

# FACT SHEET

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The U.S. Environmental Protection Agency (EPA) plans to issue/reissue, and the State of Alaska plans to certify,

a National Pollutant Discharge Elimination System (NPDES) permit to each of the following facilities pursuant to the provisions of the Clean Water Act, 33 U.S.C. §1251 et seq:

<b>Facility</b>	NPDES Permit No.	<u>Issuance/Reissuance</u>
Wrangell Oil, Inc.	AK-002945-9	Issuance
Petro Star, Inc.	AK-002944-1	Reissuance
U.S. Coast Guard, Kodiak Support Center	AK-003142-9	Issuance

#### **EPA Proposes NPDES Permit Issuance**

The EPA proposes to issue/reissue individual NPDES permits to the above referenced bulk petroleum storage facilities to provide Clean Water Act authorization for wastewater discharges to waters of the United States within the State of Alaska. The draft permits establish conditions for the discharge of pollutants to different water bodies within Alaska. In order to ensure protection of water quality and human health, the permits place 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 facilities covered
- the draft effluent limitations, monitoring schedules and other conditions
- technical material supporting the conditions in the draft general 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 permits, or request a public hearing for the draft permits, 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:

Alan Kukla Alaska Department of Environmental Conservation 555 Cordova Street Anchorage, Alaska 99501 alan\_kukla@dec.state.ak.us

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. 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 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 general NPDES permit, fact sheet and related documents 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 6<sup>th</sup> Avenue, OWW-130 Seattle, Washington 98101 (206) 553-0523 (800) 424—4372

U.S. EPA Alaska Operations Office 410 Willoughby Ave, Suite 100 Juneau, Alaska 99801 (907) 586-7619 U.S. EPA Alaska Operations Office Federal Building, Room 537 222 West 7<sup>th</sup> Avenue Anchorage, Alaska 99513-7588 (907) 271-5083 The draft general permit and fact sheet are also available for inspection and copying at the following state offices:

ADEC, Division of Water 555 Cordova Street Anchorage, Alaska 99501 (907) 269-7652 ADEC, Division of Water 410 Willoughby Ave Juneau, Alaska 99811-1800 (907) 465-5300

The draft permit, fact sheet, and other information can also be found by visiting the EPA Region 10 website at <a href="www.epa.gov/r10earth/waterpermits.htm">www.epa.gov/r10earth/waterpermits.htm</a>, click on "draft permits", then "Alaska". For technical questions regarding the draft permit or fact sheet, contact Robert Rau at the phone number or e-mail at the top of this fact sheet. Services can be made available to persons with disabilities by contacting Audrey Washington at (206) 553-0523, or at <a href="www.washington.audrey@epa.gov">washington.audrey@epa.gov</a>.

# TABLE OF CONTENTS

I.	APPLICA	ANTS	5
II.	BACKGR	ROUND	
	A.	Bulk Oil Storage Facilities in Alaska	
	В.	Types of Discharges Covered	7
III.	RECEIVI	ING WATERS	8
	A.	Water Quality Standards	
IV.	EFFLUE	NT LIMITATIONS	8
_ , ,	A.	Statutory Requirements for Determining Effluent Limitations	
	B.	Evaluation of Technology-based Limitations	
	C.	Evaluation of Water Quality-based Limitations	
	D.	Expression of Effluent Limitations:	13
	E.	Antidegradation	
V.	MONITO	ORING AND REPORTING REQUIREMENTS	14
	A.	Petroleum Hydrocarbons	
VI.	OTHER I	PERMIT CONDITIONS	15
, _,	A.	Quality Assurance Plan	
	B.	Best Management Practices Plan	
	C.	Standard Permit Provisions	16
VII.	OTHER I	LEGAL REQUIREMENTS	17
	A.	Endangered Species Act	
	B.	Essential Fish Habitat	17
	C.	State Certification	17
	D.	Alaska Coastal Management Program	18
	E.	Ocean Discharge Criteria Evaluation	18
	F.	Spill Prevention Control and Countermeasures Plan	18
	G.	Permit Expiration	19
VIII.	LIST OF	ACRONYMS	19
IX.	GLOSSA	RY OF TERMS	21
Χ.	REFERE	NCES	26
APPE	NDIX A –	FACILITY INFORMATION	328
APPE	NDIX B –	EFFLUENT LIMITATIONS AND MONITORING REQUIRMENTS	S 32

#### I. APPLICANTS

This combined fact sheet provides background information on draft NPDES permits for the three bulk petroleum storage facilities identified below. When issued, the permits will provide Clean Water Act (CWA) authorization for wastewater discharges to marine waters of the United States within Alaska. These discharges consist of stormwater that accumulates within diked areas surrounding tank farms and tanker truck loading racks.

## Applicants:

Petro Star, Inc., Kodiak Terminal 3900 C St., Suite 802 Anchorage, AK 99503

Wrangell Oil, Inc. P.O. Box 776 Wrangell, Alaska 99929

U.S. Coast Guard Integrated Support Command, Kodiak P.O. Box 195025 Kodiak, Alaska 99619-5025

The Petro Star, Inc. (Petro Star) permit is a reissuance of a permit that expired on July 12, 1983. Because the permittee submitted timely applications for renewal, this permit has been administratively extended and remains effective and enforceable until reissuance. The Coast Guard, Integrated Support Command Kodiak (Coast Guard), and Wrangell Oil, Inc. (Wrangell Oil) permits are new issuances. Although EPA received applications for individual NPDES permits from these facilities (in February 1981 and June 1976, respectively), and permit numbers were assigned for their bulk oil storage facilities, the permits were never issued. Details on each of the three facilities included in this fact sheet are provided in Appendix A.

## 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 permits are designed to provide CWA authorization for three bulk oil storage facilities discharging stormwater to marine waters in Alaska. Descriptions of the 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.

Table 1 provides C-Plan and FRP numbers for each of the three facilities covered by this fact sheet.

Table 1. C-Plan and FRP Identification Numbers

Plan Type	Facility					
	Petro Star Wrangell Oil Coast Guard					
C-Plan	053CP2147	Not Applicable	053CP2129			
FRP Plan	FRPAKA0217	FRPAKA0025	FRPAKA0076			

## B. Types of Discharges Covered

When issued, these permits will provide CWA authorization for three facilities that are 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 these facilities are more appropriately covered under individual NPDES permits which provide for a greater degree of environmental protection as compared with the MSGP. To avoid having multiple permit coverages for the same discharge, the three bulk oil storage facilities 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 mean time, EPA will issue these three individual NPDES permits in 2007, along with three additional permits in 2008 for other bulk oil terminals to eliminate long-standing administrative backlogs on these facilities. It is anticipated that the terms and conditions for the three permits 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:

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

Since none of the three facilities covered by this permitting action identified any of these wastewater streams as being part of their discharge on their permit application, none of

them are authorized by the draft permits. Treated stormwater accumulated in diked areas surrounding tanks farms and vehicle loading racks are the only discharges authorized under the draft permits.

#### III. RECEIVING WATERS

#### A. Water Quality Standards

Both the Petro Star and Coast Guard bulk terminal facilities are located in Kodiak, Alaska, and discharge to Saint Paul Harbor, a marine waterbody located on the western side of Chiniak Bay. The Wrangell Oil terminal discharges to Wrangell Harbor, a small protected marine waterbody adjacent to downtown Wrangell and an embayment of Zimovia Straight. None of these waterbodies are listed as impaired or water quality limited by ADEC under section 303(d) of the CWA.

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 aquiculture, 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 the Cook 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 Cook 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 permits are summarized in Appendix B.

## B. Evaluation of Technology-based Limitations

#### 1. Regulatory Background.

EPA is establishing technology-based effluent limitations in the proposed permits 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 general 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 2 presents the pollutant parameters limited under 40 CFR § 419.12(c), along with the daily maximum and monthly average effluent limitations.

Table 2.	Technology	-Rased	Effluent	Limitations	Adonted	as RPJ
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Parameter	Daily Maximum (mg/L)	Monthly Average (mg/L)	
BOD	48	26	
TSS	33	21	
Oil and Grease	15	8	
COD	470	240	
pН	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 their 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 permits establish 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 their antidegradation policy (18 AAC 70.015).

NPDES regulations at 40 CFR 122.44(d)(1) require that permits include limits on all pollutants or parameters which "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 meet, and must be consistent with any wasteload allocation available.

Because these are either new permit issuances or 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 general 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 three permits are reissued, which may be a state-wide general permit issuance, EPA will evaluate this monitoring data to determine if additional WQBELs are necessary in the reissuance.

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 permits 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)], and is being adopted as an effluent

limitation in the draft permits. Alaska also has numeric criteria for total aromatic and total aqueous hydrocarbons. However, the draft permits include monitoring requirements for these parameters rather than effluent limitations (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 at 40 CFR 122.45(d) require effluent limitations for industrial dischargers to be expressed, unless impracticable, as both maximum daily and average monthly values. For pollutants with technology based effluent limits, maximum daily and average monthly limits are specified in the regulations as shown in Table 2.

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 VI., the draft permit requires effluent monitoring and reporting on monthly to a semiannual basis depending on the size of the 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 each of the three facilities 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 or 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 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 states antidegradation policy. If ADEC determines that the proposed permit conditions will result in a degradation of water quality as stated in their water quality standards, then their CWA section 401 certification of the permit must include more stringent effluent limitations. It is anticipated that the effluent limitations in the draft general permit, together with the waters that are excluded from permit coverage as described in Section III.C., are sufficient to comply with the state's antidegradation policy.

## V. MONITORING AND REPORTING REQUIREMENTS

Section 308 of the CWA, and federal regulations at 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, BOD<sub>5</sub> 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 an average monthly 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. Permittees have 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. 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 actual number shall be reported.

The remainder of this section discusses specific monitoring requirements that are included in the draft general 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  $\mu$ g/L and total aromatic hydrocarbons (TAH) may not exceed 10  $\mu$ g/L. While the draft permits do not include numeric effluent limits for petroleum hydrocarbons, these criteria 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. Each 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*), and 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 three facilities 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 permits require each 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 facilities operation are 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 the 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 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) are the waters and substrates (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: king, coho, sockeye, pink and chum 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 permit 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 three permits 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 permittees have certified that the activities authorized by these draft permits are consistent with the Alaska Coastal Management Plan (ACMP). The draft permits, 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 permits 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, places such as Wrangell harbor and St. Paul Harbor are marine waters not considered "open sea". In these areas, the ordinary low water mark is not the inner boundary or baseline of the territorial sea, but rater at a "closure line" that separates the ocean (including territorial seas) from inland waters. Because marine discharges from the three bulk oil storage facilities covered by this fact sheet are 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 at 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<sub>5</sub> 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 hydrocarbonsTAH Total aromatic hydrocarbonsTMDL Total Maximum Daily Load

TSS Total Suspended Solids  $\mu g/L$  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.

BOD<sub>5</sub> 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 permittees. 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.

*Notice of Intent (NOI)* means a request, or application, to be authorized to discharge under a general NPDES permit.

OW means EPA Region 10's Office of Water.

P.L. means (U.S.) Public Law.

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.

SIP means seawater injection plant.

sp. means species.

SPAR Spill Prevention and Response

SPCC Spill Prevention Control and Countermeasure

STP means seawater treatment plant.

*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**

#### Petro Star, Inc.: North Pacific Fuels, Kodiak Terminal

NPDES Permit No. AK-002944-1

Facility Contact: Lisa V. Lewis, Director of Government Compliance

(907) 339-6630

Mailing Address: 3900 C Street, Suite 802

Anchorage, Alaska 99503-5966

Facility Address: P.O. Box 1487

715 Shelikof Street Kodiak, Alaska 99615

Permit Background: Permit No. AK-002944-1 was issued to the Union Oil Company of

California (UNOCAL) on July 12, 1978, and expired on July 12, 1983. UNOCAL later sold the Kodiak bulk terminal to Kodiak Oil Sales, Inc., and Petro Star purchased the facility in 1997. The permit was transferred between facility owners, and has been administratively extended since July 1983. The existing permit has effluent limits for oil & grease (15 mg/l) and flow (0.5 MGD), but no other monitoring requirements.

Facility Background: Petro Star Inc. owns and operates a bulk petroleum fuel terminal that is

located on the Kodiak Channel of St. Paul Harbor. The terminal receives diesel fuel and gasoline from barges, and distributes product via tanker trucks to local land based users and refuels vessels moored to their 200 foot dock. The facility is divided into four operating areas: tank farm, truck loading rack, mooring area/dock, and pipeline and valves. The tank farm consists of 8 above ground storage tanks with a maximum storage

volume of 1.7 million gallons.

Collection/Treatment System: Both the tank farm and the truck rack are surrounded by bermed or diked

areas 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 a 1,500 gallon oil/water separator through a 4-inch pipeline. Similarly, a 100 gallon oil/water separator treats stormwater from the truck rack which is feed from two, 50 gallon concrete collection sumps located beneath the loading area. In either case, treated water in the separators are visually checked for the presence of oil in amounts exceeding a sheen before a valve is manually released and the wastewater is discharged to St. Paul Harbor via a 4-inch pipe. Separator valves are then manually closed and locked. Oil/water separators are checked several times a day, and if oil

exceeds a sheen, it is skimmed off using sorbent pads, or

skimmed/pumped into drums. Each time secondary containment areas are drained to the separators, the start time, end time, water condition, and person performing the task are recorded in the Drain Log Book.

Discharge: Discharge occurs intermittently year round through a 4-inch pipe.

Outfall Location: Latitude: 57° 47' 8", Longitude: 152° 25' 20"

Receiving Water: Kodiak Channel of St. Paul Harbor

## Wrangell Oil, Inc.: Wrangell Terminal

NPDES Permit No. AK-002945-9

Facility Contact: William Privett, President

(907) 874-3276

Mailing Address: P.O. Box 776

Wrangell, Alaska 99929

Facility Address: Corner of Sunset Blvd & Peninsula St.

Wrangell, Alaska

Permit Background: In June of 1976, Union Oil Company of California (UNOCAL) submitted

an application for an NPDES permit for their Wrangell bulk petroleum terminal. EPA then began to work on the permit, and assigned it permit No. AK-002945-9, but the permit was never issued. Wrangell Oil Inc. later purchased the terminal from UNOCAL, and EPA is now in the process of issuing the permit. The permit identification number will remain the same as the one originally designated for this facility.

Facility Background: Wrangell Oil Inc. owns and operates a bulk petroleum fuel terminal

located on Wrangell Harbor that sells heating oil and gasoline to local commercial and residential customers, and provides marine fueling services from a small marina they operate. The terminal receives fuel from barges, and distributes product via tanker trucks to local land based users and refuels vessels moored to their marina. The tank farm consists of 7 above ground storage tanks with a maximum storage volume of

240,000 gallons.

Collection/Treatment System: Both the tank farm and the truck rack are surrounded by bermed or diked

areas 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 both tank farm and loading rack is directed to an oil/water separator. Residual oil sheens in the separator are collected with sorbent pads prior to discharge. During periods of heavy rain, the diked area surrounding the tank farm is drained to the oil/water separator

two to three times a week, for periods of 15 to 30 minutes each.

Discharge occurs intermittently year round.

Outfall Location: Latitude: 56° 27' 43", Longitude: 132° 22' 44"

Receiving Water: Wrangell Harbor of Zimovia Straight

## U.S. Coast Guard, Integrated Support Command, Kodiak

NPDES Permit No. AK-003142-9

Facility Contact: Deborah Darminio, Environmental Branch Chief

Ed Denoylles, Environmental Staff Engineer

(907) 487-5320

Mailing Address: P.O. Box 195025

Kodiak, Alaska 99619-5025

Facility Address: 11555 Middle Bay Rd

Kodiak, Alaska 99619

Permit Background: In February of 1981, the Coast Guard submitted an application for an

NPDES permit for their bulk petroleum terminal at Integrated Support Command, Kodiak. EPA then began to work on the permit, and assigned it permit No. AK-003142-9, but the permit was never issued. EPA is now in the process of issuing the permit. The permit identification number will remain the same as the one originally designated for this

facility.

Facility Background: The Coast Guard operates a bulk petroleum fuel terminal located on St.

Paul Harbor that provides marine and aviation fueling service to Coast Guard and Naval boats and airplanes. The terminal receives fuel from barges, and distributes product via tanker trucks and refuels vessels moored to their dock. The tank farm consists of five above ground

storage tanks with a storage volume of 5.6 million gallons.

Collection/Treatment System: Both the tank farm and the truck rack are surrounded by bermed or diked

areas that serve to contain run-on/runoff from rainfall or snowmelt. Other than stormwater, no other wastewater discharges are associated with the this permitting action. Due to the topography of the terminal situated on the Nyman Peninsula, combined with the fact that all stormwater flows via gravity with no pumping, there are 3 outfalls associated with the facility: two on Womens Bay (1 on the Inner Bay and 1 on the Outer Bay) and one on St. Paul Harbor. Stormwater reporting to Outfalls IA-3 (on St. Paul harbor) and NP-6 (inner Womens Bay) is collected and treated with an oil/water separator. A valve on the separators is manually opened to discharge only if there is no visible sheen in the tank. Residual oil sheens in the separator are collected with either sorbent pads or with a suction truck prior to discharge. Outfall NP-18 discharges to outer Womens Bay and receives no treatment in an oil/water separator prior to discharge. Instead, stormwater reporting to NP-18 passes through a petroleum oil detector tape that is connected to an alarm system. Each containment area is inspected daily, and sheens are removed whenever present, but this rarely occurs. Other oily wastewater associated with the bulk terminal (including tank wash water, tank bottom water and bilge water) gets processed through the Liquid Oily Waste System at the main wastewater treatment plant, and is discharged in accordance with NPDES permit no. AK-002064-8

(effective June 1, 2005).

Discharge occurs intermittently year round.

Outfall Location:

Outfall IA-3: Latitude: 57° 44' 21", Longitude: 152° 29' 37" Outfall NP-18: Latitude: 57° 43' 32", Longitude: 152° 30' 31" Outfall NP-6: Latitude: 57° 43' 35", Longitude: 152° 30' 54"

Receiving Water: Outfall IA-3: St. Paul Harbor

Outfall NP-18: Womens Bay Outfall NP-6: Womens Bay

## **APPENDIX B**

# EFFLUENT LIMITATIONS & MONITORING REQUIREMENTS

Table B-1. Facilities With Storage Capacity Greater Than 1 Million Gallons (Petro Star & Coast Guard)

Parameter	Units	Effluent Limits and Monitoring Requirements				
		Maximum Average		Monitoring	Sample Type	
		Daily Limit	Monthly Limit	Frequency		
Flow	gpd			Continuous	Recording	
Sheen / Residue <sup>1</sup>		No visible she	en at any time	Daily	Visual	
рН	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 <sub>5</sub>	mg/L	48	26	Monthly	Grab	
COD	mg/L	470	240	Monthly	Grab	
ТАН	μg/L			Quarterly	Grab	
TAqH	μg/L			Quarterly	Grab	

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

Table A-2. Facilities With Storage Capacity Greater Than or Equal to 210,000 Gallons (Wrangell Oil)

Parameter	Units	Effluent Limits and Monitoring Requirements				
		Maximum Daily Limit	Average Monthly Limit	Monitoring Frequency	Sample Type	
Flow	gpd			Monthly	Measure	
Sheen / Residue 1		No visible she	No visible sheen at any time		Visual	
pН	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			Semiannual	Grab	
TAqH	μg/L			Semiannual	Grab	

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