Appendix 1

NSPS Subpart A - General Provisions

(Edited)

§ 60.1 Applicability.
§ 60.2 Definitions.
§ 60.4 Address.

§ 60.5 Determination of construction or modification.
§ 60.6 Review of plans.
§ 60.7 Notification and record keeping.

(a) Any owner or operator subject to the provisions of this part shall furnish the Administrator written notification or, if acceptable to both the Administrator and the owner or operator of a source, electronic notification, as follows:
   (1) A notification of the date construction (or reconstruction as defined under §60.15) of an affected facility is commenced postmarked no later than 30 days after such date. This requirement shall not apply in the case of mass-produced facilities which are purchased in completed form.
   (2) [Reserved]
   (3) A notification of the actual date of initial startup of an affected facility postmarked within 15 days after such date.
   (4) A notification of any physical or operational change to an existing facility which may increase the emission rate of any air pollutant to which a standard applies, unless that change is specifically exempted under an applicable subpart or in §60.14(e). This notice shall be postmarked 60 days or as soon as practicable before the change is commenced and shall include information describing the precise nature of the change, present and proposed emission control systems, productive capacity of the facility before and after the change, and the expected completion date of the change. The Administrator may request additional relevant information subsequent to this notice.
   (5) [continuous monitoring system performance] NA.
   (6), (7) [Opacity] NA

(b) Any owner or operator subject to the provisions of this part shall maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of an affected facility; any malfunction of the air pollution control equipment; or any periods during which a continuous monitoring system or monitoring device is inoperative.

(c) - (f) [continuous monitoring device] NA

§ 60.8 Performance tests.

(a) Except as specified in paragraphs (a)(1),(a)(2), (a)(3), and (a)(4) of this section, within 60 days after achieving the maximum production rate at which the affected facility will be operated, but not later than 180 days after initial startup of such facility, or at such other times specified by this part, and at such other times as may be required by the Administrator under section 114 of the Act, the owner or operator of such facility shall conduct performance test(s) and furnish the Administrator a written report of the results of such performance test(s).
   (1) If a force majeure is about to occur, occurs, or has occurred for which the affected owner or operator intends to assert a claim of force majeure, the owner or operator shall notify the Administrator, in writing as soon as practicable following the date the owner or operator first knew, or through due diligence should have known that the event may cause or caused a delay in testing beyond the regulatory deadline, but the notification must occur before the performance test deadline unless the initial force majeure or a subsequent force majeure event delays the notice, and in such cases, the notification shall occur as soon as practicable.
   (2) The owner or operator shall provide to the Administrator a written description of the force majeure event and a rationale for attributing the delay in testing beyond the regulatory deadline to the force majeure; describe the measures taken or to be taken to minimize the delay; and identify a date by which the owner or operator proposes to conduct the performance test. The performance test shall be conducted as soon as practicable after the force majeure occurs.
   (3) The decision as to whether or not to grant an extension to the performance test deadline is solely within the discretion of the Administrator. The Administrator will notify the owner or operator in writing of approval or disapproval of the request for an extension as soon as practicable.
   (4) Until an extension of the performance test deadline has been approved by the Administrator under paragraphs (a) (1), (2), and (3) of this section, the owner or operator of the affected facility remains strictly subject to the requirements of this part.

(b) Performance tests shall be conducted and data reduced in accordance with the test methods and procedures contained in each applicable subpart unless the Administrator (1) specifies or approves, in specific cases, the use of a reference method with minor changes in methodology, (2) approves the use of an equivalent method, (3) approves the use of an alternative method the results of which he has determined to be adequate for indicating whether a specific source is in compliance, (4) waives the requirement for performance tests because the owner or operator of a source has demonstrated by other means to the Administrator's satisfaction that the affected facility is in compliance with the standard, or (5) approves shorter sampling times and smaller sample volumes when necessitated by process variables or other factors. Nothing in this paragraph shall be construed to abrogate the Administrator's authority to require testing under section 114 of the Act.

(c) Performance tests shall be conducted under such conditions as the Administrator shall specify to the plant operator based on representative performance of the affected facility. The owner or operator shall make available to the Administrator such records as may be necessary to determine the conditions of the performance tests. Operations during periods of startup, shutdown, and malfunction shall not constitute representative conditions for the purpose of a performance test nor shall emissions in excess of the level of the applicable emission limit during periods of startup, shutdown, and malfunction be considered a violation of the applicable emission limit unless otherwise specified in the applicable standard.

(d) The owner or operator of an affected facility shall provide the Administrator at least 30 days prior notice of any performance test, except as specified under other subparts, to afford the Administrator the opportunity to have an observer present. If after 30 days' notice for an initially scheduled performance test, there is a delay (due to operational problems, etc.) in conducting the scheduled performance test, the owner or operator of an affected facility shall notify the Administrator (or delegated State or local agency) as soon as possible of any delay in the original test date, either by providing at least 7 days prior notice of the rescheduled date of the performance test, or by arranging a rescheduled date with the Administrator (or delegated State or local agency) by mutual agreement.

(e) The owner or operator of an affected facility shall provide, or cause to be provided, performance testing facilities as follows:

(1) Sampling ports adequate for test methods applicable to such facility. This includes (i) constructing the air pollution control system such that volumetric flow rates and pollutant emission rates can be accurately determined by applicable test methods and procedures and (ii) providing a stack or duct free of cyclonic flow during performance tests, as demonstrated by applicable test methods and procedures.

(2) Safe sampling platform(s).

(3) Safe access to sampling platform(s).

(4) Utilities for sampling and testing equipment.

(f) Unless otherwise specified in the applicable subpart, each performance test shall consist of three separate runs using the applicable test method. Each run shall be conducted for the time and under the conditions specified in the applicable standard. For the purpose of determining compliance with an applicable standard, the arithmetic means of results of the three runs shall apply. In the event that a sample is accidentally lost or conditions occur in which one of the three runs must be discontinued because of forced shutdown, failure of an irreplaceable portion of the sample train, extreme meteorological conditions, or other circumstances, beyond the owner or operator's control, compliance may, upon the Administrator's approval, be determined using the arithmetic mean of the results of the two other runs.

§ 60.9 Availability of information.

§ 60.10 State authority.

§ 60.11 Compliance with standards and maintenance requirements.

(a) – (c) [Blank]

(d) At all times, including periods of startup, shutdown, and malfunction, owners and operators shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.

(e) – (f) [Blank].

(g) For the purpose of submitting compliance certifications or establishing whether or not a person has violated or is in violation of any standard in this part, nothing in this part shall preclude the use, including the exclusive use, of any credible evidence or information, relevant to whether a source would have been in compliance with applicable requirements if the appropriate performance or compliance test or procedure had been performed.

§ 60.12 Circumvention.
§ 60.13 Monitoring requirements. [NSPS Subpart XX does not require continuous monitoring]
§ 60.14 Modification.
§ 60.15 Reconstruction.
§ 60.16 Priority list.
§ 60.17 Incorporations by reference.
§ 60.18 General control device and work practice requirements.
§ 60.19 General notification and reporting requirements.

(a) For the purposes of this part, time periods specified in days shall be measured in calendar days, even if the word "calendar" is absent, unless otherwise specified in an applicable requirement.

(b) For the purposes of this part, if an explicit postmark deadline is not specified in an applicable requirement for the submittal of a notification, application, report, or other written communication to the Administrator, the owner or operator shall postmark the submittal on or before the number of days specified in the applicable requirement. For example, if a notification must be submitted 15 days before a particular event is scheduled to take place, the notification shall be postmarked on or before 15 days preceding the event; likewise, if a notification must be submitted 15 days after a particular event takes place, the notification shall be delivered or postmarked on or before 15 days following the end of the event. The use of reliable non-Government mail carriers that provide indications of verifiable delivery of information required to be submitted to the Administrator, similar to the postmark provided by the U.S. Postal Service, or alternative means of delivery, including the use of electronic media, agreed to by the permitting authority, is acceptable.

(c) Notwithstanding time periods or postmark deadlines specified in this part for the submittal of information to the Administrator by an owner or operator, or the review of such information by the Administrator, such time periods or deadlines may be changed by mutual agreement between the owner or operator and the Administrator. Procedures governing the implementation of this provision are specified in paragraph (f) of this section.

(d) If an owner or operator of an affected facility in a State with delegated authority is required to submit periodic reports under this part to the State, and if the State has an established timeline for the submission of periodic reports that is consistent with the reporting frequency(ies) specified for such facility under this part, the owner or operator may change the dates by which periodic reports under this part shall be submitted (without changing the frequency of reporting) to be consistent with the State's schedule by mutual agreement between the owner or operator and the State. The allowance in the previous sentence applies in each State beginning 1 year after the affected facility is required to be in compliance with the applicable subpart in this part. Procedures governing the implementation of this provision are specified in paragraph (f) of this section.

(e) If an owner or operator supervises one or more stationary sources affected by standards set under this part and standards set under part 61, part 63, or both such parts of this chapter, he/she may arrange by mutual agreement between the owner or operator and the Administrator (or the State with an approved permit program) a common schedule on which periodic reports required by each applicable standard shall be submitted throughout the year. The allowance in the previous sentence applies in each State beginning 1 year after the stationary source is required to be in compliance with the applicable subpart in this part, or 1 year after the stationary source is required to be in compliance with the applicable 40 CFR part 61 or part 63 of this chapter standard, whichever is latest. Procedures governing the implementation of this provision are specified in paragraph (f) of this section.

(f)

(1)

(i) Until an adjustment of a time period or postmark deadline has been approved by the Administrator under paragraphs (f)(2) and (f)(3) of this section, the owner or operator of an affected facility remains strictly subject to the requirements of this part.

(ii) An owner or operator shall request the adjustment provided for in paragraphs (f)(2) and (f)(3) of this section each time he or she wishes to change an applicable time period or postmark deadline specified in this part.

(2) Notwithstanding time periods or postmark deadlines specified in this part for the submittal of information to the Administrator by an owner or operator, or the review of such information by the Administrator, such time periods or deadlines may be changed by mutual agreement between the owner or operator and the Administrator. An owner or operator who wishes to request a change in a time period or postmark deadline for a particular requirement shall request the adjustment in writing as soon as practicable before the subject activity is required to take place. The owner or operator shall include in the request whatever information he or she considers useful to convince the Administrator that an adjustment is warranted.

(3) If, in the Administrator's judgment, an owner or operator's request for an adjustment to a particular time period or postmark deadline is warranted, the Administrator will approve the adjustment. The Administrator will notify the owner or operator in writing of approval or disapproval of the request for an adjustment within 15 calendar days of receiving sufficient information to evaluate the request.

(4) If the Administrator is unable to meet a specified deadline, he or she will notify the owner or operator of any significant delay and inform the owner or operator of the amended schedule.

Appendix 2

Table 3 to Subpart BBBBBB of Part 63—Applicability of General Provisions

Citation	Subject
40 CFR 63.1	Applicability
40 CFR 63.1(c)(2)	Title V permit
40 CFR 63.2	Definitions
40 CFR 63.3	Units and Abbreviations
40 CFR 63.4	Prohibited Activities and Circumvention
40 CFR 63.5	Construction/Reconstruction
Compliance With Standards/Operation & Maintenance	
40 CFR 63.6(a)	Compliance with Standards/Operation & Maintenance Applicability
40 CFR 63.6(b)(1)–(4)	Compliance Dates for New and Reconstructed Sources
40 CFR 63.6(b)(5)	Notification
40 CFR 63.6(f)(2)–(3)	Methods for Determining Compliance
40 CFR 63.6(g)(1)–(3)	Alternative Standard
40 CFR 63.6(i)(1)–(14)	Compliance Extension
40 CFR 63.6(j)	Presidential Compliance Exemption
Performance Test	
40 CFR 63.7(a)(2)	Performance Test Dates
40 CFR 63.7(a)(3)	Section 114 Authority
40 CFR 63.7(b)(1)	Notification of Performance Test
40 CFR 63.7(b)(2)	Notification of Re-scheduling
40 CFR 63.7(c)	Quality Assurance (QA)/Test Plan
40 CFR 63.7(d)	Testing Facilities
40 CFR 63.7(e)(2)	Conditions for Conducting Performance Tests
40 CFR 63.7(e)(3)	Test Run Duration
40 CFR 63.7(f)	Alternative Test Method
40 CFR 63.7(g)	Performance Test Data Analysis
40 CFR 63.7(h)	Waiver of Tests
Monitoring	
40 CFR 63.8(a)(1)	Applicability of Monitoring Requirements
40 CFR 63.8(a)(2)	Performance Specifications
40 CFR 63.8(b)(1)	Monitoring
40 CFR 63.8(b)(2)–(3)	Multiple Effluents and Multiple Monitoring Systems
40 CFR 63.8(c)(1)	Monitoring System Operation and Maintenance
40 CFR 63.8(c)(1)(ii)	Operation and Maintenance of CMS
40 CFR 63.8(c) (2)–(8)	CMS Requirements
40 CFR 63.8(e)	CMS Performance Evaluation
40 CFR 63.8(f) (1)–(5)	Alternative Monitoring Method
40 CFR 63.8(f)(6)	Alternative to Relative Accuracy Test

Notification Requirements	
40 CFR 63.9(a)	Notification Requirements
40 CFR 63.9(b) (1)–(2), (4)–(5)	Initial Notifications
40 CFR 63.9(c)	Request for Compliance Extension
40 CFR 63.9(d)	Notification of Special Compliance Requirements for New Sources
40 CFR 63.9(e)	Notification of Performance Test
40 CFR 63.9(h)(1)–(6)	Notification of Compliance Status
40 CFR 63.9(i)	Adjustment of Submittal Deadlines
40 CFR 63.9(j)	Change in Previous Information
Record-Keeping/Reporting	
40 CFR 63.10(a)	Record-keeping/Reporting
40 CFR 63.10(b)(1)	Record-keeping/Reporting
40 CFR 63.10(b)(2)(iii)	Maintenance records
40 CFR 63.10(b)(2)(vi)–(xi)	CMS Records
40 CFR 63.10(b)(2)(xii)	Records
40 CFR 63.10(b)(2)(xiii)	Records
40 CFR 63.10(b)(2)(xiv)	Records
40 CFR 63.10(b)(3)	Records
40 CFR 63.10(d)(1)	General Reporting Requirements
40 CFR 63.10(d)(2)	Report of Performance Test Results
40 CFR 63.10(d)(4)	Progress Reports
40 CFR 63.10(e)(3)(i)–(iii)	Reports
40 CFR 63.10(e)(3)(iv)–(v)	Excess Emissions Reports
40 CFR 63.10(e)(3)(vi)–(viii)	Excess Emissions Report and Summary Report
40 CFR 63.10(f)	Waiver for Recordkeeping/Reporting

Appendix 3

Compliance Assurance Monitoring Requirements (CAM)

Pursuant to Rule 62-213.440(1)(b)1.a., F.A.C., the CAM plans that are included in this appendix contain the monitoring requirements necessary to satisfy 40 CFR 64. Conditions 1. – 17. are generic conditions applicable to all emissions units that are subject to the CAM requirements. Specific requirements related to each emissions unit are contained in the attached tables, as submitted by the applicant and approved by the Administrator.

40 CFR 64.6 Approval of Monitoring.

1. The attached CAM plan(s), as submitted by the applicant, is/are approved for the purposes of satisfying the requirements of 40 CFR 64.3.
[40 CFR 64.6(a)]

2. The attached CAM plan(s) include the following information:
(i) The indicator(s) to be monitored (such as temperature, pressure drop, emissions, or similar parameter);
(ii) The means or device to be used to measure the indicator(s) (such as temperature measurement device, visual observation, or CEMS); and
(iii) The performance requirements established to satisfy 40 CFR 64.3(b) or (d), as applicable.
[40 CFR 64.6(c)(1)]

3. The attached CAM plan(s) describe the means by which the owner or operator will define an exceedance of the permitted limits or an excursion from the stated indicator ranges and averaging periods for purposes of responding to (see **CAM Conditions 5. - 14.**) and reporting exceedances or excursions (see **CAM Conditions 15. – 16.**).
[40 CFR 64.6(c)(2)]

4. The owner or operator is required to conduct the monitoring specified in the attached CAM plan(s) and shall fulfill the obligations specified in the conditions below (see **CAM Conditions 5. - 16.**).
[40 CFR 64.6(c)(3)]

40 CFR 64.7 Operation of Approved Monitoring.

5. Commencement of operation. The owner or operator shall conduct the monitoring required under this appendix upon the effective date of this Title V permit.
[40 CFR 64.7(a)]

6. Proper maintenance. At all times, the owner or operator shall maintain the monitoring, including but not limited to, maintaining necessary parts for routine repairs of the monitoring equipment.
[40 CFR 64.7(b)]

7. Continued operation. Except for, as applicable, monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), the owner or operator shall conduct all monitoring in continuous operation (or shall collect data at all required intervals) at all times that the pollutant-specific emissions unit is operating. Data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities shall not be used for purposes of this part, including data averages and calculations, or fulfilling a minimum data availability requirement, if applicable.

The owner or operator shall use all the data collected during all other periods in assessing the operation of the control device and associated control system. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions.
[40 CFR 64.7(c)]

8. Response to excursions or exceedances.

a. Upon detecting an excursion or exceedance, the owner or operator shall restore operation of the pollutant-specific emissions unit (including the control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance (other than those caused by excused startup or shutdown conditions, if allowed by this permit). Such actions may include initial inspection and evaluation, recording that operations returned to normal without operator action (such as through response by a computerized distribution control system), or any necessary follow-up actions to return operation to within the indicator range, designated condition, or below the applicable emission limitation or standard, as applicable.

b. Determination of whether the owner or operator has used acceptable procedures in response to an excursion or exceedance will be based on information available, which may include but is not limited to, monitoring results, review of operation and maintenance procedures and records, and inspection of the control device, associated capture system, and the process.

[40 CFR 64.7(d)(1) & (2)]

9. Documentation of need for improved monitoring. If the owner or operator identifies a failure to achieve compliance with an emission limitation or standard for which the approved monitoring did not provide an indication of an excursion or exceedance while providing valid data, or the results of compliance or performance testing document a need to modify the existing indicator ranges or designated conditions, the owner or operator shall promptly notify the permitting authority and, if necessary, submit a proposed modification to the Title V permit to address the necessary monitoring changes. Such a modification may include, but is not limited to, reestablishing indicator ranges or designated conditions, modifying the frequency of conducting monitoring and collecting data, or the monitoring of additional parameters.
[40 CFR 64.7(e)]

40 CFR 64.8 Quality Improvement Plan (QIP) Requirements.

10. Based on the results of a determination made under **CAM Condition 8.b.,** above, the permitting authority may require the owner or operator to develop and implement a QIP. Consistent with **CAM Condition 4.**, an accumulation of exceedances or excursions exceeding 5 percent duration of a pollutant-specific emissions unit's operating time for a reporting period, may require the implementation of a QIP. The threshold may be set at a higher or lower percent or may rely on other criteria for purposes of indicating whether a pollutant-specific emissions unit is being maintained and operated in a manner consistent with good air pollution control practices.
[40 CFR 64.8(a)]

11. Elements of a QIP:

a. The owner or operator shall maintain a written QIP, if required, and have it available for inspection.

b. The plan initially shall include procedures for evaluating the control performance problems and, based on the results of the evaluation procedures, the owner or operator shall modify the plan to include procedures for conducting one or more of the following actions, as appropriate:

(i) Improved preventive maintenance practices.
(ii) Process operation changes.
(iii) Appropriate improvements to control methods.
(iv) Other steps appropriate to correct control performance.
(v) More frequent or improved monitoring (only in conjunction with one or more steps under **CAM Condition 11.b(i)** through **(iv)**, above).

[40 CFR 64.8(b)]

12. If a QIP is required, the owner or operator shall develop and implement a QIP as expeditiously as practicable and shall notify the permitting authority if the period for completing the improvements contained in the QIP exceeds 180 days from the date on which the need to implement the QIP was determined.
[40 CFR 64.8(c)]

13. Following implementation of a QIP, upon any subsequent determination pursuant to **CAM Condition 8.b.**, the permitting authority may require that an owner or operator make reasonable changes to the QIP if the QIP is found to have:

a. Failed to address the cause of the control device performance problems; or
b. Failed to provide adequate procedures for correcting control device performance problems as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions.

[40 CFR 64.8(d)]

14. Implementation of a QIP shall not excuse the owner or operator of a source from compliance with any existing emission limitation or standard, or any existing monitoring, testing, reporting or recordkeeping requirement that may apply under federal, state, or local law, or any other applicable requirements under the Act.
[40 CFR 64.8(e)]

<u>40 CFR 64.9 Reporting And Recordkeeping Requirements.</u>

15. <u>General reporting requirements.</u>

a. Commencing from the effective date of this permit, the owner or operator shall submit monitoring reports semi-annually to the permitting authority in accordance with Rule 62-213.440(1)(b)3.a., F.A.C.
b. A report for monitoring under this part shall include, at a minimum, the information required under Rule 62-213.440(1)(b)3.a., F.A.C., and the following information, as applicable:
(i) Summary information on the number, duration and cause (including unknown cause, if applicable) of excursions or exceedances, as applicable, and the corrective actions taken;
(ii) Summary information on the number, duration and cause (including unknown cause, if applicable) for monitor downtime incidents (other than downtime associated with zero and span or other daily calibration checks, if applicable); and
(iii) A description of the actions taken to implement a QIP during the reporting period as specified in **CAM Conditions 10.** through **14.** Upon completion of a QIP, the owner or operator shall include in the next summary report documentation that the implementation of the plan has been completed and reduced the likelihood of similar levels of excursions or exceedances occurring.

[40 CFR 64.9(a)]

16. <u>General recordkeeping requirements.</u>

a. The owner or operator shall comply with the recordkeeping requirements specified in Rule 62-213.440(1)(b)2., F.A.C. The owner or operator shall maintain records of monitoring data, monitor performance data, corrective actions taken, any written quality improvement plan required pursuant to **CAM Conditions 10.** through **14.** and any activities undertaken to implement a quality improvement plan, and other supporting information required to be maintained under this part (such as data used to document the adequacy of monitoring, or records of monitoring maintenance or corrective actions).

b. Instead of paper records, the owner or operator may maintain records on alternative media, such as microfilm, computer files, magnetic tape disks, or microfiche, provided that the use of such alternative media allows for expeditious inspection and review, and does not conflict with other applicable recordkeeping requirements.

[40 CFR 64.9(b)]

40 CFR 64.10 Savings Provisions.

17. It should be noted that nothing in this appendix shall:

a. Excuse the owner or operator of a source from compliance with any existing emission limitation or standard, or any existing monitoring, testing, reporting or recordkeeping requirement that may apply under federal, state, or local law, or any other applicable requirements under the Act. The requirements of this appendix shall not be used to justify the approval of monitoring less stringent than the monitoring which is required under separate legal authority and are not intended to establish minimum requirements for the purpose of determining the monitoring to be imposed under separate authority under the Act, including monitoring in permits issued pursuant to title I of the Act. The purpose of this part is to require, as part of the issuance of a permit under Title V of the Act, improved or new monitoring at those emissions units where monitoring requirements do not exist or are inadequate to meet the requirements of this part.

b. Restrict or abrogate the authority of the administrator or the permitting authority to impose additional or more stringent monitoring, recordkeeping, testing, or reporting requirements on any owner or operator of a source under any provision of the Act, including but not limited to sections 114(a)(1) and 504(b), or state law, as applicable.

c. Restrict or abrogate the authority of the administrator or permitting authority to take any enforcement action under the Act for any violation of an applicable requirement or of any person to take action under section 304 of the Act.

[40 CFR 64.10]

[Note: Table 1 and table 2 present the monitoring approach when using the vapor recovery unit (VRU) and the portable vapor combustion unit (VBU), respectfully]

Emissions Unit 023

Petroleum Liquid Loading Rack with Carbon Adsorption and Continuous Emission Monitor (CEMI)

Vapor Recovery Unit for Controlling TOC Emissions

TABLE 1.a: MONITORING APPROACH (VRU) – Indicator No 1

	Indicator No. 1 – TOC Concentration in the VRU Discharge Stack
I. Indicator	TOC concentration in the VRU discharge stack
Monitoring Approach	Monitor the TOC concentration from the VRU using a CEMS to confirm that it remains at or below 1.85% for a six-hour rolling average. *{Note. The monitored operating parameter value of 1.85% value (equivalency of the emission limit of 35 mg/liter TOC) was determined at the compliance test/RATA on 2/8/2012.}* *{Note. The 1.85% value also meets the GDGACT monitoring requirement for 80 mg/liter TOC emission limit.}*
II. Indicator Range	
Action Level Range	When the TOC concentration reaches 0.9% for a six-hour rolling average, an automated alarm will be triggered and the loading rack will shut-down. Loading will not resume until trouble shooting and repairs are successfully completed, the proper regeneration of the carbon bed is restored, or until a VBU is brought on-line. Table 2 shows the monitoring approach whenever the VBU is online. *{Note. If the CEM system is down for maintenance or malfunction the load rack is shut down and no loading occurs until the CEM system is up and running or the VBU is brought on-line.}* *{Note. The loading rack will also automatically shut down if the bed temperature reaches or exceeds 200 degrees F or if the vacuum on the beds does not reach 25" Hg. during the regeneration cycle.}*
Excursion	An excursion occurs when the TOC concentration exceeds 0.9% for a six-hour rolling average. *{Note. An excursion is possible if the CEMS malfunctions and the automatic alarm is not triggered followed by the shutdown of the loading rack.}*
III. Performance Criteria	
Data Representativeness	TOC % as Propane equivalency of the emission limit (35 mg/liter) is determined by compliance test. It is recorded and maintained electronically.
Verification of Operational Status	Operators conduct inspection of the VRU/CEM during normal business working days using documented inspection and maintenance procedures. .
QA/QC Practices and Criteria	The assigned mechanical Specialist performs and records semi-annual Preventative Maintenance using MPC's *Preventive Maintenance Form Vapor Recovery Unit – Dry Vacuum Pump (PMP).* - Daily calibration is automated
Monitoring Frequency	- Continuous
Data Collection Procedures	Hourly reading into data logger recorded and maintained electronically.
Averaging Period	Per six hours (rolling average)

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TABLE 1.b: MONITORING APPROACH (VRU) – Indicator No 2

	Indicator No. 2 – Preventative Maintenance Program
I. Indicator	Documentation of inspection, maintenance, biennial carbon bed testing, and operator training program.
Monitoring Approach	N/A
II. Indicator Range	
Action Level Range	N/A
Excursion	An excursion occurs when inspection maintenance, biennial carbon bed testing or operator training does not occur.
III. Performance Criteria	
Data Representativeness	- Proper VRU operation will be verified by trained personnel during normal business working days using documented inspection, and maintenance procedures. - Carbon samples from both beds will be collected in a manner that is representative of the carbon in each bed.
Verification of Operational Status	N/A
QA/QC Practices and Criteria	- New personnel are given 40 hours of hands-on training with a qualified operator, prior to working alone. - Each personnel trains annually with the VRU maintenance contractor on proper maintenance, operation, and repair of the VRU. - Carbon samples are sent to the manufacturer and/or licensed lab.
Monitoring Frequency	- Trained personnel conduct periodic operation and maintenance checks. - The VRU maintenance contractor performs semiannual scheduled maintenance, as noted in Section III QA/QC Practices & Criteria. - The carbon bed is tested biennially. - The VRU Maintenance Contractor completes and records Quarterly Calibration Gas Audits
Data Collection Procedures	- VRU daily inspections are recorded on the VRU Weekly Inspection Report. - When the VRU is taken out of service for routine maintenance, the event is recorded in VRU Downtime Report form. - Semiannual maintenance reports are prepared by the contractor and a copy of the report is submitted to the Terminal. - Quarterly Calibration Gas Audits are conducted by the VRU Maintenance Contractor and submitted to the Terminal. - Biennial carbon bed test results are maintained at the terminal. - Personnel training records are maintained by the Terminal Manager.
Averaging Period	N/A

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TABLE 1.c: MONITORING APPROACH (VRU) – Indicator No 3

	Indicator No. 3 - Observations for Emissions
I. Indicator	Loading rack system leaking emissions.
Monitoring Approach	Inspect loading rack system for leaking emissions monthly.
II. Indicator Range	
Action Level Range	A corrective action is triggered if an LEL reading of 10% - <20% confirms leaks detected by opacity, hearing or smell. The corrective action measure is to repair or take out of service leaking equipment within 15 days of discovery. A first attempt to repair shall be made within 5 days of discovery.
Excursion	An excursion occurs when the leaking equipment is not repaired or taken out of service within 15 days of discovery.
III. Performance Criteria	
Data Representativeness	The vapor line should not have any visible, audible or olfactory signs of leaking hydrocarbons coming from the piping and/or associated fittings.
Verification of Operational Status	An operator inspects the vapor line monthly for signs of any leaks.
QA/QC Practices and Criteria	New personnel are given 40 hours of hands-on training with a qualified operator prior to working alone.
Monitoring Frequency	Monthly during active loading operations.
Data Collection Procedures	Manually record information in a Monthly VOC log
Averaging Period	N/A.

APPENDICES

Emissions Unit 023
Petroleum Liquid Loading Rack with the Portable Vapor Combustion Unit (VBU)

[Note: Table 2 present the monitoring approach whenever the portable VBU to control VOC emissions from the loading rack]

TABLE 2.a: MONITORING APPROACH (VBU) – Indicator No 1

	Indicator No 1 – Pilot Flame detection
I. Indicator	Presence of pilot flame via an Ultraviolet Flame Scanner (UFS).
Monitoring Approach	The UFS monitors presence of a pilot flame on a continuous basis when the system is operating.
II. Indicator Range	Presence of an UFS signal during loading
Action Level Range	Loss of the UFS signal during loading.
Excursion	An excursion is defined as loss of UFS signal during loading. When there is a loss of the UFS signal the Programmable Logic Controller (PLC) shuts down the load rack and the combustor. The permissive signal prevents trucks from loading at the rack.
III. Performance Criteria	
Data Representativeness	- The UFS is mounted in the burner assembly to detect the presence of a pilot flame. - The UFS generates an electric signal if a flame is present. If the flame is absent, the signal to the PLC is lost and the PLC will shut down the VBU and also removes the permissive signal from the loading rack system, thus preventing truck loading.
Verification of Operational Status	- A UFS flame status indicator light on the VBU control panel indicates whether the UFS detects the presence of a flame. - An operator inspects the UFS indicator light and the presence of a pilot flame each day that loading occurs. The inspection is documented.
QA/QC Practices and Criteria	- Start-up Inspection of VBU, including UFS, conducted each time the VBU is brought on line at the terminal. - UFS scanner and pilot flame will be evaluated for proper operation and replace//repaired as necessary. - VBU brought in has always received a Compliance Test within the last 12 months.
Monitoring Frequency	The UFS, in conjunction with the fault alarm system in the PLC, continuously monitors for a pilot flame.
Data Collection Procedures	- Logging of proper UFS operation during active loading occurs on a daily basis. - Faults/alarms during loading will be re-coded in a fault/alarm log, including date, time, and reason for the fault/alarm and action taken.
Averaging Period	N/A

TABLE 2.b: MONITORING APPROACH (VBU) – Indicator No 2

	Indicator No 2 – Loading Rack Pressure
I. Indicator	Pressure gauge at the loading rack.
Monitoring Approach	Inspect pressure gauge at the loading rack.
II. Indicator Range	Gauge pressure below 17.5 W.C
Action Level Range	
Excursion	An excursion is defined when the reading on the gauge exceeds 17.5 W.C.
III. Performance Criteria	
Data Representativeness	The pressure gauge is connected to the vapor line.
Verification of Operational Status	An operator inspects the pressure/ vacuum vent and pressure gauge for proper operation.
QA/QC Practices and Criteria	- Annual calibration/accuracy verification is performed is accordance with the manufacturer's recommendation. - The Terminal may also choose to replace the gauge with a new factory calibrated gauge annually in lieu of calibration - New personnel are given 40 hours of hands-on training with a qualified person prior to working alone.
Monitoring Frequency	Daily during active loading operations.
Data Collection Procedures	Manually record information in a log.
Averaging Period	N/A

TABLE 2.c: MONITORING APPROACH (VBU) – Indicator No 3

	Indicator No. 3 - Observations for Emissions
I. Indicator	Loading rack system leaking emissions.
Monitoring Approach	Inspect loading rack system for leaking emissions monthly.
II. Indicator Range	
Action Level Range	A corrective action is triggered if an LEL reading of 10% - <20% confirms leaks detected by opacity, hearing or smell. The corrective action measure is to repair or take out of service leaking equipment within 15 days of discovery. A first attempt to repair shall be made within 5 days of discovery.
Excursion	An excursion occurs when the leaking equipment is not repaired or taken out of service within 15 days of discovery.
III. Performance Criteria	
Data Representativeness	The vapor line should not have any visible, audible or olfactory signs of leaking hydrocarbons coming from the piping and/or associated fittings.
Verification of Operational Status	An operator inspects the vapor line monthly for signs of any leaks.
QA/QC Practices and Criteria	New personnel are given 40 hours of hands-on training with a qualified operator prior to working alone.
Monitoring Frequency	Monthly during active loading operations.
Data Collection Procedures	Manually record information in a Monthly VOC log
Averaging Period	N/A.