

Workshop R - Air Permitting & Compliance, Preparation for Upcoming Deadlines for MACT RTR

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Andrew Dunagan, Trinity Consultants
Kelydra Welcker, Solvay Specialty Polymers



trinityconsultants.com



Risk & Technology Review (RTR)



US EPA'S Risk & Technology Review (RTR) Process

- ▶ Risk based assessment of remaining health risks from each source category to determine if existing MACT Standard is adequately protective of public health and adverse environmental impacts.
- ▶ Revision of MACT Standard if US EPA determines more protective standard is needed to reduce “residual risk”
- ▶ Technology review of MACT Standard to review and update standard based upon improvements in air pollution controls and pollution prevention since original issuance.

US EPA's RTR Schedule

- ▶ US EPA is required to conduct Residual Risk and Technology Reviews (RTRs) of MACT Standards minimum of every eight (8) years.

- ▶ Deadline missed and US EPA under court order or consent decree to complete RTRs for thirty-three (31) source categories with due dates between January 2020 and December 2022.

- ▶ Rules with significant changes due to RTR:
 - YYYY – Stationary Combustion Turbines
 - AAAA – Municipal Solid Waste Landfills
 - UUUUU – Coal- and Oil-Fired Electric Utility Steam Generating Units
 - YY – Ethylene Production
 - EEEE – Organic Liquid Distribution (OLD) MACT
 - GGGGG – Site Remediation
 - FFFFF – Integrated Iron and Steel Manufacturing
 - FFFF – Miscellaneous Organic NESHAP (MON)
 - QQQ – Primary Copper Smelting

Source Category	Final Rule Publication Date	Status
Coke Ovens: Pushing, Quenching and Battery Stacks	(12/26/2022)	Not Yet Proposed
Primary Magnesium Refining	(8/1/2022)	Proposed
Mercury Emissions from Mercury Cell Chlor-Alkali Plants	(5/2/2022)	Proposed
Primary Copper Smelting	(4/1/2022)	Proposed
Generic MACT II - Cyanide Chemicals Manufacturing	11/19/2021	Final
Generic MACT II - Carbon Black Production	11/19/2021	Final
Refractory Products Manufacturing	11/19/2021	Final
Flexible Polyurethane Foam Fabrication Operations	11/18/2021	Final
Iron and Steel Foundries	9/10/2020	Final
Miscellaneous Coating Manufacturing (MCM)	8/14/2020	Final
Plywood and Composite Wood Products Manufacture	8/13/2020	Final
Misc. Organic NESHAP (MON)	8/12/2020	Final
Taconite Iron Ore Processing	7/28/2020	Final
Rubber Tire Manufacturing	7/24/2020	Final
Lime Manufacturing Plants	7/24/2020	Final
Integrated Iron and Steel Manufacturing	7/13/2020	Final
Site Remediation	7/10/2020	Final
Paper and Other Web Coating	7/9/2020	Final
Automobiles and Light-Duty Trucks, Miscellaneous Metal Parts, Plastic Parts Coatings	7/8/2020	Final
Organic Liquids Distribution (OLD MACT)	7/7/2020	Final
Ethylene Production	7/6/2020	Final

Source Category	Final Rule Publication Date	Status
Cellulose Products Manufacturing	7/2/2020	Final
Engine Test Cells/Standards	6/3/2020	Final
Coal- and Oil-Fired Electric Utility Steam Generating Units	5/22/2020	Final
Hydrochloric Acid Production (HCl MACT)	4/5/2020	Final
Municipal Solid Waste Landfills	3/26/2020	Final
Boat Manufacturing and Reinforced Plastics Composites Production	3/20/2020	Final
Solvent Extraction for Vegetable Oil Production	3/18/2020	Final
Asphalt Processing and Asphalt Roofing Manufacturing	3/12/2020	Final
Stationary Combustion Turbines*	3/9/2020	Final
Surface Coating of Metal Cans and Metal Coil	2/25/2020	Final

► Link to full list of rule changes with supplemental documents:

<https://www3.epa.gov/airtoxics/rrisk/rtrpg.html>

**Formaldehyde standards for the Stationary Combustion Turbines MACT were recently removed as of 3/9/2022.*

General Updates - SSM Revisions


- ▶ Removal of startup, shutdown and malfunction (SSM) blanket exemptions from emission control standards.
- ▶ Sources are expected to comply with emission limits and work practice standards during all emission generating periods, including startup / shutdown.
- ▶ Work Practice Standards for Malfunctions and Maintenance.
- ▶ Detailed records for events associated with each failure to meet an applicable standard – including impacted equipment & HAP emitted, estimation methodology
- ▶ The requirement for SSM Plans are completely removed, along with associated SSM recordkeeping and reporting


Key Considerations for SSM Provision Removal

- ▶ In preparation for the potential regulatory impact, and as a guide to review these proposals, impacted sources should be asking the following questions internally:
 - Can the facility comply with the applicable emissions control and treatment standards once the SSM exemptions are removed?
 - If not, what sources are problematic and what type of physical or operational changes will be required to come into compliance – and what is the timeframe and capital required for such changes?

Supplemental Documents to Identify Changes

Additional Resources

 [Fact Sheet: Proposed Amendments to Air Toxics Standards for Primary Copper Smelting \(pdf\)](#)

 [Proposed Regulation Edits for Subpart QQQ: Primary Copper Smelting NESHAP Risk and Technology Review Proposal \(pdf\)](#)

 [Primary Copper modeling files \(zip\)](#) Download this zip file to your computer and extract the files to access.

(2) You must operate a capture system that collects the gases and fumes released from converting vessels and conveys the collected gas stream to a control device.

(3) You must not cause to be discharged to the atmosphere process fugitive gases from the converter department roofline vents containing filterable particulate matter emissions in excess of 1.7 lbs/hr as measured using the test methods specified in §63.1450(f).

(f) *Baghouses.* For each baghouse applied to meet any ~~total~~filterable particulate matter emission limit in paragraphs (a) through (d) of this section, you must operate the baghouse such that the bag leak detection system does not alarm for more than 5 percent of the total operating time in any semiannual reporting period.

Example RTR Changes - MON MACT

- ▶ Closed vent system (CVS)
 - Regulated vents may not bypass the control device at any time
 - If a bypass occurs, estimate and report HAP release
- ▶ Heat exchange systems
 - Modified El Paso Method now required (TX HRVOC method).
 - Leak definition = 6.2 ppm_v
 - Large Leak (>62 ppm) must be repaired in 30 days (no DOR allowed)
- ▶ Maintenance work practice standards
 - Options:
 - ◆ Drain and purge process equipment to a closed system to ≤10% LEL prior to maintenance; or
 - ◆ Where 10% LEL cannot be demonstrated, vent to the atmosphere if ≤ 5 psig (no active purging to the atmosphere until ≤10% LEL); or
 - ◆ Show < 50 lbs of VOC that may be emitted to the atmosphere; or
 - ◆ Alternative Standard for blind flange installation
 - Document procedures used for equipment openings to verify compliance.
- ▶ Significant changes for ethylene oxide requirements

Previous PRD Requirements

- ▶ Maintain a list of regulated PRDs for each process.
- ▶ After pressure relief events, make sure the PRD has reseated.
 - Monitoring requirements for PRDs in gas service.
- ▶ Report pressure relief events and any applicable monitoring results in compliance report.
- ▶ Meet rupture disk replacement requirements when this is used as a compliance option for PRD.

New PRD Requirements

- ▶ Track releases from PRDs in organic HAP or vapor service
- ▶ Limit PRD releases to one, two, or three in a 3-year period (depending on the root cause)
 - A release due to operator error or poor maintenance is an automatic deviation
- ▶ System to identify and record the time of each release.
- ▶ Root cause analyses
- ▶ Must apply at least three (3) redundant prevention measures for each PRD to prevent lifting and document the measures.
- ▶ Does not apply to:
 - PRDs routed to a control device, process, fuel gas system, or drain system (must still meet applicable standards for system receiving the stream)
 - Heavy liquid (HL) service
 - Thermal expansion relief valves (e.g., for pressurized liquids)
 - Mobile equipment

Compliance Timeline – MON MACT

- ▶ Compliance Deadlines:
 - **One (1) year for general LDAR compliance deadline**
 - **Two (2) years for EO-specific provisions**
 - **Three (3) years all remaining changes**



Site Remediation RTR - PRDs

- ▶ Very similar to MON MACT RTR changes!
- ▶ PRDs vented to control devices
 - Comply with existing MACT GGGGG requirements for closed vent systems and control devices
- ▶ PRDs vented to atmosphere
 - Parametric monitoring system to indicate time/duration of releases
 - No more than 1 release with the same cause from a single PRD in a 3-year period
 - No more than 2 releases from a single PRD in a 3-year period
 - Releases attributable to operator error or poor maintenance are prohibited
 - Releases attributable to force majeure do not count against the allowable 2-3 events per 3-year period
 - A few exemptions for certain PRDs, similar to MON MACT

Site Remediation RTR - Control Evaluations

- ▶ Increasing control efficiency from 95% to 98% determined to be cost infeasible

- ▶ Increased stringency for LDAR requirements
 - Comply with MACT UU for pumps and gas/vapor, light liquid valves
 - Leak definition for gas/vapor, light liquid valves = 500 ppm
 - Leak definition for pumps = 1,000 ppm
 - Connector monitoring determined to be cost infeasible



Compliance and Emissions Data Reporting Interface (CEDRI)



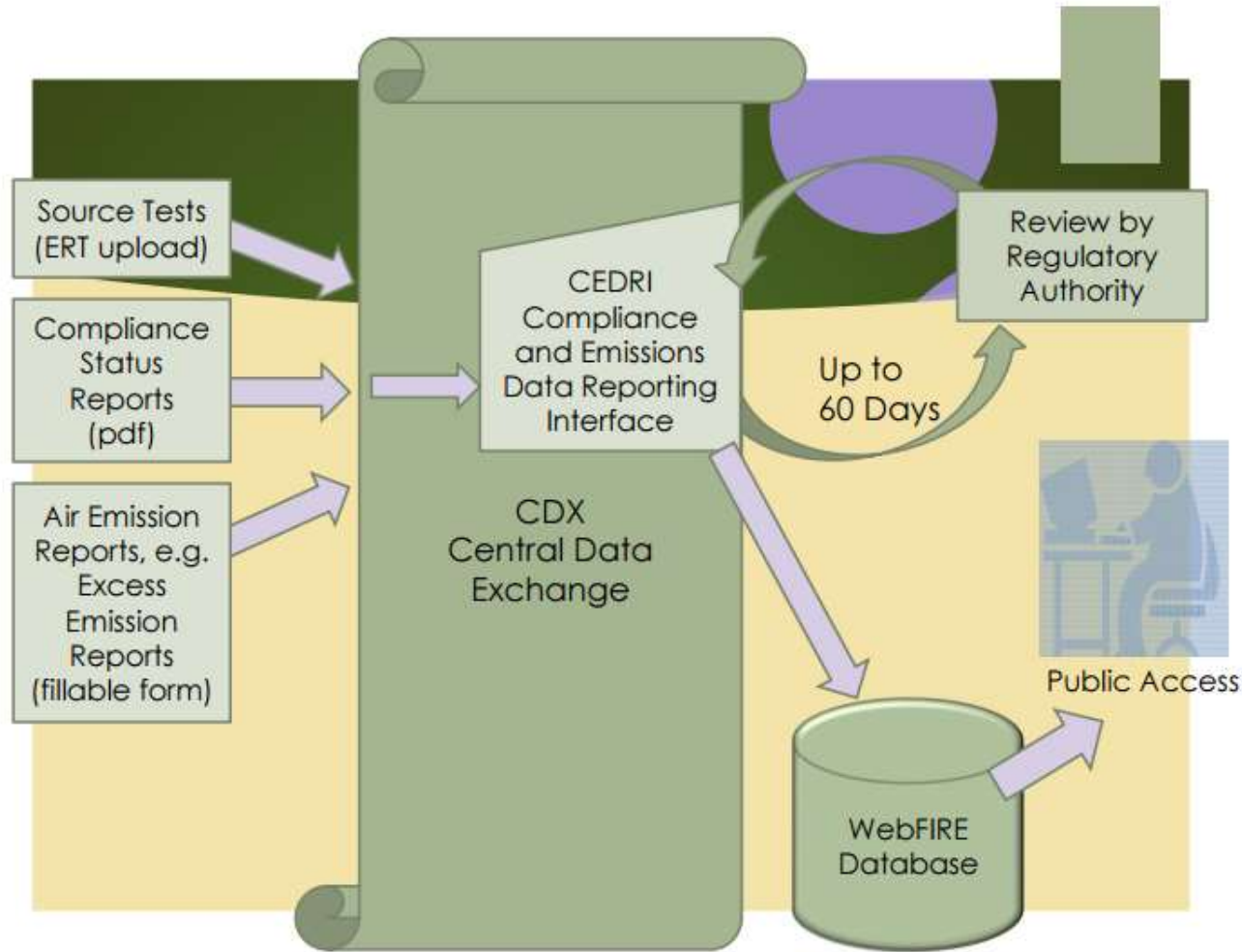
Electric Reporting (CEDRI)

- ▶ US EPA is incorporating requirements for electronic data submittal through US EPA's Compliance and Emissions Data Reporting Interface (CEDRI) into all recent regulatory actions.
- ▶ Reporting requirements thus far have included:
 - Submittal of NESHAP Performance Test Reports
 - Submittal of Fenceline Monitoring Reports
 - Semiannual NESHAP Initial and Semi-Annual Compliance Reports
- ▶ All RTR amendments, across all source categories, are incorporating some level of CEDRI reporting, and NESHAP regulated sources can expect to eventually use CEDRI for all US EPA reporting submittals.

CEDRI and Electronic Reporting

- ▶ The Compliance and Emissions Data Reporting Interface (CEDRI) is located on the Central Data Exchange (CDX)
 - Toxic Release Inventory (TRI) is submitted through CDX
- ▶ CEDRI supports submission of multiple reports at one time
- ▶ CEDRI aggregates the uploaded files and completed forms into a single package for submission. The source then certifies and signs the package using the CDX Cross-Media Electronic Reporting Regulation (CROMERR) service
- ▶ Submission files stored in CDX CROMERR, available to:
 - Submitters, authorized EPA, regional, state, local, and tribal reviewers immediately after submittal
 - Although submission files are available to state reviewers, there have been issues with accessibility (still submit through Air Services for Ohio)
 - Files also available to public in WebFIRE after review

CDX Submittal Process Flow



Source:

<https://www3.epa.gov/ttnemc01/meetnw/2015/electronicreporting.pdf>

Key Considerations for Each Facility

► How do I:

- Know if I am subject to any rules with currently applicable electronic reporting requirements in CEDRI?
- Know what needs to be submitted if I am subject to a rule with these requirements?
- Register and make sure my facility certifier is properly registered?
- Prepare and submit performance test results?
- Prepare and submit NOCS and compliance reports?
- Ensure consistency with my regular reports I submit to my state/local agency?
- Know what future electronic compliance requirements are on the horizon for my facility?

How to Determine When to Use CEDRI

Subpart [▲]	Rule Name (Rule Webpage Linked)	Reports Required to be Submitted in CEDRI	Electronic Format (ERT: Electronic Reporting Tool Upload)	Initial Report Availability Date	Last Update Date of Report Template (CEDRI Update Log)	Report Template or ERT Version Accepted in CEDRI	Available Spreadsheet Template or XML Schema
DDDDD	Industrial, Commercial, And Institutional Boilers And Process Heaters	63.7550(h)(2) CEMS Performance Evaluation Test	ERT	1/1/2012	Not Applicable	6.0, 5.0	Not Applicable
DDDDD	Industrial, Commercial, And Institutional Boilers And Process Heaters	63.7550(h)(3) Compliance Report (XML Schema option)	XML	2013	None	1.XX	XML Schema (XSD) (.xsd)
DDDDD	Industrial, Commercial, And Institutional Boilers And Process Heaters	63.7550(h)(3) Compliance Report ((c)(1) option)	Excel	1/2016	2/4/2020	1.XX	63.7550(c)(1) Compliance Report for Facilities Subject to the Requirements of a Tune Up - Bulk Upload Template (XLSX) (.xlsx)
DDDDD	Industrial, Commercial, And Institutional Boilers And Process Heaters	63.7550(h)(3) Compliance Report ((c)(2) option)	Excel	1/2016	2/4/2020	1.XX	63.7550(c)(2) Compliance Report for Facilities Complying with the Fuel Analysis - Bulk Upload Template (XLSX) (.xlsx)
DDDDD	Industrial, Commercial, And Institutional Boilers And Process Heaters	63.7550(h)(3) Compliance Report ((c)(3) option)	Excel	1/2016	2/4/2020	1.XX	63.7550(c)(3) Compliance Report for Facilities Complying with the Applicable Emissions Limit with Performance Testing - Bulk Upload Template (XLSX) (.xlsx)
DDDDD	Industrial, Commercial, And Institutional Boilers And Process Heaters	63.7550(h)(3) Compliance Report ((c)(4) option)	Excel	1/2016	2/4/2020	1.XX	63.7550(c)(4) Compliance Report for Facilities Complying with an Emissions Limit Using a CMS - Bulk Upload Template (XLSX) (.xlsx)
FFFF	Miscellaneous Organic Chemical Manufacturing	63.2450(e)(5)(iv) Flare Management Plan	PDF	7/28/2020	Not Applicable	Not Applicable	Not Applicable
FFFF	Miscellaneous Organic Chemical Manufacturing	63.2520(e) Compliance Report	Excel	Future	None	1.XX	Spreadsheet Template
FFFF	Miscellaneous Organic Chemical Manufacturing	63.2520(f) Performance Test Report	ERT	7/28/2020	Not Applicable	6.0, 5.0	Not Applicable

<https://www.epa.gov/electronic-reporting-air-emissions/cedri>

Note: Check rule to make sure reporting requirements are understood

E-Reporting Requirements Under Common Rules

- ▶ Area Source Boiler MACT – 40 CFR 63, Subpart JJJJJJ:
 - Notice of Compliance Status (NOCS)
 - Performance Tests/RATA (ERT)

- ▶ Major Source Boiler MACT – 40 CFR 63, Subpart DDDDD
 - Performance Tests/RATA (ERT)
 - Compliance Reports (Air Emissions Reports)
 - Notification Reports/NOCS (Optional – But Recommended by EPA)

- ▶ Boiler NSPS – 40 CFR 60, Subparts Da, Db, and Dc
 - PM CEMS RATA only!
 - Electronic emission reports (optional) – NSPS Da and Db

Accessing CDX and CEDRI

- ▶ <https://cdx.epa.gov/>
- ▶ CEDRI can be added as a program service of CDX

EPA United States Environmental Protection Agency

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CDX Central Data Exchange

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Logged in as CEDRITESTUSER133 (log out)

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Status	Program Service Name	Role
	CSPP; Submissions for Chemical Safety and Pesticide Programs	Primary Authorized Official

Add Program Service Manage Your Program Services

News and Updates
No news/updates.

EPA Home Privacy and Security Notice Accessibility
CDX Help Desk: 888-899-1995 | (970) 494-5500 for callers from Puerto Rico and Guam
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CEDRI Roles

- ▶ To register in CEDRI, you must register your role as either “certifier” or “preparer”

- ▶ Preparer: the person responsible for the preparation of reports for signature
 - Contractors are permitted to register as a Preparer and may assemble submission packages for the Certifier's approval and signature

- ▶ Certifier: the duly authorized representative of the source/facility or more commonly referred to as the "owner" or "operator" of the facility
 - The Certifier is authorized to modify the package a Preparer has assembled, and sign and submit the package to CDX

- ▶ Note “Organization” should be the user’s employer

Certifier Registration

- ▶ For users registering as a Certifier, identity proofing is required
- ▶ Certifiers are prompted to follow the registration steps using the LexisNexis identity verification or the Electronic Signature Agreement (ESA) signing process
 - The LexisNexis identity verification requires Personally Identifiable Information (PII). If this verification is passed, the ESA can be signed instantly and electronically
 - Otherwise, the ESA process requires the Certifier to send a paper form to the EPA and can take up to 2 weeks to complete the registration process
 - The ESA must be processed before the Certifier role is activated within CDX
 - Be aware of timing – recommend setting up the Certifier in advance

Setting up CEDRI

- ▶ An account must be associated with a facility
 - CEDRI has the ability to search for or create a facility

The screenshot shows the EPA Core CDX Registration page. The navigation bar includes Home, About, Recent Announcements, Terms and Conditions, FAQ, and Help. The page title is "CDX Core CDX Registration" and the user is logged in as "CEDRTESTUSER133". The progress bar shows steps: 1. Program Service (checked), 2. Role Access (checked), and 3. Organization Information. The "Registration Information" section shows "Program Service: Compliance and Emissions Data Reporting Interface" and "Role: Preparer". Below this is a search form with fields for Facility ID, Facility Name, Facility Address, City, State, and ZIP Code. A "Search Facilities" button is highlighted with a red box. Below the search form is a "Continue Without Facilities" button, also highlighted with a red box. The footer contains EPA contact information and logos.

The screenshot shows the EPA Core CDX Registration page after a search. The progress bar shows steps: 1. Program Service (checked), 2. Role Access (checked), 3. User and Organization, and 4. Confirmation. The "Registration Information" section is the same as in the previous screenshot. Below this is a "Facility Search Results" section with the message: "Select your facility from the list below then click the 'Select' button. If you do not see the facility in the results, you may search again." Below the message is a table with columns: EPA Registry ID, Facility Name, Facility Address, EPA Programs Reporting, and Alternate EPA Registry IDs/Program IDs. Below the table is a "No Facilities Found" message: "Your search criteria did not match any facilities. You may return to the search form and try again. If the facility doesn't exist, you may create a facility by clicking the 'Create New Facility' button." Below the message are buttons for "Select", "Search Again", "Create New Facility" (highlighted with a red box), and "Continue Without Facilities".

Submitting in CEDRI

- ▶ Once the Certifier or Preparer is logged in, select the Role(s) hyperlink to review or prepare reports

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CDX Central Data Exchange

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Logged in as CEDRITESTERT (Log out)

MyCDX Inbox My Profile Role Sponsorship Submission History

Services UC Manager

Status	Program Service Name	Role
	CEDRI: Compliance and Emissions Data Reporting Interface	Certifier

Add Program Service Manage Your Program Services

News and Updates

CDX: CDX Web will now utilize a brand new responsive layout. This will allow for a dynamic display depending on how CDX is accessed. Whether through a mobile device, a tablet, or a desktop browser, the site will automatically adapt for optimal viewing on any screen.
September 04, 2024

EPA Home Privacy and Security Notice Accessibility
CDX Help Desk: 888-895-1393 | (770) 494-5588 for calls from Puerto Rico and Guam
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CEDRI Supported Reports

- ▶ **Performance Test Reports** - Performance Test Reports use the Electronic Reporting Tool (ERT), built in Microsoft Access, to generate files containing emissions source test data. Facilities upload these files to CDX using CEDRI.
- ▶ **Notification Reports** - A Notification Report or Notification of Compliance Status (NOCS) is typically submitted by a regulated facility to notify the designated authority that the facility has achieved compliance with an applicable regulation. (Note: In CEDRI some Notification Reports will be uploaded in PDF form.)
- ▶ **Air Emissions Reports** - Air emissions reports are periodic reports submitted to the delegated authority after the facility achieves initial compliance that demonstrate that the facility has maintained continuous compliance with an applicable regulation over the reporting period (e.g., 6 months).

Electronic Reporting Tool (ERT)

- ▶ The ERT is designed to electronically create and submit stationary source sampling test plans to regulatory agencies and, after approval, to calculate and submit the test results as an electronic report to the regulatory agency
- ▶ ERT is an Microsoft Access based program that can be downloaded: <https://www.epa.gov/electronic-reporting-air-emissions/electronic-reporting-tool-ert#Installation>
- ▶ Data is manually entered into the ERT
- ▶ ERT produces a submittal package (.zip), which consists of the test data and an XML export file
- ▶ Files are uploaded and submitted in CEDRI

Electronic Reporting Tool (ERT)

- ▶ Enter data within ERT for:
 - Test plan
 - Test data
 - Process data
- ▶ ERT cannot be opened and used immediately, requires extensive review
- ▶ Recommend stack testing company prepare ERT submittal file and upload to CEDRI

ERT Helpful Hints

- ▶ ERT is frequently updated - Make sure you are using current version!
- ▶ Make sure you enable macros after opening program
- ▶ Program is buggy and will crash
- ▶ Difficult to open ERT files completed by others
- ▶ Report (PDF) preview function can appear sloppy
- ▶ State/local agency still require hardcopy test report unless they have specified otherwise!

ERT Main Menu

frmMainMenu

ERT - Main Menu

Setup / Test Plan

Test Plan

Quick Jumps

SCC

Process Info

Locations/Methods

Test Data

Run Data

Process Data

Tester DQ Assessment

Attachments

Completeness Check

Report Verification

Regulatory Agency Review

Test Plan Review

Regulatory Field Observation Documentation

Regulatory Assessment of Supporting Documentation

Emissions Results

Comprehensive Regulatory Test Assessment

Printed Reports

Select Report / Data Table

Administration

Help / Sys. Reports

Select Project Data Set Create New Project Data Set Save Project Data Set As Compact Project Data Set

Current Project Data Set: C:\Users\cpool\Desktop\ProjectData\Test.accdb - Date Created: 4/1/2016

Project Submittal History: Create ERT Submission Package File

Action	SubmitDate	SubmittedTo	SubmittedFr	Comment
*				

Record: 1 of 1 No Filter Search

ERT Test Plan

Test Plan

Test Plan Title: Fake Test Plan Test Plan Date: 4/8/2016 Open Expanded

Facility/Tester Permit/SCC Locations/Methods Regulations Process/APCD Methods cont. Audit/Calibrations Schedule Reviewers Attach.

Facility Name: * Trinity Atlanta

Address: * 3495 Piedmont Rd
Bldg 10, Suite 905

City: * Atlanta

State/Zip: * GA 30305-

County: * Fulton Co

Contact: * Chris Pool

Phone: * (678) 441-9977

Fax:

email: * cpool@trinityconsultants.com

AFS Number:

Industry NAICS: [Search on the Web](#)

FRS: * 000000000000 [Search on the Web](#) ?

State ID:

Latitude: ?

Longitude:

Testing Company: * Pool Testing Services USA LLC Attach Test Company Certification

Address: * 5468 Peachtree Rd

City: * Chamblee

State/Zip: * GA 30341-

Contact: * Chris Pool

Phone: * (678) 441-9977

Fax:

email: * cpool@trinityconsultants.com

Testing Company Project Number:

Attach Field Team Lead Certification

(* required fields)

ERT Test Plan (Continued)

Test Plan

Test Plan Title: Fake Test Plan Test Plan Date: 4/8/2016 Open Expanded

Facility/Tester Permit/SCC Locations/Methods Regulations Process/APCD Methods cont. Audit/Calibrations Schedule Reviewers Attach.

1. Please enter sampling location information. (all dimensions in inches) Add Location Attach File

(Required before test data entry)

Location: (click to view/edit)	Inlet/Outl	Total Trave	Ports	Round Duct Diam	Duct Le	Duct Wid	Equivalent I	Up Stream Distar	Down Stream Dis	Emissions are
Stack	Inlet	2	2	1				5	5	<input type="checkbox"/>

(Note: UpStreamDist = Distance from upstream disturbance (Distance A - Fig. 1-1, RM1) ; DwnStreamDist = Distance from downstream disturbance (Distance B - Fig 1-1, RM1))

2a. Please provide the following information for each test parameter. (Required before test data entry) Add Target Parameters

Location	Test Method	Target Parameter	Num Test Runs	Test Run Duration	Comments
Stack	Method 5	Filterable Particulate	3	60	

Record: 1 of 1 No Filter Search

2b. Please select the Emissions Units of Measure for each location. Add Emissions/Concentrations

Local	Method	Units of Measure	Corre	Corrected %	Process Rate, Parameter
Stack	Method 5	lb/hr		0	

ERT Stack Test Run Data

Run Data Details

Facility: Open Expanded

Permitted Source ID/Description:

Select Location - Method: Add New Run Data Delete Run Data

Select Run: < > Change Run Number Change Run Date

Method Setup | Header Data | Point Data | Lab Data | Sampling/Stack Data Results | Cyclone Cut Size | Emissions

Method: RunNumber: RunDate:

Equipment ID	Calibration	Checks	Pre	Mid	Post
Dry Gas Meter: <input type="text"/>	Y: * <input type="text"/>	Vacuum:	<input type="text" value="0"/>		<input type="text" value="0"/>
Control Console: <input type="text"/>	DH@: * <input type="text"/>	Leak Check Total Volume: *	<input type="text" value="0"/>		
Umbilical: <input type="text"/>	Cp: * <input type="text"/>	Leak Rate:	<input type="text" value="0"/>		<input type="text" value="0"/>
StackTC: <input type="text"/>	Dn: * <input type="text"/>	Pitot:	<input type="text"/>	<input type="text"/>	<input type="text"/>
TedlarBag: <input type="text"/>	Ambient		Nozzle:	<input type="text"/>	<input type="text"/>
OrsatPump: <input type="text"/>	Pb: * <input type="text"/>	Pstatic: *	Stack TC:	<input type="text"/>	<input type="text"/>
Probe/Pitot: <input type="text"/>	Temperature: <input type="text" value="0"/>	Vlc: <input type="text" value="0"/> Vlc Components			
Nozzle: <input type="text"/>	Concentrations (run ID if used)		Micromanometer ID: <input type="text"/>		
Filters		% CO2: * <input type="text"/>	Sensitivity: <input type="text" value="0"/>		
FilterNum1: <input type="text"/>		% O2: * <input type="text"/>			
FilterNum2: <input type="text"/>					
FilterNum3: <input type="text"/>					
Defaults		Fuel Type: <input type="text"/>			
tstd * <input type="text" value="68"/>	Pstd * <input type="text" value="29.92"/>	% CO <input type="text" value="0"/>	Fd <input type="text" value="0"/>	Fw <input type="text" value="0"/>	Fc <input type="text" value="0"/>

Fields marked with * are required to calculate emissions / concentrations.

ERT Stack Test Run Data (Continued)

Run Data Details

Facility: Open Expanded

Permitted Source ID/Description:

Select Location - Method: Add New Run Data Delete Run Data

Select Run: < > Change Run Number Change Run Date

Method Setup | Header Data | Point Data | Lab Data | **Sampling/Stack Data Results** | Cyclone Cut Size | Emissions

Method: RunNumber: RunDate:

Sampling Train Parameters:		Stack Gas Parameters:			
NetRunTime:	<input type="text"/>	% H2O:	<input type="text" value="0"/>	Vs:	<input type="text"/>
NetTravPts:	<input type="text" value="0"/>	% H2Osat:	<input type="text" value="0"/>	Dstk:	<input type="text" value="1"/>
Dn:	<input type="text"/>	Mfd:	<input type="text" value="1"/>	Dwdth:	<input type="text"/>
Cp:	<input type="text"/>	% CO2:	<input type="text" value="0"/>	Dlngth:	<input type="text"/>
Y:	<input type="text"/>	% O2:	<input type="text" value="0"/>	As:	<input type="text" value="0.005"/>
Pb:	<input type="text"/>	% CO + N2:	<input type="text" value="100"/>	Qsd:	<input type="text"/>
DeltaH:	<input type="text"/>	Fo:	<input type="text" value="0.00"/>	Qaw:	<input type="text"/>
Vm:	<input type="text" value="0.000"/>	Md:	<input type="text" value="28.00"/>	MMBtu/Hr:	<input type="text"/>
tm:	<input type="text"/>	Ms:	<input type="text" value="28.00"/>		
Vmstd:	<input type="text" value="0"/>	Pg:	<input type="text"/>		
Vlc:	<input type="text" value="0"/>	Ps:	<input type="text"/>		
Vwstd:	<input type="text" value="0.00"/>	ts:	<input type="text"/>		
% I:	<input type="text"/>	DeltaPavg:	<input type="text"/>		

View All Runs

Note: Double click in fields to see the formulas

ERT Stack Test Process Data

Process Data Details

Facility:

Permitted Source ID/Description:

Open Expanded

Process Run Data

Run: (Note: The first row cannot be deleted. This Process is from the SCC selected in the Test Plan)

Enter the Process Value(s) and any Comments below, go to Test Plan to change other fields:

	Name	Value	Process Rate	Target Lo	Target Hig	comments
	Bark Burned	0	Million Btus/hr	0	0	
*						

Select next Run: 1 of 1

Creating ERT Submittal File

Create ERT Submission File

Complete the steps below to create an ERT Submission File

- 1. Set/Review Test and Process Run Associations**
- 2. Enter Project Data Set Submittal Data**

Action:

Date:

Submitted To:

Submitted To Email:

Submitted From:

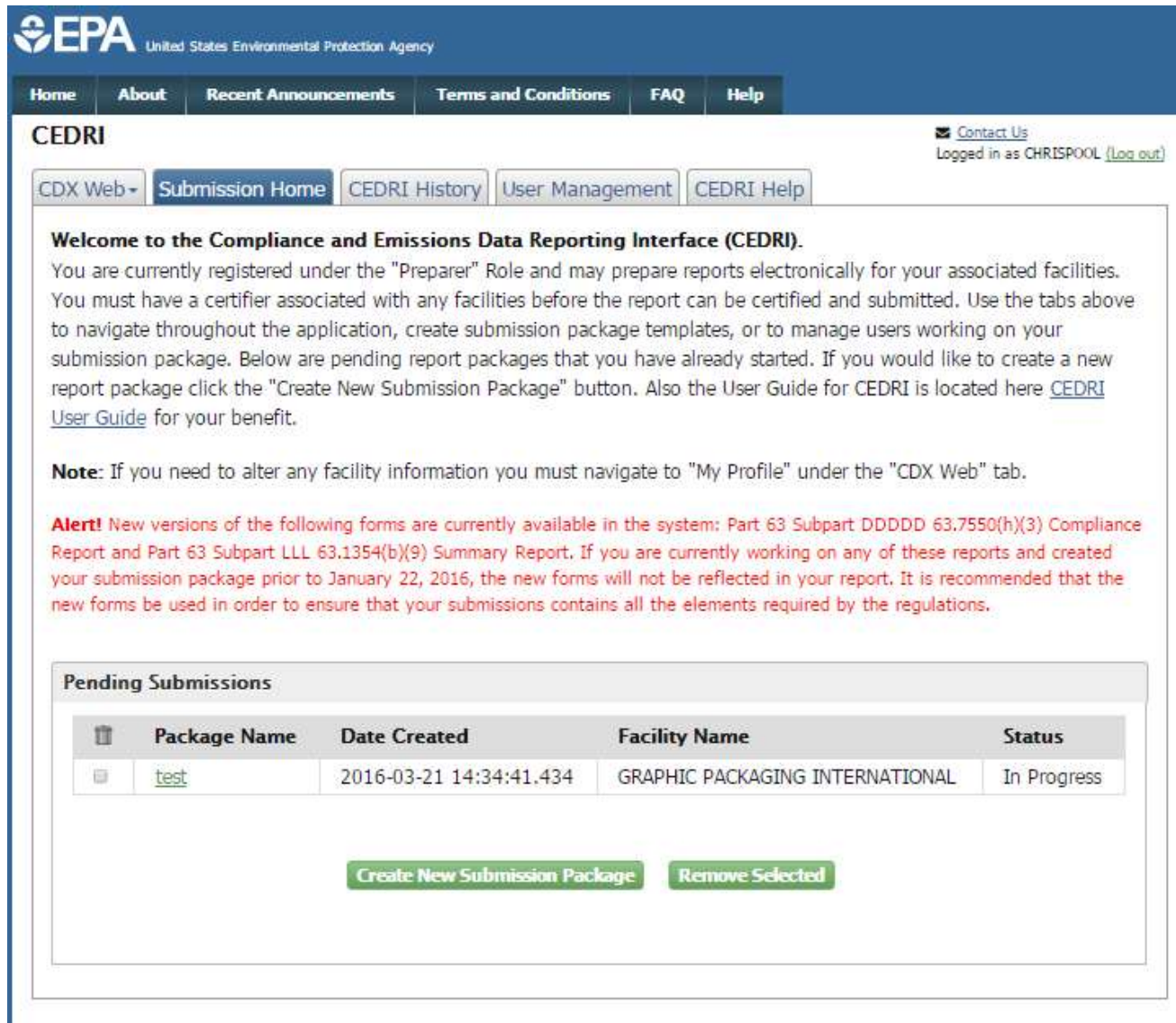
Submitted From Email:

Comment:
- 3. Create ERT Submission**

Optional Steps

- 4a. Go to the CDX Website**
- 4b. Email Submission File**

Submitting ERT File in CEDRI



The screenshot displays the EPA CEDRI (Compliance and Emissions Data Reporting Interface) web application. At the top, the EPA logo and navigation menu are visible. The main content area includes a welcome message, a note about altering facility information, an alert regarding new forms, and a table of pending submissions.

EPA United States Environmental Protection Agency

Home About Recent Announcements Terms and Conditions FAQ Help

CEDRI [Contact Us](#)
Logged in as CHRISPOOL ([Log out](#))


CDX Web - Submission Home CEDRI History User Management CEDRI Help

Welcome to the Compliance and Emissions Data Reporting Interface (CEDRI).
You are currently registered under the "Preparer" Role and may prepare reports electronically for your associated facilities. You must have a certifier associated with any facilities before the report can be certified and submitted. Use the tabs above to navigate throughout the application, create submission package templates, or to manage users working on your submission package. Below are pending report packages that you have already started. If you would like to create a new report package click the "Create New Submission Package" button. Also the User Guide for CEDRI is located here [CEDRI User Guide](#) for your benefit.

Note: If you need to alter any facility information you must navigate to "My Profile" under the "CDX Web" tab.

Alert! New versions of the following forms are currently available in the system: Part 63 Subpart DDDDD 63.7550(h)(3) Compliance Report and Part 63 Subpart LLL 63.1354(b)(9) Summary Report. If you are currently working on any of these reports and created your submission package prior to January 22, 2016, the new forms will not be reflected in your report. It is recommended that the new forms be used in order to ensure that your submissions contains all the elements required by the regulations.

Pending Submissions

	Package Name	Date Created	Facility Name	Status
	test	2016-03-21 14:34:41.434	GRAPHIC PACKAGING INTERNATIONAL	In Progress

[Create New Submission Package](#) [Remove Selected](#)

Submitting ERT File in CEDRI (Continued)

Create/Edit Submission Package

1. Package Name:*

test

2. Edit Facility Details 

Certifiers:	Julian Grimes
Facility Name:	GRAPHIC PACKAGING INTERNATIONAL
Facility Address:	100 GRAPHIC PACKAGING INTRNTL WAY, MACON, GA 31206
Mailing Address:	Click to add mailing address
Longitude of Facility:	-83.628333
Latitude of Facility:	32.774167

3. Select all applicable subparts for which you are required to submit reports.*


[Help](#) 

Part 60 subparts:

Select options

Part 63 subparts:

1 selected

Filter: DDDDD Check all Uncheck all 

- DDDDD - Major Source Boilers
- DDDDDD - Polyvinyl Chloride and Copolymer Production
- DDDDDDD - Prepared Feeds Manufacturing Area Sources

4.

su

vn list to select the reports you wish to submit for that
on to create those reports.

Submitting ERT File in CEDRI (Continued)

Sort By

 Collapse All

 **Part 63 – National Emission Standards for Hazardous Air Pollutants for Source Categories**
Subpart DDDDD – In Progress  

Subpart DDDDD - Major Source Boilers


Note: Under federal regulation for this subpart, you must electronically submit:

- 63.7550(h)(1) Results of the Performance Tests
- 63.7550(h)(2) CEMS Performance Evaluation Test
- 63.7550(h)(3) Compliance Report

Your Permitting Authority may require you to electronically submit reports identified as (Optional).

New version of the following form is currently available in the system: Part 63 Subpart DDDDD 63.7550(h)(3) Compliance Report. If you are currently working on this report and created your submission package prior to January 22, 2016, the new form will not be reflected in your report. It is recommended that the new form be used in order to ensure that your submission contains all the elements required by the regulation.

2 selected

- Check all Uncheck all 
- 63.7550(h)(1) Results of the Performance Tests
- 63.7550(h)(2) CEMS Performance Evaluation Test
- 63.7550(h)(3) Compliance Report
- Bulk Upload of 63.7550(h)(3) Compliance Report
- Notification Report (Optional)

Use Selected Report(s)

Notify Certifier(s)

Submitting ERT File in CEDRI (Continued)

63.7550(h)(1) Results of the Performance Tests	
Report Status	In Progress ⚠
Status Date	2016-04-01 13:24:20.686
File Name	
Upload ERT ZIP File	

63.7550(h)(2) CEMS Performance Evaluation Test	
Report Status	In Progress ⚠
Status Date	2016-04-01 13:24:20.695
File Name	
Upload ERT ZIP File	

File Upload

Important!

Sources that are required by regulation to electronically submit performance test data to EPA's WebFIRE database must submit the performance test data in the file format generated through use of EPA's Electronic Reporting Tool (ERT) (see <http://www3.epa.gov/ttn/chief/ert/index.html>). You must use the ERT to generate an 'ERT Submission File.' The ERT Submission File will be in the format of a Zip file. This Zip file contains two files: one Zip and one XML file. Your file must be in the proper format for a successful submittal. **Please do not change the file name that was generated by the ERT software.**

Only data collected using test methods listed on the ERT website (http://www3.epa.gov/ttn/chief/ert/ert_info.html) submitted electronically to WebFIRE. Sources who claim that some of the information being submitted in their performance tests is confidential business information (CBI) must mail a completed ERT file including the CBI on a compact disk or other commonly used electronic storage media clearly marked as CBI to U.S. EPA/OAQPS/CORE CBI Office, Attention: WebFIRE Administrator, MD C404-02, 4930 Old Page Rd., Durham, NC 27703. **In addition, the same ERT file with the CBI omitted must be submitted to EPA via CDX.**

Please contact the Help Desk for assistance with any questions:
Phone: (888) 890-1995
Email: helpdesk@epacdx.net

No file chosen

Report Formats

- ▶ Used to submit items such as Notification of Compliance Status (NOCS) and air emission reports directly in CEDRI

- ▶ Data can be uploaded for some subparts using:
 - Forms
 - XML
 - Bulk Upload (Excel)

- ▶ Other subparts may only allow a PDF upload

Notification Report Example

Part 63 – National Emission Standards for Hazardous Air Pollutants for Source Categories
Subpart JJJJJ – In Progress ⚠️

Subpart JJJJJ - Area Source Boilers

Note: Under federal regulation for this subpart, you must electronically submit:

- 63.11225(a)(4)(vi) Notification of Compliance Status
- 63.11225(e)(1) Results of the Performance Tests
- 63.11225(e)(2) Relative Accuracy Test Audit (RATA) Data

Your Permitting Authority may require you to electronically submit reports identified as (Optional).



Select Reports **Use Selected Report(s)**

63.11225(a)(4)(vi) Notification of Compliance Status ❌

Report Status	In Progress ⚠️
Status Date	Fri Apr 01 13:33:37 EDT 2016
Form ID	198381
Reporting Utilities	Click here to access templates and schemas

[Create/Edit Form\(s\)](#) 📄 [Preview/Print](#) 🖨️ [Remove](#) 🗑️

Reports - Form

 **EPA** United States Environmental Protection Agency  **CDX**
CENTRAL DATA EXCHANGE

Central Data Exchange Help Desk [Contact Us](#)

Welcome Page and Navigation Information

Information and Certification Required for Notification

Information and Certification Required for Notification

The asterisk (*) next to each field indicates that the corresponding field is required

For assistance in complying with the Area Source Boilers rule please see the following website:
<http://www.epa.gov/boilercompliance/>

1. The methods that were used to determine compliance. [[§83.9\(h\)\(2\)\(i\)\(A\)](#)] *

2. The methods that will be used for determining continuing compliance, including a description of monitoring and reporting requirements and test methods. [[§83.9\(h\)\(2\)\(i\)\(C\)](#)] *

3. This affected existing, new, or reconstructed source has complied with the relevant standard or other requirements. [[§83.9\(h\)\(2\)\(i\)\(G\)](#)] *

Yes
 No

4. This facility complies with the requirements in [§83.11214](#) to conduct an initial tune-up of the boiler. [[§83.11225\(a\)\(4\)\(ii\)](#)] *

Yes
 No

5. This facility has had an energy assessment performed according to [§83.11214\(c\)](#). [[§83.11225\(a\)\(4\)\(iii\)](#)] *

Yes
 No

Reports - Excel

The asterisk (*) next to each

NOTIFICATION OF COMPLIANCE STATUS

Facility Name*	4. This facility complies with the requirements in 63.11214 to conduct an initial tune-up of the boiler. * [§63.11225(a)(4)(ii)]	5. This facility has had an energy assessment performed according to 63.11214(c). * [§63.11225(a)(4)(iii)]	6. For units that install bag leak detection systems: This facility complies with the requirements in 63.11224(f). * [§63.11225(a)(4)(iv)]	7. If this facility does not qualify for the statutory exemption under section 129(g)(1) of the Clean Air Act, were secondary materials that are solid waste combusted in any affected unit. *

Reports - PDF

March 18, 2016

Ms. Sharita Jenkins
Stationary Source Compliance
Georgia Environmental Protection Division
Air Protection Branch
4244 International Parkway, Suite 120
Atlanta, Georgia 30354

*RE: COMPANY – FACILITY, Permit No. X-X-X
Power Boiler – Boiler MACT Notification of Compliance Status*

Dear Ms. Jenkins:

COMPANY operates a refinery located in Chamblee, DeKalb County, Georgia (the FACILITY). The FACILITY operates under Part 70 Operating Permit No. X-X-X, and subsequent amendments issued by the Georgia Environmental Protection Division (EPD). COMPANY operates the Power Boiler that is subject to 40 CFR 63 Subpart DDDDD, *National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Industrial Boilers and Process Heaters* (also known as the Boiler MACT).

Pursuant to 40 CFR 63.9(h)(2)(ii) and 40 CFR 63.7545(e), COMPANY is required to submit a Notification of Compliance Status (NOCS) within 60 days of the compliance date specified in 40 CFR 63.7495(b) for each boiler that is not required to conduct an initial compliance demonstration as specified in 40 CFR 63.7530(a). The Power Boiler is not subject to any emission limits and is not required to establish any operating limits; therefore, the boiler is not required to conduct an initial compliance demonstration. As specified in 40 CFR 63.7495(b), the compliance date for existing boilers including the Power Boiler is January 31, 2016. COMPANY is hereby submitting the information required in the NOCS for the Power Boiler within 60 days of January 31, 2016.

How Do I Submit My Reports

- ▶ Remember that multiple reports can be submitted in a package
- ▶ Only a “certifier” can submit a package
- ▶ To submit:
 - Certifier must login and select package under “Pending Submissions”
 - Click the “submit” button
 - Enter password and security question answers
 - Click the “sign” button
- ▶ Certifier should then receive a confirmation email
- ▶ Submitted files are available in “CEDRI History”

Public Scrutiny Considerations

- ▶ After review by EPA, everything submitted in CEDRI is available to the public online
- ▶ Easy for someone to download your facility's compliance or emissions data
- ▶ Some rules require the upload of CEMS data, but not possible to comment on exceedances directly on data entry table
- ▶ Will this increase compliance risk?

Regulatory Developments and Potential Impacts

- ▶ EPA's goal is to eventually require electronic reporting for NESHAP and NSPS compliance
- ▶ This goal may be achieved by:
 - Adding electronic reporting requirements when rules are being amended.
 - Promulgating rules that create wholesale changes to the general NSPS/NESHAP provisions
- ▶ Facilities must be aware of regulatory developments for specific rules and general provisions
- ▶ State/local agencies may be slow to adapt
- ▶ In the interim, facilities may need to submit both electronic and paper reports.

Helpful Hints (CEDRI)

- ▶ Don't assume EPA has prepared appropriate reporting forms for each rule
- ▶ Existing forms/uploads may or may not request all information that a rule may require in a compliance report
- ▶ Consider supplementing with additional information in forms/PDF attachments
- ▶ Forms may not be setup to accept information for your monitored parameter, fuel, etc.
- ▶ Call CDX Help Desk with issues
- ▶ Hit Save!

Helpful Hints (CEDRI)

- ▶ State/local agency may still require hard copies
 - This means facilities will likely be duplicating effort – Could be filling out state monitoring form and CEDRI monitoring form in some cases
- ▶ Have Certifier approved well in advance of submittal deadline
- ▶ Make sure reports are linked with facility – otherwise certifier cannot see them!
- ▶ The CEDRI forms change frequently – look out for changes!



SOLVAY
PROGRESS BEYOND

MON MACT RTR

Challenges and Plan Forward

March 29th, 2022

Kelydra Welcker
Solvay
Environmental Engineer

Outline

- MON MACT Residual Risk and Technology Review (RTR)
- Select Title V items
- Challenges and plans to tackle them
- Future considerations

**ENVIRONMENTAL PROTECTION
AGENCY**

40 CFR Part 63

[EPA-HQ-OAR-2018-0746; FRL-10010-27-OAR]

RIN 2060-AT85

**National Emission Standards for
Hazardous Air Pollutants:
Miscellaneous Organic Chemical
Manufacturing Residual Risk and
Technology Review**

AGENCY: Environmental Protection Agency (EPA).

ACTION: Final rule.

MON RTR Items of Focus

- Pressure Relief Device (PRD) Requirements
- Closed Vent System (CVS) Bypass Line Requirements
- Maintenance Vent Requirements
- Leak Detection and Repair (LDAR) Requirements
- Heat Exchange System Requirements
- Group 1 Storage Tanks Degassing Requirements.
- Flare Operation
- Adsorber Monitoring
- Ethylene Oxide (EO) Management

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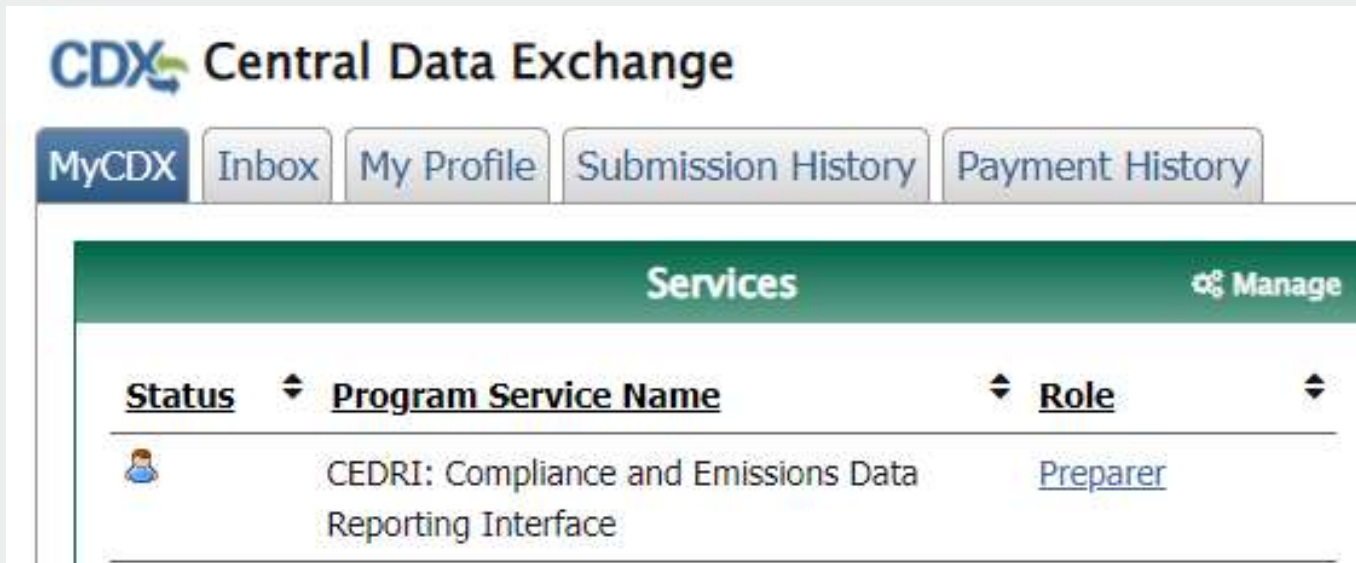
Pressure Relief Device (PRD) Requirements

(Compliance required by August 12, 2023.)


- Implementation of three (3) of the following independent safeguards to prevent a release:
 - Flow, temperature, liquid level and pressure indicators with deadman switches, monitors, or automatic actuators.
 - Documented routine inspection and maintenance programs and/or operator training
 - Inherently safer designs or safety instrumentation systems.
 - Deluge systems
 - Staged relief system where the initial pressure relief device (with lower set release pressure) discharges to a flare or other closed vent system and control device.

Pressure Relief Device (PRD) Requirements

- Incident investigation, root cause analyses, and corrective/preventative actions for all PRD releases to atmosphere within 45 days, otherwise a schedule of implementation is required with proposed start and completion dates listed. (CEDRI reporting)



The screenshot displays the CDX Central Data Exchange user interface. At the top, the CDX logo and the text "Central Data Exchange" are visible. Below this, a navigation bar contains buttons for "MyCDX", "Inbox", "My Profile", "Submission History", and "Payment History". The main content area is titled "Services" and includes a "Manage" link. A table lists the services available to the user.

Status	Program Service Name	Role
	CEDRI: Compliance and Emissions Data Reporting Interface	Preparer

Steps Toward Ensuring Compliance

- Consider consultant assistance to review applicable PRDs in determining possible exemptions (have PRD relieve to control device, for example) and documentation of applicable PRDs
- Incident Review Documentation
 - Incident review programs (eg, *Benchmark ESG |Gensuite*)
 - Excel files to maintain records of relieving times and durations
 - A second release event not including force majeure events from a single pressure relief device in a three (3) calendar year period for the same root cause for the same equipment.
 - A third release event not including force majeure events from a single pressure relief device in a three (3) calendar year period *for any reason*.
 - LDAR system

Future Considerations

- Maintenance of records
- Project updates and/or growth
Annual review? MOC review? PHA review? Engineer-lead recordkeeping?
- Redesigning current (or future) projects to ensure any PRD are exempted



Closed Vent System (CVS) Bypass Line Requirements

(Compliance is required by August 12, 2023)

- Start up, shut down, and Malfunctions (SSM) blanket exemption language has been removed.
- Required to comply with the emissions standards during SSM events at all times
 - Bypasses not meeting control standards are considered a deviation of the standard.

Steps Toward Ensuring Compliance

- Incident Review Documentation
 - Incident review programs
(*eg, Benchmark ESG |Gensuite*)
 - Excel files to maintain records of relieving times and durations
- Review permit requirements with unit engineers and operators

Future Considerations

- Maintenance of records
- Project updates and/or growth
Annual review? MOC review? PHA review? Engineer-lead recordkeeping?
- Redesigning current (or future) projects to ensure current control systems can handle new loads



Maintenance Vent Requirements

(Compliance is required by August 12, 2023)

- Prior to opening equipment for maintenance, either:
 - Drain/purge to a closed system to <10 percent (%) lower explosive limit (LEL) or, if that cannot be demonstrated, venting to atmosphere if <5 pounds per square inch gauge (psig) and no active purging to atmosphere until LEL is met,
 - Demonstrate <50 pounds (lb) volatile organic compounds (VOC) would be emitted to atmosphere, or
 - Alternative standard: blind flange installation for depressurization to <2 psig
- Maintain procedures used for equipment openings to verify compliance
 - Specify any alternative maintenance vent limit for blinds, list reasoning for variance, and emissions calculations

Steps Toward Ensuring Compliance

- Recordkeeping of tank contents and applicable HAP concentrations after procedural steps to clean/purge system
- Work with Unit Operations to capture maintenance work for reports
 - *attending morning meetings, training, operation logs, emails of cleanout, planned vs unplanned, etc.*



Leak Detection and Repair (LDAR) Requirements

- New or replaced leak detection and repair (LDAR) components must be monitored within 30 days if subject to periodic monitoring
 - Applies on or after August 12, 2020
 - Replaced, if related to repair, would retain the 15 day requirements
 - Does not apply to difficult-to-monitoring (DTM) and unsafe-to-monitor (UTM) components
- Lower leak threshold of 1,000 parts per million by volume (ppmv) for pumps in light liquid service (in an MCPU that has no continuous process vents and is part of an existing source) beginning August 12, 2021

Heat Exchange System Requirements

(Compliance is required by August 12, 2023)

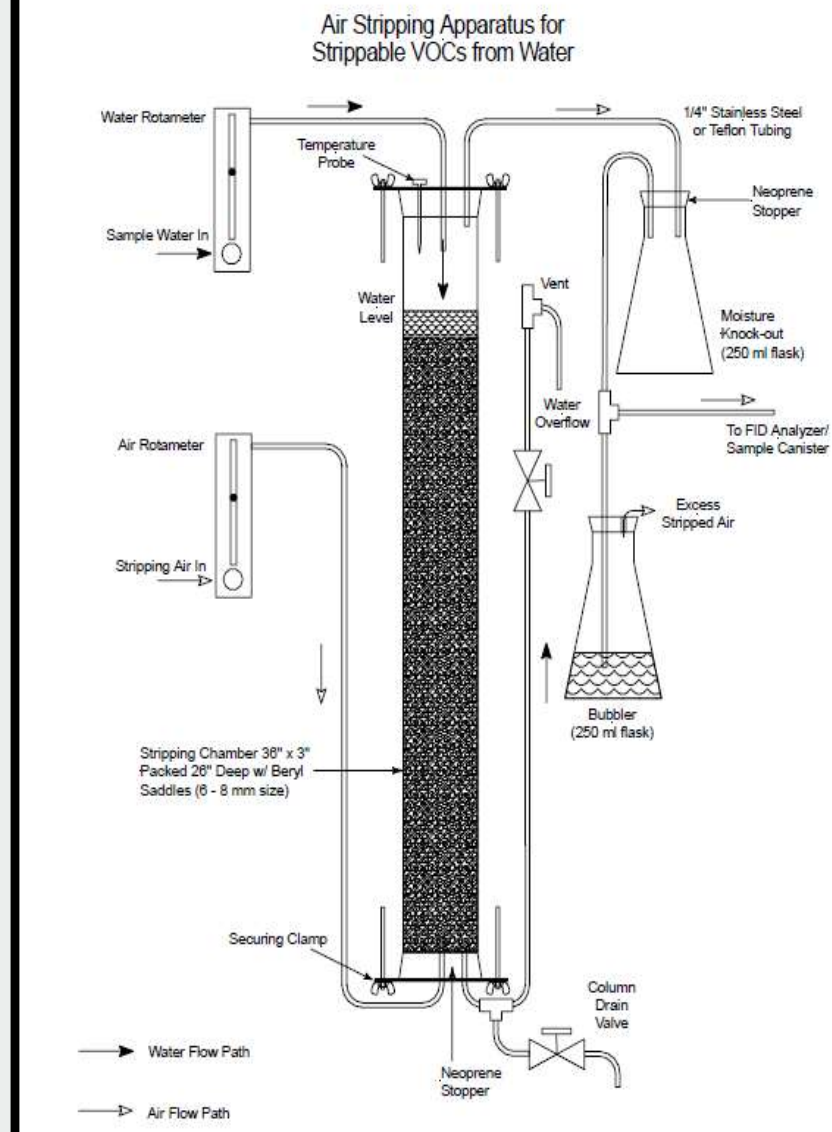
- Current method grab sample and sample analyzed via EPA Method 8260
- MON RTR will require Modified El Paso Method
 - dynamic or flow-through system to strip VOCs from a continuous supply of water using counter-current air flow.
 - Resultant off-gases are analyzed for VOCs using a common flame ionization detector (FID) analyzer.
 - The sampling location must be on the cooling water return line before the water is exposed to the atmosphere to prevent VOC loss.

Steps Toward Ensuring Compliance

- **Recognizing challenges**

- Equipment cost and setup
- Location of sampler
- Who will perform the sampling & analysis

Figure 1



Future Considerations

- Maintenance (purging material, column replacement, etc.)
- Contamination risk (surrounding environment)
- Method of identifying, isolating, and correcting leaks detected
(sites with multiple heat exchange systems)
- Unit operations understanding identifying and correcting any leaks detected

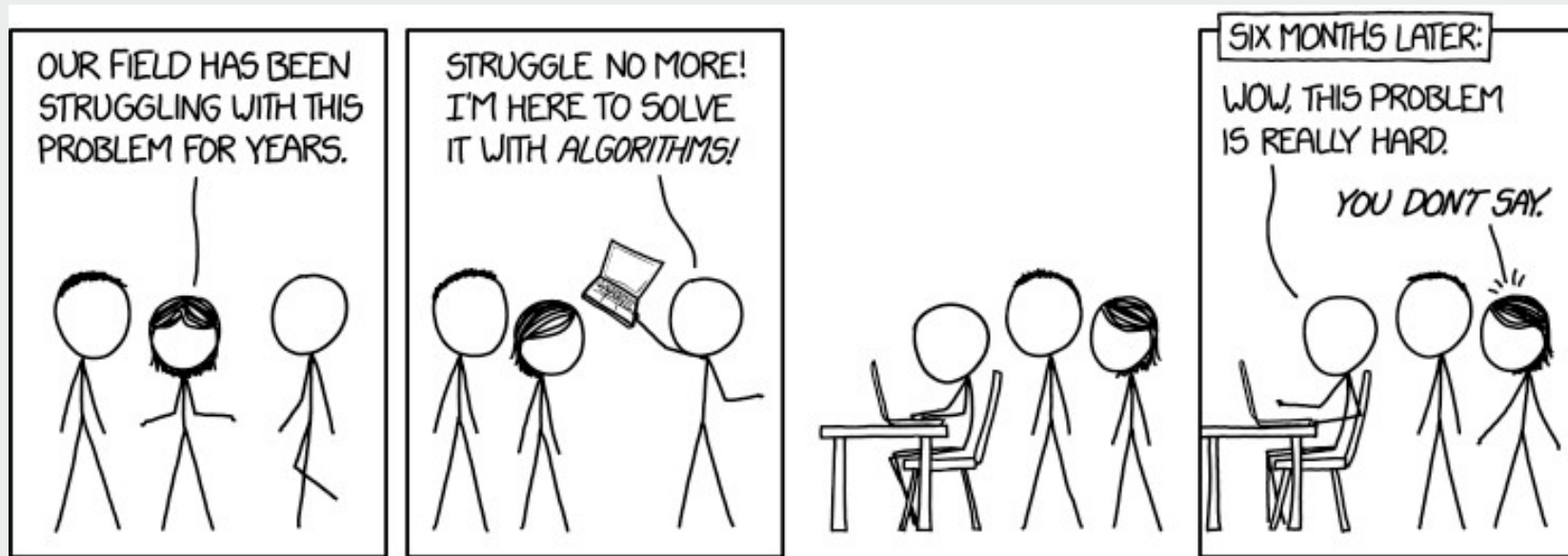


Summary

- Update the SSMP citations, checklists, and regulatory language in procedures
- Work closely with Unit engineers and operators
- LDAR updates



So, how's it going?



Questions?





Contact Us

Andrew Dunagan

Senior Consultant

P: (614) 433-0733

E: Adunagan@trinityconsultants.com

110 Polaris Parkway, Suite 200

Westerville, OH 43082

Biographical Information

Andrew R. Dunagan
Senior Consultant
Trinity Consultants Inc.
110 Polaris Parkway, Suite 200, Westerville, OH 43082
(614) 433-0733
adunagan@trinityconsultants.com

Mr. Andrew Dunagan serves as a Senior Consultant in Trinity's Columbus, Ohio office. He started his career with Trinity Consultants in 2012 after graduating from The Ohio State University with a B.S. in Chemical Engineering. Among other topics, his experience includes a wide-range of synthetic organic chemical manufacturing industry (SOCMI) support (e.g., MON, HON, RCRA, BWON, NSPS SOCMI regulations, M21 inspections, and general wastewater requirements), Title V compliance management, periodic reporting, air dispersion modeling, air emission inventory development, Spill Prevention, Control, and Countermeasure (SPCC)/Storm Water Pollution Prevention Plan (SWPPP) development, toxic release inventory reporting (TRI), and extensive Leak Detection and Repair (LDAR) support. He has experience serving the oil and gas, chemical manufacturing, steel, surface coating, roofing and asphalt, lime, glass recycling, and glass manufacturing industries.

Kelydra E. Welcker
Environmental Compliance Engineer
Solvay Specialty Polymers
17005 State Route 7, Marietta, OH 45750
(740) 376 – 6085
kelydra.welcker@solvay.com

Kelydra has worked at Solvay's Marietta site as an Environmental Engineer since 2016, where she has assisted with ensuring environmental compliance with local, state and federal regulatory items relating to Title V, RCRA, SARA 311, 312 & 313, LDAR, and NPDES.

Kelydra is a graduate of West Virginia Wesleyan College with a B.S. in Chemistry, and received a M.S. in chemical engineering from West Virginia University for her collaborative work with Cornell University on low-temperature geothermal Play Fairway analysis for the Appalachian Basin.