Notice of Construction (NOC) Worksheet

pscleanair.org
Puget Sound Clean Air Agency

Source: SeaPort Sound Terminal LLC	**NOC Number:** 11917
Installation Address: 2628 Marine View Drive | Tacoma, WA 98422	**Registration Number:** 13828
Contact Name: Paul Siler	**Contact Email:** psiler@transmontaigne.com
Applied Date: 10/15/2019	**Contact Phone:** (303) 626-8209
Engineer: Ralph Munoz	**Inspector:** Wellington Troncoso

Public notice and public hearing requested by the public.

A. DESCRIPTION

For the Order of Approval:
One CECO Model DLM-1000-C-P-F fiber-bed mist eliminator for asphalt tanks T-1, T-2, T-3, T-28 and T-163 and one CECO Model DLM-1000-C-P-F fiber-bed mist eliminator for the asphalt tank truck loading rack (lanes 1 & 2). These mist eliminators include secondary carbon absorbers. Fugitive piping components (valve, flanges, etc) for the addition of butane into the gasoline storage tanks. Coverage under this NOC includes the gasoline truck loading rack and the associated vapor recovery unit on the loading racks (Including the installation of the John Zink vacuum assist system), the 8 internal floating roof gasoline storage tanks (T-201, T-202, T-203, T-204, T-205, T-153 and T-154) with associated fugitive piping components (valve, flanges, etc) for the addition of butane into the gasoline storage tanks T-201, T-202, T-203, T-204. and the 3 existing NSPS Subpart Ka gasoline and/or ethanol storage tanks (T-151, T-155 and T-156).

This Order of Approval No. 11917 hereby cancels and supersedes Order of Approval No. 11403 (Dated 7/31/18)

Additional Information

Facility

Seaport Sound Terminal is a bulk liquids distribution terminal providing logistics for petroleum, petroleum products and renewable fuels.

Proposed Equipment/Activities

Seaport Sound Terminal submitted this permit application to allow blending of butane into existing gasoline storage tanks. Butane will be delivered via truck; the butane will be injected directly from the butane truck into the fuel line that feeds the existing gasoline storage tanks. Butane is blended completely into gasoline due to similar chemical properties; no mixing is needed.

Seaport Sound Terminal is not seeking to increase the existing gasoline throughput limit that is covered in notice of construction order of approval (NOCOA) 11403. Permit condition 16 states:

> The total throughput of the facility shall not exceed 501,875,000 gallons of gasoline during any consecutive 12-month period. Targa Sound Terminal shall record the monthly and 12-month rolling total throughput within 30 days of the end of each month.

During the permitting of 11403 Seaport Sound Terminal provided emission estimates for the tank's vapor pressure at maximum storage temperature, which was calculated to be 5-15 Reid Vapor Pressure (RVP). The addition of Butane does not change the RVP of the storage tank which is how emission are calculated in the original permit application shown below:


Response Dec 2011.pdf

The addition of piping that will be used to pump butane into the existing storage tanks will be permitted under this action and as a result permit 11403 will be cancelled and superseded by this new permit action.

The new permit conditions for this permit are Permit Condition 24 and 25. The source will need to identify all the new fugitive components associated with the butane unloading area and keep a log of the inspections for each component.

B. DATABASE INFORMATION

Updated the database with all NOC references to 11403 to 11917

New NSPS due to this NOCOA?	**No**
New NESHAP due to this NOCOA?	**No**
New Synthetic Minor due to this NOCOA?	**No**

Seaport Sound Terminal is already a synthetic minor source and the status of this will not change as a result of this NOC. The NOC which has the synthetic minor limit is 11403 for gasoline throughput

C. NOC FEES AND ANNUAL REGISTRATION FEES

NOC Fees:

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Fees have been assessed in accordance with the fee schedule in Regulation I, Section 6.04. All fees must be paid prior to issuance of the final Order of Approval.

Fee Description	Cost	Amount Received (Date)
Filing Fee	$ 1,150	
Equipment (Butane addition to tanks x 4, Fugitive equipment)	5 x $600 = $3,000	
SEPA (previous determination)	0$	
Filing received		$ 1,150 (10/15/19)
Additional fee received		$3,000
Total		

Sent invoice to Christina 6/12/20

Paid fees

Registration Fees:
Registration fees are assessed to the facility on an annual basis. Fees are assessed in accordance with Regulation I, Section 5.07.

This project will not affect the annual registration fee.

20170084 - 13828.pdf

Facility Fees and Applicable Regulations		Charges
Base Fee for Registered Sources. Reg I, 5.07(c)	**$**	1,150.00
Reg I, 5.03(a)(1) - Facilities subject to federal emission standards (Title 40 CFR)		
Reg I, 5.03(a)(2) - Facilities subject to federally enforceable emission limitations		
Reg I, 5.03(a)(4)(C) - Facilities with fuel burning equipment		
Reg I, 5.03(a)(4)(F) - Gasoline terminal facilities		
Reg I, 5.03(a)(4)(H) - Facilities with VOC storage tanks		
Reg I, 5.03(a)(5) - Facilities with gas or odor control equipment (>= 200 cfm)		
Additional Fees:		
Reg I, 5.07(c)(1) - 40 CFR 60 Subpart Dc	$	2,100.00
Reg I, 5.07(c)(1) - 40 CFR 60 Subpart XX	$	2,100.00
Reg I, 5.07(c)(1) - 40 CFR 60 Subpart Kb	$	2,100.00
Reg I, 5.07(c)(1) - 40 CFR 60 Subpart Ka	$	2,100.00
Reg I, 5.07(c)(1) - 40 CFR 63 Subpart BBBBBB	$	2,100.00
Reg I, 5.07(c)(2) - Facilities subject to federally enforceable emission limitations	$	2,300.00
	$	**13,950.00**
Fee Totals		
TOTAL REGISTRATION FEE	**$**	**13,950.00**
The Total Registration Fee is due by January 06, 2017. If unpaid after January 06, 2017, the facility may be subject to enforcement action with civil penalties (Reg I, 5.07(b)).		

D. STATE ENVIRONMENTAL POLICY ACT (SEPA) REVIEW

State Environmental Policy Act (SEPA) review was conducted in accordance with Regulation I, Article 2. The SEPA review is undertaken to identify and help government decision-makers, applicants, and the public to understand how a project will affect the environment. A review under SEPA is required for projects that are not categorically exempt in WAC 197-11-800 through WAC 197-11-890. A new source review action which requires a NOC application submittal to the Agency is not categorically exempt.

A new SEPA determination is not required because the potential impacts from this project were reviewed under SEPA by City of Tacoma

City of Tacoma
Mitigated Determina

This SEPA determination was done for the gasoline project which covered the Butane unloading area. Shirley Shultz was the SEPA lead for this project from the City of Tacoma on April 3, 2012.

No new SEPA determination was done for this permit action.

E. BEST AVAILABLE CONTROL TECHNOLOGY (BACT) REVIEW

Best Available Control Technology (BACT)

New stationary sources of air pollution are required to use BACT to control all pollutants not previously emitted, or those for which emissions would increase as a result of the new source or modification. BACT is defined in WAC 173-400-030 as, “an emission limitation based on the maximum degree of reduction for each air pollutant subject to regulation under Chapter 70.94 RCW emitted from or which results from any new or modified stationary source, which the permitting authority, on a case-by-case basis, taking into account energy, environmental, and economic impacts and other costs, determines is achievable for such source or modification through application of production processes and available methods, systems, and techniques, including fuel cleaning, clean fuels, or treatment or innovative fuel combustion techniques for control of each pollutant.”

An emissions standard or emissions limitation means “a requirement established under the Federal Clean Air Act or Chapter 70.94 RCW which limits the quantity, rate, or concentration of emissions of air contaminants on a continuous basis, including any requirement relating to the operation or maintenance of a source to assure continuous emission reduction and any design, equipment, work practice, or operational standard adopted under the Federal Clean Air Act or Chapter 70.94 RCW.”

Best Available Control Technology for Toxics (tBACT)

New or modified sources are required to use tBACT for emissions control for TAP. Best available control technology for toxics (tBACT) is defined in WAC 173-460-020 as, "the term defined in WAC 173-400-030, as applied to TAP."

A review was done for fugitive equipment leaks for pumping butane into gasoline storage tanks.

Analysis:

According to the EPA Protocol for Equipment Leak Emissions Estimates, there are two primary control techniques for reducing equipment leak emissions: equipment modifications (such as replacing a standard valve with a sealless type) and (2) implementing a leak detection and repair (LDAR) program.

Order Nos. 10982 and 11501 included a BACT analysis for piping components in gasoline service. For these Orders, it was determined that the monthly inspection requirements under NESHAP Subpart BBBBBB satisfied BACT. Butane does not meet the definition of gasoline in 40 CFR 63.11100, so equipment in butane service is not subject to NESHAP Subpart BBBBBB. However, applying this monthly leak inspection requirement to equipment in butane service would be effective at reducing emissions from the new piping components.

Recommendations:

BACT is application of the monthly leak inspection and repair requirements from NESHAP Subpart BBBBBB to the equipment approved with this NOCOA. This would include a log book of the inspections that must be kept, and each leak shall be recorded in the log book. When a leak is detected, an initial attempt at repair shall be made as soon as practicable, but no later than 5 calendar days after the leak is detected. Repair or replacement of leaking equipment shall be completed within 15 calendar days after detection of each leak. Delay of repair of leaking equipment is allowed if the repair is not feasible within 15 days.

F. EMISSION ESTIMATES

Proposed Project Emissions

The butane project will add fugitive emissions from the addition of piping to connect the butane unloading area into existing gasoline piping. Emissions were calculated using the document Protocol for Equipment Leak Emission Estimates (EPA-453/R-95-017) Table 2-3 and Table 2-2 for open-ended lines. The emission factors provided in Table 2-3 include non-VOC's such as methane and ethane which will overestimate the VOC emissions. These fugitive emissions from fittings are the only emissions associated with this project that have not been included in the Potential to Emit under previous notices of construction. Emissions from gasoline storage tanks will **not** change from the previously permitted Potential to Emit (PTE) as the facility will be maintaining the same roof type, seal type, type and number of roof penetrations, local meteorology and the product being stored.

The PTE for the tanks was originally calculated based on the allowed range of Reid Vapor Pressure (RVP) in the gasoline to be stored in the tanks (ranging from 5 to 15 psi). Because this butane blending project does not change the allowable RVP range for the gasoline in the tanks, this project does not impact the PTE for the tanks. The gasoline product will not exceed the maximum allowed RVP of 15 psi, which is already accounted for in the existing PTE calculations.

Equipment Type	Emission Factor (kg/hr/source)	Emission Factor (lb/hr/source)	Number of Sources	Emissions (lbs/year)
Fittings	0.000042	0.000093	155	126.28
Open-Ended Lines	0.0023	0.00507	2	88.83
Total				215.10

Emissions from the proposed project are 0.11 tons/year of VOC (215 lbs/year). Note that these emissions estimates are conservative ones, since they include non-VOC's such as methane and ethane and overestimate VOC emissions. All other emissions from the facility have been evaluated in previous actions and are not part of this project.

While butane is classified as a VOC, it is considered neither a hazardous air pollutant (HAP) under the federal Clean Air Act nor a toxic air pollutant (TAP) under the Washington Clean Air Act (RCW 70A.15 and WAC 173-460). Therefore, this project has no associated increase in emissions of HAPs or TAPs.

Facility-wide Emissions

Actual Emissions

Reporting Source? Yes

Seaport Sound Terminal has historically reported VOC emissions greater than the 25 ton per year threshold for the Tacoma Terminal. This Order will not change the facility's reporting status.

Potential Emissions

Potential to emit for the facility is limited by the synthetic minor limits established in Order No. 11403.

G. OPERATING PERMIT OR PSD

The Title V Air Operating Permit (AOP) program applicability for the entire source has been reviewed.

The facility is not a Title V air operating permit source because post project PTE remains below Title V applicability thresholds and criteria due to federally enforceable limits of the following order: 11403. The source is considered a "**synthetic minor**".

H. AMBIENT TOXICS IMPACT ANALYSIS

No TAP emission increases associated with this permit modification.

I. APPLICABLE RULES & REGULATIONS

Puget Sound Clean Air Agency Regulations

SECTION 5.05 (c): The owner or operator of a registered source shall develop and implement an
SECTION 5.05 (c): The owner or operator of a registered source shall develop and implement an
operation and maintenance plan to ensure continuous compliance with Regulations I, II, and III. A copy of the plan shall be filed with the Control Officer upon request. The plan shall reflect good industrial practice and shall include, but not be limited to, the following:
(1) Periodic inspection of all equipment and control equipment;
(2) Monitoring and recording of equipment and control equipment performance;
(3) Prompt repair of any defective equipment or control equipment;
(4) Procedures for startup, shut down, and normal operation;
(5) The control measures to be employed to ensure compliance with Section 9.15 of this regulation; and
(6) A record of all actions required by the plan.
The plan shall be reviewed by the source owner or operator at least annually and updated to reflect any changes in good industrial practice.

SECTION 6.09: Within 30 days of completion of the installation or modification of a stationary source subject to the provisions of Article 6 of this regulation, the owner or operator or applicant shall file a Notice of Completion with the Agency. Each Notice of Completion shall be submitted on a form provided by the Agency, and shall specify the date upon which operation of the stationary source has commenced or will commence.

SECTION 9.11: It shall be unlawful for any person to cause or allow the emission of any air contaminant in sufficient quantities and of such characteristics and duration as is, or is likely to be, injurious to human health, plant or animal life, or property, or which unreasonably interferes with enjoyment of life and property.

SECTION 9.13: It shall be unlawful for any person to cause or allow the installation or use of any device or use of any means designed to mask the emission of an air contaminant which causes detriment to health, safety or welfare of any person.

REGULATION I, SECTION 9.20(a): It shall be unlawful for any person to cause or allow the operation of any features, machines or devices constituting parts of or called for by plans, specifications, or other information submitted pursuant to Article 6 of Regulation I unless such features, machines or devices are maintained in good working order.

2. WASHINGTON STATE ADMINISTRATIVE CODE

WAC 173-400-111(7): Construction limitations.

(a) Approval to construct or modify a stationary source becomes invalid if construction is not commenced within eighteen months after receipt of the approval, if construction is discontinued for a period of eighteen months or more, or if construction is not completed within a reasonable time. The permitting authority may extend the eighteen-month period upon a satisfactory showing by the permittee that an extension is justified.

J. PUBLIC NOTICE

This project does not meet the criteria for mandatory public notice under WAC 173-400-171(3). Criteria requiring public notice includes, but is not limited to, a project that exceeds emission threshold rates as defined in WAC 173-400-030 (e.g. 40 tpy NOx, VOC, or SO_2, 100 tpy CO, 15 tpy PM_{10}, 10 tpy $PM_{2.5}$, 0.6 tpy lead), includes a WAC 173-400-091 synthetic minor limit, has a toxic air pollutant emission increase above the acceptable source impact level in WAC 173-460-150, or has significant public interest. A notice of application was posted on the Agency's website for 15 days.

There was significant public interest from the public when this permit application was posted. There were multiple requests for a public notice along with a public hearing.

The agency has decided to hold a public hearing along with a public comment period during the times of xx.xx.xxxx

K. RECOMMENDED APPROVAL CONDITIONS

Standard Conditions:

1. Approval is hereby granted as provided in Article 6 of Regulation I of the Puget Sound Clean Air Agency to the applicant to install or establish the equipment, device or process described hereon at the installation address in accordance with the plans and specifications on file in the Engineering Division of the Puget Sound Clean Air Agency.

2. This approval does not relieve the applicant or owner of any requirement of any other governmental agency.

Specific Conditions:

3. When storage Tanks T-1, T-2, T-3, T-28 and T-163 contain asphalt, a mist eliminator system and carbon bed adsorption system shall be used to control emissions. For the loading of asphalt into

tank trucks on lanes 1 and 2, a mist eliminator system that includes a carbon bed adsorption system shall be used to control emissions.

4. Emissions shall not exceed 0% opacity as determined by EPA Method 22, except for one consecutive 15-minute period in any 24-hour period when the transfer lines are being blown for clearing.

5. The mist eliminator inlet temperatures shall not exceed 120°F at any time.

6. The asphalt storage temperature shall not exceed 350°F at any time.

7. The mist eliminators shall be equipped with gauges to monitor the inlet temperature and the pressure drop across the filter elements. The acceptable pressure drop range shall be included in the facility's O&M plan and posted on or near the gauge.

8. The asphalt storage tanks shall be equipped with a temperature monitoring device and the temperature shall be monitored and recorded at least once per 24 hours to demonstrate compliance with Permit Condition 6.

9. The inspections listed in Permit Condition 4, 5, and 6 are to be performed during daylight hours but no inspection is required if there are no loading/unloading operations during daylight hours that week. If a week passes where no inspection occurred due to loading/unloading only occurring at night, the owner and/or operator shall either perform the next loading/unloading during daylight to conduct an inspection for visible emissions or conduct the visible emission test during the next loading at night. If visible emissions are observed, the filter inlet temperature exceeds 120°F, or the pressure drop across the filter exceeds the acceptable range specified in the O&M plan, the Owner and/or Operator shall immediately take corrective action until there are no visible emissions or verify compliance with Condition 4 using EPA Method 22.
    a. The storage tank mist eliminator shall be inspected weekly to meet Permit Condition 4, 5, and 7 while an asphalt tank is being filled. If no asphalt is transferred to tanks during the calendar week, the owner and/or operator shall document and perform the inspection on the next asphalt tank transfer.
    b. The truck loading rack mist eliminator shall be inspected weekly to meet Permit Conditions 4, 5, and 7 while an asphalt truck is being loaded. If no asphalt truck is loaded during a calendar week, the Owner and/or Operator will document this and perform the inspection on the next asphalt load.

10. Demister H2S and VOC monitoring:

    a. The carbon portion of the demister carbon adsorption systems shall be monitored for hours of operation.
    b. The Owner and/or Operator shall replace the carbon at or before 80% of the recommended life expectancy (as based upon OEM recommended life expectancy and documented in the O&M plan) for the carbon or if H2S/VOC greater than 10ppm is observed during three consecutive weekly inspections as required under Specific Condition 9.

c. Each demister stack shall be installed with a sampling port. An MSA Altair 4 gas monitor with a sampling pump or similar device shall be connected to the sample ports once per week under normal loading conditions to evaluate the discharge stream for H2S and VOC. Breakthrough will be determined based upon H2S levels. When H2S values are greater than 10ppm, on three consecutive weekly tests, the owner and/or operator shall take corrective actions to control the release of H2S/VOC. If corrective measures are unsuccessful, the owner and/or operator shall replace the carbon or carbon canisters within 5 days after completing corrective actions or cease loading operations that are dependent on the unit until the carbon or carbon canister is replaced or the demister system is repaired.

ADDITIONAL TRUCK LOADING RACK REQUIREMENTS:

11. The gasoline tank truck loading rack is subject to 40 CFR Part 60, Subparts XX and A. The gasoline loading terminal (gasoline storage tanks, truck loading rack, cargo tanks, and equipment components) is subject to 40 CFR Part 63, Subparts BBBBBB and A.

12. Total Non-Methane Hydrocarbon (NMHC) emissions from the vapor recovery unit (VRU) shall not exceed 0.02 lb/1000 gallons (2.4 mg/l) of gasoline throughput, as determined by EPA Method 25B and the procedures in 40 CFR 60.503. Benzene emissions from the VRU shall not exceed 0.000017 lb/1000 gallons (0.002 mg/l), as determined by EPA Method TO-15. Tests to determine compliance with these emission limits shall be conducted within 60 days of startup of the gasoline loading terminal.

13. Total NMHC emissions from the VRU shall not exceed 0.15% VOC (as propane), as determined by the CEMS on a 15-minute bed cycle. A 3-hour averaging period may be used provided that data monitored during periods with no loading activity are excluded from the average.

14. A performance evaluation of the CEMS shall be conducted within 60 days of startup of the gasoline loading terminal in accordance with 40 CFR Part 60, Appendix B, Performance Specification 8 or 8A.

15. No gasoline or ethanol shall be loaded onto railcars unless a Notice of Construction application has been filed and an Order of Approval has been issued by the Agency for that activity.

16. The total throughput of the facility shall not exceed 501,875,000 gallons of gasoline during any consecutive 12-month period. Targa Sound Terminal shall record the monthly and 12-month rolling total throughput within 30 days of the end of each month.

17. The gasoline throughput across the truck loading rack shall not exceed 4,800 gpm and 40,000 gallons per 15 minutes.

GASOLINE STORAGE TANKS (T-201, T-202, T-203, T-204, T-150, T-153 and T-154)

18. Tanks T-201, T-202, T-203, T-204, and T-150 are subject to 40 CFR Part 60, Subparts Kb and A.

19. The adjustable roof legs on these tanks shall be fitted with vapor seal boots or equivalent.

20. The secondary seals on these tanks shall extend from the roof to the tank shell and shall not be attached to the primary seal.

21. The entire circumference of each primary and secondary seal on these tanks shall be inspected for compliance with the requirements of Section 3.02 of Regulation II during hydrotesting of the tank. The time between inspections shall not exceed 10 years. If a new primary or secondary seal is installed, or if a primary or secondary seal is repaired, both seals shall be inspected at the time of the seal installation or repair. Flexible wiper seals shall be inspected when the outer edge of the seal is curved upward.

22. The concentration of organic vapor in the vapor space above the internal floating roof on these tanks shall not exceed 30% of its lower explosive limit (LEL).

23. The emissions from degassing of gasoline storage tanks shall be vented to a control device.

24. The Owner and/or Operator shall inspect all valves, pumps, and pipe fittings associated with the Butane unloading areas for leaks monthly. Detection methods incorporating sight, sound, or smell are acceptable. One inspection must occur in each calendar month, and each inspection shall be separated by at least 14 calendar days, but no more than 45 calendar days. An initial attempt to repair all detected leaks shall be made within 5 calendar days of its detection. Final repairs must be completed within 15 days of detection unless this is not feasible. The repaired or replacement component shall be reinspected the first time the component is in operation after the repair or replacement.

25. The Owner and/or Operator shall keep a log of all inspections of the equipment components. The log shall include the date of inspection, findings, leak determination method, corrective action, and inspector name and signature. For each leak detected, the log shall include the location of the leak, the date of initial attempt at repair, the date it was repaired or replaced, and the results of the reinspection. Entries into the log shall occur immediately following the inspection and initialed by the person performing the inspection.

RECORDS

26. Targa Sound Terminal shall not engage in producing gasoline, kerosene, distillate fuel oils, residual fuel oils, lubricants, or other products through the distillation of petroleum, or through the redistillation, cracking, or reforming of unfinished petroleum derivatives, without first obtaining permits for the refinery from the Puget Sound Clean Air Agency.

27. Records shall be kept for at least 5 years from the date of the record documenting the results of each inspection, maintenance and corrective action. Each record shall also include the date and time, a brief description, and the name of the person who conducted the activity.

28. This Order of Approval No. 11917 hereby cancels and supersedes Order of Approval Nos. 11403 (Dated 7/31/18)

L. CORRESPONDENCE AND SUPPORTING DOCUMENTS

M. REVIEWS

Reviews	Name	Date
Engineer:	Ralph Munoz	9/18/20
Inspector:		
Second Review:	John Dawson	9/21/20
Applicant Name:	Paul Siler	