Appendix CAM

Compliance Assurance Monitoring Requirements

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 emission unit are contained in the attached tables, as submitted by the applicant and approved.

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: [40 CFR 64.6(c)(1)]

a) The indicator(s) to be monitored (such as temperature, pressure drop, emissions, or similar parameter);
b) The means or device to be used to measure the indicator(s) (such as temperature measurement device, visual observation, or CEMS); and
c) The performance requirements established to satisfy 40 CFR 64.3(b) or (d), as applicable.

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 – 9**) and reporting exceedances or excursions (see **CAM Conditions 10 – 14**). [40 CFR 64.6(c)(2)]

4. The permittee 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 – 17**). [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. [40 CFR 64.7(d)(1) & (2)]

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.

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)]

<u>40 CFR 64.8 Quality Improvement Plan (QIP) Requirements.</u>

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. <u>Elements of a QIP</u>: [40 CFR 64.8(b)]

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)

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: [40 CFR 64.8(d)]

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.

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> [40 CFR 64.9(a)]

a) On and after the date specified in **CAM Condition 5** by which the owner or operator must use monitoring that meets the requirements of this appendix, 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.

16. <u>General recordkeeping requirements</u> [40 CFR 64.9(b)]

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 64.10 Savings Provisions.

17. It should be noted that nothing in this appendix shall: [40 CFR 64.10]

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.

CAM for Vapor Recovery Unit (VRU)

	Indicator 1	Indicator 2
Indicator	Continuously monitoring the VRU outlet VOC concentration volume as % propane.	Monitor system performance through weekly inspections.
Monitoring Approach	Use a continuous emissions monitoring system	Visual determination
Indicator Range Action Level Range	The VRU is programmed to trigger a loading rack shutdown alarm (which ceases product loading at the racks) when VOC emissions from the VRU exceed 9.0 mg/L (90% of the permitted VOC emission limit of 10 mg/L). The VRU is also programmed to trigger a warning alarm when VOC emissions from the VRU exceed 6.8 mg/L (75% of the shutdown alarm of 9.0 mg/L). These alarm values are based on 6-hour rolling average values.	The VRU will be inspected to ensure that the various operating parameters are within the specified ranges as recommended by the manufacturer. Inspection includes completing a checklist once per week and recording instantaneous readings of various operating parameters such as operating pressures, temperatures, and flow rates of specific pieces of VRU equipment.
Excursion Level/Reportable Incident Range	Loading rack shutdown alarms will be recorded by the PLC. Product loading at the Emission Unit (EU) No. 017 loading racks will cease if the VOC emissions from the VRU exceed 9.0 mg/L on a 6-hour rolling average basis. An exceedance will occur when the VOC emissions exceed 10.0 mg/L on a 6-hour rolling average basis while active loading is occurring, which corresponds to a VRU stack outlet concentration of 0.42% VOC by volume.*	A reportable incident (although not necessarily indicative of an emission of VOC above permitted levels) would occur if the weekly inspections are not performed and documented. Operational failsafes, such as warning and shutdown alarms, are present for key operational parameters. Shutdown alarms must be resolved before normal VRU operations can be resumed.

	Indicator 1	Indicator 2
Response to Indicators Action Level Range	Breach of the action level range will trigger an investigation, corrective action, and an internal reporting requirement. Upon an action level alarm being acknowledged by the facility, an investigation will be triggered and a corrective action will be initiated within 24 hours. If onsite personnel cannot conduct the required corrective action, a contractor will be contacted and brought onsite as soon as possible. For extended VRU outages, the OFFU will be utilized as the control device for loading operations associated with EU No. 017.	Shutdown alarms must be resolved before normal VRU operations can be resumed.
Performance Criteria Data Representativeness	The correlation between the stack outlet VOC concentration (% by volume) and the continuous emissions monitoring system alarm set points are based on the most recent successful compliance stack test. The stack test was conducted in accordance with accepted EPA methods.	Facility personnel will utilize a checklist during the weekly VRU inspection to verify key operational parameters are within acceptable operating ranges.
Verification of Operational Status	The continuous emissions monitoring system is fully operational.	Weekly inspections are being performed and operational data are being documented.
QA/QC Practices and Criteria	The continuous emissions monitoring system is calibrated in accordance with manufacturer's specifications.	Use standardized inspection forms provided by the VRU manufacturer.
Monitoring Frequency	The outlet VOC concentration from the VRU is monitored continuously and visual alarms are triggered when the action level is breached. The outlet VOC concentration is recorded by a data acquisition system on 1-minute intervals. The concentration shall be averaged, as applicable, over the applicable averaging period.	Inspections will be conducted on a weekly basis.
Data Collection Procedures	The outlet VOC concentration readings are recorded by a data acquisition system. Reports of the recorded VOC concentration data are generated daily. Also, the history of alarm occurrences is recorded.	Weekly inspections will be performed and data will be recorded on standardized inspection form provided by VRU manufacturer.
Averaging Period	The VRU discharge VOC concentration is averaged over a 6-hour continuous period.	N/A
APCD Bypass Monitoring	The VRU will serve as the primary control device for this PSEU. The OFFU will serve as the back-up unit. Under normal conditions, bypass of the VRU or OFFU cannot occur based on the design of the PSEU. Specifically, all vapors collected at the loading rack flow through a single header to the VRU or OFFU. Direction of the vapors to the VRU or OFFU will be controlled by a manual two way valve (i.e., if the valve is open to one control device it is closed to the other control device). There are no other lines coming from the loading rack, thus there are no alternative pathways for vapors to bypass the VRU or OFFU during normal operation.	

* This value is based on test data compiled during the performance test conducted on September 23, 2010. This value may change based on the latest successful compliance demonstration and confirmation of proposed changes from EPC. A Title V permit modification is not required to approve the changes to the correlations between outlet VOC concentration (% VOC by volume) and VOC emissions (mg/L).

CAM for Open Flare Flame Unit (OFFU)

	Indicator No. 1	**Indicator No. 2**
Applicable Requirement	Operate OFFU with no visible emissions (VE).	Operate OFFU with pilot flame present at all times.
General Monitoring Approach	Visible emissions observation.	Monitor presence of pilot flame.
Monitoring Methods and Location	Visible emissions observation via daily visual observations, supplemented by record keeping of instances in which unable to correct visible emissions problem and duration of VE. Perform a VE inspection as soon as any intentional or unintentional release of vent gas to the flare occurs (no later than one hour after event).	Thermocouple and alarm system.
Indicator Range	No visible emissions.	Presence of flame.
Data Collection Frequency	Daily.	Continuous when OFFU is in operation.
Averaging Period	None.	None.
Record keeping	Log all observations of visible emissions of more than a few seconds (control response time) and the duration of the event.	Data logger will be used to record presence of flame for pilot. Data logger will record all absence of flame alarms.
QA/QC	None.	Calibration, maintenance, and operation of thermocouple sensing probe will be performed following manufacturer's specifications.