

Surviving EPA's Online Air Emissions Reporting, CEDRI

West Michigan AWMA Spring Conference 2022

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Agenda

U.S. EPA's CEDRI System

- What is it?
- My history with CEDRI
- Who needs to use CEDRI?
- How do we report to CEDRI?

ERT

- What is *that*?
- How do we use it?
- Why is it such a pain?

Questions

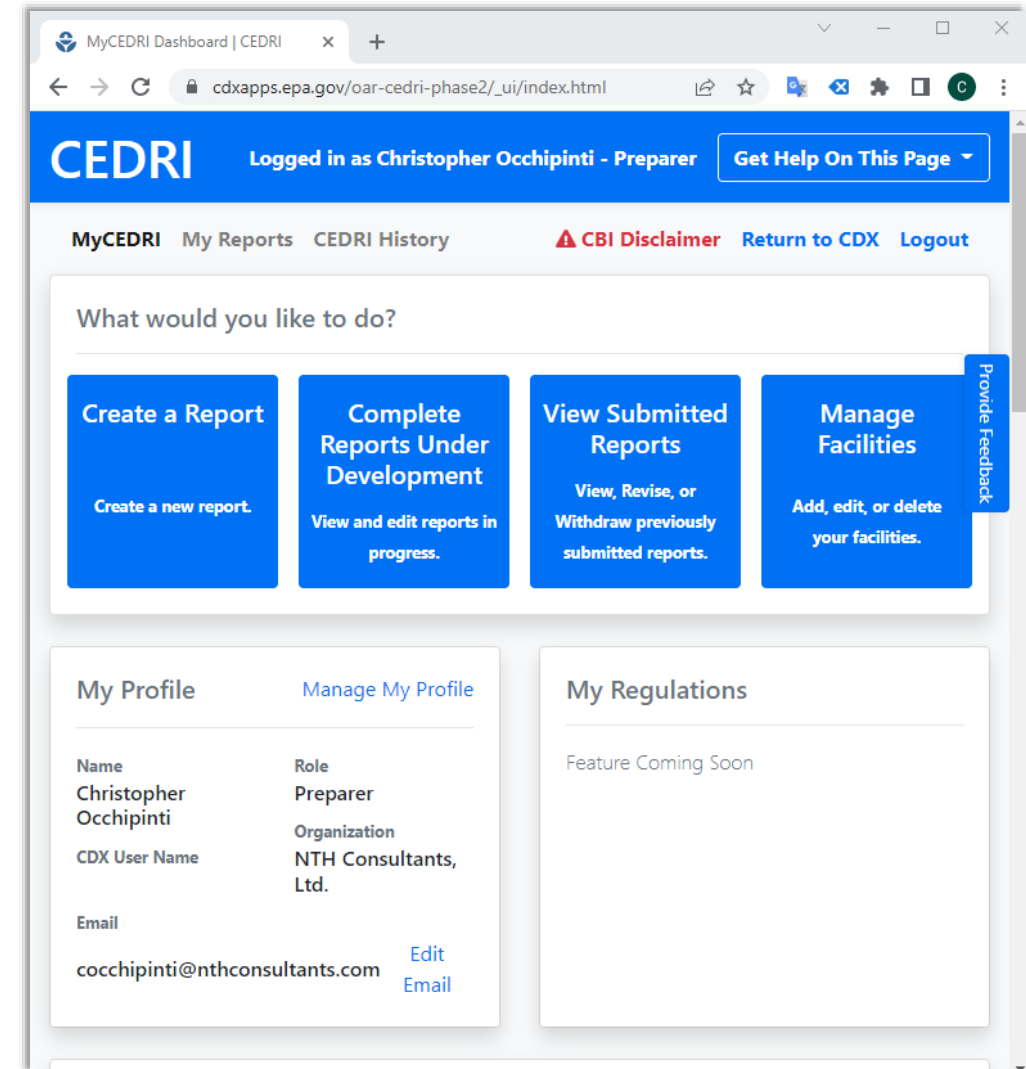


NTH Staff Using EPA Databases, Image Courtesy of Stanley Kubrick, Copyright 2001



What is CEDRI?

Compliance and Emissions Data Reporting Interface (CEDRI)





What is CEDRI?

Compliance and Emissions Data Reporting Interface (CEDRI)

Part of U.S. EPA's Central Data Exchange (CDX), used to submit the following items for compliance with various federal rules.

The screenshot shows the MyCDX Central Data Exchange interface. The page includes the EPA logo, navigation links (Home, About, Recent Announcements, Terms and Conditions, FAQ, Help), and a Virtual Assistant button. The main content area is titled "CDX Central Data Exchange" and includes a "Contact Us" link and a "Logged in as" status with a "Log out" link. Below this are tabs for "MyCDX", "Inbox", "My Profile", "Submission History", and "Payment History".

The "CDX Service Availability" section contains a link to "See the status for all program services". The "News and Updates" section shows "No news/updates". The "Services" section is a table with columns for Status, Program Service Name, and Role. The first row, "CEDRI: Compliance and Emissions Data Reporting Interface", is circled in red. The Role for this service is "Preparer".

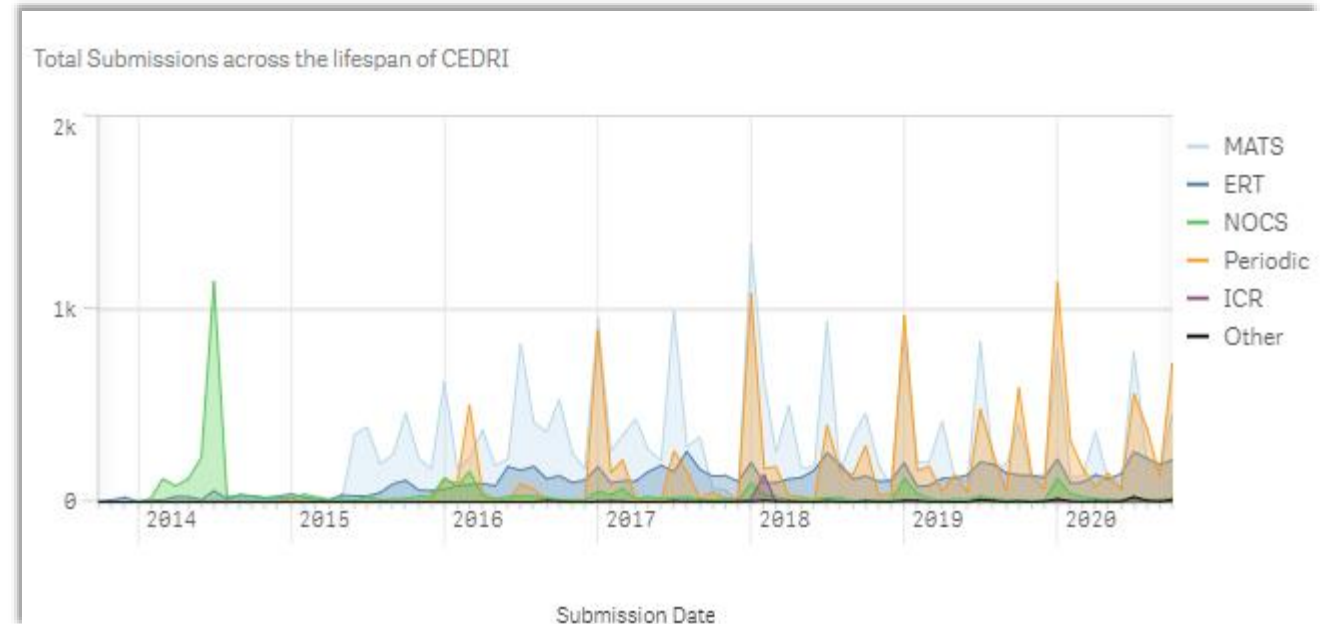
Status	Program Service Name	Role
	CEDRI: Compliance and Emissions Data Reporting Interface	Preparer
	CSPP: Submissions for Chemical Safety and Pesticide Programs	Primary Agent/Consultant
	e-GGRT: Electronic Greenhouse Gas Reporting Tool	
	RCRAInfo: Resource Conservation and Recovery Act Information	Industry Application
	TRIMEweb: Toxics Release Inventory Made Easy Web	TRI-MEweb (Preparer)

What is CEDRI?

Compliance and Emissions Data Reporting Interface (CEDRI)

Part of U.S. EPA's Central Data Exchange (CDX), used to submit the following items for compliance with various federal rules:

- Test Results through Emissions Reporting Tool (ERT)
- Information Collection Requests (ICRs)
- Notifications
- Periodic Reports



My History With CEDRI and ERT

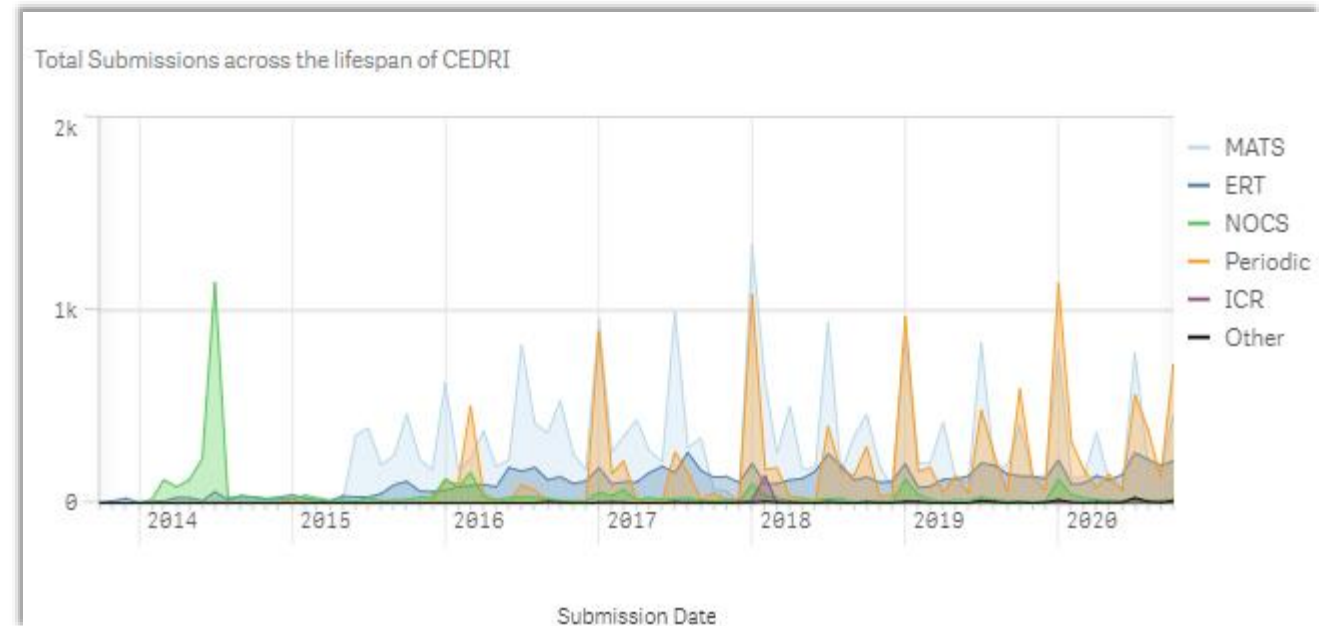
2007 – 2008 Stack Testing with Boiler MACT ICRs, which required the use of ERT for data entry.

2010 – Worked with the folks who designed and maintain the ERT database for U.S. EPA.

2011 – Continued work using ERT, now at NTH

2012 - CEDRI comes online for submitting ERT and initial notifications for certain rules.

2022 – Yup, still at it. More rules than ever.



Who Needs to Use CEDRI?

The list of supported rules continues to expand, so maybe you!

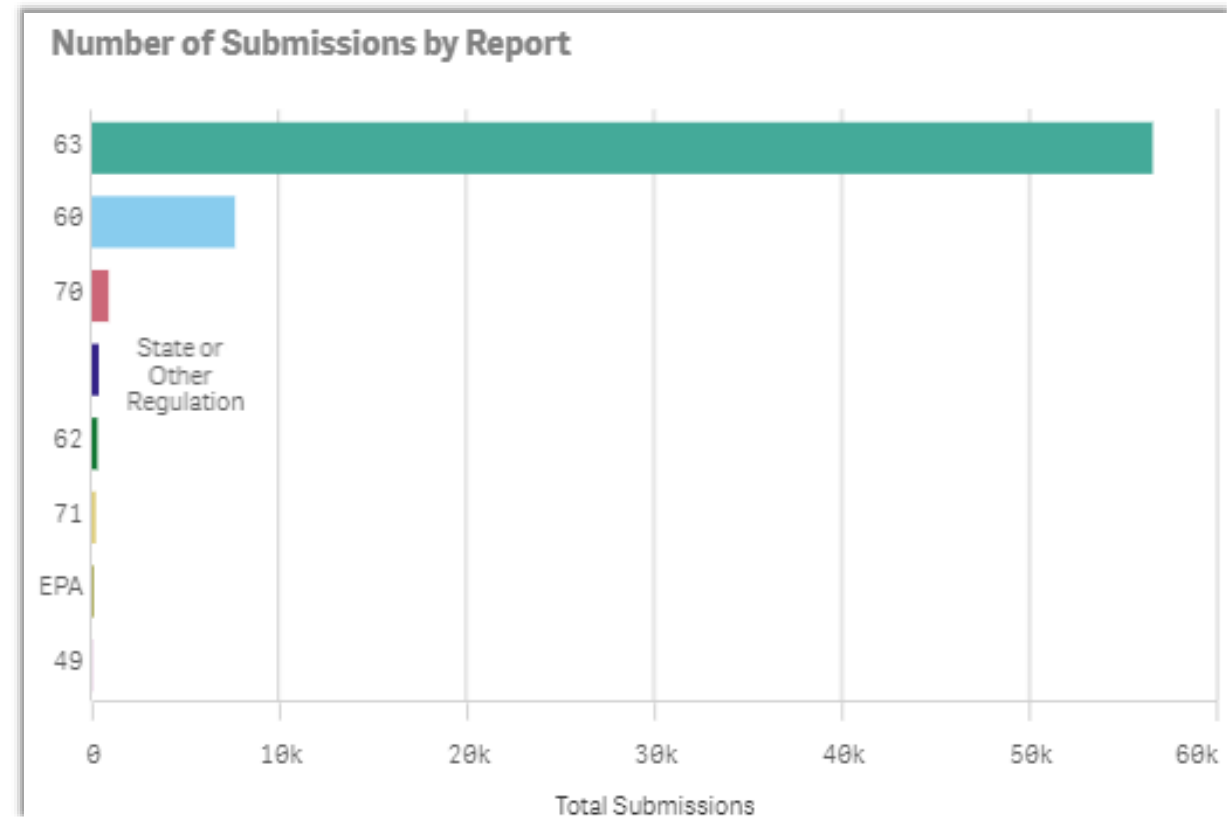
Currently certain rules within 40 CFR:

- Part 63: National Emission Standards for Hazardous Air Pollutants (NESHAPS)
- Part 60: New Source Performance Standards (NSPS)
- Part 62: Federal Plan Requirements for Existing Stationary Sources
- Other Federal, State, Tribal rules under Parts 70, 62, 71, and 49 and/or EPA internal programs (Anybody in this room?)

Michigan:

Annual compliance certification (pursuant to Rule 213(4)(c)) must also be sent to the USEPA or be submitted through the USEPA's Compliance and Emissions Data Reporting Interface (CEDRI)...

Check my Handouts!





Part	Subpart	Rule Name (Rule Webpage Linked)	Reports Required to be Submitted in CEDRI	Electronic Format (ERT: Electronic Reporting Tool Upload, Excel: Spreadsheet Template Upload, PDF: File Upload, XML: Extensible Markup Language Upload)	Initial Report Availability Date	Last Update Date of Report Template	Report Template or ERT Version Accepted in CEDRI	Available Spreadsheet Template or XML Schema
60	JJJJ	Stationary Spark Ignition Internal Combustion Engines	60.4245(e)(3) Annual Report (Spreadsheet Template Option) Supplemental Templates for Annual Report (can use as attachments to Annual Report)	XML	2015	None	1.XX	XML Schema (XSD) (7 K)
				Excel	2/2016	5/15/2020	2.XX	60.4245(e)(3) Annual Report - Bulk Upload Template (XLSX) (361 K)
				Excel	2015	1/20/2017	Not Applicable	Emergency Demand Response Use Summary (XLSX) (11 K)
								Non-Emergency Use Summary (XLSX) (18 K) Voltage or Frequency Deviation Summary (XLSX) (11 K)
60	LL	Metallic Mineral Processing Plants	60.385(a) Results of the Performance Tests	ERT	Prior to 2015	Not Applicable	6.0, 5.0	Not Applicable
60	LLLL	New Sewage Sludge Incineration Units	60.4915(i)(2) Relative Accuracy Test Audit and Performance Test Data	ERT	1/1/2012	Not Applicable	6.0, 5.0	Not Applicable
60	MMMM	Emission Guidelines and Compliance Times for Existing Sewage Sludge Incineration Units	60.5235(h)(2) Relative Accuracy Test Audit and Performance Test Data	ERT	1/1/2012	Not Applicable	6.0, 5.0	Not Applicable

Who Needs to Use CEDRI?

- Example: **40 CFR 60, Subpart JJJ for Spark Ignition Engines**
- Annual Report is on the previous list; however upon checking the rule it's only required in some cases:
 - (e) If you own or operate an emergency stationary SI ICE with a maximum engine power more than 100 HP that operates or is contractually obligated to be available for more than 15 hours per calendar year for the purposes specified in § 60.4243(d)(2)(ii) and (iii) or that operates for the purposes specified in § 60.4243(d)(3)(i), you must submit an annual report according to the requirements in paragraphs (e)(1) through (3) of this section.
- The report needs to be submitted if it is used for various non-testing and non-emergency purposes (NERC capacity, demand response, voltage regulation, etc.) *

*I'm oversimplifying, so consult the rule for details.

How do we report using CEDRI?

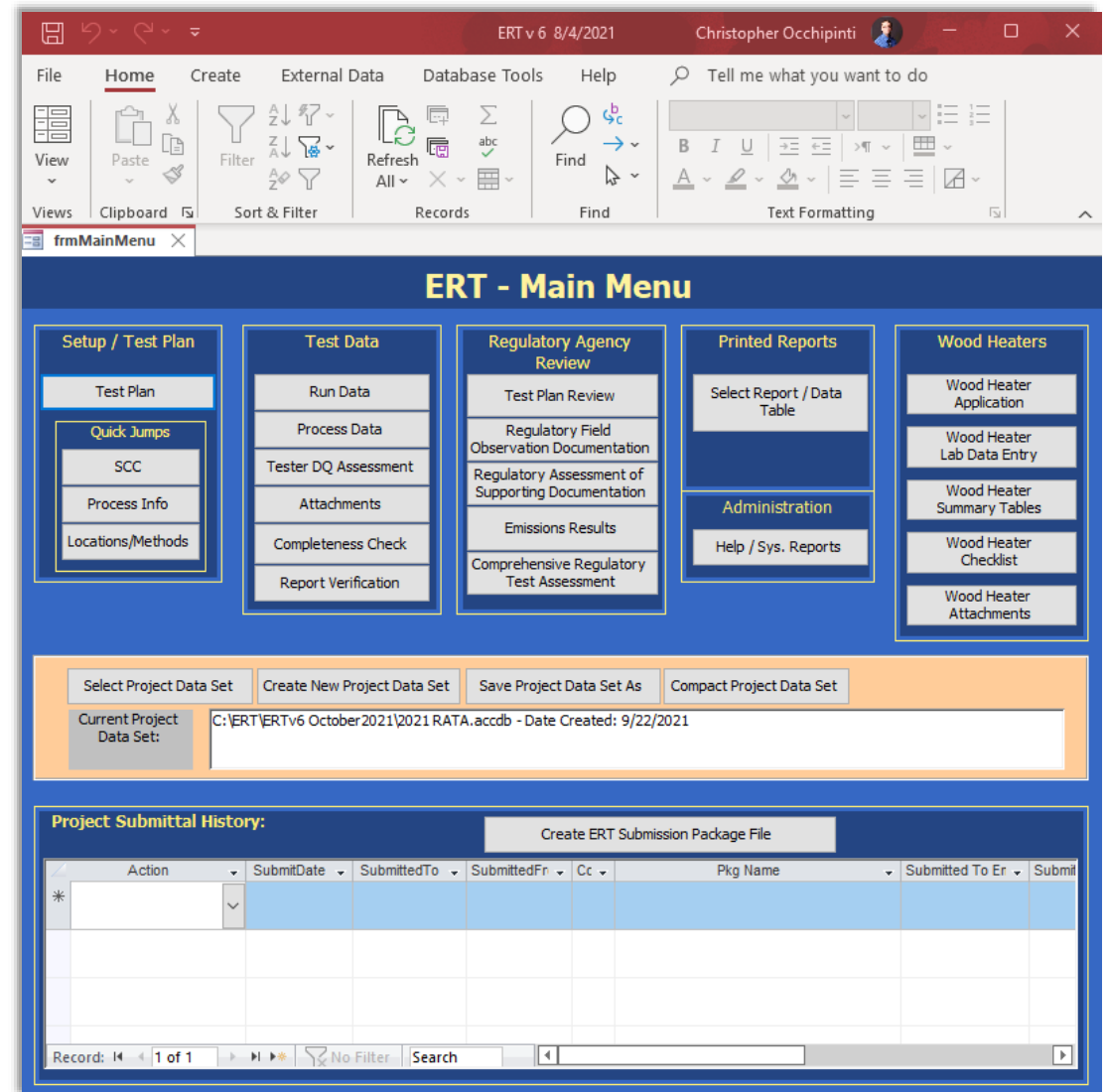
For Notifications and Periodic Reports, we populate and upload template spreadsheets

Part 63 - National Emission Standards for Hazardous Air Pollutants for Source Categories Subpart ZZZZ - Stationary Reciprocating Internal Combustion Engines - 63.6650(h)(3) Annual Report								
* Required Field								
ENGINE INFORMATION								
Engine Record No. *	Company Record No. *	Engine Description	Engine Site Rating * (Brake Horsepower) (§63.6650(h)(1)(iii))	Engine Model Year * (§63.6650(h)(1)(iii))	Latitude of the Engine * (§63.6650(h)(1)(iv))	Longitude of the Engine * (§63.6650(h)(1)(iv))	Did you use this engine for the purpose specified in §63.6640(f)(4)(ii): 50 hours per year for non-emergency situations? *	Were there deviations from the fuel requirements in §63.6604? *
EngineId	RecordId	EngineDescription	EngineRating	EngineYear	EngineLatitude	EngineLongitude	NonEmergencyFlag	DeviationFlag
e.g.: 1	e.g.: 1	e.g.: Engine 1	e.g.: 100	e.g.: 2020	e.g.: 12.12345	e.g.: -12.12345	e.g.: Yes	e.g.: No

Part 63 - National Emission Standards for Hazardous Air Pollutants for Source Categories Subpart ZZZZ						
Stationary Reciprocating Internal Combustion Engines - 63.6650(h)(3) Annual Report						
* Required Field						
NON-EMERGENCY USE SUMMARY						
Engine Record No. *	Non-Emergency Use Event Begin Date *	Non-Emergency Use Event Begin Time *	Non-Emergency Use Event End Date *	Non-Emergency Use Event End Time *	Entity who dispatched the engine *	Situation that necessitated the dispatch of the engine *
EngineId	NonEmergencyStartDate	NonEmergencyStartTime	NonEmergencyEndDate	NonEmergencyEndTime	DispatchEntity	DispatchReason
e.g.: 1	e.g.: 02/01/2020	e.g.: 15:00	e.g.: 02/02/2020	e.g.: 15:00	e.g.: Dispatcher	e.g.: Engine Malfunction

How do we report using CEDRI?

For Performance (Stack) Test and Relative Accuracy Test Audit (RATA) data, we have to generate a report using the **Emissions Reporting Tool (ERT)**



What is ERT?

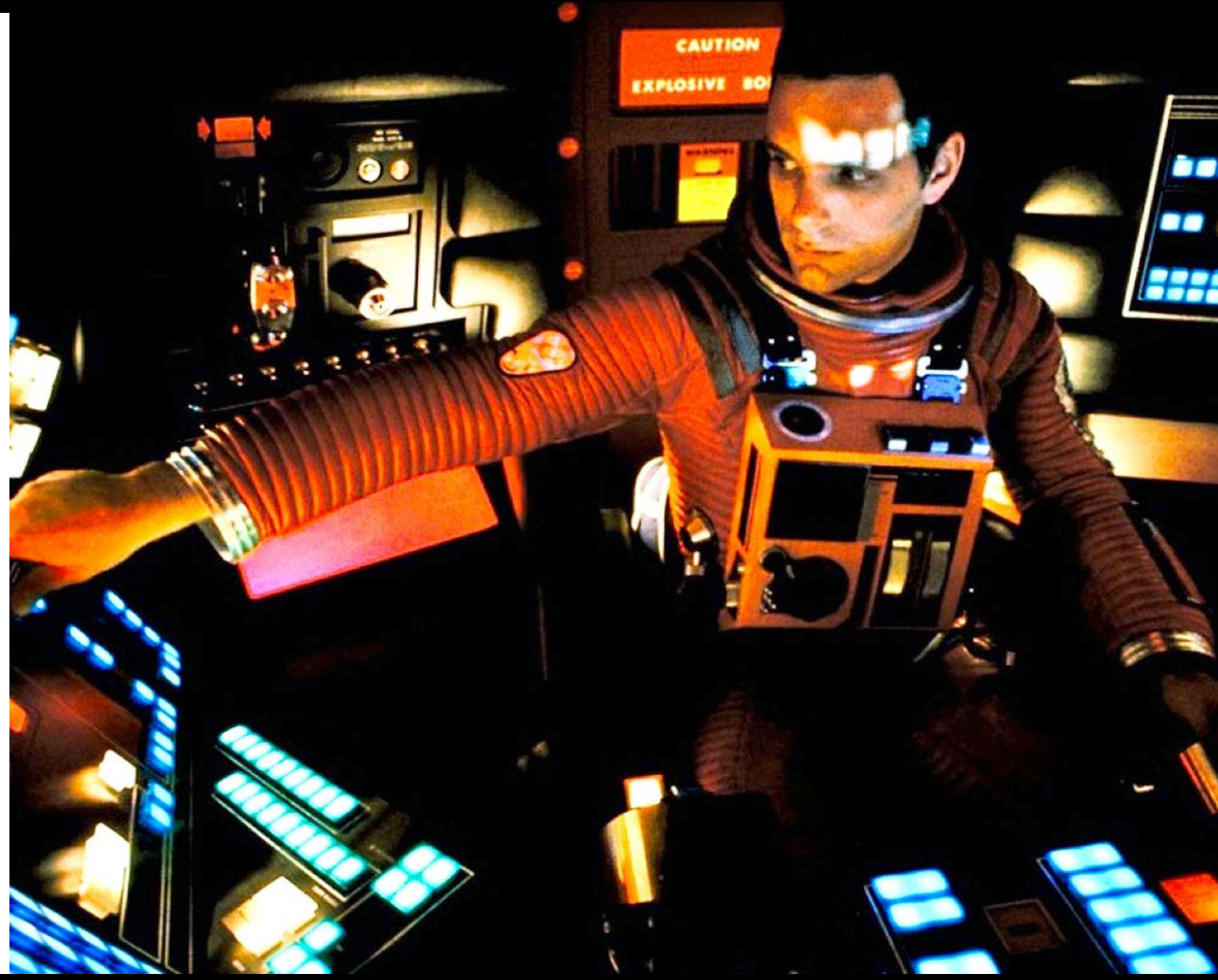
Emissions Reporting Tool (ERT)

- Microsoft Access database software
- Electronically creates test plans and reports
- Calculates results from imported or hand-entered data

Intended to standardize test data into a format that would directly interface with U.S. EPA's WebFIRE database.

60 days after upload, the files become available to the public in WebFIRE.

This allows EPA to take test data and use it in rulemaking, emission factors, etc.



What is the Process for Using ERT?

1. Decide who will be using it (testing firm?, consultant?, you?)
2. Generate a test plan, including:
 - Facility and test company info
 - Regulatory information
 - Test methods (~60 methods supported)
 - Manual methods
 - Analyzer test methods (including RATAs)
 - Test, laboratory, calibration gas, and process parameters

Test Plan

ERT Package * 2021 RATA Test Plan Date: * 8/31/2021 Open Expanded

ERT Package Name: ?

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

12. Do any of the proposed test methods require analysis of EPA audit samples? If yes, you must contact an AASP to arrange for the purchase and delivery of an audit sample. Yes No

13. Has all testing equipment been calibrated within the past 12 months? If no, please explain. Yes No

14. Will all calibration gases be certified by EPA Traceability Protocol procedures? If No, describe certification procedure below. Yes No N/A

15. Is a dilution system (via EPA Method 205) proposed? Yes No N/A

16. If applicable, list the expected calibration gas concentrations for all proposed instrumental test methods. Include as much information as is known at this time. [Attach Calibration Gas Certificates](#)

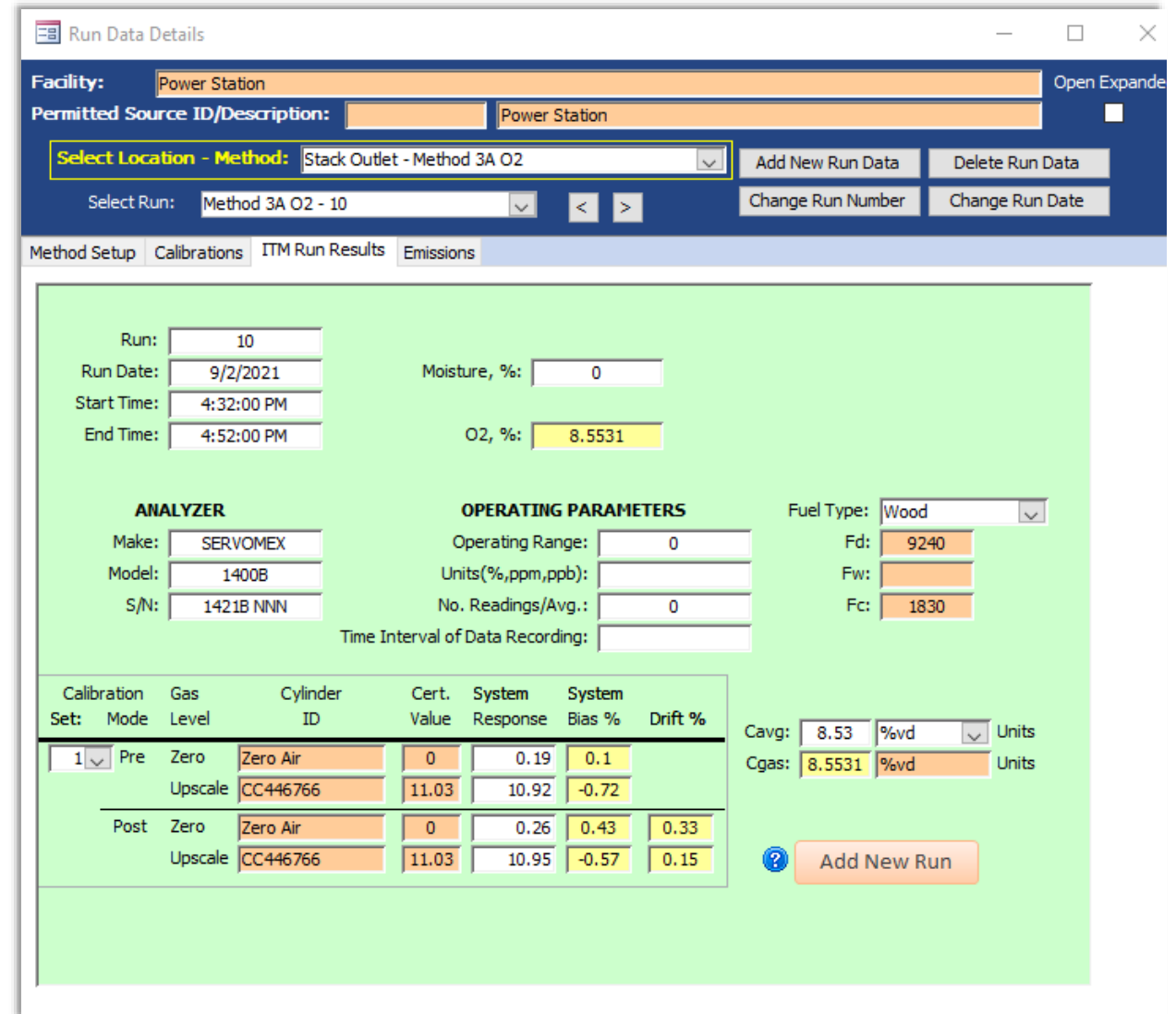
CylID	Compound(Analyt	CertProce	CertVal	UncertainPer	CertDate	ExpDate
ALM014080	CO	600/R-12/531	501	0.6	1/15/2015	1/16/202
Ambient Air	O2	NA	20.9	0	9/2/2021	9/2/202
CC446766	O2	600/R-12/531	11.03	0.8	3/5/2021	3/5/202
CC705258	CO	600/R-12/531	18.82	0.9	7/31/2019	7/31/202

Record: 1 of 6 No Filter Search

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1. Decide who will be using it (testing firm?, consultant?, you?)
2. Generate a test plan, including:
 - Facility and test company info
 - Regulatory information
 - Test methods (~60 methods supported)
 - Manual methods
 - Analyzer test methods (including RATAs)
 - Test, laboratory, calibration gas, and process parameters
3. Conduct testing
4. Import test data into ERT for:
 - Calibrations
 - Analyzers
 - Process conditions
 - Control device operations
 - Lab analytical data
5. Attach files, compare ERT results to test report, and upload to CEDRI



Run Data Details

Facility: Power Station

Permitted Source ID/Description: Power Station

Select Location - Method: Stack Outlet - Method 3A O2

Select Run: Method 3A O2 - 10

Run: 10

Run Date: 9/2/2021

Start Time: 4:32:00 PM

End Time: 4:52:00 PM

Moisture, %: 0

O2, %: 8.5531

ANALYZER

Make: SERVOMEX

Model: 1400B

S/N: 1421B NNN

OPERATING PARAMETERS

Operating Range: 0

Units(% ,ppm ,ppb):

No. Readings/Avg.: 0

Time Interval of Data Recording:

Fuel Type: Wood

Fd: 9240

Fw:

Fc: 1830

Calibration Set	Gas Mode	Cylinder Level	Cylinder ID	Cert. Value	System Response	System Bias %	Drift %
1	Pre	Zero	Zero Air	0	0.19	0.1	
		Upscale	CC446766	11.03	10.92	-0.72	
	Post	Zero	Zero Air	0	0.26	0.43	0.33
		Upscale	CC446766	11.03	10.95	-0.57	0.15

Cavg: 8.53 %vd Units

Cgas: 8.5531 %vd Units

Add New Run

“Quirks” of ERT

Submitting with ERT sounds easy enough, right?

Originally intended to be used by stack testers in the field. In a perfect world that would save time; however:

- U.S. EPA still wants paper records for traceability
- Doesn't support certain methods (18, 320, etc.)
- ERT is tricky to adapt quickly
- Must attach supporting data anyway
- Result: Most testers don't use it during the test

Updated frequently, so you have to build your report from scratch.

- Want to recycle some facility info from last year's test?
- “I'm sorry Chris, I'm afraid can't do that.”



A scene from a cave with a black pillar and gorillas at sunset. The scene is viewed from inside a dark cave, looking out through an opening. In the foreground, a tall, black, rectangular pillar stands on a rocky floor. In the background, three gorillas are silhouetted against a bright sunset sky with scattered clouds. The gorillas are sitting on a rocky ledge, looking out towards the horizon. The overall atmosphere is dramatic and contemplative.

Questions?

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