

Fact Sheet for State Waste Discharge Permit ST0045528

Tesoro Logistics Operations, LLC

February 14, 2019

Purpose of This Fact Sheet

This fact sheet explains and documents the decisions the Department of Ecology (Ecology) made in drafting the proposed State Waste Discharge permit for Tesoro Logistics Operations, LLC (TLO) that will allow discharge of wastewater to Tesoro Refining and Marketing Company LLC, Anacortes Refinery.

State law requires any commercial or industrial facility to obtain a permit before discharging waste or chemicals to municipal sanitary sewer collection and treatment systems or private wastewater treatment systems (PWTSS).

Ecology makes the draft permit and fact sheet available for public review and comment at least thirty (30) days before it issues the final permit to the facility operator. Copies of the fact sheet and draft permit for TLO, State Waste Discharge permit ST0045528, are available for public review and comment from December 12, 2018 through January 16, 2019. For more details on preparing and filing comments about these documents, please see **Appendix A - Public Involvement Information**.

TLO reviewed the draft permit and fact sheet for factual accuracy. Ecology corrected any errors or omissions about the facility's location, history, product type, production rate, discharges or other factual errors prior to publishing this draft fact sheet for public notice.

After the public comment period closes, Ecology will summarize substantive comments and our responses to them. Ecology will include our summary and responses to comments to this fact sheet as **Appendix D - Response to Comments**, and publish it when we issue the final State Waste Discharge permit. Ecology generally will not revise the rest of the fact sheet. The full document will become part of the legal history contained in the facility's permit file.

Summary

TLO is a crude oil and light products bulk storage loading/off-loading facility located in Anacortes Washington. It discharges untreated wastewater to the Tesoro Refinery's wastewater treatment system. The proposed permit includes requirements to monitor the wastewater flow and a weekly check for oil and grease at the Crude Railcar Off-Loading Facility, submit an updated spill plan, and submit discharge monitoring reports electronically.

Table of Contents

I.	<i>Introduction</i>	4
II.	<i>Background Information</i>	4
	A. Facility Description	8
	History	8
	Industrial Process(s).....	8
	Solid Wastes	9
	B. Discharge to the Tesoro WWT Plant	9
	C. Wastewater Characterization	9
	D. Summary of Compliance with Previous Permit Issued on April 9, 2013	10
	E. State Environmental Policy Act (SEPA) Compliance	10
III.	<i>Proposed Permit Limits</i>	11
	A. Design Criteria	11
	B. Technology-Based Effluent Limits	11
IV.	<i>Monitoring Requirements</i>	12
	A. Wastewater Monitoring	12
V.	<i>Other Permit Conditions</i>	13
	A. Reporting and Recordkeeping	13
	B. Operations and Maintenance	13
	C. Prohibited Discharges	13
	D. Dilution Prohibited	13
	E. Non Routine and Unanticipated Wastewater	13
	F. Spill Plan	14
	G. General Conditions	14
VI.	<i>Public Notification of Noncompliance</i>	14
VII.	<i>Permit Issuance Procedures</i>	14
	A. Permit Modifications	14
	B. Proposed Permit Issuance	14
	<i>Appendix A--Public Involvement Information</i>	16
	<i>Appendix B --Your Right to Appeal</i>	17
	<i>Appendix C--Glossary</i>	18

<i>Appendix D--Response to Comments</i>	26
Table 1 General Facility Information	4
Table 2 Crude Rail Off-Loading Facility Discharge	10
Figure 1A Tesoro/TLO location at March Point near Anacortes, WA	6
Figure 1B TLO location detail at Tesoro Refinery, March Point, Anacortes	7

I. Introduction

The legislature defined Ecology's authority and obligations for the wastewater discharge permit program in the Water Pollution Control law, Chapter 90.48 RCW (Revised Code of Washington).

Ecology adopted rules describing how it exercises its authority:

- State waste discharge program (Chapter 173-216 WAC)
- Submission of plans and reports for construction of wastewater facilities (Chapter 173-240 WAC)

These rules require any industrial facility owner/operator to obtain a State Waste Discharge permit before discharging wastewater to state waters. This rule includes commercial or industrial discharges to sewerage systems operated by municipalities, other public entities, or private entities which discharge into public waters of the state. They also help define the basis for limits on each discharge and for other performance requirements imposed by the permit.

Under the State Waste Discharge permit program and in response to a complete and accepted permit application, Ecology generally prepares a draft permit and accompanying fact sheet, and makes it available for public review before final issuance. If the volume of the discharge has not changed or if the characteristics of the discharge have not changed Ecology may choose not to issue a public notice. When Ecology publishes an announcement (public notice); it tells people where they can read the draft permit, and where to send their comments, during a period of thirty days. (See **Appendix A-Public Involvement Information** for more detail about the public notice and comment procedures). After the public comment period ends, Ecology may make changes to the draft State Waste Discharge permit in response to comment(s). Ecology will summarize the responses to comments and any changes to the permit in **Appendix D**.

II. Background Information

Table 1 General Facility Information

Facility Information	
Applicant	Tesoro Logistics Operations, LLC
Facility Name and Address	Tesoro Logistics Operations, LLC 7969 North Texas Rd Anacortes, WA 98221
Contact at Facility	Neil Norcross 360-293-9164
Responsible Official	Neil Norcross 7969 North Texas Rd Anacortes, WA 98221 360-293-9164
Industrial User Type	Minor Industrial User

Fact Sheet for State Permit **ST0045528**

Tesoro Logistics Operations, LLC

February 14, 2019

Page 5 of 28

Facility Information	
Industry Type	Crude Oil and Light Products Bulk Storage Loading/Off-Loading Facility
Facility Location (NAD83/WGS84 reference datum)	Latitude: 48.46776 Longitude: -122.553889
Treatment Plant Receiving Discharge	Tesoro Refining and Marketing Company LLC, Anacortes Refinery
Discharge Location (NAD83/WGS84 reference datum)	Latitude: 48.479242 Longitude: -122.571542

Permit Status	
Issuance Date of Previous Permit	April 9, 2013
Application for Permit Renewal Submittal Date	February 7, 2018
Date of Ecology Acceptance of Application	March 1, 2018

Inspection Status	
Date of Last Non-sampling Inspection Date	February 14, 2018

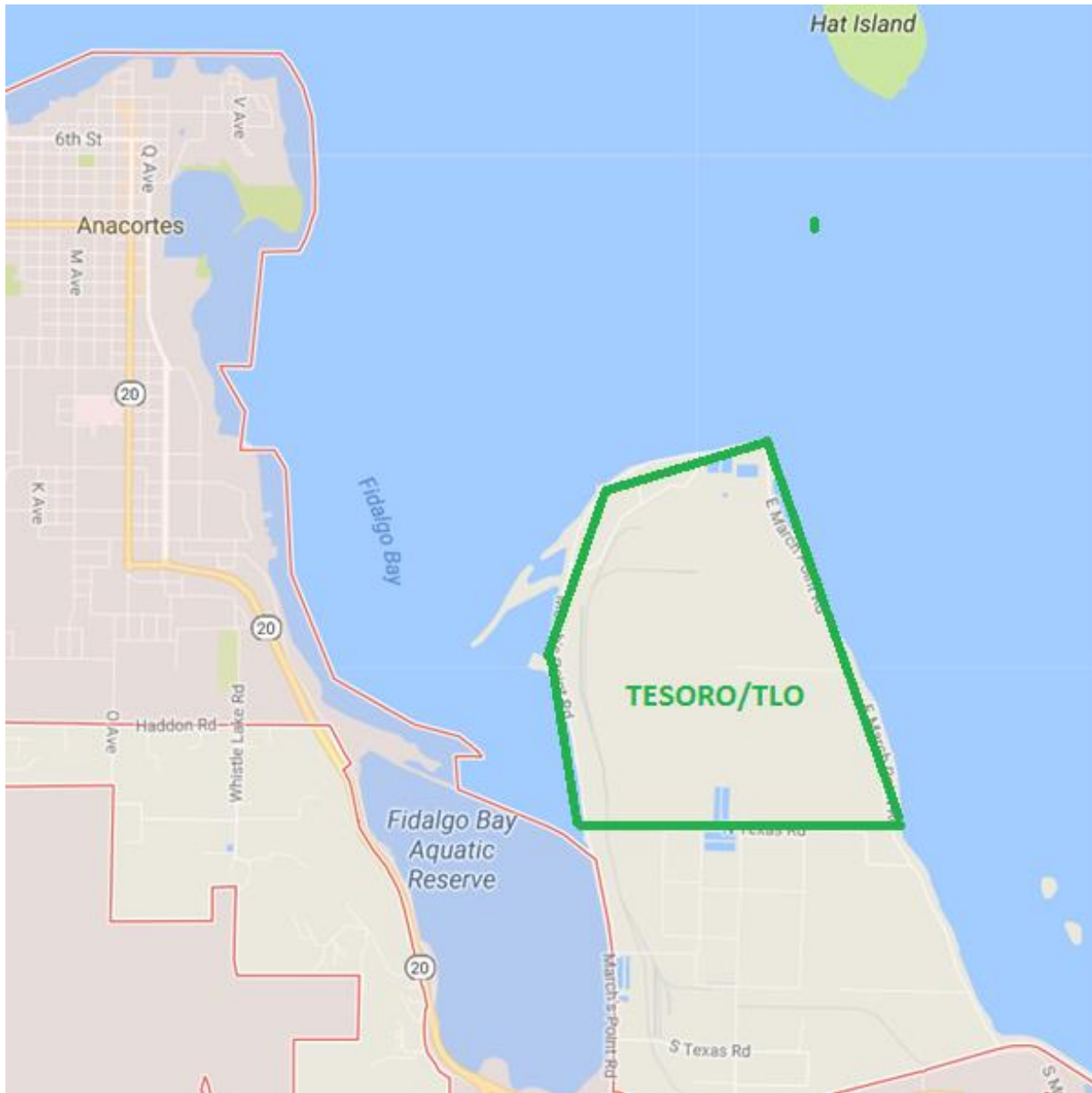


Figure 1A Tesoro/TLO location at March Point near Anacortes, WA

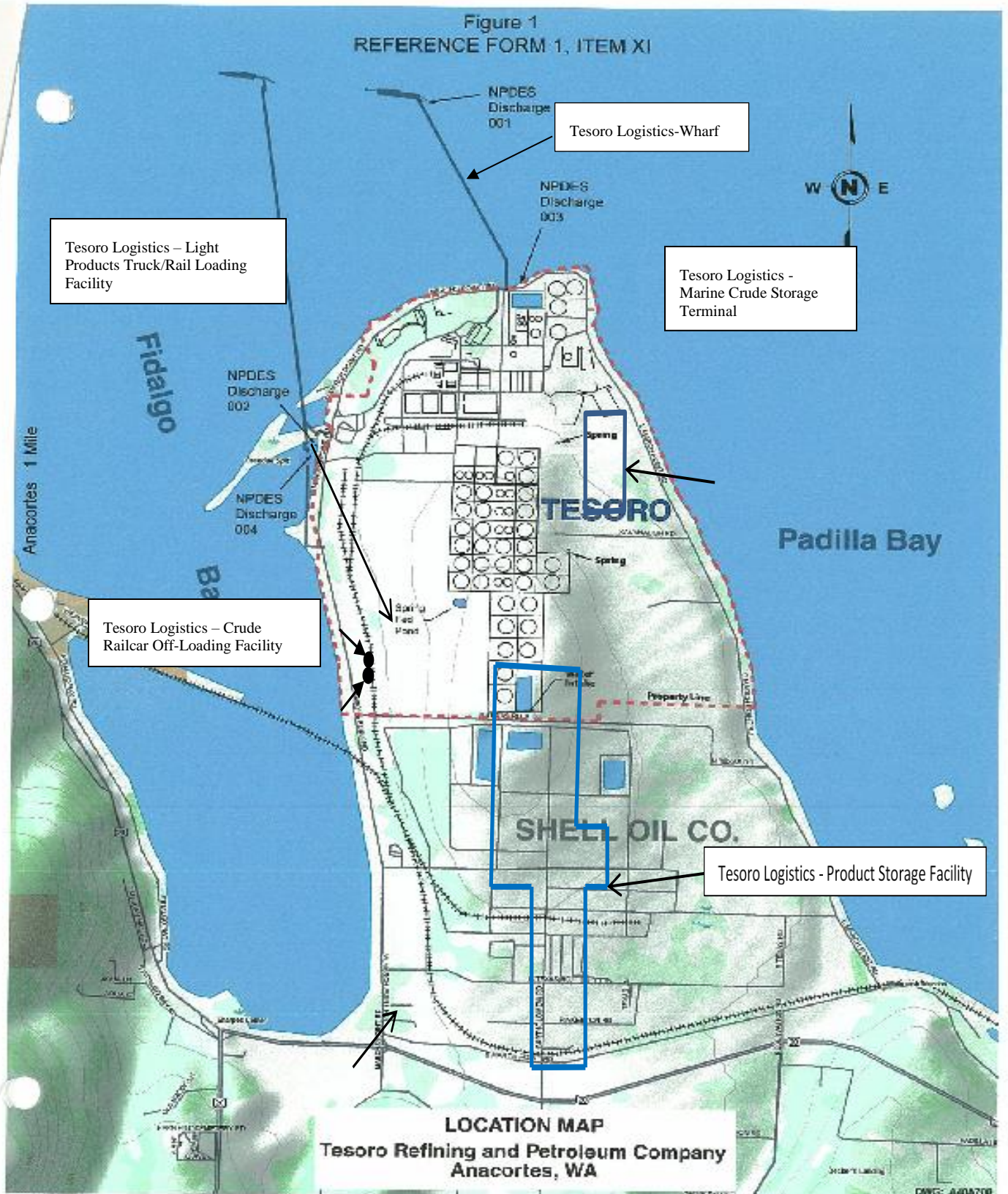


Figure 2B TLO location detail at Tesoro Refinery, March Point, Anacortes

A. Facility Description

History

This permit renewal is for a, Crude Oil and Light Products Bulk Storage and Loading/Off-Loading Facility owned by Tesoro Logistics Operations, LLC (TLO). TLO's wastewater is sent to and treated in the Tesoro Refining and Marketing Company Refinery (Tesoro) wastewater treatment system.

Industrial Process(s)

TLO consists of five operations adjacent to or within the Tesoro refinery – the Crude Railcar Off-Loading Facility, the Marine Crude Storage Terminal, the Light Products Truck/Rail Loading Facility, the Product Storage Facility, and the Wharf Facility. The TLO operations occupy portions of the Tesoro refinery complex.

The Crude Railcar Off-Loading Facility is designed to receive unit trains delivering crude oil to the Tesoro Anacortes Refinery (Petroleum Refining SIC code 2911). The facility's function is to unload crude oil from railcars and deliver the material via pipeline to aboveground storage tanks at the refinery (Transportation Support Services NAICS code 488210 or SIC code 4789). Unit trains that arrive at the facility are split up and parked on a four lane unloading platform that can accommodate 100 railcars at a time. The railcars are connected to flexible hoses that allow the crude to gravity drain to an underground manifold where it is pumped to the refinery tanks.

The unloading platform was designed to provide secondary containment in the event of a spill during the crude transfer. The platform incorporates curbs and surface drains that will direct a spill to an underground vault designed to handle a worst case release. Stormwater captured in the unloading platform drain system and any spilled material is pumped from the vault to the refinery wastewater treatment system.

In addition to the unloading platform, the facility has a railcar maintenance area where light maintenance and railcar cleaning can be performed. The maintenance area has a containment pad and drain system that connects to the unloading platform drain system. Wash water is generated at the maintenance pad when a railcar arrives at the facility with oil on its exterior that must be cleaned off before it can depart the site. Few railcars arrive in this condition and railcar cleaning is not a routine activity.

The Marine Crude Storage Terminal is designed to receive and deliver tanker shipments of crude oil and other heavy feedstocks arriving at the Tesoro Anacortes Refinery. The facility's function is to store petroleum products that have been shipped to the refinery or will be shipped from the refinery by tanker. The 17-acre facility has four above ground storage tanks with a combined capacity of 1,550 barrels. Wastewater from this facility includes tank dewatering water and stormwater runoff. Wastewater from this area is received at the refinery wastewater treatment system primarily by gravity draining the tanks and secondary containment basins.

Light Products Truck/Rail Loading Facility (Petroleum Bulk Stations SIC code 5171) transfers refined petroleum products, including butane, propane, ethanol, diesel fuel, and gasoline from above ground storage tanks to trucks or railcars.

The truck and railcar terminals incorporate secondary containment in the event of a spill during product transfer.

The containment pads drain to an underground sump that is designed to contain a worst case release. Stormwater from the loading facility also drains to the sump and stormwater and spilled material are pumped to the refinery wastewater treatment system.

The Product Storage Facility is designed to store crude oil that arrives by pipeline or railcar and intermediate and finished petroleum products (primarily gasoline, jet fuel diesel fuel and their associated components) received from the Tesoro Refinery. The finished products are shipped from the facility via pipeline, ship, railcar, or truck. The 131-acre facility has 106 above ground storage tanks. Wastewater from this facility includes tank dewatering water and stormwater runoff. Wastewater from this area is received at the refinery wastewater treatment system primarily by gravity draining the tanks and secondary containment basins.

The Tesoro Logistics Wharf Facility loads and unloads barges and tanker vessels transporting crude oil and refined products to the Tesoro Anacortes Refinery. The product transfer area of the facility is provided with secondary containment in the event of a spill. Stormwater and oil from equipment maintenance and product changes are collected in a sump that is pumped to the refinery wastewater treatment plant.

Wastewater pretreatment

TLO has no wastewater treatment facility on-site. All wastewater is discharged to and treated at the Tesoro refinery wastewater treatment (WWT) facility.

Solid Wastes

No solid wastes are generated as a result of wastewater treatment at the TLO Anacortes site.

B. Discharge to the Tesoro WWT Plant

All process wastewater and stormwater generated at the TLO site is sent to Tesoro's WWT plant. After providing primary, secondary, and tertiary wastewater treatment, Tesoro typically discharges 3 million gallons per day into the north end of Fidalgo Bay. Tesoro has a NPDES wastewater discharge permit that requires extensive monitoring of their discharge. Flow is measured and recorded by a meter.

C. Wastewater Characterization

TLO reported pollutant concentrations in the wastewater in the September 4, 2017 permit renewal application. The tabulated data represents the quality of the wastewater discharged from their operations in December of 2012. The effluent is characterized as follows:

Table 2 Crude Rail Off-Loading Facility Discharge

Parameter	Units	# of Samples	Max Value
Oil and Grease	mg/L	30	45.9
BOD ₅	mg/L	30	240
Total Suspended Solids	mg/L	30	134
COD	mg/L	2	46
Mercury	pg/L	2	<100
Arsenic	ug/L	2	2.9
Chromium	ug/L	2	2.2
Copper	ug/L	2	6.4
Lead	ug/L	2	7
Nickel	ug/L	2	3.1
Selenium	ug/L	2	<2
Zinc	ug/L	2	43

D. Summary of Compliance with Previous Permit Issued on April 9, 2013

The previous permit did not include effluent limitations for TLO’s wastewater. TLO has complied with the permit conditions throughout the duration of the temporary permit issues on April 9, 2013. Ecology assessed compliance based on inspections conducted of the facility.

E. State Environmental Policy Act (SEPA) Compliance

State law exempts the issuance, reissuance or modification of any wastewater discharge permit from the SEPA process as long as the permit contains conditions that are no less stringent than federal and state rules and regulations (RCW 43.21C.0383). The exemption applies only to existing discharges, not to new discharges.

III. Proposed Permit Limits

State regulations require that Ecology base limits, if applicable, in a State Waste Discharge permit on the:

- Technology and treatment methods available to treat specific pollutants (technology-based). Technology-based limits are set by the EPA and published as a regulation (40 CFR 400 - 471), or Ecology develops limits on a case-by-case basis (40 CFR 125.3, and RCW 90.48). Dischargers must treat wastewater using all known, available, reasonable methods of prevention, control, and treatment (AKART).
- Effects of the pollutants on the publicly-owned treatment works (POTW). Wastewater must not interfere with the operation of the POTW. Ecology considers local limits in developing permit limits.
- Applicable requirements of other local, state and federal laws.

Ecology applies the most stringent of these limits to each parameter of concern and further describes the proposed limits below.

Ecology evaluated the permit application and determined that limits were not needed to comply with the rules adopted by the state of Washington. Ecology does not develop effluent limits for all reported pollutants. Some pollutants are not treatable at the concentrations reported, are not controllable at the source, and are not listed in regulation.

Ecology does not usually develop permit limits for pollutants not reported in the permit application but may be present in the discharge. The permit does not authorize the discharge of the non-reported pollutants. During the five-year permit term, the facility's effluent discharge conditions may change from those conditions reported in the permit application. The facility must notify Ecology if significant changes occur in any constituent. Until Ecology modifies the permit to reflect additional discharge of pollutants, a permitted facility could be violating its permit.

A. Design Criteria

According to WAC 173-216-110(4), neither flows nor waste loadings may exceed approved design criteria. The Tesoro refinery receives and treats the TLO wastewater. Ecology has determined that the refinery's wastewater treatment system is adequately sized and configured to treat TLO's wastewater.

B. Technology-Based Effluent Limits

Waste discharge permits issued by Ecology specify conditions requiring all available and reasonable methods of prevention, control, and treatment (AKART) of discharges to waters of the state (RCW 90.48). The Best Management Practices (BMPs) in the 2012 Stormwater Management Manual for Western Washington, as amended in December 2014 is considered AKART for stormwater.

The state waste discharge permit regulations include restrictions and prohibitions to protect publicly-owned sewerage systems. A facility may not discharge any wastewater having a pH less than 5.0 or greater than 11.0 or having any other corrosive property capable of causing damage or hazard to structures, equipment, or personnel unless the:

- System is specifically designed to accommodate such discharge.
- Discharge is authorized by a permit (WAC 173-216-060).

Federal regulations (40 CFR 403.5b) also prohibit the discharge of pollutants which will cause corrosive structural damage to the POTW. The federal regulations also prohibit discharges with pH lower than 5.0, unless the collection and treatment system is designed to accommodate such discharges.

These rules do not apply to privately owned sewerage systems. TLO discharges to a privately owned wastewater treatment system operated by the Tesoro Anacortes Refinery.

Ecology exercised best professional judgement in deciding not to include effluent limits for TLO's wastewater prior to discharging to the Tesoro refinery's wastewater treatment system. Effluent limits are included in state waste discharge permits to protect the receiving wastewater treatment facility from pass-through, interference, concentrations of toxic chemicals, or potentially hazardous exposure levels. The characteristics of TLO's wastewater are similar to the refinery's wastewater since the TLO operations are ancillary facilities to the refinery and handle the same materials. The volumes of wastewater generated at TLO are minor compared to the volume of wastewater generated by the refinery process so there is minimal hydraulic impact to Tesoro's wastewater treatment system. TLO has been operating in the same manner for many years and has not caused any problems or concerns to the receiving wastewater treatment system operated by Tesoro.

IV. Monitoring Requirements

Ecology requires monitoring, recording, and reporting (WAC 173-216-110) to verify that the treatment process functions correctly and that the discharge complies with the permit's effluent limits.

If a facility uses a contract laboratory to monitor wastewater, it must ensure that the laboratory uses the methods and meets or exceeds the method detection levels required by the permit. The permit describes when facilities may use alternative methods. It also describes what to do in certain situations when the laboratory encounters matrix effects. When a facility uses an alternative method as allowed by the permit, it must report the test method, detection level (DL), and quantitation level (QL) on the discharge monitoring report or in the required report.

A. Wastewater Monitoring

Ecology details the proposed monitoring schedule under Special Condition S2. Specified monitoring frequencies take into account the quantity and variability of the discharge, the treatment method, past compliance, significance of pollutants, and cost of monitoring.

V. Other Permit Conditions

A. Reporting and Recordkeeping

Ecology based Special Condition S3 on its authority to specify any appropriate reporting and recordkeeping requirements to prevent and control waste discharges [WAC 173-216-110 and CFR 403.12 (e),(g), and (h)].

B. Operations and Maintenance

Ecology requires dischargers to take all reasonable steps to properly operate and maintain their facilities or systems of control which are installed to achieve compliance with the terms and conditions of the permit and state regulations (WAC 173-216-110). Proper operation and maintenance includes adequate laboratory controls and appropriate quality assurance procedures. This may require the operation of back-up or auxiliary facilities or similar systems, which are installed by a Permittee when the operation is necessary to achieve compliance with the conditions of this permit.

C. Prohibited Discharges

Ecology prohibits certain pollutants from being discharged to the Private Wastewater Treatment System (PWTS). These include substances which cause pass-through or interference, pollutants which may cause damage to the PWTS or harm to the PWTS workers (Chapter 173-216 WAC) and the discharge of designated dangerous wastes not authorized by this permit (Chapter 173-303 WAC).

D. Dilution Prohibited

Ecology prohibits the facility from diluting its effluent as a partial or complete substitute for adequate treatment to achieve compliance with permit limits.

E. Non Routine and Unanticipated Wastewater

Occasionally, this facility may generate wastewater not characterized in the permit application because it is not a routine discharge and the facility did not anticipate it at the time of application. These wastes typically consist of waters used to pressure-test storage tanks or fire water systems or of leaks from drinking water systems.

The permit authorizes the discharge of non-routine and unanticipated wastewater under certain conditions. The facility must characterize these waste waters for pollutants and examine the opportunities for reuse. Depending on the nature and extent of pollutants in this wastewater and on any opportunities for reuse, Ecology may:

- Authorize the facility to discharge the water.
- Require the facility to treat the wastewater.
- Require the facility to reuse the wastewater.

F. Spill Plan

This facility stores a quantity of chemicals and manages raw materials and products on-site that have the potential to cause water pollution and/or interference or pass through at the receiving PWTs if accidentally released. Ecology can require a facility to develop best management plans to prevent this accidental release [Section 402(a)(1) of the Federal Water Pollution Control Act (FWPCA) and RCW 90.48.080].

TLO developed a spill plan for preventing the accidental release of pollutants to state waters, to the receiving treatment plant, and for minimizing damages if such a spill occurs. The spill plan included a stormwater section addressing Best Management Practices employed at the facility to prevent chemicals, raw materials, and products from contacting stormwater. The proposed permit requires the facility to update this plan and submit it to Ecology.

G. General Conditions

Ecology bases the standardized general conditions on state law and regulations. They are included in all state waste discharge permits issued by Ecology.

VI. Public Notification of Noncompliance

Ecology may annually publish a list of all industrial users in significant noncompliance with Pretreatment Standards or Requirements during any of the previous four quarters in a local newspaper.

VII. Permit Issuance Procedures

A. Permit Modifications

Ecology may modify this permit to impose or change effluent limits, if necessary to comply with changes in the pretreatment requirements, conditions in local sewer ordinances, or based on new information from sources such as inspections and effluent monitoring. It may also modify this permit to comply with new or amended state or federal regulations.

B. Proposed Permit Issuance

This proposed permit meets all statutory requirements for authorizing a wastewater discharge, including those limits and conditions believed necessary to control toxics. Ecology proposes that the permit be issued for 5 years.

VIII. **References for Text and Appendices**

Washington State Department of Ecology.

Laws and Regulations (<https://ecology.wa.gov/About-us/How-we-operate/Laws-rules-rulemaking>)

Permit and Wastewater Related Information (<https://ecology.wa.gov/Regulations-Permits/Guidance-technical-assistance/Water-quality-permits-guidance/>)

July 2018. *Permit Writer's Manual*, Publication Number 92-109
(<https://fortress.wa.gov/ecy/publications/summarypages/92109.html>)

February 2007. *Focus Sheet on Solid Waste Control Plan, Developing a Solid Waste Control Plan for Industrial Wastewater Discharge Permittees*, Publication Number 07-10-024.
(<https://fortress.wa.gov/ecy/publications/documents/0710024.pdf>)

Appendix A--Public Involvement Information

Ecology proposes to reissue a permit to TLO Gas North America, LLC. The permit includes wastewater discharge monitoring and other conditions. This fact sheet describes the facility and Ecology's reasons for requiring permit conditions.

Ecology will place a Public Notice of Draft on December 12, 2018 in the Anacortes American publication of the Skagit Valley Herald to inform the public and to invite comment on the proposed draft State Waste Discharge permit and fact sheet.

The notice:

- Tells where copies of the draft Permit and Fact Sheet are available for public evaluation (a local public library, the closest Regional or Field Office, posted on our website).
- Offers to provide the documents in an alternate format to accommodate special needs.
- Urges people to submit their comments, in writing, before the end of the Comment Period
- Tells how to request a public hearing of comments about the proposed state waste discharge permit.
- Explains the next step(s) in the permitting process.

Ecology published a document called *Frequently Asked Questions about Effective Public Commenting*, which is available on our website at <https://fortress.wa.gov/ecy/publications/SummaryPages/0307023.html>.

You may obtain further information from Ecology by telephone, 360-407-6937 or by writing to the address listed below.

Water Quality Permit Coordinator
Department of Ecology
Industrial Section
PO Box 47600
Olympia, WA 98504-7600

The primary author of this permit and fact sheet is J. Mark Dirkx.

Appendix B --Your Right to Appeal

You have a right to appeal this permit to the Pollution Control Hearing Board (PCHB) within 30 days of the date of receipt of the final permit. The appeal process is governed by chapter 43.21B RCW and chapter 371-08 WAC. "Date of receipt" is defined in RCW 43.21B.001(2) (see glossary).

To appeal you must do the following within 30 days of the date of receipt of this permit:

- File your appeal and a copy of this permit with the PCHB (see addresses below). Filing means actual receipt by the PCHB during regular business hours.
- Serve a copy of your appeal and this permit on Ecology in paper form - by mail or in person. (See addresses below.) E-mail is not accepted.

You must also comply with other applicable requirements in chapter 43.21B RCW and chapter 371-08 WAC.

ADDRESS AND LOCATION INFORMATION

Street Addresses	Mailing Addresses
Department of Ecology Attn: Appeals Processing Desk 300 Desmond Drive SE Lacey, WA 98503	Department of Ecology Attn: Appeals Processing Desk PO Box 47608 Olympia, WA 98504-7608
Pollution Control Hearings Board 1111 Israel Road SW STE 301 Tumwater, WA 98501	Pollution Control Hearings Board PO Box 40903 Olympia, WA 98504-0903

Appendix C--Glossary

1-DMax or 1-day maximum temperature -- The highest water temperature reached on any given day. This measure can be obtained using calibrated maximum/minimum thermometers or continuous monitoring probes having sampling intervals of thirty minutes or less.

7-DADMax or 7-day average of the daily maximum temperatures -- The arithmetic average of seven consecutive measures of daily maximum temperatures. The 7-DADMax for any individual day is calculated by averaging that day's daily maximum temperature with the daily maximum temperatures of the three days prior and the three days after that date.

Acute toxicity --The lethal effect of a compound on an organism that occurs in a short time period, usually 48 to 96 hours.

AKART -- The acronym for "all known, available, and reasonable methods of prevention, control and treatment." AKART is a technology-based approach to limiting pollutants from wastewater discharges, which requires an engineering judgment and an economic judgment. AKART must be applied to all wastes and contaminants prior to entry into waters of the state in accordance with RCW 90.48.010 and 520, WAC 173-200-030(2)(c)(ii), and WAC 173-216-110(1)(a).

Alternate point of compliance -- An alternative location in the groundwater from the point of compliance where compliance with the groundwater standards is measured. It may be established in the groundwater at locations some distance from the discharge source, up to, but not exceeding the property boundary and is determined on a site specific basis following an AKART analysis. An "early warning value" must be used when an alternate point is established. An alternate point of compliance must be determined and approved in accordance with WAC 173-200-060(2).

Ambient water quality -- The existing environmental condition of the water in a receiving water body.

Ammonia -- Ammonia is produced by the breakdown of nitrogenous materials in wastewater. Ammonia is toxic to aquatic organisms, exerts an oxygen demand, and contributes to eutrophication. It also increases the amount of chlorine needed to disinfect wastewater.

Annual average design flow (AADF -- average of the daily flow volumes anticipated to occur over a calendar year.

Average monthly (intermittent) discharge limit-- The average of the measured values obtained over a calendar month's time taking into account zero discharge days.

Average monthly discharge limit -- The average of the measured values obtained over a calendar month's time.

Background water quality -- The concentrations of chemical, physical, biological or radiological constituents or other characteristics in or of groundwater at a particular point in time upgradient of an activity that has not been affected by that activity, [WAC 173-200-020(3)]. Background water quality for any parameter is statistically defined as the 95% upper tolerance interval with a 95% confidence based on at least eight hydraulically upgradient water quality samples. The eight samples are collected over a period of at least one year, with no more than one sample collected during any month in a single calendar year.

Best management practices (BMPs) -- Schedules of activities, prohibitions of practices, maintenance procedures, and other physical, structural and/or managerial practices to prevent or reduce the pollution of waters of the state. BMPs include treatment systems, operating procedures, and practices to control: plant site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage. BMPs may be further categorized as operational, source control, erosion and sediment control, and treatment BMPs.

BOD₅ -- Determining the five-day Biochemical Oxygen Demand of an effluent is an indirect way of measuring the quantity of organic material present in an effluent that is utilized by bacteria. The BOD₅ is used in modeling to measure the reduction of dissolved oxygen in receiving waters after effluent is discharged. Stress caused by reduced dissolved oxygen levels makes organisms less competitive and less able to sustain their species in the aquatic environment. Although BOD₅ is not a specific compound, it is defined as a conventional pollutant under the federal Clean Water Act.

Bypass -- The intentional diversion of waste streams from any portion of a treatment facility.

Categorical pretreatment standards -- National pretreatment standards specifying quantities or concentrations of pollutants or pollutant properties, which may be discharged to a POTW by existing or new industrial users in specific industrial subcategories.

Chlorine -- A chemical used to disinfect wastewaters of pathogens harmful to human health. It is also extremely toxic to aquatic life.

Chronic toxicity -- The effect of a compound on an organism over a relatively long time, often 1/10 of an organism's lifespan or more. Chronic toxicity can measure survival, reproduction or growth rates, or other parameters to measure the toxic effects of a compound or combination of compounds.

Clean water act (CWA) -- The federal Water Pollution Control Act enacted by Public Law 92-500, as amended by Public Laws 95-217, 95-576, 96-483, 97-117; USC 1251 et seq.

Compliance inspection-without sampling -- A site visit for the purpose of determining the compliance of a facility with the terms and conditions of its permit or with applicable statutes and regulations.

Compliance inspection-with sampling -- A site visit for the purpose of determining the compliance of a facility with the terms and conditions of its permit or with applicable statutes and regulations. In addition it includes as a minimum, sampling and analysis for all parameters with limits in the permit to ascertain compliance with those limits; and, for municipal facilities, sampling of influent to ascertain compliance with the 85 percent removal requirement. Ecology may conduct additional sampling.

Composite sample -- A mixture of grab samples collected at the same sampling point at different times, formed either by continuous sampling or by mixing discrete samples. May be "time-composite" (collected at constant time intervals) or "flow-proportional" (collected either as a constant sample volume at time intervals proportional to stream flow, or collected by increasing the volume of each aliquot as the flow increased while maintaining a constant time interval between the aliquots).

Construction activity -- Clearing, grading, excavation, and any other activity, which disturbs the surface of the land. Such activities may include road building; construction of residential houses, office buildings, or industrial buildings; and demolition activity.

Continuous monitoring -- Uninterrupted, unless otherwise noted in the permit.

Critical condition -- The time during which the combination of receiving water and waste discharge conditions have the highest potential for causing toxicity in the receiving water environment. This situation usually occurs when the flow within a water body is low, thus, its ability to dilute effluent is reduced.

Date of receipt -- This is defined in RCW 43.21B.001(2) as five business days after the date of mailing; or the date of actual receipt, when the actual receipt date can be proven by a preponderance of the evidence. The recipient's sworn affidavit or declaration indicating the date of receipt, which is unchallenged by the agency, constitutes sufficient evidence of actual receipt. The date of actual receipt, however, may not exceed forty-five days from the date of mailing.

Detection limit -- The minimum concentration of a substance that can be measured and reported with 99 percent confidence that the pollutant concentration is above zero and is determined from analysis of a sample in a given matrix containing the pollutant.

Dilution factor (DF) -- A measure of the amount of mixing of effluent and receiving water that occurs at the boundary of the mixing zone. Expressed as the inverse of the percent effluent fraction, for example, a dilution factor of 10 means the effluent comprises 10% by volume and the receiving water 90%.

Distribution uniformity -- The uniformity of infiltration (or application in the case of sprinkle or trickle irrigation) throughout the field expressed as a percent relating to the average depth infiltrated in the lowest one-quarter of the area to the average depth of water infiltrated.

Early warning value -- The concentration of a pollutant set in accordance with WAC 173-200-070 that is a percentage of an enforcement limit. It may be established in the effluent, groundwater, surface water, the vadose zone or within the treatment process. This value acts as a trigger to detect and respond to increasing contaminant concentrations prior to the degradation of a beneficial use.

Enforcement limit -- The concentration assigned to a contaminant in the groundwater at the point of compliance for the purpose of regulation, [WAC 173-200-020(11)]. This limit assures that a groundwater criterion will not be exceeded and that background water quality will be protected.

Engineering report -- A document that thoroughly examines the engineering and administrative aspects of a particular domestic or industrial wastewater facility. The report must contain the appropriate information required in WAC 173-240-060 or 173-240-130.

Fecal coliform bacteria -- Fecal coliform bacteria are used as indicators of pathogenic bacteria in the effluent that are harmful to humans. Pathogenic bacteria in wastewater discharges are controlled by disinfecting the wastewater. The presence of high numbers of fecal coliform bacteria in a water body can indicate the recent release of untreated wastewater and/or the presence of animal feces.

Grab sample -- A single sample or measurement taken at a specific time or over as short a period of time as is feasible.

Groundwater -- Water in a saturated zone or stratum beneath the surface of land or below a surface water body.

Industrial user -- A discharger of wastewater to the sanitary sewer that is not sanitary wastewater or is not equivalent to sanitary wastewater in character.

Industrial wastewater -- Water or liquid-carried waste from industrial or commercial processes, as distinct from domestic wastewater. These wastes may result from any process or activity of industry, manufacture, trade or business; from the development of any natural resource; or from animal operations such as feed lots, poultry houses, or dairies. The term includes contaminated stormwater and, also, leachate from solid waste facilities.

Interference -- A discharge which, alone or in conjunction with a discharge or discharges from other sources, both:

- Inhibits or disrupts the POTW, its treatment processes or operations, or its sludge processes, use or disposal; and
- Therefore is a cause of a violation of any requirement of the POTW's NPDES permit (including an increase in the magnitude or duration of a violation) or of the prevention of sewage sludge use or disposal in compliance with the following statutory provisions and regulations or permits issued thereunder (or more stringent State or local regulations): Section 405 of the Clean Water Act, the Solid Waste Disposal Act (SWDA) (including title II, more commonly referred to as the Resource Conservation and Recovery Act (RCRA), and including State regulations contained in any State sludge management plan prepared pursuant to subtitle D of the SWDA), sludge regulations appearing in 40 CFR Part 507, the Clean Air Act, the Toxic Substances Control Act, and the Marine Protection, Research and Sanctuaries Act.

Local limits -- Specific prohibitions or limits on pollutants or pollutant parameters developed by a POTW.

Major facility -- A facility discharging to surface water with an EPA rating score of > 80 points based on such factors as flow volume, toxic pollutant potential, and public health impact.

Maximum daily discharge limit -- The highest allowable daily discharge of a pollutant measured during a calendar day or any 24-hour period that reasonably represents the calendar day for purposes of sampling. The daily discharge is calculated as the average measurement of the pollutant over the day.

Maximum day design flow (MDDF) -- The largest volume of flow anticipated to occur during a one-day period, expressed as a daily average.

Maximum month design flow (MMDF) -- The largest volume of flow anticipated to occur during a continuous 30-day period, expressed as a daily average.

Maximum week design flow (MWDF) -- The largest volume of flow anticipated to occur during a continuous 7-day period, expressed as a daily average.

Method detection level (MDL) -- See Detection Limit.

Minor facility -- A facility discharging to surface water with an EPA rating score of < 80 points based on such factors as flow volume, toxic pollutant potential, and public health impact.

Mixing zone -- An area that surrounds an effluent discharge within which water quality criteria may be exceeded. The permit specifies the area of the authorized mixing zone that Ecology defines following procedures outlined in state regulations (chapter 173-201A WAC).

National pollutant discharge elimination system (NPDES) -- The NPDES (Section 402 of the Clean Water Act) is the federal wastewater permitting system for discharges to navigable waters of the United States. Many states, including the state of Washington, have been delegated the authority to issue these permits. NPDES permits issued by Washington State permit writers are joint NPDES/State permits issued under both state and federal laws.

pH -- The pH of a liquid measures its acidity or alkalinity. It is the negative logarithm of the hydrogen ion concentration. A pH of 7 is defined as neutral and large variations above or below this value are considered harmful to most aquatic life.

Pass-through -- A discharge which exits the POTW into waters of the State in quantities or concentrations which, alone or in conjunction with a discharge or discharges from other sources, is a cause of a violation of any requirement of the POTW's NPDES permit (including an increase in the magnitude or duration of a violation), or which is a cause of a violation of State water quality standards.

Peak hour design flow (PHDF) -- The largest volume of flow anticipated to occur during a one-hour period, expressed as a daily or hourly average.

Peak instantaneous design flow (PIDF) -- The maximum anticipated instantaneous flow.

Point of compliance -- The location in the groundwater where the enforcement limit must not be exceeded and a facility must comply with the Ground Water Quality Standards. Ecology determines this limit on a site-specific basis. Ecology locates the point of compliance in the groundwater as near and directly downgradient from the pollutant source as technically, hydrogeologically, and geographically feasible, unless it approves an alternative point of compliance.

Potential significant industrial user (PSIU) --A potential significant industrial user is defined as an Industrial User that does not meet the criteria for a Significant Industrial User, but which discharges wastewater meeting one or more of the following criteria:

- a. Exceeds 0.5 % of treatment plant design capacity criteria and discharges <25,000 gallons per day or;
- b. Is a member of a group of similar industrial users which, taken together, have the potential to cause pass through or interference at the POTW (e.g. facilities which develop photographic film or paper, and car washes).
Ecology may determine that a discharger initially classified as a potential significant industrial user should be managed as a significant industrial user.

Quantitation level (QL) -- Also known as Minimum Level of Quantitation (ML) – The lowest level at which the entire analytical system must give a recognizable signal and acceptable calibration point for the analyte. It is equivalent to the concentration of the lowest calibration standard, assuming that the lab has used all method-specified sample weights, volumes, and cleanup procedures.

The QL is calculated by multiplying the MDL by 3.18 and rounding the result to the number nearest to $(1,2, \text{or } 5) \times 10^n$, where n is an integer. (64 FR 30417).

ALSO GIVEN AS:

The smallest detectable concentration of analyte greater than the Detection Limit (DL) where the accuracy (precision & bias) achieves the objectives of the intended purpose. (Report of the Federal Advisory Committee on Detection and Quantitation Approaches and Uses in Clean Water Act Programs Submitted to the US Environmental Protection Agency December 2007).

Reasonable potential -- A reasonable potential to cause a water quality violation, or loss of sensitive and/or important habitat.

Responsible corporate officer -- A president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy- or decision-making functions for the corporation, or the manager of one or more manufacturing, production, or operating facilities employing more than 250 persons or have gross annual sales or expenditures exceeding \$25 million (in second quarter 1980 dollars), if authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures (40 CFR 122.22).

Sample Maximum -- No sample may exceed this value.

Significant industrial user (SIU) --

- 1) All industrial users subject to Categorical Pretreatment Standards under 40 CFR 403.6 and 40 CFR Chapter I, Subchapter N and;
- 2) Any other industrial user that: discharges an average of 25,000 gallons per day or more of process wastewater to the POTW (excluding sanitary, noncontact cooling, and boiler blow-down wastewater); contributes a process wastestream that makes up 5 percent or more of the average dry weather hydraulic or organic capacity of the POTW treatment plant; or is designated as such by the Control Authority* on the basis that the industrial user has a reasonable potential for adversely affecting the POTW's operation or for violating any pretreatment standard or requirement [in accordance with 40 CFR 403.8(f)(6)].

Upon finding that the industrial user meeting the criteria in paragraph 2, above, has no reasonable potential for adversely affecting the POTW's operation or for violating any pretreatment standard or requirement, the Control Authority* may at any time, on its own initiative or in response to a petition received from an industrial user or POTW, and in accordance with 40 CFR 403.8(f)(6), determine that such industrial user is not a significant industrial user.

*The term "Control Authority" refers to the Washington State Department of Ecology in the case of non-delegated POTWs or to the POTW in the case of delegated POTWs.

Slug discharge -- Any discharge of a non-routine, episodic nature, including but not limited to an accidental spill or a non-customary batch discharge to the POTW. This may include any pollutant released at a flow rate that may cause interference or pass through with the POTW or in any way violate the permit conditions or the POTW's regulations and local limits.

Soil scientist -- An individual who is registered as a Certified or Registered Professional Soil Scientist or as a Certified Professional Soil Specialist by the American Registry of Certified Professionals in Agronomy, Crops, and Soils or by the National Society of Consulting Scientists or who has the credentials for membership. Minimum requirements for eligibility are: possession of a baccalaureate, masters, or doctorate degree from a U.S. or Canadian institution with a minimum of 30 semester hours or 45 quarter hours professional core courses in agronomy, crops or soils, and have 5,3,or 1 years, respectively, of professional experience working in the area of agronomy, crops, or soils.

Solid waste -- All putrescible and non-putrescible solid and semisolid wastes including, but not limited to, garbage, rubbish, ashes, industrial wastes, swill, sewage sludge, demolition and construction wastes, abandoned vehicles or parts thereof, contaminated soils and contaminated dredged material, and recyclable materials.

Soluble BOD₅ -- Determining the soluble fraction of Biochemical Oxygen Demand of an effluent is an indirect way of measuring the quantity of soluble organic material present in an effluent that is utilized by bacteria. Although the soluble BOD₅ test is not specifically described in Standard Methods, filtering the raw sample through at least a 1.2 um filter prior to running the standard BOD₅ test is sufficient to remove the particulate organic fraction.

State waters -- Lakes, rivers, ponds, streams, inland waters, underground waters, salt waters, and all other surface waters and watercourses within the jurisdiction of the state of Washington.

Stormwater--That portion of precipitation that does not naturally percolate into the ground or evaporate, but flows via overland flow, interflow, pipes, and other features of a stormwater drainage system into a defined surface water body, or a constructed infiltration facility.

Technology-based effluent limit -- A permit limit based on the ability of a treatment method to reduce the pollutant.

Total coliform bacteria--A microbiological test, which detects and enumerates the total coliform group of bacteria in water samples.

Total dissolved solids--That portion of total solids in water or wastewater that passes through a specific filter.

Total maximum daily load (TMDL) --A determination of the amount of pollutant that a water body can receive and still meet water quality standards.

Total suspended solids (TSS) -- Total suspended solids is the particulate material in an effluent. Large quantities of TSS discharged to a receiving water may result in solids accumulation. Apart from any toxic effects attributable to substances leached out by water, suspended solids may kill fish, shellfish, and other aquatic organisms by causing abrasive injuries and by clogging the gills and respiratory passages of various aquatic fauna. Indirectly, suspended solids can screen out light and can promote and maintain the development of noxious conditions through oxygen depletion.

Upset -- An exceptional incident in which there is unintentional and temporary noncompliance with technology-based permit effluent limits because of factors beyond the reasonable control of the Permittee.

An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, lack of preventative maintenance, or careless or improper operation.

Water quality-based effluent limit -- A limit imposed on the concentration of an effluent parameter to prevent the concentration of that parameter from exceeding its water quality criterion after discharge into receiving waters.

Appendix D--Response to Comments

Entity Review

Entity review ran from May 4, 2018 to June 5, 2018 with supplemental reviews June 4 to June 12 and October 5 to October 12, 2018. Tesoro Logistics Operations (TLO) reviewed the draft permit and fact sheet for factual accuracy. Ecology corrected any errors or omissions regarding the facility's location, history, discharges, or receiving water prior to publishing this draft fact sheet for public notice.

Public Review

Ecology made the draft permit and fact sheet available for public review and comment before issuing the final permit. Ecology published notice of the opportunity to comment on the renewal of this permit in The Anacortes American on December 12, 2018. In the notice, we invited public review of the proposed permit and provided a 30-day public comment period. The deadline for submittal of written comments was January 16, 2019.

During the comment period, we received comments from Annabelle Fox and Friends of the San Juan's in Anacortes.

The original comments comprise part of the legal record for this permit. The record is available for public review at Ecology's Industrial Section office in Lacey, Washington. Anyone interested in reading the full text of the comment or in obtaining a copy of the comment, will need to contact the Public Records Office to make a formal request. Their contact information is provided below:

E-mail: RecordsOfficer@ecy.wa.gov

Mail: Public Records Office
WA Dept. of Ecology
PO Box 47600
Olympia, WA 98504-7600

The comment appears in regular text, followed by Ecology's response in italicized text.

Ecology will send a copy of the permit documents and response to comments to each person/entity who provided comments.

We will send a notice of the final permit issuance to all interested parties, will post the documents on the Industrial Section webpage at <https://ecology.wa.gov/Regulations-Permits/Permits-certifications/Industrial-facilities-permits>, and will send the documents to the Anacortes Public Library.

Comments from Annabelle Fox, Anacortes

I believe you should hold a hearing for the State Waste Discharge water quality permit for the Tesoro Logistics facility in Anacortes. With the amount and number of pollutants being released into Fidalgo Bay, an environmental review of the combined effect of that compound should be studied.

My concern in this permit is the lack of evidence required from Tesoro on the long term effect the discharge has had on Fidalgo Bay, State ground and surface waters, the health of the plant life and aquatic mammals, fish, shellfish and other creatures that live here. When was the last time Tesoro had to provide an environmental impact statement on this issue?

Tens of thousands of gallons of dangerous and extremely hazardous waste is released by Tesoro every year. What is the combined effect of eleven pages of listed pollutants on the overall health of Fidalgo Bay and surrounding area?

Tesoro should be required to transport the untreated waste to another facility until a current environmental impact assessment can be determined. Our oceans and waterways are under constant stress and now more than ever, it is up to the Department of Ecology to hold these industries to stricter standards. Delay the permit to Tesoro until current data can verify their continued release of toxic pollutants is not a catastrophe in the making.

Response

Under the State Waste Discharge Permit Program, public hearings are held when significant interest is shown about a proposed permit and/or significant requests are made for a hearing. Ecology has received comments from two interested parties regarding the permit and one request for a hearing. It was decided that a hearing will not be held.

TLO discharges its wastewater to the Tesoro (now Marathon) Anacortes refinery's wastewater treatment plant (WWTP). Tesoro is required to conduct regular monitoring of the treated wastewater and perform a number of special studies such as sediment and Whole Effluent Toxicity studies to ensure that there are no toxic effects to the environment. Ecology evaluates impacts to the environment under the State Environmental Policy Act (SEPA) when there are potentially significant changes to a facility's operations or wastewater discharges. Ecology last performed a SEPA review when Tesoro proposed constructing their railcar unloading facility.

Transporting the untreated wastewater from TLO to an offsite facility presents environmental risks not warranted for these discharges. The refinery's WWTP provides a high level of treatment to ensure that the discharge to Fidalgo Bay meets water quality standards and does not impact the receiving water sediment. Current data for the treated discharge from the refinery and the sediment in the area of the discharge shows that surface water and sediment quality standards are being met.

Comments from Friends of the San Juan's

1. Please clarify how this permit would regulate "Tesoro Logistics" as compared with other state waste discharge water quality permit(s) for what is now publicly known as Marathon Petroleum's (MPC) Anacortes Refinery, formerly known as the Andeavor Refinery, and, previous to that, the Tesoro Refinery.
2. Re. requirement to update the facility's spills plan
 - a. The required updated spills plan does not appear to be included in any of the permit documents. Ecology's handout, publication 18-07-020, states that "The proposed permit includes requirements to: ... Update the facility's spills plan." However, the Fact Sheet for State Waste Discharge Permit ST0045528, Section F. Spill Plan, does not include a spill plan though states, "The proposed permit requires the facility to update this plan and submit it to Ecology."
 - b. Does Tesoro Logistics have or will it have its own spill plan separate from the Andeavor LLC (A wholly owned subsidiary of Marathon Petroleum Corporation)/Tesoro Refining and Marketing Company's recently updated draft Oil Spill Response Plan?
 - c. What is Ecology's process for the review and approval of the required updated spills plan?
 - d. How will Ecology provide for public comment on the required updated spills plan?

3. Does the draft state waste discharge water quality permit for Tesoro Logistics regulate the manufacture and export of high purity mixed xylenes?
 - a. Does this permit regulate the process chemicals and feedstock that would be transported to the refinery for the manufacture of high purity mixed xylenes, including sulfolane and aqueous ammonia (delivered by truck), and also reformate (delivered by ATB (articulated tug and barge) and tug and barge)? Sulfolane, aqueous ammonia, reformate, and high purity mixed xylenes do not appear to be addressed in any of the publically available permit documents.
4. If this draft state waste discharge water quality permit for Tesoro Logistics does not regulate the manufacture and/or export of high purity mixed xylenes and/or the process chemicals and/or feedstock used for that manufacture and/or export, will a new state waste discharge water quality permit for Tesoro Logistics be required?
5. Does the draft state waste discharge water quality permit for Tesoro Logistics regulate the manufacture of lower sulfur fuels, including the process chemical perchloroethylene? Perchloroethylene does not appear to be addressed in any of the publically available permit documents.

Response

1. *Tesoro Logistics Operations (TLO) discharges are regulated by the proposed State Waste Discharge Permit (SWDP). State waste discharge permits are issued for facilities sending their discharges to another industry or municipality for treatment. The discharges from TLO are sent to the Anacortes refinery's WWTP for treatment and final discharge to Fidalgo Bay. The refinery's wastewater treatment system and discharge are regulated under a National Pollutant Discharge Elimination System (NPDES) Permit. Tesoro previously owned the refinery and TLO was a wholly owned subsidiary of Tesoro. Andeavor bought Tesoro and now Marathon has purchased Andeavor. Marathon is planning to make TLO a subsidiary of Marathon. It will be named Marathon Logistics Operations.*
2. *The proposed permit requires that TLO create/update their spill plan in Permit Condition S10. The TLO spill plan is part of the larger Anacortes refinery spill plan. The larger spill plan was recently reviewed and approved by the Spills Program at Ecology. Part of the approval process included a public comment period.*
3. *The draft SWDP regulates the wastewater discharges from the TLO facility. The manufacture and export of chemicals from the xylene project are not regulated by this permit.*
4. *A new SWDP will not be required for TLO to regulate the xylene project should it go forward. However, Ecology will review any possible changes to the volume and pollutant concentrations in the Anacortes refinery's wastewater as a result of the xylene project and modify the refinery's NPDES permit as necessary. Interested parties are notified of proposed permit modifications and are given an opportunity to comment on the changes to the permit.*
5. *The draft SWDP regulates the wastewater discharges from the TLO facility. It does not regulate the manufacture of low sulfur fuels.*