TECHNICAL EVALUATION

AND

PRELIMINARY DETERMINATION

FOR

Motiva Enterprises LLC

Hillsborough County

Construction Permit and Title V Operating Permit

Application Number

0570197-021-AC and 0570197-020-AV

Environmental Protection Commission of

Hillsborough County

Tampa, FL

July 14, 2011

Concurrent Construction/Title V Operating Permits
Permit Nos. 0570197-021-AC/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.

The professional engineer who sealed the application is: Bart Leininger, P.E., Ashworth Leininger Group, 601 East Daily Drive, Suite 302, Camarillo, California, 93010. The P.E. registration number is: 71856.

PROJECT DESCRIPTION

Attached are DRAFT Permit Nos. 0570197-021-AC and 0570197-020-AV. Permit No. 0570197-021-AC identifies changes to the existing Title V permit relating to rule applicability, testing requirements and the revising of potential emissions based on updated information regarding tank specifications. Permit No. 0570197-020-AV is for renewal of the current Title V permit and includes revisions incorporating these changes. These permits are being issued concurrently since there is no new construction authorized by Permit No. 0570197-021-AC and no new compliance testing is required. Permit No. 0570197-020-AV incorporates Permit Nos. 0570197-018-AC, 0570197-019-AC, and 0570197-021-AC. The Process Description has also been updated, and the Title V permit was reformatted using latest version of the preferred Title V permit format.

The project has been assigned NEDS Source Classification Code Nos. 4-04-001-11 (Petroleum and Solvent Evaporation, Petroleum Liquid Storage (non-Refinery), Standing Losses), 4-04-001-16 (Petroleum and Solvent Evaporation, Petroleum Liquid Storage (non-Refinery), Withdrawal Losses), 4-04-001-53 (Petroleum and Solvent Evaporation, Petroleum Liquid Storage (non-Refinery), Vapor Control Unit Losses), and 4-04-001-50 (Petroleum and Solvent Evaporation, Petroleum Liquid Storage (non-Refinery), Miscellaneous Losses/Leaks: Loading Racks). The Standard Industrial Code for the project is No. 5171 (Petroleum Bulk Stations and Terminals). The project is located at 6500 West Commerce Street, Tampa, FL 33616. UTM Coordinates of the location are 17-348.0 E and 3082.0 N.

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 has the capacity to handle the maximum vapor flow rate from the loading rack. Vapors from the vapor recovery system can also be routed to the VCU under any operating condition and not solely when the VRU is not in service. However, the VRU is the primary control device and typically receives the emissions from the loading rack the majority of the time. 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.

PROJECT REVIEW

The application was primarily for the renewal of the Title V operating permit, and included a request to incorporate two previously issued construction permits (Permit Nos. 0570197-018-AC and 0570197-019-AC). Construction Permit No. 0570197-018-AC was issued to add denatured ethanol as an approved product for handling within the facility's gasoline tank group and to update the status of certain equipment at the facility including the removal of two tanks (Tanks #26 and #27) and the correction of descriptions of two other tanks (Tanks #15 and #28). Construction Permit No. 0570197-019-AC was issued to modify Storage Tank #7, add Storage Tank #3, replace the former Vapor Recovery Unit (VRU), remove the bladder tank, and update the HAP speciation for the different petroleum liquids that are handled by the facility. Both construction permits also included the addition of a condition referencing the applicability of 40 CFR 63 – Subpart BBBBBB (National Emission Standards for Hazardous Air Pollutants for Source Category: Gasoline Distribution Bulk Terminals, Bulk Plants, and Pipeline Facilities).

The application also included multiple requested changes to the existing Title V permit based on rule interpretations and updated information regarding tank specifications. The requested changes affected the overall potential emissions of the facility and included the removal of some existing requirements on the emission units; therefore, the applicant also requested that a construction permit also be processed concurrently with the Title V renewal permit in order to authorize those changes.

The changes included in the construction permit and concurrently processed Title V renewal permit are summarized 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. However, although a monitoring benchmark and actual setpoint were provided during the application review, a requested explanation and justification for the proposed monitoring parameter in order to demonstrate that it is equivalent to the permitted emission standard was not provided. Therefore, the permit references the addition of the CEMS, but it does not identify its use as the formal method of compliance.

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. Although a CEMS has been installed on the outlet of the VRU, emissions from the VRU must be quantified on a continuous basis. No information was provided indicating that the CEMS monitoring system is measuring the stack gas flowrate and therefore capable of providing a real-time mass emissions summary necessary to demonstrate continual compliance.

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 pressures to be handled in the gasoline tanks group. The maximum vapor pressures are stated to ensure compliance with the potential to emit limitation in the permit for the tanks and are based on the emissions calculation data from the TANKS 4.09d spreadsheets included with the application. Therefore, limits have been specified requiring a product maximum RVP of 13.5 psia and maximum annual weighted average true vapor pressure of 9.4 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 was 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.

The facility is a major source of VOC emissions and the maximum facility-wide potential to emit for VOC emissions following the changes requested at the facility is 155.6 tons/yr. This facility is not a major source of hazardous air pollutants (HAPs). The gasoline is limited to a maximum annual content limit of 5% for MTBE, making it a synthetic minor for HAPs. It is therefore exempt from the NESHAP, Subpart R, Gasoline Distribution Facilities. The loading rack is subject to the New Source Performance Standards (NSPS), Subpart XX. Tank Nos. 3, 7, 10 and 23 are subject to the New Source Performance Standards (NSPS), Subpart Kb. Several tanks are also subject to requirements from VOC-RACT.

PROCESSING SCHEDULE AND RELATED DOCUMENTS

Application for concurrent processing of an air construction permit and a Title V Air Operation Permit Renewal received on: October 26, 2010.
Additional information requested on: December 22, 2010.
Application considered complete on: April 20, 2011.

PRIMARY REGULATORY REQUIREMENTS

This project is subject to the preconstruction review requirements of Chapter 403, Florida Statutes, Chapters, 62-204, 62-210, 62-212, 62-296, and 62-297, Florida Administrative Code (F.A.C.) and Chapter 1-3 of the Rules of the Environmental Protection Commission of Hillsborough County.

This project is not subject to the requirements of Rule 62-212.400, Prevention of Significant Deterioration, F.A.C. or Rule 62-212.500, New Source Review for Nonattainment Areas, F.A.C., since this project is minor by state definition.

This project is subject to the requirements of Rule 62-212.300, Sources Not Subject to Prevention of Significant Deterioration or Nonattainment Requirements, F.A.C., since it is a source of air pollution requiring a permit under this rule.

This project is subject to the requirements of Rule 62-213, Operation Permits for Major Sources of Air Pollution, F.A.C., since the facility is a Title V Source by state definition.

This project is subject to the requirements of Rule 62-296.320, General Pollutant Emission Limiting Standards, F.A.C., since the facility is a potential source of particulate matter, visible emissions and odors.

This project is not subject to the requirements of Rule 62-296.401 through 62-296.417, Specific Emission Limiting and Performance Standards, F.A.C., since there is no applicable source specific category in this rule.

This project is subject to the requirements of Rule 62-296.500, Reasonably Available Control Technology for VOC and NOX Emitting Facilities, F.A.C., since there are applicable source specific categories in this rule: [Rules 62-296.508, 62-296.510, and 62-296.516, F.A.C.].

This project is not subject to the requirements of Rule 62-296.600, Reasonably Available Control Technology - Lead, F.A.C., since there is no applicable source category.

This project is not subject to the requirements of Rule 62-296.700, Reasonably Available Control Technology Particulate Matter, F.A.C., since there is no applicable source category.

This project is subject to the requirements of Rule 62-204.800, Federal Regulations Adopted by Reference, F.A.C., since the facility is subject to the requirements of: 1) 40 CFR 60 - Subpart Kb for several of the storage tanks, 2) 40 CFR 60 - Subpart XX for the truck loading rack operation, and 3) 40 CFR 63 - Subpart BBBBBB for the entire facility. This project is not subject to 40 CFR 63 Subpart R – National Emission Standards for Gasoline Distribution Facilities (Bulk Gasoline Terminals and Pipeline Breakout Stations) and 40 CFR 63 Subpart EEEE – National Emission Standards for Organic Liquids Distribution (Non-Gasoline) because the facility has throughput limits and a maximum annual content limit of 5% for MTBE (a HAP), so the facility is a synthetic minor source for hazardous air pollutants emissions.

This project is subject to the requirements of Chapter 84-446, Laws of Florida and Chapter 1-3, Rules of the Environmental Protection Commission of Hillsborough County.

SUMMARY OF EMISSIONS

Although no new construction is authorized in this construction permit, changes authorized in this construction permit did result in changes to the existing facility's potential to emit (PTE). Changes to the facility's PTE from Permit Nos. 0570197-018-AC and 0570197-019-AC are also reflected in the following table:

Emission Unit	VOC Actual Emissions*	VOC Potential Emissions	VOC Allowable Emissions
	ton/yr	ton/yr	
002 - Truck Loading Racks with a Vapor Recovery Unit and Vapor Combustor Unit	22.2	66.7	10 mg/lit
008 - Gasoline Storage Tanks	27.2	74.5**	n/a
009 - Distillate Storage Tanks	1.0	2.1**	n/a
010 - Contact Water Storage Tanks	6.9	9.8	n/a
011- Misc. (Additive) Storage Tanks	0.2	0.4	n/a
Total	57.5	154.4***	

* - Actual emissions were based on the average of facility-wide emissions from the last two consecutive calendar years (2009-2010) as submitted in the Annual Operating Reports.
** - Potential emissions from EU008 and EU009 included an estimation of emissions from periodic degassing of the storage tanks, which were based on a conservative assumption of 2 gasoline and 2 diesel storage tanks degassed per year. Emissions from degassing should be included in the Annual Operating Reports.
*** - Facility-wide PTE does not include 1.2 ton/yr from emissions from fugitive components, which have been included as an insignificant activity.

The Total HAPs PTE from the facility is 14.4 ton/yr, of which 7.7 ton/yr is MTBE, based on a maximum of 5% MTBE content by weight, which is taken from the existing limit in the current permit. Therefore, inventory of Title III pollutants for the facility is estimated to be less than 10 ton/yr individually and less than 25 ton/yr collectively.

CONCLUSION

The emission limits proposed by the applicant will meet all of the requirements of Chapters 62-204, 62-210, 62-212, 62-296, and 62-297, F.A.C., and Chapter 1-3, Rules of the Commission.

The General and Specific Conditions listed in the proposed permit (attached) will assure compliance with all the applicable requirements of Chapters 62-204, 62-210, 62-212, 62-296, and 62-297, F.A.C.

PROPOSED AGENCY ACTION

Pursuant to Section 403.087, Florida Statutes and Rule 62-4.070, Florida Administrative Code the Environmental Protection Commission of Hillsborough County hereby gives notice of its intent to issue a permit to construct the aforementioned air pollution source in accordance with the draft permit and its conditions as stipulated (see attached).