

DEPARTMENT OF ENVIRONMENTAL PROTECTION
Air Quality

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TITLE: Compliance Assurance Policy for Hospital Waste Incinerators

AUTHORITY: 35 P.S. Sec. 4001-4005 (Air Pollution Control Act) and Act 95 (75 PA C.S. Section 4706())

POLICY: Minimum actions for violations of monitoring requirements for new hospital waste incinerators.

PURPOSE:

The purpose of this policy is to establish uniform criteria for assessing monetary penalties for exceedances of emission standards and data availability requirements through agreements rather than criminal citations or civil penalty actions. The Department has found agreements to be effective in resolving violations without resorting to litigation. The benefit of this policy to the source owner is certainty in determining liabilities should violations occur.

DISCLAIMER:

The policies and procedures outlined in this guidance document are intended to supplement existing requirements. Nothing in the policies or procedures shall affect different statutory or regulatory requirements.

The policies and procedures herein are not an adjudication or a regulation. There is not intent on the part of the Department to give these rules that weight or deference. This document establishes the framework for the exercise of DEP's administrative discretion in the future. DEP reserves the discretion to deviate from this policy statement if circumstances warrant.

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AIR QUALITY
COMPLIANCE ASSURANCE POLICY
FOR
HOSPITAL WASTE INCINERATORS

This facsimile of the original policy contains slight modifications for Internet use. For example, since some margins were changed, words and sentences may appear on lines different from those in the original document. Because the original policy is in wide spread circulation and use, care has been taken to replicate the original document both to be able to refer to this facsimile similarly and to avoid the mistaken impression that this facsimile represents a revision of the policy. Editorial updates like this note appear in italics within parenthesis. Hard copies of the original signed policy may be obtained by contacting the Bureau of Air Quality.

PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL RESOURCES
(currently Environmental Protection)

BUREAU OF AIR QUALITY CONTROL
(currently Air Quality)

APRIL, 1990

Approved by: *(original signed by James K. Hambricht)*
Director, Bureau of Air Quality Control
(currently Air Quality)

Date: *(04/16/90)*

DEPARTMENT OF ENVIRONMENTAL RESOURCES
(currently Environmental Protection)
BUREAU OF AIR QUALITY CONTROL
(currently Air Quality)

ENFORCEMENT POLICY FOR BEST AVAILABLE TECHNOLOGY AND
CHAPTER 127 PLAN APPROVAL CRITERIA FOR HOSPITAL/INFECTIOUS
WASTE INCINERATORS - EFFECTIVE DATE 04/16/90

TABLE OF CONTENTS

I. INTRODUCTION AND APPLICABILITY 3

 A. COMPLIANCE STRATEGY OVERVIEW 3

II. BEST AVAILABLE TECHNOLOGY ENFORCEMENT POLICY 4

 A. AMBIENT IMPACT ANALYSIS 4

 B. STACK TESTING REQUIREMENTS 5

 B. 1 FACILITIES WITH A CAPACITY LESS THAN OR EQUAL
 TO 300 POUNDS PER HOUR 6

 B. 2 FACILITIES WITH A CAPACITY GREATER THAN 300
 POUNDS PER HOUR AND EQUAL TO OR LESS THAN
 2000 POUNDS PER HOUR 6

 B. 3 FACILITIES WITH A CAPACITY GREATER THAN 2000
 POUNDS PER HOUR 7

 C. STACK TEST RESULTS 7

 C. 1 TMEL AND REL TEST RESULTS 7

 C. 2 BAT TEST RESULTS 9

 D. OTHER BAT REQUIREMENTS 11

 E. CONTINUOUS SOURCE MONITORING 11

 E. 1 REQUIREMENTS FOR ACCURACY, DATA AVAILABILITY
 AND QUARTERLY REPORT SUMMARIES 15

III. LOCAL COORDINATION 17

IV. APPENDICES 18

 A. OVERVIEW OF SURVEILLANCE ACTIVITIES 18

B.	ANNUAL AMBIENT CONCENTRATIONS	19
C.	OVERVIEW OF PARAMETERS TO BE TESTED	20
D.	OVERVIEW OF STACK EMISSION, COMBUSTION EFFICIENCY AND VISIBLE EMISSIONS VIOLATIONS ..	22
E.	OVERVIEW OF MONITORING REQUIREMENTS	23
F.	PENALTY ADJUSTMENTS	24
G.	UNIVERSAL QUARTERLY REPORT FORMATS	25
H.	OPACITY INCIDENT REPORT FORMATS	36
I.	LOW TEMPERATURE INCIDENT REPORT FORMATS	40
J.	WASTE CHARGING INTERLOCK INCIDENT REPORT FORMATS	44

DEPARTMENT OF ENVIRONMENTAL RESOURCES
(*currently Environmental Protection*)
BUREAU OF AIR QUALITY CONTROL
(*currently Air Quality*)

ENFORCEMENT POLICY
BEST AVAILABLE TECHNOLOGY AND CHAPTER 127 PLAN APPROVAL
CRITERIA FOR HOSPITAL/INFECTIOUS WASTE INCINERATORS

I. INTRODUCTION AND APPLICABILITY

The Department of Environmental Resources (*currently Environmental Protection*) (hereinafter "Department") is committed to assuring that compliance with air quality standards is achieved on a continuous basis at all hospital/infectious waste incinerators (hereinafter "HIW") with plans which were approved after January 21, 1988. Such incinerators are subject to the Department's Best Available Technology and Chapter 127 Plan Approval Criteria for Hospital/Infectious Waste Incinerators (hereinafter "BAT") which became effective on January 21, 1988 (subsequently amended on August 11, 1989).

This document represents the enforcement policy the Department will follow to insure that the BAT will be enforced on a uniform basis statewide. This policy is intended to provide the public and HIW operators with an explanation of the standards and enforcement actions that will result for lack of compliance with the BAT.

This policy does not limit the Department's enforcement response to a particular violation but specifies basic responses to most probable violations.

A. COMPLIANCE STRATEGY OVERVIEW

The three major elements in the overall strategy are the permitting process, surveillance, and enforcement.

During the permitting process the specific requirements are made clear and proposed control equipment must be approved. A plan approval, which contains conditions and restrictions, must be obtained prior to construction. An operating permit must be issued prior to routine operation of the incinerator.

Emission limitations specified in permits and special conditions will vary from unit to unit because stack standards depend on the size of the incinerator. Incinerators range in size from small to medium units located at the hospital to large units operating on a commercial basis serving a number of health care facilities.

Incinerator operating requirements also vary according to the size of the unit.

Compliance will be determined by on site inspections, sampling and analysis of stack emissions, and reports from the continuously operated emission monitoring systems. For further information, see surveillance overview chart in Appendix IV. A.

Violations will result in an appropriate enforcement action. Responses, as outlined in this document, range from warnings to immediate cessation of waste charging until corrective measures have been accomplished. Various enforcement options, including Citations, Consent Order and Agreements, Letter Agreements and Department Orders, will be used.

II. BEST AVAILABLE TECHNOLOGY ENFORCEMENT POLICY

Information in this Section represents BAT policy based on the actual BAT adopted by the Department of Environmental Resources (*currently Environmental Protection*) on January 21, 1988 (amended August 11, 1989).

The following areas of the BAT will be implemented by the inclusion of special conditions in the plan approval and operating permit documents.

General Application - I, page 11 of BAT.

Operator Training Requirements - H, page 10 of BAT.

Startup and Shutdown Requirements - E, page 8 of BAT.

Operating Requirements - B, pages 5 and 6 of BAT.

Monitoring Requirements - D, pages 7 and 8 of BAT.

Record Keeping and Reporting Requirements - G, page 10
of BAT.

A. AMBIENT IMPACT ANALYSIS

Ambient limits were established to protect the public health. Incinerators will not be allowed to continue operating if certain concentration limits are exceeded. For further information regarding concentration limits see Appendix IV.B. Risk emission limits (REL's) for all Appendix IV. B contaminants are determined using modeling procedures described in Appendix C-1 of the BAT permitting criteria. Modeling procedures involve the stack exhaust parameters, the local meteorology and the surrounding terrain. Thus the REL's are stack emission rates corresponding to the ambient concentrations limits in Appendix IV. B.

Toxic metal emission limits (TMEL's) for a particular incinerator are established during the permitting process for all contaminants in Appendix IV. B. Note that Appendix IV. B. contains dioxin, which is not a toxic metal. For convenience purposes, reference to TMEL's will also reference dioxin. The TMEL's are the lowest emission rates achievable on a continuous basis using the approved, best control technology. Units of REL's and TMEL's are grains/dry standard cubic foot of exhaust gas. TMEL's may be more stringent than the REL's but never less stringent.

As part of the plan approval application submitted, modeling results must indicate compliance with Appendix IV. B ambient limits; otherwise the plan approval will not be issued.

The enforcement responses to each stack test for toxic metals, with respect to calculated ground level concentrations, are contained in Section II C. regarding stack testing results. Responses range from penalties to shutdown of the waste firing system. Also, stack testing must be conducted in accordance with the requirements contained in the Department's Source Testing Manual.

B. STACK TESTING REQUIREMENTS

For further information, see testing overview chart in Appendix IV. C.

A written startup schedule is to be received by the Department prior to actual startup. The schedule should at least contain expected dates for the first waste firing day and for initially achieving the maximum permitted hourly firing rate for waste. A written statement indicating when these two events actually occurred is also to be sent to the Department.

A pretest plan satisfying the requirements in the Submittal and Approval section of the Department's Source Testing Manual is to be submitted to the Department for approval. The Department is also to be notified in advance of all stack tests conducted to demonstrate compliance.

A full report for all pollutants is due following the test. A test is not considered a valid test unless all pollutants described in the BAT for the particular size category are actually tested and the results submitted to the Department. Reports are to be prepared in accordance with requirements in the Submittal and Approval section of the Department's Source Testing Manual. Submission of dioxin testing reports may be extended on a case by case basis.

Plan Approval conditions will be established for all aspects of stack testing and modeling. The conditions will contain submittal requirements for all of the above referenced items.

For the purpose of penalty calculation using the formulae contained in B.1, B.2 or B.3, any part of a day is considered an entire day. Penalties will be due as directed by the Department.

B.1. FACILITIES WITH A CAPACITY LESS THAN OR EQUAL TO 300 POUNDS PER HOUR

Initial operation stack testing and reporting are required of incinerators in this category. Such testing shall be conducted within 30 days after startup of the incinerator. Test reports shall be submitted no later than 30 days after completion of the stack test. Delinquent testing is subject to penalty in accordance with the following:

$$P = \$100 \times N$$

Where N = days of delinquency

If a stack test is required by the Department (other than the initial operation test) as specified by Section F.1 of the BAT and is not conducted or reported upon by the times prescribed, the following penalty will apply:

$$P = \$200 \times N$$

Where N = days of delinquency

B.2. FACILITIES WITH A CAPACITY GREATER THAN 300 POUNDS PER HOUR AND EQUAL TO OR LESS THAN 2000 POUNDS PER HOUR

Initial operation stack testing and reporting are required of incinerators in this category. Such testing shall be conducted within 60 days after startup of the incinerator. Test reports shall be submitted no later than 30 days after completion of the stack test. Delinquent testing or reporting is subject to penalty in accordance with the following:

$$P = \$300 \times N$$

Where N = days of delinquency

Annual testing and reporting dates will be specified in the Operating Permit. Annual testing not conducted or reported upon within the prescribed times will be subject to the following penalty:

$$P = \$600 \times N$$

Where N = days of delinquency

B.3. FACILITIES WITH A CAPACITY GREATER THAN 2000 POUNDS PER HOUR

Initial operation stack testing and reporting are required of incinerators in this category. Such testing shall be conducted within 90 days after startup of the incinerator. Test reports shall be submitted no later than 30 days after completion of the stack test. Delinquent testing or reporting is subject to the following penalty:

$$P = \$500 \times N$$

Where N = days of delinquency

Semiannual testing and reporting dates will be specified in the Operating Permit. Semiannual testing not conducted or reported upon within the prescribed times will be subject to the following penalty:

$$P = \$1000 \times N$$

Where N = days of delinquency

C. STACK TESTING RESULTS

For further information, see Appendix IV. D overview chart.

Stack testing, required of all incinerators subject to the BAT standards at various intervals, is conducted to determine if the various emission limitations are being met.

Test results which show violations will result in the imposition of a penalty. In some penalty calculations, a factor is applied to the calculation based on incinerator size. Generally, the larger the incinerator, the greater the penalty will be for violations. Base penalties are multiplied by the penalty factor for size to determine the total penalty. Penalty factors are as follows.

Incinerator Rated Capacity (pounds/hour)	Penalty Factor, F
<= 300	1
301 - 2000	2
> 2000	3

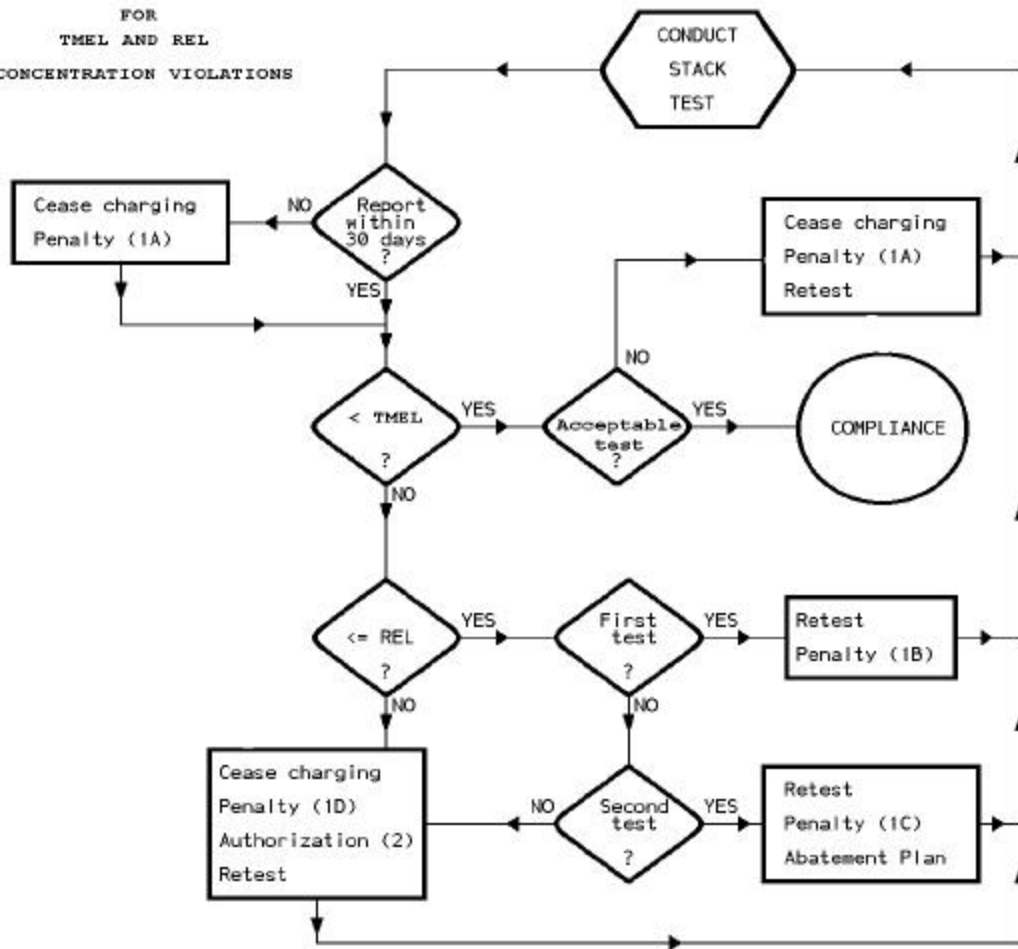
Penalties will be due as directed by the Department.

C.1. TMEL AND REL TEST RESULTS

The penalty factors described in paragraph II C. apply to any stack test results concerning TMEL and REL violations. The following flow

chart will be used to calculate penalty amounts for all incinerators subject to these BAT provisions.

ENFORCEMENT RESPONSES
FOR
TMEL AND REL
CONCENTRATION VIOLATIONS



- (1) A) Penalty = F X \$2,500
 B) Penalty = F (\$600 + N1 X \$150)
 C) Penalty = F (\$1,200 + N1 X \$300)
 D) Penalty = F (\$2,400 + N2 X \$600)

Where: F = Penalty factor for size (see paragraph C. above).

N1 = number of waste firing days between test and retest.

N2 = number of waste firing days between test and cessation.

- (2) "Written Department Authorization" is required before waste charging can be renewed.

C.2. BAT TEST RESULTS

During Initial Operation Period:

Stack testing results for BAT stack emission limitations for particulate, CO, HCl and SO₂ which exceed the standard will be considered a violation that will result in a penalty assessment. (Note that particulate matter limitations and enforcement responses for units over 2000 pounds per hour are covered in the last portion of C.2.) The penalty for violations of the above mentioned limitations will be calculated according to the formula in the Penalty Assessment section which follows. Testing requirements will be established in the Plan Approval.

Retesting for the parameter(s) violated is required and regular operation cannot commence until all parameters have been shown to be in compliance with BAT standards. Any subsequent violations will be subject to the penalty referenced above.

During Regular Operation Period:

Testing conducted during regular operation which demonstrates any of the above mentioned BAT parameters in noncompliance will require the immediate shutdown of the unit. The unit will remain shutdown until corrective measures have been taken. The Department must approve restart of the unit and retesting for violated parameters must occur within 30 days of unit restart. Penalties will be calculated according to the formula in the Penalty Assessment section which follows.

Penalty Assessment:

The penalty assessment for violations of both the Initial Operation and Regular Operation Periods will be determined using the following formula:

$$P = \$500 \times \frac{U}{300} \text{ lb/hr} \times N$$

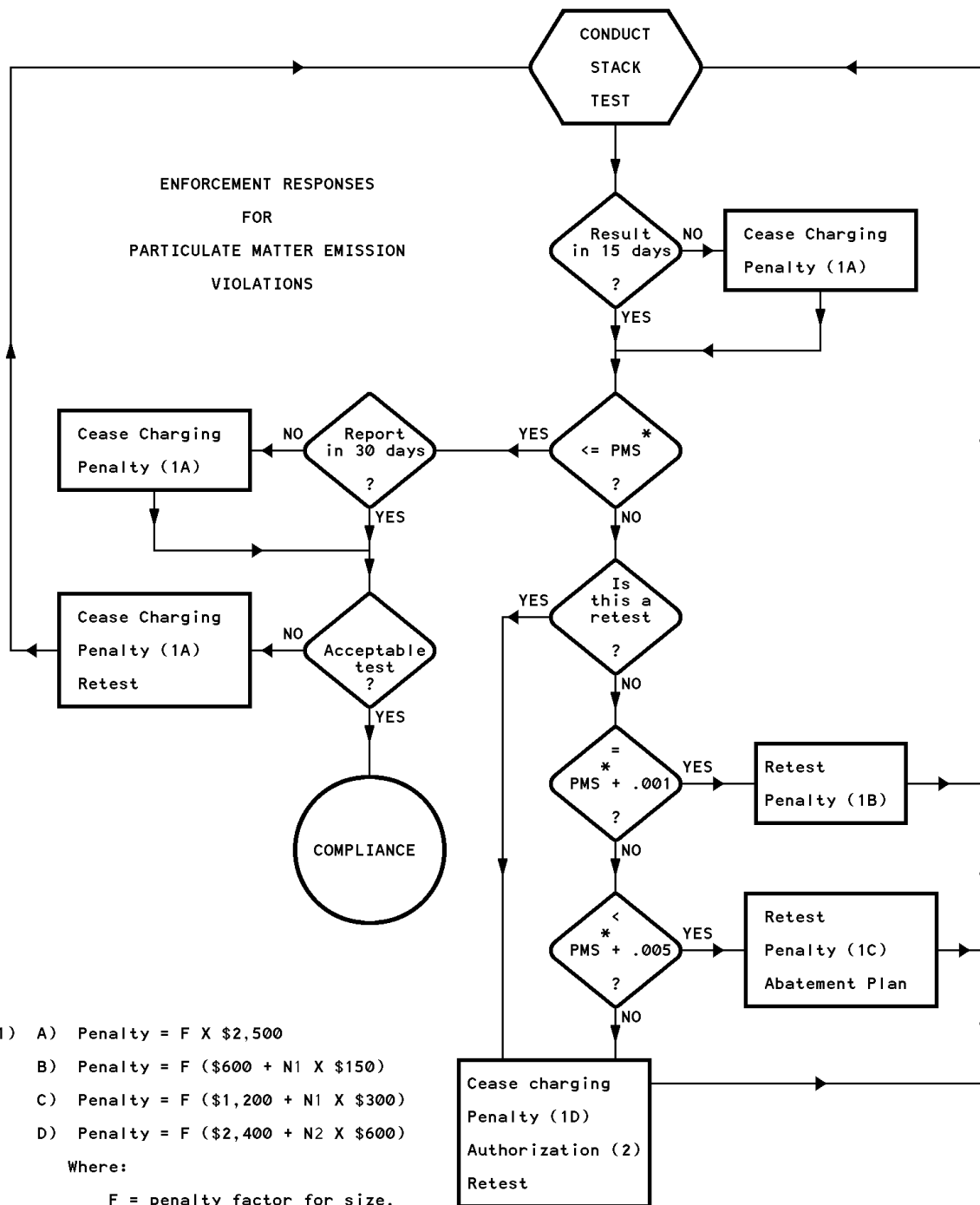
Where: U = unit size in lb/hr

P = penalty

N = number of parameters violated

Particulate matter - units greater than 2000 pounds per hour:

The enforcement responses for particulate matter violations are contained in the flow chart below. Responses range from penalties to cessation of waste charging.



- (1) A) $Penalty = F \times \$2,500$
 B) $Penalty = F (\$600 + N1 \times \$150)$
 C) $Penalty = F (\$1,200 + N1 \times \$300)$
 D) $Penalty = F (\$2,400 + N2 \times \$600)$

Where:

F = penalty factor for size.

N1 = number of waste firing days between test and retest.

N2 = number of waste firing days between test and cessation.

- (2) "Written Department Authorization" is required before waste firing can be renewed.

* PMS the is Particulate Matter Standard. If a particulate limit on sizes less than 10 microns (PM10) is also established in the Plan Approval, this also applies using the PM10 limit as the PMS. These enforcement responses apply to both standards independently.

D. OTHER BAT REQUIREMENTS

For further information on BAT requirements see Overview IV. D. Penalties will be due as directed by the Department.

Combustion efficiency:

This requirement applies only to units over 2000 pounds/hour.

If the combustion efficiency drops below 99.9% for a one hour period, a penalty of \$200 will be assessed. The penalty of \$200 is imposed for each hour of violation. The maximum daily penalty for violations of this section will not exceed \$2500.

Visible emissions:

Units greater than 300 pounds per hour are required to continuously monitor visible emissions. Violations detected generate penalties according to the provisions contained in section E., Continuous Source Monitoring, of this document.

For units equal to or less than 300 pounds per hour, observed violations of the visible emission standard will result in penalties as follows.

- 10% 3 minute/hour standard - \$100 per incident
- 30% any time standard - \$300 per incident

E. CONTINUOUS SOURCE MONITORING

For further detailed information regarding monitoring requirements, see Appendix IV. E overview chart.

The penalty factors in II.C. will also apply to II.E.

Temperature:

Temperature is the only parameter that is presently required to be monitored by all incinerators subject to the BAT. Recorded violations of the 1800⁰F temperature standard during waste firing will result in the assessment of a penalty according to the following:

Daily Minutes < 1800 ⁰ F	Base Penalty (B)
1 - 30	\$200
31 - 60	\$400
61 - 90	\$800

> 90

\$1600

The total daily penalty, which will not exceed \$2500, for low temperature violations is the penalty factor, as described in II C. above, times the base penalty:

$$P = F \times B$$

Carbon monoxide:

Monitoring is required for all units greater than 300 pounds per hour.

A daily penalty is assessed for CO if the concentration limit established in the plan approval (100 ppmv) is exceeded for any hours. The penalty is based on how much the concentration exceeds the limit. The daily penalty is defined by the sum of these concentration excesses for all violation hours in the day. The equation for this is:

$$S_{CO} = \sum_{i=1}^n (C_i - C_{CO})$$

where: C_i = concentration of CO (ppmv) for violation hour i

C_{CO} = concentration limit (ppmv) established in plan approval; ≤ 100

n = number of violation hours in the day

The S_{CO} defines the daily penalty as follows:

S_{CO}	Daily Penalty
1 - 200	\$200
200 - 400	\$400
400 - 600	\$800
> 600	\$1600

Penalty payments are to be submitted on a calendar quarter basis.

Visible air contaminants:

Monitoring is required for all units greater than 300 pounds per hour.

Daily penalties are assessed any time either the 10% or 30% limit is exceeded. Independent penalties are assessed based on the total daily minutes in excess of the 10% or 30% opacity standards according to the following tables:

<u>10% Std.</u>		<u>30% Std.</u>	
<u>Excess</u>	<u>Base</u>	<u>Excess</u>	<u>Base</u>
<u>Minutes</u>	<u>Penalty</u>	<u>Minutes</u>	<u>Penalty</u>
(T ₁₀)	(B ₁₀)	(T ₃₀)	(B ₃₀)
1 - 30	\$100	1 - 10	\$100
31 - 60	\$200	11 - 20	\$200
61 - 90	\$400	21 - 30	\$400
> 90	\$800	> 30	\$800

The total daily opacity penalty is the sum of any base penalties:

$$P = B_{10} + B_{30}$$

Note that when the opacity is => 10% for more than 15 minutes, waste charging must cease (see Operating Requirement pages 5 and 6 of the BAT).

Penalty payments are to be submitted on a calendar quarter basis.

Hydrochloric acid and sulfur dioxide:

As of the effective date of this document, continuous source monitoring for hydrochloric acid or sulfur dioxide has not been required for any incinerator subject to this policy. Enforcement regarding these two parameters is routinely based on stack test results. Hydrochloric acid monitoring would apply only to units equal to or greater than 2000 pounds per hour. Sulfur dioxide monitoring could apply to any size unit. However, if monitoring is required, enforcement will be based on the following formulas.

Hydrochloric acid:

A daily penalty is assessed for HCl if the concentration limit established in the plan approval (30 ppmv maximum) is exceeded and the required reduction established in the plan approval (minimum 90%) is not achieved for any hour. The penalty is based on how much the concentration exceeded the limit and how much less than the required reduction was achieved. The product of these two factors is summed for every violation hour in the day. The daily penalty is defined by this sum. The equation for this is:

$$S_{HCl} = \sum_{i=1}^n (C_i - C_{HCl})(R_{HCl} - R_i)$$

where: C_i = concentration of HCl (ppmv) for i^{th} violation hour

C_{HCl} = concentration limit (ppmv) established in plan approval; ≤ 30

R_{HCl} = reduction requirement (%) established in plan approval; ≥ 90

n = number of violation hours in the day

R_i = reduction percentage achieved for the i^{th} violation hour

The S_{HCl} defines the base penalty as follows:

S_{HCl}	Base Penalty (B)
1 - 1500	\$100
1501 - 3000	\$200
3001 - 4500	\$400
> 4500	\$800

The daily penalty for HCl violations is the base penalty multiplied by the penalty factor:

$$P = F B$$

Penalty payments are to be submitted on a calendar quarter basis.

Sulfur dioxide:

A daily penalty is assessed for SO_2 if the concentration limit established in the plan approval (30 ppmv maximum) is exceeded and the required reduction established in the plan approval (minimum 75%) is not achieved for an 8-hour period. The penalty will be based on how much the concentration exceeded the limit and how much less than the required reduction was achieved. The product of these two factors is summed for every 8-hour violation period in

the day. The daily penalty is defined by this sum. The equation for this is:

$$S_{SO_2} = \sum_{i=1}^n (C_i - C_{SO_2})(R_{SO_2} - R_i)$$

where: C_i = concentration of SO_2 (ppmv) for the i^{th} , 8-hour violation period

C_{SO_2} = concentration limit (ppmv) established in plan approval; ≤ 30

R_{SO_2} = reduction requirement (%) established in plan approval; ≥ 75

n = number of 8-hour violation periods in the day

R_i = reduction percentage achieved for the i^{th} , 8-hour violation period

The S_{SO_2} defines the base penalty as follows:

S_{SO_2}	Base Penalty (B)
1 - 800	\$100
801 - 1600	\$200
1601 - 2400	\$400
> 2400	\$800

The daily penalty for SO_2 violations is the base penalty multiplied by the penalty factor:

$$P = F B$$

Penalty payments are to be submitted on a calendar quarter basis.

E.1. REQUIREMENTS FOR ACCURACY, DATA AVAILABILITY AND QUARTERLY REPORT SUMMARIES

Continuous monitoring is subject to requirements for accuracy, data availability and quarterly report submittals.

Minimum data availability regulations for all continuous monitors are being promulgated. Until regulations are adopted, the requirements for incinerator monitors will be contained in the plan approvals or operating permits.

MONITORED POLLUTANT OR PARAMETER
(CLASS)

REQUIREMENT	(a) CO* & CE Temperature	(b) Opacity
Data availability	100% valid hrs /day	>= 95% valid hrs /day
Valid hour	>= 90% valid readings (54 min)	>= 75% valid readings (45 min)

* corrected to 7% oxygen on a dry basis

Monitors not achieving the required data availability are subject to quarterly penalties. Penalties depend on the pollutant or parameter class (a or b) and the total number of excess invalid hours in the quarter (N_a or N_b).

Quarterly penalties are defined by the following equations:

$$P_a = F \times \$200 \times 2^{N_a/72} \quad \text{up to a maximum of \$12,800, that is, where } N_a \geq 432 \text{ hrs}$$

$$P_b = F \times \$150 \times 2^{N_b/84} \quad \text{up to a maximum of \$9600, that is, where } N_b \geq 504 \text{ hrs}$$

Data from all required continuous monitors shall be submitted quarterly.

Routine emission or parameter data must be submitted quarterly on both paper and computer floppy disk in the formats specified in Appendices G and H respectively. The hardcopy requirement may be waived on a case-by-case basis after two quarterly report submittals.

Stoppage of waste charging due to any of the interlock mechanisms required by BAT/Chapter 127, section B. (pages 5 and 6), must be reported quarterly. The format for these reports is specified in Appendix I and J.

Reports not conforming to the required formats will be returned to the source for resubmission in the proper format.

All data reports are to be submitted in duplicate to the Division of Technical Services and Monitoring (*currently Source Testing and Monitoring*) in Harrisburg within 30 days following the end of each quarter as required in the Record Keeping and Reporting sections of the Continuous Source Monitoring Manual.

Subsequent data report changes must be submitted in duplicate to the appropriate regional office. The regional office will forward all approved changes to the Division of Technical Services and Monitoring (*currently Source Testing and Monitoring*). Data resubmittals must be submitted to the regional office within 60 days following the end of the quarter.

Any data report not submitted in the proper format within the time limits will be considered delinquent.

Delinquent reports will be considered in violation of the reporting requirements specified in the Continuous Source Monitoring Manual (pages 34 & 37; B.3) and subject to a penalty of \$100 per day of delinquency per report. However, this penalty will be forgiven for reports delinquent for seven or less days. That is, the penalty if submitted on the eighth day of delinquency would be \$800; on the ninth, \$900; etc.

III. LOCAL COORDINATION

Department reports and files on incinerator emissions are open to the public and available at the Regional Offices. Regional Office personnel will work with local agencies in fulfilling the agency's information needs concerning the incinerator.

IV. APPENDICES

A. OVERVIEW OF SURVEILLANCE ACTIVITIES

The following chart is a summary of all surveillance functions associated with the installation of a new hospital incinerator.

S U R V E I L L A N C E F U N C T I O N S	C O N S I D E R I E S O F O P E R A T I O N S	SUBSEQUENT OPERATION QUARTERS						
		N	N	1	2	3	4	
1 Routine Inspections		1	6	0	1	0	1	2
2 Stack Testing = or < 300#/hr ¹			1					1 ³
			1	1				1
			1	1		1		2
3 Follow-up Inspections		as required						-
4 CSMS Certification Tests ²			1	as required				1 ³
5 CSMS Level 1 Audits ²			1	1	1	1	1	4
6 CSMS Level 2 Audits ²				1		1		2
7 CSMS Level 3 Audits ²					1			1
8 CSMS Level 4 Audits ²							1	1
On Site Function Totals		1	8	3	2	2	2	9
Off Site Function Totals (in bold)		0	1	1	1	1	1	4
All Functions Totals		1	9	4	3	3	3	13

¹ as required by Department, see II.B & C. for further details.

² conducted for CSMS pollutants as determined by unit size.

³ first year of operation, thereafter as required by the Department.

B. ANNUAL AMBIENT CONCENTRATIONS

<u>Contaminants</u>	<u>Ambient Concentration (Ig/m³)</u>
Arsenic and compounds	0.23 x 10 ⁻³
Beryllium and compounds	0.42 x 10 ⁻³
Cadmium and compounds	0.56 x 10 ⁻³
Hexavalent Chromium and compounds	0.83 x 10 ⁻⁴
Lead and compounds	0.15
Mercury and compounds	0.24 x 10 ⁻¹
Nickel and compounds	0.33 x 10 ⁻²
PCDD & PCDF expressed as 2,3,7,8 TCDD equivalents	0.30 x 10 ⁻⁷

C. OVERVIEW OF PARAMETERS TO BE TESTED

UNITS LESS THAN OR EQUAL TO 300 POUNDS PER HOUR

1. Particulate emissions.
2. Hydrochloric acid.
3. Carbon monoxide.
4. Arsenic and compounds.
5. Beryllium and compounds.
6. Cadmium and compounds.
7. Hexavalent chromium and compounds.
8. Lead compounds.
9. Mercury and compounds.
10. Nickel and compounds.
11. Dioxins.

The Department reserves the right to require the owner or operator to conduct further source tests at any time if it is determined to be necessary after the initial compliance test.

UNITS GREATER THAN 300 POUNDS PER HOUR AND
LESS THAN OR EQUAL TO 2000 POUNDS PER HOUR

1. Particulate emissions.
2. Hydrochloric acid.
3. Carbon monoxide.
4. Arsenic and compounds.
5. Beryllium and compounds.
6. Cadmium and compounds.
7. Hexavalent chromium and compounds.
8. Lead compounds.
9. Mercury and compounds.
10. Nickel and compounds.
11. Dioxins.
12. Sulfur dioxide.

The owner or operator shall conduct source tests at any time or interval of time as may be prescribed by the Department after the initial test. At a minimum, source tests shall be conducted (a) for all pollutants specified in F.2 of the BAT every year, and (b) for hydrochloric acid and sulfur dioxide, if monitors are required, as required by the Department for the initial certification and system performance audits of the continuous monitors. As a data base is established and the emissions consistently show compliance the schedule may be altered.

UNITS 2000 POUNDS OR GREATER PER HOUR

1. Particulate emissions.

2. Hydrochloric acid.
3. Carbon monoxide.
4. Arsenic and compounds.
5. Beryllium and compounds.
6. Cadmium and compounds.
7. Hexavalent chromium and compounds.
8. Lead compounds.
9. Mercury and compounds.
10. Nickel and compounds.
11. Dioxins.
12. Sulfur dioxide.

The owner or operator shall conduct source tests at any time or interval of time as may be prescribed by the Department. At a minimum, items 1 through 10 must be tested every 6 months. Item 11, dioxins, must be tested once per year. For hydrochloric acid and sulfur dioxide (if monitors are required) as required by the Department for initial certification and system performance audits of the continuous monitors.

As a data base is established and the emissions consistently show compliance, the schedule may be altered by the Department.

**D. OVERVIEW OF STACK EMISSIONS, COMBUSTION EFFICIENCY AND
VISIBLE EMISSIONS LIMITATIONS**

Pollutant	Unit size		
	< 300#/hr. =	< 2000#/hr. =	> 2000#/hr.
Particulate Matter	.08 gdscf corrected to 7% O ₂	.03 gdscf corrected to 7% O ₂	.015 gdscf corrected to 7% O ₂
Carbon Monoxide	100 ppmv hr avg corrected to 7% O ₂ dry basis	100 ppmv hr avg corrected to 7% O ₂ dry basis upstream	100 ppmv hr avg corrected to 7% O ₂ dry basis upstream
Hydrochloric Acid	4#/hr or 90% wt reduction hourly basis	30 ppmv hr avg corrected to 7% O ₂ dry basis or 90%wt red/hr	30 ppmv hr avg corrected to 7% O ₂ dry basis or 90%wt red/hr
Sulfur dioxide	NA	30 ppmv hr avg corrected to 7% O ₂ dry basis or 75%wt red/8h	30 ppmv hr avg corrected to 7% O ₂ dry basis or 75%wt red/8h
Combustion efficiency	NA	NA	99.9% hr avg (see formula)
Visible emissions	= to or > 10% 3 min/hr or = to or > 30% at any time	= to or > 10% 3 min/hr or = to or > 30% at any time	= to or > 10% 3 min/hr or = to or > 30% at any time

E. OVERVIEW OF MONITORING REQUIREMENTS

Parameter Unit size

	< 300#/hr =	< 2000#/hr =	>2000#/hr
Temperature	Secondary chamber exit temp- measure, continuously monitor and record see ₁	Secondary chamber exit temp- measure, continuously monitor and record see ₁	Secondary chamber exit temp- measure, continuously monitored and record see ₁
Oxygen	NA	Continuous monitoring & recording	Continuous monitoring & recording
Carbon monoxide	NA	Continuous monitoring & recording	Continuous monitoring & recording
Opacity	NA	Continuous monitoring & recording	Continuous monitoring & recording
Carbon dioxide	NA	NA	Continuous monitoring & recording
Sulfur dioxide	DER reserves right to require see ₂	DER reserves right to require see ₂	DER reserves right to require see ₂
Hydrochloric-acid	NA	NA	DER reserves right to require see ₂

¹ Sensors shall be located such that flames from the burners do not impinge on the sensors.

² If the applicant chooses to comply with sulfur dioxide and hydrochloric acid emission limitations by meeting the 75% and 90% reduction requirement, the monitors, when required, shall be located upstream and downstream from the air pollution control device. If the applicant chooses to monitor the two locations with a single detector, the two locations should be sampled at an interval acceptable to the Department.

F. PENALTY ADJUSTMENTS

CEMS penalty adjustment requests are to be filed with the Regional Environmental Protection Manager, Bureau of Air Quality Control (*currently Air Quality*), within 30 days following the receipt of the Department CEMS reports by the company.

1. Upon receiving a request with adequate documentation from a source owner the Regional Environmental Protection Manager, Bureau of Air Quality Control, (*currently Air Quality*) may make penalty adjustments in accordance with the following:
 - a. Both opacity emission and data availability penalties may be reduced in a multiple incinerator situation with one opacity CEMS when one or more incinerators are shut down. The penalty factor will be based upon the rated capacity of incinerators operating at the time of the violation.
 - b. Data availability penalty adjustments may be made under the following circumstances:
 - i. If a source owner demonstrates compliance with applicable emission standards by alternate means. The amount of the reduction depends on the degree of confidence with which compliance can be demonstrated.
 - ii. If the source owner demonstrates that the penalty was due to events or circumstances beyond the control of the source owner. The amount of the reduction depends on the extent to which the situation was uncontrollable.
 - iii. If the source owner takes extraordinary steps to reduce the extent of outage or steps to prevent similarly caused outages. The amount of the reduction depends on the results or effectiveness of the steps taken.
2. The Chief of the Division of Abatement and Compliance (*currently Compliance and Enforcement*) may adjust any penalty. Requests for such adjustments must be referred through the Regional Environmental Protection

Manager, Bureau of Air Quality Control (*currently Air Quality*).

G. UNIVERSAL QUARTERLY REPORT FORMATS

INSTRUCTIONS
STANDARD EMISSIONS REPORT
(Hourly Averages, Hard Copy and Floppy Disk)

NOTE: ALL ALPHABETIC ENTRIES TO BE MADE IN UPPER CASE

DESCRIPTIVE INFORMATION:

"COMPANY NAME:" - Enter company name as it appears in DEP correspondence.
"LOCATION:" - Enter location as it appears in DEP correspondence.
"SOURCE:" - Enter source name as it appears in DEP correspondence.
"CEMS ID NO. (+SOURCE ID+ANALYZER ID):"
- Enter number (iiiiisa) where:
 iiii = CEMS ID NO. assigned by DEP
 s = SOURCE ID NO. assigned by DEP
 a = ANALYZER ID NO. assigned by DEP
 (0 if reporting data corrected in terms of standard)
"PARAMETER:" - Enter name of pollutant/parameter monitored (i.e. OPACITY, SO2, Temperature, C.E., etc.)
"QUARTER:" - Enter number of quarter (1, 2, 3 or 4)
"YEAR:" - Enter last 2 digits of year (89, etc.)
"UNITS:" - Enter units reported (PPM, %X100, DEGREES, etc.)

HOURLY DATA/MONITORING CODES/PROCESS CODES:

For each hour of valid monitoring data, enter the hourly average (####) as follows:

If units are PPM or DEGREES, truncate to whole number and enter preceded by leading zeros if necessary to fill 4 spaces.

If units are %X100 (use whenever reporting data collected/calculated as %), multiply % by 100, truncate to whole number and enter preceded by leading zeros if necessary to fill 4 spaces.

For other units, contact the Source Testing and Monitoring Section for instructions.

For each hour of invalid monitoring data, enter II##, where ## = Monitoring Code (10-21) most responsible for invalidation of data.

For each hour of either valid or invalid monitoring data, enter the Process Code (01-09) that best represents the operating conditions of the process during that hour. The process code is to be entered following the period that separates it from the data entry.

(Universal Quarterly Report Formats continued, page 2)

CALIBRATION ERROR CHECK RESULTS:

For each analyzer involved in determining the reported data, enter the "CEMS ID NO. (+SOURCE ID+ANALYZER ID)" (as explained above) and the low (LO), mid (MD) and high (HI) calibration error check results from the required quarterly calibration error check. Report as percentages truncated to the "tenths" place. When more than one calibration error check is conducted during the quarter, report only the first set of results obtained.

SIGNATURE AND TITLE:

The report must be signed by the person having managerial responsibility for the source. The title of the person signing the report must appear below the signature.

(Universal Quarterly Report Formats continued, page 3)

STANDARD EMISSIONS REPORT PAGE 1

COMPANY NAME:

LOCATION:

SOURCE:

CEMS ID NO. (+SOURCE ID+ANALYZER ID):

PARAMETER:

QUARTER:

YEAR:

UNITS:

HOUR	1	2	3	4	5	6	7	8
	9	10	11	12	13	14	15	16
	17	18	19	20	21	22	23	24

XXXX.PC XXXX.PC XXXX.PC XXXX.PC XXXX.PC XXXX.PC XXXX.PC XXXX.PC

DAY

01	_____	_____	_____	_____	_____	_____	_____	_____
	_____	_____	_____	_____	_____	_____	_____	_____
02	_____	_____	_____	_____	_____	_____	_____	_____
	_____	_____	_____	_____	_____	_____	_____	_____
03	_____	_____	_____	_____	_____	_____	_____	_____
	_____	_____	_____	_____	_____	_____	_____	_____
04	_____	_____	_____	_____	_____	_____	_____	_____
	_____	_____	_____	_____	_____	_____	_____	_____
05	_____	_____	_____	_____	_____	_____	_____	_____
	_____	_____	_____	_____	_____	_____	_____	_____
06	_____	_____	_____	_____	_____	_____	_____	_____
	_____	_____	_____	_____	_____	_____	_____	_____
07	_____	_____	_____	_____	_____	_____	_____	_____
	_____	_____	_____	_____	_____	_____	_____	_____
08	_____	_____	_____	_____	_____	_____	_____	_____
	_____	_____	_____	_____	_____	_____	_____	_____
09	_____	_____	_____	_____	_____	_____	_____	_____
	_____	_____	_____	_____	_____	_____	_____	_____
10	_____	_____	_____	_____	_____	_____	_____	_____
	_____	_____	_____	_____	_____	_____	_____	_____
11	_____	_____	_____	_____	_____	_____	_____	_____
	_____	_____	_____	_____	_____	_____	_____	_____
12	_____	_____	_____	_____	_____	_____	_____	_____
	_____	_____	_____	_____	_____	_____	_____	_____
13	_____	_____	_____	_____	_____	_____	_____	_____
	_____	_____	_____	_____	_____	_____	_____	_____
14	_____	_____	_____	_____	_____	_____	_____	_____

15 _____ . _____ . _____ . _____ . _____ . _____ . _____ . _____ .
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_____ . _____ . _____ . _____ . _____ . _____ . _____ . _____ .

(Universal Quarterly Report Formats continued, page 4)

STANDARD EMISSIONS REPORT PAGE 2

CEMS ID NO. (+SOURCE ID+ANALYZER ID):

QUARTER:

YEAR:

HOUR	1	2	3	4	5	6	7	8
	9	10	11	12	13	14	15	16
	17	18	19	20	21	22	23	24
	XXXX.PC	XXXX.PC	XXXX.PC	XXXX.PC	XXXX.PC	XXXX.PC	XXXX.PC	XXXX.PC

DAY

16	_____	_____	_____	_____	_____	_____	_____	_____
	_____	_____	_____	_____	_____	_____	_____	_____
	_____	_____	_____	_____	_____	_____	_____	_____
17	_____	_____	_____	_____	_____	_____	_____	_____
	_____	_____	_____	_____	_____	_____	_____	_____
	_____	_____	_____	_____	_____	_____	_____	_____
18	_____	_____	_____	_____	_____	_____	_____	_____
	_____	_____	_____	_____	_____	_____	_____	_____
	_____	_____	_____	_____	_____	_____	_____	_____
19	_____	_____	_____	_____	_____	_____	_____	_____
	_____	_____	_____	_____	_____	_____	_____	_____
	_____	_____	_____	_____	_____	_____	_____	_____
20	_____	_____	_____	_____	_____	_____	_____	_____
	_____	_____	_____	_____	_____	_____	_____	_____
	_____	_____	_____	_____	_____	_____	_____	_____
21	_____	_____	_____	_____	_____	_____	_____	_____
	_____	_____	_____	_____	_____	_____	_____	_____
	_____	_____	_____	_____	_____	_____	_____	_____
22	_____	_____	_____	_____	_____	_____	_____	_____
	_____	_____	_____	_____	_____	_____	_____	_____
	_____	_____	_____	_____	_____	_____	_____	_____
23	_____	_____	_____	_____	_____	_____	_____	_____
	_____	_____	_____	_____	_____	_____	_____	_____
	_____	_____	_____	_____	_____	_____	_____	_____
24	_____	_____	_____	_____	_____	_____	_____	_____
	_____	_____	_____	_____	_____	_____	_____	_____
	_____	_____	_____	_____	_____	_____	_____	_____
25	_____	_____	_____	_____	_____	_____	_____	_____
	_____	_____	_____	_____	_____	_____	_____	_____
	_____	_____	_____	_____	_____	_____	_____	_____
26	_____	_____	_____	_____	_____	_____	_____	_____
	_____	_____	_____	_____	_____	_____	_____	_____
	_____	_____	_____	_____	_____	_____	_____	_____
27	_____	_____	_____	_____	_____	_____	_____	_____
	_____	_____	_____	_____	_____	_____	_____	_____
	_____	_____	_____	_____	_____	_____	_____	_____
28	_____	_____	_____	_____	_____	_____	_____	_____
	_____	_____	_____	_____	_____	_____	_____	_____
	_____	_____	_____	_____	_____	_____	_____	_____
29	_____	_____	_____	_____	_____	_____	_____	_____
	_____	_____	_____	_____	_____	_____	_____	_____
	_____	_____	_____	_____	_____	_____	_____	_____
30	_____	_____	_____	_____	_____	_____	_____	_____
	_____	_____	_____	_____	_____	_____	_____	_____
	_____	_____	_____	_____	_____	_____	_____	_____

31 _____ . _____ . _____ . _____ . _____ . _____ . _____ . _____ . _____ .
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32 _____ . _____ . _____ . _____ . _____ . _____ . _____ . _____ . _____ .
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(Universal Quarterly Report Formats continued, page 5)

STANDARD EMISSIONS REPORT PAGE 3

CEMS ID NO. (+SOURCE ID+ANALYZER ID):

QUARTER:

YEAR:

HOUR	1	2	3	4	5	6	7	8
	9	10	11	12	13	14	15	16
	17	18	19	20	21	22	23	24

	XXXX.PC	XXXX.PC	XXXX.PC	XXXX.PC	XXXX.PC	XXXX.PC	XXXX.PC	XXXX.PC
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DAY

33	_____	_____	_____	_____	_____	_____	_____	_____
	_____	_____	_____	_____	_____	_____	_____	_____
	_____	_____	_____	_____	_____	_____	_____	_____
34	_____	_____	_____	_____	_____	_____	_____	_____
	_____	_____	_____	_____	_____	_____	_____	_____
	_____	_____	_____	_____	_____	_____	_____	_____
35	_____	_____	_____	_____	_____	_____	_____	_____
	_____	_____	_____	_____	_____	_____	_____	_____
	_____	_____	_____	_____	_____	_____	_____	_____
36	_____	_____	_____	_____	_____	_____	_____	_____
	_____	_____	_____	_____	_____	_____	_____	_____
	_____	_____	_____	_____	_____	_____	_____	_____
37	_____	_____	_____	_____	_____	_____	_____	_____
	_____	_____	_____	_____	_____	_____	_____	_____
	_____	_____	_____	_____	_____	_____	_____	_____
38	_____	_____	_____	_____	_____	_____	_____	_____
	_____	_____	_____	_____	_____	_____	_____	_____
	_____	_____	_____	_____	_____	_____	_____	_____
39	_____	_____	_____	_____	_____	_____	_____	_____
	_____	_____	_____	_____	_____	_____	_____	_____
	_____	_____	_____	_____	_____	_____	_____	_____
40	_____	_____	_____	_____	_____	_____	_____	_____
	_____	_____	_____	_____	_____	_____	_____	_____
	_____	_____	_____	_____	_____	_____	_____	_____
41	_____	_____	_____	_____	_____	_____	_____	_____
	_____	_____	_____	_____	_____	_____	_____	_____
	_____	_____	_____	_____	_____	_____	_____	_____
42	_____	_____	_____	_____	_____	_____	_____	_____
	_____	_____	_____	_____	_____	_____	_____	_____
	_____	_____	_____	_____	_____	_____	_____	_____
43	_____	_____	_____	_____	_____	_____	_____	_____
	_____	_____	_____	_____	_____	_____	_____	_____
	_____	_____	_____	_____	_____	_____	_____	_____
44	_____	_____	_____	_____	_____	_____	_____	_____
	_____	_____	_____	_____	_____	_____	_____	_____
	_____	_____	_____	_____	_____	_____	_____	_____
45	_____	_____	_____	_____	_____	_____	_____	_____
	_____	_____	_____	_____	_____	_____	_____	_____
	_____	_____	_____	_____	_____	_____	_____	_____
46	_____	_____	_____	_____	_____	_____	_____	_____
	_____	_____	_____	_____	_____	_____	_____	_____
	_____	_____	_____	_____	_____	_____	_____	_____
47	_____	_____	_____	_____	_____	_____	_____	_____
	_____	_____	_____	_____	_____	_____	_____	_____
	_____	_____	_____	_____	_____	_____	_____	_____

48 _____ . _____ . _____ . _____ . _____ . _____ . _____ . _____ . _____ .
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49 _____ . _____ . _____ . _____ . _____ . _____ . _____ . _____ . _____ .
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(Universal Quarterly Report Formats continued, page 6)

STANDARD EMISSIONS REPORT PAGE 4

CEMS ID NO. (+SOURCE ID+ANALYZER ID):

QUARTER:

YEAR:

HOUR	1	2	3	4	5	6	7	8
	9	10	11	12	13	14	15	16
	17	18	19	20	21	22	23	24
	XXXX.PC	XXXX.PC	XXXX.PC	XXXX.PC	XXXX.PC	XXXX.PC	XXXX.PC	XXXX.PC

DAY

50	_____	_____	_____	_____	_____	_____	_____	_____
	_____	_____	_____	_____	_____	_____	_____	_____
	_____	_____	_____	_____	_____	_____	_____	_____
51	_____	_____	_____	_____	_____	_____	_____	_____
	_____	_____	_____	_____	_____	_____	_____	_____
	_____	_____	_____	_____	_____	_____	_____	_____
52	_____	_____	_____	_____	_____	_____	_____	_____
	_____	_____	_____	_____	_____	_____	_____	_____
	_____	_____	_____	_____	_____	_____	_____	_____
53	_____	_____	_____	_____	_____	_____	_____	_____
	_____	_____	_____	_____	_____	_____	_____	_____
	_____	_____	_____	_____	_____	_____	_____	_____
54	_____	_____	_____	_____	_____	_____	_____	_____
	_____	_____	_____	_____	_____	_____	_____	_____
	_____	_____	_____	_____	_____	_____	_____	_____
55	_____	_____	_____	_____	_____	_____	_____	_____
	_____	_____	_____	_____	_____	_____	_____	_____
	_____	_____	_____	_____	_____	_____	_____	_____
56	_____	_____	_____	_____	_____	_____	_____	_____
	_____	_____	_____	_____	_____	_____	_____	_____
	_____	_____	_____	_____	_____	_____	_____	_____
57	_____	_____	_____	_____	_____	_____	_____	_____
	_____	_____	_____	_____	_____	_____	_____	_____
	_____	_____	_____	_____	_____	_____	_____	_____
58	_____	_____	_____	_____	_____	_____	_____	_____
	_____	_____	_____	_____	_____	_____	_____	_____
	_____	_____	_____	_____	_____	_____	_____	_____
59	_____	_____	_____	_____	_____	_____	_____	_____
	_____	_____	_____	_____	_____	_____	_____	_____
	_____	_____	_____	_____	_____	_____	_____	_____
60	_____	_____	_____	_____	_____	_____	_____	_____
	_____	_____	_____	_____	_____	_____	_____	_____
	_____	_____	_____	_____	_____	_____	_____	_____
61	_____	_____	_____	_____	_____	_____	_____	_____
	_____	_____	_____	_____	_____	_____	_____	_____
	_____	_____	_____	_____	_____	_____	_____	_____
62	_____	_____	_____	_____	_____	_____	_____	_____
	_____	_____	_____	_____	_____	_____	_____	_____
	_____	_____	_____	_____	_____	_____	_____	_____
63	_____	_____	_____	_____	_____	_____	_____	_____
	_____	_____	_____	_____	_____	_____	_____	_____
	_____	_____	_____	_____	_____	_____	_____	_____
64	_____	_____	_____	_____	_____	_____	_____	_____
	_____	_____	_____	_____	_____	_____	_____	_____
	_____	_____	_____	_____	_____	_____	_____	_____

65 _____ . _____ . _____ . _____ . _____ . _____ . _____ . _____ . _____ .
_____ . _____ . _____ . _____ . _____ . _____ . _____ . _____ . _____ .
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66 _____ . _____ . _____ . _____ . _____ . _____ . _____ . _____ . _____ .
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_____ . _____ . _____ . _____ . _____ . _____ . _____ . _____ . _____ .

(Universal Quarterly Report Formats continued, page 7)

STANDARD EMISSIONS REPORT PAGE 5
CEMS ID NO. (+SOURCE ID+ANALYZER ID):
QUARTER:
YEAR:

HOUR	1	2	3	4	5	6	7	8
	9	10	11	12	13	14	15	16
	17	18	19	20	21	22	23	24
	XXXX.PC	XXXX.PC	XXXX.PC	XXXX.PC	XXXX.PC	XXXX.PC	XXXX.PC	XXXX.PC

DAY								
67	_____	_____	_____	_____	_____	_____	_____	_____
	_____	_____	_____	_____	_____	_____	_____	_____
	_____	_____	_____	_____	_____	_____	_____	_____
68	_____	_____	_____	_____	_____	_____	_____	_____
	_____	_____	_____	_____	_____	_____	_____	_____
	_____	_____	_____	_____	_____	_____	_____	_____
69	_____	_____	_____	_____	_____	_____	_____	_____
	_____	_____	_____	_____	_____	_____	_____	_____
	_____	_____	_____	_____	_____	_____	_____	_____
70	_____	_____	_____	_____	_____	_____	_____	_____
	_____	_____	_____	_____	_____	_____	_____	_____
	_____	_____	_____	_____	_____	_____	_____	_____
71	_____	_____	_____	_____	_____	_____	_____	_____
	_____	_____	_____	_____	_____	_____	_____	_____
	_____	_____	_____	_____	_____	_____	_____	_____
72	_____	_____	_____	_____	_____	_____	_____	_____
	_____	_____	_____	_____	_____	_____	_____	_____
	_____	_____	_____	_____	_____	_____	_____	_____
73	_____	_____	_____	_____	_____	_____	_____	_____
	_____	_____	_____	_____	_____	_____	_____	_____
	_____	_____	_____	_____	_____	_____	_____	_____
74	_____	_____	_____	_____	_____	_____	_____	_____
	_____	_____	_____	_____	_____	_____	_____	_____
	_____	_____	_____	_____	_____	_____	_____	_____
75	_____	_____	_____	_____	_____	_____	_____	_____
	_____	_____	_____	_____	_____	_____	_____	_____
	_____	_____	_____	_____	_____	_____	_____	_____
76	_____	_____	_____	_____	_____	_____	_____	_____
	_____	_____	_____	_____	_____	_____	_____	_____
	_____	_____	_____	_____	_____	_____	_____	_____
77	_____	_____	_____	_____	_____	_____	_____	_____
	_____	_____	_____	_____	_____	_____	_____	_____
	_____	_____	_____	_____	_____	_____	_____	_____
78	_____	_____	_____	_____	_____	_____	_____	_____
	_____	_____	_____	_____	_____	_____	_____	_____
	_____	_____	_____	_____	_____	_____	_____	_____
79	_____	_____	_____	_____	_____	_____	_____	_____
	_____	_____	_____	_____	_____	_____	_____	_____
	_____	_____	_____	_____	_____	_____	_____	_____
80	_____	_____	_____	_____	_____	_____	_____	_____
	_____	_____	_____	_____	_____	_____	_____	_____
	_____	_____	_____	_____	_____	_____	_____	_____
81	_____	_____	_____	_____	_____	_____	_____	_____
	_____	_____	_____	_____	_____	_____	_____	_____
	_____	_____	_____	_____	_____	_____	_____	_____

82 _____ . _____ . _____ . _____ . _____ . _____ . _____ . _____ . _____ .
_____ . _____ . _____ . _____ . _____ . _____ . _____ . _____ . _____ .
_____ . _____ . _____ . _____ . _____ . _____ . _____ . _____ . _____ .
83 _____ . _____ . _____ . _____ . _____ . _____ . _____ . _____ . _____ .
_____ . _____ . _____ . _____ . _____ . _____ . _____ . _____ . _____ .
_____ . _____ . _____ . _____ . _____ . _____ . _____ . _____ . _____ .

(Universal Quarterly Report Formats continued, page 8)

STANDARD EMISSIONS REPORT PAGE 6

CEMS ID NO. (+SOURCE ID+ANALYZER ID):

QUARTER:

YEAR:

HOUR	1	2	3	4	5	6	7	8
	9	10	11	12	13	14	15	16
	17	18	19	20	21	22	23	24
	XXXX.PC	XXXX.PC	XXXX.PC	XXXX.PC	XXXX.PC	XXXX.PC	XXXX.PC	XXXX.PC

DAY

84	_____	_____	_____	_____	_____	_____	_____	_____
	_____	_____	_____	_____	_____	_____	_____	_____
85	_____	_____	_____	_____	_____	_____	_____	_____
	_____	_____	_____	_____	_____	_____	_____	_____
86	_____	_____	_____	_____	_____	_____	_____	_____
	_____	_____	_____	_____	_____	_____	_____	_____
87	_____	_____	_____	_____	_____	_____	_____	_____
	_____	_____	_____	_____	_____	_____	_____	_____
88	_____	_____	_____	_____	_____	_____	_____	_____
	_____	_____	_____	_____	_____	_____	_____	_____
89	_____	_____	_____	_____	_____	_____	_____	_____
	_____	_____	_____	_____	_____	_____	_____	_____
90	_____	_____	_____	_____	_____	_____	_____	_____
	_____	_____	_____	_____	_____	_____	_____	_____
91	_____	_____	_____	_____	_____	_____	_____	_____
	_____	_____	_____	_____	_____	_____	_____	_____
92	_____	_____	_____	_____	_____	_____	_____	_____
	_____	_____	_____	_____	_____	_____	_____	_____

CALIBRATION ERROR CHECK RESULTS (%):

ID	_____	_____	_____	_____	_____	_____	_____	_____
LO	_____	_____	_____	_____	_____	_____	_____	_____
MD	_____	_____	_____	_____	_____	_____	_____	_____
HI	_____	_____	_____	_____	_____	_____	_____	_____

PROCESS CODES (PC):

- 01= CHANGING FUELS
- 02= CONTROL EQUIP. MALF.
- 03= STARTUP
- 04= SHUTDOWN
- 05= CHANGING OPERATING LEVEL
- 06= CLEAN PROCESS EQUIP.
- 07= CLEAN CONTROL EQUIP.
- 08= NORMAL OPERATION
- 09= OTHER

MONITORING CODES (MC) (XXXX=IIMC if invalid):

- 10= REQUIRED ADJUSTMENT NOT MADE
- 11= EXCESS DRIFT PRIMARY ANALYZER
- 12= EXCESS DRIFT ANCILLARY ANALYZER
- 13= PROCESS DOWN
- 14= RECALIBRATION
- 15= PREVENTIVE MAINTENANCE
- 16= PRIMARY ANALYZER MALFUNCTION
- 17= ANCILLARY ANALYZER MALFUNCTION
- 18= DATA HANDLING SYSTEM MALFUNCTION
- 19= SAMPLE INTERFACE MALFUNCTION
- 20= CORRECTIVE MAINTENANCE
- 21= OTHER

TO THE BEST OF MY KNOWLEDGE, THE INFORMATION IN THIS REPORT REPRESENTS TRUE

AND ACCURATE DATA.

XXXX = PPM FOR HCL,SO2,CO,NOX

%X100 FOR O2,C.E.,SO2R
HCLR,OPACITY

SIGNED _____

DEG FOR TEMPERATURE

TITLE _____

(Universal Quarterly Report Formats continued, page 9)

CEMS DATA FORMAT FOR FLOPPY DISKS (Hourly Averages)

NOTE: Data must be recorded on floppy disks readable by IBM PC-compatible computer disk drives in one of the following formats:

- DS, DD, 96TPI, 5-1/4 inch, 360K
- DS, HD, 96TPI, 5-1/4 inch, 1.2M
- DS, DD, 135TPI, 3-1/2 inch, 720K
- DS, HD, 135TPI, 3-1/2 inch, 1.4M

File names: iiiiisaH.qyy where - iiii = CEMS ID NO. assigned by DEP
s = SOURCE ID NO. assigned by DEP
a = ANALYZER ID NO. assigned by DEP
(always '0' for reports)
q = QUARTER NO. (1-4)
yy = LAST 2 DIGITS OF YEAR

Data is recorded on a source basis corrected (for moisture, %O₂, etc.) as standard upper case ASCII text as follows:

([CR] = carriage return, Decimal ASCII 13; [LF] = line feed, Decimal ASCII 10; [FF] = form feed, Decimal ASCII 12; \ = space, Decimal ASCII 32; [EOF] = end of file, Decimal ASCII 26)

(Upper case indicates literal entry, lower case indicates replace with actual information)

Line Data

```
1 STANDARD\EMISSIONS\REPORT\PAGE\1[CR][LF]
2 COMPANY\NAME:\company name[CR][LF]
3 LOCATION:\location[CR][LF]
4 SOURCE:\source name[CR][LF]
5 CEMS\ID\NO.\(+SOURCE\ID+ANALYZER\ID):\iiiiisa[CR][LF]
6 PARAMETER:\parameter name (opacity, temperature, etc.))[CR][LF]
7 QUARTER:\q[CR][LF]
8 YEAR:\yy[CR][LF]
9 UNITS:\units reported (PPM, %X100, DEGREES, etc.))[CR][LF]
10 [CR][LF]
11 HOUR\1\2\3\4\5\6\7\8[CR][LF]
12 \9\10\11\12\13\14\15\16[CR][LF]
13 \17\18\19\20\21\22\23\24[CR][LF]
14 \\\XXXX.PC\XXXX.PC\XXXX.PC\XXXX.PC\XXXX.PC\XXXX.PC\XXXX.PC\XXXX.PC[CR][LF]
15 DAY[CR][LF]
16 01\xxxx.pc\xxxx.pc\xxxx.pc\xxxx.pc\xxxx.pc\xxxx.pc\xxxx.pc\xxxx.pc[CR][LF]
17 \\\xxxx.pc\xxxx.pc\xxxx.pc\xxxx.pc\xxxx.pc\xxxx.pc\xxxx.pc\xxxx.pc[CR][LF]
18 \\\xxxx.pc\xxxx.pc\xxxx.pc\xxxx.pc\xxxx.pc\xxxx.pc\xxxx.pc\xxxx.pc[CR][LF]
19 repeat lines 16 through 18, replacing 1st 2 characters with 02, 03, etc.
thru
57
```


(Universal Quarterly Report Formats continued, page 10)

```
58 15\xxxx.pc\xxxx.pc\xxxx.pc\xxxx.pc\xxxx.pc\xxxx.pc\xxxx.pc\xxxx.pc[CR][LF]
59 \\xxxx.pc\xxxx.pc\xxxx.pc\xxxx.pc\xxxx.pc\xxxx.pc\xxxx.pc\xxxx.pc[CR][LF]
60 \\xxxx.pc\xxxx.pc\xxxx.pc\xxxx.pc\xxxx.pc\xxxx.pc\xxxx.pc\xxxx.pc[CR][LF][FF]
61 STANDARD\EMISSIONS\REPORT\PAGE\2[CR][LF]
62 CEMS\ID\NO.\(+SOURCE\ID+ANALYZER\ID):\iiiiisa[CR][LF]
63 QUARTER:\q[CR][LF]
64 YEAR:\yy[CR][LF]
65 repeat lines 11 through 15
thru
69
70 repeat lines 16 through 18, replacing 1st 2 characters with 16, 17, etc.
thru
117
118 32\xxxx.pc\xxxx.pc\xxxx.pc\xxxx.pc\xxxx.pc\xxxx.pc\xxxx.pc\xxxx.pc[CR][LF]
119 \\xxxx.pc\xxxx.pc\xxxx.pc\xxxx.pc\xxxx.pc\xxxx.pc\xxxx.pc\xxxx.pc[CR][LF]
120 \\xxxx.pc\xxxx.pc\xxxx.pc\xxxx.pc\xxxx.pc\xxxx.pc\xxxx.pc\xxxx.pc[CR][LF][FF]
121 STANDARD\EMISSIONS\REPORT\PAGE\3[CR][LF]
122 CEMS\ID\NO.\(+SOURCE\ID+ANALYZER\ID):\iiiiisa[CR][LF]
123 QUARTER:\q[CR][LF]
124 YEAR:\yy[CR][LF]
125 repeat lines 11 through 15
thru
129
130 repeat lines 16 through 18, replacing 1st 2 characters with 33, 34, etc.
thru
177
178 49\xxxx.pc\xxxx.pc\xxxx.pc\xxxx.pc\xxxx.pc\xxxx.pc\xxxx.pc\xxxx.pc[CR][LF]
179 \\xxxx.pc\xxxx.pc\xxxx.pc\xxxx.pc\xxxx.pc\xxxx.pc\xxxx.pc\xxxx.pc[CR][LF]
180 \\xxxx.pc\xxxx.pc\xxxx.pc\xxxx.pc\xxxx.pc\xxxx.pc\xxxx.pc\xxxx.pc[CR][LF][FF]
181 STANDARD\EMISSIONS\REPORT\PAGE\4
182 CEMS\ID\NO.\(+SOURCE\ID+ANALYZER\ID):\iiiiisa[CR][LF]
183 QUARTER:\q[CR][LF]
184 YEAR:\yy[CR][LF]
185 repeat lines 11 through 15
thru
189
190 repeat lines 16 through 18, replacing 1st 2 characters with 50, 51, etc.
thru
237
238 66\xxxx.pc\xxxx.pc\xxxx.pc\xxxx.pc\xxxx.pc\xxxx.pc\xxxx.pc\xxxx.pc[CR][LF]
239 \\xxxx.pc\xxxx.pc\xxxx.pc\xxxx.pc\xxxx.pc\xxxx.pc\xxxx.pc\xxxx.pc[CR][LF]
240 \\xxxx.pc\xxxx.pc\xxxx.pc\xxxx.pc\xxxx.pc\xxxx.pc\xxxx.pc\xxxx.pc[CR][LF][FF]
241 STANDARD\EMISSIONS\REPORT\PAGE\5[CR][LF]
242 CEMS\ID\NO.\(+SOURCE\ID+ANALYZER\ID):\iiiiisa[CR][LF]
243 QUARTER:\q[CR][LF]
244 YEAR:\yy[CR][LF]
245 repeat lines 11 through 15
thru
249
```

(Universal Quarterly Report Formats continued, page 11)

```
250 repeat lines 16 through 18, replacing 1st 2 characters with 67, 68, etc.
thru
297
298 83\xxxx.pc\xxxx.pc\xxxx.pc\xxxx.pc\xxxx.pc\xxxx.pc\xxxx.pc\xxxx.pc[CR][LF]
299 \\xxxx.pc\xxxx.pc\xxxx.pc\xxxx.pc\xxxx.pc\xxxx.pc\xxxx.pc\xxxx.pc[CR][LF]
300 \\xxxx.pc\xxxx.pc\xxxx.pc\xxxx.pc\xxxx.pc\xxxx.pc\xxxx.pc\xxxx.pc[CR][LF][FF]
301 STANDARD\EMISSIONS\REPORT\PAGE\6[CR][LF]
302 CEMS\ID\NO.\(+SOURCE\ID+ANALYZER\ID):\iiiiisa[CR][LF]
303 QUARTER:\q[CR][LF]
304 YEAR:\yy[CR][LF]
305 repeat lines 11 through 15
thru
309
310 repeat lines 16 through 18, replacing 1st 2 characters with 84, 85, etc.
thru
336
337 CALIBRATION\ERROR\CHECK\RESULTS\(%):[CR][LF]
338 Diiiiisa\iiiiisa\iiiiisa\iiiiisaiiiiiisa\iiiiisaiiiiiisa\iiiiisa\iiiiisa[CR][LF]
339 LO\xx.x\///xx.x\///xx.x\///xx.x\///xx.x\///xx.x\///xx.x\///xx.x\///xx.x\///xx.x[CR][LF]
340 MD\xx.x\///xx.x\///xx.x\///xx.x\///xx.x\///xx.x\///xx.x\///xx.x\///xx.x\///xx.x[CR][LF]
341 HI\xx.x\///xx.x\///xx.x\///xx.x\///xx.x\///xx.x\///xx.x\///xx.x\///xx.x\///xx.x[CR][LF]
342 PROCESS\CODES\ (PC):[CR][LF]
343 01=\CHANGING\FUELS\////////04=\SHUTDOWN\////////07=\CLEAN\CONTROL\EQUIP.[CR][LF]
344 02=CONTROL\EQUIP.\MALF.05=CHANGING\OPERATING\LEVEL\08=NORMAL\OPERATION[CR][LF]
345 03=\STARTUP\////////06=\CLEAN\PROCESS\EQUIP.\\\\\09=\OTHER[CR][LF]
346 [CR][LF]
347 MONITORING\CODES\ (MC)\(XXXX=IIMC\if\invalid):[CR][LF]
348 10=\REQUIRED\ADJUSTMENT\NOT\MADE\\\\\16=\PRIMARY\ANALYZER\MALFUNCTION[CR][LF]
349 11=\EXCESS\DRIFT\PRIMARY\ANALYZER\\\\\17=\ANCILLARY\ANALYZER\MALFUNCTION[CR][LF]
350 12=\EXCESSDRIFT\ANCILLARY\ANALYZER\18=DATA\HANDLING\SYSTEM\MALFUNCTION[CR][LF]
351 13=\PROCESS\DOWN\////////19=\SAMPLE\INTERFACE\MALFUNCTION[CR][LF]
352 14=\RECLIBRATION\////////20=\CORRECTIVE\MAINTENANCE[CR][LF]
353 15=\PREVENTIVE\MAINTENANCE\////////21=\OTHER[CR][LF]
354 TO\THEBEST\OFMY\KNOWLEDGE,THE\INFORMATION\IN\THIS\REPORTREPRESENTSTRUE[CR][LF]
355 AND\ACCURATE\DATA.[CR][LF]
356 [CR][LF]
357 XXXX=\PPM\///FOR\HCL\SO2\CO\NOX
358 \\\\\%X100\FOR\O2,C.E.,SO2R\///SIGNED\_____ [CR][LF]
359 \\\\\HCLR,OPACITY[CR][LF]
360 \\\\\DEG\///FOR\TEMPERATURE\///TITLE\_____ [CR][LF]
```

NOTE: for xxxx = ppm or degrees, truncate to whole number
= % O2, C.E., SO2R, HCLR, OR OPACITY, multiply by 100 and truncate
to whole number

ALWAYS FILL xxxx WITH LEADING ZEROS!!!

H. OPACITY INCIDENT REPORT FORMATS

INSTRUCTIONS OPACITY EXCESS EMISSIONS REPORT (Hard Copy and Floppy Disk)

NOTE: ALL ALPHABETIC ENTRIES TO BE MADE IN UPPER CASE

DESCRIPTIVE INFORMATION:

"COMPANY NAME:" - Enter company name as it appears in DEP correspondence.
"LOCATION:" - Enter location as it appears in DEP correspondence.
"SOURCE:" - Enter source name as it appears in DEP correspondence.
"CEMS ID NO. (+SOURCE ID+ANALYZER ID):"
- Enter number (iiiiisa) where:
 iiii = CEMS ID NO. assigned by DEP
 s = SOURCE ID NO. assigned by DEP
 a = ANALYZER ID NO. assigned by DEP
 (0 if reporting data corrected in terms of standard)
"QUARTER:" - Enter number of quarter (1, 2, 3 or 4)
"YEAR:" - Enter last 2 digits of year (89, etc.)

DATA/PROCESS CODES:

NOTE - Alternate columns for entries (1st entry in left column, 2nd in right column, 3rd in left column, etc.)

For each hour when excess emissions occurred, enter:

DATE - Enter as mm/dd/yy using leading zeros where appropriate.

HR - Enter as 01 through 24 using leading zeros as necessary to fill 2 spaces.

PC - Enter appropriate Process Code using leading zeros as necessary to fill 2 spaces. Use code which best represents the operating conditions of the process during the hour.

#MIN 10-29 - Enter the number of one-minute averages in the specified range (for standards other than MWI opacity standards, contact the Source Testing and Monitoring Section for specific instructions), using leading zeros as necessary to fill 2 spaces.

#MIN >29 - Enter the number of one-minute averages in the specified range (for standards other than MWI opacity standards, contact the Source Testing and Monitoring Section for specific instructions), using leading zeros as necessary to fill 2 spaces.

(Opacity Incident Report Formats continued, page 2)

- 1MAX MIN - Enter the value of the highest one-minute average during the hour (01-99) using leading zeros as necessary to fill 2 spaces.
- 4MAX MIN - Enter the value of the fourth highest one-minute average during the hour (01- 99) using leading zeros as necessary to fill 2 spaces.

SIGNATURE AND TITLE:

The report must be signed by the person having managerial responsibility for the source. The title of the person signing the report must appear below the signature.

(Opacity Incident Report Formats continued, page 3)

OPACITY EXCESS EMISSIONS REPORT

COMPANY NAME:

LOCATION:

SOURCE:

CEMS ID NO. (+SOURCE ID+ANALYZER ID):

QUARTER:

YEAR:

NO. OF ENTRIES:

DATE	HR	PC	#MIN		1MAX MIN	4MAX MIN	!!		DATE	HR	PC	#MIN		1MAX MIN	4MAX MIN
			10-29	>29			!!	!!				10-29	>29		
___/___/___	___	___	___	___	___	___	!!	___/___/___	___	___	___	___	___	___	___
___/___/___	___	___	___	___	___	___	!!	___/___/___	___	___	___	___	___	___	___
___/___/___	___	___	___	___	___	___	!!	___/___/___	___	___	___	___	___	___	___
___/___/___	___	___	___	___	___	___	!!	___/___/___	___	___	___	___	___	___	___
___/___/___	___	___	___	___	___	___	!!	___/___/___	___	___	___	___	___	___	___
___/___/___	___	___	___	___	___	___	!!	___/___/___	___	___	___	___	___	___	___
___/___/___	___	___	___	___	___	___	!!	___/___/___	___	___	___	___	___	___	___
___/___/___	___	___	___	___	___	___	!!	___/___/___	___	___	___	___	___	___	___
___/___/___	___	___	___	___	___	___	!!	___/___/___	___	___	___	___	___	___	___
___/___/___	___	___	___	___	___	___	!!	___/___/___	___	___	___	___	___	___	___
___/___/___	___	___	___	___	___	___	!!	___/___/___	___	___	___	___	___	___	___
___/___/___	___	___	___	___	___	___	!!	___/___/___	___	___	___	___	___	___	___
___/___/___	___	___	___	___	___	___	!!	___/___/___	___	___	___	___	___	___	___
___/___/___	___	___	___	___	___	___	!!	___/___/___	___	___	___	___	___	___	___
___/___/___	___	___	___	___	___	___	!!	___/___/___	___	___	___	___	___	___	___
___/___/___	___	___	___	___	___	___	!!	___/___/___	___	___	___	___	___	___	___
___/___/___	___	___	___	___	___	___	!!	___/___/___	___	___	___	___	___	___	___
___/___/___	___	___	___	___	___	___	!!	___/___/___	___	___	___	___	___	___	___
___/___/___	___	___	___	___	___	___	!!	___/___/___	___	___	___	___	___	___	___
___/___/___	___	___	___	___	___	___	!!	___/___/___	___	___	___	___	___	___	___
___/___/___	___	___	___	___	___	___	!!	___/___/___	___	___	___	___	___	___	___
___/___/___	___	___	___	___	___	___	!!	___/___/___	___	___	___	___	___	___	___
___/___/___	___	___	___	___	___	___	!!	___/___/___	___	___	___	___	___	___	___
___/___/___	___	___	___	___	___	___	!!	___/___/___	___	___	___	___	___	___	___
___/___/___	___	___	___	___	___	___	!!	___/___/___	___	___	___	___	___	___	___
___/___/___	___	___	___	___	___	___	!!	___/___/___	___	___	___	___	___	___	___
___/___/___	___	___	___	___	___	___	!!	___/___/___	___	___	___	___	___	___	___
___/___/___	___	___	___	___	___	___	!!	___/___/___	___	___	___	___	___	___	___
___/___/___	___	___	___	___	___	___	!!	___/___/___	___	___	___	___	___	___	___
___/___/___	___	___	___	___	___	___	!!	___/___/___	___	___	___	___	___	___	___
___/___/___	___	___	___	___	___	___	!!	___/___/___	___	___	___	___	___	___	___
___/___/___	___	___	___	___	___	___	!!	___/___/___	___	___	___	___	___	___	___
___/___/___	___	___	___	___	___	___	!!	___/___/___	___	___	___	___	___	___	___
___/___/___	___	___	___	___	___	___	!!	___/___/___	___	___	___	___	___	___	___
___/___/___	___	___	___	___	___	___	!!	___/___/___	___	___	___	___	___	___	___
___/___/___	___	___	___	___	___	___	!!	___/___/___	___	___	___	___	___	___	___
___/___/___	___	___	___	___	___	___	!!	___/___/___	___	___	___	___	___	___	___

PROCESS CODES (PC):

- 01= CHANGING FUELS
- 02= CONTROL EQUIP. MALF.
- 03= STARTUP
- 04= SHUTDOWN
- 05= CHANGING OPERATING LEVEL
- 06= CLEAN PROCESS EQUIP.
- 07= CLEAN CONTROL EQUIP.
- 08= NORMAL OPERATION
- 09= OTHER

TO THE BEST OF MY KNOWLEDGE, THE INFORMATION IN THIS REPORT REPRESENTS TRUE AND ACCURATE DATA.

SIGNED _____

TITLE _____

(Opacity Incident Report Formats continued, page 4)

CEMS DATA FORMAT FOR FLOPPY DISKS (Opacity Excess Emissions)

NOTE: Data must be recorded on floppy disks readable by IBM PC-compatible computer disk drives in one of the following formats:

- DS, DD, 96TPI, 5-1/4 inch, 360K
- DS, HD, 96TPI, 5-1/4 inch, 1.2M
- DS, DD, 135TPI, 3-1/2 inch, 720K
- DS, HD, 135TPI, 3-1/2 inch, 1.4M

File names: `iiiiisaE.qyy` where - `iiii` = CEMS ID NO. assigned by DEP
`s` = SOURCE ID NO. assigned by DEP
`a` = ANALYZER ID NO. (always '0' for reports)
`q` = QUARTER NO. (1-4)
`yy` = LAST 2 DIGITS OF YEAR

Data is recorded on a source basis as standard upper case ASCII text as follows:

([CR] = carriage return, Decimal Ascii 13; [LF] = line feed, Decimal Ascii 10; [FF] = form feed, Decimal Ascii 12; \ = space, Decimal Ascii 32; [EOF] = end of file, Decimal Ascii 26)

(Upper case indicates literal entry, lower case indicates replace with actual information)

Line Data

```
1  OPACITY\EXCESS\EMISSIONS\REPORT\PAGE\1[CR][LF]
2  COMPANY\NAME:\company name[CR][LF]
3  LOCATION:\location[CR][LF]
4  SOURCE:\source name[CR][LF]
5  CEMS ID NO. (+SOURCE ID+ANALYZER ID):\iiiiisa[CR][LF]
6  QUARTER:\q[CR][LF]
7  YEAR:\yy[CR][LF]
8  \\\\\\\\\\\STAT\#MIN\#\#MIN\1MAX\4MAX\!!\\\\\\STAT\#MIN\#\#MIN\1MAX\4MAX[CR][LF]
9  DATE\HR\CODE\10-29\>29\MIN\MIN\!!\DATE\HR\CODE\10-29\>29\MIN\MIN[CR][LF]
10 [CR][LF]
11 xx/xx/xx\xx\xx\xx\xx\xx\xx\!!\xx/xx/xx\xx\xx\xx\xx\xx[CR][LF]
12 repeat line 11
thru
50
51 PROCESS\OPERATIONAL\STATUS\CODES:[CR][LF]
52 01=\CHANGING\FUELS\\\\\\\\\04=\SHUTDOWN\\\\\\\\\07=\CLEAN\CONTROL\EQUIP.[CR][LF]
53 02=\CONTROL\EQUIP.MALF.05=CHANGING\OPERATING\LEVEL\08=NORMAL\OPERATION[CR][LF]
54 03=\STARTUP\\\\\\\\\06=\CLEAN\PROCESS\EQUIP.\\\\\09=[CR][LF]
```

```
55      [CR][LF]
56      TO\THE\BEST\OF\MYKNOWLEDGE,THEINFORMATION\IN\THISREPORT\REPRESENTSTRUE[CR][LF]
57      AND\ACCURATE\DATA.[CR][LF]
58      \\\SIGNED\_____ [CR][LF]
59      [CR][LF]
60      \\\TITLE\_____ [CR][LF]
```

If additional data must be reported, enter [FF] then repeat lines 1 through 60, but identify as PAGE 2, PAGE 3, etc.

I. LOW TEMPERATURE INCIDENT REPORT FORMATS

INSTRUCTIONS LOW TEMPERATURE REPORT (Hard Copy and Floppy Disk)

NOTE: ALL ALPHABETIC ENTRIES TO BE MADE IN UPPER CASE

DESCRIPTIVE INFORMATION:

- "COMPANY NAME:" - Enter company name as it appears in DEP correspondence.
"LOCATION:" - Enter location as it appears in DEP correspondence.
"SOURCE:" - Enter source name as it appears in DEP correspondence.
"CEMS ID NO. (+SOURCE ID+ANALYZER ID):"
- Enter number (iiiiisa) where:
 iiii = CEMS ID NO. assigned by DEP
 s = SOURCE ID NO. assigned by DEP
 a = ANALYZER ID NO. assigned by DEP
 (0 if reporting data corrected in terms of standard)
"QUARTER:" - Enter number of quarter (1, 2, 3 or 4)
"YEAR:" - Enter last 2 digits of year (89, etc.)
"NO. OF ENTRIES:"
- Enter total number of data lines (count each column separately)
 appearing in report.

DATA/PROCESS CODES:

NOTE - Alternate columns for entries (1st entry in left column, 2nd in right column, 3rd in left column, etc.)

For each hour when low temperature occurred, enter:

- DATE BEG - Enter date as mm/dd/yy using leading zeros where appropriate.
HR BEG - Enter hour as 01 through 24 using leading zeros as necessary to fill 2 spaces.
MIN BEG - Enter minute low temperature incident began as 01 through 60 using leading zeros as necessary to fill 2 spaces.
#MIN LONG - Enter the number of minutes of low temperature during the hour using leading zeros as necessary to fill 4 spaces.
PC - Enter appropriate Process Code using leading zeros as necessary to fill 2 spaces. Use code which best represents the operating conditions of the process during the hour.

(Low Temperature Incident Report Formats continued, page 2)

AVG xxxx - Enter the average of the low temperatures using leading zeros as necessary to fill 4 spaces.

LOW xxxx - Enter the lowest one-minute average temperature during the hour using leading zeros as necessary to fill 4 spaces.

SIGNATURE AND TITLE:

The report must be signed by the person having managerial responsibility for the source. The title of the person signing the report must appear below the signature.

TO THE BEST OF MY KNOWLEDGE, THE INFORMATION IN THIS REPORT REPRESENTS TRUE AND ACCURATE DATA.

XXXX = DEG FOR TEMPERATURE SIGNED _____

TITLE _____

(Low Temperature Incident Report Formats continued, page 4)

CEMS DATA FORMAT FOR FLOPPY DISKS (Low Temperature Report)

NOTE: Data must be recorded on floppy disks readable by IBM PC-compatible computer disk

drives in one of the following formats:

- DS, DD, 96TPI, 5-1/4 inch, 360K
- DS, HD, 96TPI, 5-1/4 inch, 1.2M
- DS, DD, 135TPI, 3-1/2 inch, 720K
- DS, HD, 135TPI, 3-1/2 inch, 1.4M

File names: iiiiisaT.qyy where - iiii = CEMS ID NO. assigned by DEP
s = SOURCE ID NO. assigned by DEP
a = ANALYZER ID NO. (always '0' for reports)
q = QUARTER NO. (1-4)
yy = LAST 2 DIGITS OF YEAR

Data is recorded on a source basis as standard upper case ASCII text as follows:

([CR] = carriage return, Decimal Ascii 13; [LF] = line feed, Decimal Ascii 10; [FF] = form feed, Decimal Ascii 12; \ = space, Decimal Ascii 32; [EOF] = end of file, Decimal Ascii 26)

(Upper case indicates literal entry, lower case indicates replace with actual information)

Line Data

```
1 LOW\TEMPERATURE\REPORT\PAGE\1[CR][LF]
2 COMPANY\NAME:\company name[CR][LF]
3 LOCATION:\location[CR][LF]
4 SOURCE:\source name[CR][LF]
5 CEMS ID NO. (+SOURCE ID+ANALYZER ID):\iiiiisa[CR][LF]
6 QUARTER:\q[CR][LF]
7 YEAR:\yy[CR][LF]
8 DATE\\\HOUR\MIN\#MIN\\\AVG\LOW\\!!\DATE\\\HOUR\MIN\#MIN\AVG\LOW\[CR][LF]
9 START\\BEG\BEG\LONG\PC\XXXX\XXXX\\!!\START\BEG\\BEG\LONG\PC\XXXX\XXXX[CR][LF]
10 [CR][LF]
11 xx/xx/xx\xx\\xx\xxxx\xx\xxxx\xxxx\!!\xx/xx/xx\xx\xx\xxxx\xx\xxxx\xxxx[CR][LF]
12 repeat line 11
thru
49
50 PROCESS\CODES\PC):[CR][LF]
51 01=\CHANGING\FUELS\04=\SHUTDOWN\07=\CLEAN\CONTROL\EQUIP.[CR][LF]
52 02=\CONTROL\EQUIP.MALF.05=CHANGING\OPERATING\LEVEL\08=NORMAL\OPERATION[CR][LF]
53 03=\STARTUP\06=\CLEAN\PROCESS\EQUIP.\09=\OTHER[CR][LF]
```

54 [CR][LF]
55 TO\THEBEST\OFMY\KNOWLEDGE,THE\INFORMATION\INTHIS\REPORT\REPRESENTSTRUE[CR][LF]
56 AND\ACCURATE\DATA.[CR][LF]
57 [CR][LF]
58 XXXX\=\DEG\\\FOR\TEMPERATURE\\\SIGNED_____ [CR][LF]
59 [CR][LF]
60 \\\TITLE_____ [CR][LF]

If additional data must be reported, enter [FF] then repeat lines 1 through 60, but identify as PAGE 2, PAGE 3, etc.

J. WASTE CHARGING INTERLOCK INCIDENT REPORT FORMATS

INSTRUCTIONS MWI INTERLOCK INCIDENT REPORT (Hard Copy and Floppy Disk)

NOTE: ALL ALPHABETIC ENTRIES TO BE MADE IN UPPER CASE

DESCRIPTIVE INFORMATION:

- "COMPANY NAME:" - Enter company name as it appears in DEP correspondence.
"LOCATION:" - Enter location as it appears in DEP correspondence.
"SOURCE:" - Enter source name as it appears in DEP correspondence.
"CEMS ID NO. (+SOURCE ID+ANALYZER ID):"
- Enter number (iiiiisa) of associated opacity CEMS where:
 iiii = CEMS ID NO. assigned by DEP
 s = SOURCE ID NO. assigned by DEP
 a = ANALYZER ID NO. assigned by DEP
 (0 if reporting data corrected in terms of standard)
"QUARTER:" - Enter number of quarter (1, 2, 3 or 4)
"YEAR:" - Enter last 2 digits of year (89, etc.)
"NO. OF ENTRIES:"
- Enter total number of data lines (count each column separately)
 appearing in report.

DATA/PROCESS CODES:

NOTE - Alternate columns for entries (1st entry in left column, 2nd in right column, 3rd in left column, etc.)

For each hour when an incident requiring cessation of waste charging occurred, enter:

- DATE BEG - Enter date waste charging was ceased as mm/dd/yy using leading zeros where appropriate.
HR BEG - Enter hour waste charging was ceased as 01 through 24 using leading zeros as necessary to fill 2 spaces.
MN BEG - Enter minute waste charging was ceased as 01 through 60 using leading zeros as necessary to fill 2 spaces.
#MIN LONG - Enter the length of the incident during the hour (until compliance with all standards was achieved, thus allowing charging of waste) in minutes using leading zeros as necessary to fill 4 spaces.

(Waste Charging Interlock Incident Report Formats
continued, page 2)

- PC - Enter appropriate Process Code using leading zeros as necessary to fill 2 spaces. Use code which best represents the operating conditions of the process during the hour.
- AVG xxxx - Enter the average value, during non-charging time, of the parameter responsible for cessation of waste charging (Opacity, Temperature, O2, C.E.) using leading zeros as necessary to fill 4 spaces. For Temperature, enter as degrees. For Opacity, O2 and C.E. enter as %X100 truncated to a whole number.
- PARAMETER
NAME - Enter the name of the parameter responsible for cessation of waste charging (Opacity, Temperature, O2, C.E.).

SIGNATURE AND TITLE:

The report must be signed by the person having managerial responsibility for the source. The title of the person signing the report must appear below the signature.

AND ACCURATE DATA.

xxxx = %x100 for C.E.,O2,Opacity
deg for Temperature

Signed _____

Title _____

(Waste Charging Interlock Incident Report Formats
continued, page 4)

CEMS DATA FORMAT FOR FLOPPY DISKS (Interlock Incident Report)

NOTE: Data must be recorded on floppy disks readable by IBM PC-compatible computer disk

drives in one of the following formats:

DS, DD, 96TPI, 5-1/4 inch, 360K
DS, HD, 96TPI, 5-1/4 inch, 1.2M
DS, DD, 135TPI, 3-1/2 inch, 720K
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File names: iiiiisaI.qyy where - iiii = CEMS ID NO. assigned by DEP
(of associated opacity CEMS)
s = SOURCE ID NO. assigned by DEP
a = ANALYZER ID NO. (always '0' for reports)
q = QUARTER NO. (1-4)
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Data is recorded on a source basis as standard upper case ASCII text as follows:

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(Upper case indicates literal entry, lower case indicates replace with actual information)

Line Data

```
1 INTERLOCK\INCIDENT\REPORT\PAGE\1[CR][LF]
2 COMPANY\NAME:\company name[CR][LF]
3 LOCATION:\location[CR][LF]
4 SOURCE:\source name[CR][LF]
5 CEMS ID NO. (+SOURCE ID+ANALYZER ID):\iiiiisa[CR][LF]
6 QUARTER:\q[CR][LF]
7 YEAR:\yy[CR][LF]
8 DATE\HOUR\MIN\#MIN\AVG\PARAMETER\!!\DATE\HOUR\MIN\#MIN\AVG\PARAMETER[CR][LF]
9 START\BEG\BEG\LONG\XXXX\NAME\!!\START\BEG\BEG\LONG\XXXX\NAME[CR][LF]
10 [CR][LF]
11 xx/xx/xx\xx\xx\xxxx\xxxx\xxxxxxxx\!!\xx/xx/xx\xx\xx\xxxx\xxxx\xxxxxxxx[CR][LF]
12 repeat line 11
thru
53
54 [CR][LF]
55 TOTHE\BEST\OFMY\KNOWLEDGE,THE\INFORMATION\INTHIS\REPORT\REPRESENTSTRUE[CR][LF]
56 AND\ACCURATE\DATA.[CR][LF]
57 [CR][LF]
58 XXXX\=%X100\FOR\C.E.,O2,OPACITY\\\SIGNED\_____ [CR][LF]
59 \\\DEG\\\FOR\TEMPERATURE[CR][LF]
60 \\\TITLE\_____ [CR][LF]
```

If additional data must be reported, enter [FF] then repeat lines 1 through 60, but identify as PAGE 2, PAGE 3, etc.