REVISED October 15, 2012

HESS CORPORATION – TAMPA TERMINAL

COMPLIANCE ASSURANCE MONITORING (CAM) PLAN
TANK TRUCK LOADING RACK (EU 003)

CAM Plan for John Zink "ZTOF" (Zink Thermal Oxidizer Flare) Vapor Combustion Unit (VCU)

The key elements of the monitoring approach are presented in the tables below.

I. Indicator 1 Measurement Approach	Presence of flare pilot flame. Presence of flare pilot flame shall be monitored using a thermocouple or any other equivalent device to detect the presence of a flame.
II. Indicator Range Reporting Threshold	An excursion is defined as a failure for pilot detector to shutdown the vapor combustor unit (VCU) when there is no flame. All excursions shall be reported to the Department in semiannual monitoring reports.
III. Performance Criteria	
A. Data Representativeness	The pilot detector controls the operation of the VCU. When no pilot flame is detected, the VCU cannot start-up and if no flame is detected during operation, the VCU automatically shuts down and loading ceases.
B. Verification of Operational Status	The pilot detector is connected to an interlock system that ensures the VCU and loading rack cannot operate if no flame is detected.
C. QA/QC Practices and Criteria	VCU receives preventative maintenance **<u>four times</u>** per year. During each visit the following items are checked to ensure proper pilot operation: • Pull and clean pilot gas strainer. • Pull and clean assist gas strainer. • Check all indicator lights and sensors, replace if faulty. • Inspect spark ignition system. • Insure burner scanner is operating properly- blocking scanner and starting unit. Unit must shut down on flame failure. • Complete start-up procedure checked. • Verify operation of automated alarm / shutdown system.
D. Monitoring Frequency	Pilot detector operates continuously.
E. Data Collection	Results of inspections, system malfunctions, and preventative maintenance of the pilot operation are manually recorded and maintained on site.
F. Averaging Period	Not applicable.

I. Indicator 2 Measurement Approach	Operation of VCU. Visual inspection of VCU operation while emissions are vented into it.
II. Indicator Range Reporting Threshold	An excursion is defined as failure for VCU to operate while emissions are vented into it and failure to perform daily verification of proper operation of VCU system. All excursions shall be reported to the Department in semi-annual monitoring reports.
III. Performance Criteria	
A. Data Representativeness	Visual inspections at terminal office and at the VCU (as needed).
B. Verification of Operational Status	Indicator light in terminal office and records of inspections.
C. QA/QC Practices and Criteria	Trained personnel perform inspections and maintenance. The following items are verified during each day: • The proper operation of the air-assist blower. • The vapor line valve. • The automated shutdown system.
D. Monitoring Frequency	Once daily when the VCU is in operation.
E. Data Collection	Operators log data manually.
F. Averaging Period	Not applicable.

CAM Plan for Vapor Collection System

The key elements of the monitoring approach are presented in the table below.

I. Indicator 1 Measurement Approach	Vapor Collection Line Back Pressure Pressure gauge reading when trucks are being loaded.
II. Indicator Range Reporting Threshold	An excursion is defined as when the pressure gauge reading shows back pressure to be greater than 18 inches of water column. An excursion will trigger an investigation, corrective action, and a reporting requirement. All pressure gauge readings greater than 18 inches will be reported to the Department in the semi-annual monitoring reports.
III. Performance Criteria	
A. Data Representativeness	A pressure gauge that is attached to a spool piece is inserted between the vapor line connection of the tanker and the connection for the terminal's vapor collection line measures back pressure. The gauge measures pressure within ± 0.2 inch of water column.
B. Verification of Operational Status	Annual check on each loading bay with manual log entry.
C. QA/QC Practices and Criteria	The back pressure gauge is calibrated or replaced at least once every five years.
D. Monitoring Frequency	Annually, performed during compliance testing.
E. Data Collection	Annual reading with manual entry, including documentation of any incidents of the gauge reading outside the range along with the corrective action implemented.
F. Averaging Period	Not applicable.

CAM Plan for McGill Vapor Recovery Unit (VRU)

The key elements of the monitoring approach are presented in the tables below.

I. Indicator 1 Monitoring Approach	Preventative Maintenance Program Documentation of preventative maintenance. Proper vapor recovery unit (VRU) operation is verified by performing preventative maintenance as recommended by VRU manufacturer at least three times per year.
II. Indicator Range	An excursion occurs if the preventative maintenance is not performed or documented. All excursions will be reported to the Department in semi-annual monitoring reports.
III. Performance Criteria	
A. Data Representativeness	VRU operation is verified visually by trained personnel using documented inspection and maintenance procedures.
B. Verification of Operational Status	Not applicable.
C. QA/QC Practices and Criteria	Personnel are trained on inspection and maintenance procedures and proper frequencies. The following observations are included with the preventative maintenance: • Verify operation of automated alarm / shutdown system. • Carbon bed outlet VOC concentration measurement. • Vacuum level measurements. • Annual test of carbon activity for each carbon bed.
D. Monitoring Frequency	Preventative maintenance will be performed **four times** during a calendar year.
E. Data Collection	Results of inspection and maintenance performed during preventative maintenance are manually recorded and maintained on site.
F. Averaging Period	Not applicable.

I. Indicator 2 Monitoring Approach	Carbon Bed Regeneration Vacuum and System Monitoring Vacuum Gauge and Daily Inspections
II. Indicator Range	An excursion is defined as when the vacuum gauge does not reach 26 inches of mercury or greater during a daily inspection or fails to hold at 26 inches or greater for at least 3 minutes during a weekly inspection. An excursion will trigger an investigation, corrective action, and a reporting requirement. All excursions will be reported to the Department in semi-annual monitoring reports.
III. Performance Criteria	
A. Data Representativeness	The vacuum gauge is located on the VRU piping, approximately 2 feet from the shell of each carbon bed vessel. The minimum accuracy of the vacuum gauge is ± 1.0 percent.
B. Verification of Operational Status	Not applicable.
C. QA/QC Practices and Criteria	Vacuum regeneration gauge receives preventative maintenance **<u>four times</u>** per year.
D. Monitoring Frequency	The entire regeneration cycle will be monitored weekly whenever the unit operates more than 3 days in a week period. Once daily when the VRU is in operation, the vacuum will be observed and recorded. The following observations are included with the daily inspections: • The proper valve sequencing. • The cycle time. • The gasoline flow. • The purge air flow. • The operating temperatures.
E. Data Collection	The daily and weekly readings of the vacuum and other parameters are recorded with a manual log entry.
F. Averaging Period	Not applicable.