Title V Air Operation Permit Renewal
Permit No. 0570197-020-AV

APPLICANT

The applicant for this project is Motiva Enterprises LLC. The applicant's responsible official and mailing address are: Les Millman, Motiva Enterprises LLC, P.O. Box 21108, Fort Lauderdale, FL 33335.

FACILITY DESCRIPTION

The applicant operates a bulk petroleum receiving and distribution facility, which is located in Hillsborough County at 6500 West Commerce Street, Tampa, Florida.

The facility receives the bulk supply of petroleum products by marine vessel, but some products can also be delivered by truck (e.g. ethanol) or drums (e.g. additives). The petroleum products are handled through enclosed piping and are stored in the tanks and redistributed by loading out to tanker trucks via a three-bay loading rack. Vapors displaced from the trucks during product loading are captured in a vapor recovery system and routed to a Vapor Recovery Unit (VRU) and/or a Vapor Combustion Unit (VCU) to reduce emissions to the atmosphere. Volatile organic compound emissions from the storage and handling of petroleum products are controlled through the use of internal and external floating roofs, bottom filling of vessels, the VRU, and the VCU. The VRU and VCU each have the capacity to handle the maximum vapor flow rate from the loading rack. However, the VRU is the primary control device and typically receives the emissions from the loading rack the majority of the time. The VCU is operated as a backup control device for use primarily when the VRU is unavailable due to operational or maintenance problems. The VRU is also equipped with a continuous emission monitor (CEMS) to monitor VOC emissions from the exhaust of the unit. The facility has access to a pipeline to the airport to transport jet fuel. The line is owned and maintained by an independent contractor.

Some of the tanks at this facility have been grouped to provide flexibility in operation. The emissions from each tank group are based on the standing and working losses from each tank in the group using the product with the highest annual average vapor pressure in that tank group. This allows storage and handling of multiple products in the same tank group as long as they don't exceed the vapor pressure of the worse-case product.

Also included in this permit are miscellaneous unregulated/insignificant 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

Renewed Title V Air Operation Permit No. 0570197-013-AV issued June 9, 2006.
Application for concurrent processing of an air construction permit and a Title V Air Operation Permit Renewal received on: October 26, 2010.
DRAFT Permit Nos. 0570197-020-AV and 0570197-021-AC issued on: July 14, 2011.
REVISED DRAFT Permit Nos. 0570197-020-AV and 0570197-021-AC issued on: February 1, 2012.

PRIMARY REGULATORY REQUIREMENTS

Title III: The facility is not identified as a major source of hazardous air pollutants (HAP).

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 loading rack is subject to the 40 CFR 60 - Subpart XX, and several storage tanks are subject to 40 CFR 60 - Subpart Kb.

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. The facility is not subject to 40 CFR 63 - Subpart R or 40 CFR 63 - Subpart EEEE because the facility has throughput limits and is restricted from handling gasoline oxygenated with MTBE (a HAP), so it is a synthetic minor source for hazardous air pollutants emissions.

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

CAM: The facility does operate units subject to Compliance Assurance Monitoring (CAM).

STATE: The facility does operate units subject to the requirements of Rule 62-296.500, Reasonably Available Control Technology for VOC and NO_X Emitting Facilities, F.A.C., since there is an applicable source specific category in this rule: Petroleum Liquid Storage, Bulk Gasoline Terminals, and Petroleum Liquid Storage Tanks with External Floating Roofs (Rules 62-296.508, 62-296.510, and 62-296.516, F.A.C.).

PROJECT REVIEW

The renewal permit incorporated two previously issued construction permits (Permit Nos. 0570197-018-AC and 0570197-019-AC) and the concurrently issued construction permit (Permit No. 0570197-021-AC), and also updated portions of the permit as follows:

1) The Title V 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 potential emissions from the tanks was changed to 87.7 ton/yr based on several updates to the tank specifications used in the TANKS 4.0.9d program to calculate emissions. The updated tank parameters have been included in the tank description portion in the Process Description. Estimated emissions from periodic degassing of tanks included in EU008 and EU009 was also changed slightly based on calculations from the application.

3) Tank 98 was removed from the permit.

4) Estimated potential emissions from the oil/water separator were updated and included as part of the potential emissions from EU010.

5) Based on the application, facility-wide fugitive emissions were estimated at 1.2 ton/yr from valves, elbows, etc; therefore, a category was added to the Insignificant Activity List entitled "Fugitive Equipment Leaks".

6) Ethanol unloading and barge unloading were added to Appendix I as insignificant activities at the plant. However, Condition B.9 of the current Title V permit was edited and moved to the Facility-wide section (Condition FW8) to identify reasonable precautions for proper operation of these activities.

7) The emergency generator located at the facility has been included in Appendix ICE to ensure that the facility is aware of its potential applicability to federal rules related to internal combustion engines.

8) The propane tanks associated with the VCU were added to Appendix I.

9) The facility is now subject to 40 CFR 63 – Subpart BBBBBB (National Emission Standards for Hazardous Air Pollutants for Source Category: Gasoline Distribution Bulk Terminals, Bulk Plants, and Pipeline Facilities). Based on guidance from FDEP, although the subpart has not yet been adopted by state of Florida, the rule has been referenced in the permit and added to the Title V permit as an appendix, since it is still a federally-enforceable requirement.

10) In order to comply with 40 CFR 63 – Subpart BBBBBB, the applicant elected the option to install a CEMS on the VRU outlet. The applicant requested that the CEMS be added as the method of compliance for operation of the VRU. Therefore, the permit references the addition of the CEMS and identifies its use as the formal method of compliance. Annual RATA testing on the CEM has also been added as a requirement in the permit.

11) The CAM Plan for the VRU was updated to remove references to the bladder tank, and remains an enforceable attachment in the Title V permit. Since a CEMS has been installed on the outlet of the VRU, the CAM Plan was updated to replace vacuum pressure monitoring with CEM monitoring as Indicator 1 in the VRU monitoring table. The hydrocarbon concentration equivalent to the 10 mg/liter emission standard and referenced in the CAM Plan is based on a comparison to actual test data from the site and will be updated periodically with new testing data.

12) The new, larger VRU is capable of handling emissions from the entire loading rack, and has been identified as the primary control device to be used during normal operations. Since the VCU has been identified as the backup control device used primarily when the VRU is unavailable due to operational or maintenance issues, and is therefore expected to operate for the minority of normal operation, the CAM Plan for the VCU was edited to remove the requirement for a minimum operating temperature and identifies the continual monitoring for presence of flame as the primary monitoring requirement.

13) Specific Condition B.1.A.) was edited to identify the maximum product vapor pressure to be handled in the gasoline tanks group. The maximum vapor pressure is stated to ensure compliance with the potential to emit limitation in the permit for the tanks and is based on the emissions calculation data from the TANKS 4.09d spreadsheets included with the application. Therefore, the limit has been updated requiring a product maximum annual weighted average RVP of 13.5 psia.

14) Specific Condition Nos. B.1 and A.3 of Permit Nos. 0570197-018-AC and -019-AC, respectively, require a maximum monthly RVP of products stored during the ozone season in accordance with the requirements from 40 CFR 80 – *Regulation of Fuels and Fuel Additives*. However, based on discussions with the Florida Department of Environmental Protection and examination of the state and federal rules, it was determined that the state of Florida has not adopted 40 CFR 80 as part of its state operating permit program. Therefore, since the state of Florida is not the permitting and enforcement authority for this federal rule, the requirements related to seasonal RVP limits were <u>not</u> included in the renewed operating permit.

15) The applicant requested removal of the requirements of 40 CFR 60 – Subpart Kb from Tank No. 10. Tank No. 10 was previously permitted by Construction Permit No. 0570197-015-AC to modify the gasoline storage tank in order to handle ethanol, as it currently does. The conversion of the tank to handle ethanol involved several changes including retrofitting with a mechanical shoe primary seal and a rim-mounted secondary seal, the application of a specialty-coating, and the addition of new piping for tank loading from trucks and tank unloading to the blending skids at the loading rack. Since the project involved new construction and the tank is still authorized to handle gasoline, it was determined that the changes could result in an increase in actual emissions and therefore constitute a modification. Therefore, the tank remains subject to 40 CFR 60 – Subpart Kb as stated in the construction permit.

16) The rule cites for conditions relating to Tank No. 12 were corrected from Rule 62-296.516, F.A.C to Rule 62-296.508, F.A.C.

17) The conditions relating to distillate, additive and contact water storage tanks were edited to indicate that the throughput limits are per tank rather than per group of tanks, similar to language already existing for the gasoline storage tanks. Accordingly, the Process Description was also updated to remove the statement that working loss emissions are based on the "worst case tank" in the group.

18) The Process Description was updated to reflect the specific types of products that can be handled by each tank group.

19) Specific Condition Nos. A.2, A.4, and A.11 of the new Title V permit were amended to include the requirements from Rule 62-296.510, F.A.C.

20) The reference to EPA Method 21 for internal floating roof tanks was removed from Specific Condition No. B.10 consistent with changes to Rule 62-296.508, F.A.C. since issuance of the previous Title V permit.

21) The requirement to handle gasoline with a 5% MTBE content or less was removed and replaced with a requirement that the facility not handle gasoline oxygenated with MTBE.

22) The requirement to monitor and record the vacuum pressure on the VRU was removed from the permit since a CEM has now been installed on the control device and daily inspections of the VRU are still required by the CAM Plan.

CONCLUSION

This project revises Title V air operation permit No. 0570197-013-AV, which was issued on June 9, 2006. 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.