Title V Air Operation Permit Renewal
Permit No. 0570123-031-AV

APPLICANT

The applicant for this project is Hess Corporation. The applicant's responsible official and mailing address are: Peter Haid, Hess Corporation, 1 Hess Plaza, Woodbridge, NJ 07095.

FACILITY DESCRIPTION

The applicant operates a bulk gasoline terminal, which is located in Hillsborough County at 504 North 19th Street, Tampa, Florida 33605.

Hess Corporation's Tampa Terminal consists of: 1) twelve petroleum liquid storage tanks for storage and handling of the petroleum products (gasoline, distillate, and denatured ethanol) and additives including various brands of Red Dye, 2) a truck loading rack with four loading bays, and 3) a marine loadout operation. Details of the equipment are as follows:

Loading Rack

The loading rack consists of four (4) truck-loading bays. The Eastern loading bay (Lane 3, Bay C) consists of five (5) loading arms; three (3) for gasoline, and two (2) for distillate or residual oil. The second bay (Lane 2, Bay B) consists of four (4) loading arms; three (3) for gasoline and one (1) for distillate or residual oil. The third bay (Lane 1, Bay A) consists of five (5) loading arms; four (4) for gasoline and one (1) for distillate, residual oil, or denatured ethanol. The (Western) fourth loading bay (Lane 4, Bay D) consists of five (5) loading arms; three (3) for gasoline and two (2) for distillate or residual oil. The facility also has the capability to load limited quantities of gasoline and distillate fuel into marine vessels at the facility's dock directly from the storage tanks using the same piping that transfers fuel from the vessels into the storage tanks. The marine loading operation is uncontrolled. An emergency generator is also at the site to operate the loading rack in emergencies where the primary power is unavailable.

Volatile organic compound (VOC) emissions generated during the truck loading operations are primarily controlled by a John Zink "ZTOF" (Zink Thermal Oxidizer Flare) Vapor Combustion Unit (VCU), Model ZCT-5-9-50-X-2/8-2/8 (Serial No. VC-9077984). The backup control device is a McGill Vapor Recovery Unit (VRU), Model No. 704. To minimize loading losses, all petroleum products are bottom loaded into the tanker trucks. VOC emissions from the loading rack are limited to 20 milligrams per liter of gasoline loaded.

Storage Tanks

The storage tank farm consists of twelve storage tanks. Five of the tanks are large internal floating roof tanks that can store gasoline or any other petroleum product with a lower vapor pressure (i.e. distillates, denatured ethanol, additives, etc.). There are two fixed cone roof tanks that store distillates or any other petroleum product with a lower vapor pressure. In addition, there are five smaller fixed roof tanks that store additives or red dye to be mixed into the finished product being delivered to the trucks.

The VOC emission limits for all the storage tanks were calculated by using Tanks 4.0 and the highest average vapor pressure from the approved products for storage in each tank group.

Fugitive Sources

Fugitive sources at the facility include valves, connectors, pumps, and pipelines at the tank farm, truck loading rack, and marine loading/unloading area.

VOC emissions from the storage and handling operation are minimized by the use of bottom fill/submerged fill method, internal floating roof(s), pressure vent(s), and limiting the throughput of the products.

Also included in this permit are miscellaneous unregulated/exempt emissions units and/or activities.

PROJECT DESCRIPTION

The purpose of this permitting project is to renew the existing Title V permit for the above referenced facility.

PROCESSING SCHEDULE AND RELATED DOCUMENTS

Initial Title V Air Operation Permit No. 0570123-024-AV issued March 11, 2008
Title V Air Operation Permit Revision (No. 0570123-027-AV) issued April 2, 2009
Title V Air Operation Permit Revision (No. 0570123-029-AV) issued April 14, 2009
Title V Air Operation Permit Revision (No. 0570123-030-AV) issued November 24, 2009
Application for a Title V Air Operation Permit Renewal received July 20, 2012

PRIMARY REGULATORY REQUIREMENTS

Title III: Based on the Title V permit renewal application received on July 20, 2012, this facility is not a major source of hazardous air pollutants (HAPs).

Title V: The facility is a Title V major source of air pollution in accordance with Chapter 62-213, Florida Administrative Code (F.A.C.).

PSD: The facility is not a Prevention of Significant Deterioration (PSD)-major source of air pollution in accordance with Rule 62-212.400, F.A.C.

NSPS: The facility does operate units subject to the New Source Performance Standards (NSPS) of 40 Code of Federal Regulations (CFR) 60. The facility is subject to 40 CFR 60 Subpart XX- Standards of Performance for Bulk Gasoline Terminals. Tank 1812 is subject to requirements of 40 CFR 60 Subpart Kb - Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984. The emergency generator is subject to 40 CFR 60 Subpart IIII - Standards of Performance for Stationary Compression Ignition Internal Combustion Engines.

NESHAP: The facility does operate units subject to the National Emissions Standards for Hazardous Air Pollutants (NESHAP) of 40 CFR 63. The facility is subject to 40 CFR 63 Subpart BBBBBB - Gasoline Distribution Bulk Terminals, Bulk Plants, Bulk Plants and Pipeline Facilities.

CAIR: The facility is not subject to the Clean Air Interstate Rule (CAIR) set forth in Rule 62-296.470, F.A.C.

CAM: Compliance Assurance Monitoring (CAM) applies to Emission Unit 003 (Truck Loading Rack). EU003 is subject to CAM for the regulated emissions of volatile organic compounds, which are controlled primarily by a vapor combustion unit with a secondary vapor recovery unit serving as a back-up if the VCU is inoperable.

PROJECT REVIEW

The renewal permit updated several portions of the permit as follows:

1) The permit was reformatted using latest version of the preferred Title V permit format. Appendix TV-6 was replaced with new Appendix TV, and Appendices RR and TR were added to document reporting and testing requirements.

2) The Process Description was updated to more accurately reflect the available products at each loading bay, to correct the referenced number of tanks from 11 to 12, and to include a reference to the emergency generator located on-site.

3) An initial CAM Plan was added to the permit in order to provide action points to be monitored on the vapor control systems to help initiate corrective responses prior to reaching an exceedance.

4) Since the emergency generator is subject to 40 CFR 60 – Subpart IIII, it was added to the permit as an emission unit under Appendix ICE. Conditions of operation related to Subpart IIII were added to the permit as part of the appendix.

5) The facility is subject to 40 CFR 63 – Subpart BBBBBB. Conditions of operation related to Subpart BBBBBB were added to the permit. Facility-Wide Condition No. FAC.16 was added to the permit to clarify that monthly leak inspections of all equipment in gasoline service are required pursuant to 40 CFR 63 – Subpart BBBBBB. EPA remains the administrator for Subpart BBBBBB until Florida adopts this subpart.

6) Specific Condition No. C.6.A of the current Title V permit was updated to remove the reference to EPA Method 22 visible emission observation, as requested by the permittee, since there is no rule basis for visible emissions as a measurement of compliance for VOC emissions.

7) Specific Condition Nos. C.5 and C.20 were amended to require documentation of the vacuum pressure and operating temperature of the VRU on a daily basis (when it is in operation), consistent with the requirements from 40 CFR 63.11092(b)(1)(i) and as specified in the CAM Plan submitted by the permittee.

8) Specific Condition No. C.12 was amended to add a requirement that the vacuum pressure across the beds of the VRU be documented at the beginning and end of each stack test, at a minimum, and submitted with the test report. This was added to ensure that the vacuum pressure is documented for reference for evaluation as part of the operating and testing parameters of the VRU.

CONCLUSION

This project renews Title V air operation permit No. 0570123-030-AV, which was issued on November 24, 2009. This Title V air operation permit renewal is issued under the provisions of Chapter 403, Florida Statues (F.S.), and Chapters 62-4, 62-210 and 62-213, F.A.C.