

3 May 2005

Mr. Roger Leitch  
Regional Manager  
Motiva Enterprises LLC  
520 Allens Avenue  
Providence, RI 02905-0007

Dear Mr. Leitch:

The Department of Environmental Management, Office of Air Resources has reviewed and approved your request for modifications to your bulk gasoline terminal located at 520 Allens Avenue, Providence.

Enclosed is a minor source permit issued pursuant to our review (Approval Nos. 1843-1844).

If there are any questions concerning this permit, please contact me at 222-2808, extension 7011.

Sincerely,

Douglas L. McVay  
Associate Supervising Engineer  
Office of Air Resources

cc: Providence Building Official

STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS  
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF AIR RESOURCES

MINOR SOURCE PERMIT

*MOTIVA ENTERPRISES LLC*

APPROVAL NOs. 1843-1844

Pursuant to the provisions of Air Pollution Control Regulation No. 9, this minor source permit is issued to:

*Motiva Enterprises LLC*

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**For the following:**

*The conversion of Tanks T7049 (Approval No. 1843) and T7547 (Approval No. 1844) to allow the storage of gasoline and other petroleum liquids of lesser vapor pressure. The allowable gasoline throughput for the entire facility shall remain at 527,000,000 gallons per year.*

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**Located at:** *520 Allens Avenue, Providence*

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**This permit shall be effective from the date of its issuance and shall remain in effect until revoked by or surrendered to the Department. This permit does not relieve *Motiva Enterprises LLC* from compliance with applicable state and federal air pollution control rules and regulations. The design, construction and operation of this equipment shall be subject to the attached permit conditions and emission limitations.**

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**Stephen Majkut, Chief  
Office of Air Resources**

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**Date of issuance**

**STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS  
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF AIR RESOURCES**

Permit Conditions and Emission Limitations

**MOTIVA ENTERPRISES LLC**

**APPROVAL NOS. 1843-1844**

A. Operating Requirements

1. Each storage vessel shall be allowed to store gasoline or other petroleum liquids that have a Reid vapor pressure of 4.0 psia or less as determined by ASTM Method D323.
2. Each storage vessel shall be equipped with a fixed roof in combination with an internal floating roof and shall meet the following specifications:
  - a. 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 accomplished as rapidly as possible.
  - b. Each internal floating roof shall be equipped with one of the following closure devices between the wall of the storage vessel and the edge of the internal floating roof:
    - (1) A foam or liquid-filled seal mounted in contact with the liquid (liquid-mounted seal). A liquid-mounted seal means a foam- or liquid-filled seal mounted in contact with the liquid between the wall of the storage vessel and the floating roof continuously around the circumference of the tank.
    - (2) Two seals mounted one above the other so that each forms a continuous closure that completely covers the space between the wall of the storage vessel and the edge of the internal floating roof. The lower seal may be vapor-mounted, but both must be continuous.
    - (3) A mechanical shoe primary seal and a secondary seal. A 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.

- c. Each opening in a noncontact 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.

B. Monitoring

1. The owner/operator shall visually inspect the internal floating roof, the primary seal, and the secondary seal, prior to initial filling of the storage vessel with gasoline or petroleum liquids. 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.
2. The owner/operator shall:
  - a. conduct a visual inspection through manholes and roof hatches on the fixed roof, at least once every 12 months after initial fill, of the internal floating roof and the primary seal or the secondary seal (if one is in service); and
  - b. empty and degas the vessel at least every 10 years and conduct a visual inspection of the internal floating roof, the primary seal, the secondary seal, gaskets, slotted membranes and sleeve seals.
3. If, during the visual inspection through manholes and roof hatches, the internal floating roof is not resting on the liquid surface, 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/operator shall repair the items or empty and remove the storage vessel from service within 45 days. If a failure that is detected during the above inspection 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 Office of Air Resources in the inspection report required in Condition D.1. 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.
4. If, during the visual inspection when the vessel is emptied and degassed, the internal floating roof has defects, the primary seal or 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/operator shall repair the items as necessary so that none of the conditions specified this paragraph exist before refilling the storage vessel with gasoline or petroleum liquids.
5. The owner/operator shall notify the Office of Air Resources, in writing, at least 60 days prior to the filling or refilling of each storage vessel following emptying and

degassing, to afford the Office of Air Resources the opportunity to inspect the storage vessel prior to refilling. If the emptying and degassing of the storage vessel is not planned and the owner/operator could not have known about the emptying and degassing 60 days in advance of refilling the tank, the owner/operator shall notify the Office of Air Resources 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 emptying and degassing 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 Office of Air Resources at least 7 days prior to the refilling.

C. Recordkeeping

1. The owner/operator shall maintain records of each inspection performed as required by Conditions B.2.a and B.2.b Each record shall contain;
  - a. The identity of the storage vessel;
  - b. The date the vessel was inspected; and
  - c. The observed condition of each component of the control equipment (seals, internal floating roof, and fittings).
2. The owner/operator shall maintain the following records for each storage vessel:
  - a. Records showing the dimensions of each tank and an analysis showing the capacity of the tank;
  - b. The product stored, the period of storage and the maximum true vapor pressure of that product during the respective storage period for each tank. Available data on the Reid vapor pressure and the maximum expected storage temperature based on the highest expected calendar-month average temperature of the stored product may be used to determine the maximum true vapor pressure from nomographs in API Bulletin 2517, unless the Office of Air Resources specifically requests that the liquid be sampled, the actual storage temperature determined and the Reid vapor pressure determined from the sample(s); and
  - c. The monthly throughput for each tank for each product stored.

D. Reporting

1. If any of the conditions described in Condition B.3 are detected during the annual visual inspection, a report shall be furnished to the Office of Air Resources within 30 days of the inspection. Each report shall contain:

- a. The identity of the storage vessel;
  - b. The nature of the defect(s); and
  - c. The date the storage vessel was emptied or the nature of and date the repair was made.
2. If any of the conditions described in Condition B.4 are detected during the visual inspection when the vessel is emptied and degassed, a report shall be furnished to the Office of Air Resources within 30 days of the inspection. The report shall include:
  - a. The identity of the storage vessel;
  - b. The nature of any defects identified; and
  - c. A list of each repair made.
3. The owner/operator shall, on a monthly basis, no later than 5 days after the first of the month, determine the total quantity of gasoline or petroleum liquid loaded into the storage tanks for that month. The owner/operator shall keep records of this determination and provide such records to the Office of Air Resources upon request.
4. The owner/operator shall notify the Office of Air Resources, in writing, after an exceedance of any emission limitation is discovered. This notification shall be made within five (5) days of the exceedance. Notification shall be made on forms furnished by the Office of Air Resources and must provide all of the information requested on the form.
5. The owner/operator shall notify the Office of Air Resources of any record showing noncompliance with the terms of this permit or any other air pollution control rule or regulation applicable to the facility by sending a copy of the record to the Office of Air Resources within 30 days following the occurrence.
6. The owner/operator shall notify the Office of Air Resources of any anticipated noncompliance with the terms of this permit or any other applicable air pollution control rules and regulations.
7. The owner/operator shall notify the Office of Air Resources in writing of any planned physical or operational change to any equipment that would:
  - a. Change the representation of the facility in the application.
  - b. Alter the applicability of any state or federal air pollution rules or regulations.
  - c. Result in the violation of any terms or conditions of this permit.

- d. Qualify as a modification under APC Regulation No. 9.

Such notification shall include:

- Information describing the nature of the change.
- Information describing the effect of the change on the emission of any air contaminant.
- The scheduled completion date of the planned change.

Any such change shall be consistent with the appropriate regulation and have the prior approval of the Director.

8. All records required as a condition of this permit must be made available to the Office of Air Resources or its representative upon request. These records must be maintained for a minimum of five years after the date of each record.

E. Other Permit Conditions

1. To the extent consistent with the requirements of this approval and applicable Federal and State laws, the facility shall be designed, constructed, and operated in accordance with the representation of the facility in the permit application.
2. The facility is subject to the requirements of the Office of Air Resource's Air Pollution Control Regulation No. 11 "Petroleum Liquids Marketing and Storage". If there is any conflict between any term or condition of this permit and the applicable provisions of APC Regulation No. 11, the owner/operator shall comply with the term or condition of this permit.
3. The facility is subject to the requirements of the following Federal New Source Performance Standards:
  - a. 40 CFR 60 Subpart A "General Provisions"
  - b. 40 CFR 60 Subpart Kb "Standards of Performance for Volatile Organic Liquid Storage Vessels for Which Construction, Reconstruction or Modification Commenced After July 23, 1984"

Compliance with all applicable provisions therein is required.

4. Employees of the Office of Air Resources and its authorized representatives shall be allowed to enter the facility at all times for the purpose of inspecting any air pollution source, investigating any condition it believes may be causing air pollution or examining any records required to be maintained by the Office of Air Resources.

5. Except as provided in Condition E.6, the owner/operator shall not store, sell or supply as fuel, at or from this facility, a gasoline having a Reid Vapor Pressure greater than 9.0 pounds per square inch, during the period of 1 May through 15 September of each year. Sampling and testing of gasoline shall be in accordance with ASTM Method D323-82 or any equivalent method approved by the Office of Air Resources and EPA.
6. The owner/operator shall not store, sell or supply as fuel, at or from this facility, a gasoline - ethanol blend (containing at least 9% ethanol) having a Reid Vapor Pressure greater than 10.0 pounds per square inch, during the period of 1 May through 15 September of each year. Sampling and testing of gasoline - ethanol blends shall be in accordance with ASTM Method D323-82 or any equivalent method approved by the Office of Air Resources and EPA.
7. At all times, including periods of startup, shutdown and malfunction, the owner/operator shall, to the extent practicable, maintain and operate the facility in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Office of Air Resources which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures and inspection of the source.

#### F. Definitions

As used throughout this permit, the following terms shall, where the context permits, be construed as follows:

"Fill" means the introduction of gasoline or petroleum liquid into a storage vessel but not necessarily to complete capacity.

"Gasoline" means any petroleum distillate having a Reid vapor pressure of more than 4.0 psia as determined by ASTM Method D323. This term includes but is not limited to mixtures of alcohols and gasoline.

"Liquid-mounted seal" means a primary seal mounted in continuous contact with the liquid around the circumference of the tank between the tank wall and the floating roof.

"Mechanical shoe seal" includes but is not limited to a metal sheet held vertically against the tank wall 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.

"Petroleum" means the crude oil removed from the earth and the oils derived from tar sands, shale and coal.

"Petroleum liquids" means petroleum, condensate, and any finished or intermediate products manufactured in a petroleum refinery.



"Reid vapor pressure" means the absolute vapor pressure of volatile crude oil and volatile nonviscous petroleum liquids except liquefied petroleum gases, as determined by ASTM D323-82.

"Storage vessel" means each tank, reservoir, or container used for the storage of gasoline or other petroleum liquids that have a Reid vapor pressure of 4.0 psia or less as determined by ASTM Method D323.

"Vapor-mounted seal" means a primary seal mounted so there is a vapor space underneath the seal. The annular vapor space is bounded by the bottom of the primary seal, the tank wall, the liquid surface, and the floating roof.