NOTICE OF DECISION

Decision: Approved, subject to conditions
Proposal: Shoreline Substantial Development Permit and critical areas review for modification to a rail car unloading facility at Taylor Way, as well as tank installation and installation of a Marine Vapor Combustion Unit that has an associated Dock Safety Unit (DSU) to be installed on the existing marine loading dock on Marine View Drive.

Applicant: Troy Goodman, Targa Sound Terminal, 2628 Marine View Drive
Location: 2628 Marine View Drive and 1515 (1601) Taylor Way Parcel Nos. 0321264046, -4073, -4048, -2062, -3048, -3030 and 2275200211
Application No: SHR2013-40000203722

Staff Contact: Shirley Schultz, Principal Planner, 747 Market St, Room 345, (253) 591-5121, shirley.schultz@cityoftacoma.org

Environmental Review: The City has determined the project will not have a probable significant adverse impact on the environment and has issued a Determination of Nonsignificance (DNS). The DNS may be appealed following the appeal procedures and fee above.

For further information regarding the proposal, log onto the website at http://tacomapermits.org and select "Message Board". The case file may be viewed in Planning and Development Services, 747 Market Street, Room 345.

Reconsideration: Any person having standing may request reconsideration of the Director's decision, based upon errors of procedure or fact, by submitting a request in writing to Planning and Development Services at the address above.

Appeal to Shoreline Hearings Board: If no reconsideration request is timely filed, the decision shall become final and shall be transmitted to the Department of Ecology. Upon receipt of the final decision, Ecology shall conduct a 21-day appeal period. The Decision may be appealed by any person aggrieved by the granting, denying or rescinding of a permit on shorelines of the state pursuant to RCW 90.58.140, who may seek review from the shorelines hearings board by filing a petition for review.

Information on filing an appeal of a Shoreline Substantial Development Permit may be obtained by contacting the State of Washington Environmental and Land Use Hearings Office at www.eho.wa.gov or PO Box 40903, Olympia WA 98504-0903, 360-664-9160, eluho@eluho.wa.gov

Date of Decision: 12/5/2013
Appeal Period Ends: 12/19/2013
Decision Effective: 12/20/2013

To request this information in an alternative format or a reasonable accommodation, please call 253-591-5030 (voice). TTY or STS users please dial 711 to connect to Washington Relay Services.
NOTICE OF LAND USE DECISION
SHORELINE SUBSTANTIAL DEVELOPMENT PERMIT

APPLICANT: Troy Goodman
Targa Sound Terminal
2628 Marine View Drive
Tacoma, WA 98422

SUMMARY OF REQUEST:
The applicant is requesting a Shoreline Substantial Development Permit and critical areas review for modification to a rail car unloading facility at Taylor Way, as well as tank installation and installation of a Marine Vapor Combustion Unit that has an associated Dock Safety Unit (DSU) to be installed on the existing marine loading dock on Marine View Drive. The site is located within the “S-10” Shoreline District – Port Industrial and the “PMI” Port Maritime Industrial District.

LOCATION:
2628 Marine View Drive and 1515 (1601) Taylor Way
Parcel Nos. 0321264046, 0321264073, 2275200211, 0321264048, 0321262062, 0321263048 and 0321263030

DECISION:
The requested permits are Approved subject to conditions.

NOTE: Last day to request reconsideration December 19, 2013.
This decision will be final on December 20, 2013 and will be transmitted to the Department of Ecology at that time, provided no requests for reconsideration are timely filed as identified in APPEAL PROCEDURES of this Report and Decision. Upon receipt by Department of Ecology, a 21-day appeal period will begin.

For additional information concerning this land use permit please contact:

Shirley Schultz
Planning and Development Services
747 Market Street, Room 345, Tacoma, WA 98402
253-591-5121 or shirley.schultz@cityoftacoma.org
SUMMARY OF RECORD

The following attachments and exhibits constitute the administrative record:

Attachments:

A. Vicinity Map
B. Tank Farm Site plans
C. Rail Facility Site Plan
D. Mooring Plan, marine loading dock
E. Technical Memorandum, Karla Kluge, Senior Environmental Specialist, October 16, 2013
F. Comments from City of Tacoma Environmental Services Department, Engineering Division, dated July 14, 2013
G. Comments received from Planning and Development Services, Engineering, Dan Sully, October 25, 2013

Exhibits:¹

A. Determination of Environmental Non-significance, SEP2013-40000203723
B. JARPA
C. Land Use Permit Application
D. Comment Letter, Tacoma-Pierce County Health Department, July 29, 2013
E. Department of Ecology Correspondence
   a. DOE Comment Letter, July 25, 2013
   b. Applicant Response, August 16, 2013
F. Puget Sound Clean Air Agency (PSCAA) Correspondence
   a. Initial Comment Letter, July 24, 2013
   b. Applicant's response, August 27, 2013
   c. Second PSCAA comment Letter, September 6, 2013
   d. Applicant's response, October 10, 2013
   e. Final PSCAA comments, November 6, 2013
G. Comment Letter, Citizens for a Healthy Bay, July 25, 2013
H. Targa Sound Terminal Facility Contingency Plan
I. US Coast Guard Acceptance letter for Facility Response Plan
J. Binding Agreement regarding Spill Prevention, Preparedness, and Response Program
K. Membership Agreement, Marine Spill Response Corporation
L. TMC 13.10, Shoreline Management, June 2013 (This is the regulatory code in effect at time of complete application, included for reference.)

The Director of Planning and Development Services (Director) enters the following Findings and Conclusions based upon the applicable criteria and standards set forth in the Tacoma Municipal Code, Tacoma Shoreline Master Program, and Washington Administrative Code, as well as the attachments and exhibits listed above.

¹ All Exhibits are contained in Planning and Development Services File No. SHR2013-40000203722 and are referenced and incorporated herein as though fully set forth.
FINDINGS

Proposal

1. The applicant is requesting a Shoreline Substantial Development Permit and critical areas review for modification to a rail car unloading facility at Taylor Way, as well as tank installation and installation of a Marine Vapor Combustion Unit that has an associated Dock Safety Unit (DSU) to be installed on the existing marine loading dock on Marine View Drive. The purpose of the project is to increase rail loading efficiency at the site and to reduce emissions from marine loading of fossil fuels. The use of the site is water-dependent, as it relies on its location on the Hylebos Waterway to transfer materials by water.

2. At the Taylor Way site, the applicant proposes to modify the existing rail unloading facility. The facility has space for 36 rail cars on the site, but only has the capacity to offload crude oil from 24 spots, 12 cars at a time. Addition of two pumps and their associated piping, electrical equipment, and ancillary structures will allow offloading of all 36 cars at one time, thus increasing efficiency and allowing the cars to return into circulation. The applicant estimates that an additional 288 rail cars per week (up to 6-8 round-trips per delivery: 3-4 trains into the site and 3-4 trains leaving) would arrive at the site with this increased capacity.

3. The project at Taylor Way will also include replacement of one ethanol pump with two new pumps. Overall the project will require minimal grading activity for concrete pads for the pumps. See Attachment “C” for the proposed site plan.

4. At the Marine View Drive site, the applicant proposes to install a Marine Vapor Combustion Unit (MVCU) and associated equipment to serve the existing marine loading dock in the Hylebos Waterway. The MVCU will capture and burn emissions that occur during the loading of products onto marine vessels. The project includes the MVCU (located more than 200 feet from Ordinary High Water Mark – OHWM), adjacent to a blower unit (VBSU). These will be connected via piping to a Dock Safety Unit (DSU). The DSU is the equipment that is actually located atop the existing dock, on a skid that is approximately 7 feet by 21 feet. No additional overwater coverage will occur due to the proposal. See Attachment “B” for a site plan.

5. The MVCU will also include minimal grading (trenching), as the pipes will be at the surface or as close to ground surface as possible.

6. The applicant has also included in the JARPA a description of modifications to two tanks and the construction of two tanks. This inclusion is for the benefit of other agencies, as the tanks have been permitted by the City of Tacoma previously (SHR2008-40000122196 and SHR2011-400001629622). Except as they may be related to the above-noted proposal, these tanks are not addressed in this Report and Decision.

Project Site

7. The sites are used by the applicant as a petroleum transfer terminal. The applicant provides third party logistical services for crude oil, petroleum products, and renewable fuels through storage, a marine berth, rail unloading, and truck loading facilities. Rail cars are unloaded at the Taylor Way facility and product is delivered to the Marine View Drive facility via pipes beneath the Hylebos Waterway. Product is then stored at the Marine View Drive facility

2 These files are available for review from Planning and Development Services.
and/or distributed by truck or marine vessel. The Marine View Drive facility also receives product directly from the Olympic Pipeline.

8. The Marine View Drive site, about 18.5 acres, is developed with 38 storage tanks, a truck rack (for loading trucks), operations facilities, maintenance facilities, and Targa Sound Terminal's administrative offices. Additional tanks and associated facilities have been previously permitted on adjacent land to the north of the existing facility. The site is fully secured with fencing and controlled access.

9. Vegetation on the site is minimal, particularly on the upland portions of the site. Shoreline plantings have recently been permitted and are scheduled to be installed along the expansion portion of the facility in 2014.

10. The Taylor Way site, approximately 5.8 acres, is developed with a rail unloading facility consisting of three rail spurs, pumps, storage tanks, small offices/sheds, and associated equipment. The site is fully secured with fencing and controlled access.

11. Vegetation on this site is minimal as well, except for critical area plantings along the northerly edge of the site.

12. Portions of the subject site(s) lie within an identified 100-year FEMA flood hazard zone. However, according to the 2007 Floodplain map and FEMA flood map 530148 Panels 0025B and 0010B, the locations of the proposed construction are outside of the 100-year floodplain, with the exception of the piping and DSU. However, the piping and the DSU unit and related equipment will be on the terminal and dock that is situated well above the maximum flood elevation. No trees are proposed to be removed, no new impervious surfaces applied, no fill and no impact to flood waters or habitat is anticipated.

13. A Fish and Wildlife Habitat Conservation Area and its marine buffer are present on the subject site. No wetlands, streams, or stream buffers are present on the subject property. A wetland buffer does extend onto the 1601 Taylor Way site, but not into the area where construction will take place.

14. No Endangered Species will be affected by the proposed work. According to the website for U.S. Fish and Wildlife Service of Western Washington, the following threatened or endangered species have the potential to occur in Pierce County: Bull Trout, Canada Lynx, Gray wolf, Grizzly bear, marbled murrelet, and northern spotted owl. There is also critical habitat for bull trout, marbled murrelet and northern spotted owl in Pierce County. However, no suitable habitat or designated critical habitat occurs within the project site.

15. According to the NOAA Fisheries, the following threatened or endangered marine mammals have the potential to occur in marine waters of Puget Sound: Southern Resident Killer Whales, humpback whale, Stellar Sea lion. Based on historical movement patterns and known haul-out locations for the Stellar sea lion, it is very unlikely that any of these three species would occur immediately adjacent to the project sites. In addition, four species of ESA listed turtles have potential to occur in Puget Sound, however they are all considered extremely rare in the region.

16. Five additional species of threatened or endangered fish species may also occur in Puget Sound. They are: Chinook Salmon, steelhead trout, Puget Sound DPS Boccaccio, Puget Sound canary rockfish, and Puget Sound DPS yelloweye rockfish. Any of these species may occur within the marine waters near the subject sites.

17. Both sites are located within the “S-10” Shoreline District – Port Industrial, with a Shoreline Environment Designation of “Urban.” Further, the Comprehensive Plan designates the area as “High Intensity.”
18. The intent the “urban” designation is “designed to ensure optimum utilization of shorelines within urbanized shoreline areas.” See TSMP section 5.3.

19. The intent of the “S-10” district is “to allow the continued development of the Port Industrial Area, with an increase in intensity of development and a greater emphasis on terminal facilities within the City”. See TSMP section 9.12. (Previously, TMC 13.10.130)

**Surrounding Area**

20. The area around the Taylor Way site is fully developed with industrial uses. The site is bounded on the north by a construction company, which site includes a wetland restoration area. To the south, the site borders a paved area of land which is currently used for container storage, as well as berthing of the Kalakala ferry.

21. The area surrounding the Marine View Drive site is primarily developed with industrial and port uses. Directly adjacent to the marine loading dock, the Port of Tacoma and the Puyallup Tribe of Indians have conducted a remediation and restoration of tidelands along the Hylebos Waterway.

22. All areas surrounding the proposed work are zoned “S-10” Shoreline District – Port Industrial.

**Additional Information**

23. The application was determined to be complete for review on June 11, 2013, and is vested to the codes and policies in place at that time.

24. The applicant has indicated that due to the nature of site activities (movement and storage of hazardous materials) there are significant safety concerns with allowing public access within or near to the subject property. The applicant indicates that the project is exempt from providing public access per TMC 13.10.175.A.1.a(1) and TMC 13.10.175.A.1.a(4). See Exhibit “B”.

25. Pursuant to WAC 197-11-340, the City will issue a Determination of Non-Significance (DNS) for the proposed action concurrent with this Decision. The comment period closed July 25, 2013. The DNS and associated materials are included as Exhibit “A”.

26. The *Tacoma Shoreline Master Program* (TSMP) provides the following policy guidance relative to industrial uses in the shoreline (Page 85):

a. Water-dependent terminal, commercial and industrial uses should have shoreline location priority over all other uses in designated shoreline industrial areas.

b. The preferred location for future non-water dependent industry is in industrial areas away from the shoreline.

c. Non-water dependent industries presently occupying waterfront locations are encouraged to relocate to backup industrial areas away from the shoreline.

d. Procedures for handling toxic materials in shoreline areas should prevent their entering the air or water.

27. The site plan and project proposal were reviewed by Karla Kluge, Senior Environmental Specialist (SES) and subject matter expert for the Planning and Development Services Department. The Director would note that substantial weight is given to Ms. Kluge’s review of the proposal for potential effects on critical areas. Ms. Kluge’s Technical Memorandum is marked as Attachment “E”.

File No. SHR2013-40000203722
Targa Sound Terminal Dock and Rail Loading Revisions
Page 5
28. Ms. Kluge reviewed available documents, including prior permitting and information provided by the applicant. See Exhibits “A-C”. As long as the project is constructed and operated using best practices, Ms. Kluge has concluded that the proposal will have no impact on priority species or their habit, nor will vegetation be affected. Further, Ms. Kluge has concluded that there will be no adverse impacts to the floodplains located on the sites.

Notification and Comments

29. Written notice of the application and copies of the project plans, the Environmental Checklist, and the JARPA were originally transmitted to the Puyallup Tribe and reviewing local, state, and federal resource agencies on June 25, 2013.

30. Comments from reviewing departments of the City of Tacoma are appended to this Report and Decision as Attachments “F” and “G”. Recommended conditions are incorporated into the decision as appropriate.

31. Comments from the Department of Ecology (DOE), and the response from the applicant, are appended to this Report and Decision as Exhibit “E”.

32. The Director understands the concerns of DOE to be requests for clarification of construction and operations at the site, specifically related to the SEPA checklist. This includes a qualitative analysis of greenhouse gas emissions, a clearer description of the crude oil loading/unloading activities, an analysis of the potential to encounter contaminated soils at the site, and demonstration of compliance with stormwater regulations for the site.

33. In response to the letter from DOE, the applicant submitted additional information related to the proposal, which is included in SEP2013-40000203723 as an addendum to the original checklist. In summary, the applicant provided the following information:

- The total GHG emissions on the site are less than 25,000 metric tons of carbon dioxide equivalents per year, which is the threshold of significance provided in DOE guidance. Further, other criteria pollutants are below major source limits.
- Targa has adopted site specific standard operating procedures in compliance with all regulations for spill prevention and spill response. Rail cars arrive by Tacoma Rail to the three rail spur (12 cars each) on the Taylor Way site. The site includes ground protection (drip pans), the rail cars are secured, and cars are securely unloaded.
- A net increase of approximately 288 rail cars per week is expected due to the ability to unload cars more quickly at the site.
- Maximum annual crude oil throughput at the site is expected to be 14,601,600 barrels per year.
- In addition to transfer by rail, Targa would transfer crude oil by vessels up to 800 feet in length – all of them double hulled vessels. The applicant estimates an additional eight vessels per month, each with a capacity of about 150,000 bbl.
- All best practices will be followed for the transfer of crude oil and other petroleum products. The applicant maintains a spill prevention and response plan that is certified by state and federal agencies.
- The project reviewed under this proposal will result in minimal soil disturbance. Targa is aware of the potential to encounter contaminated soils at the site, and has already remediated the areas where installation of the MVCU will occur.
- Targa maintains and complies with an approved NPDES permit for stormwater discharges from the site. All work will occur within the parameters of that permit.

34. Comments from Puget Sound Clean Air Agency (PSCAA) and responses to those letters are appended to this Report and Decision as Exhibit “F”.

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Targa Sound Terminal Dock and Rail Loading Revisions
Page 6
35. The Director understands the concerns expressed by PSCAA to include the following:

- There is a general lack of clarity about the crude oil throughput capacity for the facility in relation to federal regulations.
- There is no clear guarantee that the facility will operate within the stated limits of throughput for crude oil.
- The applicant has not provided adequate information for off-site air quality impacts resulting from rail and vessel transport increases expected as a result of the proposal.
- The applicant has not provided specific quantification of criteria pollutants from off-site use of rail and vessels to transport petroleum products.
- The applicant needs to provide clear description of all approved oil spill prevention and response plans and how they will be modified or amended to address the handling of crude oil at the facility.
- The applicant needs to make sure that all other permits are acquired for the site, including any necessary permits from the U.S. Army Corps of Engineers (Corps), and comply with all conditions of those permits. This includes, specifically, review of the facility as it may be subject to the Magnuson Amendment.
- There is concern about incremental expansions of the facility and its throughput, gradually exceeding acceptable thresholds for pollutants, traffic, and other hazards that may result from the use of the site as a transfer facility.
- The shoreline permit should be conditioned upon the applicant’s consistency with development and operations at the site in compliance with the representations set forth in the application materials and subsequent communications.

36. The applicant provided two response letters to the PSCAA, which are also included as addenda to the original SEPA checklist (SEP2013-40000203723) as they provide additional, clarifying information about the proposal and the operations at the site, and the impacts that are expected as result of the proposal. The applicant’s responses are summarized below:

- Targa has applied for all applicable Corps permits for the MVCU and the rail unloading expansion. As part of the review, and in order to issue the permit, the Corps must ensure that the project may be permitted consistent with the Magnuson Amendment. Appropriate review and determination of "capable of being handled" will occur under that Corps permitting process. Should the Corps determine the Magnuson Amendment precludes it from issuing a permit for the project, Targa would be unable to receive a permit from the Corps for their currently defined project, and pursuant to the conditions below, the City will not grant development permits for this currently defined project.
- Targa has stated in applications to the City and to the PSCAA that its total throughput will be limited to a maximum annual throughput of 14,601,600 bbl/yr, equating to 40,000 bbl/day on average. Exceeding this assumed throughput would put the facility out of compliance with both local and PSCAA permits.

 Footnote 3: The Magnuson Amendment provides, in relevant part: "Notwithstanding any other provision of law, on and after October 18, 1977, no officer, employee, or other official of the Federal Government shall, or shall have authority to, issue, renew, grant, or otherwise approve any permit, license, or other authority for constructing, renovating, modifying, or otherwise altering a terminal, dock, or other facility in, on, or immediately adjacent to, or affecting the navigable waters of Puget Sound, or any other navigable waters in the State of Washington east of Port Angeles, which will or may result in any increase in the volume of crude oil capable of being handled at any such facility (measured as of October 18, 1977), other than oil to be refined for consumption in the State of Washington."
• Additional information regarding greenhouse gas emissions as well as criteria pollutants and volatile organic compounds from off-site transportation is estimated and provided is estimated and provided by the applicant\(^4\). Targa does not own or control marine vessels or locomotives – those are third-party common carriers. These carriers are subject to EPA rules for air quality improvements. Since 2008, EPA has been working with rail companies to improve locomotive engines. Likewise, EPA has been making Regulations for ocean-going vessels more stringent since 2004. These regulations have reduced the amount of sulfur dioxide, nitrogen oxides, carbon monoxide, and other emissions from diesel engines.

• A copy of the facility contingency plan and the approval from the US Coast Guard was provided, along with the binding agreement with DOE to comply with the plans. In addition, Targa provided certification of its membership in the Marine Spill Response Corporation, which is the response company in case of spills.

• Targa is in the process of procuring all other required permits and will provide copies of those permits prior to obtaining development permits from the City of Tacoma.

• Targa understands that operations at the site are subject to multiple reviews at the local, state, and federal level – including all crude oil marine transfers, truck traffic at the site, and rail cars received and loaded/unloaded.

37. In regard to the comments received from reviewing agencies and the applicant’s responses, the Director would note the following.

• The applicant will be required to demonstrate that all required permits have been acquired. Included in this requirement will be demonstration that the Corps has been consulted and permits have been obtained (or are not necessary). The same will be required regarding the Washington Department of Fish and Wildlife.

• The applicant has claimed and certifies that all application materials are complete and accurate. The permits have been analyzed based upon those representations. This permit, as with all land use permits, is predicated upon the accuracy of the application and related materials. Should there be changes in the proposal, or should there be material facts which come to light which change the analysis herein (or in the SEPA determination), additional review and, possibly, additional permitting will be required.

• The Director understands the concern of reviewing agencies with the amount of vessel traffic to and from the site. However, the City has no regulatory authority over vessel traffic and cannot condition a permit to restrict vessel traffic.

• Failure of the applicant to comply with the representations in the permit and conditions thereof may be considered a violation of the TMC and may subject the applicant to enforcement actions by the City.

• The applicant has provided and the Director has considered a quantitative analysis of greenhouse gas emissions, criteria pollutants, and hazardous air pollutants (including state toxic air pollutants) that are expected at the site as a result of the proposal. These emissions will be addressed through compliance with PSCAA permits for activities at the site, and will include the installation and operation of the MVCU. The applicant will be required to demonstrate permits from PSCAA as part of the building permit process.

• The applicant has provided and the Director has considered a qualitative analysis of greenhouse gas emissions, criteria pollutants, and hazardous air pollutants that may occur as a result of rail and vessel transportation to and from the site. While the Director

\(^{4}\) PSCAA also provided with its November 6, 2013 letter a recent quantitative inventory of all maritime air emissions in the Puget Sound airshed, including emissions from vessels and locomotives. “Puget Sound Maritime Air Emissions Inventory,” Puget Sound Maritime Air Forum, August 2012 (updated May 2013).
understands the concerns of reviewing agencies about impacts to air quality, it should be noted that neither the City of Tacoma nor the State of Washington has specific regulations for these types of emissions. Further, the applicant does not own or otherwise control these means of transportation and therefore can only make qualitative statements about impacts.

38. The Director notes that there are concerns related to transportation via rail and by water. The Director has considered these comments, but notes that the City does not have authority over vessel traffic, and review must be limited to the proposal's compliance with local shoreline code and the regulations set forth in the Shoreline Management Act. Likewise, the operation of locomotives and the design of those engines relative to EPA standards for emissions is beyond the scope of this permit review. This review is limited to the placement of equipment on the dock, the piping between that equipment and the upland MVCU, and the installation of additional pumps at the rail facility located at Taylor Way and whether that proposal complies with applicable regulations.

39. Public notice was sent to all owners of property within 400 feet of the site on June 25, 2013 and a property sign was posted within seven days of the start of the 30-day comment period.

40. One public comment was received from Citizens for a Healthy Bay and is appended to this Report and Decision as Exhibit "G".

Conclusion of Law as Finding of Fact

41. Any conclusion of law hereinafter stated which may be deemed a finding of fact herein is hereby adopted as such.

CONCLUSIONS

Jurisdiction

1. The Planning Director has jurisdiction in this matter. See TMC Section 13.05.030.

Burden of Proof

2. The applicant bears the burden of proof to demonstrate the proposal's consistency with the policies of the TSMP and the Comprehensive Plan, including its implementing regulations set forth in TMC Chapter 13.10, with policies of the Shoreline Management Act ("SMA"), the criteria set forth in the Washington Administrative Code (WAC) for the approval of Substantial Development Permits, the regulations and criteria set forth in TMC Chapter 13.11 and other applicable City ordinances.

Applicable Regulations

3. Port, terminal, and industrial uses and associated piers, are permitted in the "S-10" Shoreline – Port Industrial District, subject to the issuance of a Shoreline Substantial Development Permit and consistency with development regulations and policies. See TMC 13.10.130 and TMC 13.10.175; TSMP; WAC 173-27-140 and 173-27-150.

4. WAC 173-27-150 allows that:
   
   (1) A substantial development permit shall be granted only when the development proposed is consistent with:

   (a) The policies and procedures of the act;
   (b) The provisions of this regulation; and
(c) The applicable master program adopted or approved for the area. Provided, that
where no master program has been approved for an area, the development shall be
reviewed for consistency with the provisions of chapter 173-26 WAC, and to the
extent feasible, any draft or approved master program which can be reasonably
ascertained as representing the policy of the local government.

(2) Local government may attach conditions to the approval of permits as necessary to
assure consistency of the project with the act and the local master program.

Findings Adopted as Conclusions

5. Any finding set forth above which may be deemed a conclusion is hereby adopted as such.

Shoreline Substantial Development Permit

11. The project as described is generally consistent with the stated intent of the "S-10" Shoreline
Port Industrial District, as well as with the objective of the urban environment in which the
project site is located. See TMC 13.10.130.A and TMC 13.10.030.3.c; TSMP; Exhibits "A"-
"C"; Findings 1-5, 17-19

12. The use and development, permitted within the "S-10" Shoreline – Port Industrial District, is
consistent with surrounding uses and facilities and the on-going industrial activities at the
site. It is the conclusion of this Director that the proposal is generally consistent with the
policies of the SMA. The request is also generally consistent with the applicable provisions
of the City's Comprehensive Plan. See TMC 13.10.130.D.14; TSMP; Findings 7, 20-22, 24-28

13. The project is consistent with the regulations specific to development in the "S-10" Shoreline
Port Industrial District and also consistent with regulations specific to development of port,
terminal, and industrial uses. See TMC 13.10.130, and TMC 13.10.175.B.15; Attachments
"B"-"C"; Findings 1-4, 17-19, 24-25

14. The applicant has demonstrated the use of the site is not compatible with public access
requirement. See TMC 13.10.175.A.1; Exhibit "B"; Findings 7-11, 24

15. Compliance with the conditions set forth herein, and with existing regulations, will ensure
that the project meets the environmental protection measures required for all developments
proposed within the City's shoreline. TMC 13.10.175.A.2; Attachments "E"-"G", Exhibit "A";
Findings 25-28

16. The proposal does not trigger additional parking requirements. Since a new parking area is
not being created at this time, the parking standards for development within the City's
shoreline do not apply to this project. TMC 13.10.175.A.3; Exhibit "B"; Findings 1-6

17. Since no new signage is proposed at this time, the sign standards do not apply to this
project. TMC 13.10.175.A.4; Exhibit "B"; Findings 1-6

DECISION

Based upon the above findings and conclusions, the applicant's request for a Shoreline
Substantial Development and FHWCA Permit is Approved, subject to the following conditions:

Conditions

1. The decision set forth herein is based upon representations made and information
submitted, including development plans and proposals, submitted to the Director. Any
substantial change(s) or deviation(s) in such development plans, proposals, or conditions of approval imposed shall be subject to the approval of the Director, and may require additional permitting and public notification and comment.

2. Prior to acquiring development permits from the City of Tacoma, the applicant shall provide copies of all required Corps permits, air quality permits from PSCAA, and an Hydraulic Project Approval from the Department of Fish and Wildlife. If these permits are not required, the applicant shall provide written communication from the agencies stating this is the case.

3. All permit requirements of SHR2008-40000122196 and SHR-2011-40000162962 and associated SEPA reviews must be met for the installation of tanks at the Marine View Drive site.

Advisory Notes

The below notes are meant to provide additional information to the applicant relative to the specific development proposal. These notes are not conditions of the permit nor do they constitute a complete review of the project.

1. Prior to construction the applicant shall obtain any necessary permits from other state and/or federal agencies as required.

2. The authorization(s) granted herein is/are subject to all applicable federal, state and local laws, regulations, and ordinances. By accepting this/these approvals, the applicant represents that the developments and activities allowed will comply with such laws, regulations, and ordinances. If, during the term of the approvals granted, the developments and activities permitted do not comply with such laws, regulations, or ordinances, the applicant agrees to promptly bring such developments or activities into compliance.

3. This permit may be rescinded pursuant to RCW 90.58.140(8) of the Shoreline Management Act of 1971 and Section 13.10.330 of the Tacoma Municipal Code in the event the permittee fails to comply with any condition thereof.

4. Construction shall be commenced within two (2) years after the effective date of the permit. Local government may, however, authorize a single extension for a period not to exceed one year based on reasonable factors, if a request for extension has been filed before the expiration date. Authorization to conduct development activities shall terminate five years after the effective date of a shoreline permit, however, a single extension for a period not to exceed one year may be granted by local government if a request for extension has been filed before the expiration date.

5. Construction pursuant to this permit will not begin or is not authorized until twenty-one (21) days from the "date of filing" with the Washington State Department of Ecology, as that term is defined in WAC 173-27-130, or until all review proceedings initiated within twenty-one (21) days from the "date of filing" have been terminated.
ENDANGERED SPECIES ACT WARNING:
The holder of this shoreline permit is responsible for compliance with the applicable provisions of the Endangered Species Act of 1973 (ESA) (16 U.S.C. 1531 et seq.), and this shoreline permit includes no representation or warranty of ESA compliance.

ORDERED this this 5th day of December, 2013

PETER HUFFMAN
INTERIM DIRECTOR,
PLANNING AND DEVELOPMENT SERVICES DEPARTMENT

FULL DECISION TRANSMITTED this 5th day of December, 2013 via first class or electronic mail to the following:

Applicant, Troy Goodman
New Tacoma Neighborhood Council, Chairperson
Puyallup Tribe of Indians, 3009 Portland Avenue, Tacoma, WA 98404, Bill Sullivan, Peter Mill,
Jeffrey Thomas, Judy Wright, Cynthia Lyman

cc via email:
WDOE – SEPA Unit (sepaunit@ecy.wa.gov), Diane Butorac (dbut461@ecy.wa.gov), Paula
Ehlers (pehl461@ecy.wa.gov)
Puget Sound Clean Air Agency, Jennifer Dold (JenniferD@pscleanair.org), Carol Cenci
(CarolC@pscleanair.org)
EFSEC, Jim LaSpina (JLaSpina@utc.wa.gov),
Targa Sound Terminal, LLC – Jessica Keiser, Matthew Kolata, Justin Ranes
Keith O’Connell, URS Corporation (keith.oconnell@urs.com)
Citizens for a Healthy Bay, Leslie Ann Rose (larose@healthybay.org)
Port of Tacoma, Tony Warfield, (twarfield@portoftacoma.com)
Planning and Development Services, Reuben McKnight, Peter Huffman, Brian Boudet
Washington State Office of Archaeology & Historic Preservation, Gretchen Kaehler,
gretchen.kaehler@dahp.wa.gov
Pierce Transit Land Use Review, Monica Adams, madams@piercetransit.org
Pierce County Assessor Treasurer, Darci Brandvold, dbrandv@co.pierce.wa.us

NOTE: Pursuant to RCW 36.70B.130, you are hereby notified that affected property owner(s) receiving this notice of decision may request a change in valuation for property tax purposes consistent with Pierce County’s procedure for administrative appeal. To request a change in value for property tax purposes you must file with the Pierce County Board of Equalization on or before July 1st of the assessment year or within 30 days of the date of notice of value from the Assessor-Treasurer’s Office. To contact the board, you may call 253-798-7415 or by e-mail at www.co.pierce.wa.us/boe.
APPEAL PROCEDURES

RECONSIDERATION:
Any person having standing under the ordinance governing this application and feeling that the decision of the Director is based on errors of procedure or fact may make a written request for review by the Director within fourteen (14) days of the issuance of the written order. This request shall set forth the alleged errors, and the Director may, after further review, take such further actions as deemed proper, and may render a revised decision. A request for RECONSIDERATION of the Director’s decision in this matter must be filed in writing with Planning and Development Services, Room 345, Third Floor, Tacoma Municipal Building, 747 Market Street, Tacoma, WA 98402, on or before December 19, 2013.

Should no reconsideration be requested, this Decision will be considered final and will be mailed via certified mail to the Department of Ecology on December 20, 2013.

APPEAL TO SHORELINE HEARINGS BOARD:
The decision of the Director of Planning and Development Services may be appealed by any person aggrieved by the granting, denying, or rescinding of a permit on shorelines of the state pursuant to RCW 90.58.140, who may seek review from the shorelines hearings board by filing a petition for review within twenty-one (21) days of the date of filing of the decision as defined in RCW 90.58.140(6), which states that the “date of filing” is “the date of actual receipt by the department of the local government’s decision”.

Information on filing an appeal of a Shoreline Substantial Development Permit may be obtained by contacting the State of Washington’s Environmental and Land Use Hearings Office at www.eho.wa.gov, or PO Box 40903, Olympia WA 98504-0903, 360-664-9160, email: eluho@eluho.wa.gov
Determination of Environmental Nonsignificance (DNS)

SEPA File Number: SEP2013-40000203723
Related File Number: SHR2013-40000203722

To: All Departments and Agencies with Jurisdiction
Subject: Determination of Environmental Nonsignificance

In accordance with Washington Administrative Code (WAC) 197-11-340, a copy of the Determination of Nonsignificance (DNS) for the project described below is transmitted.

Applicant: Troy Goodman, Targa Sound Terminal, LLC
2628 Marine View Drive
Tacoma, WA 98401

Proposal: Modification to rail car loading facility at Taylor Way and installation of a Marine Vapor Combustion Unit/Dock Safety Unit on the existing marine loading dock at Marine View Drive. The sites are located within the "S-10" Shoreline District – Port Industrial.

Location: 2628 Marine View Drive and 1515 Taylor Way, Parcels 0321264046, 0321264073, 2275200211, 0321264048, 0321262062, 0321263048 & 0321263030

Lead Agency: City of Tacoma

City Contact: Shirley Schultz
Principal Planner
Planning and Development Services
747 Market Street, Room 345
Tacoma, WA 98402
253-591-5121 | shirley.schultz@cityoftacoma.org

The Responsible Official for the City of Tacoma hereby makes the following findings and conclusions based upon a review of the environmental checklist and attachments, other information on file with the City of Tacoma, and the policies, plans, and regulations designated by the City of Tacoma as a basis for the exercise of substantive authority under the Washington State Environmental Policy Act (SEPA) pursuant to RCW 43.21C.
Findings of Fact:

General:

1. The applicant has requested a Shoreline Substantial Development Permit and Critical Areas review for modification to rail car loading facility at Taylor Way and installation of a Marine Vapor Combustion Unit/Dock Safety Unit (MVCU/DSU) on the existing marine loading dock at Marine View Drive. The sites are located within the "S-10" Shoreline District – Port Industrial.

2. The modification of the rail unloading facility includes the installation of two pumps and associated piping, fixtures and associated electrical equipment to allow unloading of crude at all 36 spots simultaneously. The proposed improvements are shown on the attached site plans. Targa will also replace an existing ethanol pump with two new pumps. Grading activity will occur within the shoreline jurisdiction.

3. The installation of the MVCU will take place in an upland location. The DSU will be installed on the existing marine loading dock, with piping to connect the DSU to the MVCU and associated equipment. The MVCU will enhance the existing barge-loading operations at the site and will increase the capacity of the facility to transfer crude oil as well as other fuels.

4. Additional project actions include revisions to previously-approved tank permits at the site to install fixed cone/floating roofs on two tanks to allow storage of higher-pressure liquids, as well as the installation of two additional tanks for liquids storage. These portions of the proposal have been reviewed and approved previously by the City of Tacoma (SEP2008-40000122197 and SEP2011-40000162964, Exhibit “A”), but the applicant has included them in the current project description for the benefit of reviewing agencies.

5. The SEPA Environmental Checklist and proposed site plans are attached to and incorporated within this Determination. The Checklist includes as attachments 3 additional letters from the applicant dated August 16, August 27, and October 10, 2013, to respond to requests for additional information about potential air quality impacts, facility capacity, and emergency planning. The information contained in those letters is supplemental to the original SEPA checklist.

6. An environmental review is required for the proposal in accordance with the SEPA, RCW 43.21C, Washington Administrative Code (WAC) 197-11, and Tacoma Municipal Code (TMC) 13.12 Environmental Code due to the over-water work and work within the shoreline district. In addition, the applicant has requested permitting from Puget Sound Clean Air Agency, which is not exempt from SEPA review. The City of Tacoma has established “Lead Agency Status” per WAC 197-11-050 and WAC 197-11-932.

Earth:

7. The project proposes to comply with all regulations including the International Building Code (IBC) Appendix J (Grading) as adopted and amended by the City of Tacoma, as well as TMC Chapter 13.06 Zoning and Chapter 13.11 Critical Areas Ordinance.

Air:

8. The applicant has provided a “Notice of Construction” (NOC) to the Puget Sound Clean Air Agency (PSCAA) to address the air quality implications of the uses at the site, as well as for approval and conditioning of the MVCU and associated equipment. That NOC sets forth an assumed limit of approximately 40,000 bbl per day of crude oil throughput. Receiving and

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1 This and all other referenced exhibits are contained in the Planning and Development Services file SEP2013-4000203723 and are fully incorporated herein.

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distributing that crude oil by water, rail, and road will result in air emissions. Information regarding those emissions is provided in the October 10, 2013 addendum to the original environmental checklist.

9. Emissions from motor vehicle traffic (trucks) are not expected to change as a result of the current proposal, as capacity for loading and unloading trucks is not proposed to change. The applicant has policies in place for best practices for idling vehicles, including both trucks and trains, minimizing diesel exhaust at the site. Further, it is expected that air quality impacts from all vehicles will continue to decrease as EPA standards for combustion engines become more stringent.

10. The applicant states that vessel traffic is expected to increase at the site as a result of the proposal. Currently the site loads approximately 40-60 vessels per month and the equivalent of eight additional 150,000 bbl vessels per month at the dock. It is presumed that these will all be ocean-going vessels.

Air quality impacts from ocean-going vessels within the Puget Sound airshed are estimated based on total vessel traffic within a particular area, with consideration of vessel size, engine size, type, and age, and the activities surrounding that ship for hoteling and maneuvering. The Port of Tacoma reported approximately 1,100 vessel calls in 2012 at Port facilities alone, and additional calls for both ocean-going vessels and more local vessels were made at privately-owned docks within the Port. In turn, the Port of Tacoma vessel calls represent about half of all vessel trips within the Puget Sound area.

Given that the proposal is expected to result in approximately 100 vessel calls per month, a small percentage of all vessel calls both in the Port of Tacoma and in the region, and given further that one-third to half of airshed emissions are from port activities (other than sulfur dioxide) other than ocean-going vessel traffic, it is unlikely that this increase in vessels to the Targa site will have significant adverse impacts to the overall air quality in the region.

11. Rail traffic to the site is expected to increase as a result of the proposal, by up to 288 rail cars per week (or an additional 6-8 locomotive round-trips from the Tacoma Rail marshaling yard, 3-4 into the site and 3-4 out). The site will still be able to handle 36 cars at a time; the new pumps at the Taylor Way site will allow quicker turnaround of those tanker cars, and their return to the Tacoma Rail system.

Air quality impacts from rail traffic are based upon assumptions made about the diesel locomotive engines used to move the rail cars to the site. Within the Port of Tacoma, the cars are moved using Tacoma Rail locomotives, which use ultra-low sulfur diesel fuels, idle reduction equipment, and EPA-compliant engines. These measures minimize emissions within the Port to the extent possible.

Air quality impacts from rail traffic beyond the Port include both the GHG emissions from combustion of diesel fuel as well as criteria pollutants. The applicant provided an analysis of the Scope 3 GHG emissions from rail transportation but did not provide an analysis of the criteria pollutants. However, the maximum net increase in rail traffic is only expected to be approximately 2.5 unit trains per week, and given that locomotives are subject to EPA regulations for fuel usage and idling times regardless of their operator, the impacts from these train trips are likely to be minimal.

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2 Per the Port of Tacoma website: http://www.portoftacoma.com/stats
3 Per 2011 Puget Sound Maritime Air Emissions Inventory – Section 3; see Exhibit "C"
4 Ibid., Executive Summary page 6.
5 Ibid., page 24.

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12. The primary purpose of the MVCU is to capture and combust the volatile organic compounds (VOCs) emitted as a result of the transfer of fossil fuels, and thus is expected to minimize air quality impacts due to the vessel-loading activities on site.

Water:

13. The project will meet all requirements of the current and any future revisions to the Stormwater Management Manual, the Critical Areas Ordinance and other City regulatory requirements related to stormwater.

14. A Fish and Wildlife Habitat Conservation Area and its marine buffer are present on the subject site. No wetlands, streams, or stream buffers are present on the subject property. A wetland buffer does extend onto the 1601 Taylor Way site, but not into the area where construction will take place. The project has been reviewed per the City's Critical Areas Protection Ordinance, and if completed with the appropriate methods and conditions, no impacts to critical areas are expected.

15. Portions of the subject site(s) lie within an identified 100-year FEMA flood hazard zone. However, according to the 2007 Floodplain map and FEMA flood map 530148 Panels 0025B and 0C10B, the locations of the proposed construction are outside of the 100-year floodplain, with the exception of the piping and DSU unit. However, the piping and the DSU unit and related equipment will be on the terminal and dock that is situated well above the maximum flood elevation. No trees are proposed to be removed, no new impervious surfaces applied, no fill and no impact to flood waters or habitat is anticipated.

Plants:

16. No changes to existing landscaping, or to landscaping/plantings as approved under previous permits, are proposed as part of this project. No impacts to plants are expected as a result of the current proposal.

Aesthetics:

17. The proposed project will meet TMC 13.06.501 Building Design Standards, TMC 13.06.502 Landscaping/Buffering Standards, and TMC 13.06.503 Residential Compatibility Standards.

Animals:

18. No state or federal candidate, threatened or endangered plant or animal species, or habitat has been identified on the project site. No endangered species will be affected by the proposed work.

19. A Hydraulic Project Approval (HPA) will be required from the Washington State Department of Fish and Wildlife prior to the start of any construction activity on the shoreline. Potential significant adverse impacts to fisheries habitat on the shoreline will be adequately mitigated through compliance with this requirement.

20. The National Marine Fisheries Service (NMFS) and the United States Fish and Wildlife Service (USFWS) have listed two salmonid species as threatened under the Endangered Species Act (ESA). Regulatory requirements may be imposed on the project as a result under the authority of the ESA. A future project may be required to comply with either or both agencies under the 4(d) rule.

Energy and Natural Resources:

21. The proposed project will comply with the City's Energy Code and will be operated with existing electrical connections to the site.
Environmental Health:

22. The subject property is located within the “footprint” of the area known as the “Asarco Plume.” Properties within the plume are known to contain contaminants associated with the operation of the former Asarco smelter located approximately 5 miles to the west of the subject site. In addition, the northerly portion of the tank farm site is listed on the Washington Department of Ecology’s (Ecology) Hazardous Sites List due to contamination from prior uses at the site. The applicant will complete cleanup at the site in compliance with the Model Toxics Control Act (MTCA) and demonstrate completion of the cleanup to Ecology’s satisfaction prior to final occupancy permits at the site.

23. The MVCU is planned to reduce emissions at the site due to the transmission of fossil fuels, by collecting and destroying vapors that are emitted during the barge loading activity at the site.

24. Materials that are transferred to and from the site are hazardous materials. Best practices are used for the handling of those materials (i.e., spill prevention measures, employee training, etc.). In addition, Targa has developed an extensive safety and accident response plan that has been submitted to, and approved by, the Environmental Protection Agency, US Coast Guard, and Washington Department of Ecology (Exhibit "B").

25. The transfer of fossil fuels is regulated by permits and agreements with the Puget Sound Clean Air Agency, Department of Ecology, and, depending on overall throughput and capacity, by the Utilities and Trade Commission – Energy Facilities Site Evaluation Commission. All requirements of PSCAA, Ecology, the Tacoma-Pierce County Health Department (TPCHD), and all other agencies will be met and are the responsibility of the applicant.

Noise:

26. All WAC noise levels shall be met.

27. Activities at the site shall comply with all applicable provisions of TMC 8.122 Noise Enforcement.

Land and Shoreline Use:

28. The project is a permitted use within the "S-10" Shoreline District – Port Industrial, and will require a Shoreline Substantial Development Permit.

29. The Comprehensive Plan designation for the site is “High Intensity” and the Shoreline Environment designation is “Urban”.

30. Compatibility of land use, consistency with the Shoreline Management Act and City of Tacoma Shoreline Master Program and its policies and the City of Tacoma Shoreline Management Regulations, TMC 13.10, will be evaluated and addressed through the shoreline permit application process.

31. The Army Corps of Engineers and the Washington State Departments of Ecology, Fish and Wildlife Service, and Natural Resources have limited jurisdiction and require permits for some types of activities when occurring within the waters of the state. It is the sole responsibility of the applicant to secure all permits required for this project.

Housing:

32. The project will provide no units of housing. No adverse impacts to housing will result from the proposal.
Recreation:
33. The project will not be developed on property designated as open space or public recreation area. No adverse impacts to recreation will result from the proposal.

Historical and cultural preservation:
34. The applicant has provided Cultural Resource Assessment for prior SEPA reviews at the site (see Exhibit "A"). The project is not located within or adjacent to any property listed on the Tacoma, Washington State or National Registers of Historic Places, and is not within proximity to any known archaeological site or archaeological site that is inventoried by the State of Washington Department of Archaeology and Historic Preservation.

However, the site is located within the Usual and Accustomed area of the Puyallup Tribe of Indians. While it is unlikely that historic or archaeological resources will be encountered, historic sites may be exposed when the project is undertaken. Should there be unanticipated discovery of an archaeological find during construction the Unanticipated Discovery Plan which has been developed shall be implemented immediately. Further, additional review of impacts to cultural resources may be required for projects under the jurisdiction of federal agencies under Section 106 of the National Historic Preservation Act (36 CFR 800).

Transportation:
35. The project will comply with TMC 13.06.510 Off-street parking and storage areas.
36. The Public Works Engineering Division indicates that the traffic volumes generated by the proposal will not result in significant adverse impacts to the City's street system.
37. The Targa facility uses both water and rail transportation to receive and distribute fuels. With the addition of the MVCU on the barge loading dock, Targa anticipates an increase from the current 40-60 vessels per month (about 30% of the dock's capacity) to a maximum of about 70-90 per month (about 60% of the capacity), with the increase being vessels transporting crude oil. (Realistically the increase is expected to be nearer to ten additional vessels per month.) Each vessel transfer is documented and reported to Department of Ecology. This increase is not expected to have any effects on other marine traffic in the vicinity.
38. With the additional fuel loading platforms at the rail facility on Taylor Way, Targa does not expect additional rail cars at the site; rather, the cars would be off-loaded more quickly and efficiently by unloading all 36 cars at a time, rather than in groups of 12 cars. The proposal will not have any effects on other rail traffic in the vicinity.

Public Services/Public Utilities:
39. Project concurrency certification or an appropriate mitigation will be completed at the building permit review stage.
40. The project will comply with emergency vehicle circulation requirements.
41. Fire protection must be provided in accordance with the requirements of TMC 3.02 Fire Code.
42. The applicant acknowledges that there is a spill risk inherent in the transfer and transportation of fuels. The applicant maintains an up-to-date, approved Spill Prevention and Countermeasure Plan and a Facility Oil Contingency Plan. Both plans are reviewed, approved, and monitored by the Department of Ecology and the U.S. Coast Guard. All local, state, federal, and tribal emergency response bodies are included in the planning and prv
CONCLUSION OF THE RESPONSIBLE OFFICIAL:

The City of Tacoma, the lead agency for this proposal, has determined that the requirements for environmental analysis, protection, and mitigation measures have been adequately addressed in the development regulations and comprehensive plan adopted under Chapter 36.70A RCW, and in other applicable local, state, or federal laws or rules, as provided by RCW 43.21C.240 and WAC 197-11-158. The City will not require any additional mitigation measures under SEPA.

Additionally, the City of Tacoma has determined that this project does not have a probable significant adverse impact on the environment. The proposal will have no significant adverse environmental impacts to fish and wildlife, water, noise, transportation, air quality, environmental health, public services and utilities, or land and shoreline use. An environmental impact statement (EIS) is not required under RCW 43.21C.030(2). This decision was made after review of a completed environmental checklist and other information on file with the lead agency. This information is available to the public upon request.

As noted previously, the applicants have also filed for a Shoreline Substantial Development Permit. In order to receive approval of this permit the applicant will be required to demonstrate that the project will meet the applicable requirements of the TMC. If approved, the City’s decision regarding the requested Shoreline Substantial Development Permit will likely include conditions of approval that may address necessary utility upgrades, street and sidewalk improvements, street lighting, grading and erosion control measures, and stormwater controls.

There is no administrative appeal opportunity for this Determination. Per the requirements of TMC 13.12.820, WAC 197-11-680, and the Tacoma Shoreline Master Program Section 2.7, appeals of Shoreline Substantial Development Permits and associated SEPA determinations may be made to the Shoreline Hearings Board as governed by the procedures set forth in RCW 90.58.180 and WAC 461-08. All appeals must be made to the Shoreline Hearings Board within twenty-one days after the date of filing of the City’s final decision with the Department of Ecology.

A copy of the appeal shall be filed with Planning and Development Services, and with the City Attorney’s Office, 747 Market Street, Tacoma, WA 98402.

Responsible Official: Peter Huffman

Position/Title: Director, Planning and Development Services

Signature: 

SEPA Officer Signature: 

Issue Date: December 5, 2013

NOTE: The issuance of this SEPA Determination does not constitute final project approval. The applicant must comply with all other applicable requirements of the City of Tacoma Departments and other agencies with jurisdiction prior to receiving construction permits.

cc: Applicant, Troy Goodman
    New Tacoma Neighborhood Council, Chairperson
    Puyallup Tribe of Indians, 3009 Portland Avenue, Tacoma, WA 98404, Bill Sullivan, Peter Mill, Jeffrey Thomas, Judy Wright, Cynthia Lyman

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cc via email:
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  (peh1461@ecy.wa.gov)
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  Tacoma-Pierce County Health Department, SEPA, SEPA@tpchd.org
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  Pierce Transit Land Use Review, Monica Adams, madams@piercetransit.org
  Pierce County Assessor Treasurer, Darci Brandvold, dbrandv@co.pierce.wa.us
A. BACKGROUND

1. Name of proposed project, if applicable:
   Targa Sound Terminal LLC Rail Modification and Tank Expansion Project

2. Proponent/applicant--Name and phone number:  
   Targa Sound Terminal LLC
   Matthew Kolata (253) 272-9348

   Proponent/applicant--Address: 2628 Marine View Drive, Tacoma, WA 98401

3. Contact Person--Name and phone number: Jessica Keiser (713) 584-1084
   Contact Person--Address: 1000 Louisiana St, Ste 4300, Houston, Texas 77002

4. Date checklist prepared: June 10, 2013

5. Agency requesting checklist: City of Tacoma

6. Proposed timing or schedule (including phasing, if applicable):  
   Targa would like to begin the project as soon as possible. There is no phasing to this project.

7. Do you have any plans for future additions, expansion, or further activity related to or connected with this proposal? If yes, explain.

   Targa Sound Terminal LLC operates a petroleum transfer terminal at 2628 Marine View Drive, in the Port of Tacoma. This existing terminal provides third party logistical services for crude oil, petroleum products, and renewable fuels through available tankage, a marine berth, rail, pipeline and truck rack. The petroleum transfer terminal includes a rail unloading facility at 1515 Taylor Way (also known as 1601 Taylor Way by the City of Tacoma), connected to the Marine View Drive facility by piping that extends beneath the Hylebos Waterway. The proposed project is described in Section A.11.

   At this time, Targa has no specific plans for future additions, expansion, or further activity related to or connected with this proposal. Targa is actively looking for additional opportunities to increase its business at the Port of Tacoma, which may require additional lands, increased rail space, additional tanks and improvements. The expansion of our business due to demand for increased storage and logistics operations in the State of Washington could include development of the Kaiser property, expansion of our existing facility, or possibly some combination of both. Targa is conducting due diligence for potential development on the Kaiser property, pursuant to a contingent lease arrangement with the Port of Tacoma. At the time those projects are more fully defined, Targa will apply for all the required permits and assess any environmental impacts of those projects through the SEPA process.

8. List any environmental information you know about that has been prepared, or will be prepared, directly related to this proposal.

   Directly related to this proposal, air modeling was performed by Trinity Consultants and a report was included in the Puget Sound Clean Air Agency (PSCAA) NOC Application 10554, titled Marine Vapor Combustion and Tank Expansion, submitted May 10, 2013.

   The following reports and studies were prepared for a previous project at the Sound Terminal, referred to as the Renewable Fuels Expansion Project. This project was authorized under a City of Tacoma shoreline permit SHR2008-40000122196, PSCAA NOC 10325, and applicable SEPA Checklist.

   1. A geotechnical evaluation report was prepared by GeoEngineers in April 2012 and submitted to the City of Tacoma in support of a construction permit for the foundations for the above-ground storage tanks.
   2. A survey for the presence of critical areas at the site was performed as part of the renewable fuels project, including a survey for streams and wetlands at the Marine View Drive site, by Anchor QEA in March 2011. No critical areas were found within the project site. A wetlands assessment and shoreline determination report for the 1515 Taylor Way site was completed in November 2005, by RETEC Group.
3. GeoEngineers biologists conducted a site reconnaissance of the project area (Marine View Drive site) on April 18, 2011 for the presence of vegetation as part of the renewable fuels project. They noted that the entire project area is situated within an industrial setting and has been highly disturbed. All native vegetation has been cleared and the ground surface is covered in most cases with gravel, pavement or other manmade surfaces and void of habitat. The shoreline along the waterway has been extensively modified with riprap, bulkheads and piers.

4. An archaeological survey of the Marine View Drive site was prepared by Historic Research Associates, Inc. (HRA) (dated April 21, 2011) for the installation of the pipeline and storage tank location. HRA did not identify archaeological resources and indicated that "No further archaeological studies are recommended, though, due to references of an ethnographic village being located within the vicinity of the northern portion of the Project Area ...., archaeological monitoring is recommended."

5. Hefron Transportation, Inc. prepared a traffic impact analysis dated May 4, 2011.

9. Do you know whether applications are pending for governmental approvals of other proposals directly affecting the property covered by your proposal? If yes, explain.

There is one pending application with PSCAA (NOCs 10554) that directly affects this proposal. NOC 10554 was submitted to the PSCAA in October 2012 (and resubmitted on May 10, 2013), for the rail modifications, marine vapor combustion unit (MVCU) installation, and tank expansion.

10. List any government approvals or permits that will be needed for your proposal, if known

Construction approvals:
Notice of Construction (PSCAA) (NOC 10554) (needed for all five components listed in A.11. below)
SEPA Review (City of Tacoma)
Shoreline Substantial Development Permit (City of Tacoma) (needed for components 1 and 2 listed in A.11. below)
Construction Permit (City of Tacoma) (needed for components 1, 2 and 4 listed in A.11. below)
Above Ground Installation Tank Permit (City of Tacoma Fire Department) (needed for component 4 listed in A.11 below)

Operations approvals:
Operations Manual examination (U.S. Coast Guard)
Vapor Control System endorsement (U.S. Coast Guard)

11. Give brief, complete description of your proposal, including the proposed uses and the size of the project and site. There are several questions later in this checklist that ask you to describe certain aspects of your proposal. You do not need to repeat those answers on this page.

Targa Sound Terminal LLC (Targa) operates a petroleum transfer terminal at 2628 Marine View Drive, in the Port of Tacoma. This existing terminal provides third party logistical services for crude oil, petroleum products, and renewable fuels through available tankage, a marine berth, rail, pipeline and truck loading rack. The petroleum transfer terminal includes a rail unloading facility at 1515 Taylor Way, connected to the Marine View Drive facility by piping that extends beneath the Hylebos Waterway. The facility at 2628 Marine View Drive is connected with the Olympic Pipeline. Both sites are shown on Figure 1 (Site Vicinity) and Figure 2 (Site Plan).

On the Targa Sound Terminal LLC property at Marine View Drive there are 38 storage tanks, a truck rack, operations room, maintenance shop, two docks, a business office and appurtenant equipment within a fenced enclosure. At Taylor Way there are three rail spurs, three 60,000 gallon capacity liquid petroleum gas above ground tanks, associated pumps and piping, temporary office/control sheds, equipment storage and appurtenant equipment within a fenced yard area. The Marine View Drive facility covers an approximate area of 18.44 acres. The Taylor Way facility covers an approximate area of 5.8 acres.

The proposed project includes five (5) components described in detail below [with reference to the required permits and approvals from A.10 above]:

City of Tacoma SEPA Checklist
Last Update: March, 2013
1. **Modify the existing rail unloading facility at 1515 Taylor Way.** Targa's rail facility has 36 railcar spots. Of these spots, only 24 can currently accommodate crude offloading, 12 at a time. The modification of the rail unloading facility includes the installation of two pumps and associated piping, fixtures and associated electrical equipment to allow unloading of crude at all 36 spots simultaneously. The proposed improvements are shown on Exhibit A. Targa will also replace an existing ethanol pump with two new pumps. [PSCAA; City of Tacoma: Shoreline, Construction, and Above Ground Installation]

2. **Install and use a John Zink Company Marine Vapor Combustion Unit (MVCU) at the Marine View Drive facility to reduce emissions from marine loading.** This MVCU will be used as a primary method of controlling volatile organic compound (VOC) emissions that occur during marine loading of crude, petroleum products, and renewable fuels to vessels. These products include, but are not limited to, ethanol, gasoline, and crude oil. The proposed MVCU has an estimated capture efficiency of 100% and destruction efficiency of 98%. The terminal will be limited by PSCAA NOC 10554 to a total throughput across the marine dock of 14,601,600 bbl/yr. The MVCU will be equipped with a vapor blower staging unit (VBSU) and a dock safety unit (DSU). The DSU is required by the Coast Guard under 33 CFR 154.824, sub-part E. The DSU will be mounted on a 7-foot by 21-foot skid on the existing dock. The VBSU will be installed adjacent to the MVCU. The installation will include additional piping between the MVCU and the DSU and associated electrical equipment. The new piping between the DSU and the MVCU is to include a 10-inch diameter pipe for vapor return to the MVCU, a 3-inch diameter pipe to supply natural gas to the DSU, and a 2-inch diameter conduit for control wiring. The MVCU will also serve as an available backup to the existing facility Tank Vapor Recovery System (TVRS). The location of the proposed MVCU is shown on Exhibit B. [PSCAA; City of Tacoma: Shoreline, Construction, and Above Ground Installation; US Coast Guard]

3. **Reconfiguration of the roofs of two tanks (designated as Tanks 164 and 165 as shown on Exhibit C) previously permitted under City of Tacoma shoreline permit SHR2008-40000122196.** Instead of fixed roofs, the tanks will be built with fixed cone roofs and have internal floating roofs to allow for the storage of liquids with a higher vapor pressure. The tanks are constructed of steel and will be welded together and placed on existing foundations. The tank location and foundation design was previously approved by the City of Tacoma in shoreline and construction permits, accompanied by a Mitigated DNS. [PSCAA only]

4. **Siting and construction of two new storage tanks, Tanks 206 and 207, at the area located at Marine View Drive previously permitted under City of Tacoma shoreline permit SHR2008-40000122196.** Instead of fixed roofs, these tanks will be built with fixed cone roofs and have internal floating roof to allow for the storage of liquids with a higher vapor pressure. The tank location and foundation design was previously approved by the City of Tacoma in the shoreline permit, accompanied by a Mitigated DNS. However, unlike Tanks 164 and 165 above, Tanks 206 and 207 do not have existing foundations. [PSCAA; City of Tacoma: Construction and Above Ground Installation]

5. **Increased throughput through existing above ground storage tanks, Tanks 157 and 162.** [PSCAA only]

12. **Location of the proposal.** Give sufficient information for a person to understand the precise location of your proposed project, including a street address, if any. If a proposal would occur over a range of area, provide the range or boundaries of the site(s).

   Targa Sound Terminal is located within the Port of Tacoma, on the northwest edge of the Tacoma tide flat area in Pierce County. The main facility is located on the north shore of the Hylebos Waterway extending some 2,500 feet south eastward of the Eleventh Street Bridge. The associated rail yard is located on the south shore of the Hylebos Waterway. The site address is 2628 Marine View Drive, Tacoma, Washington. The rail yard address is 1515 Taylor Way, Tacoma, Washington. The site is within Section 26 of Township 21 North, Range 03 East (W.M.). The main part of the site at Marine View Drive is comprised of six parcels: Pierce County Assessor parcel numbers 0321262062, 0321264044, 0321264046, 0321264048, 0321264073 and 2275200211. The rail yard consists of one parcel: Pierce County Assessor parcel number 0321263030.

   The legal descriptions of the parcels were obtained from the Pierce County Assessor’s office and are presented in Exhibit D.
13. Assessor Parcel Number:

The project work will occur within the following Pierce County Assessor’s parcel numbers:

- 0321264046, 0321264073 and 2275200211 (Marine Vapor Combustion Unit)
- 0321264048 (Tanks 164 and 165)
- 0321262062 and 0321263048 (Tanks 206 and 207)
- 0321263030 (Rail yard Area)

B. ENVIRONMENTAL ELEMENTS

1. Earth

a. General description of the site (circle one): Flat, rolling, hilly, steep slopes, mountainous, other:

Primarily flat. The tank farm areas at the Marine View Drive site are surrounded by a combination of soil berms and concrete walls that are three to five feet in height.

b. What is the steepest slope on the site (approximate percent slope)?

The areas at the shoreline of both sites, and the berms surrounding the tank farms at the Marine View site, have maximum slopes of roughly 30 percent. The proposed project areas are relatively flat.

c. What general types of soils are found on the site (for example, clay, sand, gravel, peat, muck)? If you know the classification of agricultural soils, specify them and note any prime farmland.

Both sites are generally surfaced with sand and gravel fill, and underlain by native silt and sand deposits. There is no prime farmland.

d. Are there surface indications or history of unstable soils in the immediate vicinity?

There are no indications of unstable soils in the immediate vicinity, based on a review of a geotechnical evaluation report prepared by GeoEngineers in April 2012.

e. Describe the purpose, type and approximate quantities of filling or grading proposed. Indicate source of fill.

Limited grading is required for the construction of the pad for the MVCU. An approximately 400-square foot pad will be constructed by removing an approximately 18-inch thick layer of existing fill soil (about 23 cubic yards of soil) and placing a 6 to 12-inch thick layer of crushed gravel obtained from a local offsite source. A reinforced concrete slab-on-grade will then be constructed on the crushed gravel. The finished surface of the concrete slab will be slightly above the grade of the adjacent existing gravel yard area.

Limited grading is required for the installation of the pad for the pumps at the rail uploading area (Taylor Way site). The pumps are to be placed on concrete slabs that will be placed on a leveled area at or near grade.

No grading is required for the installation of the floating roofs on the storage tanks (164 and 165) or the equipment that is to be installed on the dock.

Limited grading is needed to improve the fire safety road to surround the tank area. The grading is anticipated to be less than 20,000 cubic yards.

No additional grading, other than previously approved, is required for the construction of Tanks 206 and 207.

The crushed gravel will likely be obtained from Washington Rock Quarry, LLC. The quarry is located within 15 miles of the site.

f. Could erosion occur as a result of clearing, construction, or use? If so, generally describe.

Some limited erosion could occur during grading and construction activities. Areas where vegetation has been removed, or where the soil is exposed at the surface, would be susceptible to erosion. Erosion may occur during
seasonal rain storms. Erosion mitigation following Best Management Practices (BMPs) has been installed related to other permitted construction ongoing within the facility and would be effective in reducing or preventing additional erosion that could result from the grading and construction of the pads for the MVCU or the pumps at the rail uploading area, as described below in B.1.h.

g. About what percent of the site will be covered with impervious surfaces after project construction (for example, asphalt or buildings)?
There will not be an increase in the impervious surface area of the site related to the proposed construction.

h. Proposed measures to reduce or control erosion, or other impacts to the earth, if any:

Because the site is relatively flat, limited erosion could occur. Due to the recent grading, construction, and erosion control measures at the site, there is little potential for erosion to occur from this proposal. Proper implementation of required construction BMPs and stormwater control measures is expected to adequately address the risk of erosion at this site during construction.

A Storm Water Pollution Prevention Plan (SWPPP) is in effect for the Targa facility. The plan included the installation of erosion and sediment controls within the facility and at the edges of the site adjacent to the Hylebos Waterway.

In addition, the facility operates under an existing NPDES permit. The existing site at Marine View Drive collects rainfall runoff from on-site surface areas. There are three basins within the facility. The stormwater is collected and conveyed to one of the basins where it is held for inspection. Once runoff has been inspected, the stormwater is pumped through the discharge system to an existing Department of Ecology approved NPDES discharge point.

The existing site at Taylor Way collects rainfall runoff from on-site surface areas. There is a storm basin approximately 50 feet from the northern edge of the facility. The basin is enclosed within erosion-control fencing. The drainage is collected and conveyed to an existing Department of Ecology approved NPDES discharge point.

2. Air

a. What types of emissions to the air would result from the proposal (i.e., dust, automobile, odors, industrial wood smoke) during construction and when the project is completed? If any, generally describe and give approximate quantities, if known.

During construction the project would involve the use of diesel or gasoline powered equipment, such as cranes and man-lifts. However, the use of this equipment would be completed within one year.

This proposal includes a modification to the rail unloading facility, installation of a MVCU and associated VBSU and DSU, the addition of four storage tanks, and a request for increased throughput of two existing storage tanks. The MVCU will be installed to reduce emissions of VOC during marine loading. The storage tanks will be equipped with floating roofs to reduce VOC emissions from working and breathing losses.

The emissions from the Targa facility under the proposal were evaluated by Trinity Consultants (Trinity) as part of NOC Application 10554. Trinity performed analysis of toxic air pollutant (“TAP”) emissions and air quality dispersion modeling and concluded that the proposed facility meets the requirements for a NOC application under PSCAA Regulation 1, Section 6.03. The modeling examined acceptable source impact levels for TAPs and found no significant offsite impacts. A summary of the project emissions are included in the table below.
b. Are there any off-site sources of emissions or odor that may affect your proposal? If so, generally describe.

None.

c. Proposed measures to reduce or control emissions or other impacts to air, if any.

Under PSCAA Regulation III Section 1.05, each new source of TAPs must employ Best Available Control Technology (BACT) to minimize the emissions from new and modified equipment. A BACT analysis is performed for the storage tanks, MVCU, and equipment leak fugitives. A summary of the BACT determinations is provided in the table below.

<table>
<thead>
<tr>
<th>Source</th>
<th>Pollutant</th>
<th>Control Technology</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tank 164, 165, 206, and 207</td>
<td>VOC</td>
<td>Internal Floating Roof</td>
</tr>
<tr>
<td>Marine Loading</td>
<td>VOC</td>
<td>MVCU with VBSU and DSU</td>
</tr>
<tr>
<td>MVCU</td>
<td>NOx, CO</td>
<td>Good Operating Practices</td>
</tr>
<tr>
<td>Equipment Leaks</td>
<td>VOC</td>
<td>Good Operating Practices</td>
</tr>
</tbody>
</table>

3. Water

a. Surface

1) Is there any surface water body on or in the immediate vicinity of the site (including year-round and seasonal streams, saltwater, lakes, ponds, wetlands)? If yes, describe type and provide names. If appropriate, state what stream or river it flows into.

The site is on the north side of Commencement Bay, which is part of Puget Sound. The Hylebos Waterway is located adjacent to the site. Wetlands are located offsite adjacent to the west of the rail yard facility between 1501/1509 Taylor Way. See answer to Section B.8.h.

2) Will the project require any work in or adjacent to (within 200 feet) of the described waters? If yes, please describe and attach available plans.

The proposed ventilation and conduit piping to the DSU from the MVCU would be installed on existing pipe racks in the terminal that extend to and over the existing dock, which is located over the Hylebos Waterway. The DSU will also be located on the existing dock. None of the work will occur in the water nor will there be any other changes to the existing dock.

Construction of the MVCU will not take place within 200 feet of the waterway.
The floating roofs will be added to tanks that are being constructed under the existing shoreline permit (SHR2008-400000122196), within 200 feet of the waterway. The tanks are currently being constructed of steel and are being welded together on existing foundations. This work is taking place inside the existing tank yard with secondary containment.

The proposed pumps and piping at Taylor Way would be installed in an area adjacent to the existing pumps that are located within 200 feet of the waterway. The pumps will be placed on concrete slabs that will be placed on the existing gravel surfaced area adjacent to the rail unloading area.

3) Estimate the amount of fill and dredge material that would be placed in or removed from surface water or wetlands and indicate the area of the site that would be affected. Indicate the source of fill material.

Not applicable. The piping and DSU will be installed above grade and/or on existing terminal structures. No work will occur in surface water or wetlands.

4) Will the proposal require surface water withdrawals or diversions? Give general description, purpose, and approximate quantities, if known.

No.

5) Does the proposal lie within a 100-year flood plain? If so, note location on the site plan.

According to the City of Tacoma 2007 Critical Areas Flood Map and the FEMA Flood Map 530148 Panels 0025B and 0010B, with exception to the piping and DSU equipment to be installed on the terminal, the locations of the proposed construction are outside of the 100-year flood plain. However, the piping and DSU related equipment will be on the terminal that is situated well above the maximum flood elevation.

6) Does the proposal involve any discharges of waste materials to surface waters? If so, describe the type of waste and anticipated volume of discharge.

No. Stormwater discharges will occur in accordance with the existing NPDES permit for the Targa facility (see 3.c.1 below). In the event of an accidental spill, existing spill containment measures will prevent discharge of spilled material to surface waters.

b. Ground:

1) Will the ground water be withdrawn, or will water be discharged to ground water? Give general description, purpose, and approximate quantities, if known.

No.

2) Describe waste material that will be discharged into the ground from septic tanks or other sources, if any. For example: domestic sewage, industrial, containing the following chemicals . . . agricultural; etc. Describe the general size of the system, the number of such systems, the number of houses to be served, if applicable, or the number of animals or humans the system(s) are expected to serve.

Not applicable. No waste material will be discharged into the ground.

c. Water Runoff (including storm water):

1) Describe the source of runoff (including storm water) and method of collection and disposal, if any (include quantities, if known). Where will this water flow? Will this water flow into other waters? If so, describe.

The proposal does not require any changes to the existing storm water management program at the Targa Sound Terminal. Stormwater will continue to be collected, handled and discharged as permitted under Targa’s existing NPDES permit (NPDES#WA0003204). Targa applied for a permit renewal on September 1, 2011. The Department of Ecology responded on March 13, 2012 indicating that the current NPDES permit will remain in effect until the renewal is issued.

The existing site at Marine View Drive collects rainfall runoff from on-site surface areas. There are three basins within the facility. The stormwater is collected and conveyed to one of the basins where it is held for inspection. Once runoff has been inspected the stormwater is pumped through the discharge system to an existing Department of Ecology approved NPDES discharge point.
The existing site at Taylor Way collects rainfall runoff from on-site surface areas. There is a storm basin approximately 50 feet from the northern edge of the facility. The basin is enclosed within erosion-control fencing. The drainage is collected and conveyed to an existing Department of Ecology approved NPDES discharge point.

2) Could waste materials enter ground or surface waters?

The proposed equipment will not result in the generation of waste material and will not increase the amount of stormwater runoff over the amounts previously permitted.

Based on the limited area of the proposed construction, it is unlikely that wastes could enter the ground or surface waters during construction. A Facility Response Plan (FRP) and a Spill Prevention Control and Countermeasures (SPCC) plan are already in place at the facility. The areas where spills could occur are diked with sufficient capacity to contain spills or releases from piping, spills, leaks or other equipment or tank failures. The water collected within the bermed areas is inspected prior to treatment and/or discharge under a Department of Ecology approved NPDES discharge point. Waste water from diked containment areas (which have the potential to contain petroleum products) is directed to an on-site treatment system containing a multi-stage aeration system and settling system, and then discharged to the City of Tacoma municipal water treatment system. Water from other areas of the site is discharged to Hylebos Waterway through a NPDES permitted discharge point.

d. Proposed measures to reduce or control surface, ground, and runoff water impacts, if any.

The facility operates under an existing NPDES permit, and has in place a Storm Water Pollution Prevention Plan (SWPPP), a Facility Response Plan (FRP), and a Spill Prevention Control and Countermeasures (SPCC) plan.

Proper implementation of construction BMPs and required stormwater control measures are expected to minimize the risk of erosion at this site during construction.

4. Plants

a. Check or circle types of vegetation found on the site.

- __X_ deciduous tree: alder, maple, aspen, other
- ___ evergreen tree: fir, cedar, pine, other
- __X_ shrubs
- ___ grass
- ___ pasture
- ___ crop or grain
- ___ wet soil plants: cattail, buttercup, bullrush, skunk cabbage, other
- ___ water plants: water lily, eelgrass, milfoil, other
- __X_ other types of vegetation

Approximately 10 trees are located on the Marine View Drive site. Some weeds and blackberry are also present along the shoreline.

On the Taylor Way site, there is no ground surface without pavement or crushed rock. A few scattered weeds are present including Epilobium ciliatum and Melilotus albus. Two small areas of restoration planting have recently been installed, and they include several species of native trees and shrubs. Blackberry is present to the north of the fenceline along the upper portion of the shoreline.

b. What kind and amount of vegetation will be removed or altered?

None.

c. List threatened or endangered species known to be on or near the site.

None.
d. Proposed landscaping, use of native plants, or other measures to preserve or enhance vegetation on the site, if any:

Maintain existing areas of restoration plantings.

5. Animals

a. Underline any birds and animals which have been observed on or near the site or are known to be on or near the site: birds: hawk, heron, eagle, songbirds, other; mammals: deer, bear, elk, beaver, other; fish: bass, salmon, trout, herring, shellfish, other:

Birds observed on the Marine View Drive site during an April 3, 2013 site visit included American crow and song sparrow. In the adjacent Hylebos Waterway and tidal mudflat, the following were observed: killdeer, mallard, common merganser and northern pintail.

No wildlife was observed during a May 16, 2013 site visit to the Taylor Way site.

b. List any threatened or endangered species known to be on or near the site.

According to the web site for the U.S. Fish and Wildlife Service, the following threatened or endangered species have the potential to occur in Pierce County: Bull trout (Salvelinus confluentus) Canada lynx (Lynx canadensis), gray wolf (Canis lupus), grizzly bear (Ursus arctos), marbled murrelet (Brachyramphus marmoratus), and northern spotted owl (Strix occidentalis caurina). Pierce County also contains critical habitat for bull trout, marbled murrelet and northern spotted owl. No suitable habitat or designated critical habitat for any of these species exists at the project site or within the industrial area of Tacoma.

According to the northwest region of NOAA Fisheries, the following threatened or endangered marine mammals have the potential to occur in Puget Sound: Southern Resident killer whales (Orcinus orca), humpback whale (Megaptera novaeangliae) and Stellar sea lion (Eumetopias jubatus). Based on historical movement patterns and known haul-out locations (Stellar sea lion), it is very unlikely that any of these three species would occur immediately adjacent to the project area. In addition, four species of ESA listed turtles have potential to occur in Puget Sound, however they are all considered extremely rare in the region.

Five additional species of threatened or endangered fish species may also occur in Puget Sound. They are: Chinook salmon (Oncorhynchus tshawytscha), steelhead trout (O. mykiss), Puget Sound DPS bocaccio (Sebastes paucispinis), Puget Sound DPS canary rockfish (Sebastes pinniger), and Puget Sound DPS yelloweye rockfish (Sebastes ruberrimus). Any of these species may occur in the waters near Tacoma.

c. Is the site part of a migration route? If so, explain.

The site is located within the Pacific Flyway, which is a flight corridor for waterfowl and other avian migration. The Pacific Flyway extends from Alaska south to Mexico and South America.

d. Proposed measures to preserve or enhance wildlife, if any.

Impacts to marine wildlife from potential spills of petroleum products are addressed by U.S. Coast Guard and Washington Department of Ecology regulations. During loading operations, the risk of spills is limited by the use of proper loading equipment, employee training, pre-booming all transfers, and adherence to USCG and Ecology requirements. The existing marine berth operates under a state-approved Contingency Plan. Marine Spill Response Corporation (MSRC) is employed as Targa’s primary response contractor. During shipment, all vessels are double-hulled and crewed by experienced personnel meeting competency and fatigue standards. The vessels are assisted by vessel escorts through designated shipping lanes, and subject to inspection by the USCG and Ecology.

6. Energy and Natural Resources

a. What kinds of energy (electric, natural gas, oil, wood stove, solar) will be used to meet the completed project’s energy needs:

The proposed equipment will be powered by existing electrical sources. Electricity will be needed to power the MVCU and the pumps. The MVCU will be used only during material handling.
b. Would your project affect the potential use of solar energy by adjacent properties? If so, generally describe.

The proposed project will not affect potential use of solar energy on adjacent properties. There will not be an increase in height over the height of the previously approved storage tanks.

c. What kinds of energy conservation features are included in the plans of this proposal? List other proposed measures to reduce or control energy impacts, if any.

Variable speed pumps will be utilized to ensure the most efficient use of electricity.

7. Environmental Health

a. Are there any environmental health hazards, including exposure to toxic chemicals, risk of fire and explosion, spill, or hazardous waste that could occur as a result of this proposal? If so, describe.

The proposed equipment will likely reduce health hazards by controlling emissions. The MVCU is intended to collect and destroy vapors during marine loading. The floating roofs are intended to reduce emissions from storage tanks working and breaching losses.

The following discussion addresses the environmental health hazards associated with existing operations at the facility. No increased risk of environmental health hazards is anticipated in connection with the proposal.

Products such as gasoline and crude oils may contain toxic chemicals such as benzene and 1,3 butadiene. Targa Sound Terminal has evaluated air emissions, and provided modeling results to PSCAA that show minimal offsite impacts that fall below the acceptable source impact level (ASIL) as described in WAC 173-460 for all offsite receptors.

Crude oil, petroleum products, and renewable fuels are shipped to Targa Sound Terminal LLC by rail. Rail transportation is handled by federally-regulated interstate carriers such as Burlington Northern Santa Fe (BNSF) which delivers to Tacoma Rail. Tacoma Rail delivers the railcars to the Targa Sound Terminal rail facility on Taylor Way. At the Taylor Way facility, the cars are spotted over drip pans that are designed to capture any drips or spills that may occur while attaching or disconnecting hoses from the facility pipe header to the railcar.

At the Targa Sound Terminal LLC marine berth, petroleum, petroleum products, and renewable fuels are transferred over water to and from ships and barges that navigate the Puget Sound. Marine transfers may pose a risk of spills to the waterway (Hylebos). The risk of spills is controlled by the use of proper loading equipment, employee training, pre-booming 100% of all transfers as required, and adherence to U.S. Coast Guard (USCG) regulations as well as the State of Washington Department of Ecology requirements.

The marine berth at Targa Sound Terminal operates with a state approved Contingency Plan and employs the Marine Spill Response Corporation (MSRC) as our primary response contractor.

Ships that perform transfers at Targa Sound Terminal LLC are double hulled vessels, crewed by experienced personnel with competency and fatigue standards. These vessels are assisted by escorts through the approved Washington shipping lanes and are subject to inspection by Washington State Department of Ecology and the USCG.

1) Describe special emergency services that might be required.

There are no additional special emergency services required due to the proposed installation of the MVCU, the storage tanks, or the additional equipment at the railcar unloading area.

2) Proposed measures to reduce or control environmental health hazards, if any:

The tanks and the MVCU will be within an existing bermed tank farm area designed to contain the spill of the largest tank and the water volume from a twenty-five year storm event. Targa has an existing Facility Response Plan (FRP) and a Spill Prevention Control and Countermeasure (SPCC) plan in place at the facility, and those plans would also apply to this project. The existing FRP and SPCC plan were developed to comply with EPA Guidelines (40 CFR 112.7), U.S. Coast Guard Regulations (33 CFR 154), and Washington State Dangerous Waste Regulations (WAC chapters 173-182, 173-303 and 296-62).
b. Noise

1) What types of noise exist in the area which may affect your project, (for example: traffic, equipment, operation, other)?

The location for this project is an industrial area. Typical noise in the area consists of truck, rail and marine vessel traffic consistent with the uses in the vicinity and adjacent rights-of-way and waterway. Such noise is not expected to affect the project.

2) What types of levels would be created by or associated with the project on a short-term or long-term basis (i.e., traffic, construction, operation, other)? Indicate what hours noise would come from the site.

The MVCU will emit less than 80dBh while operating consistent with electrical equipment with blowers and vacuum equipment. Some increase in noise due to construction equipment is anticipated during the brief construction period. However, all noise emitted from site activity will be of similar type to the existing noise level and below the City of Tacoma noise limits for industrial facilities. Construction would take place during normal operating business hours. Minimal noise levels would be short term and generated from cranes, man-lifts, and welding machinery used during the construction.

3) Proposed measures to reduce or control noise impacts, if any.

None.

8. Land and Shoreline Use

a. What is the current use of the site and adjacent properties?

Targa Sound Terminal LLC's property is zoned for industrial use, and is in operation as a petroleum transfer terminal. The facility was originally built and operated as a refinery and storage terminal in 1967. The facility includes a marine transfer berth, tank farms, truck loading rack, and rail yard.

The eastern neighbor to the Targa Sound Terminal is a lumber processing yard. To the south across the Hylebos Waterway is American Construction. The north side of the Terminal is bordered by Marine View Drive.

b. Has the site been used for agriculture? If so, describe.

No.

c. Describe any structures on the site.

On the Targa Sound Terminal LLC property at Marine View Drive there are 38 storage tanks, a truck rack, operations room, maintenance shop, two docks, a business office and appurtenant equipment within a fenced enclosure. At Taylor Way there are three rail spurrs, three 60,000 gallon capacity liquid petroleum gas above ground tanks, associated pumps and piping, temporary office/control sheds, equipment storage and appurtenant equipment within a fenced yard area.

d. Will any structures be demolished? If so, what?

No.

e. What is the current zoning classification of the site?

The area where the improvements are to be constructed is zoned M-2 Heavy Industrial.

f. What is the current comprehensive plan designation of the site?

Type -4 – high intensity

g. If applicable, what is the current shoreline master program designation of the site?

The Shoreline Master Program (SMP) currently in effect was adopted by the Tacoma City Council in November 2011 and is anticipated to be approved by the Washington State Department of Ecology in 2013. A portion of the site within 200 feet of marine water is classified as “S-10, Port Industrial”, which is considered a High Intensity Environment.

h. Has any part of the site been classified as an "environmentally sensitive" area? If so, specify.
The USFWS Wetlands Mapper for National Wetlands Inventory Map Information (USFWS 2013) and the Pierce County Wetlands Inventory (Pierce County 2009) do not identify wetland habitat within the undeveloped portion of the property. The City of Tacoma GovMe.com critical area map (City of Tacoma 2011) identifies the potential presence of wetlands on the Marine View Drive site. A survey for the presence of critical areas at the Marine View Drive site was performed, including whether streams and wetlands were present at the site, by Anchor QEA in March 2011. The potential wetland area identified on the City of Tacoma map coincides with the location of a soil stockpile (the eastern portion of the undeveloped area), which was approximately 10 to 15 feet above the average ground surface elevation on all sides of the stockpile. No wetland characteristics were present on the stockpile. The soil stockpile was eventually removed during grading performed for the grading of the yard in 2011.

GeoEngineers conducted a site reconnaissance of the project area on April 18, 2011. They noted that the entire project area is situated within an industrial setting and has been highly disturbed. Almost all native vegetation has been cleared and the ground surface is covered in most cases with gravel, pavement or other manmade surfaces and devoid of habitat. The shoreline along the waterway has been extensively modified with riprap, bulkheads and piers.

Wetland habitat is mapped within the vicinity of the project area adjacent to Hylebos Waterway. According to a wetland assessment and shoreline determination report (RETEC group 2005), there are wetlands mapped west of the property line and outside of the fenced Taylor Way site. Although those mapped wetlands are located within 200 feet of the project area, there will be no impacts to the wetlands because the project construction will be limited to upland area.

i. **Approximately how many people would reside or work in the completed project?**

Currently and upon completion of the project there will be 20 - 23 people working on site during the operating hours of 7:00 AM and 5:00 PM. Between the hours of 5:00 PM and 7:00 AM there will be 6 - 10 people present at any given time. No one resides or would reside at the site.

j. **Approximately how many people would the completed project displace?**

None.

k. **Proposed measures to avoid or reduce displacement impacts, if any.**

Not applicable.

l. **Proposed measures to ensure the proposal is compatible with existing and projected land use and plans, if any.**

Does not apply. The proposal does not alter the current land use at the Targa Sound Terminal facility, which is consistent with existing and projected land use plans of the City of Tacoma and the Port of Tacoma.

9. **Housing**

a. **Approximately how many units would be provided, if any? Indicate whether high, middle, or low-income housing.**

None.

b. **Approximately how many units, if any, would be eliminated? Indicate whether high, middle, or low-income housing.**

None.

c. **Proposed measures to reduce or control housing impacts, if any.**

Not applicable.

10. **Aesthetics**

a. **What is the tallest height of any proposed structure(s), not including antennas; what is the principal exterior building material(s) proposed?**

The floating roofs will not extend above the elevation of the tanks. The maximum height of the proposed equipment would be 50-feet. This height is consistent with the existing tank heights and equipment within the facility. The tanks and equipment would be constructed of steel.
b. What views in the immediate vicinity would be altered or obstructed?
   None.

c. Proposed measures to reduce or control aesthetic impacts, if any.
   None.

11. Light and Glare
   a. What type of light or glare will the proposal produce? What time of day would it mainly occur?
      During construction activities, light and glare could be produced (between 7:00 AM and 5:00 PM). After the project is in operation, limited high efficiency lighting will be increased within the existing tank farm areas, but it will be designed to shine downward and internal to the site. Lighting may be adjusted at the dock following the installation of the DSU (lights will be aimed to minimize impact in the water). No other change or addition to lighting is planned.

   b. Could light or glare from the finished project be a safety hazard or interfere with views?
      No.

   c. What existing off-site sources of light or glare may affect your proposal?
      None.

   d. Proposed measures to reduce or control light and glare impacts, if any.
      Lights from the terminal are directed away from the shoreline and localized within the site.

12. Recreation
   a. What designation and informal recreational opportunities are in the immediate vicinity?
      Alderwood Park is located approximately 1 mile north of the site. In addition, fishing and other related shoreline activities may occur informally within ½ mile of the site.

   b. Would the proposed project displace any existing recreational uses? If so, describe.
      No.

   c. Proposed measures to reduce or control impacts on recreation, including recreation opportunities to be provided by the project or applicant, if any.
      None.

13. Historic and Cultural Preservation
   a. Are there any places or objects listed on, or proposed for, national, state, or local preservation registers known to be on or next to the site?
      No.

   b. Generally describe any landmarks or evidence of historic, archaeological, scientific, or cultural importance known to be on or next to the site.
      An archaeological survey was prepared by Historic Research Associates, Inc. (HRA) for the previously-approved facility expansion. HRA did not identify archaeological resources and indicated that "No further archaeological studies are recommended, though, due to references of an ethnographic village being located within the vicinity of the northern portion of the Project Area ..., archaeological monitoring is recommended."

   c. Proposed measures to reduce or control impacts, if any.
      Contractors are expected to follow the State regulations for Unanticipated Discovery. Disturbance of the ground is to be limited to a depth of 18-inches at the location of the MVCU and the rail unloading area. These areas are comprised of between 2 to 4 feet of imported granular fill that was placed after 1967. However, since there is limited ground disturbance planned for the proposed construction areas, there is very low potential for encountering materials of historic, archeological, scientific, or cultural importance.

14. Transportation
a. Identify public streets and highways serving the site, and describe proposed access to the existing street system. Show on site plans, if any.

Marine View Drive (State Route 509) and East 11th Street are the nearest public streets serving the Marine View Drive site (located north and west, respectively). Access to the site would be from East 11th Street via existing terminal facility roads. The nearest highway is State Route 509 (Marine View Drive). Taylor Way and State Route 509 are the nearest public streets and highways serving the Taylor Way site. Access to Taylor Way would be from State Route 509 (Marine View Drive).

b. Is site currently served by public transit? If not, what is the approximate distance to the nearest transit stop?

The site is not currently served by public transit. The nearest transit stop is located approximately ½ mile northwest of the site at the intersection of McMurray Road NE and Browns Point Boulevard NE, served by Pierce County Transit.

c. How many parking spaces would the completed project have? How many would the project eliminate?

No parking places would be created or eliminated (the site would continue to have approximately 40 parking spaces).

d. Will the proposal require any new roads or streets, or improvements to existing roads or streets, not including driveways? If so, generally describe (indicate whether public or private).

No. No increase in truck traffic is anticipated as a result of the project.

e. Will the project use (or occur in the immediate vicinity of) water, rail, or air transportation? If so, generally describe.

The existing Targa facility is located adjacent to the Hylebos Waterway at the Port of Tacoma, and includes a marine berth that accommodates vessels of up to 800 feet in length. This project does not increase the berth capacity. The berth is limited to one vessel at a time. Currently Targa Sound Terminal LLC utilized about 30% of the marine berth capacity, with this project Targa expects an increase of utilization to approximately 60%. The proposed project will not increase the vessel traffic at the marine berth beyond the facility’s capabilities. Ships and barges are assisted by tug boats and as required escorts. The marine traffic utilizes designated shipping lanes within Puget Sound. The proposed project will not increase the vessel traffic at the marine berth beyond the facility’s current capabilities or otherwise increase the rate at which products may be loaded or unloaded to or from marine vessels. Ships and barges traveling to and from Targa’s marine berth are double-hulled vessels. Ships and barges are assisted by tug boats and as required escorts. The marine traffic utilizes designated shipping lanes within Puget Sound. The project will support loading operations at the existing marine dock, by reducing air emissions during handling of petroleum hydrocarbons. Crude oil, petroleum products, and renewable fuels are shipped to the facility via rail, truck, pipeline, and/or barge. Railcars are staged and unloaded at the Targa rail yard. Targa presently receives rail shipments up to seven days a week. The Targa Sound Terminal Rail Yard is currently capable of offloading from 36 rail cars at a time. Due to existing piping constraints, of the 36 offload spots, Targa is capable of offloading crude oil from only 24 rail cars, at a rate of only 12 cars at a time. The proposed project will improve the efficiency at the rail yard by modifying the piping configuration at the rail yard to allow for simultaneous unloading of crude oil at all 36 unloading spots. The facility does not use air transportation.

f. How many vehicular trips per day would be generated by the completed project? If known, indicate when peak volumes would occur.

There would be no change in the number of vehicular trips per day generated by the completed project. It is anticipated that peak volumes would continue to occur between 9:00 and 10:00 AM, based on a traffic analysis prepared by Hefron Transportation, Inc. dated May 4, 2011.

g. Proposed measures to reduce or control transportation impacts, if any.

No measures are required since there will not be an impact to transportation.

15. Public Services

a. Would the project result in an increased need for public services (i.e., fire protection, police protection, health care, schools, other)? If so, generally describe.
b. Proposed measures to reduce or control direct impacts on public services, if any.

None.

16. Utilities

a. Underline utilities currently available at the site: electricity, natural gas, water, refuse service, telephone, sanitary sewer, septic system, other.

Electricity, telephone, natural gas, sanitary sewer, water, and refuse service are currently available at the site.

b. Describe the utilities that are proposed for the project, the utility providing the service, and the general construction activities on the site or in the immediate vicinity which might be needed.

No additional utility service will be needed for the proposed project. However, new conduit and associated equipment are planned.

Signature

The above answers are true and complete to the best of my knowledge. I understand that the lead agency is relying on them to make its decision.

Signature of Proponent/Applicant: [Signature]

Date: June 10, 2013

Received, Buildings and Land Use Services Division: [Signature]

Date Submitted: June 11, 2013

Receipt #

Filing Fee $460.73
Figure 1
Site Location Map

Source: USGS 7.5-minute topographic quadrangle, Tacoma North, Washington, 2011
Figure 2

Site Plan

Legend

- Subject property boundary
- Riprap shoreline with blackberry and weeds

Note: Image does not show current state of infrastructure.

Source: Google Earth Pro

Job No. 33764126

Targa Sound Terminal
Tacoma, Washington
Tank 207
Tank 206
Tank 164
Tank 165
Exhibit C
Exhibit D – Parcel Descriptions

Parcel 0321264046: Section 26 Township 21 Range 03 Quarter 42: BEG AT INTER OF A LI PAR/W & 658.5 FT W OF E LI GOVT LOT 3 WITH SLY Li MARINE VIEW DR TH NWLY ALG SD SLY Li TO INTER A LI PAR/W & 1008.5 FT W OF E LI SD LOT TH SLY ON SD Li TO A PT 610 FT N OF S LI B 5 ASHTONS RPT TH W 200 FT TH S TO S LI B 5 ASHTON RPT TH SELY ON SLY Li SD B 5 ASHTONS RPT & SLY Li GOVT LOT 12 TO INTER A LI EXT S 658.5 FT W OF E LI GOVT LOT 3 TH N ON SD Li TO BEG EXC POR LOT 12 WITHIN HYLBOS WATERWAY SEG E 9263 DC2/9/01JU

Parcel 0321264048: Section 26 Township 21 Range 03 Quarter 42: THAT POR OF GOVT LOTS 3 & 12 DESC AS FOLL BEG AT A PT ON S LI OF GOVT LOT 3 SD PT BEING 658.5 FT W OF E LI SD LOT TH N PAR/W E LI SD LOT TO SLY Li OF EAST SIDE DR AKA MARINE VIEW DR TH SELY ALG SD SLY Li TO A LI WHICH IS PAR/W & 628.5 FT W OF E LI SD LOT 3 TH S PAR/W SD E LI TO A PT 400 FT N OF S LI SD LOT TH E PAR/W S LI SD LOT 3, 200 FT TH S PAR/W E LI SD LOT TO NLY Li HYLBOS WW TH NWLY ALG SD NLY Li TO A PT 56.26 FT S OF POB TH N 56.26 FT TO BEG

Parcel 0321263030: Section 26 Township 21 Range 03 Quarter 34 WLY 325 FT OF POR GOVT LOT 8 & 9 OF FOLL BEG INTER OF N LI TAYLOR WAY WITH A LI PAR/W & 804 FT W OF E LI GOVT LOT 9 TH ALG SD N LI TAYLOR WAY N 60 DEG 23 MIN 23 SEC W 744.87 FT M/L TO W LI OF E 165 FT GOVT LOT 8 TH N 00 DEG 34 MIN 10 SEC E ALG SD W-E Li 935.33 FT M/L TO SLY Li HYLBOS WATERWAY TH ALG SD WATERWAY Li S 69 DEG 23 MIN E 813.67 FT M/L TO A PT PAR/W & 754 FT W OF E LI SD GOVT LOT 9 TH S 01 DEG 27 MIN 35 SEC W 129.88 FT M/L TO A PT 799.94 FT N FROM NLY Li TAYLOR WAY TH N 88 DEG 32 MIN 25 SEC W 50 FT TH S 01 DEG 27 MIN 35 SEC W 782.79 FT TO POB EXC FROM SD WLY 325 FT THAT POR OF FOLL BEG INTER OF N LI TAYLOR WAY & A LI PAR/W & 804 FT W OF E LI GOVT LOT 9 TH ALG SD N LI TAYLOR WAY N 69 DEG 23 MIN 23 SEC W 400 FT M/L TO E LI OF W 160 FT SD GOVT LOT 9 TO POB TH ALG SD E LI N 00 DEG 34 MIN 10 SEC E 510 FT TH N 89 DEG 25 MIN 50 SEC W 100 FT TH S 00 DEG 34 MI 10 SEC W 470 FT M/L TO SD N LI TAYLOR WAY TH ALG SD N LI TAYLOR WAY S 69 DEG 23 MIN 23 SEC E 106 FT M/L TO POB SEG G-4979 (DCPLES8-23-82)

Parcel 0321263048: Section 26 Township 21 Range 03 Quarter 31 PARCEL A OF BLA 2010-06-02-5006 DESC AS COM AT CENT OF SEC TH N 88 DEG 8 MIN 32 SEC W 134.05 FT TO POB TH S 36 DEG 13 MIN 14 SEC EAST 216.46 FT TO E LI OF GOVT LOT 4 TH S 2 DEG 2 MIN 11 SEC W 657.96 FT TH N 19 DEG 44 MIN 4 SEC W 29.76 FT TH N 7 DEG 12 MIN 5 SEC E 75.61 FT TH N 5 DEG 22 MIN 25 SEC W 128.21 FT TH N 41 DEG 4 MIN 57 SEC W 143.01 FT TH N 29 DEG 55 MIN 55 SEC W 119.12 FT TH N 47 DEG 8 MIN 11 SEC W 102.21 FT TH N 31 DEG 9 MIN 16 SEC W 56.59 FT TH N 41 DEG 55 MIN 10 SEC W 78.5 FT TH N 82 DEG 4 MIN 55 SEC W 50.1 FT TH N 69 DEG 8 MIN 44 SEC W 146.62 FT TH N 74 DEG 4 MIN 46 SEC W 44.64 FT
TH N 59 DEG 42 MIN 15 SEC W 32.54 FT TH N 52 DEG 2 MIN 37 SEC W 37.54 FT TH S 75 DEG 43 MIN 42 SEC W 34.17 FT TH N 87 DEG 47 MIN 48 SEC W 174.43 FT TH N 63 DEG 50 MIN 17 SEC W 33.31 FT TH N 31 DEG 30 MIN 44 SEC W 49.78 FT TH N 46 DEG 27 MIN 25 SEC W 49.19 FT TH N 62 DEG 35 MIN 13 SEC W 55.81 FT TH FT TH N 72 DEG 46 MIN 33 SEC W 60.19 FT TO MC ON N LI OF SD GOVT LOT 4 TH N 79 DEG 10 MIN 27 SEC W 75.69 FT TH N 44 DEG 7 MIN 4 SEC E 35.89 FT TH S 79 DEG 10 MIN 27 SEC E 60.21 FT TH S 63 DEG 9 MIN 58 SEC E 68.62 FT TH S 63 DEG 9 MIN 58 SEC E 74.06 FT TH S 36 DEG 48 MIN 29 SEC E 85.16 FT TH N 44 DEG 7 MIN 4 SEC E 132.1 FT TH S 88 DEG 8 MIN 32 SEC E 631.62 FT TO POB OUT OF 3-043 & 3-044 SEG 2011-0025 DX7/12/10DX

Parcel 0321264073: Section 26 Township 21 Range 03 Quarter 42 : BEG AT INTER OF W LI OF GOVT LOT 3 WITH SLY LI OF MARINE VIEW DR TH S ALG W LI OF SD LOT 3 & SD W LI EXT TO S LI OF B 5 OF ASHTONS REPLAT TH S 69 DEG 23 MIN E ALG SD S LI TO INTER A LI PAR/W & 1208.5 FT W OF E LI OF SD LOT 3 TH N PAR/W E LI SD LOT 3 537.3 FT TH E 200 FT TH N 155 FT M/L TO SLY LI OF MARINE VIEW DR TH NWLY ALG SD SLY LI TO POB EXC THAT POR LY IN PROP CYD TO PORT OF TACOMA BY AFN 2000-10-06-0572 OUT OF 4-004 & 227520-020-0 SEG M-0480 JU 2/9/01JU

Parcel 2275200211: Section 26 Township 21 Range 03 Quarter 42 ASHTONS RPT BLKS 13-48 TAC TDLDS: ASHTONS RPT BLKS 13-48 TAC TDLDS NE OF SW 26-21-03E ALL OF B 5 EXC THAT POR LY E OF SLY EXT OF W LI OF GOVT LOT 3 EXC THAT POR THEREOF CYD TO PORT OF TACOMA BY AFN 2000-10-06-0572 APPROX 83,211 SQ FT OUT OF 021-0 & 020-0 SEG M-0480 JU 2/9/01JU

Parcel 0321262062: Section 26 Township 21 Range 03 Quarter 24 : BEG ON S LI OF LOT 2 279.15 FT WLY OF SE COR SD LOT TH N 37 DEG 36 MIN W 318.09 FT TH N 52 DEG 24 MIN E 120 FT TO WLY LI MARINE VIEW DRIVE TH N 37 DEG 36 MIN W 39.23 FT TH S 52 DEG 24 MIN W 225 FT TH N 37 DEG 36 MIN W 115 FT TH S 42 DEG 44 MIN W 200 FT TH S 47 DEG 16 MIN E TO S LI SD LOT TH ELY ALG SD S LI 340 FT M/L TO BEG SUBJ TO EASE
JOHN ZINK® MARINE VAPOR COMBUSTION SYSTEM

Prepared for:
Wayne Desberg
Of
Sound Refining
Tacoma, WA

PREPARED BY LARISSA HESPEN
DATE 26-APRIL-2013
REVISION 2
JZ FILE NUMBER 201304-34829-A
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A. General Terms and Conditions of Sale
B. Technical Assistance Agreement
C. Rental Agreement
D. Rental Proposal
I. Introduction

John Zink Company, LLC is pleased to provide this proposal for a JOHN ZINK® Model ZCM-3/3-9-50-2/8-2/8 Marine Vapor Combustion System (MVCS) to be located at Sound Refining’s petroleum products terminal in Tacoma, WA.

The system is designed in accordance with the appropriate sections of 33 CFR Part 154 to condition, transfer and combust the hydrocarbon vapors displaced during the loading of marine vessels. Loading will occur at one loading berth at a maximum rate of 7,000 BPH. The destruction efficiency will be a minimum of 98 percent as described in the Performance Guarantee section.

Through the execution of hundreds of vapor control projects, John Zink has developed a thorough understanding that our customers value safety, efficiency, and ease of installation, operation and maintenance in their equipment. The design of the proposed VCU incorporates several features which enhance safety, performance and reliability. John Zink also understands that, in addition to high-quality equipment, our customers value excellence in project execution and service. Purchasing a system from John Zink provides many advantages not limited to the following:

- Experienced design and project management staff dedicated to providing excellent customer service during the execution and installation phases of a project.
- In-house fabrication ability. Because John Zink owns its own 250,000 square foot manufacturing facility, we are able to assemble most systems in our own shop which allows us to better control quality and schedule. We also assemble our control panels in-house and perform a functional test of the control panel and MVCS skids prior to shipment.
- Large service organization. Our factory trained technicians provide both preventative maintenance and emergency call-out assistance 24/7.
- Spare parts inventory for quick turn arounds.
- Portable Emission Control Systems (PECS®) for temporary compliance needs.
- Installation assistance.
- John Zink proprietary anti-flashback burners. John Zink is the only VCU supplier to design and manufacture our own anti-flashback burners.
- Elimination of liquid seal. John Zink’s anti-flashback burners allow for an additional level of safety so that liquid seal can be removed, reducing equipment maintenance.
Scope of Supply Summary

Engineering

The following items are included as “Engineering Deliverables”
1. Piping and Instrument Diagrams
2. System pressure drop calculations
3. Natural gas enrichment requirements
4. Combustor emission data
5. Utility requirements
6. Design and specification for:
   Dock Safety Unit (DSU)
   Vapor Blower Staging Unit (VBSU)
   Vapor Combustion Unit (VCU)
7. General arrangement drawings with complete tagging and assembly information.
8. Control panel(s) and junction box schematics.
9. Electrical one line diagrams.
10. Structural design of combustor with foundation information for design by others.
11. Structural design of skids with foundation information for design by others.
12. Written operational procedure.
13. Documentation package for the John Zink design that will be used as part of the documentation package to obtain an exemption from compliance with the requirement for a liquid seal found in 33CFR 154.828(b)(1).

Equipment

The proposed Marine Vapor Combustion System (MVCS) is designed to control hydrocarbon emissions from vapors displaced during the loading of marine vessels safely and effectively. The MVCS consists of three main process units, one (1) Dock Safety Unit (DSU), one (1) Vapor Blower Staging Unit (VBSU), and one (1) Vapor Combustion Unit (VCU).

DSU equipment is located on the dock. The DSU serves as protection for the marine vessels from excessive pressure, excessive vacuum, flashback, and other shore-based hazards. Vapors displaced from the marine vessel will be conditioned with natural gas to a safe composition above the upper flammable limit. The DSU will be provided on a skid, and dual oxygen analyzers will be used to monitor the process conditions.

The VBSU utilizes a centrifugal pressure blower to transfer the vapors from the DSU to the VCU. The system operating pressure is controlled by varying the motor speed to match demand requirements. Vapors are transferred to the VCU where they are thermally destroyed in a controlled manner. The control system is integrated between the three process units. Each unit includes numerous components that must interact with each other, automatically adjusting to changes in flow and composition. The MVCS uses an Allen Bradley CompactLogix
programmable logic controller (PLC) to coordinate these interactions in an orderly manner. There is a PLC at the DSU and the VCU.

The design and operation of the MVCS are strictly regulated by the U.S. Coast Guard as defined in Title 33 Code of Federal Regulations Part 154 (33 CFR 154). These regulations were promulgated on June 21, 1990 in response to the requirements in the Clean Air Act for vapor control during marine loading. The regulations did not require vapor control, but established safety requirements to prevent the marine vessel from excessive pressure or vacuum, overfilling, and fire or explosion when vapor control is used. The regulations originally addressed only the marine loading of crude oil, gasoline and benzene but have been extended to the loading of many other materials including distillates and chemicals. The regulations have not been revised to address the numerous technical complexities and new environmental regulations since they were promulgated. They have, however, been significantly supplemented by a large number of U.S. Coast Guard letters, guidelines and waivers. John Zink has been integrally involved in the evolution of these regulations and supplements and assures our customers that our MVCS will meet all U.S. Coast Guard requirements.
II. Design Basis

This design basis was developed from bid specifications and from reasonable assumptions. This basis is critical to the performance of the MVCS, and both the site-specific information and the assumptions should be thoroughly reviewed to ensure that they are accurate and acceptable.

Number of Docks ................................................................. 1
Vessels Loaded........................................................................ 1
Vessels Atmospheres............................................................... Inert or Non-Inert
Number of Vessels Loaded Simultaneously ............................... 1
Inerted and Non-Inerted Atmospheres Loaded Simultaneously ...... No

Loading Rates
  Position # 1 (Dock) .......................................................... 7,000 BPH
  Postion #2 (Truck Rack) ..................................................... 4,800 GPM*

*The VCU proposed herein is intended as a back-up for truck rack loading only. Loading at the dock and the truck rack shall not occur simultaneously.

Piping Layout (to be confirmed by customer)
  DSU to VBU/VCU .................................................................. 1,400'
  Vapor Line Control Pressure at the DSU Inlet ......................... -2" w.c.g.

Products Loaded: .............................................. Crude Oil, Gasoline, Ethanol, E85, Diesel
Vapor Hydrocarbon Concentration \(^{(1)}\) .................................... 55 mol% maximum
True Vapor Pressure \(^{(1)}\) ..................................................... 11.5 psia maximum
Estimated Heat Release ........................................................ 75 MMBtu/hr
Estimated Pilot Gas \(^{(2)}\) .............................................. 1.0 scfm natural gas for each of the 2 pilots
Vapors with Growth .............................................................. 819 scfm
Estimated Enrichment Gas \(^{(3)}\) .............................................. 0-351 scfm
Enriched Vapors \(^{(4)}\) .......................................................... 1170 scfm maximum
Estimated Assist Gas \(^{(3)}\) ..................................................... 0-351 scfm
Destruction Efficiency \(^{(5)}\) .................................................. 98% minimum

Area Electrical Classification
  DSU skid ............................................................................. Class I, Div II, Group D
  VBU/VCU skid ................................................................... Outdoor Unclassified
  Motor Type ................................................................. TEFC (Class I, Div II)
  DSU Enclosure Type ....................................................... NEMA 4X with Z-purge
  VCU Enclosure Type ....................................................... NEMA 4X
  Detonation Arrester Classification ...................................... Group D

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Earthquake Zone.................................................................UBC 4
Wind Velocity.................................................................100 mph
Ambient Temperature......................................................40-100°F
Electrical Power .......... 230/480 V, 3 Ph, 60 Hz and 120 V, 1 Ph, 60 Hz
Enrichment Gas..............Natural Gas @ 30 psig minimum
Instrument Air/Nitrogen.................80 psig (-40°F dew point)

Notes to Design Basis

1. The maximum hydrocarbon concentration corresponds to approximately 70% saturation of a liquid with a true vapor pressure of 11.5 psia. We use a saturation level of approximately 70% based on our barge loading experience. True vapor pressure needs to be verified by the customer.

2. Pilot gas is required continuously at a rate of approximately 1.0 scfm per pilot.

3. Enrichment gas is required when the oxygen concentration of non-inerted vapors is too high to be considered “safe” in accordance with 33 CFR 154.824. The amount of enrichment gas required will vary considerably based on the vapor flow rate and the oxygen and hydrocarbon concentrations. The maximum enrichment gas flow rate occurs at the beginning of the loading of a non-inert vessel. When an inert vessel is loaded, enrichment gas is not required. In the case of inert loading, assist gas would be added at the VCU in order to provide the supplemental heat content required for combustion. The estimated assist gas usage is 0-351 scfm regardless if inert or non-inert vessels are loaded.

4. The enriched vapor flow rate will vary considerably based on the loading rate and the vapor oxygen and hydrocarbon concentrations. The maximum enriched vapor flow rate occurs at the beginning of the loading of non-inerted vessels. The USCG 25 percent growth factor is included. The flow rate is calculated for vapors at 60°F and 14.7 psia at the Dock Safety Unit and will be somewhat different at other temperatures and pressures. The MVCs, however, is designed for the entire vapor temperature and pressure ranges defined in this basis.

5. Refer to the Performance Guarantee in Section V.

6. The design basis assumes that there is negligible H₂S and mercaptan. Higher concentrations may require additional precautions to protect against corrosion in the stack and vapor piping.
III. Process Description

All marine transport vessels (ships/barges) used for the transportation of organic liquids, are outfitted with a vapor collection header for the containment of the organic vapors generated during the loading process. The collected vapors are routed through a vapor hose and into the Dock Safety Unit (John Zink Supply).

The Dock Safety Unit is located at the dock and serves the purposes of protecting the marine vessel from fire/explosion, over and under pressure, and of conditioning the captured vapors to a nonflammable condition. At the DSU the vapors are conditioned by adding enough natural gas to the captured vapors to "enrich" the mixture to at least 170% of the upper flammability limit (UFL).

On the DSU, the vapors pass through an automatic quick closing block valve. The vapors are then routed through a Detonation Arrestor to the enriching gas mixer for addition of the natural gas. The amount of enrichment gas added is controlled throughout loading by using a Dual Oxygen Analyzer System. The mixed vapors are analyzed with the Dual Oxygen Analyzer System to verify the mixture is at least 170% of the UFL. For a non-inerted vessel, the system alarms at a concentration of 15.5% oxygen (170% of the UFL for methane in air) and shuts the loading process down at an oxygen concentration of 16.5% (150% of the UFL for methane in air).

The vapors leaving the Dock Safety Unit travel through piping (provided by others) to the Knockout Vessel located on the VBSU (John Zink Supply). Any condensate that forms in the system will be collected here. The vapors will then go to a centrifugal blower. The blower provides the motive force for overcoming the pressure drop created during transportation of the vapors from the marine vessel to the emission control device. The blower is equipped with a variable speed drive to control the pressure in the vapor manifold at the desired level. A pressure transmitter at the DSU sends a signal to a second pressure controller. The pressure controller, in turn, automatically adjusts the pressure control valve at the dock to maintain a slight negative pressure (-2" w.c.g.) at the facility vapor connection.

The vapors discharged from the blower pass through another detonation arrestor and into the combustion chamber of the Vapor Combustion Unit. The combustion process is aided in the combustion chamber by an assist air blower which provides part of the stoichiometric air necessary for combustion as well as providing mixing energy for efficient, smokeless operation. The remaining air required for combustion and for quenching is controlled via temperature by the natural draft dampers located at the bottom of the stack. The combusted vapors exit the VCU to the atmosphere.

The MVCU can also serve as a back-up for truck rack loading. The vapors will be routed from the truck rack to the MVCU.
IV. Equipment Specifications

The proposed Marine Vapor Combustion System (MVCS) is provided in modular packages to allow for convenient field installation and to provide adequate equipment spacing for ease of operation and maintenance.

The Dock Safety Unit (DSU) and the Vapor Blower Staging Unit (VBSU) will be furnished as separate skid mounted assemblies. The dock is required to have a “control station” and therefore an operator control panel is mounted on the dock safety skid. The “main” control panel is included and mounted on the VBSU. The equipment is described in detail below. All sizes, dimensions and specifications are preliminary and may be changed in final engineering.

Marine Dock Safety Unit (DSU) Components

The DSU is designed to handle the vapors from loading up to 7,000 BPH. The DSU is expected to be installed in hazardous area. The main DSU components are described below.

Pressure / Vacuum Relief Valve
One pressure / vacuum relief valve in accordance with 33 CFR 154.814 will be provided to help protect the marine vessel from excessive pressure from a faulty enrichment system or excessive vacuum from the vapor blower. The valve is equipped with flame screens.

Detonation Arrester
An 8” detonation arrester in accordance with 33 CFR 154.822 is required for each loading spot to help protect the marine vessel from fire and explosion. It is a passive device that uses the element to extinguish a flame by absorbing its heat and is designed to withstand the velocities and high pressures that occur in a detonation. The arrester is designed for group D vapors and is constructed with a carbon steel body and a stainless steel element. A high temperature shutdown switch is provided on the element face to detect the presence of a flame on the face of the element. The element is removable for cleaning and inspection.

Cartridge Filter
A cartridge filter with 8” 150 # flanged connections designed to remove rust and scale that may be accumulated in the vessel’s vapor piping system is included to reduce the maintenance chore of cleaning the detonation arresters. The filter is designed to remove 98% of particulates that are greater than 10 microns. The cartridge filter is designed as an ASME Sec VIII Div 1 vessel and fabricated from carbon.
**Vapor Piping System**
A carbon steel vapor piping system in accordance with 33 CFR 154.810 will be provided for the introduction of vapors into the DSU. It consists of a facility vapor connection, a vertical vent pipe for the pressure relief valve effluent, an automatic isolation valve and a manual isolation valve.

**Instrumentation**
Pressure instruments in accordance with 33 CFR 154.814 are provided for the measurement of the vapor pressure. The instruments include a dual pressure transmitter for pressure control as well as high/low pressure warning and shutdown, a differential pressure transmitter for backflow detection, thermocouple element for high temperature alarm and shutdown, and pressure/temperature gauges for local indication.

**Instrument Air Header**
A galvanized instrument air header with local pressure indication and individual manual shut off valves to each individual instrument air user is furnished.

**Oxygen Analyzer System**
One oxygen analyzer system in accordance with 33 CFR 154.824 will be provided to sample and analyze the oxygen content of the vapors and send a signal to the enrichment gas controller. The system consists of two oxygen analyzers, a common pumped sampling system with sample low-flow shutdown and a local indicator. The analyzer electronics are suitable for a hazardous area however the complete oxygen analyzer system will be provided in a NEMA 4X enclosure for weather protection.

**Enrichment Gas System**
One carbon steel enrichment gas system in accordance with 33 CFR 154.824 will be provided for the DSU to add the fuel gas necessary to ensure the vapors are not in the flammable range. The system consists of the piping and components needed to control the flow including a regulator, strainer, pressure gauge, control valve, shutdown valve, and manual valves. The system also includes a proprietary mixer to ensure the enrichment gas is thoroughly distributed in the vapor piping.

**Vessel Overfill Panel**
A vessel overfill panel in accordance with 33 CFR 154.812 will be provided to alarm and shut down the MVCS if the marine vessel is overfilled at each facility connection. They are intrinsically safe and will be supplied with a 100 foot long cable for connection to the vessel.

**Pressure Test Panel**
A test panel will be provided to help perform the testing of the pressure alarms and shutdowns required by 33 CFR 154.880. The panel is permanently installed and consists of the components and instruments needed apply pressure and vacuum to the appropriate instruments in order to verify proper calibration and operation as required by USCG.
DSU Skid
The structural steel skid will be fabricated in accordance with AWS D1.1 and will be constructed of A36 carbon steel.

Vapor Blower Staging Unit (VBSU) Components

An integral Vapor Blower/Combustion Staging Unit (VBSU) contains all vapor blower components as well as the auxiliary and safety equipment required for the Vapor Combustion Unit (VCU). The main components are described below.

Vapor Piping System
A carbon steel vapor piping system in accordance with 33 CFR 154.828 will be provided for the introduction of the vapors into the VBSU.

Knockout Vessel and Accessories
A knockout vessel in accordance with 33 CFR 154.808 will be provided to help remove liquid from the vapors. It is a vertical carbon steel vessel designed and fabricated (but not stamped) as an ASME Section VIII vessel rated at 50 psig. The knockout has a diameter of 2 feet and a seam-to-seam height of 5 feet. Vessel connections include 8” 150# flanges for the vapor inlet and outlet, 2” NPT connection for the drain, two 2” NPT connections for the level bridle, and a 1” NPT connection for the relief valve.

The 1” relief valve will have a set pressure of 5 psig and is sized based on an external fire engulfing the vessel. The relief valve will have a flame screen on its discharge.

A 2” diameter level bridle with magnetic level gauge will be attached to the knockout vessel with 2” ball type isolation valves. The bridle will have switches for high level alarm and high level shutdown and ½” ball type vent and drain valves.

Vapor Blower and Accessories
A single stage centrifugal vapor blower in accordance with 33 CFR 154.824 is included to transfer the vapors approximately 1,400 feet from the loading connection at the dock safety units to the VCU.

The blower will have the capacity to handle the fully enriched (including a 25% expansion factor) vapors from loading at a rate of 7,000 BPH. The blower is designed for the pressure drop through the John Zink system plus 1,400 feet of 8” pipe from the dock to the VCU.
Variable Frequency Drive
A variable speed drive will be provided for the blower to control the pressure at the dock facility connection slightly above atmospheric. The enclosure will be NEMA 1 for installation inside a safe control room.

Liquid Seal
Note:
A liquid seal in accordance with 33 CFR 154.828 is not provided as part of the package. Documentation will be provided to assist with the Coast Guard exemption process to operate without a liquid seal vessel. Requirements of the liquid seal vessel exemption will be supplied. The exemption with an appropriate “equivalent of safety added to the system has become standard operating procedure for the USCG when utilizing John Zink proprietary anti-flashback burners and should only be a formality.

Vapor Isolation Valves
An 8” 150 # wafer style high performance butterfly valve is located upstream of combustor detonation arrester is provided with a pneumatic actuator to serve as a portion of the double combustor isolation valves required by the USCG. The second portion of the required double isolation is achieved with two similar valves that are downstream of the combustor detonation arrester located in parallel lines directing the vapors to different burner stages in the combustor.

During operation each of the two parallel valves leading to the burners is opened and closed based on the vapor flow rate. These valves are 6” 150 # wafer style firesafe butterfly valves and are provided with a pneumatic actuator.

Detonation Arrester
An 8” detonation arrester in accordance with 33 CFR 154.822 is required to help protect the marine vessel from fire and explosion. It is a passive device that uses the element to extinguish a flame by absorbing its heat and is designed to withstand the velocities and high pressures that occur in a detonation. The arrester is designed for group D vapors constructed with a carbon steel body and a stainless steel element. A high temperature shutdown switch is provided on the element face to detect the presence of a flame on the face of the element. The element is removable for cleaning and inspection.

Pilot System
A carbon steel pilot gas system will be provided to control the pilot gas flow including a strainer, regulator, pressure gauge, shutdown valve, high- and low-pressure shutdown switches, and manual valves.

Assist Gas System
Assist gas will be added to the waste vapor stream to control temperature. For non-inert vessels, it is not anticipated that assist gas will be required as the enrichment gas added at the DSU will provide the heat release necessary to maintain the VCU at a sufficient
temperature. However, assist gas is provide for low flow conditions or for any pre-heat requirements if applicable. A carbon steel assist gas system will be provided to control the assist gas flow including a regulator, pressure gauge, shutdown valve, control valve, and manual valve.

**VBSU Instrumentation**

Instrumentation provided on the VBSU includes:

- Thermocouple temperature elements for each combustion stage
- Thermocouple temperature element for detonation arrester
- Differential pressure transmitter for backflow detection across detonation arrester
- Pressure switch on vapor manifold for staging burners on/off and maintaining burner exit velocities at levels conducive for safe and stable combustion

**VBSU Skid**

The structural steel skid will be fabricated in accordance with AWS D1.1 and will be constructed of A36 carbon steel.

**Control System**

The Marine Vapor Control System will be controlled by a programmable logic controller (PLC) and analog controllers. The main PLC unit will be located in the VCU control panel located on the VBSU. A remote PLC will be located at the DSU. The use of the remote PLC units allows nearly all of the extensive wiring between the DSU and VCU to be replaced with communication cables. The primary operator interface for the operation of the Vapor Control Combustion System will be at the DSU control panels. An auxiliary operator interface for the operation of the VCU will be provided at the VCU control panel. Analog controllers will be used for the oxygen content, vapor pressure and combustor temperature control functions. Independent controllers will be provided for the fuel gas and quench air, which will allow a lower temperature set point to be used for the fuel gas. Motor starters for the assist air blower and an ignition transformer enclosure will also be located on the VBSU. All enclosures will be NEMA 4X except as noted and will be purged as necessary to meet the area classification. The electrical design and construction is in accordance with NFPA-70 of the NEC, except for Article 515, Table 515-2.

The NEMA 1 vapor blower VFD will be provided for installation by others in a remote indoor unclassified area.
Vapor Combustion Unit (VCU)

The VCU consists of an enclosed vapor combustor sized to handle the vapors from the loading of a barge at a rate of 7,000 BPH or the vapors from the truck rack at 4,800 GPM to be installed in a non-hazardous area. It is a self-supported vertical stack that uses natural draft to provide combustion and quench air.

**Mechanical Design**
The combustor has a diameter of 9 feet and an overall height of 50 feet. Two, 2” npt sample ports, one sight glass per stage, various instrument and component connections, lifting lugs, and ladder and platform clips are provided. A ladder and 120 degree service platform is an option that can be provided for access to elevated stack instrumentation and sample ports that is designed in accordance with OSHA standards.

The design conditions used are a shell temperature of 500 °F, MDMT of −20 °F and no corrosion allowance. Material of construction is A-36 carbon steel welded in accordance with AWS D1.1.

The structural design is as follows
- Earthquake .................................................................Zone UBC 4
- Wind Velocity ............................................................ASCE 7-02 120 mph

**Other Combustor Features**

**Refractory:**
Ceramic fiber refractory with Inconel pins and keepers will be provided in the enclosed combustor to protect it from the radiation and high temperature of combustion. This refractory does not require curing and does not limit the combustor heat-up or cool-down rates. A rainshed is installed on the top edge of the refractory to help protect it from the weather. The hot face temperature rating of the ceramic fiber is 2400 °F.

**Anti-flashback Vapor Burners:**
Two (2) combustion stages each equipped with two (2) 8” stainless steel anti-flashback burners will be provided for the introduction of the marine vapors into the combustion chamber. These proprietary burners help prevent flashbacks into the vapor piping by using technology similar to that used in flame and detonation arrestors.

**Assist Air Blower:**
A tube-axial assist air blower will be provided on each stage to ensure the vapors are combusted quickly and efficiently. The assist air helps ensure smokeless operation by using a part of the combustion air to enhance mixing. It also cools the burners and extends their operating life. A 3 HP 480 V TEFC motor drives each blower. Each assist air blower has a manual inlet damper that can be used to fine tuning of assist air flow.
Quench Air Damper(s):
Two quench air dampers with an automatic actuator will be provided to introduce combustion and quench air into the combustor. The damper blades operate in an opposed manner to maximize the control with the low available differential pressure. The damper frame is galvanized carbon steel, and the blades and bearings are stainless steel. The damper is hinged for easy entry to the inside of the combustor.

Pilot Gas System
One high-efficiency pilot will be provided for each section of vapor burners and for the assist gas burner to ensure that a stable, continuous ignition source is available for each stream. The pilots inspire air from outside the combustor and mix it with fuel gas to provide a pre-mix stream to the tips. Fuel gas use is approximately one scfm per pilot due to the high efficiency design. An automatic ignition assembly will be provided.

Instrumentation
- One ultraviolet flame detector for each pilot. The detectors are used to ensure that the pilots have stable flames.

- The combustor will have two thermocouples near the exit of the exhaust. One is used to control the assist gas / quench air dampers and the other is used as a safety shutdown.

John Zink Fabrication Standards

Piping
Vapor piping is carbon steel and is built to ANSI B31.3 150# class. All piping 1.5” and smaller to be SCH 80, piping greater than 1.5” to be schedule 40. All piping connections greater than 2” will utilize 150# flanges; small-bore piping will have NPT connections with appropriately positioned unions to facilitate maintenance.

Paint
Piping, stack, vessels will have a commercial blast surface preparation (SSPC-SP-6) and one coat of Sherwin Williams Zinc Clad II Low VOC Inorganic Zinc Rich Primer (one coat, 2.0-4.0 mils DFT).

Structural skids will be galvanized.

Components with a manufacturer’s finish coat will not be painted. Components that could be damaged by blasting such as valves will be hand-tool cleaned (SSPC-SP-2) instead of blasted. Sherwin-Williams products are used.
Equipment Dimensions and Weights

Dock Safety Unit (DSU):  
7’ W X 21’ L  
7,800 Lbs

Vapor Blower Staging Unit (VBSU):  
10’ W X 26’ L  
9,150 Lbs

Vapor Combustion Unit:  
9’ OD X 50’ OAH  
26,000 Lbs

Optional Features

In the discussion that follows some optional features are offered. Each of the optional features offered are identified by a number and the pricing of each option is included in the Commercial Section of this proposal.

1. Ladders and Platforms  
   A ladder with a 120 degree platform will be provided. The ladder and platform will be galvanized per ASTM.

2. Finish Coat of Paint  
   The piping and knock out vessel can be finish coated per the following:  
   Surface preparation per SSPC-SP6  
   Prime: Sherwin Williams Zinc Clad III HS Organic Zinc Rich Epoxy Primer, 3-4 mils  
   DFT  
   Finish: Sherwin Williams 218 HS Acrylic Polyurethane, White, 3-5 mls DFT

   Finish painting will add one week to the delivery. It is recommended that the stack finish coat be completed in the field.
V. Performance Guarantee

John Zink Company guarantees the performance of the proposed vapor combustion unit to produce a minimum 98% reduction in the total hydrocarbon vapor emissions routed through it based on the following:

1. The equipment is transported, stored, installed, operated, and maintained in compliance with manufactures’ operating and maintenance guidelines (including operation records), accepted good industry practices, and within conditions as defined in "Design Basis" of this proposal.

2. Total hydrocarbons include evaporative hydrocarbon emissions naturally occurring during the marine loading of products listed in the Design Basis, plus natural gas added for enrichment or assist gas.

3. The use of natural gas for pilot, enrichment, and warm-up gas.

4. Determination of hydrocarbon emissions shall be measured according to the EPA Reference Methods 2A, 2B, 25A & 25B or any other equivalent test method acceptable by John Zink.

5. Emissions measurements shall be averaged over at least the last 50% of the total liquid cargo loaded. In addition, the hydrocarbon concentration of the inert vapor shall not exceed the minimum and maximum limits stated in the Design Basis.

6. John Zink Company is responsible only for those emissions that pass through the vapor control device supplied by John Zink.

7. The process guarantees apply only to the time period when loading is occurring. System purge, stack heat up, etc. are not included as part of the process performance test.

8. The performance guarantee as stated above is the only performance guarantee offered. Values stated for other parameters are good faith estimates and not to be construed as performance guarantees.

9. Any defects are reported immediately to John Zink.

10. Performance testing shall be conducted by customer within sixty (60) days after the equipment has been placed in operation. John Zink Company shall be notified in writing prior to the test so that their representative may be present. It shall be the customer’s responsibility to maintain equipment in good working order prior to and during the testing. Performance testing is the Customer’s responsibility. However, if due to no fault of John Zink Company the equipment cannot be put into operation or
for other reasons not tested within 12 months after equipped is ready to ship, then the Performance Guarantee shall be deemed to have been met for any and all purposes.

11. Should the equipment not meet the Performance Guarantee, John Zink and the Customer shall jointly determine, in accordance with recognized engineering procedures and practices, whether the failure is a result of a design deficiency. If it is established that the equipment failed to meet the Performance Guarantee and such failure is due to design deficiency, John Zink will take such action as it may determine necessary to correct the equipment to meet such guarantees. Customer agrees to give John Zink free and necessary access to the equipment when requested for the purpose of making correction.

12. The Performance Guarantees shall terminate 18 months after the date that the equipment is available for shipment or one year after start-up, whichever occurs first (the “Guarantee Period”).
August 16, 2013

Shirley Schultz, Principal Planner
City of Tacoma
Planning & Development Services
747 Market Street
Tacoma, WA 98402-3769

RE: Response to the State of Washington Department of Ecology SEPA Comments
Targa Sound Terminal LLC Rail Modification & Tank Expansion Project
Applications SEP2013-40000203723 & SHR2013-40000203722
2628 Marine View Drive and 1515 Taylor Way

Dear Ms. Schultz:

Thank you for providing Targa Sound Terminal LLC (Targa) with the opportunity to respond to comments received by the City of Tacoma (the City) during the recent public comment period on our Shoreline Permit and State Environmental Policy Act (SEPA) Checklist 2013-4000203722. Targa recognizes the importance of providing all the information necessary to identify and understand the environmental impacts of our proposal. We believe the following additional information and analyses provide for a complete and satisfactory record for the City to fulfill its obligations as Lead Agency.

We understand that your department received comments from the City of Tacoma Environmental Services, Citizens for a Healthy Bay, the State of Washington Department of Ecology (Ecology), and the Puget Sound Clean Air Agency (PSCAA). The City of Tacoma Environmental Services department had no objections to the proposed project and provided recommended conditions of approval that ask for Targa to comply with all applicable requirements contained in the City of Tacoma Stormwater Management Manual, Side Sewer and Sanitary Sewer Availability Manual, Tacoma Municipal Code 12.08 and the Public Works Design Manual in effect at time of vesting land use actions, building or construction permitting. Targa acknowledges these requirements. Citizens for a Healthy Bay (CHB) provided comments in support of the proposed project. Targa met with CHB on July 2, 2013, in order to explain the proposed project activities and provide CHB with an opportunity to ask questions or discuss any concerns with the project. No further response is required for the comments from the City of Tacoma or CHB.

The comments from Ecology and PSCAA requested more information on the details of the project. The following responses address the comments from Ecology. To the extent that this letter contains additional information on the project, it should be considered as an Addendum to the SEPA Checklist submitted to the City on June 11, 2013. Targa will provide a separate letter addressing comments from PSCAA.
Ms. Shirley Shultz  
Targa Response to Comments  
Applications SEP2013-40000203723 & SHR2013-40000203722

Ecology’s comments are summarized in bullet points below, with Targa’s response following each comment.

AIR QUALITY (GHG)

- A qualitative estimate of greenhouse gas (GHG) emissions from the project proposal would be helpful.

TARGA RESPONSE:

As provided in the SEPA Checklist in QB.2.a, air emission sources from the facility are projected to be below major source limits and managed under appropriate approvals and required permits from PSCAA. A Marine Vapor Combustion Unit (MVCU) with associated Dock Safety Unit (DSU) will be used to control emissions of volatile organic compounds (VOC) from marine loading. Though this control strategy will reduce potential VOC emissions, by combusting captured VOC, the MVCU will cause an increase in the facility’s potential GHG emissions. GHG emissions associated with the MVCU were included in the SEPA Checklist. However, other GHG emissions from the proposed project include exhaust from vehicle (e.g. ship, truck, or rail) engines from receiving products via rail and shipping products via marine vessel.

Ecology has published a guidance document that can be used for calculating GHG emissions for SEPA (Guidance for Ecology Including Greenhouse Gas Emissions in SEPA Reviews, June 3, 2011). Targa used this guidance to prepare Table 1a below.

<table>
<thead>
<tr>
<th>Table 1a – Direct and Indirect GHG Emissions¹</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Source/ Activity</td>
<td>Greenhouse Gas Emissions $(CO_2$ tonnes/yr)</td>
</tr>
<tr>
<td>Scope 1 Emissions</td>
<td></td>
</tr>
<tr>
<td>MVCU</td>
<td>14,588</td>
</tr>
<tr>
<td>Vehicle Fleet Emissions</td>
<td>2</td>
</tr>
<tr>
<td>Scope 2 Emissions</td>
<td></td>
</tr>
<tr>
<td>Purchased Electricity or Steam</td>
<td>48</td>
</tr>
<tr>
<td>Scope 3 Emissions</td>
<td></td>
</tr>
<tr>
<td>Transportation by Rail²</td>
<td>3,549</td>
</tr>
<tr>
<td>Transportation by Vessel²</td>
<td>2,650</td>
</tr>
<tr>
<td>Vehicle Trips during Operation</td>
<td>48</td>
</tr>
<tr>
<td>Total GHG Emissions (annual)</td>
<td>20,837</td>
</tr>
<tr>
<td>Temporary Scope 3 Emissions</td>
<td></td>
</tr>
<tr>
<td>Heavy Machinery Emissions</td>
<td>205</td>
</tr>
<tr>
<td>Vehicle Trips During Construction</td>
<td>429</td>
</tr>
</tbody>
</table>

¹ Scope 1, 2, and 3 emissions should be included in a SEPA GHG analysis per the Guidance for Ecology Including Greenhouse Gas Emissions in SEPA Reviews, June 3, 2011, available online via http://www.ecy.wa.gov/climatechange/docs/sepa/20110603_SEPA_GHGinternalguidance.pdf.

² The boundaries of the project for which emissions should be disclosed is discussed in Section F of Ecology's GHG SEPA guidance.
Ms. Shirley Shultz  
Targa Response to Comments  
Applications SEP2013-40000203723 & SHR2013-40000203722

<table>
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<tr>
<th>Emissions Need to be Disclosed</th>
<th>Yes</th>
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<tbody>
<tr>
<td>Type of Disclosure</td>
<td>Qualitative</td>
</tr>
<tr>
<td>Significant GHG Emissions</td>
<td>No</td>
</tr>
</tbody>
</table>

The total GHG emission increases caused by this project will be approximately 20,837 tonnes/yr CO₂e, which is less than 25,000 tonnes/yr CO₂e; thus, only a qualitative disclosure of the GHG emissions is necessary per Ecology’s GHG guidance for SEPA. Per Ecology’s guidance, a project is “presumed to be not significant for GHG emissions and thus no further mitigation for greenhouse gas emissions will be necessary” if the project is expected to result in less than 25,000 tonnes/yr CO₂e. Therefore, the statement “no significant offsite impacts” is accurate with respect to Ecology’s GHG guidance and no mitigation is necessary.

**Description of Each Scope Activity**

**MVCU.** GHG emissions from the MVCU have conservatively been estimated assuming an average loading rate of 4,500 barrels per hour (bph), even though the MVCU/DSU allow for a maximum loading rate of 7000 bph. While Targa would expect to utilize the maximum loading rate, using a lower loading rate results in higher calculated GHG emissions. The MVCU is expected to automatically add enrichment gas when not loading at a full rate, thus boosting the overall heat content of the combusted vapors. Therefore, the calculated GHG emissions (which are based on a MMBtu basis) will be higher due to this assumption⁴. To maintain consistency across the various representations, the same loading rate has been used here to overestimate GHG emissions.

The GHG emissions in Table 1a for the MVCU above are higher than the emissions originally represented in Q.B.2a. of the SEPA Checklist. Previously, we calculated GHG emissions using the GHG emission factors for natural gas combustion (53.02 kg/MMBtu) from 40 CFR 98, Subpart C, for both the enrichment gas and captured vapors (i.e. crude vapors). The calculations now utilize the fuel gas factor (59 kg/MMBtu) from the same source. The fuel gas emission factor is expected to be more representative of the crude and/or gasoline vapor captured during marine loading, because both have expected higher carbon content than natural gas. In addition, the fuel gas emission factor is more conservative.

**Vehicle Fleet Emissions.** Targa currently has three company vehicles that are used to travel between the terminal on Marine View Drive and the rail yard at Taylor Way. While we do not anticipate any additional trips being required due solely to this project, we have conservatively estimated 3 additional round trips per week for one vehicle.

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³ Projects that are expected to produce greater than an estimated average 10,000 tonnes CO₂e annually must at least qualitatively disclose the GHG emission caused by the project. Projects that are expected to produce an average of 25,000 or more tonnes CO₂e each year should include a quantitative disclosure of GHG emissions.

⁴ The 4,500 BPH loading rate is also a conservative assumption to calculate emission rates for demonstrating compliance, as required by PSCAA, with the short-term (24-hour averaging period) air toxics SQERs and ASILs.
Purchased Electricity. The facility will consume approximately 13.4 kw-hrs of electricity to run the 18 horsepower vapor blower on the DSU, which will result in the emissions of 48 tonnes of CO$_2$e per year.

Transportation by Rail. Up to 14,601,600 barrels per year (bbls/yr) of crude oil will be unloaded from unit trains of 108 rail cars with an estimated four locomotive engines per unit train or manifest railcars. It is assumed the railcars will travel round trip between Tacoma and Post Falls, Idaho, approximately 628 miles. GHG emissions from rail transportation of product within the state of Washington could increase GHG emissions associated with the facility’s operation, under Scope 3 of Ecology’s SEPA GHG guidance. The submitted permit application to PSCAA includes the average receipt of 432 railcars of crude oil per week, based on a requested annual throughput allowance. These railcars would arrive over the course of four days. During those days, the crude oil railcars would offset the existing business handled at the rail yard, therefore the reduction in non-crude oil operations would lead to a potential weekly net increase of 288 railcars.

Transportation by Vessel. Additionally, all of the crude delivered by rail to the facility will be subsequently loaded onto marine vessels, assumed to have a capacity of 150,000 bbls per vessel, with the MVCU controlling emissions of VOC, Hazardous Air Pollutants (HAPs), and Toxic Air Pollutants (TAPs). We have conservatively estimated that all of the volume represented in the PSCAA application, 14,601,600 bbls/yr of crude oil, would be considered new vessel traffic, resulting in approximately 8 additional marine vessels per month. GHG emissions from the vessel transportation of product within Washington’s three nautical mile boundary would further increase Scope 3 GHG emissions associated with the facility.

Vehicle Trips During Operation. The GHG calculations assume Targa hires 5 new full time employees to operate the changes associated with this project, and that each of these employees commutes 50 miles roundtrip to work.

Heavy Machinery Emissions. Heavy machinery emissions during site preparations, construction, and cleanup activities will consume an estimated 20,000 gallons of diesel fuel, which will result in the one-time emissions of 205 tonnes of CO$_2$e per year during construction.

Vehicle Trips During Construction. The GHG calculations assume the Targa project will require 45 full time contractors during the construction phase of the project, and that each of these workers commutes 50 miles roundtrip to work.

SPILLS PREVENTION, PREPARDNESS & RESPONSE

The SEPA checklist should:

- Thoroughly identify the operations required to unload crude oil from railcars.
TARGA RESPONSE:

The procedures for unloading railcars at the Taylor Way facility follow the guidelines of the site specific Standard Operating Procedures. These procedures are intended to provide a uniform practice for terminal operators and ensure quality control and, consistent and repeatable operations for rail car unloading.

When a scheduled unloading event is initiated at the railcar facility the railcars which have been transported to the facility under the U.S. Department of Transportation (DOT) Federal Railroad Administration regulations by Tacoma Rail are brought in to the facility and disconnected on one of the three rail spurs. Once Tacoma Rail disconnects the railcars Targa personnel assume responsibility for secure management of the railcars and initiate unloading procedures.

The railcars are located above drip pans that are permanently attached to the rail spurs. The purpose of the drip pans is to contain any drips or spills that may occur during the unloading process. The drip pans have drains which are attached to a vault to allow for drips or spills to be contained and subsequently removed for proper disposal. The railcars are secured in place by applying the hand brake on each car on the spur, applying wheel chocks to end cars, and the “Stop-Tank Car Connected” sign is posted on the track indicating that the track is occupied so that no additional cars can be placed on the spur during unloading procedures. The operators then review the product Manifest for each car to ensure that the product contained in the car is the correct product scheduled for delivery. This review also re-familiarizes the operator with safety procedures and precautions associated with the product in the railcar. The operator then completes the railcar check list and secures the check list for file documentation. Each operator then thoroughly inspects each car for any potential issues that may have occurred during transportation to the facility that may affect the unloading procedures. If an operator observes a potential issue with the car a notification is made to the terminal operations manager and the car is tagged for additional inspection. Once the inspection is complete the railcar is cleared to be unloaded.

The operator opens the vent valve on top of the railcar to allow for ventilation during the unloading procedures. The vent also ensures a vacuum is not created during the unloading process. The operators thoroughly inspect the connection valve located underneath the center of the tank to ensure that it is in the closed position and the security seal is in place. The operators then remove the cap from the connection valve, and connect an elbow to the valve which has a gasket to prevent leaks at the connection. Subsequently, the operator connects a flexible hose to the elbow after removing the camlock plug from the end of the hose. The camlock plug is used to prevent any residual crude oil (or other product) in the hose from leaking when it is not in use. The flexible hose is connected to a facility manifold which is connected to the main terminal by pipeline. Once the operator inspects all the connections from the tank to the manifold the seal is broken on the rail car valve and then opened. The operator repeats these steps on each rail car on the rail spur. Once all the cars on the spur are attached to the pipeline manifold a pump is activated which removes the crude oil from the tank and transfers it to a storage tank located at the main terminal. The operator remains in the near vicinity of the rail car during unloading procedures to monitor the unloading process. If an issue were to occur the operator would
immediately shut off the transfer pump and close the railcar tank valve and implement any spill response if necessary. The operator would also notify the terminal operations manager of the issue.

Upon completion of the unloading the operator verifies the rail car is empty, turns off the transfer pump, and closes the connection valve on the rail car. When disconnecting the flexible hose the operator drains any residual product in the hose into the pipeline manifold and closes the valve to the manifold then places the camlock plug on the end of the hose. The operator removes the elbow from the connection valve and replaces the cap on the rail car connection valve and closes the manway on top of the rail car. This process is performed on all the rail cars on the spur. Following unloading for all the cars, the operator removes the wheel chocks and inspects the spur to ensure there is nothing on the rails and removes the “Stop-Tank Car Connected” sign. Tacoma Rail is contacted to return to the facility and remove the cars. A minimum of two operators are always present during the hook up and disconnecting of rail cars. All operators are trained on the standard operating procedures, unloading safety procedures, and spill prevention procedures.

- **Identify the increase in rail traffic into the terminal for crude oil deliveries.**

**TARGA RESPONSE:**

The Taylor Way facility includes three rail spurs which can contain 12 railcars on each spur such that 36 railcars can offload at designated locations on the spurs, all of which have fixed drip pans. The rail spurs are segregated by products that are offloaded, i.e. ethanol, fuel oil, asphalt, or crude. As described above, the offloading process occurs by connecting multiple railcars by hose to an offload manifold, which is a series of valves that spans the length of the rail spur. The current design of the facility does not allow for offloading of a single product from all 36 railcar spots on the spur. This design also limits the number of times the railcars can be switched out and unloaded to once per day.

The project’s proposed facility modification would allow for unloading one product, such as crude oil, from all 36 railcars on the spurs, and would allow for unloading at a rate that would enable the railcars to be switched out two to three times per day. The annual throughput limit in the PSCAA permit application would result in the average receipt of 432 railcars of crude oil per week. During this time, the crude oil railcars would displace the existing rail traffic handled at the rail yard, therefore shifting from non-crude oil operations to crude oil handling would lead to a potential weekly net increase of 288 railcars.

- **Identify volumes of crude oil that will be unloaded and transferred on a daily and annual basis.**

**TARGA RESPONSE:**

The air permit application submitted to PSCAA proposed an annual throughput limit of 14,601,600 barrels of crude oil that would be handled by Targa Sound Terminal. This volume
assumes an average of four deliveries of 108 railcars of crude per week. This average estimate would lead to approximately 280,800 barrels of crude oil per week, or 70,200 barrels per rail shipment.

- **Identify the specific types of vessels that will be receiving crude oil from the terminal.**

**TARGA RESPONSE:**

Targa’s marine berth serves vessels (e.g., tankers, barges, ships, tugboats, or other workboats) that are up to but cannot exceed 800 feet in length with a beam that can be variable, and a maximum draft of 26.4 feet (currently, though we can dredge to 30 feet). Targa communicates closely with customers when scheduling loading or unloading at the marine dock to ensure that a vessel will not exceed the limits of the facility. Targa also communicates specific information regarding dock operations such as mooring arrangements and vessel restrictions.

All vessels that call upon the Targa Sound Terminal marine berth are double hulled vessels such as the ITB or ATB barges as well as Panamax equivalent or smaller tankers.

- **Identify changes in vessel traffic as a result of this expansion.**

**TARGA RESPONSE:**

Current operations of the Targa marine dock include loading/unloading of approximately 40-60 vessels per month. Targa submits form ECY 070-175 “Advance Notice of Oil Transfer” to Ecology for each transfer. With the approval of the rail car facility, tank expansion, and vapor combustion unit, the marine dock will load the equivalent of 8 additional 150,000 bbl capacity vessels per month. With this project the marine dock will be about 60% utilized.

- **Assess the risk of oil spills based on the volume of oil being transferred from the railcars and to vessels receiving the oil.**

**TARGA RESPONSE:**

Targa currently transfers petroleum and petroleum products at the railcar facility and terminal. Our operations are subject to and we will comply with regulations under various federal agencies including the Environmental Protection Agency’s (EPA’s) Oil Spill Contingency, Spill Prevention Countermeasures and Control (SPCC) and Facility Response Plans (FRP), the United States Coast Guard’s (USCG’s) FRP and Marine Dock Operations, and the United States Occupational Safety and Health Administration (OSHA). These plans can be available for review by the City of Tacoma. Combined, compliance with these regulations dramatically reduce the risk, the severity, and likelihood of releases and significant events.

The potential risk for a spill from a railcar is highest during the process of connecting and disconnecting hoses. Attempting to connect a hose to a railcar with a failed valve under the railcar is the most likely cause of a failure. Although unlikely, the worst case spill scenario
would involve the complete loss of the volume of the railcar, estimated at 650 barrels. Because crude oil is not elevated in temperature, the terminal operators may potentially have the ability to replace drain caps to stop the product loss. Spill pans that drain to a sump large enough to contain at least one full railcar would capture a considerable amount of oil; however, some oil could still spill to the ground if the drain on the pan is overwhelmed. Operators are trained in proper offloading procedures and examine railcars prior to offloading to reduce the risk of a spill by spotting abnormal conditions on the railcar. As previously mentioned, all of these items, from procedures to spill containment design, are regulated by the federal agencies mentioned above.

At the marine dock, Targa would load crude oil using a transfer hose (assumed as 8-inch for this example) connection flowing at a maximum rate of 7,000 barrels per hour. A failure of the transfer hose would lead to a loss of 116.6 barrels of oil per minute. Transfer operations are typically inspected every 15 minutes by the dock Person In Charge (PIC) and by the transfer tankerman. If a transfer hose failure was observed, the PIC would cease loading operations immediately. Conservatively, assuming the PIC did not observe a transfer hose failure for 15 minutes, a loss of the transfer hose could lead to a potential spill of 1,740 barrels.

As a Standard Operating Procedure, Targa Sound Terminal deploys a hard boom around all oil vessels prior to commencing transfer operations. As a result, any spills would primarily be contained in the hard boom surrounding the vessel. Additionally Targa Sound Terminal has a Master Service Contract with the Marine Spill Response Corporation (MSRC) who is the facility Primary Response Contractor (PRC). Marine Spill Response Corporation (MSRC) is capable of responding to an incident within the required time frame of the Northwest Area Contingency Plan and WAC 173-182-800.

- ... include a thorough discussion on the oil spill contingency plan and its purpose in ensuring the company’s access to appropriate oil spill response equipment including boom, recovery equipment and storage necessary to respond to a worst case spill.

**TARGA RESPONSE:**

As stated in Targa’s Oil Spill Contingency Plan Submittal Agreement, the Targa Sound Terminal Facility Contingency Plan has been professionally prepared and has adopted applicable documentation for use from the National Incident Management System-Incident Command System (NIMS-ICS), the Central Puget Sound Geographic Response Plan (GRP), and the Northwest Area Contingency Plan (NWACP). The Plan is a living document which is reevaluated, changed, and improved as needed. To the best of Targa’s knowledge the plan is complete and responsive to the requirements of 49 CFR 194, Response Plans for Onshore Transportation-Related Oil Pipelines; WAC 173-182, Oil Spill Contingency Plan; 33 CFR 154, Subpart F; 40 CFR 112, Subpart D; OPA 90; Northwest Contingency Plan; Central Puget Sound Geographic Response Plan; Labor & Industries; and Targa’s Safety & Health Plan. It has also been submitted to and accepted by the USCG, EPA and City of Tacoma. Ecology has reviewed and certified the plan.
An onsite response equipment list can be found in Chapter 5 – Response Equipment which includes: boom type; location and length, sorbent boom location and length, response boats, hand tools, communication equipment. Targa is prepared to deploy response equipment and boom to recover and store material to meet regulatory response time and recovery requirements for EPA, Ecology, and USCG Worst Case Discharge estimates. A PRC has been retained and a letter from Ecology stating MSRC has been granted approval as a PRC can be found in Appendix 4 of the Plan. Also included in the letter is a Recovery Rating of MRSC’s available skimmer equipment.

In addition to maintaining boom and response equipment and securing contracts with a PRC, Targa conducts inspections of response equipment and performs and participates in mock drills, to which agency observers are invited, including Ecology, Tacoma Fire Department, and USCG. All facility personnel participate in Spill Prevention, Countermeasures, and Control (SPCC) plan training as well as other safety training.

If you believe it is necessary to include in the application file a copy of the facility’s Oil Spill Contingency Plan, please let me know.

TOXICS CLEANUP/TACOMA SMELTER PLUME:

The proposed project is located in an area that may have been contaminated with heavy metals due to the air emissions originating from the old Asarco smelter in north Tacoma. As a condition of approval by the lead agency for this project Ecology recommends the following:

- The soils be sampled and analyzed for arsenic and lead.

TARGA RESPONSE:

The only areas where the proposed project includes the disturbance of soils are at the Taylor Way railcar modification area and the tank expansion area for tanks 206 and 207. The expansion area for tanks 164 and 165 will involve minimal soil disturbance because these tanks are located within an existing improved area that has been in operation for several years and will be constructed within the existing secondary containment. (Please see Exhibit C of the SEPA Checklist, Area H.)

The soils at both at the Taylor Way facility and the expansion area for tanks 206 and 207 (see Area I of Exhibit C, the tanks in this area do not currently exist) have previously been evaluated and remediated.

In 1999 the Taylor Way property, then owned by Simon & Sons, entered into an Agreed Order with Ecology for the cleanup of soils. The cleanup included extensive excavation of sediments, shoreline soils, sandblasting grit around the bay, upland Total Petroleum Hydrocarbon (TPH) contaminated soils, stabilization of the site surface with a gravel layer, and planting of shoreline
and wetland buffer area with native vegetation. Surface water from the site is now channeled to a gravel/sand infiltration structure which discharges at the head of the small bay.

The cleanup report submitted to Ecology in June 2000 confirmed that post-cleanup soil samples collected from all of the excavation areas met the standards for MTCA, Method A, unrestricted standards. In 2003 the Ecology site manager was satisfied with the remedial actions performed and recommended that the Taylor Way site be removed from the hazardous sites list.

The tank expansion area for tanks 206 and 207 includes a property formerly known as the Airo Services property which had a history of various operations which were known to have impacted the soils. As a condition of purchasing the former Airo property for the tank expansion project Targa agreed to perform certain remedial activities on soil and groundwater. Targa initiated communications with Ecology regarding redevelopment of the former Airo Services property and remediation of historical impacts. In March 2012 Targa submitted to Ecology a Remedial Investigation, Feasibility Study and Cleanup Action Plan (RI/FS/CAP) which focused on soil and groundwater impacts. The RI/FS/CAP presented a summary of investigations which identified the extent of lead and arsenic impact, as well as other constituents, to the soils on the property. The CAP was designed to aggressively remediate impacted soils by excavation and proper disposal. Ecology reviewed and approved the CAP. In September 2012 Targa initiated the excavation activities and by October a total of 3,980 cubic yards of impacted soil were properly disposed at a permitted landfill. Before clean backfill was placed in each excavation sidewall and floor samples were collected to confirm that the remediation efforts met the MTCA Cleanup goals. Following completion of the excavation activities Targa submitted a draft Completion Construction Report to Ecology for review which concluded that the cleanup efforts performed in the tank expansion area effectively removed impacted soils above MTCA goals.

As explained above, the tank expansion area for tanks 164 and 165 is located within the existing improved operating area for the Targa Sound Terminal, and the construction for these tanks will not disturb any surface soil. However, it is worth mentioning that previous surface soil investigation in the vicinity of tank 165 did not indicate arsenic or lead at levels of concern. Therefore, no actions were necessary to address any soil contamination.

Based on the remedial work performed at the Taylor Way facility and the expansion area for tanks 206 and 207 – work reviewed and approved by Ecology—there is no evidence of risk to human health and the environment requiring additional soil sampling and analysis for the proposed project. If you believe it is necessary to include in the application file copies of the reports and plans discussed above, please let me know.

WATER QUALITY

Any discharge of sediment-laden runoff or other pollutants to water of the state is in violation of Chapter 90.48 RCW, Water Pollution Control, and WAC 173-201A, Water Quality Standards for Surface Waters of the State of Washington, and is subject to enforcement action.
Erosion control measures must be in place prior to any clearing, grading, or construction. These control measures must be effective to prevent stormwater runoff from carrying soil and other pollutants into surface water or stormdrains that lead to waters of the state.

This project may require a construction stormwater permit if the following conditions:

- One or more acres of soil surface area will be disturbed by construction activities.
- The site already has offsite discharge to waters of the state or stormdrains or will have offsite discharge during construction.

TARGA RESPONSE:

A construction stormwater permit is not required for the work at Taylor Way. The construction work will not disturb one acre of soil and currently the site does not discharge to waters of the state or stormdrains nor do we have plans to. Discharge during construction activities is not anticipated however Targa will employ best management practices to ensure the protection of the waters of the state.

The tank expansion project area for tanks 206 and 207 will require a construction stormwater permit and Storm Water Pollution Prevention Plan (SWPPP). The construction work is covered under the Department of Ecology Construction Stormwater General Permit WAR125988 and site specific SWPPP which are designed to protect surface waters. Although the construction work at Taylor Way will not disturb an acre of soil, Targa will nonetheless also obtain coverage for that portion of the project under the Construction General Permit.

The tank expansion project area for tanks 164 and 165 stormwater is currently being managed under the facility NPDES permit WA-000230-4. In this area stormwater flows to permitted Outfalls 002 and 003. At these outfalls stormwater travels through a weir box as an added measure to ensure water quality prior to surface discharge to the Hylebos Water Way. Under the NPDES permit, best management practices will be employed to prevent construction-related materials from discharging to surface waters.

Targa appreciates the opportunity to provide responses to the comments for the Rail Modification and Tank Expansion projects. Should you have any questions, please contact me at jkeiser@targaresources.com or 713-818-8209.

Sincerely;

Jessica L. Keiser
Vice President, ES&H
Targa Resources Corp.
Ms. Shirley Shultz
Targa Response to Comments
Applications SEP2013-40000203723 & SHR2013-40000203722

Cc: Sonia Mendoza, State of Washington Department of Ecology
    Troy Goodman, President of Targa Sound Terminal LLC
    Vincent DiCosimo, Vice President, Targa Terminals LLC
August 27, 2013

Shirley Schultz, Principal Planner  
City of Tacoma  
Planning & Development Services  
747 Market Street  
Tacoma, WA 98402-3769

RE: Response to the Puget Sound Clean Air Agency SEPA Comments  
Targa Sound Terminal LLC Rail Modification & Tank Expansion Project  
Applications SEP2013-40000203723 & SHR2013-40000203722  
2628 Marine View Drive and 1515 Taylor Way

Dear Ms. Schultz:

This letter serves as follow up to our submittal on August 16, 2013, regarding comments received by the City of Tacoma (the City) during the recent public comment period on the Targa Sound Terminal LLC (Targa) Shoreline Permit and State Environmental Policy Act (SEPA) Checklist 2013-4000203722. Public comments were received by your department from the City of Tacoma Environmental Services, Citizens for a Healthy Bay, the State of Washington Department of Ecology (Ecology), and the Puget Sound Clean Air Agency (PSCAA). The City of Tacoma Environmental Services department had no objections to the proposed project and provided recommended conditions of approval that ask for Targa to comply with all applicable requirements contained in the City of Tacoma Stormwater Management Manual, Side Sewer and Sanitary Sewer Availability Manual, Tacoma Municipal Code 12.08 and the Public Works Design Manual in effect at time of vesting land use actions, building or construction permitting. Targa previously acknowledged these requirements in our August 16, 2013, letter. Citizens for a Healthy Bay (CHB) provided comments in support of the proposed project. Targa met with CHB on July 2, 2013, in order to explain the proposed project activities and provide CHB with an opportunity to ask questions or discuss any concerns with the project. No further response is required for the comments from the City of Tacoma or CHB.

The comments from Ecology and PSCAA requested more information on the details of the project. Targa recognizes the importance of providing all the information necessary to identify and understand the environmental impacts of our proposal. We believe the following additional information and analyses provide for a complete and satisfactory record for the City to fulfill its obligations as Lead Agency. Targa’s August 16, 2013, letter provided a response to Ecology’s comments. With this letter, Targa provides our response to PSCAA’s comments. To the extent that this letter contains additional information on the project, it should be considered as an Addendum to the SEPA Checklist submitted to the City on June 11, 2013.
PSCAA’s comments are stated in italics below, with Targa’s response following each comment.

Proposal Description. Targa’s new SEPA checklist states that it currently “provides third party logistical services for crude oil, petroleum products, and renewable fuels through available tankage, a marine berth, rail, pipeline and truck rack.” See Checklist (June 10, 2013) at 3. However, Targa does not currently have the necessary approval from our Agency to transfer crude oil via marine vessels through its dock. This is an unapproved method of operation and Targa seeks through this present proposal to now be allowed to store crude oil on-site and transfer it via marine berth.

TARGA RESPONSE:

PSCAA issued three Notices of Violation (NOVs) (Nos. 3-006309, 3-006310, and 3-006311) on March 20, 2013, two NOVs on April 1, 2013 (Nos. 3-006312 and 3-006313), and one additional NOV (No 3-006315) on July 23, 2013, alleging that the loading of crude oil on marine barges constitutes a change in the method of operation and is not authorized by PSCAA. For several months, Targa and PSCAA have been working through the issues that surround these NOVs. We provided detailed responses to these NOVs in letters to PSCAA dated April 10, May 13, and July 29, 2013, and Targa has appealed all of the NOVs except 3-006311, related to tank construction, to the Washington Pollution Control Hearings Board (PCHB). Targa disagrees with PSCAA regarding the alleged violations and believes that the NOVs are based on misunderstandings regarding the facility’s potential emissions and historic methods of operation. It is significant that this facility previously operated as a refinery and historically transferred crude oil and other petroleum products over the marine dock. Notwithstanding these facts, it is Targa’s understanding from PSCAA that the issuance of the Notice of Construction (NOC) Permit 10554 would resolve PSCAA’s concerns. NOC 10554 is the corresponding PSCAA application for this same project, for which the SEPA Checklist and Shoreline Permit were submitted (see SEPA Checklist QA.8, 9, and 10).

Checklist at § A.Q.7. Targa states in its Checklist at 3 that it “has no specific plans for future additions, expansion, or further activity related to or connected with this proposal.” Id. As the City knows, Targa presented its Kaiser site redevelopment to the City and multiple government agencies at a February 22, 2013 pre-application meeting. A map circulated by Targa at this meeting showed a physical connection between the 2628 Marine View Drive facility and the Kaiser site by an underwater pipeline, see Attachment C to this letter, and Targa stated at the meeting that it would operate the two facilities together. Given the information before it, we strongly suggest that SEPA requires the City to consider impacts of the Kaiser site application as part of its review of all direct, indirect and cumulative impacts of this proposal. Allowing this proposal to go forward without reviewing Targa’s public plans for the Kaiser site could allow improper division and/or segmentation of environmental review to occur and impacts to go unevaluated. See WAC 197-11-060.
TARGA RESPONSE:

As Targa stated in the SEPA checklist, Targa was, and still is, conducting due diligence for potential development at the Port of Tacoma's Kaiser property under a contingent lease from the Port. As part of its due diligence, Targa discussed a potential development scenario at the Kaiser property with the City and other agencies in February. The map referenced in PSCAA's comment letter, which was provided to the City and other agencies at that time, included a high-level conceptual rendering of a potential development scenario but did not reflect a proposal for a particular project. In March and April, Targa continued its due diligence through a meeting and correspondence with staff of the Energy Facility Site Evaluation Council (EFSEC) regarding EFSEC's potential jurisdiction over a potential future development scenario at the Kaiser property. In April, EFSEC advised Targa that it would have jurisdiction over the potential project at the Kaiser property that Targa had discussed with the City and others in February. EFSEC's determination relates directly to Targa's due diligence regarding permitting pathways and timelines for various potential developments at the Kaiser property. Targa continues to evaluate multiple options for the possible future development of the Kaiser property.

The rail and tank project currently before the City and any potential future development at the Kaiser property are separate actions under SEPA because the current project can and will proceed without regard to whether the Kaiser property is subsequently developed. Similarly, the two projects are not part of a larger proposal and do not depend on any larger proposal for either justification or implementation. Accordingly, the two proposals need not be evaluated in a single SEPA review process (WAC 197-11-060(3)(b)). The City can complete SEPA review for the current project now, and the City or others can conduct appropriate SEPA review for any future development at the Kaiser property if and when it is proposed.

Checklist at § A Q.10, Targa proposes to store on-site and transfer liquids, including crude oil, to outgoing marine vessels. Specifically, Targa states it plans to "increase the facility-wide crude throughput to 14,601,600 barrels per year" across the marine dock at the site. Attachment B at 2-2; Checklist at 5. Given that the storing and marine export of crude oil from this site has not been permitted by the Agency and would be a new function and method of operation at the site, Targa should be required to explain in detail how its proposal will comply with 33 USC § 476. The City should not proceed with its review until Targa presents written approval from federal agencies that its proposal complies with 33 U.S.C. § 476.

TARGA RESPONSE:

PSCAA's comment is related to the federal law known as the Magnuson Amendment, 33 U.S.C. § 476. The Magnuson Amendment provides, in relevant part:

Notwithstanding any other provision of law, on and after October 18, 1977, no officer, employee, or other official of the Federal Government shall, or shall have authority to, issue, renew, grant, or otherwise approve any permit, license, or
other authority for constructing, renovating, modifying, or otherwise altering a terminal, dock, or other facility in, on, or immediately adjacent to, or affecting the navigable waters of Puget Sound, or any other navigable waters in the State of Washington east of Port Angeles, which will or may result in any increase in the volume of crude oil capable of being handled at any such facility (measured as of October 18, 1977), other than oil to be refined for consumption in the State of Washington.

Targa, previously Sound Refining, Inc., was built in 1967 as a petroleum refinery producing asphalt, fuel oil, gas oil, diesel, kerosene, and naptha. The facility initially utilized a marine berth constructed in 1967 to receive crude oil and ship petroleum products. In 1976, Targa expanded its marine operations by installing a new berth, which is still in operation today, to the northwest of the original berth. Accordingly, Targa's existing marine terminal facility has had the capability to handle crude oil since well before October 18, 1977.

The Magnuson Amendment applies to the review of permits by the Federal Government and does not apply to review of this proposal by any state or local entity. By its plain terms, the statute applies only to the actions of federal agencies and authorities ("no officer, employee, or other official of the Federal Government shall . . ."). Accordingly, the City of Tacoma can and should complete SEPA review for the proposal, and the City, PSCAA and other state and local authorities should process applicable permit applications on the merits and without limitation by the Magnuson Amendment.

The proposal in this project includes the installation of a Dock Safety Unit (DSU) and associated equipment and piping on the dock that will connect to the upland Marine Vapor Combustor Unit (MVCU). Targa has been working directly with the United States Army Corps of Engineers (the Corps) to obtain permit authorization for the DSU and associated equipment and piping. As part of that effort, Targa is providing information to the Corps showing that the Magnuson Amendment would not prohibit the Corps from issuing a permit for this project.

Checklist at § B, Q. 2, 3, 5, 7, 14, Targa should be required to provide adequate information about off-site impacts of the proposal, including impacts to off-site lands that will be impacted and all state waters where marine vessels traveling to and from Targa's marine berth will travel. Such information is not included in the materials submitted by Targa to date.

TARGA RESPONSE:

Targa has provided responses to the more detailed comments in the section below for the SEPA Checklist numbers B 2, 3, 5, 7, and 14.

§ B, Q. 2. Air emissions from the associated locomotives delivering crude oil to the terminal and from all ships that will transport crude oil and other liquids across the proposed MVCU still need to be identified and evaluated. The identified emissions must
include emissions to be produced on off-site lands and on surrounding state waters and must include identification and consideration of: criteria pollutants, greenhouse gases, and other air contaminants to be released. Impacts from all identified air emissions, including but not limited to air impacts at rail crossings and along rail corridors, and any mitigation measures to be proposed to limit the scope or impacts of the proposal and how such mitigation will be monitored and enforced, should be identified and evaluated by the City and Targa as part of the City’s SEPA process.

TARGA RESPONSE:

As provided in the SEPA Checklist in QB.2.a, air emission sources from the facility are projected to be below major source limits and managed under appropriate approvals and required permits from PSCAA. A Marine Vapor Combustion Unit (MVCU) with associated Dock Safety Unit (DSU) will be used to control emissions of volatile organic compounds (VOC) from marine loading. Though this control strategy will reduce potential VOC emissions, by combusting captured VOC, the MVCU will cause an increase in the facility’s potential greenhouse gas (GHG) emissions. GHG emissions associated with the MVCU were included in the SEPA Checklist. However, other GHG emissions from the proposed project include exhaust from vehicle (e.g. ship, truck, or rail) engines from receiving products via rail and shipping products via marine vessel, as well as temporary emissions associated with construction.

Targa’s August 16 letter to the City provides a detailed qualitative assessment of the on and off-site GHG emissions associated with the proposal consistent with Ecology’s published guidance document for calculating GHG emissions for SEPA (Guidance for Ecology Including Greenhouse Gas Emissions in SEPA Reviews, June 3, 2011). Targa used this guidance to prepare Table 1a below.

<table>
<thead>
<tr>
<th>Table 1a – Direct and Indirect GHG Emissions¹</th>
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<tbody>
<tr>
<td><strong>Source/ Activity</strong></td>
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<tr>
<td><strong>Scope 1 Emissions</strong></td>
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<tr>
<td>MVCU</td>
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<tr>
<td>Vehicle Fleet Emissions</td>
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<tr>
<td><strong>Scope 2 Emissions</strong></td>
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<tr>
<td>Purchased Electricity or Steam</td>
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<tr>
<td><strong>Scope 3 Emissions</strong></td>
</tr>
<tr>
<td>Transportation by Rail²</td>
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<tr>
<td>Transportation by Vessel²</td>
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<tr>
<td>Vehicle Trips during Operation</td>
</tr>
<tr>
<td><strong>Total GHG Emissions (annual)</strong></td>
</tr>
</tbody>
</table>

¹ Scope 1, 2, and 3 emissions should be included in a SEPA GHG analysis per the Guidance for Ecology Including Greenhouse Gas Emissions in SEPA Reviews, June 3, 2011, available online via http://www.ecy.wa.gov/climatechange/docs/sepa/20110603_SEPA_GHGinternalguidance.pdf.
² The boundaries of the project for which emissions should be disclosed is discussed in Section F of Ecology’s GHG SEPA guidance.
Temporary Scope 3 Emissions

<table>
<thead>
<tr>
<th>Description</th>
<th>Value</th>
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<tr>
<td>Heavy Machinery Emissions</td>
<td>205</td>
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<tr>
<td>Vehicle Trips During Construction</td>
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<tr>
<td>Emissions Need to be Disclosed³</td>
<td>Yes</td>
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<tr>
<td>Type of Disclosure</td>
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<tr>
<td>Significant GHG Emissions</td>
<td>No</td>
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</table>

The total GHG emission increases caused by this project will be approximately 20,837 tonnes/yr CO₂e, which is less than 25,000 tonnes/yr CO₂e; thus, only a qualitative disclosure of the GHG emissions is necessary per Ecology’s GHG guidance for SEPA. Per Ecology’s guidance, a project is “presumed to be not significant for GHG emissions and thus no further mitigation for greenhouse gas emissions will be necessary” if the project is expected to result in less than 25,000 tonnes/yr CO₂e. Therefore, the statement “no significant offsite impacts” is accurate with respect to Ecology’s GHG guidance and no mitigation is necessary.

The following detailed description of each scope activity was provided in Targa’s August 16 letter to the City and is repeated here in full for reference.

Description of Each Scope Activity

**MVCU.** GHG emissions from the MVCU have conservatively been estimated assuming an average loading rate of 4,500 barrels per hour (bph), even though the MVCU/DSU allow for a maximum loading rate of 7,000 bph. While Targa would expect to utilize the maximum loading rate, using a lower loading rate results in higher calculated GHG emissions. The MVCU is expected to automatically add enrichment gas when not loading at a full rate, thus boosting the overall heat content of the combusted vapors. Therefore, the calculated GHG emissions (which are based on a MMBtu basis) will be higher due to this assumption⁴. To maintain consistency across the various representations, the same loading rate has been used here to overestimate GHG emissions.

The GHG emissions in Table 1a for the MVCU above are higher than the emissions originally represented in Q.B.2a. of the SEPA Checklist. Previously, we calculated GHG emissions using the GHG emission factors for natural gas combustion (53.02 kg/MMBtu) from 40 CFR 98, Subpart C, for both the enrichment gas and captured vapors (i.e. crude vapors). The calculations now utilize the fuel gas factor (59 kg/MMBtu) from the same source. The fuel gas emission factor is expected to be more representative of the crude and/or gasoline vapor captured during marine loading, because both have expected higher carbon content than natural gas. In addition, the fuel gas emission factor is more conservative.

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³ Projects that are expected to produce greater than an estimated average 10,000 tonnes CO₂e annually must at least qualitatively disclose the GHG emission caused by the project. Projects that are expected to produce an average of 25,000 or more tonnes CO₂e each year should include a quantitative disclosure of GHG emissions.

⁴ The 4,500 BPH loading rate is also a conservative assumption to calculate emission rates for demonstrating compliance, as required by PSCAA, with the short-term (24-hour averaging period) air toxics SQERs and ASILs.
Vehicle Fleet Emissions. Targa currently has three company vehicles that are used to travel between the terminal on Marine View Drive and the rail yard at Taylor Way. While we do not anticipate any additional trips being required due solely to this project, we have conservatively estimated 3 additional round trips per week for one vehicle.

Purchased Electricity. The facility will consume approximately 13.4 kw-hrs of electricity to run the 18 horsepower vapor blower on the DSU, which will result in the emissions of 48 tonnes of CO$_2$e per year.

Transportation by Rail. Up to 14,601,600 barrels per year (bbls/yr) of crude oil will be unloaded from unit trains of 108 rail cars with an estimated four locomotive engines per unit train or manifest railcars. It is assumed the railcars will travel round trip between Tacoma and Post Falls, Idaho, approximately 628 miles. GHG emissions from rail transportation of product within the state of Washington could increase GHG emissions associated with the facility’s operation, under Scope 3 of Ecology’s SEPA GHG guidance. The submitted permit application to PSCAA includes the average receipt of 432 railcars of crude oil per week, based on a requested annual throughput allowance. These railcars would arrive over the course of four days. During those days, the crude oil railcars would offset the existing business handled at the rail yard, therefore the reduction in non-crude oil operations would lead to a potential weekly net increase of 288 railcars.

Transportation by Vessel. Current operations of the Targa marine dock include loading/unloading of approximately 40-60 vessels per month. Targa submits form ECY 070-175 “Advance Notice of Oil Transfer” to Ecology for each transfer. With the approval of the rail car facility, tank expansion, and vapor combustion unit, the marine dock will load the equivalent of 8 additional 150,000 bbl capacity vessels per month. With this project the marine dock will be about 60% utilized.

Since all of the crude delivered by rail to the facility will be subsequently loaded onto marine vessels, assumed to have a capacity of 150,000 bbls per vessel, with the MVCU controlling emissions of VOC, Hazardous Air Pollutants (HAPs), and Toxic Air Pollutants (TAPs). We have conservatively estimated that all of the volume represented in the PSCAA application, 14,601,600 bbls/yr of crude oil, would be considered new vessel traffic, resulting in approximately 8 additional marine vessels per month. GHG emissions from the vessel transportation of product within Washington’s three nautical mile boundary would further increase Scope 3 GHG emissions associated with the facility.

Vehicle Trips During Operation. The GHG calculations assume Targa hires 5 new full time employees to operate the changes associated with this project, and that each of these employees commutes 50 miles roundtrip to work.

Heavy Machinery Emissions. Heavy machinery emissions during site preparations, construction, and cleanup activities will consume an estimated 20,000 gallons of diesel fuel, which will result in the one-time emissions of 205 tonnes of CO$_2$e per year during construction.
Vehicle Trips During Construction. The GHG calculations assume the Targa project will require 45 full time contractors during the construction phase of the project, and that each of these workers commutes 50 miles roundtrip to work.

Additional Information about Rail Transportation
The rail yard at Taylor Way is designed to have cars spotted at a single time for offloading prior to departure. We also work with Tacoma Rail to efficiently spot and release cars resulting in as few trips as possible. In addition, Tacoma Rail has implemented improvements in their own technologies that help reduce energy consumption and lessen their own environmental impacts. Please see Attachment 1 to this letter, taken directly from Tacoma Rail’s webpage, which lists several major emission reduction efforts with which they are involved including idle reduction technology, locomotive changes, and use of ultra-low sulfur diesel.

In addition to GHG emissions described above, this project will increase criteria pollutant, Hazardous Air Pollutants (HAP), and Toxic Air Pollutant (TAP) emissions, which are detailed in the NOC 10554 application submitted to PSCAA in May 2013. These increases in emissions will result from the MVCU, the working and standing losses from the new tanks, and fugitive equipment leaks. As demonstrated in Targa’s MVCU NOC 10554 application submitted to PSCAA in May 2013, all offsite concentration increases from the terminal emission units are below thresholds established to protect adverse impacts.

Increases of non-GHG emissions from offsite rail or marine transportation are expected to be negligible in any one location (such as rail crossings). Unlike GHG emission impacts that should be considered in total regardless of location, criteria pollutant, HAP, and TAP emissions are evaluated for ambient air quality impacts at a specific location (i.e., the smoke from a fire in Tacoma would be unlikely to affect air quality in Spokane and vice versa, but GHG emissions from Tacoma and Spokane contribute to the same global impact). Therefore, emissions from trains or marine vessels should only be considered for the time periods that the vehicles are in the vicinity of concern. This time would be far less than one hour, even when considering multiple trains crossing a location in a single day. For this reason, because offsite impacts from the MVCU combustion stack were determined to be insignificant, and because total transportation emissions are of a similar or lesser magnitude as the MVCU emissions, offsite air concentration impacts due to associated transportation emissions are determined to be insignificant.

§ B, Q. 3, 5, 7. Given the new method of operation proposed by Targa marine loading of crude oil, the City should require Targa to provide an analysis of all current, approved spill contingency plans and explain in detail how this proposal will meet all local, state and federal requirements for any spills of liquid fuel in and around the Hylebos waterways, Commencement Bay, and the Puget Sound, including but not limited to the crude oil that will be stored on site; imported to; or exported from the site by marine vessels.
TARGA RESPONSE:

Targa currently transfers petroleum and petroleum products at the railcar facility and marine terminal. As such, our operations are already subject to numerous regulations administered by various federal and state agencies under which we have prepared and implemented detailed plans to prevent and address spills. These include the Environmental Protection Agency’s (EPA’s) Oil Spill Contingency, Spill Prevention Countermeasures and Control (SPCC) and Facility Response Plans (FRP), the United States Coast Guard’s (USCG’s) FRP and Marine Dock Operations, the United States Occupational Safety and Health Administration (OSHA) and Ecology’s Oil Spill Contingency Plan requirements. These plans are available for review by the City of Tacoma. Combined, compliance with these regulations dramatically reduces the risk, the severity, and the likelihood of releases and significant events.

The following sections of this letter provide the details of all our currently approved spill contingency plans and explain how Targa will continue to meet all local, state and federal requirements. PSCAA’s comment is similar to the comments by Ecology regarding our spill prevention, preparedness, and response. As such, some of the same response to Ecology’s comments that was previously provided in our August 16 letter is being provided here for PSCAA as a reference.

Assessing the risk of oil spills – State of Washington

Dr. Dagmar Schmidt Etkin with Environmental Research Consulting prepared a risk analysis for Ecology titled Oil Spill Risk in Industry Sectors Regulated by Washington State Department of Ecology Spills Program For Oil Spill Prevention and Preparedness\(^5\). Published in 2009, the document evaluates the risks of various oil spills within the State of Washington in the context of spill prevention and preparedness programs. Some of the findings underscore the changes in marine vessels and state programs that have reduced the risk of oil spills as well as the severity of such spills over the past 25 years.

The study states that there were only 14 oil spills from tankers in the State of Washington during the years 1995 to 2008, with a total of 13,709 gallons (or 326 barrels) of oil spilled. During the same time period, however, there were an additional 132 near-miss incidents. The “worst-case discharge (WCD) potential [from tankers] is expected to be reduced by 50 percent by 2015 with the full implementation of double hulls and other preventive measures.”\(^6\)

“The fact that oil tankers have historically represented less than four percent of the total spill risk while having had a WCD potential risk of over 75 percent is clearly reflective of the fact that spill prevention measures at both the national and federal levels have been enforced with great efficacy. National tanker spill rates have been shown to have decreased since 1990 due in large part to the implementation of various parts of the federal Oil Pollution Act of 1990 (OPA 90) and

\(^6\) Id. at page 5.
in some cases from coastal state regulatory programs, which include mandated double hulls for tankers, increased liability limits for spill response, inclusion of natural resource damage assessments, and increased requirements for financial responsibility. Overall, a higher class of tankers transits US waters than other parts of the world.”\footnote{Id. at page 5.}

The report goes on to praise Washington State for its record compared to other states with regard to spill prevention from tankers and other vessels. “Spill rates from vessels in Washington waters are significantly lower than in other key port states and in the US as a whole. The lower spillage rates in Washington waters can be attributed to mandated and voluntary best-achievable-practice (BAP) programs for vessel owners and operators in the State, and the continuous efforts of Department of Ecology in such activities as inspecting vessels, monitoring vessel response and spill preparedness plans, implementing pre-booming regulations for oil transfer operations, tug escort programs, and conducting spill response drills and exercises.”\footnote{Id. at page 6.}

As the report concludes, maintaining and enforcing spill prevention and preparedness is a top priority for the State of Washington. “The fact that actual oil spill rates have been so low with oil tankers and other vessels is testament to the effectiveness of Ecology’s spill prevention and preparedness programs.”\footnote{Id. at page 9.}

\textit{Assessing the risk of oil spills – Targa Sound Terminal}

The potential risk for a spill from a railcar is highest during the process of connecting and disconnecting hoses. Attempting to connect a hose to a railcar with a failed valve under the railcar is the most likely cause of a failure. Although unlikely, the worst case spill scenario would involve the complete loss of the volume of the railcar, estimated at 650 barrels. Because crude oil is not elevated in temperature, the terminal operators may potentially have the ability to replace drain caps to stop the product loss. Spill pans that drain to a sump large enough to contain at least one full railcar would capture a considerable amount of oil; however, some oil could still spill to the ground if the drain on the pan is overwhelmed. Operators are trained in proper offloading procedures and examine railcars prior to offloading to reduce the risk of a spill by spotting abnormal conditions on the railcar. As previously mentioned, all of these items, from procedures to spill containment design, are regulated by the federal agencies mentioned above.

At the marine dock, Targa would load crude oil using a transfer hose (assumed as 8-inch for this example) connection flowing at a maximum rate of 7,000 barrels per hour. A failure of the transfer hose would lead to a loss of 116.6 barrels of oil per minute. Transfer operations are typically inspected every 15 minutes by the dock Person In Charge (PIC) and by the transfer tankerman. If a transfer hose failure was observed, the PIC would cease loading operations immediately. Conservatively, assuming the PIC did not observe a transfer hose failure for 15 minutes, a loss of the transfer hose could lead to a potential spill of 1,740 barrels.
As a Standard Operating Procedure, Targa Sound Terminal deploys a hard boom around all oil vessels prior to commencing transfer operations. As a result, any spills would primarily be contained in the hard boom surrounding the vessel. Additionally Targa Sound Terminal has a Master Service Contract with the Marine Spill Response Corporation (MSRC) who is the facility Primary Response Contractor (PRC). Marine Spill Response Corporation (MSRC) is capable of responding to an incident within the required time frame of the Northwest Area Contingency Plan and WAC 173-182-800.

A thorough discussion on the oil spill contingency plan and its purpose in ensuring the company’s access to appropriate oil spill response equipment including boom, recovery equipment and storage necessary to respond to a worst case spill.

As stated in Targa’s Oil Spill Contingency Plan Submittal Agreement, the Targa Sound Terminal Facility Contingency Plan has been professionally prepared and has adopted applicable documentation for use from the National Incident Management System-incident Command System (NIMS-ICS), the Central Puget Sound Geographic Response Plan (GRP), and the Northwest Area Contingency Plan (NWACP). The Plan is a living document which is reevaluated, changed, and improved as needed. To the best of Targa’s knowledge the plan is complete and responsive to the requirements of 49 CFR 194, Response Plans for Onshore Transportation-Related Oil Pipelines; WAC 173-182, Oil Spill Contingency Plan; 33 CFR 154, Subpart F; 40 CFR 112, Subpart D; OPA 90; Northwest Contingency Plan; Central Puget Sound Geographic Response Plan; Labor & Industries; and Targa’s Safety & Health Plan. It has also been submitted to and accepted by the USCG, EPA and City of Tacoma. Ecology has reviewed and certified the plan.

An onsite response equipment list can be found in Chapter 5 – Response Equipment which includes: boom type; location and length, sorbent boom location and length, response boats, hand tools, communication equipment. Targa is prepared to deploy response equipment and boom to recover and store material to meet regulatory response time and recovery requirements for EPA, Ecology, and USCG Worst Case Discharge estimates. A PRC has been retained and a letter from Ecology stating MSRC has been granted approval as a PRC can be found in Appendix 4 of the Plan. Also included in the letter is a Recovery Rating of MRSC’s available skimmer equipment.

In addition to maintaining boom and response equipment and securing contracts with a PRC, Targa conducts inspections of response equipment and performs and participates in mock drills, to which agency observers are invited, including Ecology, Tacoma Fire Department, and USCG. All facility personnel participate in Spill Prevention, Countermeasures, and Control (SPCC) plan training as well as other safety training.

If you believe it is necessary to include in the application file a copy of the facility’s Oil Spill Contingency Plan, please let me know.
Given that this proposal includes storing and exporting liquids, including crude oil and fuels, to marine vessels and these marine vessels will travel on state waters, all impacts to marine vegetation and marine species should be identified and evaluated. In particular, the Puget Sound is a migration route for salmon and other species of fish and wildlife, and provides habitat for endangered or threatened species including, but not limited to, Orca Whales. Updated information and analysis must include consideration of the proposal’s impacts, including but not limited to impacts from spills, on the above species and their habitats. Simply listing the species that live in these waters and the existence of US Coast Guard and Department of Ecology regulations, see e.g. Checklist at 11, is insufficient. Any specific mitigation measures to be proposed to limit the scope or impacts of the proposal and how such mitigation will be monitored and enforced should also be identified and evaluated by the City and Targa as part of the City’s SEPA process.

TARGA RESPONSE:

The Targa marine terminal is located on the Hylebos Waterway, which connects to Commencement Bay/Puget Sound. The project site, as well as the area immediately adjacent to the project site and the Hylebos Waterway itself, is industrial. This project does not involve industrial expansion into any sensitive marine habitats, such as estuaries or nearshore beach habitat. Marine impacts could result from local spills at the terminal or from spills and/or leaks from vessels transiting Puget Sound.

In general, marine impacts from oil spills are well-documented. According to the Department of Ecology’s Spill Prevention, Preparedness & Response Program:

Over 20 billion gallons of oil and hazardous chemicals are transported through Washington State each year by ship, barge, pipeline, rail, and road. Accidents, equipment failure, and human error can all lead to unintended and potentially disastrous consequences. Oil and chemical spills can threaten some of the most productive and valuable ecosystems in the world. These incidents can kill fish, birds, and marine animals and contaminate beaches and shellfish. All spills whether on land or water can threaten public health, safety, the environment, and ultimately damage the state’s economy and quality of life.

Accordingly, Ecology’s Spill Prevention, Preparedness & Response Program has adopted and is vigorously pursuing a goal of “zero spills” within Washington.\(^{10}\) The comprehensive state and federal regulatory programs discussed above – with which Targa already complies and will continue to comply – provide aggressive avoidance and mitigation of impacts to aquatic species and habitat.

\(^{10}\) See http://www.ecy.wa.gov/programs/spills/other/overbook_spills.pdf.
A detailed description of the government agencies regulating Targa’s current operations, of our own risk analysis, and of our mitigation measures to prevent any oil spills was provided in the response to comment B.Q. 3, 5, 7 above.

Booms that surround the vessel are put in place prior to any loading or unloading of oil. Loading and unloading is performed in accordance with US Coast Guard procedures. The areas within the terminal where spills could occur are diked with sufficient capacity, per the requirements of SPCC, to contain spills or releases from piping, spills, leaks or other equipment or tank failures.

The water collected within the diked areas must be inspected prior to treatment and/or discharge under a Department of Ecology approved National Pollutant Discharge Elimination System (NPDES) discharge point. Water from diked containment areas (which have the potential to contain petroleum products) is directed to an on-site treatment system containing a multi-stage aeration system and settling system, and then discharged to the City of Tacoma municipal water treatment system.

Water from other areas of the site is discharged to Hylebos Waterway through a NPDES permitted discharge point.

§ B. Q. 14. It appears that actual rail and marine traffic will increase as the proposed MVCU will provide a capability the facility is not permitted for currently. Targa states that its proposal will enable short-term and long-term increases in crude throughput of 40,000 barrels per day (on average) and 14,601,600 barrels per year. See Attachment B. The proposal also includes construction of four new storage vessels for crude (6 tanks total on-site are proposed to be able to handle crude) with a total gallon capacity of over 12 million gallons. Id. Despite this, Targa does not identify or evaluate actual increases in the amount of vessel traffic, claiming that because the berth is existing and rail traffic already occurs, there is no increase in “facility capacity.” See Checklist at 16. But given that marine loading of crude oil is not an approved method of operation\textsuperscript{11}, all marine loading of crude oil and related rail movement of crude oil is a new use, and its impacts should be specifically identified. Given the actual increases, a description of the expected quantity of rail traffic demands (trips per day) to deliver crude oil to the site and the expected quantity of marine vessel traffic (trips per day) anticipated to receive and transport away crude oil across the proposed MVCU should be identified. Then the impacts, including but not limited to, transportation impacts, including but not limited impacted rail crossings and corridors, and safety impacts, from the identified rail and marine traffic (and any mitigation measures to be proposed to limit the scope or impacts of the proposal and how such mitigation will be monitored and enforced) should be identified and evaluated by the City and Targa as part of the City's SEPA process.

TARGA RESPONSE:

\textsuperscript{11} As noted above, Targa disagrees with this allegation, which is under appeal to the PCHB.
The Taylor Way facility includes three rail spurs which can contain 12 railcars on each spur such that 36 railcars can offload at designated locations on the spurs, all of which have fixed drip pans. The rail spurs are segregated by products that are offloaded, i.e. ethanol, fuel oil, asphalt, or crude. As described above, the offloading process occurs by connecting multiple railcars by hose to an offload manifold, which is a series of valves that spans the length of the rail spur. The current design of the facility does not allow for offloading of a single product from all 36 railcar spots on the spur. This design also limits the number of times the railcars can be switched out and unloaded to once per day.

The project’s proposed facility modification would allow for unloading one product, such as crude oil, from all 36 rail cars on the spurs, and would allow for unloading at a rate that would enable the railcars to be switched out two to three times per day. The annual throughput limit in the PSCAA permit application would result in the average receipt of 432 railcars of crude oil per week. During this time, the crude oil railcars would displace the existing rail traffic handled at the rail yard, therefore shifting from non-crude oil operations to crude oil handling would lead to a potential weekly net increase of 288 railcars.

Current operations of the Targa marine dock include loading/unloading of approximately 40-60 vessels per month. As part of Ecology’s spill prevention program, Targa submits Form ECY 070-175 “Advance Notice of Oil Transfer” to Ecology for each transfer. With the approval of the rail car facility, tank expansion, and vapor combustion unit, the marine dock will load the equivalent of 8 additional 150,000 bbl capacity vessels per month.

The environmental impacts associated with these increases, as well as applicable mitigation measures required under state and federal laws and regulations, have been discussed in detail in the responses above.

Targa appreciates the opportunity to provide responses to the comments for the Rail Modification and Tank Expansion project. Should you have any questions, please contact me at jkeiser@targaresources.com or 713-818-8209.

Sincerely,

Jessica L. Keiser
Vice President, ES&H
Targa Resources Corp.

Attachments

Cc: Jennifer A. Dold, Puget Sound Clean Air Agency
    Troy Goodman, President of Targa Sound Terminal LLC
    Vincent DiCosimo, Vice President, Targa Terminals LLC
Attachment 1

(Tacoma Rail)
Home > General Information > Environment

ENVIRONMENT
Tacoma Rail is committed to being a responsible steward of the environment. In addition to using environmentally sound practices in our daily work procedures and projects, whenever possible we implement technologies that help us reduce our energy consumption and lessen our environmental impact.

We've undertaken several major eco-friendly efforts, including:

**Idle reduction technology**
Tacoma Rail has installed idle reduction technologies on all but one of its 14 locomotives. Idle reduction lowers our fuel costs and reduces emissions considerably. These technologies work by actively managing the idle time of the locomotives in a way that can't be done manually. Idle reduction also extends the life of the locomotive by shutting the locomotive down to a ready-use state.

For example, we have four locomotives (two GP38-2s and two GP40-2s) that were equipped with idle reduction technology in May 2007. The equipment was provided by Kim Hotstart Manufacturing Company and ZTR Control Systems. Now, instead of idling, the 2000 horsepower GP38-2s and 3000 horsepower GP40-2s automatically shut down when not in use. The Hotstart Diesel Driven Heating System (DDHS) uses a small 27 horsepower diesel engine to keep the locomotive engine above 100 degrees Fahrenheit and charge the batteries so the locomotive can be restarted easily.

The ZTR SmartStart system automatically shuts down and restarts the Hotstart system and the locomotive as necessary. SmartStart also records data and provides detailed fuel savings reports. The Hotstart-SmartStart combination has proven to reduce idling by as much as 90%, which in turn has reduced locomotive engine wear, fuel consumption, emissions and noise.

Over five years, the four locomotives with the DDHS:
- Save 400,000 gallons of diesel fuel
- Reduce fine particulate matter by 3 tons
- Reduce nitrogen oxides by 140 tons
- Reduce carbon monoxide by 15 tons

**GenSet locomotives**
In August 2011, Tacoma Rail acquired a 2,100 horsepower National Railway Equipment 3GS21B-DE locomotive, Numbered 2100, the unit is equipped with three 700 horsepower diesel engines, each coupled to an electric generator. This locomotive uses only the capacity needed to do the job at hand, similar to the cylinder deactivation technology used in some automobiles. However, instead of cylinders shutting off, the locomotive starts up and shuts off individual GenSets as needed. For example, when 2100 pulls a mile-and-a-half-long intermodal train, it may use all three GenSets to pull the train successfully. When switching a few cars in the yard, it may only use a single GenSet.

Another advantage of this locomotives is its advanced wheel slip control, which allows optimum tractive effort to be applied to the rail and eliminates the damage caused to locomotives and track by wheel slip.

**Repowered locomotives**
In late 2011, Tacoma Rail acquired two EMD GP-22eco 2,000 horsepower locomotives. These are repowered units with new engines and other components that make them compliant with EPA Tier II diesel emission standards, as well as provide the advantages of more modern control systems. These two units, numbered 2200 and 2201, were assembled in Tacoma at Progress Rail's shops.

**Ultra-low sulfur diesel**
Tacoma Rail converted to ultra low sulfur diesel in June 2006. It was not mandated by the Environmental Protection Agency (EPA) for all locomotives until 2012. Ultra-low sulfur diesel has sulfur content of 15 parts per million (ppm) instead of the 500 ppm typical of regular diesel fuel.

**Eco-tip super-stack fuel injectors**
In November 2005, Tacoma Rail installed eco-tip super-stack fuel injectors on its fleet of locomotives. Advantages of the injectors include:
• 3% fuel savings at full load
• 44% reduction in particulate matter
• 75% reduction in smoke opacity

Learn about our environmental memberships.

Tacoma Public Utilities
3628 South 35th Street

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October 10, 2013

Shirley Schultz, Principal Planner  
City of Tacoma  
Planning & Development Services  
747 Market Street  
Tacoma, WA 98402-3769  

RE: Response to the Puget Sound Clean Air Agency SEPA Comments dated September 2, 2013  
Targa Sound Terminal LLC Rail Modification & Tank Expansion Project  
Applications SEP2013-40000203723 & SHR2013-40000203722  
2628 Marine View Drive and 1515 Taylor Way

Dear Ms. Schultz:

This letter serves as further follow up to our submittals on August 16, 2013 and August 27, 2013, and my email to you dated September 13, 2013, all regarding comments received by the City of Tacoma (the City) during the recent public comment period on the Targa Sound Terminal LLC (Targa) Shoreline Permit and State Environmental Policy Act (SEPA) Checklist 2013-4000203722. Specifically, this letter responds to the further comments of the Puget Sound Clean Air Agency (PSCAA) dated September 6, 2013 as clarified by your September 25 e-mail to me providing direction to Targa following the City’s consultation with PSCAA, the Department of Ecology and the Energy Facility Site Evaluation Council (EFSEC) on outstanding information needs. Finally, this letter provides new information regarding Targa’s prior consideration of potential development at the Port of Tacoma’s Kaiser property in response to issues raised in PSCAA’s July 24, 2013 SEPA comment letter.

As with our earlier letters, to the extent that this letter contains additional information on the project, it should be considered as an Addendum to the SEPA Checklist submitted to the City on June 11, 2013. Targa believes that with this letter, the City has before it information reasonably sufficient to evaluate the impact of Targa’s proposal, and Targa looks forward to the City’s completion of SEPA review and action on the underlying permit application.

As we have done before, PSCAA’s comments are summarized in italics below, with Targa’s response following each comment. Also provided in italics is a summary of the City’s direction on specific comments as provided in your September 25 e-mail.

_PSCAA comment re Corps of Engineers approval._ PSCAA suggests that “Targa be required to provide written approval demonstrating compliance with 33 U.S.C. §476 [Magnuson Amendment] before the City completes its review” or that “the City should condition any SEPA decision and permit approval upon successful receipt by Targa of all required federal permits.”

_City direction re capacity for facility throughput._ As a matter of practice, the City’s shoreline permit and building permits will require compliance with other applicable permitting requirements, including those imposed by the Corps of Engineers and state agencies such as PSCAA. However, the City requests clarification as to how regulatory limits on facility crude oil throughput, such as any associated with the Magnuson Amendment, will be implemented and enforced.
TARGA RESPONSE:

As Targa noted in its August 27 letter, the Magnuson Amendment applies to the review of permits by the Federal Government and does not apply to review of this proposal by any state or local entity. As required by law, the Corps of Engineers will evaluate its approval relative to the Magnuson Amendment and will make a determination as to whether the proposal is allowed under the amendment. Targa understands that the Corps’ determination will be based on its evaluation of the volume of crude oil capable of being handled at the marine berth facility as of October 18, 1977 as compared to the volume capable of being handled at the marine berth under the proposal. In the event that the Corps determines a limit on crude oil throughput is required by the Magnuson Amendment, such limit will be included in the Corps’ approval as a federally enforceable condition. Targa’s contact at the Corps is Olivia Romano, but Targa’s permit application has not been assigned a number at this time.

More importantly, Targa’s Notice of Construction air permit application to PSCAA is based upon and is limited to an overall facility maximum annual crude oil throughput of 14,601,600 bbl/yr, which equates to 40,004 bbl/day on an annual average. The maximum annual crude oil throughput will be an enforceable limit under PSCAA’s approval of the NOC. Targa anticipates that the PSCAA crude oil limit under the NOC will be more stringent than the Corps’ limit, meaning that the PSCAA limit will control. Should Targa wish to increase its crude oil throughput in the future, it would need to obtain a new or revised permit approval from PSCAA, which would entail further environmental review, as appropriate to the specific proposal.

Because the PSCAA approval, and possibly also the Corps permit, will establish enforceable limits on crude oil throughput, the City should follow its ordinary practice and require Targa to comply with all applicable state and federal approvals, including specifically those from PSCAA and the Corps. No further conditions regarding crude oil throughput should be required by the City. Targa will abide by all PSCAA, Corps and City requirements.

PSCAA comment re transportation-based emissions. After summarizing its earlier comment on transportation-based emissions and Targa’s response, PSCAA requests that “Targa identify specifically and quantitatively all criteria, HAP and TAC pollutants to be created from the locomotives and ships that Targa claims will be involved as part of its proposals and evaluate the impacts from those emissions.”

City direction re transportation-based emissions. Targa should provide further support for its conclusion that impacts of off-site emissions would be negligible, including Targa’s underlying analysis and assumptions. Targa should provide a qualitative discussion of off-site transportation-related air impacts, but a full analysis is not required. However, Targa should provide more specific information regarding on-site air impacts.

TARGA RESPONSE:

Overview

PSCAA’s July 24 letter requested that transportation-based emissions be “identified and evaluated.” In our August 16 and August 27 letters to the City, Targa provided a detailed qualitative assessment of the on and off-site greenhouse gas (GHG) emissions associated with the proposal consistent with Ecology’s published guidance document for calculating GHG emissions for SEPA (Guidance for Ecology Including Greenhouse Gas Emissions in SEPA Reviews, June 3, 2011). This included rail and marine movement of
goods to and from the terminal (“scope 3” emissions, i.e., emissions typically identified as indirect and associated with sources not owned or controlled by the project proponent) because GHG emissions have a cumulative impact regardless of location. Targa also acknowledged that there would be increases in non-GHG emissions from off-site rail and marine transportation, evaluated the impacts of such emissions, and concluded that they would be negligible in any given location.

PSCAA’s September 6 letter requests that non-GHG pollutants be specifically identified and quantified. The City’s September 25 clarification indicates that what is needed is a qualitative discussion of off-site transportation based impacts. The City also requests that Targa provide more specific information regarding on-site air emissions. The following discussion identifies the specific emissions of criteria pollutants, Hazardous Air Pollutants (HAPs), and Toxic Air Pollutants (TAPs) from on-site sources, as well as the types of non-GHG emissions typically associated with off-site rail and marine transportation. It also provides the requested qualitative assessment of associated impacts. Targa does not believe that a more detailed evaluation, including quantification of indirect off-site emissions by third-party common carriers engaged in interstate commerce is necessary under SEPA, typically provided, or even feasible.

**Types of Pollutants**

The Clean Air Act requires the United States Environmental Protection Agency (EPA) to set National Ambient Air Quality Standards (NAAQS) for pollutants considered harmful to public health and the environment. EPA calls these pollutants "criteria" air pollutants because it regulates them by developing human health-based and/or environmentally-based criteria (science-based guidelines) for setting permissible levels.

Emissions of the applicable EPA criteria pollutants from the proposed project at Targa’s Sound Terminal facility, including particulate matter (PM), volatile organic compounds (VOC), carbon monoxide (CO), sulfur dioxide (SO₂), and nitrogen oxides (NOₓ) were identified and calculated in Sections 2 and 3 of our May 2013 Notice of Construction (NOC) application to PSCAA.

The EPA also regulates hazardous air pollutants (HAPs), also known as air toxics. Section 112(b) of the Clean Air Act, as amended by Congress in 1990, designates 187 chemicals or classes of chemicals as HAPs. These are chemicals for which special standards and risk assessments are required. They are regulated based on estimated release volumes and toxicity. HAPs are distinct from the EPA’s seven “criteria” pollutants, for which EPA has established health-based ambient standards. Emissions of HAPs associated with the proposed project at the Targa Sound Terminal were identified in Appendix D of the PSCAA NOC application. The HAPs are a subset of the total VOC emissions and include compounds such as benzene, ethylbenzene, or hydrogen sulfide. In crude oil, these HAPs are naturally occurring compounds. In a refined product such as gasoline, they can be naturally occurring or a product of a refinery process.

EPA has established National Emission Standards for Hazardous Air Pollutants (NESHAPs) in 40 CFR 61 and 63 to regulate the emissions HAPs. NESHAP regulations codified in 40 CFR 63 establish Maximum Achievable Control Technology (MACT) standards for specific types of equipment at affected facilities. Most MACT regulations apply to facilities that are major sources. Under 40 CFR 63, a major source is defined as “any stationary source or group of stationary sources located within a contiguous area and under common control that emits or has the potential to emit considering controls, in the aggregate, 10 tons per year or more of any HAP or 25 tons per year or more of any combination of HAP....” The Sound Terminal is not a major source of HAP under this definition. However, NESHAP Subpart BBB BBB is applicable to gasoline distribution bulk terminals, defined as any gasoline storage and
distribution facility that receives gasoline by pipeline, ship or barge, or cargo tank and has a gasoline throughput of 20,000 gallons per day or greater. The Sound Terminal qualifies as a bulk gasoline terminal as defined above, and thus is subject to NESHAP Subpart BBBBBB.

In addition to federal HAP regulations, in the State of Washington, all new sources emitting Washington State listed toxic air pollutants (TAPs), which include more compounds than EPA’s list of HAPs, are required to show compliance with the Washington TAP program pursuant to WAC 173-460. PSCAA’s regulations incorporate the Washington TAP program by reference. The emission rates of TAPs expected from this project are detailed in Appendix D and Table 6-1 of the PSCAA NOC application. All the TAPs emitted from the proposed project are in compliance with the Washington State TAP program.

Ecology has developed calculation tools to estimate GHG emissions from off-site sources such as marine vessels and locomotives. These tools have been used to develop the GHG emission estimates presented in Targa’s SEPA submittals. While not immediately obvious, however, the calculation of criteria pollutants from rail and marine vessels does not follow the same methodology as the calculation of GHGs. Emission calculations for GHG from marine vessels and locomotives are closely tied to the fuel consumption of the equipment. The primary form of GHG emissions from these emission sources is from the conversion of carbon in the fuels used by their engines to CO₂ in the engine exhaust. The formation of criteria pollutant emissions at these sources is more complex, and relies on a variety of additional factors besides fuel consumption. The combustion characteristics of different engine types, and even the age of the engines, can result in wide variations of PM, VOC, NOₓ and CO emissions from one engine to another. For these reasons, the calculation tools provided by Ecology cannot easily be adapted for criteria pollutant calculations.

GHG and criteria pollutants also affect the environment in different ways. GHG emissions can remain in the atmosphere for tens to hundreds of years after being released. They become globally mixed in the lower atmosphere, reflecting contributions from emissions sources worldwide.¹ Because GHGs mix on a global scale, and their impact is tied to global GHG concentrations, an increase in GHG emissions outside the terminal has a comparable impact to the same quantity of GHG emissions at the terminal. Or, as previously stated, they have a cumulative impact regardless of location. Criteria pollutants have some long-range transport effects, but primarily impact the environment in a more localized manner. As a result, the regulation of criteria pollutants under the Clean Air Act is based mainly on improving and preserving ambient air concentrations of the pollutants at a local level. These concentrations are monitored, with local exceedances of ambient air quality standards resulting in designation of areas as “nonattainment” areas.² Unlike a stationary source such as a terminal, marine vessels and locomotives, with low levels of criteria pollutants, and with emissions spread out over large distances as they travel, would not be expected to have a significant impact on any particular local area.

Criteria pollutant emissions from marine vessels and locomotives are regulated by EPA through different programs than those used to regulate stationary sources of air pollution. EPA sets emission standards and certification requirements for locomotives and marine engines through its Office of Transportation and Air Quality. Standards for criteria pollutants have been issued by EPA to make emission reductions in PM, NOₓ, hydrocarbons (HC), and CO from locomotive and marine diesel engines. These standards were further tightened in 2008 to obtain additional improvements in PM and NOₓ emissions from both new and existing engines.³ These regulations minimize and mitigate the effects of off-site emissions

associated with third-party vessel and locomotive operations. More information on these regulations is below.

**Onsite Air Emissions**

As mentioned above, emissions of the applicable EPA criteria pollutants as well as listed HAPs from the proposed project at Targa’s Sound Terminal facility were identified and calculated in Sections 2 and 3 of our May 2013 Notice of Construction (NOC) application to PSCAA. Additionally, the HAP and TAP emissions from the project were summarized in Appendix D to the PSCAA NOC application. However, we recognize that the PSCAA NOC application has not been introduced into the formal SEPA record. As such, the operations and emission sources associated with the project that are onsite at the Targa Sound Terminal are described below.

**Storage Tanks**

The proposed storage tanks will be authorized to store crude oil, diesel, or fuel oils. Typical Bakken and other light crudes have Reid Vapor Pressures (RVPs) that can vary widely. For conservatism, the crude emissions are calculated on a basis of RVP 13. These tanks will emit volatile organic compounds (VOC) through each tank’s vent stack. VOC emissions are also expected from fugitive equipment leaks at the valves and flanges associated with the tanks. Other than VOC, no criteria pollutant emissions are emitted from the tanks. However, the crude will contain HAPs as well as WAC 173-460-150 Toxic Air Pollutants (TAPs). VOC and benzene emissions from the tanks have been estimated using the U.S. EPA TANKS 4.09.d (TANKS) program and are summarized in the table below.

**Marine and Truck Rack Loading Operations**

Emissions of VOC are emitted to the atmosphere during loading of marine vessels and trucks at the loading racks. However, Targa proposes to install a marine vapor combustion unit (MVCU) combined with vapor blower staging unit (VBSU) and dock safety unit (DSU) which is designed to capture 100% of VOC emitted from marine loading operations. The VBSU employs a vapor blower to maintain a controlled vacuum inside the vapor collection module during the loading process, thereby eliminating fugitive emissions at the source. The VBSU will prevent leakage of emissions from marine vessels and eliminate fugitive emissions during marine loading by capturing and routing those emissions to the MVCU. The MVCU will also be used as a backup control device to the existing truck rack VRU during any periods of upsets or maintenance.

**Rail Unloading Facility**

The rail unloading facility consists of 36 railcar spots used to offload multiple products from railcars. The emissions from the rail unloading facility consist entirely of VOC fugitive emissions (i.e., emissions from equipment such as valves and pumps). The fugitive emissions from the new equipment components for both ethanol and crude rail unloading are accounted for in the PSCAA NOC application.

**Equipment Leaks**

Equipment components (such as valves, flanges, and pumps) installed for the proposed project may leak a small amount of VOC during operation. The emission factors for marketing terminals from Table 2-3 in EPA’s Protocol for Equipment Leak Emission Estimates, published in November 1995 are used to calculate VOC emissions for all equipment components. The service for all fugitive components is
assumed to be the worst-case product scenario of either gasoline or crude for each species in order to estimate the fugitive VOC and TAP emissions conservatively.

Site-wide Emissions

### Rail Modification and Tank Expansion Project Emission Rates

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<th>Emission Unit</th>
<th>PM10 (tpy)</th>
<th>PM2.5 (tpy)</th>
<th>SO2 (tpy)</th>
<th>NOx (tpy)</th>
<th>VOC (tpy)</th>
<th>CO (tpy)</th>
<th>H2S (tpy)</th>
<th>Individual HAP (tpy)</th>
<th>Combined HAP (tpy)</th>
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<td>24.34</td>
<td>0.140</td>
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</table>

### Emissions from Locomotives and Marine Vessels

While Targa does not control the marine vessels or the locomotives and trains transporting products to and from the Seattle/Tacoma area, Targa recognizes that trains and ocean going vessels have nonroad engines that combust fuel and emit criteria pollutants, primarily PM, NOx, CO and SO2, into the atmosphere during transportation. VOCs, including HAPs or TAPs such as benzene, toluene, or formaldehyde, can also be emitted into the atmosphere from combustion engines. The specific pollutant and the quantities emitted depend on the fuel combusted and the efficiency of the engine. The EPA has adopted emission standards for all types of nonroad engines, equipment, and vehicles, and in some cases, additional requirements apply for in-use gasoline and diesel fuels. The goal of these standards is to reduce criteria pollutant from vessel and locomotive engines. The EPA is also active in the international environmental community and the United States plays an active role in various maritime organizations that influence regulation of marine vessels, including emissions standards.

#### Emissions from Locomotives

In March 2008, EPA finalized a three part program to dramatically reduce emissions from diesel locomotives of all types -- line-haul, switch, and passenger rail. The rule will cut PM emissions from these engines by as much as 90 percent and NOx emissions by as much as 80 percent when fully implemented. The standards are based on the application of high-efficiency catalytic after-treatment technology for newly manufactured engines built in 2015 and later.

EPA standards also apply for existing locomotives when they are remanufactured, and there are requirements in place to reduce idling for new and remanufactured locomotives.

As part of the 2008 rulemaking, EPA is requiring that all newly manufactured and nearly all remanufactured locomotives be equipped with idle reduction technology that will automatically shut

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4 See [http://www.epa.gov/otaq/locomotives.htm](http://www.epa.gov/otaq/locomotives.htm).
locomotives down if they are left idling unnecessarily. The regulations also include a emission testing program to make sure locomotives comply with emission standards for their operational life.

EPA has also been working with the United States’ major railroads to implement voluntary efforts to reduce idle emissions beyond the mandated reductions. All Class I railroads have joined the SmartWay Transport Program: CSX Transportation, Norfolk Southern, Canadian National Railway, BNSF Railway Co., Canadian Pacific Railway, Kansas City Southern Railway, and Union Pacific Railroad Co. As part of their SmartWay commitment, each railroad has submitted action plans describing the steps they are taking to significantly reduce CO, NOx, and PM emissions, and to conserve considerable amounts of diesel fuel. Every Class I railroad action plan includes efforts to reduce idling through a variety of technologies and strategies, including automatic engine stop-start systems, auxiliary power units or diesel-driven heating systems, electrical shorepower connections, and company idle-shutdown policies.

Emissions from Marine Vessels

**Diesel Boats and Ships**

Marine diesel engines are used in a variety of different types of vessels ranging in size and application from small recreational runabouts to large ocean-going vessels. New marine diesel engines must meet increasingly stringent emissions requirements. In May 2004, as part of the Nonroad Diesel Tier 4 Rule, EPA finalized new requirements that decrease the allowable levels of sulfur in marine diesel fuel by 99 percent. These fuel improvements, which began to take effect in 2007, are creating significant environmental and public health benefits by reducing PM and sulfur compound emissions from new and existing engines.

In March 2008, EPA finalized a three-part program that further reduces emissions from marine diesel engines with per-cylinder displacement below 30 liters. These include marine propulsion engines used on vessels from recreational and small fishing boats to towboats, tugboats and Great Lake freighters, and marine auxiliary engines ranging from small generator sets to large generator sets on ocean-going vessels. The rule will cut PM emissions from these engines by as much as 90 percent and NOx emissions by as much as 80 percent when fully implemented.

The 2008 final rule includes the first-ever national emission standards for existing commercial marine diesel engines, applying to engines larger than 600kW when they are remanufactured. The rule also sets Tier 3 emissions standards for newly built engines that are phasing in from 2009. Finally, the rule establishes Tier 4 standards for newly built commercial marine diesel engines above 600kW, based on the application of high-efficiency catalytic aftertreatment technology, phasing in beginning in 2014.

**Ocean Vessels and Large Ships**

Diesel engines are also used on large ships, such as container ships, tankers, bulk carriers, and cruise ships. There are two main engine types on these large ships: main propulsion and auxiliary engines. The main propulsion engines on most large ships are Category 3 (C3) marine diesel engines, which can stand over three stories tall and run the length of two school buses. Auxiliary engines on large ships typically range in size from small portable generators to locomotive-size engines.

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6 See [http://www.epa.gov/otaq/oceanvessels.htm](http://www.epa.gov/otaq/oceanvessels.htm).
Engine and Fuel Standards

In a rule published on April 30, 2010, EPA adopted standards that apply to C3 engines installed on U.S. vessels and to marine diesel fuels produced and distributed in the United States. That rule added two new tiers of engine standards for C3 engines: Tier 2 standards that begin in 2011 and Tier 3 standards that begin in 2016. It also includes a regulatory program to implement Annex VI to the International Convention for the Prevention of Pollution from Ships (a treaty called "MARPOL") in the United States, including engine and fuel sulfur limits, and extends the Emission Control Area (ECA) engine and fuel requirements to U.S. internal waters. The rule also revised EPA’s domestic Clean Air Act diesel fuel program to allow for the production and sale of diesel fuel with up to 1,000 ppm sulfur for use in C3 marine vessels, phasing in by 2015.

International Standards

EPA participates on the U.S. delegation to the International Maritime Organization (IMO). The IMO is the United Nations agency concerned with maritime safety and security and the prevention of marine pollution from ships. The international air pollution standards are found in Annex VI to MARPOL.

In October 2008, member states of the IMO adopted new international standards for marine diesel engines and their fuels (2008 Amendments to MARPOL Annex VI) that apply globally as of July 1, 2010. The amendments also established additional, more stringent emission requirements for ships that operate in designated coastal areas where air quality problems are acute, called Emission Control Areas (ECA’s). These new global and geographic standards have the potential to significantly reduce air pollution from ships, and provide important benefits to our national air quality.

Under the new global standards, NOx emissions will be reduced, and the fuel sulfur cap will drop to 5,000 ppm in 2020 (pending a fuel availability review in 2018). Under the new geographic standards, ships operating in designated ECA’s will be required to use engines that meet the most advanced technology-forcing standards for NOx emissions beginning in 2016, fuel with a sulfur content not exceeding 10,000 ppm in the first phase of the program, and 1,000 ppm in the second phase of the program.

Emission Control Area Designation

MARPOL Annex VI contains a program that applies stringent engine emission standards and fuel sulfur limits to ships that operate in specially designated Emission Control Areas. The quality of fuel that complies with the ECA standard changes over time.

On March 26, 2010, the IMO officially designated waters off North American coasts, including the waters off Washington State, as an area in which stringent international emission standards will apply to ships. For this area, the effective date of the first-phase fuel sulfur standard was 2012, and the second phase begins in 2015. Beginning in 2016, NOx aftertreatment requirements become applicable.

*PSCAA comment re vessel traffic baseline.* PSCAA discusses Targa’s existing marine fuel operations, including direct-fueling and barge loading. PSCAA then states “Because marine fuel is not volatile, no emissions control for this loading is necessary. Thus, claiming existing marine fuel-related traffic as some sort of baseline for analysis of vessel traffic from crude loading, on its face,
does not appear to accurately describe the proposal or identify and evaluate air impacts for the requested crude operation.”

TARGA RESPONSE:
As stated in my September 13 e-mail to you, in response to the comments from both Ecology and PSCAA to define a net increase in vessel traffic, Targa established a baseline of current vessel calls at Sound Terminal. Current operations of the Targa marine dock include the loading/unloading or fueling of approximately 40-60 vessels per month, of non-crude oil products. Targa conservatively estimated that all proposed crude operations would result in new vessel calls, rather than displacing existing business. Whether or not emissions control is necessary for the existing operations, these vessel calls still represent the baseline level of vessel activity at the terminal for purposes of comparison to the level of activity under the proposal, i.e., proposed with the addition of crude handling.

Targa submits form ECY 070-175 “Advance Notice of Oil Transfer” to Ecology for each transfer. Targa’s marine berth serves commercial vessels (e.g., tankers, barges, ships, tugboats, or other workboats) that are up to but cannot exceed 800 feet in length with a beam that can be variable, and a maximum draft of 26.4 feet (currently, though we can dredge to 30 feet). This year, the largest vessel to call on our facility is the CROWLEY VISION/650-10 with a 182,000 barrel capacity.

To further clarify, Targa does marine fueling of commercial fishing vessels and tug boats. We also load fuel oil and diesel onto vessels/barges for our customers who may then move the vessel on to fuel commercial vessels such as container ships and cruise ships or may take their fuels to other domestic or international ports. Targa also receives barges or vessels of various petroleum products from domestic and international originations.

Many of the vessels that handle fuel oil are also designed to handle crude oil. Therefore, we feel our analysis accurately depicts the vessels that we can expect for crude oil transport.

PSCAA comment re crude vessel traffic. PSCAA states that Targa “bases its analysis on a description of crude vessel traffic that could be viewed as too narrowly identifying the amount of expected crude vessel traffic and associated air emissions.” Specifically, PSCAA requests clarification as to the capacity of vessels expected to carry crude, and how the 150,000 barrel capacity Targa assumed relates to the capacity of barges loaded in 2012 and 2013. PSCAA further requests clarification or expansion of Targa’s analysis if smaller vessels will be used “to ensure that a realistic range in the analyzed frequency of vessel traffic, and associated air emissions, is accurately identified and evaluated.”

TARGA RESPONSE:
As stated in my September 13 e-mail to you, Targa’s analysis is based on anticipated future operations, not past operations. During the referenced period, Targa did only load approximately 40,000 bbls of crude oil per barge. However, during most of the time period, Targa stored crude oil in only one (1) 50,000 bbl floating roof storage tank. So, it was not possible to fill a 150,000 bbl vessel. In order to keep the roof floating, and per the request of the customer, only about 40,000
40,000 bbls per barge was loaded out on average. Additionally, 40,000 bbls was the volume loaded and not the size of the vessel onto which the crude oil was loaded. The vessels that called at the time ranged in size, but all were greater than 40,000 bbls. For example, the Lovel Briere (50,000 bbls), Webb Moffett (50,000 bbls) and Olympic Spirit (80,000 bbls) were the barges sent by the customer during this time period. Vessels that arrive for loading are chosen by the customer and arranged by schedule and availability.

Targa’s current proposal is to construct additional crude storage tanks or convert existing tanks to crude service. Targa therefore will increase its crude oil storage capacity. Accordingly, Targa expects to keep crude oil in the amount of about 156,000 to 250,000 barrels. Our customer planned to load about 150,000 barrels per vessel at a rate of about 2 vessels per week. Targa considered all the crude vessel traffic as incremental new traffic in our analysis.

In regards to the size of the vessel, based upon customer input, 150,000 barrels was the expected amount we would load on a vessel similar to the ATB CROWLEY VISION. Thus, this was used in our analysis.

PSCAA comment re risk of off-site rail spills. PSCAA requests that “Given the risk of spills from derailments at other locations on the tracks, the identification of impacts from spills at off-site locations should be identified and evaluated in the SEPA analysis for this proposal.”

TARGA RESPONSE:

As acknowledged in Targa’s August 27 response, there is a spill risk associated with all forms of oil transportation, including rail transportation. According to the Department of Ecology’s Spill Prevention, Preparedness & Response Program:

Over 20 billion gallons of oil and hazardous chemicals are transported through Washington State each year by ship, barge, pipeline, rail, and road. Accidents, equipment failure, and human error can all lead to unintended and potentially disastrous consequences. Oil and chemical spills can threaten some of the most productive and valuable ecosystems in the world. These incidents can kill fish, birds, and marine animals and contaminate beaches and shellfish. All spills whether on land or water can threaten public health, safety, the environment, and ultimately damage the state’s economy and quality of life.

Accordingly, Ecology’s Spill Prevention, Preparedness & Response Program has adopted and is vigorously pursuing a goal of “zero spills” and ensuring a rapid and aggressive response to significant spills. Further, the interstate rail carriers that serve the Targa terminal are heavily regulated by the Federal Railroad Administration (FRA) to prevent and respond to spills, including spills associated with the transportation of crude oil. For example, the FRA’s Action Plan for Hazardous Materials Safety includes specific measures to increase the safe transport of crude oil from the Bakken region. These federal regulations and programs mitigate the risk of off-site spills associated with rail transport to the Targa terminal.

8 [http://www.fra.dot.gov/eLib/details/L04721](http://www.fra.dot.gov/eLib/details/L04721)
Ms. Shirley Shultz  
Targa Response to Comments - PSCAA  
Applications SEP2013-40000203723 & SHR2013-40000203722

City request re emergency response planning information. Your September 25 e-mail requested that Targa provide copies of spill response and emergency management plans, and that Targa describe in detail how the emergency plans have been amended to address the proposed project, including the handling of crude oil.

TARGA RESPONSE:

As required by State and Federal regulations, Targa Sound Terminal has a Spill Prevention Control and Countermeasure (SPCC) plan and a Facility Oil Spill Contingency Plan (Contingency Plan). These plans focus on the planning and preparation to respond to spills at the facility and also preventive measures to minimize the risk of a spill to a navigable water or adjoining shoreline. Copies of Targa’s current SPCC and Contingency Plans are being provided to the City with this letter.

The Contingency Plan has been submitted to both the Washington Department of Ecology and the United States Coast Guard for review and approval. The current plan was most recently approved by the Washington Department of Ecology on November 26, 2012 and the US Coast Guard on April 17, 2013. This plan is designed to maximize the effectiveness and timeliness of oil spill response, ensure continual readiness, maintenance of equipment, and training of personnel, and support the coordination with State, Federal, and Local response planning and implementation. The SPCC plan is not required to be submitted for review; however, this plan, as well as the Contingency Plan, has been prepared in accordance to 40 CFR 112.2.

SPCC Plan

The purpose of the SPCC plan is to prevent a discharge of oil into navigable waters or adjoining shorelines. Because the facility has an aggregate aboveground oil storage capacity greater than 1,320 U.S. gallons it has long been subject to SPCC regulations. Therefore, the facility has developed and implemented an SPCC Plan that describes oil handling operations, spill prevention practices, discharge or drainage controls, and the personnel, equipment and resources at the facility that are used to prevent oil spills from reaching navigable waters or adjoining shorelines. The SPCC regulations apply to oil in any type or form, which is defined to include, but is not limited to, petroleum; crude oil; fuel oil; sludge; oil refuse; oil mixed with wastes other than dredged spoil; fats, oils or greases of animal, fish, or marine mammal origin; vegetable oils, including oil from seeds, nuts, fruits, or kernels; and other oils and greases, including synthetic oils and mineral oils. Although each SPCC Plan is unique to a facility, there are certain elements that must be described in every Plan including:

• Operating procedures at the facility to prevent oil spills;
• Control measures (such as secondary containment) installed to prevent oil spills from entering navigable waters or adjoining shorelines; and
• Countermeasures to contain, cleanup, and mitigate the effects of an oil spill that has impacted navigable waters or adjoining shorelines.

The current SPCC plan for the Sound Terminal includes operating procedures for the safe transfer of oils, including crude oil, from rail car to pipeline, pipeline to storage tank(s) and from storage tank(s) to barge, ship, or tanker truck. The procedures are established to ensure that the transfer of oil is performed so as to eliminate the risk of spills that may reach navigable waters or adjoining shorelines. The current operating procedures at the Sound Terminal would not change as a result of the addition of crude oil storage. The operating procedures are designed to prevent any oil spill regardless of whether it is a petroleum, a distillate, or crude oil spill. These procedures include inspection of valves, hoses, and storage containers
prior to and during transfer operations. They also include ensuring drip pans are in proper location prior to oil transfer, placing a plug in the end of a transfer hose to ensure no oil spills at the completion of transfer. Storage containers are inspected regularly to ensure leaks are detected quickly in order to minimize spill volumes. Employees are trained annually on the operating procedures to ensure continued compliance. Because the facility has previously stored crude oil the operating procedures associated with the SPCC plan will not require changes to procedures but will include training to employees for continued safe procedures.

The existing storage tanks at the facility that are subject to SPCC regulations for control measures are located in secondary containment structures which are designed to control the capacity of the volume of the largest tank in common containment as well as sufficient freeboard. What this means is that if a storage tank within containment would suddenly spill all the contents of the tank the secondary containment structure would contain all the contents of the tank, therefore preventing the oil from entering the Hylebos Waterway. In accordance with SPCC regulations, any new oil storage tank constructed or brought to the facility must be included in an existing SPCC plan within 6 months of the tank being put in to service. Therefore, the new tanks proposed for crude oil service in connection with this project, tanks 164, 165, 206, and 207, will be added to the existing SPCC plan. This addition to the plan will require a review and approval by a professional engineer. The sections of the SPCC plan which will be updated when additional storage tanks for crude oil are constructed at the facility include; the specific location of the new tanks on the facility diagram, the storage tank data such as contents and volume of the tank(s), type of tank, volume calculation to demonstrate sufficient secondary containment and design, and drip pans under valves for transfer operations. All the reviews and updates are required to be performed within 6 months of the additional storage and to ensure continued compliance with SPCC regulation.

The spill countermeasures described in the SPCC plan are another key component to ensuring that an oil spill does not impact navigable water or adjoining shorelines. The countermeasures described in the current facility plan include training of facility personnel to recognize a spill and quickly control it by closing a valve or valves, notifying their supervisor, deploying initial containment and/or absorbent material, and contacting the oil spill response contractor listed in the plan as well as notifying appropriate State and Federal agencies. The size of the spill will determine the level of countermeasures that must be enacted. The current SPCC plan at the facility includes the necessary countermeasures for an oil spill from the existing storage tanks subject to SPCC. The addition of crude oil storage tanks will require that the SPCC plan is reviewed and updated within 6 months of the initial operation of the new tanks. The facility employees will be refreshed on training for a spill of crude oil from the new storage tanks, also the oil spill response company listed in the plan will be notified of the new tanks and contents of the tanks. This is performed in order to make sure the spill response contractor continues to stock and bring to the facility the appropriate amount of containment and absorbent material in the event of a spill. Drip pans will be added to the railcar unloading area to ensure that a spill from a rail car is contained within the railcar unloading area. Additional containment boom and absorbent boom and material may be added to the existing inventory if necessary. The facility currently performs training exercises for an oil spill, however as a result of new storage tanks and rail car unloading capabilities, employees will be refreshed on the operating procedures, control and countermeasures in order to comply with SPCC regulations.

**Facility Oil Spill Contingency Plan**

The Sound Terminal is also subject to the requirements to prepare and submit for approval an Oil Spill Contingency Plan (Contingency Plan) designed to respond to a worst case discharge or the threat of a
worst case discharge of oil to navigable waters or adjoining shorelines. The facility currently has an approved Contingency Plan that describes the plan to respond to a worst case discharge.

The addition of new storage tanks at the facility will require that the Contingency Plan be evaluated to incorporate the new tanks and operations for transfer of crude oil to and from the tanks before the new storage tanks and oil transfer equipment is placed in to service. Most of the “administrative” information in the plan would remain unchanged. These sections of the plan would include information such as: contact information for Targa, State and Federal agencies, and contractors; notification procedures (who to call and when), response personnel, and the logistics on how to manage the response operations (Incident Command System).

Sections of the plan with facility information such as maps, tank lists, ingress/egress routes, pump rates, and other equipment associated with the storage and transfer of oil will be updated to reflect the additional volume of oil at the facility. Targa will perform a revised evaluation of a Worst Case Discharge (WCD) of crude oil. If this evaluation changes the current WCD then Targa will be required to update the appropriate response information. However, since the current Contingency Plan WCD evaluation includes petroleum, it is possible that the addition of crude oil will not require any material changes to the response information. In addition, a meeting will be held with the Oil Spill Removal Organization (OSRO) which is an organization that is certified by the U.S. Coast Guard to provide extensive response resources, such as personnel and equipment. Targa’s OSRO is Marine Spill Response Corporation (MSRC) Pacific Northwest Region located in Everett, WA. The purpose of the meeting is to discuss and evaluate the changes in potential spill volumes as a result of the new storage tanks and oil transfer operations and to verify that MSCR continues to meet the response requirements of the Contingency Plan. Areas discussed will include changes in: spill trajectories, booming strategies, effects on natural resources, and quantity and type of committed recovery equipment.

Based on the current operations of the Targa Sound Terminal, and the proposed changes, Targa does not anticipate that any significant increase in response resources, or change in planning procedures will be required for the current Contingency Plan

_Kaiser property update._ PSCAA’s July 24 comment letter raised questions about Targa’s potential future development at the Port of Tacoma’s Kaiser property.

TARGA RESPONSE:

As Targa stated in the SEPA checklist and Targa’s August 27, 2013 letter, Targa was, at that time, conducting due diligence for potential development at the Port of Tacoma’s Kaiser property under a contingent lease from the Port. After completing its due diligence, Targa terminated its lease for the Kaiser property on August 29, 2013.

CONCLUSION

Targa appreciates the City’s efforts to clarify the information needed to complete its SEPA review for the Rail Modification and Tank Expansion projects, and appreciates the opportunity to provide these responses. Should you have any further questions, please contact me at jkeiser@targaresources.com or 713-818-8209.

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Sincerely;

Jessica L. Keiser  
Vice President, ES&H

Cc: Jennifer A. Dold, Puget Sound Clean Air Agency  
   Diane Butorac, Washington Department of Ecology  
   Steven Posner, Energy Facility Site Evaluation Council  
   Troy Goodman, Terminal President, Targa Sound Terminal LLC  
   Vincent DiCosimo, Vice President, Targa Terminals LLC

Enclosure (to City):  
   SPCC Plan  
   Contingency Plan
Figure 1
Site Location Map

Source: USGS 7.5-minute topographic quadrangle, Tacoma North, Washington, 2011
Figure 2
Site Plan

Subject property boundary
Riprap shoreline with blackberry and weeds

Note: Image does not show current state of infrastructure.

Source: Google Earth Pro

Job No. 33764126

Targa Sound Terminal
Tacoma, Washington
SHR2013-400000203722
Attachment “A”
Exhibit D – Parcel Descriptions

Parcel 0321264046: Section 26 Township 21 Range 03 Quarter 42 :  BEG AT INTER OF A LI PAR/W & 658.5 FT W OF E LI GOVT LOT 3 WITH SLY LI MARINE VIEW DR TH NWLY ALG SD SLY LI TO INTER A LI PAR/W & 1008.5 FT W OF E LI SD LOT TH SLY ON SD LI TO A PT 610 FT N OF S LI B S ASHTONS RPT TH W 200 FT TH S TO S LI B 5 ASHTON RPT TH SELY ON SLY LI SD B 5 ASHTONS RPT & SLY LI GOVT LOT 12 TO INTER A LI EXT S 658.5 FT W OF E LI GOVT LOT 3 TH N ON SD LI TO BEG EXC POR LOT 12 WITHIN HYLBOS WATERWAY SEG E 9263 DC2/9/01JU

Parcel 0321264048: Section 26 Township 21 Range 03 Quarter 42 : THAT POR OF GOVT LOTS 3 & 12 DESC AS FOLL BEG AT A PT ON S LI OF GOVT LOT 3 SD PT BEING 658.5 FT W OF E LI SD LOT TH N PAR/W E LI SD LOT TO SLY LI OF EAST SIDE DR AKA MARINE VIEW DR TH SELY ALG SD SLY LI TO A LI WHICH IS PAR/W & 628.5 FT W OF E LI SD LOT 3 TH S PAR/W SD E LI TO A PT 400 FT N OF S LI SD LOT TH E PAR/W S LI SD LOT 3, 200 FT TH S PAR/W E LI SD LOT TO NLY LI HYLBOS WW TH NWLY ALG SD NLY L TO A PT 56.26 FT S OF POB TH N 56.26 FT TO BEG

Parcel 0321263030: Section 26 Township 21 Range 03 Quarter 34 WLY 325 FT OF POR GOVT LOT 8 & 9 OF FOLL BEG INTER OF N LI TAYLOR WAY WITH A LI PAR/W & 804 FT W OF E LI GOVT LOT 9 TH ALG SD N LI TAYLOR WAY N 60 DEG 23 MIN 23 SEC W 744.87 FT M/L TO W LI OF E 165 FT GOVT LOT 8 TH N 00 DEG 34 MIN 10 SEC E ALG SD W-E LI 935.33 FT M/L TO SLY LI HYLBOS WATERWAY TH ALG SD WATERWAY LI S 69 DEG 23 MIN E 813.67 FT M/L TO A PT PAR/W & 754 FT W OF E LI SD GOVT LOT 9 TH S 01 DEG 27 MIN 35 SEC W 129.88 FT M/L TO A PT 799.94 FT N FROM NLY LI TAYLOR WAY TH N 88 DEG 32 MIN 25 SEC W 50 FT TH S 01 DEG 27 MIN 35 SEC W 782.79 FT TO POB EXC FROM SD WLY 325 FT THAT POR OF FOLL BEG INTER OF N LI TAYLOR WAY & A LI PAR/W & 804 FT W OF E LI GOVT LOT 9 TH ALG SD N LI TAYLOR WAY N 69 DEG 23 MIN 23 SEC W 400 FT M/L TO E LI OF W 160 FT SD GOVT LOT 9 TO POB TH ALG SD E LI N 00 DEG 34 MIN 10 SEC E 510 FT TH N 89 DEG 25 MIN 50 SEC W 100 FT TH S 00 DEG 34 MI 10 SEC W 470 FT M/L TO SD N LI TAYLOR WAY TH ALG SD N LI TAYLOR WAY S 69 DEG 23 MIN 23 SEC E 106 FT M/L TO POB SEG G-4979 (DCPLES8-23-82)

Parcel 0321263048: Section 26 Township 21 Range 03 Quarter 31 PARCEL A OF BLA 2010-06-02-5006 DESC AS COM AT CENT OF SEC TH N 88 DEG 8 MIN 32 SEC W 134.05 FT TO POB TH S 36 DEG 13 MIN 14 SEC EAST 216.46 FT TO E LI OF GOVT LOT 4 TH S 2 DEG 2 MIN 11 SEC W 657.96 FT TH N 19 DEG 44 MIN 4 SEC W 29.76 FT TH N 7 DEG 12 MIN 5 SEC E 75.61 FT TH N 5 DEG 22 MIN 25 SEC W 128.21 FT TH N 41 DEG 4 MIN 57 SEC W 143.01 FT TH N 29 DEG 55 MIN 55 SEC W 119.12 FT TH N 47 DEG 8 MIN 11 SEC W 102.21 FT TH N 31 DEG 9 MIN 16 SEC W 56.59 FT TH N 41 DEG 55 MIN 10 SEC W 78.5 FT TH N 82 DEG 4 MIN 55 SEC W 50.1 FT TH N 69 DEG 8 MIN 44 SEC W 146.62 FT TH N 74 DEG 4 MIN 46 SEC W 44.64 FT
NOTES

1. HAWSERS RATED @ >20 TONS.
To: Shirley Schultz, Principal Planner  
From: Karla Kluge, Senior Environmental Specialist 
Subject: TARGA Sound Terminal

File No. SHR2013-40000203722, SEP2013-40000203723
2628 Marine View Drive and 1515 (1601) Taylor Way
Parcel No's. 0321264046, 0321264073, 2275200211, 0321264048, 0321262062, 0321263048 and 0321263030

Proposal
Shoreline Substantial Development Permit and Critical Areas review for modification to rail car loading facility at Taylor Way, tank installation and installation of a Marine Vapor Combustion Unit on the existing barge loading dock at Marine View Drive.

Documents provided to the City of Tacoma
- Cover letter
- JARPA with drawings in plan and section views
- John Zink Marine Vapor Combustion System prepared by Larissa Hespen, April 26, 2013
- SEPA checklist

FINDINGS

Summary of Proposal
1. The proposal includes the following:
   - Modify the existing rail unloading facility at 1515 Taylor Way (1601 Taylor Way as addressed by the Pierce County Assessors records). Targa’s rail facility has 36 railcar spots. Of these spots, only 24 can currently accommodate crude offloading, 12 at a time. The modification of the rail unloading facility includes the installation of two pumps and associated piping, fixtures and associated electrical equipment to allow unloading of crude oil at all 36 spots simultaneously. Targa will also replace an existing ethanol pump with two new pumps. The pumps and associated piping at the rail facility will be constructed at or near existing grade with limited excavation in the existing fill. All piping (suctions lines) that are replaced or installed on site will be between existing rail lines or within other existing developed portions of the site. No new construction will occur “outside” the existing rails toward the wetland and buffer located on the westerly adjacent site.

   - Install and use a John Zink Company Marine Vapor combustion Unit (MVCU) at the Marine View Drive facility to reduce emissions from marine loading. The MVCU will be used as a primary method of controlling volatile organic compound...
(VOC) emissions that occur during the marine loading of crude, petroleum products, and renewable fuels to vessels. These products include, but are not limited to, ethanol, gasoline, and crude oil. The proposed MVCU has an estimated capture efficiency of 100% and destruction efficiency of 98%. The terminal will be limited by PSCAA NOC 10554 to a total throughput across the marine dock of 14,601,600 bbl/yr. The MVCU will be equipped with a vapor blowing staging unit (VBSU) and a dock safety unit (DSU). The DSU equipment will be installed on the existing marine dock. The DSU and associated blower will be skid mounted. Equipment and supplies will be delivered to the terminal using existing access ways. No in water work is planned. No modifications to the existing terminal or dock are proposed. The new piping between the DSU and MVCU is to include a 10-inch diameter pipe to return vapors to a MVCU located over 200 feet from the ordinary high water mark. A 3-inch diameter pipe will be installed to provide natural gas line to the DSU. The natural gas is added to the captured vapors in order to “enrich” the mixture to at least 170% of the upper flammability limit (UFL). A third conduit is needed to provide control wiring to the DSU.

- Reconfiguration (siting and construction) of the roof of two tanks (designated as Tanks 164 and 165 as shown within Exhibit C) previously permitted (SHR2008-40000122196). Instead of fixed roofs, the tanks will be built with fixed cone roofs and have internal floating roofs to allow for the storage of liquids with a high vapor pressure. The tanks are constructed of steel and will be welded together and placed on existing foundations. The tank location and foundation design was previously approved by the City of Tacoma.

- A minor modification to the previous issued permit. Siting and construction of two new storage tanks, Tanks 206 and 207, at the area located at Marine View Drive previously permitted under SHR2008-40000122196. Instead of fixed roofs, these tanks will be built with fixed cone roofs and have internal floating roof to allow for the storage of liquids with a higher vapor pressure. The tank location and foundation design was previously approved by the City of Tacoma. However, unlike Tanks 164 and 165 above, Tanks 206 and 207 do not have existing foundations.

**Project Site**

2. The project area(s) are located at 2628 Marine View Drive and 1601 Taylor Way, Parcel No’s. 0321264046, 0321264073, 2275200211, 0321264048, 0321262062, 0321263048 and 0321263030

3. The 2628 Marine View Drive site is zoned “S-10-Shoreline Port Industrial”. The Generalized Land Use Element (GLUE) of the City’s Comprehensive Plan identifies the site as a “High” Land Use Intensity area and does not designate a General Tier for growth.

4. The 1601 Taylor Way site is zoned “S-10-Shoreline Port Industrial” and “PMI-Port Maritime and Industrial”. The Generalized Land Use Element (GLUE) of the City’s Comprehensive Plan identifies the site as a “High” Land Use Intensity area and a Tier 1-Primary Growth Area.
5. Portions of the subject site(s) lie within an identified 100-year FEMA flood hazard zone. However, according to the 2007 Floodplain map and FEMA flood map 530148 Panels 0025B and 0010B, the locations of the proposed construction are outside of the 100-year floodplain, with the exception of the piping and DSU unit. However, the piping and the DSU unit and related equipment will be on the terminal and dock that is situated well above the maximum flood elevation. No trees are proposed to be removed, no new impervious surfaces applied, no fill and no impact to flood waters or habitat is anticipated.

6. The Marine View Drive site is developed with 38 storage tanks, a truck rack, operations room, maintenance shop, two docks, a business office and appurtenant equipment within a fenced enclosure. At Taylor Way, there are three tail spurs, three 60,000 gallon capacity liquid petroleum gas above ground tanks, associated pumps and piping, temporary office/control sheds, equipment storage and appurtenant equipment within a fenced yard area. The Marine View Drive facility covers an approximate area of 18.44 acres and the Taylor Way facility covers an approximate area of 5.8 acres. The petroleum transfer facility at 1601 Taylor Way is connected to the Marine View Drive facility by piping that extends beneath the Hylebos Waterway.

7. A Fish and Wildlife Habitat Conservation Area and its marine buffer are present on the subject site. No wetlands, streams, or stream buffers are present on the subject property. A wetland buffer does extend onto the 1601 Taylor Way site, but not into the area where construction will take place.

8. No Endangered Species will be affected by the proposed work. According to the website for U.S. Fish and Wildlife Service of Western Washington, the following threatened or endangered species have the potential to occur in Pierce County: Bull Trout, Canada Lynx, Gray wolf, Grizzly bear, marbled murrelet, and northern spotted owl. There is also critical habitat for bull trout, marbled murrelet and northern spotted owl. No suitable habitat or designated critical habitat occurs within the project site.

9. According to the NOAA Fisheries, the following threatened or endangered marine mammals have the potential to occur in marine waters of Puget Sound: Southern Resident Killer Whales, humpback whale, Stellar Sea lion. Based on historical movement patterns and known haul-out locations for the Stellar sea lion, it is very unlikely that any of these three species would occur immediately adjacent to the project sites. In addition, four species of ESA listed turtles have potential to occur in Puget Sound, however they are all considered extremely rare in the region.

10. Five additional species of threatened or endangered fish species may also occur in Puget Sound. They are: Chinook Salmon, steelhead trout, Puget Sound DPS Boccaccio, Puget Sound canary rockfish, and Puget Sound DPS yelloweye rockfish. Any of these species may occur within the marine waters near the subject sites.

11. I have conducted site visits previously at the two project areas (2628 Marine View Drive and 1601 Taylor Way. I visited the 2628 Marine View Drive site for silt fence inspection during the work conducted under the previously issued permit and have reviewed the site at 1601 Taylor Way and general surrounding areas for various cleanup activities directed by DOE and am familiar with both sites and surrounding area.
Applicable Tacoma Municipal Code (TMC)- Critical Areas Regulations 13.11

TMC 13.11.130 Scope and Applicability
A. The provisions of this chapter apply to all lands and waters, all land uses and development activities, and all structures and facilities in the city, whether or not a permit or authorization is required, and shall apply to every person, firm, partnership, corporation, group, governmental agency, or other entity that owns, leases, or administers land within the City. This Chapter specifically applies to any activity which would destroy vegetation; result in a significant change in critical habitat, water temperature, physical, or chemical characteristics; or alter natural contours and/or substantially alter existing patterns of tidal, sediment, or storm water flow on any land which meets the classification standards for any critical area defined therein. Such activities include excavation, grading, filling, the removal of vegetation, and the construction, exterior alteration, or enlargement of any building or structure. In addition, this chapter applies to all public or private actions, permits, and approvals in or adjacent to a critical area and its buffer.

TMC 13.11.190 Review Process
A. The Review Process is used to determine whether a critical area or critical area buffer is present on or adjacent to a proposal, and whether additional review or permitting is required.

TMC 13.11.510 Classification
A. Fish and wildlife habitat conservation areas are areas identified by the Washington Department of fish and Wildlife as being of critical importance to the maintenance of fish and wildlife species. These areas may include other critical areas such as geologically hazardous areas, stream corridors, wetland, and these critical areas’ associative buffers.

1. Fish and Wildlife Habitat Conservation Areas (FWHCAs). Fish and Wildlife habitat areas include:
   a. Lands and waters containing priority habitats and species including Commencement Bay and all waterways.

TMC 13.11.520
A.1 No development shall be allowed within a Fish and Wildlife Habitat Conservation Area with which a state or federally endangered, threatened or sensitive species have primary association without approval from the City of Tacoma and/or WDFW.

TMC 13.11.530 requires a 50-foot marine buffer for Commencement Bay waters, including industrial waterways.

TMC 13.11.620 Standards.
All development proposals shall comply with Sections 2.12.040 through 2.12.050, Flood Hazard and coastal High Hazard Areas, and Chapter 12.08 Surface Water Management Manual of the TMC for general and specific flood hazard protection. Development shall not reduce the flood water storage ability. Construction, grading, or other regulated activities which would reduce the flood water storage must be mitigated by creating compensatory storage on-or off-site. Compensatory storage provided off-site for purposes of mitigating habitat shall comply with all applicable wetlands, stream, and fish and wildlife habitat conservation area requirements. Compensatory storage provided off-site for purposes of providing flood water storage capacity shall be of similar elevation as the development. Compensatory storage is not required in Coastal A or V Zone flood hazard areas with a mapped floodway but containing no functional salmonid habitat on the site. For sites with functional connection to salmonid bearing waters that provide a fish accessible pathway during flooding, compensatory storage areas shall be graded and vegetated to allow fish refugia during flood events and their return to the main channel as floodwater recede without creating flood stranding risks. Base flood data and flood hazard notes shall be shown on the face of any recorded plat or site plan, including, but not limited to, base flood elevations, flood protection elevation, boundary of floodplain, and zero rise floodway.
Avoidance and Minimization Measures

12. The tank farm area at the Marine View Drive site is surrounded by a combination of soil berms and concrete walls that are three to five feet in height to prevent unintentional release of any petroleum fluids that may be lost due to an unforeseen event.

13. A Storm Water Pollution Prevention Plan (SWPPP) is in effect for the TARGA facility. The plan includes the installation of erosion and sediment controls within the facility and at the edges of the site adjacent to the Hylebos Waterway. The facility also operates under an existing NPDES permit. In addition, a Facility Response Plan (FRP) and a Spill Prevention Control and Countermeasures (SPCC) plan are already in place at the facility.

14. During loading operations, the risk of spills is limited by the use of proper loading equipment, employee training, pre-booming all transfers, and adherence to USCG and DOE requirements. The existing marine berth operates under a state-approved Contingency Plan. During shipping, all vessels are double-hulled and crewed by experienced personnel meeting competency and fatigue standards. Vessels are escorted through designated shipping lanes, and subject to inspection at all times.

15. Lighting and glare may be produced during construction activities. After construction has ended, limited high efficiency lighting will be increased within the existing tank farm areas, but it will be designed to shine downward and internal to the site. Lighting along the dock area may be adjusted to minimize impact in the water.

Conclusions

16. Priority species will not be affected as the impacts to the waterbody are primarily avoided through construction siting and construction techniques.

17. Vegetation will not be affected during construction as all structures will be constructed on improved and paved surfaces. There will be no loss of habitat or buffer functions and there will be no loss of wetland area or vegetated wetland buffer area; therefore, no compensatory mitigation is required.

18. The project areas lie outside (or above) identified floodplain areas. The proposed construction on the dock area is above the floodplain and outside of the waterway. The attachment of piping will not affect the FWHCA or fish species present in the area, therefore, no priority species were affected. All other construction areas are outside of critical areas or within improved buffers.

19. Based on the above findings, the proposal is consistent with the policies of the TMC 13.11 Critical Areas Preservation Ordinance.

Conditions

1. All construction techniques and Best Management Practices as described with the Joint Aquatic Resources Permit Application shall be employed.

Advisory Notes
2. This permit is only applicable to the proposed project as described above and based upon the information submitted by the applicant. Modifications to this proposal and future activities or development within the regulated buffers may be subject to further review and additional permits as required in accordance with TMC 13.11.

3. The applicant must obtain other approvals prior to construction as required by other local, state and federal agencies. The City of Tacoma is not the only reviewing agency with jurisdiction over the project area. The Army Corps of Engineers and State Department of Fish and Wildlife have requirements regarding work within regulated waters that may be applicable to the project.
TO: Shirley Schultz, Planning and Development Services

FROM: Karina Stone, Environmental Services Engineering Division

SUBJECT: Shoreline Substantial Development Permit (SHR2013) SEPA (SEP2013) File Numbers: 40000202779, 40000203723 2628 Marine View Drive and 1515 Taylor Way

DATE: July 25, 2013

The following information was provided to Environmental Services for evaluation as part of this proposal:

• Public Notice dated June 11, 2013 (2 pages)
• Application for Land Use Permit signed June 11, 2013 (3 pages)
• JARPA Permit Application unsigned
• Preliminary Site Plans (5 sheets)
• Marine Vapor Combustion System description, dated April 26, 2013
• SEPA Checklist signed dated June 10, 2013

Environmental Services has the following Conditions of Approval for the subject Shoreline Substantial Development Permit:

1. Environmental Services has no objection to the proposed Shoreline Substantial Development Permit. Please note that at the time of building permits, land segregation or other similar actions affecting site improvements, Environmental Services will have specific Conditions of Approval for the project. This Shoreline Substantial Development Permit shall not vest the project for surface water requirements.

Environmental Services has the following Conditions of Approval for the subject SEPA:

2. The proposal shall comply with all applicable requirements contained in the City of Tacoma Stormwater Management Manual, Side Sewer and Sanitary Sewer Availability Manual, Tacoma Municipal Code 12.08 and the Public Works Design Manual in effect at time of vesting land use actions, building or construction permitting.

An online version of the City of Tacoma Stormwater Management Manual is available at http://www.cityoftacoma.org/stormwater.

An online version of the City of Tacoma Side Sewer and Sanitary Sewer Availability Manual is available at www.govme.org under the “City Information” tab on the left side of the screen.

An online version of the Public Works Design Manual is available at www.govme.org under the “City Information” tab on the left side of the screen.

If you have questions regarding these storm and sanitary sewer conditions, please call the Environmental Services Engineering Division, Site Development Group at (253) 591-5218.
Categories: Green Category

Comments:

1. Obtain demolition permits prior to removing any existing structures.

2. All clearing and grading shall conform to the current adopted edition of the International Building Code, Chapter 36 (City of Tacoma amendment).

3. All new construction shall conform to the current adopted edition of the International Building Code, other applicable codes, state amendments, and City of Tacoma ordinances.

4. A building permit is required for the MVCU tower foundation.

5. Building permits are required for the new tanks and foundations.

6. A portion of these sites are in the 100-year flood zone. Any new construction within the flood area must conform to FEMA requirements.

Daniel P. Sully, P.E., S.E.
Structural Engineer

City of Tacoma
Community & Economic Development Department
Building and Land Use Services
747 Market Street, Room 345
Tacoma, WA 98402-3769
(253) 591-5334 FAX (253) 591-5433
dsully@cityoftacoma.org

From: Schultz, Shirley
Sent: Wednesday, June 19, 2013 3:44 PM
To: Kuntz, Craig; Rambow, Peter; Terrill, Frank; Sully, Dan; Coffman, James; Webster, Jeff; Kammerzell, Jennifer; Pierce, Ramie; Site Development; Coyne, Richard; Gaddis, John; Aplin, Alan; Price, Richard; Cornforth, Ronda; Erickson, Ryan; Ripley, Rachelle; Larson, Tracy; Porter, Hal; Angel, Jesse; McKnight, Reuben; Atkinson, Stephen; Fejarang, Kristina; Beard, Scott; Ferguson, Cheryl; Flynn, Ryan; PWRO@cityoftacoma.org
Cc: larose@healthybay.org; tlarson@co.pierce.wa.us; dbrandv@co.pierce.wa.us; Adams, Monica (Pierce