FEDERAL SYNTHETIC MINOR NEW SOURCE REVIEW PERMIT ISSUED PURSUANT TO THE REQUIREMENTS OF 40 CFR § 49.158 NUSTAR LOGISTICS, L.P.

PERMITTING AUTHORITY:

PERMITEE:

PERMIT NUMBER:

FACILITY:

United States Environmental Protection Agency Region 6

NuStar Logistics, L.P. Pena Blanca, New Mexico

R6NSR-NM-002

Rosario Terminal SIC - 4226 NAICS - 493190

FACILITY LOCATION:

The Pueblo of Santo Domingo 967 NM 16 Road Pena Blanca (Sandoval County) NM 87041

Latitude 35º28'54.20"N and Longitude 106º13'42.57"W

Pursuant to the provisions of the Clean Air Act (CAA), Subchapter I, Part A (42 U.S.C. Section 7410(a)(2)(c)), and the Code of Federal Regulations (CFR) Title 40, Sections 49.151-161, the United States Environmental Protection Agency (EPA), Region 6 is issuing a *Synthetic Minor New Source Permit* to NuStar Logistics, L.P. (NuStar) for an existing operating source. This permit places enforceable restrictions on the potential to emit of the source such that the requirements for major sources in 40 CFR Part 71 will not apply to the source, provided the Permittee is in compliance with the permit.

This authorization relates to the operation of an existing bulk loading facility consisting of a liquid asphalt plant and a crude oil transloading facility. Emissions from this source are from eight asphalt storage tanks, two natural gas-fired heaters, one natural gas-fired steam boiler in the liquid asphalt plant and two crude oil transloaders. NuStar is authorized to operate as a synthetic minor source in the Pueblo of Santo Domingo, in accordance with the terms and conditions set forth in this permit. Failure to comply with any term or conditions set forth in this permit may result in enforcement action pursuant to Section 113 of the CAA. The permit does not relieve NuStar of the responsibility to comply with any other applicable provisions of the CAA or other federal and tribal requirements.

In accordance with 40 CFR § 49.159 (a)(3) the permit is effective immediately upon issuance unless comments resulted in a change in the draft permit, in which case the permit is effective 30 days after issuance.

Mark Hansen Associate Director for Air, Multimedia Division Date

I. PROJECT DESCRIPTION

NuStar currently operates the Rosario terminal as a bulk loading facility for asphalt and crude oil transloading. NuStar also operates a liquid asphalt plant that has a polymer milling process to formulate various grades of polymer modified asphalt (PMA) cement. Asphalt is received by railcar and then either shipped out by truck or is stored and used to produce various grades of asphalt cement. The PMA milling process consists of blending polymer and/or sulfur pellets with the liquid asphalt which then is fed to the polymer mill for shearing and curing. The final product is shipped out by truck to the individual sales units.

The facility has eight storage tanks for asphalt products, two natural gas-fired asphalt heaters, a natural gas-fired steam boiler, a PMA mill, an asphalt loading station and two crude oil transloading stations. The crude oil transloading operation is completely independent from the asphalt railcar offloading.

The facility currently operates ten hours per day and five days per week and does not operate on federal or company holidays. The permit conditions will allow the facility to operate on a continuous 24 hours per day, 7 days per week schedule. The potential to emit emissions from all NSR pollutants are less than the Title V major source threshold except for VOC, for which this EPA permit puts operational controls to limit the VOC pollutant to be below 100 tpy. The facility will be using a vapor balance system for its crude oil transloading operation in order to reduce the VOC emissions.

II. EQUIPMENT LIST

Equipment Description	Emission Point Identification Number (EPN)	Model or Type of Equipment	Maximum Design Capacity
Asphalt storage tank	10-01, 10-02, 10-03, 10-04	Fixed roof insulated tanks	10,000 bbls
Asphalt storage tank	30-01, 30-02, 30-03, 30-04	Fixed roof insulated tanks	30,000 bbls
Asphalt heater	HTR-1		25.2 MMBtu/hr
Asphalt heater	HTR-2	Natural gas burners	18.7 MMBtu/hr
Steam boiler	BLR-3		17.5 MMBtu/hr
Asphalt loading facility	B2	One Truck bay	3.504 MM bbls per
			year
Polymer mill	Mill	Open bins, wet mixing vessel, shearing mill, pumps and ancillary equipment	
2 Crude oil transloading	T-LOAD	Transloading spur, railcars	1.76 MM bbls per
stations		and trucks	year. Each rail car capacity is 660 bbls.
2 Vapor balance control devices	VBAL	Hoses and connectors from crude oil railcars to tanker trucks	
Fugitive sources	F-Plant	Piping connectors, valves, leaks from equipment and	

Table 1

other fugitive sources.

III. REGULATORY APPLICABILITY

- 1) The applicant is required through this synthetic minor permit under 40 CFR § 49.158 to control the VOC emissions from the crude transloading operations through "vapor balance¹," and submerged filling. Vapor balance is an emission control between two vessels/containers designed to capture the VOC emissions that are displaced during liquid loading, in which the cargo tank (that is being unloaded) retrieves the vapors displaced from the container that is being loaded. VOC emissions from the facility shall be limited according to Table 2 of this permit to be below the major source requirement for a Part 71 operating permit. An air pollution control method where the contaminated air (or carrier gas) is displaced back to a fixed volume storage container during the transfer process.
- 2) The issuance of this permit does not provide relief for any federal applicable regulations that the facility may have been subject to including 40 CFR § 52, 40 CFR § 60, 40 CFR § 63, or 40 CFR § 71, prior to issuance of the permit.
- 3) By issuing this permit, the EPA does not assume any risk of loss which may occur as a result of the operation of the permitted facility by the Permittee, owner, and/or operator, if the conditions of this permit are not met by the Permittee, owner, and/or operator.

IV. GENERAL CONDITIONS

- 1) This permit and any required attachments shall be retained and made available for inspection upon request at the site.
- 2) The Permittee shall abide by all representations, statements of intent and agreements contained in the application and subsequent revisions submitted by the Permittee. The EPA shall be notified ten (10) days in advance of any significant deviation from the permit application as well as any plans, specifications or supporting data.
- 3) The Permittee, shall comply with all conditions of this permit, including emission limitations that apply to the affected emissions units at the permitted source. Noncompliance with any permit term or condition is a violation of the permit and may constitute a violation of the Clean Air Act and is grounds for enforcement action and for a permit termination or revocation.
- 4) The permitted source must not cause or contribute to a National Ambient Air Quality Standard (NAAQS) violation or in an attainment area, must not cause or contribute to a Prevention of Significant Deterioration (PSD) increment violation as in 40 CFR § 49.155(a)(7).
- 5) Issuance of this permit does not relieve the Permittee, the owner, and/or the operator of the responsibility to comply fully with all other applicable Federal and Tribal rules, regulations, and orders now or hereafter in effect.

¹ EPA's "Compilation of Air Pollutant Emission Factors" (AP – 42), Volume 1 (Stationary Point and Area Sources), Section 5.2.2.1.1 (Loading Losses).

- 6) It is not a defense, for the Permittee, in an enforcement action, to claim that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.
- 7) For modifications, as defined at 40 CFR §§ 49.152(d) and 49.153 (a)(1)–(3), that would increase an emissions unit's allowable emissions of a regulated NSR pollutant above its existing permitted annual allowable emissions limit, the Permittee shall first obtain a permit modification pursuant to 40 CFR §§ 49.154 and 49.155 approving the increase. For a proposed modification that is not otherwise subject to review under major NSR or under this program, such proposed increase in the annual allowable emissions limit shall be approved through an administrative permit revision as provided at 40 CFR § 49.159(f).
- 8) At such time that a new or modified source at the permitted facility or modification of the permitted facility becomes a major stationary source or major modification solely by virtue of a relaxation in any legally and practically enforceable limitation which was established after August 7, 1980, on the capacity of the permitted facility otherwise to emit a pollutant, such as a restriction on hours of operation, then the requirements of 40 CFR § 52.21 shall apply to the source or modification as though construction had not yet commenced on the source or modification.
- 9) Revise, Reopen, Revoke and Reissue, or Terminate for Cause: The permit may be revised, reopened, revoked and reissued, or terminated for cause pursuant to 40 CFR § 49.155(7)(iv). The filing of a request by the Permittee for a permit revision, revocation and re-issuance or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition. The EPA may reopen a permit for a cause on its own initiative, e.g., if the permit contains a material mistake or the facility fails to assure compliance with the applicable requirements.
- 10) *Severability:* The provisions of this permit are severable, and in the event of any challenge to any portion of this permit, or if any portion is held invalid, the remaining permit conditions shall remain valid and in force.
- 11) *Property Rights:* The permit does not convey any property rights of any sort or any exclusive privilege.
- 12) *Information Requests:* The Permittee shall furnish to the EPA, within a reasonable time, any information that the EPA may request in writing to determine whether cause exists for revising, revoking and reissuing, or terminating the permit or to determine compliance with the permit. For any such information claimed to be confidential, the Permittee shall also submit a claim of confidentiality in accordance with 40 CFR Part 2, Subpart B.
- 13) *Inspection and Entry:* The EPA or its authorized representatives may inspect the permitted facility during normal business hours for the purpose of ascertaining compliance with all conditions of this permit. Upon presentation of proper credentials, the Permittee shall allow the EPA or its authorized representative to:

- a) Enter upon the premises where a source is located or emissions-related activity is conducted, or where records are required to be kept under the conditions of the permit;
- b) Have access to and copy, at reasonable times, any records that are required to be kept as in the conditions of the permit;
- c) Inspect, during normal business hours or while the source is in operation, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit;
- d) Sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with the permit or other applicable requirements; and
- e) Record any inspection by use of written, electronic, magnetic and photographic media.
- 14) *Permit Effective Date:* This permit is effective immediately upon issuance unless comments resulted in a change in the draft permit, in which case the permit is effective 30 days after issuance. The Permittee may notify the EPA, in writing, that this permit or a term or condition of it is rejected. Such notice should be made within thirty days of receipt of the permit and should include the reason or reasons for rejection.
- 15) *Permit Transfers:* Permit transfers shall be made in accordance with 40 CFR § 49.159(f). The Air Program Director shall be notified in writing at the address shown below if the company is sold or changes its name.

U.S. Environmental Protection Agency Region 6 Air Permitting, Multimedia Planning and Permitting Division Tribal Air Permitting, 6 PDR 1445 Ross Ave, Dallas TX 75202

V. SPECIAL CONDITIONS

- 1) Permittee must meet the emission limitations in Table 2 at all times including during startup and shutdown operations.
- 2) Crude oil transloading operations shall not exceed an annual throughput of 1.76 MM bbls per year based on a 12-month rolling average from the two loading stations.
- 3) The Permittee shall conduct the loading transfer of crude oil from trucks to rail cars using a vapor balance system and submerged filling with no detectable VOC emissions.
- 4) Permittee shall install and operate and maintain each loading spur such that:
 - i. All vapor connections and lines on the railcars and trucks shall be equipped with closures that seal upon disconnect; and

- ii. The vapor line from the railcar to the trucks shall be vapor-tight and liquid fill connections for all systems shall be equipped with vapor-tight caps. Vapor-tight means equipment/connectors that allows no loss of vapors.
- 5) Asphalt loading shall not exceed an annual throughput of 3.504 MM bbls per year based on a 12month rolling average.
- 6) Emissions shall be calculated using the latest "AP-42 Chapter 5¹, Transportation and Marketing of Petroleum Liquids" for the crude oil transloading operations.
- 7) The VOC emissions from the asphalt fixed roof tanks are based on a pump rate not to exceed 16.8M gallons per hour.
- 8) During all loading operations (asphalt and crude) there shall be no visible emissions.

Equipment Type	Emission Point Identification Number (EPN)	Operational or Work Practice Standards	Emission Standard or Limits
Asphalt storage	10-01, 10-02, 10- 03, 10-04	Insulated fixed roof	Tank emissions are based on asphalt production and transfer loading of 3.504 MM bbls per year
tank ¹	03, 30-04	Insulated fixed foor	
Asphalt heaters ¹	HTR-1 HTR-2	Only use of pipeline natural gas fuel, good combustion practices based on manufacturer's operations and maintenance	Annual fuel consumption not to exceed 528 MMSCF based on a 12-month
Steam boiler ¹	BLR-3	schedules	rolling average
Asphalt loading facility ¹	B2	No applicable regulation since vapor pressure is less than 0.05 psia. Dedicated service for trucks and tanks	3.504 MM bbls per year based on a 12-month rolling average. See Special Conditions 5 & 7
Crude oil transloading operations	T-LOAD	Submerged filling/vapor balancing to achieve a minimum of 40% control	VOC emissions not to exceed 80 tpy. See Special Conditions 2-4
Fugitive sources ¹		Inspects all pipes and fixtures monthly for leaks. Repair prior to use or within 5 days if in continuous use	

Table 2Emission Limits and Standards.

¹ Insignificant VOC emissions of less than 0.5 tpy per source will not require monitoring of VOC emissions

VI. MONITORING REQUIREMENTS

- 1) The Permittee shall operate and maintain the equipment per the manufacturer's recommendations for the boilers and heaters.
- 2) Prior to each crude oil transloading operation, the hoses shall be examined for integrity for operation with no visible holes, leaks or cracks. The Permittee shall monitor all lines, connections, fittings, valves, or any other appurtenance employed to collect, contain, and/or move crude oil at each transloading station for crude oil leaks during all crude oil loading events using olfactory, visual, and auditory techniques. If a leak is detected, the Permittee shall discontinue the use of the station and repair the leak prior to resuming use of the truck loading station. Additionally there shall be no visible emissions during asphalt and crude loading emissions.
- 3) Monitor fuel rate to the heaters and boiler (EPNs: HTR-1, HTR-2, BLR-3) on a monthly basis from the natural gas meter to the facility to meet the limit in Table 2 based on a 12-month rolling average.
- 4) Asphalt transfer operations shall be conducted to ensure there are no spills during the transfer.
- 5) Monitor the monthly the asphalt transfer loading rates to calculate a 12-month rolling average for calculating annual VOC emissions.

VII. RECORDKEEPING REQUIREMENTS

- 1) Maintain records of the time, day and duration of each crude oil loading activity, including the check for integrity of the vapor balance system as described in permit condition VI.2.
- 2) Record the actual monthly and rolling 12-month volume of crude oil loaded from rail cars into trucks in barrels.
- 3) VOC emissions from the crude oil transloading operations shall be calculated in tons and recorded at the end of each month beginning with the first calendar month that permitted operations commence. Prior to 12 full months of data, the Permittee shall within seven (7) calendar days of the end of each month, add the emissions for that month to the calculated emissions for all previous months since permitted operations commenced and record the total. Thereafter, the Permittee shall, within 7 calendar days of the end of each month, add the emissions for that month to the calculated emissions for the preceding 11 months and record a new 12-month total.
- 4) VOC emissions from railcar loading for each calendar month shall be calculated using the methodology described in the most current version of EPA AP-42 – Compilation of Air Pollutant Emission Factors, Volume 1: Stationary Point and Area Sources, Section 5.2 Transportation and Marketing of Petroleum Liquids (for loading losses), and using the following:

- i. Total measured volume of crude oil transloaded for the month (bbl);
- ii. Molecular weight of vapors, pounds per pound-mole (lbs/lb-mole) using the True vapor pressure of the crude oil (> 2 psia), and.
- iii. The assumed vapor balance efficiency of 40%.
- 5) Record the monthly throughput of asphalt loading operations. Calculate the 12-month rolling average of asphalt loading by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11-months.
- 6) Maintain records of the natural gas flow rate to the heaters and boiler on a monthly basis. Calculate fuel usage based on a 12-month rolling basis to determine compliance with the annual limit in Table 1. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11-months.
- 7) Maintain all maintenance records of the tanks, crude oil transloading vapor hoses and fugitive sources in the plant.
- 8) Keep records of all input parameters and methodologies used to calculate VOC emissions from the crude oil transloading operations.
- 9) All records shall be retained for a minimum of 5 years from the time such record was created.

VIII. REPORTING REQUIREMENTS

Reports should be sent electronically to EPA Compliance and Enforcement Division at: <u>R6TribalNSRCompliance@epa.gov</u>, and a copy to <u>R6AirPermits@epa.gov</u>

- The Permittee shall promptly submit to EPA a written report of any deviations of emission or operational limits and a description of any corrective actions or preventative measures taken. A "prompt" deviation report is one that is emailed to R6TribalNSRCompliance@epa.gov
 - a) Thirty (30) days from the discovery of a deviation that would cause the Permittee to exceed the facility-wide emission limits if left un-corrected for more than five (5) days after discovering the deviation; and
 - b) Twelve (12) months from the discovery of a deviation of recordkeeping or other permit conditions that do not affect the permittee's ability to meet the facility-wide emission limits.

2) An annual report documenting the twelve (12) month annual emissions for each previous calendar year no later than April 1st is to be submitted to EPA to the electronic addresses as indicated above. For the first calendar year the Permittee shall submit the cumulative facility wide limits. The report shall also document that no operational restriction (as noted in Table 2) has been exceeded.

3) Annual emissions are to be calculated using appropriate methods as in stated in the permit.

4) The Permittee shall submit any record or report required by this permit upon EPA request.

Table of Acronyms

Btu/hr	British Thermal Units per Hour
bbls	Barrels
CFR	Code of Federal Regulations
CH ₄	Methane
СО	Carbon Monoxide
dscf	Dry Standard Cubic Foot
FIP	Federal Implementation Plan
FR	Federal Register
HHV	High Heating Value
НАР	Hazardous Air Pollutants
hr	Hour
lb/yr	Pounds per Year
MM bbls	Million barrels
MM SCF	Million Standard Cubic Feet
NSPS	New Source Performance Standards
NOx	Nitrogen Oxides
PSD	Prevention of Significant Deterioration
PTE	Potential to Emit
SCF	Standard Cubic Feet
tpy	Tons per Year
VOC	Volatile Organic Compounds (40 CFR §51.100)
%	Percent