



FACT SHEET

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The U.S. Environmental Protection Agency (EPA) plans to reissue,
and the State of Alaska plans to certify,
a National Pollutant Discharge Elimination System (NPDES) permit to the following facility
pursuant to the provisions of the Clean Water Act, 33 U.S.C. §1251 et seq:

Facility

Shoreside Petroleum, Inc. – Cordova Bulk Facility

NPDES Permit No.

AK-003699-4

EPA Proposes NPDES Permit Issuance

The EPA proposes to issue the individual NPDES permit to the above referenced bulk petroleum storage facility to provide Clean Water Act authorization for wastewater discharges to waters of the United States within the State of Alaska. The draft permit establishes conditions for the discharge of pollutants to Orca Inlet. In order to ensure protection of water quality and human health, the permit places limits on the types and amounts of pollutants that can be discharged from each facility.

This Fact Sheet includes:

- information on public comment, public hearings and appeal procedures
- a description of the industry and facility covered
- the draft effluent limitations, monitoring schedules and other conditions
- technical material supporting the conditions in the draft permit

Alaska State Certification

The Alaska Department of Environmental Conservation (ADEC) proposes to certify the NPDES permits under section 401 of the Clean Water Act. The state has submitted preliminary Section 401 certifications prior to the public notice.

Public Comment

Persons wishing to provide comments on the draft permit, or request a public hearing for the draft permit, may do so in writing before the expiration date of the public notice. A written request for public hearing must state the nature of the issues to be raised as well as the requester's name, address and telephone number. All written comments should be submitted to EPA as described in the public comments section of the attached public notice. After the public notice expires, and all significant comments have been considered, EPA's Regional Director for the Office of Water and Watersheds will make a final decision regarding permit issuance.

Persons wishing to comment on state certification of the permits should submit written comments by the public notice expiration date to:

Shawn Stokes
Alaska Department of Environmental Conservation
555 Cordova Street
Anchorage, Alaska 99501 – 2617
Shawn.Stokes@alaska.gov

If no substantive comments are received, the conditions in the draft permit will become final and the permit will become effective upon issuance. If comments are received, EPA will address the comments and issue the permit. The permit will become effective at least 30 days after the issuance date unless an appeal is submitted to the Environmental Appeals Board within 30 days.

Documents are Available for Review

The draft NPDES permit, fact sheet can be reviewed or obtained by visiting or contacting the offices provided below between 8:30 a.m. and 4:00 p.m., Monday through Friday at:

U.S. EPA Region 10
1200 6th Avenue, OWW-130
Seattle, Washington 98101
(206) 553-0523
(800) 424—4372 ext. 0523

U.S. EPA Alaska Operations Office
Federal Building, Room 537
222 West 7th Avenue
Anchorage, Alaska 99513-7588
(907) 271-5083

U.S. EPA Alaska Operations Office
410 Willoughby Ave, Suite 100
Juneau, Alaska 99801
(907) 269-7652

ADEC, Division of Water
555 Cordova Street
Anchorage, Alaska 99501
(907) 586-7619

The draft permit and fact sheet can also be found by visiting the EPA Region 10 website at www.epa.gov/r10earth/waterpermits.htm. For technical questions regarding the draft permit or fact sheet, contact Erin Seyfried at the phone number or e-mail at the top of this fact sheet. Those with impaired hearing or speech may contact a TDD operator at 1-800-833-6384 and ask to be connected to the appropriate phone number. Additional services can be made available to persons with disabilities by contacting Audrey Washington at (206) 553-0523, or at washington.audrey@epa.gov.

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I. APPLICANT

This fact sheet provides background information on the draft NPDES permit for the bulk petroleum storage facility identified below. When issued, the permit will provide Clean Water Act (CWA) authorization for wastewater discharge to Orca Inlet, within Alaska. This discharge consists of stormwater that accumulates within diked areas surrounding tank farms and tanker truck loading racks.

Applicant:

Shoreside Petroleum, Inc. – Cordova Bulk Facility
Attn: Matthew Lindsey, VP Operations
6401 Lake Otis Parkway
Anchorage, AK 99507

The proposed Shoreside Petroleum, Inc. permit is a first time issuance of an NPDES permit for the Cordova Bulk Facility. The permittee originally submitted an application for NPDES permit coverage in May of 1982. The permit was not issued at that time, however, the facility was expected to comply with the State of Alaska's Water Quality Standards. Details on this facility are included in Appendix A of this fact sheet.

II. BACKGROUND

A. BULK OIL STORAGE FACILITIES IN ALASKA

Due to Alaska's vast size, harsh climate and remote population centers, oil storage facilities are required to provide basic fuel needs to remote communities and industrial facilities. In addition, large oil storage facilities are also located in major city population centers, and at port facilities and airfields to service vessels, aircraft, and the basic fuel requirements to the residents of Alaska. Much of the fuel used for in-state consumption is produced by one of four refineries located in Alaska; however, refined petroleum products are also shipped in from west coast refineries located in Washington and California.

Within Alaska, there are several state and federal government agencies that have overlapping and sometimes redundant regulatory authorities over bulk oil storage facilities. These include the U.S. EPA and Coast Guard, and the Alaska Departments of Public Safety (Fire Marshal) and Environmental Conservation (ADEC). For both EPA and the Coast Guard, statutory authority to regulate oil storage facilities is derived from the CWA and the Oil Pollution Act (OPA) of 1990. Both the CWA and OPA have greatly expanded the scope of the National Contingency Plan (NCP) to prevent and respond to oil spills; while the NCP (40 CFR § 300) also addresses spills and releases of

hazardous substances under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) of 1980 (Superfund).

As mandated by Alaska Statute (AS Title 46 Chapter 4), ADEC is charged with protecting public safety and health, the environment, and state resources by ensuring that bulk fuel terminals throughout the state are fully prepared to cleanup oil spills, and are employing reasonable and prudent measures to prevent spills. Oversight of this task is charged to the ADEC Division of Spill Prevention and Response (SPAR), Industry Preparedness Program (IPP), Terminals and Tank Farms (TTF) Section. The TTF Section is responsible for the evaluation, approval, and regulatory oversight of Oil Discharge Prevention and Contingency Plans (C-Plans) submitted to ADEC for approval under Alaska Statute (AS) 46.03, 46.04; and 18 AAC 75 (Article 4) by operators of oil terminals with a capacity of 210,000 gallons (5,000 barrels) or greater of crude oil, or 420,000 gallons of noncrude (i.e., refined) oil. This does not include barges, tankers and other marine vessels, pipelines, and petroleum exploration and development facilities.

The draft NPDES permit is designed to provide CWA authorization for a bulk oil storage facility discharging stormwater to marine waters in Alaska. Descriptions of the facility discharges are provided in Appendix A of this fact sheet. In addition to NPDES permitting, the CWA also requires owners and operators of oil above ground storage tanks (ASTs) with an aggregate storage capacity of 1,320 gallons (including all containers 55 gallons or larger and associated piping) or greater to prepare a Spill Prevention, Control and Countermeasure (SPCC) Plan, and to comply with the requirements of 40 CFR § 112. SPCC also requires facilities with a storage capacity greater than or equal to 42,000 gallons, and which transfer oil to or from a vessel (or over water), are required to prepare a Facility Response Plan as described in 40 CFR § 112.20. A Facility Response Plan (FRP) is also required for any oil storage facility with a capacity of 1,000,000 gallons or greater.

B. TYPES OF DISCHARGES COVERED

When issued, this permit will provide CWA authorization for a facility that is discharging stormwater (rainfall & snowmelt) accumulated in areas of secondary containment (i.e., diked or bermed areas) surrounding tank farms and tanker truck loading racks. This stormwater discharge is currently covered under Sectors P or Q in the Stormwater Multi-Sector General Permit (MSGP) for Industrial Activities where petroleum bulk stations and terminals are covered as Standard Industrial Classification (SIC) code 5171 under Sector P (Land Transportation), or as SIC Code 4499 under Sector Q (Water Transportation).

Due to the nature of the discharges associated with bulk oil storage terminals, EPA has decided that this facility is more appropriately covered under an individual NPDES permit, which provides for a greater degree of environmental protection as compared with the MSGP. To avoid having multiple permit coverages for the same discharge, the

bulk oil storage facility associated with this fact sheet need not seek permit coverage under the MSGP. In the future, EPA anticipates issuing a general NPDES permit that will provide CWA authorization for stormwater and wastewater discharges associated with all bulk oil storage facilities in Alaska. However, work on this general permit will likely not begin prior to 2009. In the meantime, EPA will issue individual NPDES permits for bulk oil terminals to eliminate long-standing administrative backlogs on these facilities. It is anticipated that the terms and conditions for the permit associated with this fact sheet will be similar to those contained in the general permit once issued.

In addition to accumulated stormwater discharged from diked areas, many bulk oil storage terminals have other wastewater discharges associated with their facilities including:

- Ship ballast or bilge water
- Hydrostatic test water
- Tank, vehicle, or equipment wash water
- Tank bottom or petroleum contact water
- Non-contaminated stormwater runoff commingled with any of the above

The facility covered by this permitting action did not identify any of these wastewater streams as being part of their discharge on their permit application; as such, none of the above listed discharges will be authorized by the draft permit. Treated stormwater accumulated in diked areas surrounding tanks farms and vehicle loading racks is the only discharge authorized under the draft permit.

III. WATER QUALITY STANDARDS OF RECEIVING WATER BODY

The Shoreside Petroleum, Inc. – Cordova Bulk Facility is located in Cordova, Alaska, and discharges to Orca Inlet. Orca Inlet is located in southeast Prince William Sound and receives flow from the Copper River. This waterbody is listed as a “Category 3” waterbody by ADEC under Section 303(d) of the CWA. Category 3 waterbodies lack data and information needed to determine if any designated use is attained. Furthermore, Orca Inlet was listed as a “priority waterbody” under the Alaska Clean Water Actions ranking system, which nominates waterbodies when existing data suggests that a current water quality problem exists, or that future problems are likely.

Section 301(b)(1)(C) of the CWA requires the development of limitations in permits necessary to meet water quality standards by July 1, 1977. Federal regulations at 40 CFR § 122.4(d) require that the conditions in NPDES permits ensure compliance with the water quality standards of all affected states. A state’s water quality standards are composed of

use classifications, numeric and/or narrative water quality criteria, and an anti-degradation policy. The use classification system designates the beneficial uses (such as protection for aquaculture, contact recreation, and aquatic life) that each water body is expected to achieve. The numeric and/or narrative water quality criteria are the criteria deemed necessary by the state to support the beneficial use classification of each water body. The antidegradation policy represents a three-tiered approach to maintain and protect various levels of water quality and uses. No use designations are listed for Orca Inlet in 18 AAC 70.230(e). In accordance with Alaska Water Quality Standards (18 AAC 70.050), unless a particular water body has been reclassified or redesignated, all marine waters of the State of Alaska, including the Orca Inlet, are to be protected for the following uses:

- Water Supply (aquaculture, seafood processing and industrial uses)
- Water Recreation (contact and secondary recreation uses)
- Growth & Propagation of Fish, Shellfish, Aquatic Life and Wildlife
- Harvesting for Consumption of Raw Mollusks and other Raw Aquatic Life

IV. EFFLUENT LIMITATIONS

A. STATUTORY REQUIREMENTS FOR DETERMINING EFFLUENT LIMITATIONS

The CWA prohibits the discharge of pollutants to waters of the United States without an NPDES permit unless such a discharge is otherwise authorized by the CWA. The NPDES permit is the mechanism used to implement technology and water quality-based effluent limitations and other requirements including monitoring and reporting. NPDES permits are developed in accordance with various statutory and regulatory authorities established pursuant to the CWA. The regulations governing the EPA NPDES permit program are generally found at 40 CFR parts 122, 124, 125, and 136.

Sections 101, 301(b), 304, 308, 401 and 402 of the CWA provide the process and statutory basis for the effluent limitations and other conditions in the permit. EPA evaluates discharges with respect to these sections of the CWA and the relevant NPDES regulations in determining which conditions to include in the permit.

In general, EPA first determines which technology-based limits apply to the discharges in accordance with applicable national effluent guidelines and standards. EPA further determines which water quality-based limits apply to the discharges based upon an assessment of the pollutants discharged and a review of state water quality standards. Monitoring requirements must also be included in the permit to determine compliance with effluent limitations. The basis for the permit conditions are described in more detail in this section of the fact sheet. Effluent limits and monitoring requirements, included in the draft permit, are summarized in Appendix B.

B. EVALUATION OF TECHNOLOGY-BASED LIMITATIONS

1. REGULATORY BACKGROUND

EPA is establishing technology – based effluent limitations in the proposed permit utilizing Best Professional Judgment (BPJ) to meet the requirements of Best Conventional Technology and Best Available Technology Economically Achievable (BCT/BAT). Section 301 of the CWA requires particular categories of industrial dischargers to meet technology – based effluent limitation guidelines. The intent of a technology – based effluent limitation is to require a minimum level of treatment for industrial point sources based on currently available treatment technologies while allowing a discharger to choose and use any available control technique to meet the limitations.

The CWA initially focused on the control of "traditional" pollutants (conventional pollutants and some metals) through the use of Best Practicable Technology (BPT). Permits issued after July 1, 1977, must include any conditions necessary to ensure that the BPT level of pollution control is achieved. BPT limitations are based on effluent limitation guidelines (ELGs) developed by EPA for specific industries. Where EPA has not yet developed guidelines for a particular industry, permit limitations may be established using Best Professional Judgment (BPJ) [40 CFR § 122.43, 122.44, 125.3, and section 402(a)(1) of the CWA].

Section 301(b)(2) of the CWA also requires further technology – based controls on effluents. After March 31, 1989, all permits are required by CWA 301(b)(2) and 301(b)(3) to contain effluent limitations for all categories and classes of point sources which: 1) represent BCT; and, 2) control toxic pollutants and nonconventional pollutants through the use of BAT. BCT effluent limitations apply to conventional pollutants (pH, BOD, oil and grease, suspended solids and fecal coliform). BAT effluent limitations apply to toxic and nonconventional pollutants. Toxic pollutants are those listed in 40 CFR § 401.15 and § 131.36. Nonconventional pollutants include all pollutants not included in the toxic and conventional pollutant categories, such as chemical oxygen demand (COD). In no case may BCT or BAT be less stringent than BPT. Like BPT requirements, BAT and BCT permit conditions may be established using BPJ procedures in the absence of effluent limitations guidelines for a particular industry.

EPA has been developing ELGs for existing industrial and commercial activities since 1972 as directed in the original Federal Water Pollution Control Act (40 CFR § 403 through § 471 inclusive). However, ELGs have not yet been developed for bulk oil storage facilities. Therefore, and as provided in Section 402(a)(1) of the CWA, EPA is establishing technology – based effluent limits in the draft permit utilizing BPJ to meet the requirements of BCT/BAT.

2. *HISTORY OF BULK OIL STORAGE DISCHARGE LIMITS*

In 2004, the EPA Office of Science and Technology studied Petroleum Bulk Stations and Terminals (SIC code 5171) as a potential new source subcategory under the Petroleum Refining Point Source Category (EPA 2004). Although EPA is considering establishing effluent limitation guidelines for this category of dischargers, currently there are no technology-based limits promulgated for bulk terminals.

3. *DEVELOPMENT OF PROPOSED TECHNOLOGY – BASED EFFLUENT LIMITS*

In establishing technology – based BPJ effluent limits for the draft permits, EPA reviewed the Oil and Gas Extraction Point Source Category (40 CFR § 435), and the Petroleum Refining Point Source Category (40 CFR § 419) for potentially applicable ELGs. Specifically, 40 CFR § 419.12(c) contains effluent limits for ballast water discharges from petroleum refineries. EPA has concluded that ELGs for treated ballast water are most applicable to bulk oil storage facilities, and is establishing these limitations as technology – based BPJ limits for the draft permits. Table 1 presents the pollutant parameters limited under 40 CFR § 419.12(c), along with the daily maximum and monthly average effluent limitations.

Table 1. Technology-Based Effluent Limitations Adopted as BPJ

Parameter	Daily Maximum (mg/L)	Monthly Average (mg/L)
BOD	48	26
TSS	33	21
Oil and Grease	15	8
COD	470	240
pH	6.0 – 9.0 s.u. at all times	

Source: 40 CFR § 419.12(c) for ballast water discharges from petroleum refineries.

Technology – based effluent limitations, including limits based upon BPJ, are the primary mechanism of control and enforcement of water pollution under the CWA. Accordingly, every individual member of a discharge class or category is required to operate its water pollution control technologies according to industry – wide standards. This means that technology – based effluent limits based upon a BPJ determination are applied at end – of – pipe, and mixing zones are not allowed [40 CFR § 125.3(a)]. Similarly, compliance schedules are also not allowed.

The draft permit establishes technology – based effluent limitations, and the permittee must ensure the application of best management practices (BMP's) to minimize the environmental impacts of the discharge. However, EPA does not prescribe specific technologies required to meet the effluent requirements in the

permits. The information provided here is meant to demonstrate that, in most instances, the contaminants found in these discharges can be successfully and economically managed.

C. EVALUATION OF WATER QUALITY – BASED LIMITATIONS

Section 301(b)(1)(C) of the CWA requires the development of water quality – based effluent limitations (WQBELs) in permits necessary to meet state water quality standards (by July 1, 1977) when technology – based effluent limitations are not protective of such standards. Discharges to state waters must also comply with limitations imposed by ADEC as part of its certification of NPDES permits under Section 401 of the CWA, including compliance with the State’s antidegradation policy (18 AAC 70.015).

NPDES regulations under 40 CFR §122.44(d)(1) require that permits include limits on all pollutants or parameters that "are or may be discharged at a level which will cause, have the reasonable potential to cause, or contribute to an excursion above any state water quality standard, including state narrative criteria for water quality." NPDES regulations require the permitting authority to make this evaluation using procedures which account for existing controls on point and nonpoint sources of pollution, the variability of the pollutant in the effluent, species sensitivity (for toxicity), and where appropriate, dilution in the receiving water. Effluent limitations must be stringent enough to ensure that Alaska Water Quality Standards (18 AAC 70) are met, and must be consistent with any wasteload allocation available.

Because insufficient monitoring data exists to evaluate the need for WQBELs, and it is unclear if the technology – based effluent limits identified in Table 1 will be sufficient to protect state water quality standards, the draft permit includes monitoring for various pollutants considered appropriate for bulk oil storage facilities, but no WQBELs other than pH and hydrocarbon sheen (as described below). When the permit is reissued at the end of this permit term, which may be a state – wide general permit issuance, it is expected that EPA (or ADEC) will evaluate this monitoring data to determine if additional WQBELs are necessary in the reissuance.

As mentioned in Part III, above, by default, all waters of the United States within the State of Alaska are protected for all designated uses unless otherwise reclassified through a Use Attainability Analysis or through Site Specific Criteria. For marine waters, use designations include: 1) water supply (for aquaculture, seafood processing and industrial); 2) recreation (both primary contact and secondary); 3) growth and propagation of fish and wildlife; and, 4) the consumption of raw mollusks and other aquatic life [18 AAC 70.020(a)(2)].

Provided below is a discussion of the state water quality parameters that are included in the draft permits for monitoring purposes. For each pollutant, the criteria upon which monitoring results will be evaluated against is the same for both marine and fresh waters.

Because all waters of the State are protected for all designated uses (unless otherwise reclassified), the most stringent use designation criteria will be used for evaluation purposes during permit reissuance.

pH: The most stringent marine water quality criteria for pH are for the protection of aquaculture water supply, and for the growth and propagation of fish and wildlife. In this case, pH must be no less than 6.5 and no greater than 8.5 standard units, and may not vary more than 0.2 standard units outside of the naturally occurring range. These limits are more stringent than the technology – based effluent limit (6.0 – 9.0) identified in 40 CFR § 419.12(c), and have been adopted in the draft permit accordingly.

Petroleum Hydrocarbons: Alaska Water Quality Standards have a narrative criteria for petroleum hydrocarbons stating that discharges “may not cause a film, sheen, or discoloration on the surface or the floor of the waterbody or adjoining shoreline”. This applies for the contact recreation designated use for marine waters [18 AAC 70.020(b)(17)(B)(i)]. However, Alaska also has numeric criteria for total aromatic and total aqueous hydrocarbons, 10µg/L and 15µg/L, respectively. This draft permit adopts the numeric criteria as an effluent limitation, and also includes monitoring requirements for these parameters (see Section V.A.).

Residues: Similar to petroleum hydrocarbons, the Alaska water quality standards [18 AAC 70.020(b)(20)] require that discharges “may not, alone or in combination with other substances, cause a film, sheen, or discoloration on the surface of the water or adjoining shorelines; cause leaching of toxic or deleterious substances; or cause a sludge, solid, or emulsion to be deposited beneath or upon the surface of the water, within the water column, on the bottom, or upon adjoining shorelines”. Therefore, EPA has included a narrative limitation prohibiting the discharge of such residues in the draft permit. Visual monitoring for residues is required on a daily basis during discharge episodes and shall be conducted from the pier above Outfall 001. Observed residues must be reported in the “Comment” section on the DMR form.

D. EXPRESSION OF EFFLUENT LIMITATIONS

Regulations under 40 CFR § 122.45(d) require effluent limitations for industrial dischargers to be expressed, unless impracticable, as both maximum daily and average monthly values.

NPDES regulations at 40 CFR § 122.45(e) allow effluent limits or monitoring frequencies for non – continuous discharges to be described and limited considering the following factors, as appropriate: 1) frequency of discharge; 2) total mass of the pollutant per batch; 3) maximum discharge rate; and, 4) expression of limits using the appropriate measure (i.e., concentration, mass, etc.). As described in Section V, this draft permit requires effluent monitoring and

reporting on a monthly basis for the Shoreside Petroleum, Inc. – Cordova Bulk Facility.

Most permits contain both concentration and mass – based effluent limits. Mass – based effluent limits are often imposed to ensure that dilution is not used as a substitute for treatment. Alternatively, in the absence of concentration limits, a permittee would be able to increase its effluent concentration (i.e., reduce the level of treatment) during periods of low flow and still meet its mass – based effluent limit. Because the facility covered by this fact sheet will be discharging intermittently, based primarily on weather conditions, the draft permits include only concentration – based effluent limits. However, the permit specifically prohibits the use of dilution as a form of treatment or as a means for which to comply with effluent limitations.

E. ANTIDegradation

In addition to technology – based or water quality – based limitations for pollutants that could cause or contribute to exceedances of numeric or narrative criteria, EPA must consider the state’s antidegradation policy in 18 AAC 70.015 which is reflected in the ADECs Section 401 certification of the permit.

The State of Alaska must determine that the proposed permit conditions will not result in degradation of water quality and are consistent with the State’s antidegradation policy. If ADEC determines that the proposed permit conditions will result in a degradation of water quality as stated in its water quality standards, then its CWA Section 401 certification of the permit must include more stringent effluent limitations. It is anticipated that the effluent limitations described in the draft permit are sufficient to comply with the state’s antidegradation policy.

V. MONITORING AND REPORTING REQUIREMENTS

Section 308 of the CWA and federal regulations under 40 CFR § 122.44(i) require monitoring in permits to determine compliance with effluent limitations. Monitoring may also be required to gather effluent and/or surface water data to determine if additional effluent limitations are required and/or to monitor effluent impacts on receiving water quality. The permittee is responsible for conducting the monitoring and for reporting results on Discharge Monitoring Reports (DMRs) to the EPA and ADEC.

For pollutants with technology – based effluent limits (i.e., oil & grease, TSS, BOD₅ and COD), monitoring frequencies are determined by the expression of the effluent limitations as maximum daily and average monthly concentrations. For these pollutants, monthly effluent monitoring (i.e., sampling) is required because at least one sample must be collected each month to determine compliance with the average monthly limit and the maximum daily limit. In this situation, if one effluent sample is collected each month,

then the concentration of this sample represents both the average monthly and the maximum daily concentration. The Permittee has the option of taking more frequent samples than are required under the permit. These samples must be used for averaging if they are conducted using EPA approved test methods (generally found in 40 CFR § 136) and if the Method Detection Limits (MDLs) are less than the effluent limits (Table 1). For pollutant parameters with no effluent limits, monitoring frequencies are also based on: 1) the nature and effect of the pollutant; 2) a determination of the minimum sampling necessary to adequately monitor the facility's performance; and, 3) and the size category of the facility.

Monitoring must be summarized on DMRs and postmarked by the 15th of the month. For DMR calculations and reporting requirements, analytical test results less than the method detection limit (MDL) shall be reported as "less than (<) MDL number." For results above the MDL, the measured value shall be reported.

The remainder of this section discusses specific monitoring requirements that are included in the draft permit in addition to those pollutant parameters with effluent limitations discussed above.

A. PETROLEUM HYDROCARBONS

Water supply for marine aquaculture is the most restrictive water quality criteria for petroleum hydrocarbons, where total aqueous hydrocarbons (TAqH) may not exceed 15 µg/L and total aromatic hydrocarbons (TAH) may not exceed 10 µg/L. While the draft permit does include numeric effluent limits for petroleum hydrocarbons, the additional monitoring requirements will be used as a benchmark in evaluating whether future effluent limits will be required during permit reissuance. TAqH refers to the collective dissolved and water – accommodated monoaromatic and polynuclear aromatic petroleum hydrocarbons that are dissolved in water. TAqH does not include floating surface oil or grease. TAH is the sum of the following volatile monoaromatic hydrocarbon compounds: benzene, toluene, ethylbenzene and the xylene isomers (commonly called BTEX).

Refined petroleum products contain many hundreds of hydrocarbon chemicals, including many on the Priority Pollutant List (40 CFR §131.36). Rather than sample for a large number of toxic organic chemicals, the selection of TAH and TAqH simplifies the monitoring burden by focusing on two chemical analyses that collectively represent a much broader group of hydrocarbons.

VI. OTHER PERMIT CONDITIONS

A. QUALITY ASSURANCE PLAN

Federal regulation at 40 CFR §122.41(e) requires a permittee to develop

procedures to ensure that the monitoring data submitted is complete, accurate and representative of the environmental or effluent condition. The facility is required to prepare (or update) a Quality Assurance Plan (QAP) within 120 days of the effective date of the final permit. The QAP shall be prepared in accordance with EPA guidance documents, EPA QA/R-5 (*EPA Requirements for Quality Assurance Project Plans*) and EPA QA/G-5 (*Guidance for Quality Assurance Project Plans*). It must consist of standard operating procedures the permittee must follow for collecting, handling, storing and shipping samples, laboratory analysis, and data reporting. The QAP must be retained on site and made available to EPA and ADEC upon request.

B. BEST MANAGEMENT PRACTICES PLAN

Section 402 of the CWA, and federal regulations at 40 CFR §122.44(k) authorize EPA to require best management practices (BMPs) in NPDES permits. BMPs are measures that are intended to prevent or minimize the generation and potential release of pollutants to waters of the United States through runoff, spillage, leaks or erosion. For the facility covered by this fact sheet, the BMP Plan will incorporate many elements typically found in a Stormwater Pollution Prevention Plan. These measures are important tools for waste minimization and pollution prevention, and should apply to all components of operation at the bulk terminal.

The draft permit requires the facility to prepare and implement a BMP Plan within 120 days of the permit effective date. The intent of the BMP plan is to recognize the hazardous nature of petroleum and other substances stored or used at the facility, and the way in which these substances may be accidentally dispersed or released into the environment. The BMP Plan should incorporate elements of pollution prevention as set forth in the Pollution Prevention Act of 1990, 42 U.S.C §13101 to §13109. Additional BMP requirements are set forth in 18 AAC 75.075 which describe state requirements for secondary containment associated with aboveground petroleum storage tanks.

The BMP Plan shall be a “living document”. The draft permit requires that the BMP Plan be maintained to reflect any systems changes and that any modifications to the facility’s operation be made with consideration of the effect the modification could have on the generation or potential release of pollutants. The BMP Plan must be revised if the facility is modified or as new pollution prevention practices are developed. It is anticipated that much of content of the BMP Plan can be adopted from an existing SPCC Plan or from the requirements of 18 AAC 75.

C. STANDARD PERMIT PROVISIONS

Sections III, IV, and V of the draft permit contain standard regulatory language

that must be included in all NPDES permits. Because they are based directly on the federal regulations, they cannot be challenged in the context of an NPDES permit action. The standard regulatory language covers requirements such as monitoring, recording, and reporting requirements, compliance responsibilities, and other general requirements.

VII. OTHER LEGAL REQUIREMENTS

A. ENDANGERED SPECIES ACT

The Endangered Species Act requires federal agencies to consult with National Oceanic and Atmospheric Administration Fisheries (NOAA Fisheries) and the U.S. Fish and Wildlife Service (USFWS) if their actions could beneficially or adversely affect any threatened or endangered species. EPA has determined that issuance of this permit will not affect any of the threatened or endangered species in the vicinity of the discharges. As a consequence of this *no effect* determination, further consultation with Services is not required.

B. ESSENTIAL FISH HABITAT

Essential fish habitat (EFH) consists of the waters and substrates (e.g. sediments, etc.) necessary for fish to spawn, breed, feed, or grow to maturity. The Magnuson-Stevens Fishery Conservation and Management Act (January 21, 1999) requires EPA to consult with NOAA Fisheries when a proposed discharge has the potential to adversely affect EFH. The EFH regulations define an adverse effect as any impact which reduces quality and/or quantity of EFH and may include direct (e.g. contamination or physical disruption), indirect (e.g. loss of prey, reduction in species' fecundity), site specific, or habitat – wide impacts, including individual, cumulative, or synergistic consequences of actions.

The marine waters in the vicinity of the discharges have been designated to support the following species for EFH: Weathervane scallops, Walleye pollocks, Pacific cod, Flathead sole, Yellowfin sole, Rock sole, Arrowtooth flounder, Sculpin *spp.*, Skates *spp.*, and Pink, Chum, Sockeye, Chinook, and Coho salmon. EPA has determined that issuance of this permit will not adversely affect EFH in the vicinity of the discharge. EPA has provided NOAA Fisheries with copies of the draft permit and fact sheet during the public notice period. Any comments received from NOAA Fisheries regarding EFH will be considered prior to reissuance of this permit.

C. STATE CERTIFICATION

Section 301(b)(1)(C) of the CWA requires that an NPDES permit contain conditions which ensure compliance with applicable state water quality standards.

The effluent limits in the draft permit for pH and hydrocarbon sheen were established pursuant to Alaska Water Quality Standards (18 AAC 70). Section 401 of the CWA requires that states certify that federally issued NPDES permits are in compliance with state law, including the antidegradation policy (18 AAC 70.015). EPA has received a draft CWA Section 401 certification from ADEC for the issuance of the permit covered by this fact sheet.

If the State authorizes different requirements into their final certification, EPA will incorporate those requirements into the permit. For example, if ADEC authorizes a mixing zone for WQBELs in its final certification, EPA will recalculate the effluent limitations in the final permit based upon the dilution available in the final mixing zone.

D. ALASKA COASTAL MANAGEMENT PROGRAM

The permittee has certified that the activities authorized by this draft permit are consistent with the Alaska Coastal Management Plan (ACMP). The draft permit, fact sheet and consistency determination will be submitted to the State for review prior to public notice. Pursuant to 40 CFR § 122.49(d), requirements for state coastal zone management review and approval must be satisfied before the permit may be issued.

E. OCEAN DISCHARGE CRITERIA EVALUATION

Section 403 of the CWA and federal regulations at 40 CFR § 125 Subpart M require NPDES permits for discharges into offshore waters, including territorial seas and federal waters, to comply with Ocean Discharge Criteria for determining potential degradation of the marine environment. The Ocean Discharge Criteria are intended to “prevent unreasonable degradation of the marine environment and to authorize imposition of effluent limitations, including a prohibition of discharge, if necessary, to ensure this goal” (49 FR. §65942; October 3, 1980).

Section 502(8) of the CWA defines *territorial seas* as “the belt of the seas measured from the line of ordinary low water along that portion of the coast which is in direct contact with the open sea and the line marking the seaward limit of the inland waters, and extending seaward a distance of three miles.” The *inner boundary* or *baseline* of the territorial sea is the line of ordinary low water along that portion of the coast which is in direct contact with the open sea. However, Orca Inlet is not considered “open sea”. For that water body, the ordinary low water mark is not the inner boundary or baseline of the territorial sea, but rather at a “closure line” that separates the ocean (including territorial seas) from inland waters. Because the marine discharge from the bulk oil storage facility covered by this fact sheet is located inside the inner boundary or baseline of the territorial sea, an Ocean Discharge Criteria Evaluation (ODCE) is not required.

F. SPILL PREVENTION CONTROL AND COUNTERMEASURES PLAN

The permittee must comply with federal regulations under 40 CFR §112, Oil Pollution Prevention, including the preparation of a Spill Prevention Control and Countermeasure (SPCC) Plan. The CWA and the Oil Pollution Act of 1990 (OPA), 33 U.S.C.A. §2701 to §2761, maintain overlapping statutory authorities for controlling oil and oil related pollution into waters of the United States.

G. PERMIT EXPIRATION

The permit will expire five years from the effective date.

VIII. LIST OF ACRONYMS

AAC	Alaska Administrative Code
ACMP	Alaska Coastal Management Program
ADEC	Alaska Department of Environmental Conservation
ADF&G	Alaska Department of Fish and Game
AML	Average monthly limit
APA	Administrative Procedures Act
AWQS	Alaska Water Quality Standard
BAT	Best Available Technology
BCT	Best Conventional Pollution Control Technology
BTEX	Benzene, toluene, ethyl benzene, xylene
BMP	Best Management Practices
BPJ	Best Professional Judgment
BOD ₅	5-day Biochemical Oxygen Demand
BPT	Best Practicable Control Technology, currently available
CFR	Code of Federal Regulations
DMR	Discharge Monitoring Report
DNR	Department of Natural Resources
EFH	Essential Fish Habitat
ELG	Effluent Limitations Guidelines
EPA	United States Environmental Protection Agency
ESA	Endangered Species Act
FR	Federal Register
FRP	Facility Response Plan
GPD	gallons per day
MDL	Method Detection Limit or Maximum Daily Limit
MGD	million gallons per day
mg/L	milligrams per liter
MSGP	Multi-Sector General Permit (Storm water)

NOAA Fisheries	National Marine Fisheries Service
NPDES	National Marine Fisheries Service
NSPS	New Source Performance Standards
ODCE	Ocean Discharge Criteria Evaluation
OWW	Office of Water and Watersheds
QA/QC	Quality assurance quality control
SWPPP	Storm Water Pollution Prevention Plan
TAqH	Total aqueous hydrocarbons
TAH	Total aromatic hydrocarbons
TMDL	Total Maximum Daily Load
TSS	Total Suspended Solids
µg/L	micrograms per liter
U.S.C.	United States Code
USFWS	United States Fish & Wildlife Service
WLA	Waste load allocation
WQBEL	Water Quality-Based Effluent Limit

IX. GLOSSARY OF TERMS

§ means section or subsection.

AAC means Alaska Administrative Code.

Act means the Clean Water Act.

ADEC means Alaska Department of Environmental Conservation.

ADGC means State of Alaska, Division of Governmental Coordination.

Administrator means the Administrator of the EPA, or an authorized representative.

Average monthly discharge means the average of “daily discharges” over a monitoring month, calculated as the sum of all daily discharges measured during a monitoring month divided by the number of daily discharges measured during that month. It may also be referred to as the “monthly average discharge.”

Best Available Technology Economically Achievable (BAT) means the technology-based standard established by the Clean Water Act (CWA) as the most appropriate means available on a national basis for controlling the direct discharge of toxic and nonconventional pollutants to navigable waters. BAT effluent limitations guidelines, in general, represent the best existing performance of treatment technologies that are economically achievable within an industrial point source category or subcategory.

Best Conventional Pollutant Control Technology (BCT) means the technology-based standard for the discharge from existing industrial point sources of conventional pollutants including BOD, TSS, fecal coliform, pH, oil and grease.

Best management practices (“BMPs”) means schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the pollution of “waters of the United States.” BMPs also include treatment requirements, operating procedures, and practices to control plant site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage.

BOD₅ means five-day biochemical oxygen demand.

Bypass means the intentional diversion of waste streams from any portion of a treatment facility.

°C means degrees Celsius.

CFR means Code of Federal Regulations.

Conventional pollutant means BOD, TSS, fecal coliform bacteria, oil and grease and pH as defined in 40 CFR 401.16.

CWA means the Clean Water Act, (formerly referred to as the Federal Water Pollution Control Act or Federal Water Pollution Control Act Amendments of 1972) Public Law 92-500, as amended by Public Law 95-217, Public Law 95-576, Public Law 96-483 and Public Law 97-117, 33 U.S.C. 1251 et seq.

Daily discharge means the discharge of a pollutant measured during a calendar day or any 24-hour period that reasonably represents the calendar day for purposes of sampling. For pollutants with limitations expressed in units of mass, the "daily discharge" is calculated as the total mass of the pollutant discharged over the day. For pollutants with limitations expressed in other units of measurement, the "daily discharge" is calculated as the average measurement of the pollutant over the day.

Daily maximum discharge means the highest allowable "daily discharge" and is also referred to as the "maximum daily discharge."

Designated Use means any of the various uses which may be made of the waters of Alaska, including, but not limited to, domestic water supplies, industrial water supplies, agricultural water supplies, navigation, recreation in and on the water, wildlife habitat, and aesthetics (18 AAC 70).

The *Director* means the Regional Administrator of EPA Region 10, or the State of Alaska ADEC Commissioner, or an authorized representative thereof.

Discharge of a pollutant means any addition of any "pollutant" or combination of pollutants to "waters of the United States" from any "point source" or any addition of any pollutant or combination of pollutants to the waters of the "contiguous zone" or the ocean from any point source other than a vessel or other floating craft which is being used as a means of transportation.

Discharge Monitoring Report ("DMR") means the EPA uniform national form, including any subsequent additions, revisions, or modifications for the reporting of self-monitoring results by the permittee. DMRs must be used by "approved States" as well as by EPA.

Draft permit means a document prepared under 40 CFR 124.6 indicating the Director's tentative decision to issue or deny, modify, revoke and reissue, terminate, or reissue a "permit" (40 CFR 122.2).

Effluent limitation means any restriction imposed by the Director on quantities, discharge rates, and concentrations of "pollutants" which are "discharged" from "point sources" into "waters of the United States," the waters of the "contiguous zone," or the ocean.

EOA means Eastern Operations Area.

EPA means U.S. Environmental Protection Agency.

ESA means the Endangered Species Act.

°F means degrees Fahrenheit.

Facility or activity means any NPDES "point source" or any other facility or activity (including land or appurtenances thereto) that is subject to regulation under the NPDES program.

General permit means an NPDES "permit" issued under Sec. 122.28 authorizing a category of discharges under the CWA within a geographical area. (40 CFR 122.2)

Grab sample means a single sample or measurement taken at a specific time.

lb means pound.

Maximum means the highest measured discharge or pollutant in a waste stream during the time period of interest.

Maximum daily discharge limitation means the highest allowable “daily discharge.”

MGD means million gallons per day.

mg/L means milligrams per liter.

Mixing zone means the zone of dilution authorized by the Alaska Department of Environmental Conservation under 18 AAC 70.032 wherein pollutant concentrations may exceed the criteria of the Alaska Water Quality Standards for the proscribed pollutants.

MLLW means mean lower low water.

Monthly average limit means the average of “daily discharges” over a monitoring month, calculated as the sum of all “daily discharges” measured during a monitoring month divided by the number of “daily discharges” measured during that month (40 CFR 122.2).

NMFS means National Marine Fisheries Service.

National Pollutant Discharge Elimination System (“NPDES”) means the national program for issuing, modifying, revoking and reissuing, terminating, monitoring and enforcing permits, and imposing and enforcing pretreatment requirements, under sections 307, 402, 318, and 405 of CWA.

Nonconventional pollutants means all pollutants that are not included in the list of conventional or toxic pollutants in 40 CFR 401. This includes pollutants such as COD, TOC, nitrogen and phosphorous.

OWW means EPA Region 10’s Office of Water and Watersheds.

Point source means any discernible, confined, and discrete conveyance, including but not limited to, any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, landfill leachate collection system, vessel or other floating craft from which pollutants are or may be discharged. This term does not include return flows from irrigated agriculture or agricultural storm water runoff.

Pollutant means dredged spoil, solid waste, incinerator residue, filter backwash, sewage, garbage, sewage sludge, munitions, chemical wastes, biological materials, radioactive materials, heat, wrecked or discarded equipment, rock, sand, cellar dirt, and industrial, municipal, and agricultural waste discharged into water.

Process wastewater means any water which, during manufacturing or processing, comes into direct contact with or results from the production or use of any raw material, intermediate product, finished product, byproduct, or waste product.

Sanitary wastes means human body waste discharged from toilets and urinals.

Severe property damage means substantial physical damage to property, damage to the treatment facilities which causes them to become inoperable, or substantial and permanent

loss of natural resources which can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.

Sewage means human body wastes and the wastes from toilets and other receptacles intended to receive or retain body wastes.

sp. means species.

SPAR Spill Prevention and Response

SPCC Spill Prevention Control and Countermeasure

Technology-based limit means a permit limit or condition based upon EPA's technology-based effluent limitation guidelines or EPA's best professional judgment.

Total aqueous hydrocarbons (TAqH) means those collective dissolved and water-accommodated monoaromatic and polynuclear petroleum hydrocarbons that are persistent in the water column; TAqH does not include floating surface oil or grease.

Total aromatic hydrocarbons (TAH) means the sum of the following volatile monoaromatic compounds: benzene, ethylbenzene, toluene, and xylene isomers, commonly called BTEX.

TSS means total suspended solids.

USFWS means U.S. Fish and Wildlife Service.

Upset means an exceptional incident in which there is unintentional and temporary noncompliance with permit effluent limitations 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, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.

Variance means any mechanism or provision under section 301 or 316 of CWA or under 40 CFR part 125, or in the applicable "effluent limitations guidelines" which allows modification to or waiver of the generally applicable effluent limitation requirements or time deadlines of CWA. This includes provisions which allow the establishment of alternative limitations based on fundamentally different factors or on sections 301(c), 301(g), 301(h), 301(i), or 316(a) of CWA.

Water quality-based limit means a permit limit derived from a state water quality standard or an appropriate national water quality criteria.

Waters of the United States or waters of the U.S. means:

(a) All waters which are currently used, were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide;

(b) All interstate waters, including interstate wetlands;

(c) All other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds the use, degradation, or destruction of which would affect or could affect interstate or foreign commerce including any such waters:

(1) Which are or could be used by interstate or foreign travelers for recreational or other purposes;

(2) From which fish or shellfish are or could be taken and sold in interstate or foreign commerce; or

(3) Which are used or could be used for industrial purposes by industries in interstate commerce;

(d) All impoundments of waters otherwise defined as waters of the United States under this definition;

(e) Tributaries of waters identified in paragraphs (a) through (d) of this definition;

(f) The territorial sea; and

(g) Wetlands adjacent to waters (other than waters that are themselves wetlands) identified in paragraphs (a) through (f) of this definition.

X. REFERENCES

Alaska Department of Environmental Conservation, 2006. Water Quality Standards. 18 AAC 70.

Alaska Department of Environmental Conservation, 2006. Oil and Other Hazardous Substances Pollution Control. 18 AAC 75.

Alaska Department of Environmental Conservation, 2006. Alaska Water Quality Criteria Manual for Toxic and Other Deleterious Organic and Inorganic Substances.

American Society of Civil Engineers, 1992. Design and Construction of Urban Stormwater Management Systems. Manuals and Reports of Engineering Practice No. 77.

EPA. 1991. Technical support document for water quality-based toxics control. Office of Water, Washington, D.C. EPA/505/2-90-001.

EPA. 1993. Guidance Manual for Developing Best Management Practices (BMP). Office of Water, Washington, D.C. EPA/833/2-93-004.

EPA. 1996. NPDES Permit Writers' Manual. Office of Wastewater Management, Washington, D.C. EPA/833/B-96-003.

EPA. 2004. Technical Support Document for the 2004 Effluent Guidelines Program Plan. Office of Water, Office of Science and Technology, Washington, D.C. EPA-821-R-04-014. August 2004.

APPENDIX A

FACILITY INFORMATION

Shoreside Petroleum, Inc. – Cordova Bulk Facility

NPDES Permit No.	AK-003699-4
Facility Contact:	Bruce VanBrocklin, Terminal Manager (907) 242-4326
Mailing Address:	6401 Lake Otis Parkway Anchorage, Alaska 99507
Facility Address:	100 Ocean Dock Road Cordova, Alaska 99574
Permit Background:	Permit No. AK-003699-4 was originally assigned, although never issued, to Chevron USA, Inc. in May of 1982. Chevron USA, Inc. later sold the Cordova terminal to Orca Oil Co., Inc., which was in turn sold to Shoreside Petroleum Inc. on April 30, 2007.
Facility Background:	Shoreside Petroleum Inc. owns and operates a bulk petroleum fuel terminal that is located in Cordova, discharging to Orca Inlet. The terminal provides gasoline, jet fuel, diesel fuel and heating oil to a number of marine customers and shore – based distributors. The facility consists of two separate tank farms with a total combined capacity of 32,051 barrels (1,349,166 gallons). Both tank farms are located within secondary containment walls. The lower tank farm has a truck loading rack and piping that feeds a municipal loading dock.
Facility Discharge and Collection/Treatment System:	The type of discharge from this facility is primarily associated with secondary containment water. The wastewater is directed through an oil – water (O/W) separator and discharged directly to Orca Inlet, through two outfall points. The tank farms are surrounded by secondary containment walls that serve to contain run-on/runoff from rainfall or snowmelt. Other than stormwater, no other wastewater discharges are associated with the facility. All stormwater that falls within the area of secondary containment surrounding the tank farm is directed to the oil – water separator. Treated water in the separator is visually inspected for the presence of oil in amounts exceeding a sheen before the treated wastewater is discharged.
Outfall Location:	001 – Latitude: 60° 33' 25", Longitude: 145° 45' 16" 002 – Latitude: 60° 33' 17", Longitude: 145° 45' 18"
Receiving Water:	Orca Inlet

APPENDIX B

EFFLUENT LIMITATIONS & MONITORING REQUIREMENTS

Table B – 1. Effluent Limitations and Monitoring Requirements for the Shoreside Petroleum, Inc. – Cordova Bulk Facility

Parameter	Units	Effluent Limits and Monitoring Requirements			
		Maximum Daily Limit	Average Monthly Limit	Monitoring Frequency ²	Sample Type
Flow	gpd	---	---	Continuous	Recording
Sheen / Residue ¹	---	No visible sheen at any time		Daily	Visual
pH	s.u.	6.5 – 8.5 at all times		Monthly	Grab
Oil & Grease	mg/L	15	8	Monthly	Grab
TSS	mg/L	33	21	Monthly	Grab
BOD ₅	mg/L	48	26	Monthly	Grab
COD	mg/L	470	240	Monthly	Grab
TAH	µg/L	10	---	Monthly	Grab
TAqH	µg/L	15	---	Monthly	Grab

¹The permittee must not discharge any floating solids or visible foam in other than trace amounts, or oily wastes that produce a sheen on the surface of the receiving water.

²During discharge events