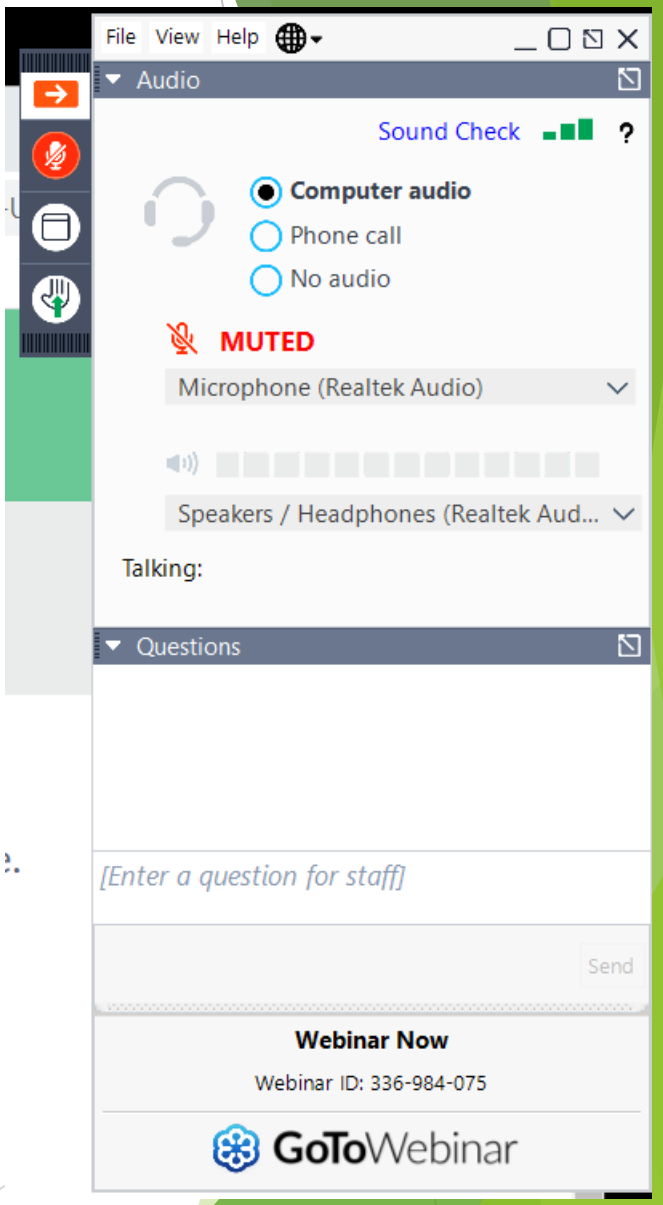
2020 ASTSWMO RCRA Corrective Action Virtual Conference: Day 3

September 3, 2020

Before we start

- All attendees are muted throughout the webinar.
- **Questions:** Use the Questions Pane in the control panel to send questions to the speakers throughout the webinar.
- **Note who the question is directed to in your submittal.**
- The webinar is being recorded and will be made available on the ASTSWMO website.



About Videos

- There are a couple of videos during this presentation.
- Audio for the videos will come through the computer speakers, even if you are using a phone for your audio. So please remember to make sure your computer isn't muted and your volume is at controlled level.
- There have been issues in the past where the audio won't play for some attendees, we apologize in advanced if this happens. To mitigate this we have uploaded the videos to youtube and a link will be posted in your question area before the video begins. Feel free to watch the video at your leisure.
- We also included subtitles on the videos so you can read along if you choose to as well.

September 3, 2020 Agenda

1:00 – 1:15 PM	Opening Remarks
1:15 – 2:00 PM	Corrective Action Tools and Autorities
2:00 – 2:05 PM	Set-up Time for Next Session
2:05 – 2:35 PM	Parceling
2:35 – 2:40 PM	Set-up Time for Next Session
2:40 – 3:00 PM	RCRA Redevelopment Videos
3:00 PM	End of Day 3 and the 2020 RCRA Corrective Action Conference

Susan Bodine

Assistant Administrator

U.S. EPA Office of Enforcement and Compliance Assurance

Opening Remarks

Colleen Michuda

Senior Attorney, RCRA/FIFRA/TSCA Law Office, U.S. EPA Region 4

Corrective Action: Tools and Authorities

RCRA's Cleanup Authorities:

Legal Tools in the RCRA Toolbox

Colleen E. Michuda
Senior Attorney, U.S. EPA Region 4
RCRA/FIFRA/TSCA Law Office

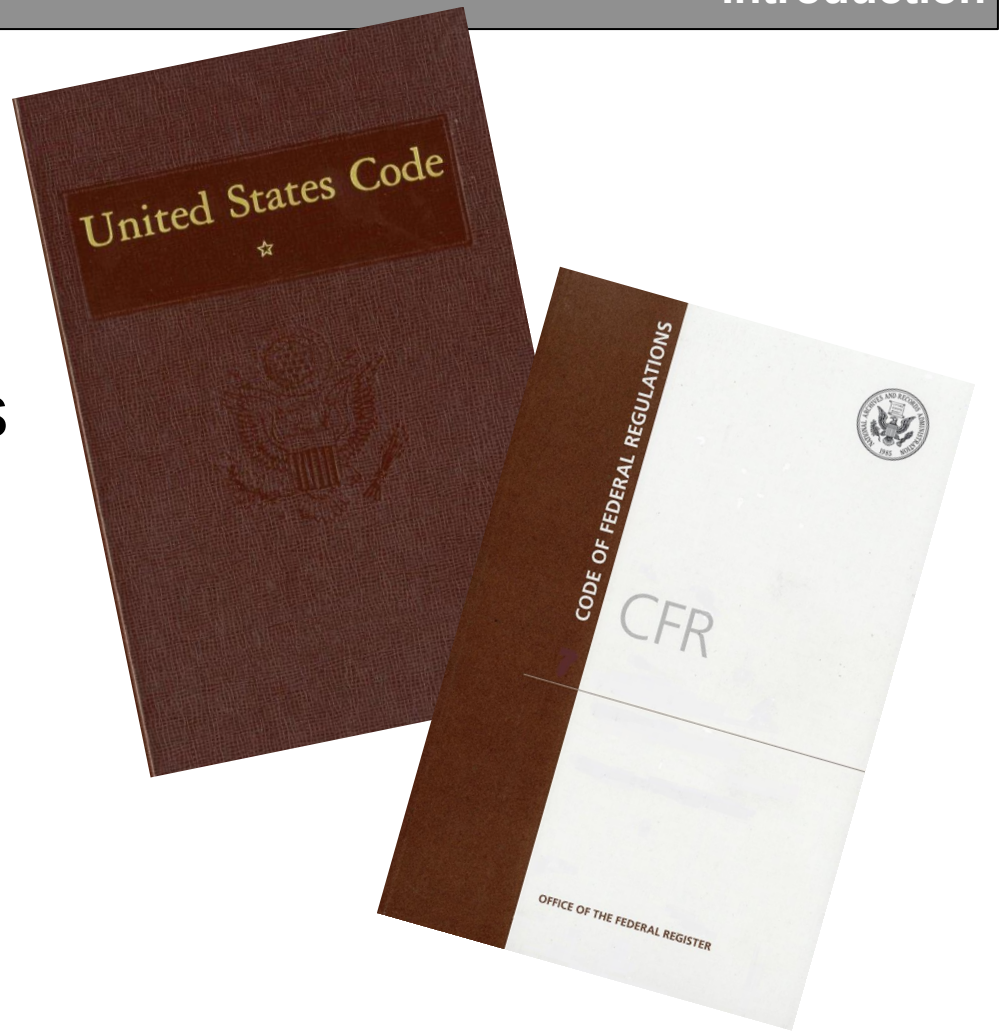
September 3, 2020

This presentation does not create any legally binding requirements on the U.S. Environmental Protection Agency (EPA), states, or the regulated community, and does not create any right or benefit, substantive or procedural. In addition, the presentation is not a complete representation of the Resource Conservation and Recovery Act or of EPA's regulations and views.

RCRA Corrective Action

Introduction

- Statutory Authorities
- Regulatory Authorities
- Important Points
  - State Authorization
  - Financial Assurance



History of RCRA

Statutes and Regulations Overview

- *Solid Waste Disposal Act of 1965* – initial focus on improving solid waste disposal methods
- *Resource Conservation and Recovery Act (RCRA) of 1976* – nation's primary law governing the disposal of solid and hazardous waste; enacted to address growing volume of waste
- *Hazardous and Solid Waste Amendments (HSWA) of 1984* – expanded RCRA's protective framework with several new statutory provisions, including corrective action

Statutes v. Regulations

Statutes and Regulations Overview

- The RCRA statute (passed by Congress) establishes a national framework for solid and hazardous waste management.
- The RCRA statute provides EPA with authority to develop the RCRA program.
- The RCRA statute is codified at Title 42 of the United States Code (U.S.C.), §§ 6901-6992k.

Section 3004 of RCRA = 42 U.S.C. § 6924
Section 3005 of RCRA = 42 U.S.C. § 6925
Section 3008 of RCRA = 42 U.S.C. § 6928

Statutes v. Regulations

Statutes and Regulations Overview

- EPA promulgates regulations to carry out Congressional intent and establish legally enforceable requirements for waste management.

- The RCRA hazardous waste regulations are found in Title 40 of the Code of Federal Regulations (C.F.R.), Parts 260-279.

State Authorization

RCRA § 3006

- **Section 3006 of RCRA** (42 U.S.C. § 6926) provides for EPA to authorize state hazardous waste programs.
- Authorized state regulations operate in lieu of the federal regulations.
- EPA implements and enforces RCRA in states and territories without authorized programs.

RCRA's Statutory Cleanup Authorities

RCRA's Cleanup Authorities

Imminent and Substantial Endangerment

- **Section 7003** (42 U.S.C. § 6973): Section 7003 provides EPA with authority to initiate a judicial action or an administrative order to compel *any person* to abate conditions that *may present* an *imminent and substantial endangerment* to human health or the environment.

RCRA's Cleanup Authorities

Imminent and Substantial Endangerment

Section 7003 Key Points

- EPA can bring a *civil judicial* action or issue an *administrative order*
- Action can be taken against *past or present* owners, operators, generators, transporters, handlers, etc.
- Covers the *past or present* handling of *solid or hazardous waste* (statutory definitions)
- No actual harm or release required

RCRA's Cleanup Authorities

Monitoring, Testing, Analysis & Reporting

- **Section 3013** (42 U.S.C. § 6934): Section 3013 provides EPA with authority to issue an administrative order to require *monitoring, testing, analysis, and reporting* where the *presence* or *release* of *hazardous waste may present a substantial hazard* to human health or the environment.

RCRA's Cleanup Authorities

Monitoring, Testing, Analysis & Reporting

Section 3013 Key Points

- Administrative order authority
- Order can be issued to present owners or operators (and, in appropriate circumstances, the most previous o/o).
- Either the presence or release of *hazardous waste* (statutory definition) "may present a substantial hazard" to human health or the environment
- Monitoring and assessment only

RCRA's Cleanup Authorities

Enforcement

- **Section 3008(a)** (42 U.S.C. § 6928(a)): Section 3008(a) provides EPA with authority to issue an order or commence a civil judicial action for past or current violations.
  - EPA may seek a civil penalty and "other appropriate relief"

RCRA's Corrective Action Authorities

RCRA's Subpart F Groundwater Monitoring Regulations (Pre-HSWA)

- Subpart F Groundwater Monitoring and Protection Program for "Regulated Units"
  - Applies only to "regulated units"

    "surface impoundment, waste pile, land treatment unit or landfill that receives *hazardous waste* after July 26, 1982"
  - Addresses releases to the uppermost aquifer only
  - Specific regulations are found in 40 C.F.R. §§ 264.90 through 264.100.

RCRA Corrective Action – Post-HSWA

RCRA § 3004(u) and (v)

- **RCRA Section 3004(u)** (42 U.S.C. § 6924(u)): Requires that RCRA permits issued after November 8, 1984, include corrective action for releases of hazardous waste or constituents from solid waste management units (SWMUs) *regardless of the time at which waste was placed in a unit*.
  - Schedules of compliance
  - Financial assurance

- **RCRA Section 3004(v)** (42 U.S.C. § 6924(v)): Requires corrective action beyond the facility boundary.

RCRA Corrective Action – Post-HSWA

Section 3004(u) and (v) Key Points

- Requires corrective action in all permits after November 8, 1984
- Applies to releases of hazardous waste or hazardous constituents
- Requires financial assurance for completing corrective action
- Corrective action both at the facility and beyond the boundary
- Schedules of compliance for corrective action

RCRA's Permitting Authorities

RCRA § 3005

- **RCRA Section 3005(a) and (c)** (42 U.S.C. § 6925(a) and (c)): Requires that owners or operators of hazardous waste treatment, storage, or disposal facilities must have a permit.

- **RCRA Section 3005(c)(3)** (42 U.S.C. § 6925(c)(3)): *Omnibus* Authority
  - Permits shall contain "such terms and conditions as the Administrator (or the State) determines necessary to protect human health and the environment."
  - "Area of Concern"

Who issues Corrective Action Permits?

RCRA § 3005

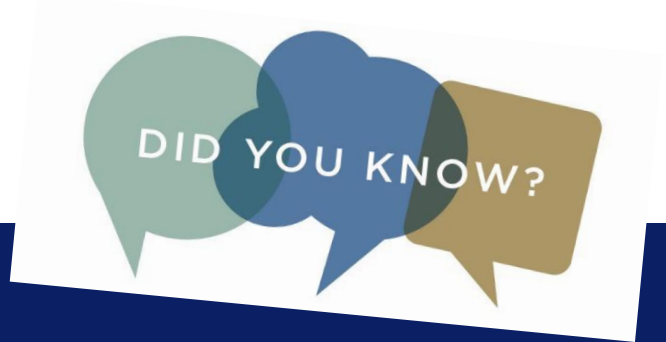
- Forty-five states are authorized to implement HSWA corrective action at permitted facilities.

- In states *NOT* authorized for HSWA corrective action, EPA issues the corrective action portion of the RCRA Permit.
  - Corrective action is a HSWA provision – automatically effective in states regardless of authorization.
  - EPA permit will be a “companion” permit to the State’s permit and together, they comprise the facility’s RCRA Permit.

Fun Facts About Permits

RCRA § 3005

- The obligation to apply for and obtain a RCRA permit is on the current owner and operator.
- Permits can add additional details that are facility-specific.
- Permit terms are enforceable.
- EPA can enforce a state-issued RCRA permit in an authorized state.



RCRA Corrective Action – Post-HSWA

RCRA § 3008(h) Interim Status

- **RCRA Section 3008(h)** (42 U.S.C. § 6928(h)): Section 3008(h) provides EPA with authority to issue an administrative order requiring corrective action or commence a civil action where there *is or has been a release* of *hazardous waste* at a facility in *interim status.*

RCRA Corrective Action – Post-HSWA

RCRA § 3008(h) Interim Status

Section 3008(h) Key Points

- Interim status corrective action order authority
- EPA could bring a *civil judicial* action or issue an *administrative order*
- Covers releases of hazardous waste (statutory) or hazardous constituents
- Can include all the steps that would be included in a corrective action permit
- Generally issued to facility owners and operators
- Orders can include financial assurance

RCRA's Regulatory Corrective Action Authorities

RCRA Corrective Action Regulations – Post-HSWA

Corrective Action Regulations

- 40 C.F.R. § 264.101
  - 40 C.F.R.§ 264.90(a)(2)*
  - 40 C.F.R. § 270.60(b) and (c)*

  *These provisions cite to compliance with Section 264.101.

- 264.101 codifies into the regulations the requirements in RCRA § 3004(u) and (v).
  - Schedule of compliance
  - Financial assurance
  - Beyond the facility boundary

How did we get here?

Corrective Action Regulations

- **Subpart S Proposal (55 FR 30798, July 27, 1990)**
  - RCRA Facility Assessment (RFA) = SF Preliminary Assessment/Site Inspection
  - RCRA Facility Investigation (RFI) = SF Remedial Investigation (RI)
  - Corrective Measures Study (CMS) = SF Feasibility Study
  - Statement of Basis (SB) and Response to Comments (RTC) = SF Record of Decision
  - Corrective Measures Implementation (CMI) = SF Remedial Design/Remedial Action

How did we get here?

Corrective Action Regulations

Corrective action provisions finalized after 1990:

- Corrective Action Management Units (CAMUs) and Temporary Units (TUs) for managing remediation wastes (58 FR 8658, February 16, 1993)
  - 40 C.F.R. § 264.552 (CAMUs)
  - 40 C.F.R. § 264.553 (TUs)

- Definition of "facility" for corrective action (58 FR 8658, February 16, 1993)
  - 40 C.F.R. § 260.10: "for the purpose of implementing corrective action under 264.101, *all contiguous property under the control of the owner or operator. . .*"

How did we get here?

Corrective Action Regulations

- **Advanced Notice of Proposed Rulemaking (61 FR 19432, May 1, 1996)**
  - Has become the primary corrective action implementation guidance

- **Seven Implementation Principles:**

(1) Base decisions on risk; (2) Focus on results; (3) Use interim and stabilization measures to reduce risk and exposure; (4) Consider phasing; (5) Inclusion of stakeholders; (6) Use most appropriate tool for facility; and (7) States should be primary implementers.

How did we get here?

Corrective Action Regulations

- **1999 Withdrawal of Subpart S Proposal (64 FR 54604, October 7, 1999)**
  - Withdrew most provisions of the Subpart S Proposal
  - Concluded that comprehensive regulations were not necessary to implement the program
  - Existing regulations, supplemented by guidance and training are sufficient

Other Notable Mentions

Corrective Action Regulations

- **1998 Post-Closure Rule (63 FR 56710, October 22, 1998)**
  - Regulatory authority may allow alternate requirements under corrective action authority in limited situations where regulated units are situated among SWMUs and certain requirements are met

- **1998 Hazardous Remediation Waste Management Requirements (HWIR-media) (63 FR 65874, November 30, 1998)**
  - Introduces “staging piles” for remediation wastes and “Remedial Action Plans”

Financial Assurance for Corrective Action

- Financial assurance requirements for corrective action are included in permits and RCRA 3008(h) orders.
- *Proposed* Financial Assurance for Corrective Action Regulations (51 FR 37854, October 24, 1986)
  - *Never finalized*
- "Interim Guidance on Financial Assurance for Facilities Subject to RCRA Corrective Action" (September 30, 2003)

Financial Assurance for Corrective Action

When?

Timing can be tailored by regulators to facility-specific circumstances, but no later than remedy selection, and as early as investigation or interim measures.

How?

Generally, mechanisms (i.e., letter of credit, trust) are borrowed from RCRA's Part 264, Subpart H requirements.

Contact Information

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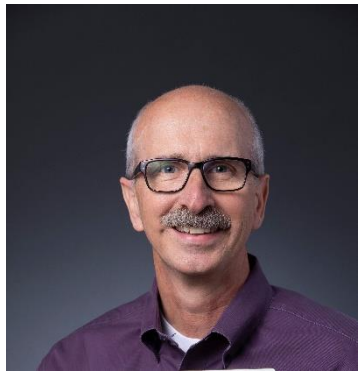

Tom Rinehart
Regulatory Affairs Manager
Chevron Environmental Management and Real Estate Company

Corrective Action: Parceling

ASTSWMO
RCRA Corrective Action Conference

Former Texaco Lockport Refinery – A RCRA Parceling Example

Tom Rinehart
Regulatory Affairs Manager

September 2020

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Introduction

- Former refinery is located approximately 35 miles southwest of Chicago within Lockport city limits.
- Refinery was operated by Texaco for 70 years (1911 – 1981).
- Refinery operations encompassed 580 acres.
- In 2001, Chevron acquired Texaco.

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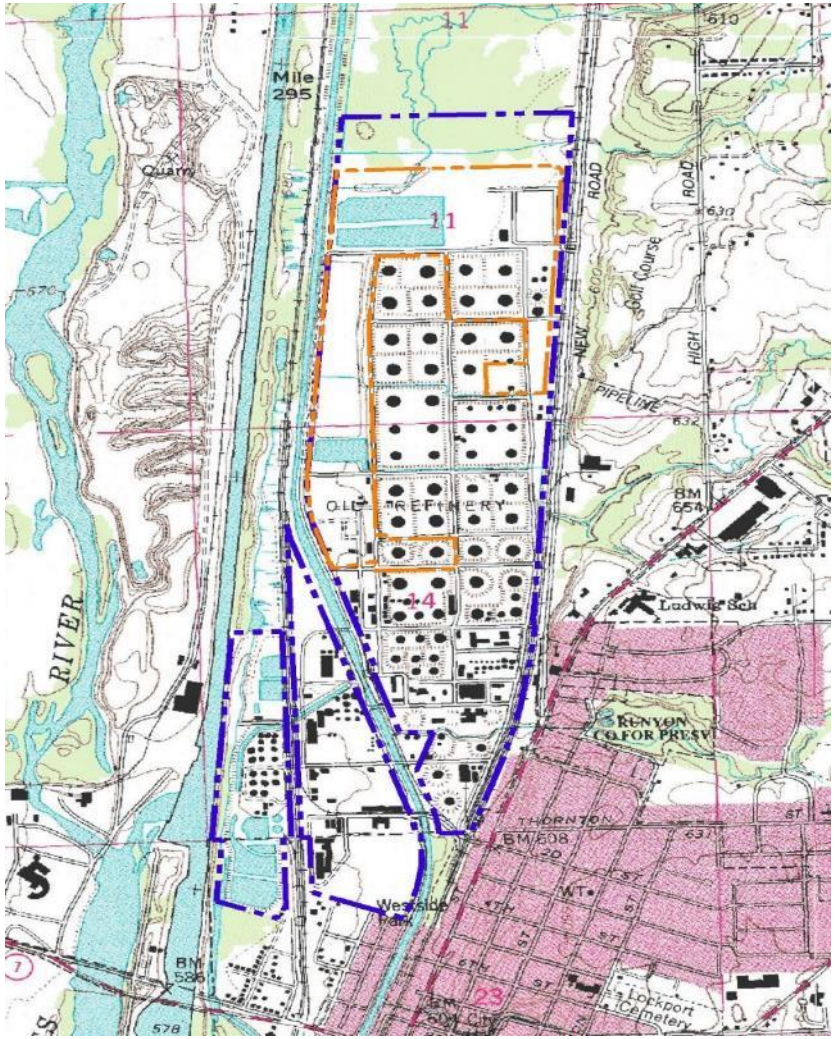
Regulatory Framework and Context

RCRA-Permitted Facility

- Post-Closure and Corrective Action Permit
- Site-wide Corrective Action, including management of a closed Corrective Action Management Unit (CAMU)
- Three regulated units moved to Corrective Action for remediation to enable redevelopment.
- Currently one HW landfill in post-closure care and a closed CAMU



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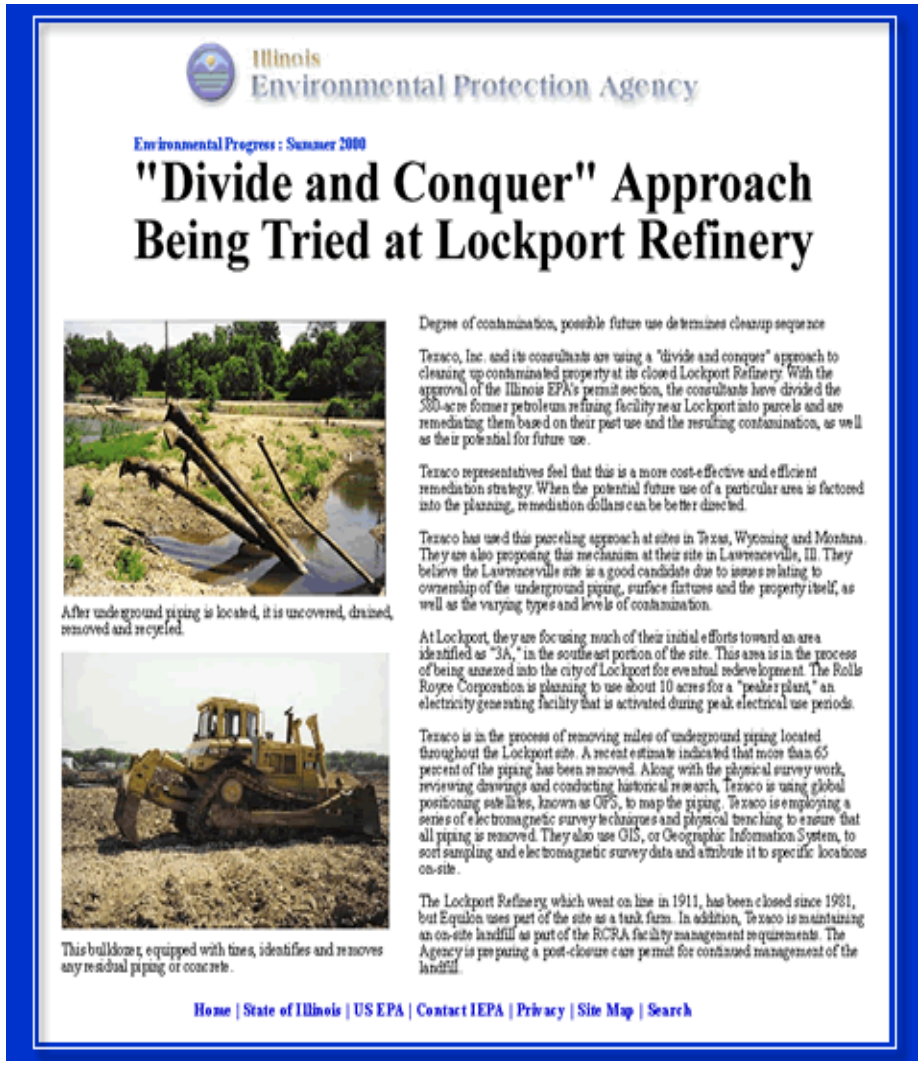
Divide and Conquer



Illinois Environmental Protection Agency

Environmental Progress : Summer 2000

"Divide and Conquer" Approach Being Tried at Lockport Refinery

After underground piping is located, it is uncovered, drained, removed and recycled.

This bulldozer, equipped with tines, identifies and removes any residual piping or concrete.

Degree of contamination, possible future use determines cleanup sequence

Texaco, Inc. and its consultants are using a "divide and conquer" approach to cleaning up contaminated property at its closed Lockport Refinery. With the approval of the Illinois EPA's permit section, the consultants have divided the 580-acre former petroleum refining facility near Lockport into parcels and are remediating them based on their past use and the resulting contamination, as well as their potential for future use.

Texaco representatives feel that this is a more cost-effective and efficient remediation strategy. When the potential future use of a particular area is factored into the planning, remediation dollars can be better directed.

Texaco has used this parceling approach at sites in Texas, Wyoming and Montana. They are also proposing this mechanism at their site in Lawrenceville, Ill. They believe the Lawrenceville site is a good candidate due to issues relating to ownership of the underground piping, surface fixtures and the property itself, as well as the varying types and levels of contamination.

At Lockport, they are focusing much of their initial efforts toward an area identified as "3A," in the southeast portion of the site. This area is in the process of being annexed into the city of Lockport for eventual redevelopment. The Rolls Royce Corporation is planning to use about 10 acres for a "peaker plant," an electricity generating facility that is activated during peak electrical use periods.

Texaco is in the process of removing miles of underground piping located throughout the Lockport site. A recent estimate indicated that more than 65 percent of the piping has been removed. Along with the physical survey work, reviewing drawings and conducting historical research, Texaco is using global positioning satellites, known as GPS, to map the piping. Texaco is employing a series of electromagnetic survey techniques and physical trenching to ensure that all piping is removed. They also use GIS, or Geographic Information System, to sort sampling and electromagnetic survey data and attribute it to specific locations on-site.

The Lockport Refinery, which went on line in 1911, has been closed since 1981, but Equilon uses part of the site as a tank farm. In addition, Texaco is maintaining an on-site landfill as part of the RCRA facility management requirements. The Agency is preparing a post-closure care permit for continued management of the landfill.

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IEPA Newsletter

featured

Lockport Refinery

soil remediation approach

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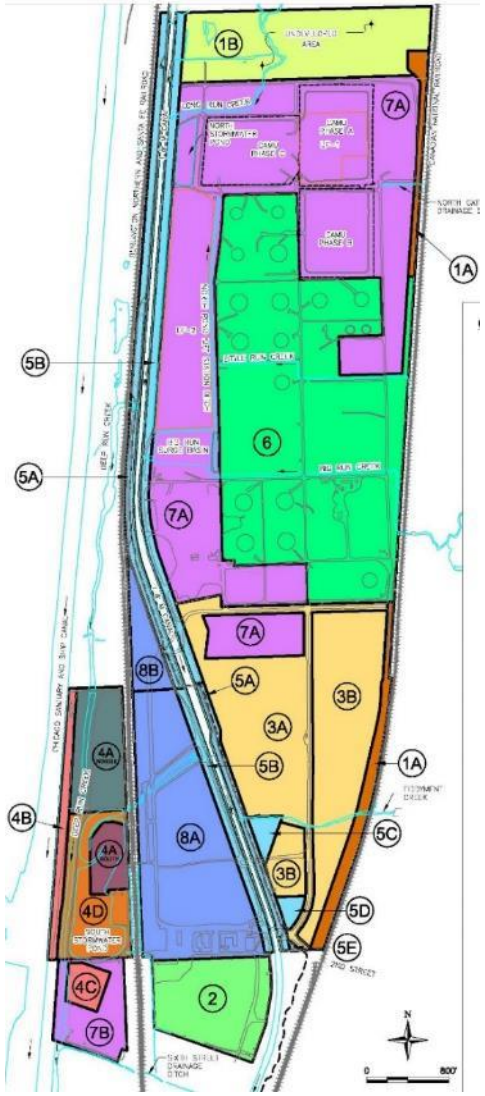
RCRA Corrective Action Strategy

Streamlined Corrective Action Process

- Consolidate assessment and remediation of RCRA corrective action, land reuse goals, and risk-based cleanup into one flexible program
- Site conditions report was updated and the facility was divided into multiple Investigation Areas
- Establish Facility-Wide Groundwater Management Zone (GMZ)
- Assess and remediate parcels based on reuse potential and/or environmental priority
- Obtain No Further Action (NFA) Letters on a parcel-by-parcel and/or media-specific basis
- Consistent with USEPA's 1999 and 2001 RCRA Cleanup Reforms



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Risk-Based Approach to Corrective Action

- Illinois Program is Tiered Approach to Corrective Action Objectives (TACO)

- TACO
  - Provides for development of exposure pathway-specific soil and groundwater remediation objectives (SROs and GROs)
  - Considers land use – residential (unrestricted) and industrial/commercial
  - Allows for Engineered Barriers and Environmental Land Use Controls (ELUCs) to eliminate exposure pathways
  - Applies to the RCRA Program

The primary regulatory driver for cleanup at Lockport focused on commercial/industrial use.

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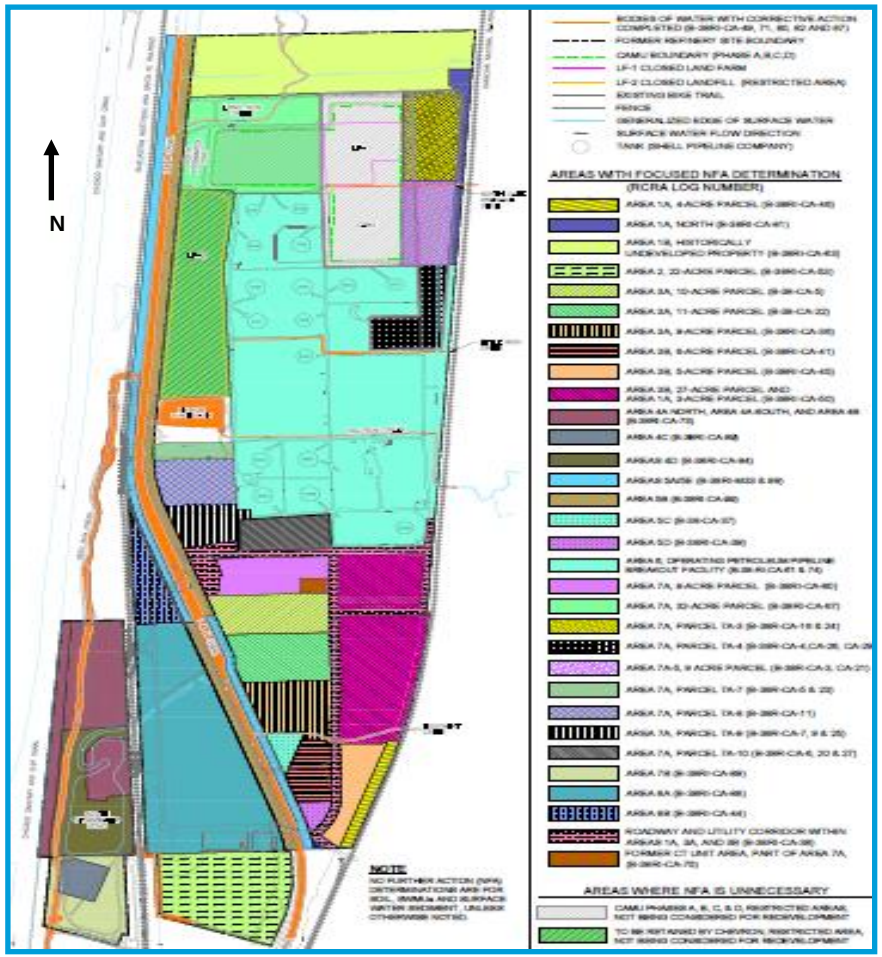
Remediation of Soil



Divide and Conquer

- All impacted soil was excavated to bedrock (2’ – 10’) starting in 2000. Impacted soil management activities continued until 2015.
- Backfill was imported for no charge by local developers.
- Nearly 40 No Further Action determinations have been issued by IEPA for soil.
- Soils managed in a CAMU

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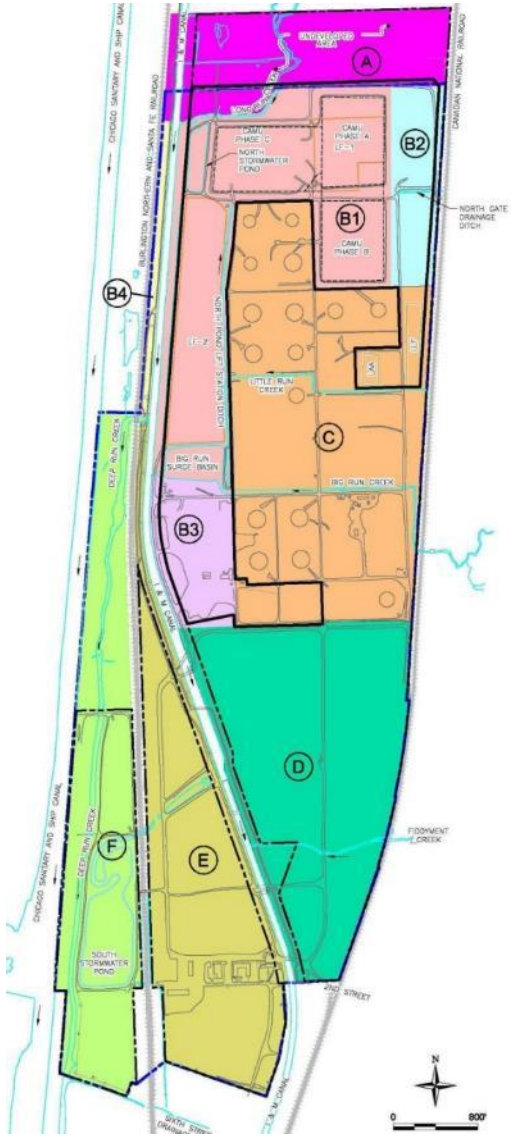
Groundwater Investigation and Remediation Approach

- Groundwater Management Zone was established 2003
  - Acknowledges that groundwater cleanup and closure will take time
  - Foundation for Groundwater Corrective Measures Program

- Groundwater Master Plan developed for the facility and approved by IEPA in 2011
  - Site divided into six Groundwater Investigation Areas



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Facility Boundary Modification

- As part of the 2013 permit renewal, the facility boundary was changed.
- The original RCRA facility was 580 acres.
- All the parcels with soil NFAs were removed from the RCRA facility boundary and considered off-site under the corrective action regulations (40 CFR 264.101(c)).
- Groundwater investigation and remediation continues on these parcels
- The current RCRA facility is 148 acres and contains the CAMU and remaining regulated unit.

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Corrective Action Goals Realized

- Focused NFA determinations for soils, SWMUs and other Recognized Environmental Conditions (RECs), surface water and sediments
- Cleanup to industrial/commercial remediation objectives
- Establish ELUCs to restrict land use and eliminate exposure routes
- Corrective action focus shifted to few remaining groundwater areas

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Current Status

Corrective Action Management Unit (CAMU) - Closed

For Sale Sign in Future Business Park

Bike Path

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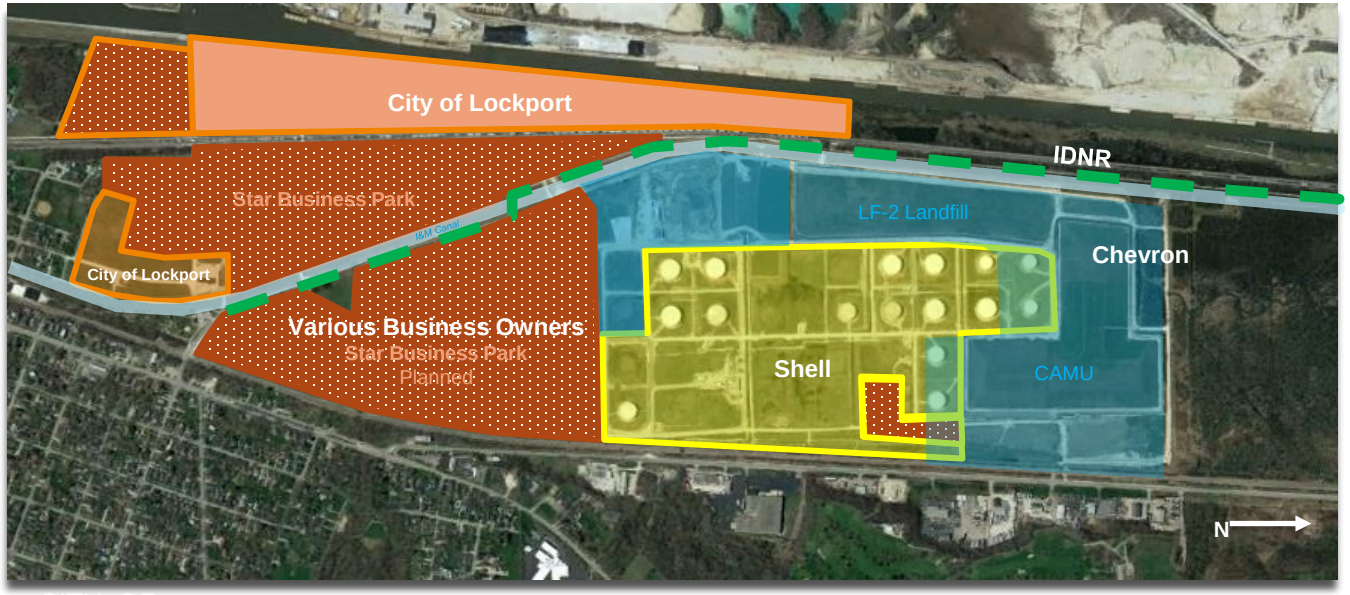
Current End State Vision



Current — Chevron-owned, ~160 acres

Current — Available land, ~200 acres

Current — City of Lockport-owned, ~100 acres

Planned Current — Shell-owned, ~150 acres

Current — IDNR-owned, Bike Path

Current — IDNR-owned, I&M Canal

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Questions

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Greg Rudloff
Chief, Corrective Action Section 3, U.S. EPA Region 5

Toby Wall
U.S. EPA Region 5 Videographer

RCRA Redevelopment Videos

RACER REDEVELOPMENT VIDEOS

Greg Rudloff	Toby Wall
U.S. EPA, Region 5	U.S. EPA, Region 5
Land Chemicals and Redevelopment Division	Office of Public Affairs

Videos

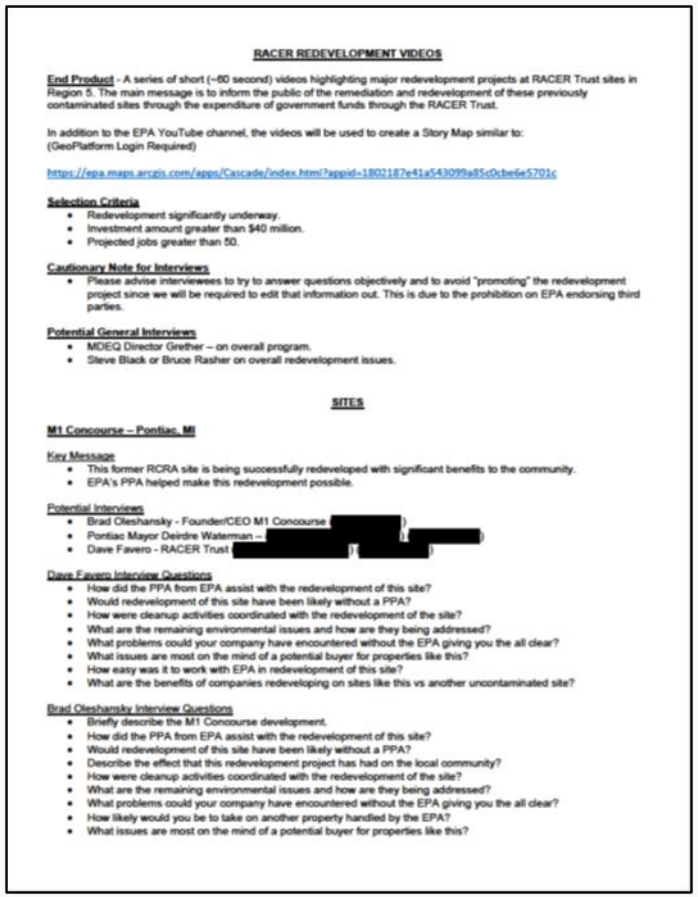
- https://www.youtube.com/watch?v=EHWF8JLU_XU&feature=youtu.be
- https://www.youtube.com/watch?v=SUVG1gYq1Uk&feature=youtu.be
- https://www.youtube.com/watch?v=k5nXzCLvF1c&feature=youtu.be

Background and Planning

RACER Trust

- Created by a U.S. Bankruptcy Court
- Goal of returning contaminated sites to productive use
- Operates under Settlement Agreement between EPA, DOJ, Treasury, States, and Tribes
- EPA and state programs work cooperatively with RACER to review, approve and undertake response actions to address contamination
- EPA manages federal lead sites and provides oversight and technical assistance for state lead sites
- There are 49 RACER properties in Region 5

Background and Planning



RACER REDEVELOPMENT VIDEOS

End Product - A series of short (~60 second) videos highlighting major redevelopment projects at RACER Trust sites in Region 5. The main message is to inform the public of the remediation and redevelopment of these previously contaminated sites through the expenditure of government funds through the RACER Trust.

In addition to the EPA YouTube channel, the videos will be used to create a Story Map similar to:
(GeoPlatform Login Required)

https://epa.maps.arcgis.com/apps/Cascade/index.html?appid=1802187e41a543099a85c0cbe6e5701c

Selection Criteria
- Redevelopment significantly underway.
- Investment amount greater than $40 million.
- Projected jobs greater than 50.

Cautionary Note for Interviews
- Please advise interviewees to try to answer questions objectively and to avoid "promoting" the redevelopment project since we will be required to edit that information out. This is due to the prohibition on EPA endorsing third parties.

Potential General Interviews
- MDEQ Director Grether – on overall program.
- Steve Black or Bruce Rasher on overall redevelopment issues.

SITES

M1 Concourse – Pontiac, MI

Key Message
- This former RCRA site is being successfully redeveloped with significant benefits to the community.
- EPA's PPA helped make this redevelopment possible.

Potential Interviews
- Brad Oleshansky - Founder/CEO M1 Concourse ([redacted])
- Pontiac Mayor Deirdre Waterman – ([redacted])
- Dave Favero - RACER Trust ([redacted])

Dave Favero Interview Questions
- How did the PPA from EPA assist with the redevelopment of this site?
- Would redevelopment of this site have been likely without a PPA?
- How were cleanup activities coordinated with the redevelopment of the site?
- What are the remaining environmental issues and how are they being addressed?
- What problems could your company have encountered without the EPA giving you the all clear?
- What issues are most on the mind of a potential buyer for properties like this?
- How easy was it to work with EPA in redevelopment of this site?
- What are the benefits of companies redeveloping on sites like this vs another uncontaminated site?

Brad Oleshansky Interview Questions
- Briefly describe the M1 Concourse development.
- How did the PPA from EPA assist with the redevelopment of this site?
- Would redevelopment of this site have been likely without a PPA?
- Describe the effect that this redevelopment project has had on the local community?
- How were cleanup activities coordinated with the redevelopment of the site?
- What are the remaining environmental issues and how are they being addressed?
- What problems could your company have encountered without the EPA giving you the all clear?
- How likely would you be to take on another property handled by the EPA?
- What issues are most on the mind of a potential buyer for properties like this?

Pick Location and Pack Gear

Wireless Mic

Camera and
Tripod

GOPRO
With Mount

Interviews

Backgrounds and Staging

Open Ended Questions (Who, What, ETC.)

Feeling Questions (How did it make you feel?)

B-Roll and Photos

- Extra footage gives perspective and adds emphasis to points in the story

M1 Concourse

Yankee Air Museum

Narration

- Recorded narration allows the producer to give input on anything they want
- Allows you to fill in gaps that quotes leave

Follow the Recipe!

- Combine Narration, Interview Quotes, and Extra Footage (b-roll and pictures)
- Sprinkle in Graphics to add visual appeal
- Add a Dash of Subtitles
- Garnish with music (COPYRIGHT FREE)
- Presto you have a professional video

Imagination is the only Limitation!

- Use Cellphones instead of traditional rigs
- Use editing tricks to make amateur video look more professional
- Contact us for more information

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RCRA Corrective Action - 2020 and The Road Ahead Webinar Series

October 6, 2020 – 1st of the Series:

Risk Assessment Modeling and Risk Management

ASTSWMO Annual Meeting – Virtual Event

October 26 – 30, 2020

http://astswmo.org/event/astswmo-2020-annual-meeting/

Special Thanks to

Robin Thomas (AZ)

Chair, ASTSWMO Corrective Action and Permitting Task Force

Sarah Bargsten (WY)

Vice-Chair, ASTSWMO Corrective Action and Permitting Task Force

End of Day 3

Please respond to the Feedback Survey

Thank You for Joining Us for the

ASTSWMO 2020 RCRA Corrective Action Conference!