TECHNICAL EVALUATION
AND
PRELIMINARY DETERMINATION

I. GENERAL INFORMATION

A. APPLICANT

Jaxbulk Terminal, LLC
1301 Wigmore Street
Jacksonville, FL 32206

Draft Permit No.: 0310574-001-AC
County: Duval

B. PROJECT

On June 23, 2011, Jaxbulk Terminal, LLC applied to the Permitting Authority for a permit to construct a new ethanol handling and distribution facility. The construction includes the retrofitting of 6 existing fixed roof storage tanks to internal floating roof tanks, the installation of a three bay unloading rack for trucks, and an unloading arm for barges. Emissions from the unloading of the denatured ethanol into trucks and/or barges will be controlled by a vapor combustion unit (VCU). Jaxbulk Terminal, LLC is located at 1301Wigmore Street, Jacksonville FL 32206.

The six storage tanks are approximately 101 feet in diameter with a total storage capacity of approximately 13.86 million gallons (2.31 million gallons each). Denatured ethanol (98% ethanol and 2% gasoline), will be delivered by railcar at up to one unit train (100 cars) per day. The maximum potential quantity of material delivered to the site is approximately 1,095 million gallons per year. The tanks will each be located within individual containment areas. Product blending will not be performed on site.

II. RULE APPLICABILITY

The facility is located in an area designated as unclassifiable for the air pollutants particulate matter less than or equal to ten (10) micrometers and lead; and in an air quality maintenance area for ozone, and in the area of influence of an air quality maintenance area for particulate matter pursuant to Chapter 62-204, Florida Administrative Code (FAC), and Rule 2.201, Jacksonville Environmental Protection Board (JEPB).

The facility after completion of this project will not be a major stationary source of air pollution for PSD purposes because the potential emissions of PSD air pollutants will be less than 250 tons per year pursuant to Rule 62-210.200(189), FAC, and Rule 2.301, JEPB.

The facility is a synthetic minor source of air pollution because the operational limit assumed by the owner will limit the potential emissions of any regulated air pollutant to less than 100 tons per year pursuant to Chapter 62-210, FAC, and Rule 2.301, JEPB.

The facility is a minor source of Hazardous Air Pollutants (HAP) because the potential emissions of HAP are less than 10 tons per year for any single HAP and less than 25 tons per year for total HAP.

This facility is subject to 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.

III. TECHNICAL EVALUATION

Emissions Unit No. 001 - Internal Floating Roof Tanks - Subpart Kb

This emissions unit consists of six (6) internal floating roof storage tanks (Tank Nos. T101 - T106) storing denatured ethanol (98% ethanol, 2% gasoline).

Essential Potential to Emit (PTE) Parameters

This emissions unit is allowed to operate continuously, i.e., 8,760 hours per year.

Emission Limitations and Standards

40 CFR 60, Subpart Kb, Standards of Performance for Volatile Organic Liquid (VOL) Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced after July 23, 1984, shall apply to the emission unit described herein. Applicable portions of Subpart A, General Provisions shall apply to the emission unit described herein.

Each fixed roof in combination with an internal floating roof shall meet the following specifications:

(i) The internal floating roof shall rest or float on the liquid surface (but not necessarily in complete contact with it) inside a storage vessel that has a fixed roof. The internal floating roof shall be floating on the liquid surface at all times, except during initial fill and during those intervals when the storage vessel is completely emptied or subsequently emptied and refilled. When the roof is resting on the leg supports, the process of filling, emptying, or refilling shall be continuous and shall be accomplished as rapidly as possible.

(ii) Each internal floating roof shall be equipped with the following closure device (a mechanical shoe seal) between the wall of the storage vessel and the edge of the internal floating roof.

The mechanical shoe seal is a metal sheet held vertically against the wall of the storage vessel by springs or weighted levers and is connected by braces to the floating roof. A flexible coated fabric (envelope) spans the annular space between the metal sheet and the floating roof.

(iii) Each opening in a non contact internal floating roof except for automatic bleeder vents (vacuum breaker vents) and the rim space vents is to provide a projection below the liquid surface.

(iv) Each opening in the internal floating roof except for leg sleeves, automatic bleeder vents, rim space vents, column wells, ladder wells, sample wells, and stub drains is to be equipped with a cover or lid which is to be maintained in a closed position at all times (i.e., no visible gap) except when the device is in actual use. The cover or lid shall be equipped with a gasket. Covers on each access hatch and automatic gauge float well shall be bolted except when they are in use.

(v) Automatic bleeder vents shall be equipped with a gasket and are to be closed at all times when the roof is floating except when the roof is being floated off or is being landed on the roof leg supports.

(vi) Rim space vents shall be equipped with a gasket and are to be set to open only when the internal floating roof is not floating or at the manufacturer's recommended setting.

(vii) Each penetration of the internal floating roof for the purpose of sampling shall be a sample well. The sample well shall have a slit fabric cover that covers at least 90 percent of the opening.

(viii) Each penetration of the internal floating roof that allows for passage of a column supporting the fixed roof shall have a flexible fabric sleeve seal or a gasketed sliding cover.

(ix) Each penetration of the internal floating roof that allows for passage of a ladder shall have a gasketed sliding cover.

Test Methods and Procedures

After installing the control equipment (internal floating roof), each owner or operator shall:

(i) Visually inspect the internal floating roof, the primary seal, and the secondary seal (if one is in service), prior to filling the storage tank with VOL. If there are holes, tears, or other openings in the primary seal, the secondary seal, or the seal fabric or defects in the internal floating roof, or both, the owner or operator shall repair the items before filling the storage vessel.

(ii) For vessels equipped with a liquid-mounted or mechanical shoe primary seal, visually inspect the internal floating roof and the primary seal through manholes and roof hatches on the fixed roof at least once every 12 months after initial fill. If the internal floating roof is not resting on the surface of the VOL inside the storage vessel, or there is liquid accumulated on the roof, or the seal is detached, or there are holes or tears in the seal fabric, the owner or operator shall repair the items or empty and remove the storage vessel from service within 45 days. If a failure that is detected during inspections required in this paragraph cannot be repaired within 45 days and if the vessel cannot be emptied within 45 days, a 30-day extension may be requested from the Permitting Authority in the inspection report required in 40 CFR 60.115b(a)(3). Such a request for an extension must document that alternate storage capacity is unavailable and specify a schedule of actions the company will take that will assure that the control equipment will be repaired or the vessel will be emptied as soon as possible.

(iii) Visually inspect the internal floating roof, the primary seal, gaskets, slotted membranes and sleeve seals (if any) each time the storage vessel is emptied and degassed. If the internal floating roof has defects, the primary seal has holes, tears, or other openings in the seal or the seal fabric, or the secondary seal has holes, tears, or other openings in the seal or the seal fabric, or the gaskets no longer close off the liquid surfaces from the atmosphere, or the slotted membrane has more than 10 percent open area, the owner or operator shall repair the items as necessary so that none of the conditions specified in this paragraph exist before refilling the storage vessel with VOL. In no event shall inspections conducted in accordance with this provision occur at intervals greater than 10 years in the case of vessels conducting the annual visual inspection as specified in Specific Condition No. 4 (ii) above.

Monitoring of Operations

The owner or operator of these storage vessels shall keep readily accessible records showing the dimension of each storage vessel and an analysis showing the capacity of each storage vessel. These records shall be kept for the life of the storage vessels.

The owner or operator of these storage vessels shall maintain a record of the VOL stored, the period of storage, and the maximum true vapor pressure of that VOL during the respective storage period for each storage vessel.

The owner or operator of these storage vessels shall notify the Permitting Authority within 30 days when the maximum true vapor pressure of the liquid exceeds the maximum true vapor pressure value of 5.2 kilo Pascals (kPa).

The maximum true vapor pressure of the VOL shall be determined in accordance with the methods and procedures specified in 40 CFR 60.116b(e).

Notification, Recordkeeping, and Reporting

Notify the Permitting Authority in writing at least 30 days prior to the filling or refilling of each storage vessel for which an inspection is required by paragraph (4)(i) and (4)(iii) above of this section to afford the Permitting Authority the opportunity to have an observer present. If the inspection required by paragraph (4)(iii) above of this section is not planned and the owner or operator could not have known about the inspection 30 days in advance of refilling the vessel, the owner or operator shall notify the Permitting Authority at least 7 days prior to the refilling of the storage vessel. Notification shall be made by telephone immediately followed by written documentation demonstrating why the inspection was unplanned. Alternatively, this notification including the written documentation may be made in writing and sent by express mail so that it is received by the Permitting Authority at least 7 days prior to the refilling.

The owner or operator of these storage vessels shall submit a notification of the date construction (or reconstruction as defined under 40 CFR 60.15) of an affected emission unit is commenced postmarked no later than 30 days after such date.

The owner or operator of these storage vessels shall submit a notification of the actual date of initial startup of an affected emission unit postmarked within 15 days after such date. The owner or operator shall furnish the Permitting Authority with a report that describes the control equipment and certifies that the control equipment meets the specifications of 40 CFR 60.112b(a)(1) and 60.113b(a)(1). This report shall be an attachment to the notification required by 40 CFR 60.7(a)(3).

The owner or operator of these storage vessels shall maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of this emission unit.

The owner or operator shall keep a record of each inspection performed as required by 40 CFR 60.113b (a)(1), (a)(2), and (a)(4). Each record shall identify the storage vessel on which the inspection was performed and shall contain the date the vessel was inspected and the observed condition of each component of the control equipment (seals, internal floating roof, and fittings).

If any of the conditions described in 40 CFR 60.113b(a)(2) are detected during the annual visual inspection required by 40 CFR 60.113b(a)(2), a report shall be furnished to the Permitting Authority within 30 days of the inspection. Each report shall identify the storage vessel, the nature of the defects, and the date the storage vessel was emptied or the nature of and date the repair was made.

Records required by 40 CFR 60.7(f) shall be retained in a permanent form for a minimum period of five years, unless otherwise specified.

The owner or operator shall annually report the VOC emissions from floating roof tanks during a roof landing. The emissions shall be calculated for each occurrence and for each storage tank and reported in the ***Annual Operation Report.***

Emissions Unit No. 002 - Truck and Barge Loading Rack Operation

This emissions unit consists of truck and barge loading systems loading denatured ethanol (98% ethanol, 2% gasoline blend). VOC emissions will be controlled by a vapor combustion unit (VCU).

Essential Potential to Emit (PTE) Parameters

This emissions unit is allowed to operate continuously, i.e., 8,760 hours per year.

Emission Limitations and Standards

The maximum throughput rate shall not exceed 1,095 million gallons per year of denatured ethanol.

Total organic compounds (TOC) shall not exceed 57.83 tons per year @ 10 milligrams per liter for ethanol/ gasoline blends per 12 consecutive month period.

Test Methods and Procedures

Testing for demonstration of compliance shall be performed in accordance with EPA Reference Method (RM) 2A or 2B and 25A or 25B (as described in 40 CFR 60, Appendix A) for total organic compounds.

The initial compliance test for TOC shall be performed within 60 days after achieving the maximum production rate at which the affected facility will be operated, but not later than 180 days after initial startup of such facility. Subsequent tests shall be performed annually (once per federal fiscal year, i.e., October 1 – September 30).

Notification, Recordkeeping and Reporting Requirements

Monthly records of the truck and barge loading operations throughput of denatured ethanol shall be kept and maintained for a minimum period of five (5) years. Records shall be provided to the Permitting Authority upon request.

IV. CONCLUSION

Based upon information provided by Jaxbulk Terminal, LLC, the Permitting Authority has reasonable assurance that the proposed construction as described in this evaluation and subject to the conditions proposed herein, will not cause, or contribute to a violation of any ambient air quality standard or other technical provision of Chapters 62-296 and 62-297, FAC, JEPB Rules 2.1101 and 2.1201.