Monitoring Part 2: Reporting

Louisville, KY

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Part 2 Overview

- What's an EDR? - EDR Basics
- Monitoring Plan Records (RT 500)
- Certification Test Records (RT 600)

Electronic Data Reporting Format

- EDR version 2.1 is the most current accepted reporting format
- General Record Types
  - RT 100s - General Facility Information
    - » Facility Location (RT 102)
    - » Facility Identification (RT 100)
  - RT 200s - Monitoring Data
    - » NO_x Concentration Data (RT 201)
    - » Diluent Gas Concentration Data (RT 210 or RT 211)
    - » Moisture Data (RT 212)
    - » Stack Volumetric Flow Rate (RT 220)
    - » Daily Calibrations (RT 230)
    - » Flow Interference Checks (RT 231)

Electronic Data Reporting Format

- RT 300s - Unit and Calculated Emissions Data
  - Unit Operating and Cumulative Emissions Data (RT 300)
  - NO_x Emission Rate Data (RT 320)
  - NO_x Mass Emissions (RT 328)
  - LME Data (RT 360)
- RT 500s - Monitoring Plan Information
  - Common Stack/Pipe ID (RT 503)
  - Unit Information (RT 504)
  - Program Identifier (RT 505)
  - Capacity Factor Data for Peaking Status (RT 507)
  - Subpart H Reporting Schedule (RT 508)

Electronic Data Reporting Format

- RT 500s - Monitoring Plan Information (continued)
  - Monitoring System/Components Table (RT 510)
  - Formula Table (RT 520)
  - Span Table (RT 530)
  - Maximum, Minimums, Defaults (RT 531)
  - Operating Load Data (RT 535)
  - Range of Operation (RT 536)
  - Fuel Flowmeter Information (RT 540)
  - Appendix E Correlation Curves (RT 560)
  - Monitoring Methodology (RT 585)
  - Emission Controls (RT 586)
  - Fuel Type(s) (RT 587)

Electronic Data Reporting Format

- RT 600s - Quality Assurance and Certification Test Data
  - 7-day Calibration Error Test Data & Results (RT 600)
  - Linearity Check Data & Results (RT 601 & 602)
  - Flow-to-Load Test (RT 605 & 606)
  - RATA/Bias Test Data & Results (RT 610, 611, 614-616)
  - Flowmeter Visual Inspections (RT 624)
  - Fuel Flowmeter Accuracy Tests (RT 627 & 628)
  - LME Qualifying Data (RT 645)
  - Appendix E Test Data (RT 650 - 653)
  - LME Unit Group Testing (RT 660)
  - QA Extension, Exemptions, & Grace Periods (RT 695-699)
- RT 900s - Certification Statements and Contacts

Electronic Data Reporting Instructions

- "Electronic Data Reporting Version 2.1 Instructions, Tables and Changes" revised January 24, 2001
  - Appendix C contains Guidelines for Preparation of EDR Submittals by Program Applicability
    - » Monitoring Plan
    - » Certification and Re-certification Applications
    - » Quarterly Reporting

Electronic Monitoring Plan

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10000011712001V2.1
102WHOM EVER                                ELECTRIC UTILITY    4911AZ013 3326301120930
504CC4   CT  1190.020010401        120 1050 177
505CC4   NBP       P2Q 20010401         AZMC
506CC4   CC4   CC4  CC4  2001 117    00117
510CC4   470G40AGAS P GFFMORFLATER                LATER        LATER                20010401
510CC4   D01G40AGAS P DAHS   MONITOR LABS         REGPERFECT    LATER                20010401
510CC4   410N40ANOX P NOXLEXTROSEMOUNT             951C         U1004960             20010401
510CC4   415N40ANOX P NOXHEXTROSEMOUNT             951C         U1004960             20010401
510CC4   420N40ANOX P O2D EXTSIEMENS              ULTRA/OXYMAT 6EMO-231              20010401
510CC4   D01N40ANOX P DAHS   MONITOR LABS         REGPERFECT    LATER                20010401
520CC4   A41GNOX F-5  NOX LB/MMBTU = 1.194 * 10** - 7 * S#(410-N40) * 8710 * (20.9 / (20.9-S#(420-N40)))
520CC4   A43GHI  F-20 HI (mmBtu/hr) = S#(470-G40) * (GCV/10**6)
520CC4   A45GSO2 D-5  SO2 LB = F#(43G) * 0.0006
520CC4   A46GCO2 G-4  CO2 TONS = 1040 * (F#(43G) * (1/385) * 44) / 2000
530CC4   NOX HHD     120.000 0.184     150.000     150.000PPM   01040100
530CC4   NOX LHD      10.000 0.000      20.000      25.000PPM   01040100
530CC4   O2  H                         21.000      25.000%     01040100
535CC4   MW   130
536CC4     130    10H,MH 20010401
540CC4   G40GAS PNG    9259.0HSCF UMXASME              A
585CC4   CO2 GFF       PNGPSPTS  20010401
585CC4   HI  GFF       PNGPSPTS  20010401
585CC4   NOXRCEM       NFSPSPTS  20010401
585CC4   OP  EXP       PNGPNA    20010401
585CC4   SO2 GFF       PNGPSPTS  20010401
586CC4   NOX DLNB  P
587CC4   PNG20010401       P
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System/Component Table

Formula Table

Span Table

Monitoring Methodology Information

Basic Monitoring Plan RTs by Methodology

Monitioring Plan Record Types Required for Various Monitoring Options						
RT	(1) NOx Diluent CEMS for NOx Rate plus Flow and Diluent CEMS for HI	(2) NOx Diluent CEMS for NOx Rate plus Appendix D for HI	(3) NOx Concentration & Flow for NOx Mass plus Flow and diluent CEMS for HI (if HI required)*	(4) NOx Concentration & Flow CEMS for NOx Mass plus Appendix D for HI (if HI required)*	(5) Appendix E for NOx Rate plus Appendix D for HI	(6) LME
100	x	x	x	x	x	x
503	A	A	A	A	A	A
504	x	x	x	x	x	x
505	x	x	x	x	x	x
506	x	x	x	x	x	x
507	A	A	A	A	x	
508	O/S only	O/S only	O/S only	O/S only	O/S only	O/S only
510	x	x	x	x	x	A (LTFF only)
520	x	x	x	x	x	
530	x	x	x	x	x	
531	A	A	A	A		x
535	x	x	x	x	x	x
536	x	x	x	x	x	
540		x		x	x	x
550	optional	optional	optional	optional	optional	optional
556	A	A	A	A	A	A
560					x	
585	x	x	x	x	x	x
586	x	x	x	x	x	x
587	x	x	x	x	x	x
9XX	x	x	x	x	x	x

Legend:

A = As required

X = Typically required

O/S = Ozone Season Reporter

* Heat Input reporting is required for Section 126 sources. For SIP sources, HI reporting is required if source is Acid Rain affected or if the state SIP requires it.

CLEAN AIR MARKET PROGRAMS

Certification & QA/QC Record Types Required for Various Monitoring Options							
RT	NOx Concentration CEMS	NOx Diluent CEMS	Stack Flow CEMS	Contiuous Moisture System	Appendix D Fuel Flowmeter	Appendix E Correlation Curve	LME
100	x	x	x	x	x	x	x
5XX	x	x	x	x	x	x	x
600	x	x	x				
601	x	x					
602	x	x					
603			x				
605			x				
606			x				
610	x	x	x	x			
611	x	x	x	x			
614			x (2F,G,H)				
615			x (2F,G,H)				
616			x (2H)				
621	x	x					
623	x	x					
624					x		
627					x		
628					x		
629					optional		
630					optional		
645							x
650						x	x
651						x	
652						x	
653						x	
660							x
695			x				
696					x		
697	x	x	x	x			
698	x	x	x				
699	x	x	x	x			
9XX	x	x	x	x	x	x	x

Basic Certification & QA/QC RTs

CLEAN AIR MARKET PROGRAMS