TECHNICAL EVALUATION
&
PRELIMINARY DETERMINATION

APPLICANT

Genesis Rail Services, LLC
919 Milam Street, Suite 2100
Houston, Texas 77002

Walnut Hill Facility
Facility ID No. 0330289

PROJECT

Project No. 0330289-001-AC
Application for Minor Source Air Construction Permit
Crude Oil Storage and Transfer

COUNTY

Escambia, Florida

PERMITTING AUTHORITY

Florida Department of Environmental Protection
Air Resource Section
Northwest District Office
160 W. Government Street, Suite 308
Pensacola, Florida 32502-5740

April 6, 2012

1. GENERAL PROJECT INFORMATION

Air Pollution Regulations

Projects at stationary sources with the potential to emit air pollution are subject to the applicable environmental laws specified in Section 403 of the Florida Statutes (F.S.). The statutes authorize the Department of Environmental Protection (Department) to establish regulations regarding air quality as part of the Florida Administrative Code (F.A.C.), which includes the following applicable chapters: 62-4 (Permits); 62-204 (Air Pollution Control – General Provisions); 62-210 (Stationary Sources – General Requirements); 62-212 (Stationary Sources – Preconstruction Review); 62-296 (Stationary Sources - Emission Standards); and 62-297 (Stationary Sources – Emissions Monitoring). Specifically, air construction permits are required pursuant to Rules 62-4, 62-210 and 62-212, F.A.C.

In addition, the U.S. Environmental Protection Agency (EPA) establishes air quality regulations in Title 40 of the Code of Federal Regulations (CFR). Part 60 specifies New Source Performance Standards (NSPS) for numerous industrial categories. Part 61 specifies National Emission Standards for Hazardous Air Pollutants (NESHAP) based on specific pollutants. Part 63 specifies NESHAP based on the Maximum Achievable Control Technology (MACT) for numerous industrial categories. The Department adopts these federal regulations on a quarterly basis in Rule 62-204.800, F.A.C.

Glossary of Common Terms

Because of the technical nature of the project, the permit contains numerous acronyms and abbreviations, which are defined in Appendix A of this permit.

Facility Description and Location

Genesis Rail Services, LLC proposes to construct a new crude oil transfer and storage facility which is categorized under Standard Industrial Classification Code No. 5172: Petroleum and Petroleum Products Wholesalers, Except Bulk Stations and Terminals. This facility will be located in Escambia County at the intersection of Highway 99-A and Railroad Street in Walnut Hill, Florida. The UTM coordinates of the new facility are Zone 16, 451.559 km East, and 3416.588 km North. This site is in an area that is in attainment (or designated as unclassifiable) for all air pollutants subject to state and federal Ambient Air Quality Standards (AAQS).

Facility Regulatory Categories

- The facility is not a major source of hazardous air pollutants (HAP).
- The facility has no units subject to the acid rain provisions of the Clean Air Act.
- The facility is not a Title V major source of air pollution in accordance with Chapter 213, F.A.C.
- The facility is not a major stationary source in accordance with Rule 62-212.400, F.A.C. for the Prevention of Significant Deterioration (PSD) of Air Quality.

Project Description

This permit is for the construction of a new crude oil storage and transfer facility comprised of a 100,000-barrel (4,200,000 gallons, or 15,897 m^3) storage tank with associated piping and pumps to transfer crude oil from rail cars to an existing 16-inch pipeline. The storage tank will be equipped with an external floating roof painted white with a primary mechanical shoe seal and secondary seal. For emissions calculations the crude oil is said to have a worst-case Reid Vapor Pressure (RVP) of 8, which is equivalent to 6.47 psia, or 44.6 kPa.

Processing Schedule

March 8, 2012 Received the application for a minor source air pollution construction permit; application complete.

2. PSD APPLICABILITY

General PSD Applicability

For areas currently in attainment with the state and federal AAQS or areas otherwise designated as unclassifiable, the Department regulates major stationary sources of air pollution in accordance with Florida's PSD preconstruction review program as defined in Rule 62-212.400, F.A.C. Under preconstruction review, the Department first must determine if a project is subject to the PSD requirements ("PSD applicability review") and, if so, must conduct a PSD preconstruction review. A PSD applicability review is required for projects at new and existing major stationary sources. In addition, proposed projects at existing minor sources are subject to a PSD applicability review to determine whether potential emissions *from the proposed project itself* will exceed the PSD major stationary source thresholds. A facility is considered a major stationary source with respect to PSD if it emits or has the potential to emit:

- 250 tons per year or more of any regulated air pollutant; or
- 100 tons per year or more of any regulated air pollutant and the facility belongs to one of the following 28 PSD-major facility categories: fossil fuel-fired steam electric plants of more than 250 million British thermal units per hour heat input, coal cleaning plants (with thermal dryers), Kraft pulp mills, portland cement plants, primary zinc smelters, iron and steel mill plants, primary aluminum ore reduction plants, primary copper smelters, municipal incinerators capable of charging more than 250 tons of refuse per day, hydrofluoric, sulfuric, and nitric acid plants, petroleum refineries, lime plants, phosphate rock processing plants, coke oven batteries, sulfur recovery plants, carbon black plants (furnace process), primary lead smelters, fuel conversion plants, sintering plants, secondary metal production plants, chemical process plants, fossil fuel boilers (or combinations thereof) totaling more than 250 million British thermal units per hour heat input, petroleum storage and transfer units with a total storage capacity exceeding 300,000 barrels, taconite ore processing plants, glass fiber processing plants and charcoal production plants.

Once it is determined that a project is subject to PSD preconstruction review, the project emissions are compared to the "significant emission rates" defined in Rule 62-210.200, F.A.C. for the following pollutants: carbon monoxide (CO); nitrogen oxides (NO_X); sulfur dioxide (SO_2); particulate matter (PM); particulate matter with a mean particle diameter of 10 microns or less (PM_{10}); volatile organic compounds (VOC); lead (Pb); fluorides (Fl); sulfuric acid mist (SAM); hydrogen sulfide (H_2S); total reduced sulfur (TRS), including H_2S; reduced sulfur compounds, including H_2S; municipal waste combustor organics measured as total tetra- through octa-chlorinated dibenzo-p-dioxins and dibenzofurans; municipal waste combustor metals measured as particulate matter; municipal waste combustor acid gases measured as SO_2 and hydrogen chloride (HCl); municipal solid waste landfills emissions measured as non-methane organic compounds (NMOC); and mercury (Hg). In addition, significant emissions rate also means any emissions rate or any net emissions increase associated with a major stationary source or major modification which would construct within 10 kilometers of a Class I area and have an impact on such area equal to or greater than 1 $\mu g/m^3$, 24-hour average.

If the potential emission exceeds the defined significant emissions rate of a PSD pollutant, the project is considered "significant" for the pollutant and the applicant must employ the Best Available Control Technology (BACT) to minimize the emissions and evaluate the air quality impacts. Although a facility or project may be *major* with respect to PSD for only one regulated pollutant, it may be required to install BACT controls for several "significant" regulated pollutants.

<u>PSD Applicability for Project</u>

As provided in the application, the following table summarizes potential emissions and PSD applicability for the project.

Table A. Potential Emissions (Tons/Year) and PSD Applicability

Pollutant	Pre-Project Potential Emissions (TPY)	Project Potential Emissions (TPY)	PSD Major Threshold (TPY)	Significant Emissions Rate (TPY)	Subject to PSD
CO	None - new	0	250	100	No
NO_X	None - new	0	250	40	No
PM/PM_{10}	None - new	0	250	25/15	No
SO_2	None - new	0	250	40	No
VOC	None - new	8.7	250	40	No

This new facility is not a major stationary source with respect to PSD because potential emissions of each pollutant-from the project do not reach or exceed the PSD major stationary source threshold of 250 TPY for this type of facility. Therefore, this project is subject only to the general preconstruction review requirements of Rule 62-212.300, F.A.C.

3. APPLICATION REVIEW

Application Fee

This is a construction permit (AC/1E $1,000.00 fee) for a minor source with potential emissions of 5 or more tons per year, but less than 25 tons per year, of any single pollutant. [Rule 62-4.050(4)(a)2.d., F.A.C]

Discussion of Emissions

Potential emissions from the storage tank are 8.3 TPY, and uncontrolled emissions from fugitive sources are 0.4 TPY. Facility-wide VOC emissions estimates are based on a throughput of 23.36 million barrels per year, Tanks 4.09d, emission factors from AP-42 and EPA protocol for equipment leak estimates.

State Requirements

Compliance with 40 CFR 60 Subpart Kb, Standards of Performance for VOL Storage Vessels, incorporated by reference by Rule 62-204.800(8)(b)17, F.A.C.

Federal NSPS Provisions

The facility is regulated under 40 CFR 60 Subpart Kb, Standards of Performance for VOL Storage Vessels. Applicability is established for the new tank with a nominal volume of 100,000 barrels (4,200,000 gallons, or 15,897 m^3) storing crude oil said to have a worst-case Reid Vapor Pressure (RVP) of 8, which is equivalent to 6.47 psia, or 44.6 kPa. The external floating roof with primary and secondary seals, installed in accordance with requirements of 40 CFR 60.112b, is an acceptable required emission control for the storage tank.

Federal NESHAP Provisions

The facility is not regulated under Federal NESHAP Provisions.

Other Draft Permit Requirements

The applicant shall retain a Professional Engineer, registered in the State of Florida, for the inspection of this project. Upon completion the engineer shall inspect for conformity to the permit application and associated documents. An application for an operation permit shall be submitted with the compliance test results and appropriate fee. These are to be submitted within 75 days after initial operation. The permittee shall obtain an operating permit for this source before the expiration of the construction permit if the permittee desires to continue operation. [Rules 62-4.030, 62-4.050(3), 62-4.210(3), 62-4.220 and 62-210.300(1)(a) & (2), F.A.C.]

4. PRELIMINARY DETERMINATION

The Department makes a preliminary determination that the proposed project will comply with all applicable state and federal air pollution regulations as conditioned by the draft permit. This determination is based on a technical review of the complete application, reasonable assurances provided by the applicant, and the conditions specified in the draft permit. Howard Ard is the project engineer responsible for reviewing the application and drafting the permit. Additional details of this analysis may be obtained by contacting the project engineer at 850/595-0622 or Howard.Ard@dep.state.fl.us.