > Observe general housekeeping practices
- > Understand area specific restrictions

On-site Audits - Tips and Thoughts

- > Information gathering
 - ❖ Agency can be a good source of records, but allow for time
 - ❖ Talk to the people who do the work
 - ❖ Ask open-ended questions
 - ❖ No answer is “wrong” - you are seeking the ground truth
 - ❖ Walk around
- > Does your scope include why?
 - ❖ Be curious
 - ❖ Don't be afraid to follow a trail
- > Findings indicative of systemic issue?

Record Reviewing

- > Look for completeness of forms
- > Look for patterns
 - ❖ i.e. Confined Space entry: is attendant consistently missing on the form?
- > Use record review to identify next steps in audit
 - ❖ i.e. Observe confined space entry unannounced

Record Review - Sample Size

- > Determine appropriate sample size
 - ❖ Percentage
 - ❖ All documents if not cumbersome
- > Noncompliance may mean deeper digging (i.e. missing manifests, incomplete confined space permits, etc.)
- > Some auditees set a number of non-compliances to identify a widespread problem
 - ❖ For example, if you find 3 examples of missing manifests, you can stop your review

Report Writing

- > State facts; communicate the extent of findings clearly
- > Avoid generalities
- > If finding is based on observations or what the auditor was told, that should be stated
- > Avoid extreme language
- > Do not focus on individuals or their mistakes
- > Do not draw unsubstantiated conclusions
- > Determine ahead of time if report is to include options for corrective action

Findings - What is the requirement?

- > If the Finding is against a procedure or permit, cite the reference. “...as required by procedure/permit ABC-123.”
 - ❖ Don't write--“The flow valve is not always opened on time.”
 - ❖ Do write - “Per an interview with the wastewater department, the flow valve is not consistently opened prior to sampling as required by procedure SOP-123.”
 - ❖ Without the reference, it is difficult to understand why it is a discrepancy and the Auditee has difficulty finding the problem.

Adapting the Legacy Data

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INTELEX

Intelex Platform

Asset Compliance Tracking System (ACTS)

- Assets
- Production and Event Data
- Emission Data
- Inspection Data
- Permit Data
- Reports and Dashboards
- Integrations
- Tasks/ Tasking
- File Attachments

Different Scenarios of M&A

➤ System to System

- Buyer and Seller both have the same system - example ACTS
- Common with larger companies.

➤ Buying into System

- Seller has a system, buyer does not
- Common for spin offs

➤ Buying into Excel

- Seller doesn't have a system. Data is likely stored in spreadsheets
- Common with small acquisitions

Pain Points

➤ System to System

- Most decision points
- Usually requires moderate data alignment

➤ Buying into System

- Most QA/QC
- Seller must review and signoff on new database

➤ Buying into Excel

- Most Data Entry/ Imports
- Time Consuming

Good News

➤ System to System

- Teams/ Responsible persons already in place
- Processes already defined
- Tables are all the same (ACTS)

➤ Buying into System

- Up and running with least interruption
- Intelix will copy seller DB then bulk remove assets not including in transaction

➤ Buying into Excel

- Complete control over where to map data for import
- Easy to divvy out tasks

Planning and Considerations

Cut Overs

Do you have system integrations or are you collecting field data? You'll need to plan a cut over date.

Data Alignment

Even when data is stored in the same format there may still be alignment work needed. Examples: Inspections, asset attributes

Rollups

Production Data: Units are everything, might need some one time roll ups.

Personnel

Bring in open tasks/ workorders? Depends – mergers often include assets as well as employees.

Scalability

Are your current processes scalable? Is it time to make changes to adapt a new basin or scale up your existing processes?

Questions?

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