

CDX CEDRI XML Reporting Instructions Environmental Protection Agency Office of Air and Radiation (OAR)

> Version 2.1 December 15, 2015

December 15, 2015

Table of Contents

1		Introduction7
	1.1	Purpose of this Document7
	1.2	How to Upload XML Files in CEDRI8
2		Data Elements15
	2.1	WebFIRE Report15
	2.2	Emission Point Information List16
	2.3	Emission Point Information16
	2.4	Emission Summary Information List19
	2.5	Emission Summary Information19
	2.6	Excess Emissions Information List
	2.7	Excess Emissions Information
	2.8	CMS Downtime Information List
	2.9	CMS Downtime Information
	2.10	Equipment Malfunction Information List
	2.11	Equipment Malfunction Information
	2.12	2 Deviation Information List
	2.13	3 Deviation Information
	2.14	4 CEMS Summary List42
	2.15	5 CEMS Summary42
	2.16	5 Fuel Use During Reporting Period List43
	2.17	7 Fuel Use During Reporting Period43
	2.18	Portland Cement Notifications46
	2.19	9 Temp Limits Info47
	2.20	Calibrate Thermocouples Info48
	2.2′	Carbon Injection Info49
	2.22	2 Combustion System Info49
	2.23	3 Maintenance Plan Info
	2.24	Information Certification Notification51
	2.25	5 Additional Information
	2.26	8 Rice Reporting Period
	2.27	7 Rice Engine Information List
	2.28	8 Rice Engine Information
	2.29	Rice Non-Emergency Summary61

2.30	Rice Non-Emergency List	62
2.31	Rice Non-Emergency	62
2.32	Rice Voltage Deviation Summary	64
2.33	Rice Voltage Deviation List	65
2.34	Rice Voltage Deviation	65
2.35	Rice Emergency Use Summary	67
2.36	Rice Emergency Use List	67
2.37	Rice Emergency Use	68
2.38	Rice Deviation Summary	69
2.39	Rice Deviation List	70
2.40	Rice Deviation	70
3 Ap	opendix A: Reports Currently Configured for XML Upload	73
4 Ap	opendix B: Terms and Acronyms	74

List of Exhibits

Exhibit 1-1 CEDRI Help Tab	7
Exhibit 1-2 CEDRI Help Page	8
Exhibit 1-3 Creating a New Submission Package	9
Exhibit 1-4 Filling out Submission Package Data (1/3)	10
Exhibit 1-5 Filling out Submission Package Data (2/3)	10
Exhibit 1-6 Filling Out Submission Package Data (3/3)	10
Exhibit 1-7 Trigger File Upload Dialog	11
Exhibit 1-8 Reporting Utilities Templates and Schema	11
Exhibit 1-9 Choose a File to Upload	12
Exhibit 1-10 Uploading an XML File	12
Exhibit 1-11 Upload Successful Dialog Box	13
Exhibit 1-12 Validation Error Dialog Box	13
Exhibit 1-13 Create / Edit Report Link	14
Exhibit 1-14 Mark Form as Complete	14
Exhibit 2-1 WebFIRE Report XML Element	15
Exhibit 2-2 Emission Point Information List XML Element	16
Exhibit 2-3 Emission Point Information XML Element	17
Exhibit 2-4 Emission Summary Information List XML Element	19
Exhibit 2-5 Emission Summary Information XML Element (1/3)	20
Exhibit 2-6 Emission Summary Information XML Element (2/3)	27
Exhibit 2-7 Emission Summary Information XML Element (3/3)	30
Exhibit 2-8 Excess Emission Information List XML Element	30
Exhibit 2-9 Excess Emissions Information XML Element	31
Exhibit 2-10 CMS Downtime Information List XML Element	34
Exhibit 2-11 CMS Downtime Information XML Element	35
Exhibit 2-12 Equipment Malfunction Information List XML Element	37
Exhibit 2-13 Equipment Malfunction Information XML Element	38
Exhibit 2-14 Deviation Information List XML Element	39
Exhibit 2-15 Deviation Information XML Element	40
Exhibit 2-16 CEMS Summary List XML Element	42
Exhibit 2-17 CEMS Summary XML Element	42
Exhibit 2-18 Fuel Use During Reporting Period List XML Element	43
Exhibit 2-19 Fuel Use During Reporting Period XML Element	44
Exhibit 2-20 Portland Cement Notifications XML Element	46
Exhibit 2-21 Temp Limits Info XML Element	48
Exhibit 2-22 Calibrate Thermocouples Info XML Element	48

49
50
50
52
55
57
58
59
61
62
63
64
65
66
67
68
68
69
70
71

List of Tables	
Table 2-1 Limit Unit Options	21
Table 2-2 Compliance Period Options	23
Table 2-3 Operating Time Units Auto-Populated Values	24
Table 2-4 Compliance Period Units Auto-Population Values	25
Table 2-5 Excess Emission Time Units Auto-Population Values	33

1 Introduction

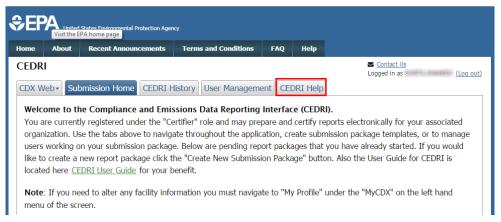
The Compliance and Emissions Data Reporting Interface (CEDRI) is the electronic, web-based tool provided by the Environmental Protection Agency's (EPA's) Office of Air and Radiation (OAR) for the electronic submission of source test results, emissions monitoring data, compliance reports, and emissions reports to EPA. The CEDRI tool is available to users through EPA's Central Data Exchange (CDX), a web-based system used for various electronic environmental data submissions to EPA. Under EPA's "E-Reporting" rules, users wishing to submit compliance and emissions reports to EPA must register for access to the CEDRI program service through CDX. More information about CDX is available at http://www.epa.gov/cdx/.

1.1 Purpose of this Document

This document in designed to help users create software to automatically generate XML files that may be used to upload data in an Air Emission Report (AER) form generated by the CEDRI application. These XML files can then subsequently be uploaded into CEDRI where they will be validated against the XSD file for the particular Part – Subpart combination of the report. These XSD files can be found external to the CEDRI application at

<u>http://epa.gov/ttn/chief/cedri/index.html</u>, or within the CEDRI application by clicking on the 'CEDRI Help' tab (see Exhibit 1-1).

Exhibit 1-1 CEDRI Help Tab



After navigating to the 'CEDRI Help' page, you can find the XML upload Schemas in the 'Reporting Utilities' section of the page (see Exhibit 1-2).

Exhibit 1-2 CEDRI Help Page

e About Recent Ann	nouncements	Terms and Conditions	FAQ	Help			
DRI						Contact Us Logged in as	(Lo
X Web- Submission Hon		story User Manageme	t CED	DT Heln		Loggia in as	1.00
www.b.		story [] oser managemen		a neip			
u are here: CEDRI Home	» CEDRI Help						
Compliance and Emis	sions Data Re	eporting Interface (CE)RI) Use	r Guide			
This guide describes ea	ch screen of th	ne CEDRI application and	provides	informat	ion on how	to use the system to	D
submit compliance and	emissions repo	orts to comply with feder	al regula	tions defi	ned in 40 CF	R Part 60 and 63. T	his
submit compliance and emissions reports to comply with federal regulations defined in 40 CFR Part 60 and 63. This guide also contains instructions for registering with CDX as well as setting up organization profiles for their facilities.							
	ructions for re	gistering with CDX as we	l as setti	ng up org	janization pi	ofiles for their facilit	ies.
guide also contains inst		gistering with CDX as we guide for quick reference		ng up org	janization pi	ofiles for their faciliti	ies.
guide also contains inst				ng up org	janization pi	ofiles for their faciliti	ies.
guide also contains inst				ng up org	janization pi	ofiles for their facilit	ies.
guide also contains inst Click <u>here</u> to download				ng up org	janization pi	ofiles for their facilit	ies.
guide also contains inst				ng up org	janization p	ofiles for their facilit	ies.
guide also contains inst Click <u>here</u> to download Reporting Utilities Use the dropdown belo	and print the g						
guide also contains inst Click <u>here</u> to download Reporting Utilities	and print the g	guide for quick reference					
guide also contains inst Click <u>here</u> to download Reporting Utilities Use the dropdown belo XML upload schemas fo	and print the g	guide for quick reference					
guide also contains inst Click <u>here</u> to download Reporting Utilities Use the dropdown belo	and print the g	guide for quick reference					
guide also contains inst Click <u>here</u> to download Reporting Utilities Use the dropdown belo XML upload schemas fo	and print the g	guide for quick reference					
guide also contains inst Click <u>here</u> to download Reporting Utilities Use the dropdown belo XML upload schemas fo 1 selected	and print the g w to select wh r.	guide for quick reference ich parts/subparts you w					
guide also contains inst Click <u>here</u> to download Reporting Utilities Use the dropdown belo XML upload schemas fo	and print the g w to select wh r.	uide for quick reference ich parts/subparts you w Available Files	ould like	to downl	oad Excel up		
guide also contains inst Click <u>here</u> to download Reporting Utilities Use the dropdown belo XML upload schemas fo 1 selected	and print the g w to select wh r.	uide for quick reference ich parts/subparts you w Available Files	ould like Summary	to downl	oad Excel up		
guide also contains inst Click <u>here</u> to download Reporting Utilities Use the dropdown belo XML upload schemas fo 1 selected Part / Subpart Nam	and print the g w to select wh r.	ich parts/subparts you w Available Files CMS Downtime Excess Emission	ould like Summary	to downl (xlsx)(2: (ry(.xlsx))	oad Excel up		
guide also contains inst Click <u>here</u> to download Reporting Utilities Use the dropdown belo XML upload schemas fo 1 selected	and print the g w to select wh r.	uide for quick reference ich parts/subparts you w Available Files	ould like Summary	to downl (xlsx)(2: (ry(.xlsx))	oad Excel up		
guide also contains inst Click <u>here</u> to download Reporting Utilities Use the dropdown belo XML upload schemas fo 1 selected Part / Subpart Nam	and print the g w to select wh r.	ich parts/subparts you w Available Files CMS Downtime Excess Emission	ould like Summary s Summa ort(.xlsx)	to downl (.xlsx)(2: (_2KB)	oad Excel up		

It is important to note that this document provides a comprehensive view of all of the elements for every AER form in CEDRI; not all of the elements presented in this document will be necessary for an XML file uploaded to CEDRI. In order to create valid and relevant XML files, it is advised that you use three tools: this document, the respective XSD file(s) for the report(s) of interest, and the actual form on the CEDRI website.

The information contained within an XML document that adheres to one of the CEDRI XSD files will map directly to the form fields in one of CEDRI's AER forms.

1.2 How to Upload XML Files in CEDRI

After generating a valid XML file using the constraints listed in this document, as well as the respective XSD file, you are ready to upload the file to CEDRI. The XML file must be contained within a .zip archive, along with any attachments the file references. Please note that even if your file does not contain any attachments, the lone XML file must be contained within a .zip archive for submission. The steps to uploading an XML file in CEDRI are enumerated below (these steps assume you've already registered for CDX, CEDRI, and have an active Preparer, Certifier, or Delegated Certifier role. If this is not the case, please follow Sections 3.2 - 3.10 in the CEDRI User Guide as necessary to complete your registration. The CEDRI User Guide can be found at http://epa.gov/ttn/chief/cedri/index.html):

1) Log into CDX.

- 2) Enter the CEDRI Application using a Preparer, Certifier, or Delegated Certifier role.
- 3) At the 'Submission Home' page, click the 'Create New Submission Package' button (see Exhibit 1-3).

CEDRI	Submission Home CEDRI History User	Management CEDRI Help	Log	<u>Contact Us</u> ged in as GHSLUSHE <u>(Loq ou</u>		
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 <u>CEDRI User Guide</u> for your benefit. Note: If you need to alter any facility information you must navigate to "My Profile" under the "MyCDX" on the left hand menu of the screen.						
Pendin	ng Submissions	P • • • • •	Facility			
Û	Package Name	Date Created		Status		
	Test package	2015-12-04 08:52:04.942	CGI FEDERAL	Status In Progress		
-	-	2015-12-04	Name	In		
•	Test package	2015-12-04 08:52:04.942 2015-12-03	Name CGI FEDERAL	In Progress In		
	Test package CEDRI Test Package	2015-12-04 08:52:04.942 2015-12-03 16:51:29.085 2015-12-03	CGI FEDERAL	In Progress In Progress In		

Exhibit 1-3 Creating a New Submission Package

- 4) Fill out the necessary information for the Submission Package:
 - a) Enter a value for the 'Package Name' field, click the 'To Step 2' button, select a Facility from the dropdown list, and click the 'To Step 3' button (see Exhibit 1-4).

CEDRI	✓ <u>Contact Us</u> Logged in as				
CDX Web - Submission Home CEDRI History User Management CEDRI Help					
You are here: CEDRI Home» Submission Package					
Use the fields below to manage your submission package before it is submitted electror selected subparts/reports may be modified at any time prior to submittal. Refer to Sec located here <u>CEDRI User Guide</u> for more specific information regarding submission pa	tion 4.3 of the CEDRI User guide				
Note: In step 2, the facilities in the 'Select Facility' dropdown menu are specific to your organization and role. To modify them, you must navigate to 'My Profile' under the 'MyCDX' menu tab at the top of the screen. Once a facility is chosen, the selection is final, although you may revise facility details at any time by selecting the 'Edit Facility Details' button. You may not revise facility information on a re-submission.					
The asterisk (*) next to each step indicates that the corresponding step is required and must be completed before advancing to the next step.					
Create/Edit Submission Package					
1. Package Name:* Demonstration: XML Upload					
2. Select a facility from the dropdown list. * ENVIRONMENTAL PROTECTION AGENCY					

Exhibit 1-4 Filling out Submission Package Data (1/3)

b) Select the appropriate subparts from the dropdown menus and click the 'To Step 4' button to apply your selection (see Exhibit 1-5).



art 60 subparts:		
Select options	•	
art 63 subparts:		
Select options	•	
tate or Other Regulation subparts:		
Select options	-	

c) Expand the accordion fold for one of the Part-Subpart combinations you selected and select the Air Emissions Report from the dropdown menu and click the 'Use Selected Report(s)' button (see Exhibit 1-6).

Exhibit 1-6 Filling Out Submission Package Data (3/3)

Part 60 – Standards of Performance for New Stationary Sources (NSPS) Subpart Da – In Progress A	×
Electric Utility Steam Generating Units	
Select options Use Selected Report(s)	
✓ Check all × Uncheck all ●	
60.49Da(v)(4) ERT Performance Report	
60.51Da(d) Air Emissions Report	

5) Click the 'Upload XML Data' link (see Exhibit 1-7) to trigger the 'File Upload' dialog.

🔻 In Progress 🚹	f Performance for New Stationary Sources (NSPS) Subpart Da -
Electric Utility Steam G	enerating Units
Select Reports	Use Selected Report(s)
60.51Da(d) Air Emission	ns Report 🛛 🗶
60.51Da(d) Air Emission Report Status	ns Report 🛛 🗱 🕅
Report Status	In Progress 🔥

Exhibit 1-7 Trigger File Upload Dialog

6) You may also choose to 'Upload XML Data' in order to complete the Air Emissions Report. For sample schemas click 'Click here to access templates and schemas' link. The following pop-up window will provide you the list of available Reporting Utilities (see Exhibit 1-9). The highlighted link 'CEDRI XML Reporting Instructions' will point you to this user guide.

Exhibit 1-8 Reporting Utilities	Templates and Schema
--	----------------------

k the links below to download the	Excel upload template file or XML schema for this report, Instructions on how to use the
	und in Section 4.5.1 of the CEDRI User Guide. Instructions on how to use the XML schema
	e found in the CEDRI XML Reporting Instructions.
Part / Subpart Name	Available Files
	CMS Downtime Summary(.xlsx)(23KB)
art 60 Subpart Da	Excess Emissions Summary(.xlsx)(32KB)
art ou Subpart Da	Malfunction Report(.xlsx)(22KB)
	XML Schema(.xsd)(12KB)
	Close

7) In the 'File Upload' dialog click the 'Choose File' button and select the appropriate ZIP file from your computer's file system (see Exhibit 1-9).

Exhibit 1-9 Choose a File to Upload

Subpart DDDDD In Drogress A	_(
File Upload	*
Here, sources may upload data to a form via an XML file. The XML file must follow the XSD schema that can be downloaded from the <u>CDX CEDRI</u> <u>Website</u> . While the schema is annotated to assist sources in creating the XML, further details on how a properly formatted XML file can be created can be found in the <u>CEDRI XML Reporting Instructions</u> .	
The XML upload will be in the format of a Zip file. This Zip file will contain the XML file, and any of its associated attachments.	
Once the XML is uploaded, it will be presented in a form. Please use this form to validate that the information is accurate, and edit any inaccurate information.	
Please contact the Help Desk for assistance with any questions:	
Phone: (888) 890-1995	
Email: <u>helpdesk@epacdx.net</u>	
Choose File No file chosen	
Upload Cancel	
	Ψ.

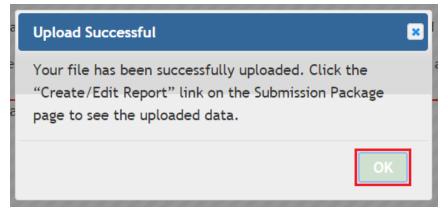
8) After you have picked your file, the name of the file will be shown next to the 'Choose File' button (see Exhibit 1-10). Click the 'Upload' button to upload your file, and create the form with the data from the XML. When this button is clicked, CEDRI will validate the contents of your XML file against the appropriate XSD.

Exhibit 1-10 Uploading an XML File

File Upload		
Here, sources may upload data to a form via an XML file. The XML file must follow the XSD schema that can be downloaded from the <u>CDX CEDRI</u> <u>Website</u> . While the schema is annotated to assist sources in creating the XML, further details on how a properly formatted XML file can be created can be found in the <u>CEDRI XML Reporting Instructions</u> .		
The XML upload will be in the format of a Zip file. This Zip file will contain the XML file, and any of its associated attachments.		
Once the XML is uploaded, it will be presented in a form. Please use this form to validate that the information is accurate, and edit any inaccurate information.		
Please contact the Help Desk for assistance with any questions:		
Phone: (888) 890-1995 Email: <u>helpdesk@epacdx.net</u>		
Choose File 63_DDDDD_OK.zip		
Upload Cancel		

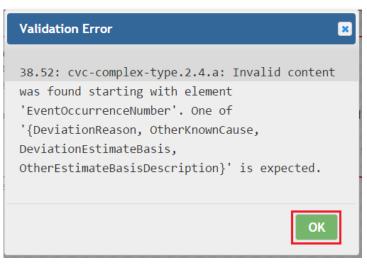
a) If your XML passes the validation check, the 'Upload Successful' dialog box will be shown reflecting this (see Exhibit 1-11). Click the 'OK' button to continue.

Exhibit 1-11 Upload Successful Dialog Box



b) If your XML fails the validation check, the 'Validation Error' dialog box will be shown reflecting this as well (see Exhibit 1-12). The dialog box will detail the errors in the uploaded XML so that you may correct the XML to agree with the applicable XSD. Click the 'OK' button to continue.

Exhibit 1-12 Validation Error Dialog Box



9) After a successful XML upload, you must open the form that is now pre-populated with the XML contents, and verify that the data is complete and correct within the form. You can do this by clicking the 'Create/Edit Form(s)' link (see Exhibit 1-13).

Exhibit 1-13 Create / Edit Report Link

In Progress A	Performance for New Stationary Sources (NSPS) Subpart Da –	>
Electric Utility Steam Ger	perating Units	
,		
Select Reports	 Use Selected Report(s) 	
60.51Da(d) Air Emissions	Report 🗶	
Report Status	In Progress 🔥	
Status Date	Sun Dec 06 13:28:10 EST 2015	
	212094	
Form ID	Click here to access templates and schemas	
Form ID Reporting Utilities	Click here to access templates and schemas	

10) After verifying that all the information in complete and correct within the form, click the 'Mark as Complete' button within the form to complete this report (see Exhibit 1-14).

Exhibit 1-14 Mark Form as Complete

Central Data Excha	nge 🗠 🗠 🗠	tact Us
Welcome – Instructions	Additional Information	_ [
instructions	Describe any changes since last quarter in CMS, process or controls	
Compliance Report Selection	None.	- 1
 Emission Point: North East Stack 	Please enter any additional information	- 1
✓ Pollutant: PM		- 1
(CPMS)	Please attach any additional information. The file must be in .pdf	- 1
CMS	format.	_
Downtime Summary	Download Remove Upload a Different File	- 1
Malfunction	If you demonstrate compliance by emission averaging, certify the emission level achieved or the control	- 1
Report	technology employed is no less stringent than the level or control technology contained in the notification of compliance status in § 63.7545(e)(5)(i). *	- 1
Deviation	 Yes 	- 8
Summary	● Tes	- 8
Monitoring	Not Applicable	_
System Averages		

11) You may complete steps 5-9 for any other AERs within your submission package. Once all reports are completed, follow Section 4.4 in the CEDRI User Guide to submit your package.

Note: A preparer may notify Certifier(s) that a package has been created or is ready for certification by selecting the 'Notify Certifier(s)' button at the bottom of the 'Create/Edit Submission Package' window. See section 4.3.6 of the CEDRI User Guide for instructions on how to notify Certifiers of a submission package.

 \frown

2 Data Elements

2.1 WebFIRE Report

WebFIRE Report

Element Name: WebfireReport

Element Description: The containing element for the entire report. Holds report metadata, as well as reporting data.

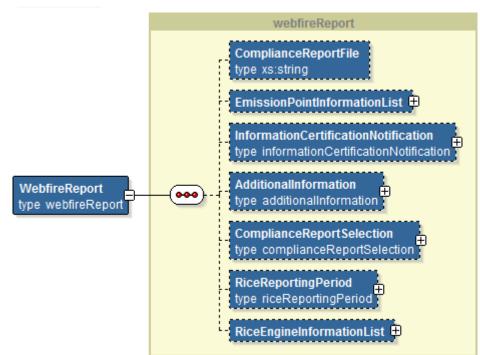


Exhibit 2-1 WebFIRE Report XML Element

Compliance Report File Upload

Element Name: ComplianceReportFile

Element Type: String

Element Description: Name of PDF file that contains applicable 63.7550(c) report(s). Multiple reports must be contained in one PDF.

WebFIRE Report Complex Child Elements

- Emission Point Information List
- Information Certification Information
- Additional Information
- RICE Reporting Period
- RICE Engine Information List

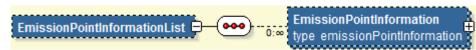
2.2 Emission Point Information List

Emission Point Information List

Element Name: EmissionPointInformationList

Element Description: The containing element for Emission Point Information.

Exhibit 2-2 Emission Point Information List XML Element



Emission Point Information List Complex Child Elements

• Emission Point Information

2.3 Emission Point Information

Emission Point Information List

Element Name: EmissionPointInformation

Element Description: Containing element for information regarding the emission point.

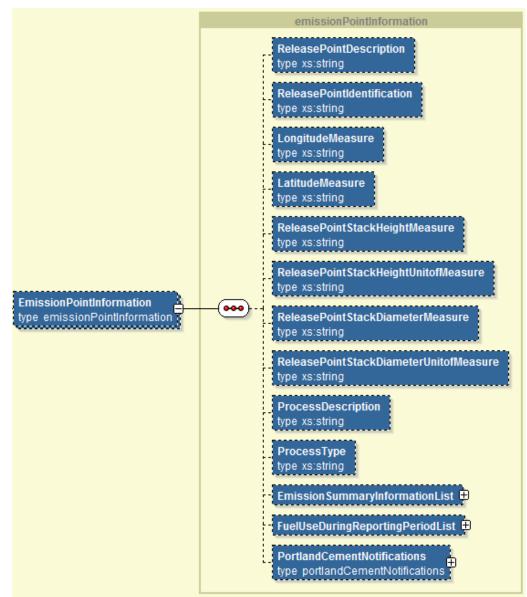


Exhibit 2-3 Emission Point Information XML Element

Release Point Description

Element Name: ReleasePointDescription Element Description: A description of the release point (e.g. East Stack).

Release Point Identification

Element Name: ReleasePointIdentification Element Description: The State/Local agency Emission Point ID if applicable.

Longitude Measure

CEDRI XML Reporting Instructions

Element Name: LongitudeMeasure

Element Description: Longitude measure of the emission point. This value must have 5 decimal places in precision.

Latitude Measure

Element Name: LatitudeMeasure

Element Description: Latitude measure of the emission point. This value must have 5 decimal places in precision.

Release Point Stack Height Measure

Element Name: ReleasePointStackHeightMeasure Element Description: The number representing the height of the stack.

Release Point Stack Height Unit of Measure

Element Name: ReleasePointStackHeightUnitofMeasure Element Description: The unit of measure for the stack height.

Release Point Stack Diameter Measure

Element Name: ReleasePointStackDiameterMeasure Element Description: The number representing the diameter of the stack.

Release Point Stack Diameter Unit of Measure

Element Name: ReleasePointStackDiameterUnitofMeasure Element Description: The unit of measure for the stack diameter.

Process Description

Element Name: ProcessDescription Element Description: A description of the process taking place at this emission point (e.g. Wood Burner).

Process Type *Element Name: ProcessType Element Description:* The name of the manufacture of the unit.

Emission Point Information Complex Child Elements

- Emission Summary Information List
- Fuel Use During Reporting Period List

• Portland Cement Notifications

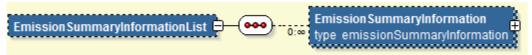
2.4 Emission Summary Information List

Emission Summary Information List

Element Name: EmissionSummaryInformationList

Element Description: The containing element for Emission Summary Information.

Exhibit 2-4 Emission Summary Information List XML Element



Emission Summary Information List Complex Child Elements

- Emission Summary Information
- 2.5 Emission Summary Information

Emission Summary Information

Element Name: EmissionSummaryInformation

Element Description: The containing element for information regarding the Emissions Summary. This element in repeatable.

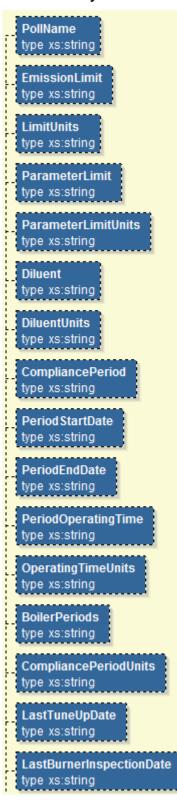


Exhibit 2-5 Emission Summary Information XML Element (1/3)

Poll Name

Element Name: PollName

Element Description: The name of the pollutant/parameter. The applicable pollutants for your report can be found in the respective XSD file.

Emission Limit

Element Name: EmissionLimit Element Description: The number that represents the emission limit.

Limit Units

Element Name: LimitUnits

Element Description: Units for the 'Emission Limit' element. The values available in this field will be dependent upon the value selected for PollName (see Table 2-1).

PollName	LimitUnits Available Options
CO (630-08-0)	ppb, ppm, grains/dscf, lb/GWh, lb/MMBtu, lb/MWH, lb/Tbtu, lb/ton of product, mg/acm, mg/dscm, ug/acm, ug/dscm
Fuel Moisture*	%
H2S (7783-06-4),	ppb, ppm
HCI (7647-01-0) ,	
HF (7664-39-3),	
NOx (11104-93-1),	
TRS (18496-25-8)	
HAP Metals CEMS	mg/dscm, ug/dscm, grains/dscf, lb/GWh, lb/GWh, lb/MMBtu, lb/MWH, lb/Tbtu, lb/ton of product, ug/acm, mg/ascm
Hg (CEMS) (7439-97-6)	grains/dscf, lb/GWh, lb/MMBtu, lb/MWH, lb/Tbtu, lb/ton of product, mg/ascm, mg/dscm, ug/acm, ug/dscm
Opacity,	%
O2 (7782-44-7),	
Unit Operating Load	
PM (CEMS) (1647593)	mg/dscm, ug/dscm
Scrubber Liquid Flow Rate	gal/min
Scrubber pH	n/a
Scrubber Pressure Drop	inches H20
SO2 (7446-09-5)	ppm, ppb, % reduction
Dry Scrubber Sorbent,	Kg/hr, liters/hr, kg/Btu
Carbon Injection Rate	
Electrostatic Precipitator Total Secondary Electric Power Output	Volt-amps

Table 2-1 Limit Unit Options

PollName	LimitUnits Available Options
PM (CPMS),	Temperature, Activated Carbon Injection Rate
HCI (CEMS),	
Hg (CEMS),	
THC (CEMS),	
D/F Temperature Monitoring System,	
Hg Sorbent Trap Monitoring System,	
Carbon Injection Rate,	
Activated Carbon Injection Carrier Gas Flow Rate,	
Activated Carbon Injection Carrier Gas Pressure Drop	

Parameter Limit

Element Name: ParameterLimit

Element Description: The number that represents the Parameter Limit. This is only applicable for pollutants: PM (CPMS), Scrubber pH, Scrubber Liquid Flow Rate, and Scrubber Pressure Drop.

Parameter Limit Units

Element Name: ParameterLimitUnits

Element Description: A string representing the unit value for the 'Parameter Limit' element. This is only applicable for pollutants: PM (CPMS), Scrubber pH, Scrubber Liquid Flow Rate, and Scrubber Pressure Drop.

Diluent

Element Name: Diluent Element Description: The diluent for this pollutant, if applicable.

Diluent Units

Element Name: DiluentUnits Element Description: Unit of diluent used.

Compliance Period

Element Name: CompliancePeriod

Element Description: The period of recording used during the reporting period. The values available in this field will be dependent upon the Part – Subpart combination of the regulation for which you are submitting, and the value selected for the 'PollName' element (see Table 2-2).

Part – Subpart(s)	PollName	CompliancePeriod Options
60 – Da, Db, Dc	NOx (11104-93-1), TRS (18496-25-8), H2S (7783-06-4), CO (630-08-0), SO2 (7446-09-5), HCI (7647-01-0), HF (7664-39-3), Hg (CEMS) (7439-97-6), Hg (Sorbent Trap Monitoring) (7439- 97-6), Fuel Moisture*	Hourly, 4 hrs Period, 6 hrs Period, 12 hrs Period, 24 hrs Period, Daily
	Opacity	Minutes, Hourly, 4 hrs Period, 6 hrs Period, 12 hrs Period, 24 hrs Period, Daily
63 - LLL	PM (CPMS), HCI (CEMS), Hg (CEMS), THC (CEMS), D/F Temperature Monitoring System, Hg Sorbent Trap Monitoring System, Carbon Injection Rate, Activated Carbon Injection Carrier Gas Flow Rate, Activated Carbon Injection Carrier Gas Pressure Drop	30 Operating Day Rolling Avg Periods
63 - DDDDD	CO (630-08-0) Hg (CEMS) (7439-97-6) PM (CPMS) PM (CEMS) (1647593) Scrubber pH Scrubber Liquid Flow Rate Scrubber Pressure Drop Dry Scrubber Sorbent Carbon Injection Rate Electrostatic Precipitator Total Secondary Electric Power Output O2 (7782-44-7) SO2 (7446-09-5)	30 Operating Day Rolling Avg Periods

Table 2-2 Compliance Period Options

Part – Subpart(s)	PollName	CompliancePeriod Options
	Unit Operating Load	
	Opacity	Daily

Period Start Date

Element Name: PeriodStartDate Element Description: The beginning of the reporting period (MM/DD/YYYY).

Period End Date

Element Name: PeriodEndDate Element Description: The end date of the reporting period (MM/DD/YYYY).

Period Operating Time

Element Name: PeriodOperatingTime

Element Description: The number representing the amount of time this emission point has operated within the Period Start Date and Period End Date.

Operating Time Units

Element Name: OperatingTimeUnits

Element Description: The unit value for the 'Period Operating Time' element. This field will be auto-populated, if needed, upon form creation. It is dependent on the value of the 'PollName' element. It does not need to be included in an XML upload. See Table 2-3 for details regarding the auto-population of the Operating Time Units field.

PollName	OperatingTimeUnits
CO (630-08-0),	Hours
Fuel Moisture*,	
H2S (7783-06-4),	
HCI (7647-01-0) ,	
HF (7664-39-3),	
NOx (11104-93-1),	
TRS (18496-25-8),	
HAP Metals CEMS,	
Hg (CEMS) (7439-97-6),	
O2 (7782-44-7),	
Unit Operating Load,	
PM (CEMS) (1647593),	

Table 2-3 Operating Time Units Auto-Populated Values

PollName	OperatingTimeUnits
Scrubber Liquid Flow Rate,	
Scrubber pH,	
Scrubber Pressure Drop,	
SO2 (7446-09-5),	
Dry Scrubber Sorbent,	
Carbon Injection Rate,	
Electrostatic Precipitator Total Secondary Electric Power Output,	
PM (CPMS),	
HCI (CEMS),	
Hg (CEMS),	
THC (CEMS),	
D/F Temperature Monitoring System,	
Hg Sorbent Trap Monitoring System,	
Carbon Injection Rate,	
Activated Carbon Injection Carrier Gas Flow Rate,	
Activated Carbon Injection Carrier Gas Pressure Drop	
Opacity	Minutes

Boiler Periods

Element Name: BoilerPeriods

Element Description: Number of Compliance Periods in the reporting period.

CompliancePeriodUnits

Element Name: CompliancePeriodUnits

Element Description: Unit value for the 'Boiler Periods' element. This field will be autopopulated, if needed, upon form creation. It is dependent on the value of the 'PollName' element. It does not need to be included in an XML upload. See Table 2-4 for details regarding the auto-population of the 'Compliance Period Units' element.

CompliancePeriod	CompliancePeriodUnits
Minutes	Minutes
Hourly,	Hours
4 hrs Period,	
6 hrs period,	
12 hrs Period,	
24 hrs Period	
Daily,	Days

CompliancePeriod	CompliancePeriodUnits
30 Operating Day Rolling Avg Periods,	
90 Operating Day Rolling Avg Periods	

Last Tune Up Date

Element Name: LastTuneUpDate

Element Description: The date of the last tune up for a unit subject to 63.10021(e) (if applicable).

Last Burner Inspection Date

Element Name: LastBurnerInspectionDate Element Description: Most recent date that burner was inspected (if applicable).

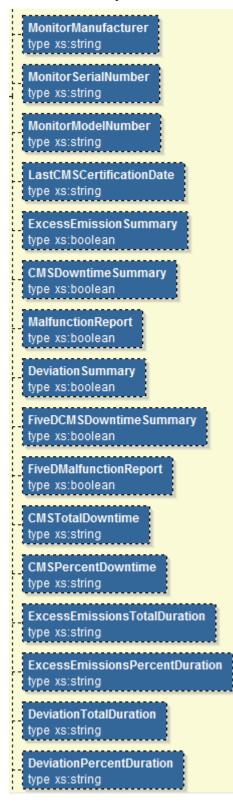


Exhibit 2-6 Emission Summary Information XML Element (2/3)

Monitor Manufacturer

Element Name: MonitorManufacturer

Element Description: Manufacture for the monitoring device used for the applicable pollutant.

Monitor Serial Number

Element Name: MonitorSerialNumber Element Description: The serial number for the monitoring device used for the applicable pollutant.

Monitor Model Number

Element Name: MonitorModelNumber

Element Description: The model number for the monitoring device used for the applicable pollutant.

Last CMS Certification Date

Element Name: LastCMSCertificationDate Element Description: The date of the last CMS Certification for the applicable pollutant.

Excess Emission Summary

Element Name: ExcessEmissionSummary

Element Description: Whether or not there was an occurrence of Excess Emissions to justify an Excess Emissions Report.

CMS Downtime Summary

Element Name: CMSDowntimeSummary

Element Description: Whether or not there was a presence of any instances to justify a CMS Performance Summary.

Malfunction Report

Element Name: MalfunctionReport

Element Description: Whether or not there were any process malfunctions during the reporting period to justify a Malfunction Report.

Deviation Summary

Element Name: DeviationSummary

Element Description: Whether or not there was an occurrence of a deviation from the emissions or operating limit to justify a Deviation Summary.

Five D CMS Downtime Summary

Element Name: FiveDCMSDowntimeSummary

Element Description: Whether or not there was an occurrence of a deviation from continuous monitoring to justify a CMS Performance Summary.

Five D Malfunction Report

Element Name: FiveDMalfunctionReport

Element Description: Whether or not there were any boiler, process heater, associate air pollutant control device, or CMS malfunctions during the reporting period to justify a Malfunction Report.

CMS Total Downtime

Element Name: CMSTotalDowntime

Element Description: This field will be auto-populated, if needed, upon form creation. It does not need to be included in an XML upload.

CMS Percent Downtime

Element Name: CMSPercentDowntime

Element Description: This field will be auto-populated, if needed, upon form creation. It does not need to be included in an XML upload.

Excess Emissions Total Duration

Element Name: ExcessEmissionsTotalDuration

Element Description: This field will be auto-populated, if needed, upon form creation. It does not need to be included in an XML upload.

Excess Emissions Percent Duration

Element Name: ExcessEmissionsPercentDuration

Element Description: This field will be auto-populated, if needed, upon form creation. It does not need to be included in an XML upload.

Deviation Total Duration

Element Name: DeviationTotalDuration

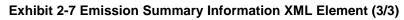
Element Description: This field will be auto-populated, if needed, upon form creation. It does not need to be included in an XML upload.

Deviation Percent Duration

CEDRI XML Reporting Instructions

Element Name: DeviationPercentDuration

Element Description: This field will be auto-populated, if needed, upon form creation. It does not need to be included in an XML upload.



ExcessEmissionsInformationList
CMSDowntimeInformationList
EquipmentMalfunctionInformationList
DeviationInformationList
CEMSSummaryList

Emission Summary Information Complex Child Elements

- Excess Emission Information List
- CMS Downtime Information List
- Equipment Malfunction Information List
- Deviation Information List
- CEMS Summary List

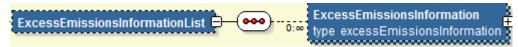
2.6 Excess Emissions Information List

Excess Emission Information List

Element Name: ExcessEmissionInformationList

Element Description: The containing element for Excess Emission Information.

Exhibit 2-8 Excess Emission Information List XML Element



Excess Emissions Information List Complex Child Elements

• Excess Emissions Information

2.7 Excess Emissions Information

Excess Emissions Information

Element Name: ExcessEmissionInformation

Element Description: The containing element for information about Excess Emissions. This element is repeatable.

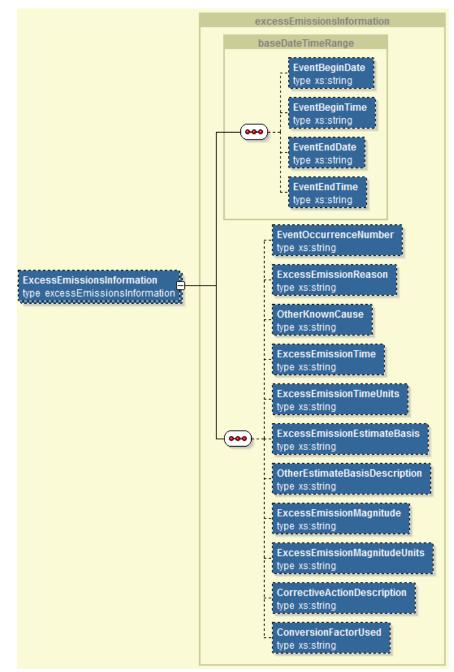


Exhibit 2-9 Excess Emissions Information XML Element

Event Begin Date Element Name: EventBeginDate Element Description: Start date of applicable excess emission event.

Event Begin Time Element Name: EventBeginTime Element Description: Start time of applicable excess emission event.

Event End Date Element Name: EventEndDate Element Description: End date of applicable excess emission event.

Event End Time Element Name: EventEndTime Element Description: End time of applicable excess emission event.

Event Occurrence Number

Element Name: EventOccurenceNumber Element Description: This field will be auto-populated upon form creation. It does not need to be included in an XML upload.

Excess Emission Reason Element Name: ExcessEmissionReason Element Description: Reason why the applicable excess emission event occurred.

Other Known Cause

Element Name: OtherKnownCause

Element Description: If 'Other known causes' was selected for the 'Excess Emission Reason' element, then this field is required to describe what the known cause for excess emissions was.

Excess Emission Time

Element Name: ExcessEmissionTime

Element Description: The total time elapsed in this occurrence of excess emissions. This field will be auto-populated, if the Excess Emission Time Units field has a value of 'Hours' (see Table 2-5 for a list of possible values), upon form creation. It does not need to be included in an XML upload.

Excess Emission Time Units

Element Name: ExcessEmissionTimeUnits

Element Description: This field will be auto-populated with the same value as Compliance Period Units, if needed, upon form creation. It does not need to be included in an XML upload. See Table 2-5 for a mapping from the 'Compliance Period Units' element to the 'Excess Emission Time Units' element.

CompliancePeriodUnits	ExcessEmissionTimeUnits
Minutes	Minutes
Hours	Hours
Days	Days

Excess Emission Estimate Basis

Element Name: ExcessEmissionEstimateBasis Element Description: Method used to estimate excess emissions.

Other Estimate Basis Description

Element Name: OtherEstimateBasisDescription

Element Description: If 'Other' was selected for the 'Excess Emission Estimate Basis' element, this field is required and should describe the method used to estimate excess emissions.

Excess Emission Magnitude

Element Name: ExcessEmissionMagnitude Element Description: The value that the measured emissions exceeded the applicable limit.

Excess Emission Magnitude Units

Element Name: ExcessEmissionMagnitudeUnits

Element Description: Units that describe the 'Excess Emission Magnitude' element. This field's options are the same as those for the 'Limit Units' element, and follow the same rules as shown in Table 2-1.

Corrective Action Description

Element Name: CorrectiveActionDescription Element Description: A description of the corrective action taken to reduce this instance of excess emissions.

Conversion Factor Used Element Name: ConversionFactorUsed Element Description: The factor used to adjust between different units of measure.

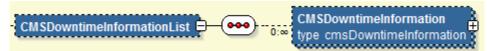
2.8 CMS Downtime Information List

CMS Downtime Information List

Element Name: CMSDowntimeInformationList

Element Description: The containing element for CMS Downtime Information.

Exhibit 2-10 CMS Downtime Information List XML Element



CMS Downtime Information List Complex Child Elements

• CMS Downtime Information

2.9 CMS Downtime Information

CMS Downtime Information

Element Name: CMSDowntimeInformation

Element Description: The containing element for information about CMS Downtime. This element is repeatable.

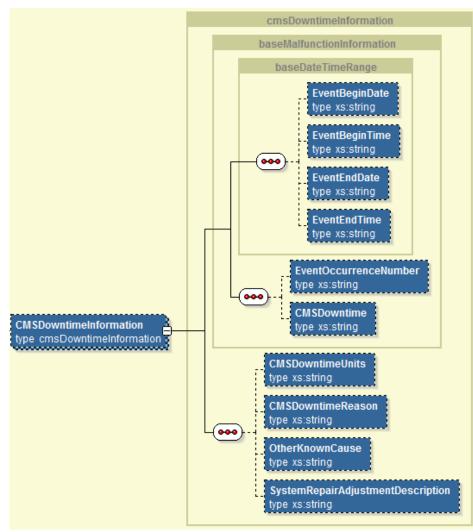


Exhibit 2-11 CMS Downtime Information XML Element

Event Begin Date

Element Name: EventBeginDate Element Description: Start date of applicable CMS downtime event.

Event Begin Time

Element Name: EventBeginTime Element Description: Start time of applicable CMS downtime event.

Event End Date *Element Name: EventEndDate Element Description:* End date of applicable CMS downtime event.

Event End Time

Element Name: EventEndTime

Element Description: End time of applicable CMS downtime event.

Event Occurrence Number

Element Name: EventOccurenceNumber

Element Description: This field will be auto-populated, if needed, upon form creation. It does not need to be included in an XML upload.

CMS Downtime

Element Name: CMSDowntime

Element Description: The total time elapsed in this occurrence of CMS downtime. This field will be auto-populated, if needed, upon form creation. It does not need to be included in an XML upload.

CMS Downtime Units

Element Name: CMSDowntimeUnits

Element Description: The unit value of for the 'CMS Downtime' element. This field will be auto-populated with the value 'Hours', if needed, upon form creation. It does not need to be included in an XML upload.

CMS Downtime Reason

Element Name: CMSDowntimeReason

Element Description: Reason why applicable CMS downtime event occurred.

Other Known Cause

Element Name: OtherKnownCause

Element Description: Required if 'Other known causes' was selected for 'CMS Downtime Reason'element.

System Repair Adjustment Description

Element Name: SystemRepairAdjustmentDescription

Element Description: A description of repairs or adjustments done to the system to rectify this CMS downtime event.

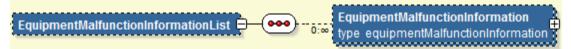
2.10 Equipment Malfunction Information List

Equipment Malfunction Information List

Element Name: EquipmentMalfunctionInformationList

Element Description: The containing element for Equipment Malfunction Information.

Exhibit 2-12 Equipment Malfunction Information List XML Element



Equipment Malfunction Information List Complex Child Elements

• Equipment Malfunction Information

2.11 Equipment Malfunction Information

Equipment Malfunction Information

Element Name: EquipmentMalfunctionInformation

Element Description: The containing element for information about an equipment malfunction. This element is repeatable.

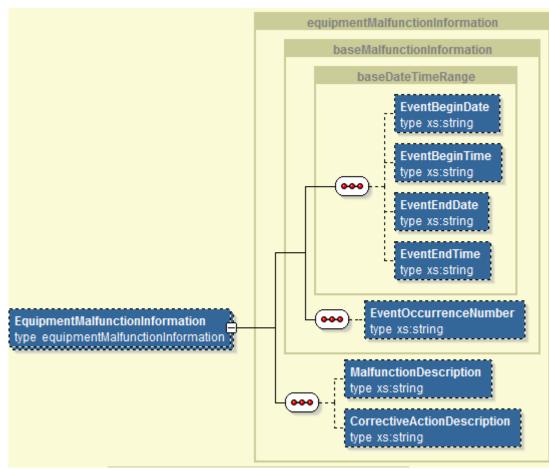


Exhibit 2-13 Equipment Malfunction Information XML Element

Event Begin Date

Element Name: EventBeginDate

Element Description: Start date of applicable equipment malfunction event.

Event Begin Time

Element Name: EventBeginTime Element Description: Start time of applicable equipment malfunction event.

Event End Date

Element Name: EventEndDate Element Description: End date of applicable equipment malfunction event.

Event End Time Element Name: EventEndTime Element Description: End time of applicable equipment malfunction event.

Event Occurrence Number

Element Name: EventOccurenceNumber

Element Description: This field will be auto-populated, if needed, upon form creation. It does not need to be included in an XML upload.

Malfunction Description

Element Name: MalfunctionDescription Element Description: Details of applicable equipment malfunction event.

Corrective Action Description

Element Name: CorrectiveActionDescription Element Description: Description of the corrective action taken for this malfunction.

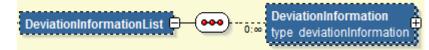
2.12 Deviation Information List

Deviation Information List

Element Name: DeviationInformationList

Element Description: The containing element for Deviation Information.

Exhibit 2-14 Deviation Information List XML Element



Deviation Information List Complex Child Elements

• Deviation Information

2.13 Deviation Information

Deviation Information

Element Name: DeviationInformation

Element Description: The containing element for information about deviations from the emissions or operating limit. This element in repeatable.

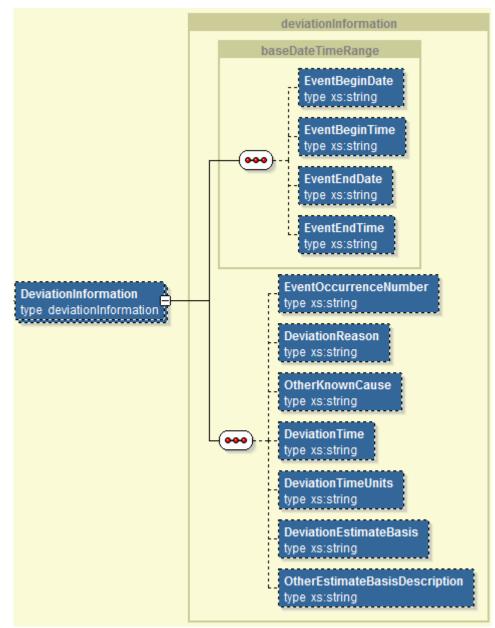


Exhibit 2-15 Deviation Information XML Element

Event Begin Date

Element Name: EventBeginDate Element Description: Start date of applicable deviation event.

Event Begin Time

Element Name: EventBeginTime Element Description: Start time of applicable deviation event.

Event End Date

Element Name: EventEndDate

Element Description: End date of applicable deviation event.

Event End Time

Element Name: EventEndTime Element Description: End time of applicable deviation event.

Event Occurrence Number

Element Name: EventOccurenceNumber

Element Description: This field will be auto-populated, if needed, upon form creation. It does not need to be included in an XML upload.

Deviation Reason

Element Name: DeviationReason

Element Description: The reason for deviation from the emissions or operating limit.

Other Known Cause

Element Name: OtherKnownCause

Element Description: If 'Other known causes' was selected for the 'Deviation Reason' element, then this field is required to describe what the known cause for the deviation was.

Deviation Time

Element Name: DeviationTime

Element Description: This field will be auto-populated, if needed, upon form creation. It does not need to be included in an XML upload.

Deviation Time Units

Element Name: DeviationTimeUnits

Element Description: This field will be auto-populated with the value 'days', if needed, upon form creation. It does not need to be included in an XML upload.

Deviation Estimate Basis

Element Name: DeviationEstimateBasis

Element Description: The means by which an estimate of the deviation was made.

Other Estimate Basis Description

Element Name: OtherEstimateBasisDescription

Element Description: If 'Other' was selected for the 'Deviation Estimate Basis' element, then this field is required to describe the basis of estimate for the deviation.

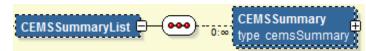
2.14 CEMS Summary List

CEMS Summary List

Element Name: CEMSSummaryList

Element Description: The containing element for CEMS Summary information.

Exhibit 2-16 CEMS Summary List XML Element



CEMS Summary List Complex Child Elements

• CEMS Summary

2.15 CEMS Summary

CEMS Summary

Element Name: CEMSSummary

Element Description: The containing element for information about monitoring system averages. This element is repeatable.

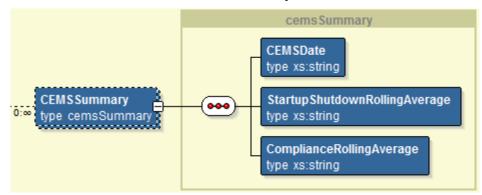


Exhibit 2-17 CEMS Summary XML Element

CEMS Date

Element Name: CEMSDate

Element Description: Date of monitoring system measurement.

Startup Shutdown Rolling Average

Element Name: StartupShutdownRollingAverage Element Description: The Startup / Shutdown Rolling average for the applicable Emission Monitoring System.

Compliance Rolling Average

Element Name: ComplianceRollingAverage Element Description: The compliance Rolling Average for the applicable Emission Monitoring System.

2.16 Fuel Use During Reporting Period List

Fuel Use During Report Period List

Element Name: FuelUseDuringReportingPeriodList

Element Description: The containing element for Fuel Use During Reporting Period.

Exhibit 2-18 Fuel Use During Reporting Period List XML Element



Fuel Use During Report Period List Complex Child Elements

• Fuel Use During Report Period

2.17 Fuel Use During Reporting Period

Fuel Use During Report Period

Element Name: FuelUseDuringReportingPeriod

Element Description: The containing element for information on Fuel User During the Reporting Period. This element is repeatable.

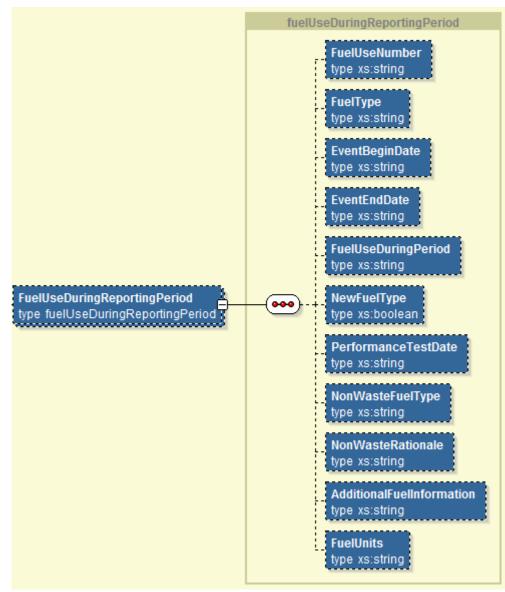


Exhibit 2-19 Fuel Use During Reporting Period XML Element

Fuel Use Number

Element Name: FuelUseNumber

Element Description: This field will be auto-populated, if needed, upon form creation. It does not need to be included in an XML upload.

Fuel Type

Element Name: FuelType Element Description: Type of fuel used during reporting period.

Event Begin Date *Element Name: EventBeginDate Element Description:* Start date of applicable fuel use.

Event End Date *Element Name: EventEndDate Element Description:* End date of applicable fuel use.

Fuel Use During PeriodElement Name: FuelUseDuringPeriodElement Description: The amount of fuel used during this instance.

Fuel UnitsElement Name: FuelUnitsElement Description: The units for the amount of fuel used in this instance.

New Fuel Type Element Name: NewFuelType Element Description: Whether or not the fuel is a new type.

Performance Test Date *Element Name: PerformanceTestDate Element Description:* Date of performance test when this fuel was in use.

Non Waste Fuel Type *Element Name:* NonWasteFuelType *Element Description:* Type of non-waste fuel, or if the fuel is not non-waste fuel.

Non Waste Rationale

Element Name: NonWasteRationale

Element Description: If 'Non EPA determined non-waste' is selected for the 'Non Waste Fuel Type' element, this field is required to describe the basis for concluding the fuel is a non-waste fuel.

Additional Fuel Information

Element Name: AdditionalFuelInformation

Element Description: Any additional information about the fuel that you would like to report.

2.18 Portland Cement Notifications

Portland Cement Notifications

Element Name: PortlandCementNotifications

Element Description: The containing element for Portland Cement information.

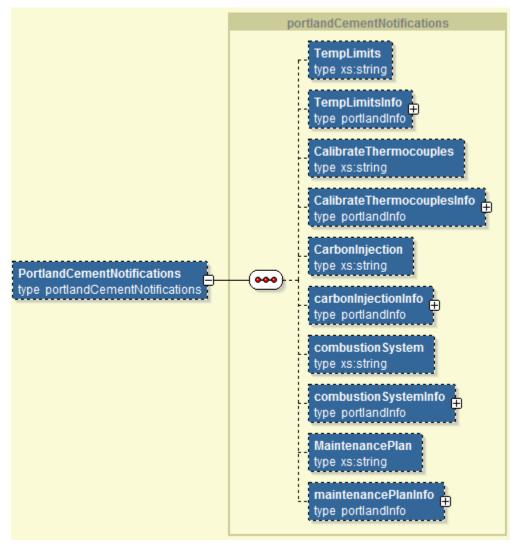


Exhibit 2-20 Portland Cement Notifications XML Element

Temp Limits

Element Name: TempLimits

Element Description: Whether or not there were any exceedances of maximum control device inlet gas temperature limits specified in §63.1346(a) and (b).

Calibrate Thermocouples

Element Name: CalibrateThermocouples

Element Description: Whether or not there were any failures to calibrate thermocouples and other temperature sensors as required under (63.1350(g)(1)).

Carbon Injection

Element Name: CarbonInjection

Element Description: Whether or not there were any failures to maintain the activated carbon injection rate, and the activated carbon injection carrier gas flow rates or pressure drops, as applicable, as required under §63.1346(c)(2).

Combustion System

Element Name: CombustionSystem

Element Description: Whether or not there were any failures to conduct any combustion system component inspections conducted within the reporting period as required under §63.1347(a)(3).

Maintenance Plan

Element Name: MaintenancePlan

Element Description: Whether or not there were any failures to comply with any provision of the operation and maintenance plan developed in accordance with §63.1347(a).

Portland Cement Notifications Complex Child Elements

- Temp Limits Info
- Calibrate Thermocouples Info
- Carbon Injection Info
- Combustion System Info
- Maintenance Plan Info

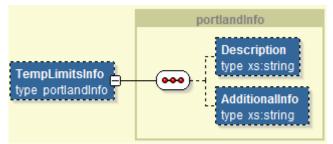
2.19 Temp Limits Info

Temp Limits Info

Element Name: TempLimitsInfo

Element Description: Containing element for addition information for the 'Temp Limits' element.

Exhibit 2-21 Temp Limits Info XML Element



Description

Element Name: Description

Element Description: This is required if you answer 'Yes' to the 'Temp Limits' element. Explain all exceedances of maximum control device inlet.

Additional Info

Element Name: AdditionalInfo

Element Description: This is optional if you answer 'No' to the 'Temp Limits' element. Please list any additional information you would like to provide.

2.20 Calibrate Thermocouples Info

Calibrate Thermocouples Info

Element Name: CalibrateThermocouplesInfo

Element Description: Containing element for additional information for the 'Calibrate Thermocouples' element.

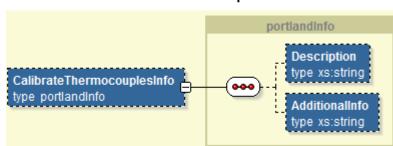


Exhibit 2-22 Calibrate Thermocouples Info XML Element

Description

Element Name: Description

Element Description: This is required if you answer 'Yes' to the 'Calibrate Thermocouples' element. Explain all failures to calibrate thermocouples and other temperature sensors.

Additional Info

Element Name: AdditionalInfo

Element Description: This is optional if you answer 'No' to the 'Calibrate Thermocouples' element. Please list any additional information you would like to provide.

2.21 Carbon Injection Info

Carbon Injection Info

Element Name: carbonInjectionInfo

Element Description: Containing element for additional information for the 'Carbon Injection' element.

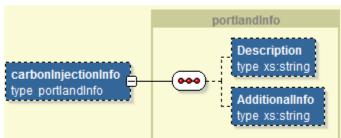


Exhibit 2-23 Carbon Injection Info XML Element

Description

Element Name: Description

Element Description: This is required if you answer 'Yes' to the 'Carbon Injection' element. Explain all failures to maintain the activated carbon injection rate, and the activated carbon injection carrier gas glow rates or pressure drops.

Additional Info

Element Name: AdditionalInfo

Element Description: This is optional if you answer 'No' to the 'Carbon Injection' element. Please list any additional information you would like to provide.

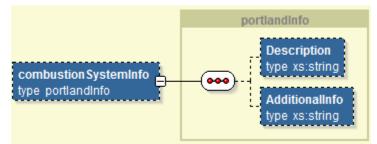
2.22 Combustion System Info

Combustion System Info

Element Name: combustionSystemInfo

Element Description: Containing element for additional information for the 'Combustion System' element.

Exhibit 2-24 Combustion System Info XML Element



Description

Element Name: Description

Element Description: This is required if you answer 'Yes' to the 'Combustion System' element. Explain all failures to conduct any combustion system component inspections conducted within the reporting period.

Additional Info

Element Name: AdditionalInfo

Element Description: This is optional if you answer 'No' to the 'Combustion System' element. Please list any additional information you would like to provide.

2.23 Maintenance Plan Info

Maintenance Plan Info

Element Name: maintenacePlanInfo

Element Description: Containing element for additional information for the 'Maintenance Plan' element.

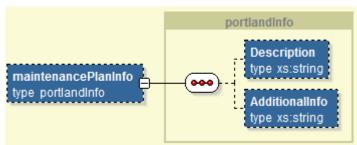


Exhibit 2-25 Maintenance Plan Info XML Element

Description *Element Name: Description* *Element Description:* This is required if you answer 'Yes' to the 'Maintenance Plan' element. List any and all failures to comply with provisions of the operating and maintenance plan.

Additional Info

Element Name: AdditionalInfo

Element Description: This is optional if you answer 'No' to the 'Maintenance Plan' element. Please list any additional information you would like to provide.

2.24 Information Certification Notification

Information Certification Notification

Element Name: InformationCertificationNotification

Element Description: Containing element for information regarding Certification Notifications.

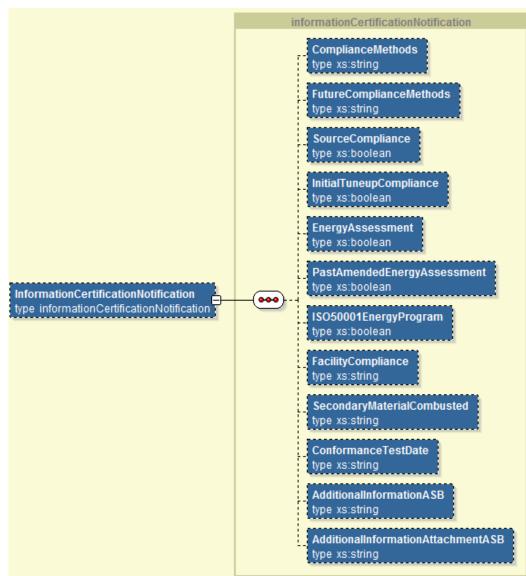


Exhibit 2-26 Information Certification Notification XML Element

Compliance Methods

Element Name: ComplianceMethods

Element Description: The methods that were used to determine compliance.

Future Compliance Methods

Element Name: FutureComplianceMethods

Element Description: The methods that will be used for determining continuing compliance, including a description of monitoring and reporting requirements and test methods.

Source Compliance

Element Name: SourceCompliance

Element Description: Whether or not the source complied with the relevant standard or other requirements.

Initial Tune up Compliance

Element Name: InitialTuneupCompliance

Element Description: Whether or not this facility complies with the requirements in §63.11214 to conduct an initial tune-up of the boiler.

Energy Assessment

Element Name: EnergyAssessment

Element Description: Whether or not the facility has had an energy assessment performed according to §63.11214(c).

Past Amended Energy Assessment

Element Name: PastAmendedEnergyAssessment

Element Description: This element is required if you answered 'Yes' to the 'Energy Assessment' element. Whether or not a past or amended energy assessment has been performed on or after January 1, 2008 and by March 21, 2014 to meet the energy assessment requirements in §63.11214(c).

ISO 50001 Energy Program

Element Name: ISO50001EnergyProgram

Element Description: This element is required if you answered 'Yes' to the 'Energy Assessment' element. Whether or not your facility operates under an energy program compatible with ISO 50001 that includes the affected units to meet the energy assessment requirements of §63.11214(c).

Facility Compliance

Element Name: FacilityCompliance

Element Description: Whether or not the facility complies with the requirements in §63.11224(f).

Secondary Material Combusted

Element Name: SecondaryMaterialCombusted

Element Description: Whether or not no secondary materials that are solid waste were combusted in any affected unit.

Conformance Test Date

Element Name: ConformanceTestDate

Element Description: Date of the test showing conformance with the emission standard and operating limits of the subpart (if applicable).

Additional Information ASB

Element Name: AdditionalInformationASB Element Description: Any additional information you wish to include in the report.

Additional Information Attachment ASB

Element Name: AdditionalInformationAttachmentASB Element Description: Attachment of additional information for the report. Must be a PDF.

2.25 Additional Information

Additional InformationElement Name: AdditionalInformationElement Description: Containing element for Additional information for most AER forms.

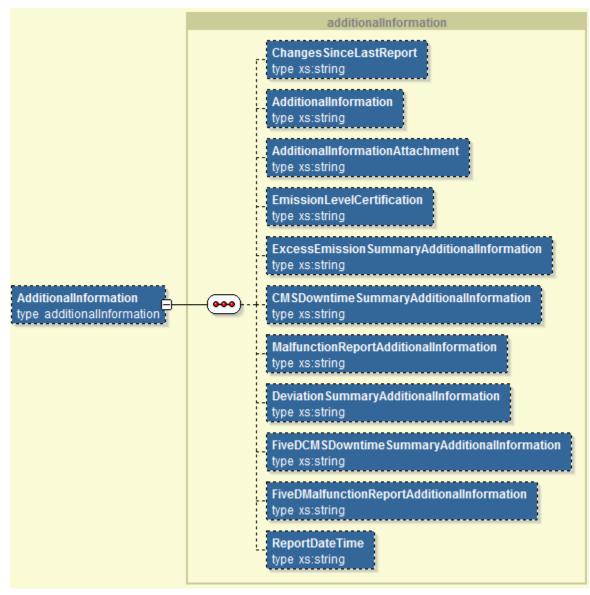


Exhibit 2-27 Additional Information XML Element

Change Since Last Report

Element Name: ChangeSinceLastReport

Element Description: Details on the changes since the last quarter in the CMS, process, or controls.

Additional Information

Element Name: AdditionalInformation Element Description: Describe any additional information to be included in the AER form.

Additional Information Attachment

Element Name: AdditionalInformationAttachment

Element Description: Attachments to give further details about applicable additional information. Must be a PDF.

Emission Level Certification

Element Name: EmissionLevelCertification

Element Description: Whether or not your facility demonstrates compliance by emission averaging, certify that the emission level achieved or the control technology employed is no less stringent than the level or control technology contained in the notification of compliance status in § 63.7545(e)(5)(i).

Excess Emission Summary Additional Information

Element Name: ExcessEmissionSummaryAddtionalInformation

Element Description: Additional information for the excess emission summary if you answered 'No' to the 'Excess Emissions Summary' element.

CMS Downtime Summary Additional Information

Element Name: CMSDowntimeSummaryAddtionalInformation

Element Description: Additional information for the CMS downtime summary if you answered 'No' to the 'CMS Downtime Summary' element.

Malfunction Report Additional Information

Element Name: MalfunctionReportAddtionalInformation

Element Description: Additional information for the malfunction report if you answered 'No' to the 'Malfunction Report' element.

Deviation Summary Additional Information

Element Name: DeviationSummaryAddtionalInformation

Element Description: Additional information for the deviation summary if you answered 'No' to the 'Deviation Summary' element.

Five D CMS Downtime Summary Additional Information

Element Name: FiveDCMSDowntimeSummaryAdditionialInformation

Element Description: Additional information for the CMS downtime summary if you answered 'No' to the 'Five D CMS Downtime Summary' element.

Five D Malfunction Report Additional Information

Element Name: FiveDMalfunctionReportAdditionialInformation

Element Description: Addition information for the malfunction report if you answered 'No' to the 'Five D Malfunction Report' question.

Report Date Time

Element Name: ReportDateTime

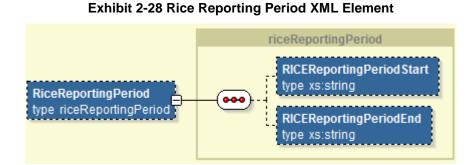
Element Description: This field will be auto-populated, upon form creation. It should not be included in an XML upload.

2.26 Rice Reporting Period

Rice Reporting Period

Element Name: RiceReportingPeriod

Element Description: Containing element for information about the RICE reporting period.



Rice Reporting Period Start

Element Name: RiceReportingPeriodStart Element Description: Start date of RICE reporting period.

Rice Reporting Period End

Element Name: RiceReportingPeriodEnd Element Description: End date of RICE reporting period.

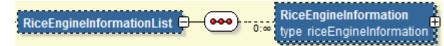
2.27 Rice Engine Information List

Rice Engine Information List

Element Name: RiceEngineInformationList

Element Description: Containing element for the RICE Engine Information elements.

Exhibit 2-29 Rice Engine Information List XML Element



Rice Engine Information List Complex Child Elements

• Rice Engine Information

2.28 Rice Engine Information

Rice Engine Information

Element Name: RiceEngineInformation

Element Description: Containing element for information regarding RICE engines. This element is repeatable.

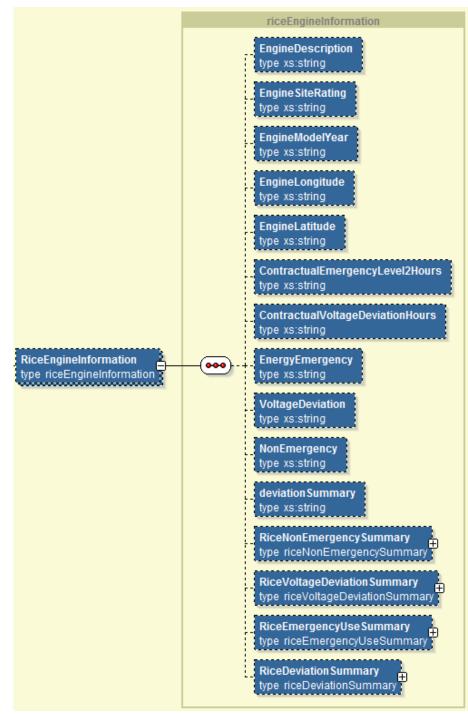


Exhibit 2-30 Rice Engine Information XML Element

Engine Description

Element Name: EngineDescription Element Description: Description of the applicable engine. Engine Site Rating Element Name: EngineSiteRating Element Description: The manufacture's nameplate brake horsepower rating.

Engine Model Year

Element Name: EngineModelYear Element Description: Model year of the applicable engine.

Engine Longitude

Element Name: EngineLongitude

Element Description: Longitude of the engine. The value must be at least five decimal places in precision.

Engine Latitude

Element Name: EngineLatitude

Element Description: Latitude of the engine. The value must be a least five decimal places in precision.

Contractual Emergency Level 2 Hours

Element Name: ContractualEmergencyLevel2Hours

Element Description: Hours the engine is contractually obligated to be available for the purpose specified in 63.6640(f)(2)(ii).

Contractual Voltage Deviation Hours

Element Name: ContractualVoltageDeviationHours

Element Description: Hours the engine is contractually obligated to be available for the purpose specified in 63.6640(f)(2)(iii).

Non-Emergency

Element Name: NonEmergency

Element Description: Whether or not the engine was used for the purpose specified in 63.6640(f)(4)(ii): 50 hours per year for non-emergency situations.

Voltage Deviation

Element Name: VoltageDeviation

Element Description: Whether or not the engine was used for the purpose specified in §63.6440(f)(2)(iii): Voltage deviation or frequency of 5% or greater below standard voltage or frequency.

Energy Emergency

Element Name: EnergyEmergency

Element Description: Whether or not the engine was used for the purpose specified in 63.6640(f)(2)(ii): Energy Emergency Level 2.

Deviation Summary

Element Name: deviationSummary

Element Description: Whether or not there were deviations from the fuel requirements in §63.6604.

Rice Engine Information Complex Child Elements

- Rice Non-Emergency Summary
- Rice Voltage Deviation Summary
- Rice Emergency Use Summary
- Rice Deviation Summary

2.29 Rice Non-Emergency Summary

Rice Non-Emergency Summary

Element Name: RiceNonEmergencySummary

Element Description: Containing element for RICE Non-Emergency Summary information.

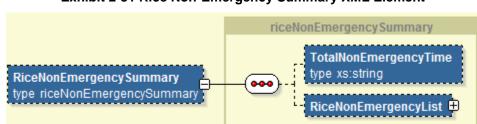


Exhibit 2-31 Rice Non-Emergency Summary XML Element

Total Non-Emergency Time

Element Name: TotalNonEmergencyTime

Element Description: Total time that the engine was used for the purpose specified in 63.6640(f)(4)(ii): 50 hours per year for non-emergency situations. This field will be autopopulated, if needed, upon form creation. It does not need to be included in an XML upload.

Rice Non-Emergency Summary Complex Child Elements

• Rice Non-Emergency List

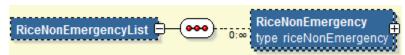
2.30 Rice Non-Emergency List

Rice Non-Emergency List

Element Name: RiceNonEmergencyList

Element Description: Containing element for the occurrences the engine was used for the purpose specified in 63.6640(f)(4)(ii): 50 hours per year for non-emergency situations.

Exhibit 2-32 Rice Non-Emergency List XML Element



Rice Non-Emergency List Complex Child Elements

• Rice Non-Emergency

2.31 Rice Non-Emergency

Rice Non-Emergency

Element Name: RiceNonEmergency

Element Description: Containing element for information regarding the occurrences the engine was used for the purpose specified in 63.6640(f)(4)(ii): 50 hours per year for non-emergency situations. This element is repeatable.

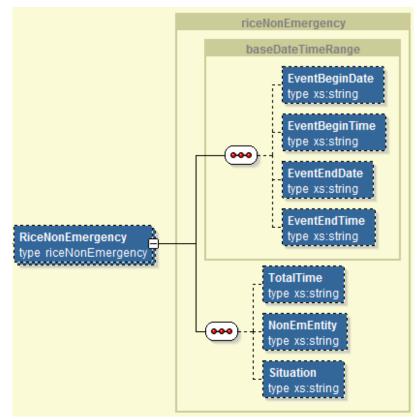


Exhibit 2-33 Rice Non-Emergency XML Element

Event Begin Date

Element Name: EventBeginDate

Element Description: The beginning date for this occurrence of the engine being used for the purpose specified in 63.6640(f)(4)(ii): 50 hours per year for non-emergency situations.

Event Begin Time

Element Name: EventBeginTime

Element Description: The beginning time for this occurrence of the engine being used for the purpose specified in §63.6640(f)(4)(ii): 50 hours per year for non-emergency situations.

Event End Date

Element Name: EventEndDate

Element Description: The ending date for this occurrence of the engine being used for the purpose specified in 63.6640(f)(4)(ii): 50 hours per year for non-emergency situations.

Event End Time

Element Name: EventEndTime

Element Description: The ending time for this occurrence of the engine being used for the purpose specified in 63.6640(f)(4)(ii): 50 hours per year for non-emergency situations.

Total Time

Element Name: TotalTime

Element Description: The total elapsed time (in hours) for this occurrence of the engine being used for the purpose specified in (63.6640(f)(4)(i)): 50 hours per year for non-emergency situations.

Non Em Entity

Element Name: NonEmEntity

Element Description: The entity who dispatched the engine to be used for the purpose specified in §63.6640(f)(4)(ii): 50 hours per year for non-emergency situations.

Situation

Element Name: Situation

Element Description: The situation that necessitated the dispatch of the engine for the purpose specified in §63.6640(f)(4)(ii): 50 hours per year for non-emergency situations.

2.32 Rice Voltage Deviation Summary

Rice Voltage Deviation Summary

Element Name: RiceVoltageDeviationSummary

Element Description: Containing element for RICE Voltage Deviation Summary information.

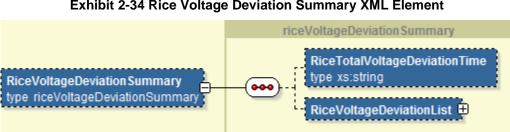


Exhibit 2-34 Rice Voltage Deviation Summary XML Element

Rice Total Voltage Deviation Time

Element Name: RiceTotalVoltageDeviationTime

Element Description: Total time that the engine was used for the purpose specified in §63.6640(f)(2)(iii). This field will be auto-populated, if needed, upon form creation. It does not need to be included in an XML upload. This element is repeatable.

Rice Voltage Deviation Summary Complex Child Elements

• Rice Voltage Deviation List

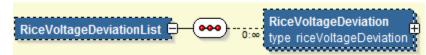
2.33 Rice Voltage Deviation List

Rice Voltage Deviation List

Element Name: RiceVoltageDeviationList

Element Description: Containing element for the occurrences the engine was used for the purpose specified in §63.6640(f)(2)(iii).

Exhibit 2-35 Rice Voltage Deviation List XML Element



Rice Voltage Deviation List Complex Child Elements

• Rice Voltage Deviation

2.34 Rice Voltage Deviation

Rice Voltage Deviation

Element Name: RiceVoltageDeviation

Element Description: Containing element for information regarding the occurrences the engine was used for the purpose specified in 63.6640(f)(2)(iii). This element is repeatable.

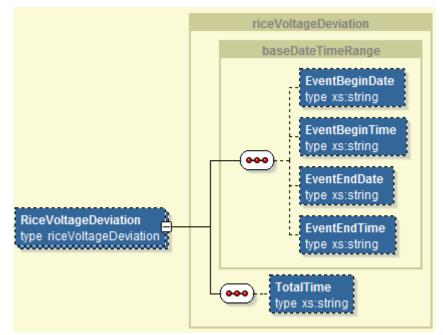


Exhibit 2-36 Rice Voltage Deviation XML Element

Event Begin Date

Element Name: EventBeginDate

Element Description: The beginning date for this occurrence of the engine being used for the purpose specified in 63.6640(f)(2)(iii).

Event Begin Time

Element Name: EventBeginTime

Element Description: The beginning time for this occurrence of the engine being used for the purpose specified in 63.6640(f)(2)(iii).

Event End Date

Element Name: EventEndDate

Element Description: The ending date for this occurrence of the engine being used for the purpose specified in 63.6640(f)(2)(iii).

Event End Time

Element Name: EventEndTime

Element Description: The ending time for this occurrence of the engine being used for the purpose specified in 63.6640(f)(2)(iii).

Total Time

Element Name: TotalTime

Element Description: The total elapsed time (in hours) for this occurrence of the engine being used for the purpose specified in 63.6640(f)(2)(iii).

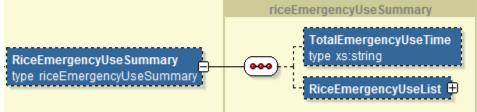
2.35 Rice Emergency Use Summary

Rice Emergency Use Summary

Element Name: RiceEmergencyUseSummary

Element Description: Containing element for RICE Emergency Use Summary information.





Total Emergency Use Time

Element Name: TotalEmergencyUseTime

Element Description: Total time that the engine was used for the purpose specified in 63.6640(f)(2)(ii): Energy Emergency Level 2. This field will be auto-populated, if needed, upon form creation. It does not need to be included in an XML upload.

Rice Emergency Use Summary Complex Child Elements

• Rice Emergency Use List

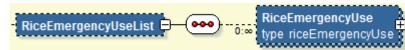
2.36 Rice Emergency Use List

Rice Emergency Use List

Element Name: RiceEmergencyUseList

Element Description: Containing element for occurrences the engine was used for the purpose specified in §63.6640(f)(2)(ii): Energy Emergency Level 2.

Exhibit 2-38 Rice Emergency Use List XML Element



Rice Emergency Use List Complex Child Elements

• Rice Emergency Use

2.37 Rice Emergency Use

Rice Emergency Use

Element Name: RiceEmergencyUse

Element Description: Containing element for information regarding occurrences the engine was used for the purpose specified in 63.6640(f)(2)(ii): Energy Emergency Level 2. This element is repeatable.

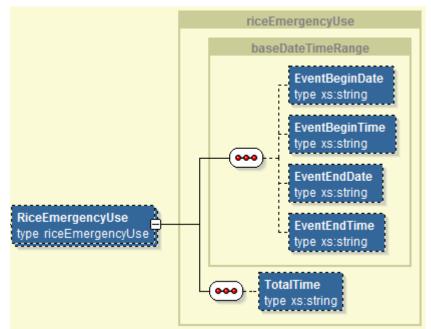


Exhibit 2-39 Rice Emergency Use XML Element

Event Begin Date

Element Name: EventBeginDate

Element Description: The beginning date for this occurrence of the engine being used for the purpose specified in 63.6640(f)(2)(ii): Energy Emergency Level 2.

Event Begin Time

Element Name: EventBeginTime

Element Description: The beginning time for this occurrence of the engine being used for the purpose specified in §63.6640(f)(2)(ii): Energy Emergency Level 2.

Event End Date

Element Name: EventEndDate

Element Description: The ending date for this occurrence of the engine being used for the purpose specified in §63.6640(f)(2)(ii): Energy Emergency Level 2.

Event End Time

Element Name: EventEndTime

Element Description: The ending time for this occurrence of the engine being used for the purpose specified in §63.6640(f)(2)(ii): Energy Emergency Level 2.

Total Time

Element Name: TotalTime

Element Description: The total elapsed time (in hours) for this occurrence of the engine being used for the purpose specified in 63.6640(f)(2)(ii): Energy Emergency Level 2.

2.38 Rice Deviation Summary

Rice Deviation Summary

Element Name: RiceDeviationSummary

Element Description: Containing element for RICE Deviation Summary information.

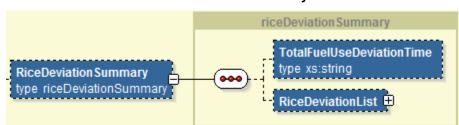


Exhibit 2-40 Rice Deviation Summary XML Element

Total Fuel Use Deviation Time

Element Name: TotalFuelUseDeviationTime

Element Description: Total time that the engine deviated from fuel use requirements in §63.6604. This field will be auto-populated, if needed, upon form creation. It does not need to be included in an XML upload.

Rice Deviation Summary Complex Child Elements

• Rice Deviation List

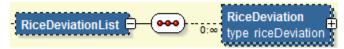
2.39 Rice Deviation List

Rice Deviation List

Element Name: RiceDeviationList

Element Description: Containing element for occurrences of deviations from fuel use requirements in §63.6604.

Exhibit 2-41 Rice Deviation List XML Element



Rice Deviation List Complex Child Elements

• Rice Deviation

2.40 Rice Deviation

Rice Deviation

Element Name: RiceDeviation

Element Description: Containing element for information regarding occurrences of deviations from fuel use requirements in §63.6604. This element is repeatable.

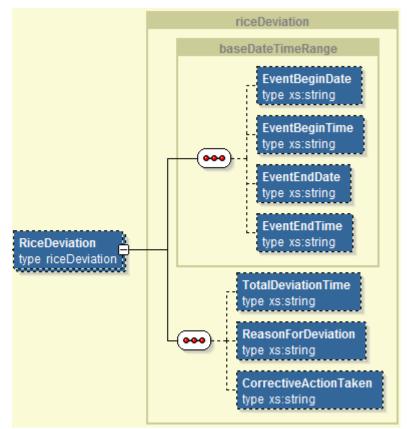


Exhibit 2-42 Rice Deviation XML Element

Event Begin Date

Element Name: EventBeginDate

Element Description: The beginning date for this occurrence of a deviation from the fuel requirements in §63.6604.

Event Begin Time

Element Name: EventBeginTime

Element Description: The beginning time for this occurrence of a deviation from the fuel requirements in §63.6604.

Event End Date

Element Name: EventEndDate

Element Description: The ending date for this occurrence a deviation from the fuel requirements in §63.6604.

Event End Time

Element Name: EventEndTime

Element Description: The ending time for this occurrence of a deviation from the fuel requirements in §63.6604.

Total Deviation Time

Element Name: TotalDeviationTime

Element Description: The total elapsed time (in hours) of this occurrence of deviation from the fuel requirements in §63.6604.

Reason For Deviation

Element Name: ReasonForDeviation

Element Description: The reason for this occurrence of deviation from the fuel requirements in §63.6604.

Corrective Action Taken

Element Name: CorrectiveActionTaken

Element Description: Action taken to correct this occurrence of deviation from the fuel requirements in §63.6604.

3 Appendix A: Reports Currently Configured for XML Upload

Part	Subpart	Report Types
60 – Standards of Performance for New Stationary Sources	Da - Standards of Performance for Electric Utility Steam Generating Units	Air Emissions Report
	IIII - Standards of Performance for Stationary Compression Ignition Internal Combustion Engines	Air Emissions Report
	JJJJ - Standards of Performance for Stationary Spark Ignition Internal Combustion Engines	Air Emissions Report
63 - National Emission Standards for Hazardous Air Pollutants For Source Categories	DDDDD - National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters	Air Emissions Report
	JJJJJJ - National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources	Notification of Compliance Status
	LLL - National Emission Standards for Hazardous Air Pollutants From the Portland Cement Manufacturing Industry	Air Emissions Report
	ZZZZ - National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines	Air Emissions Report

4 Appendix B: Terms and Acronyms

Term / Acronym	Definition
AER	Air Emissions Report
CDX	Central Data Exchange
CEDRI	Compliance and Emissions Data Reporting Interface
Complex Element	An element that contains other elements.
EPA	Environmental Protection Agency
OAR	Office of Air and Radiation
RICE	Reciprocating Internal Combustion Engine
XML	EXtensible Markup Language
XSD	XML Schema Definition