ALASKA POLLUTANT DISCHARGE ELIMINATION SYSTEM

PERMIT FACT SHEET – DRAFT

Permit:AK0031429 – USCG Base Kodiak
Bulk Fuel Storage Facility

DEPARTMENT OF ENVIRONMENTAL CONSERVATION
Wastewater Discharge Authorization Program
555 Cordova Street
Anchorage, AK 99501

Public Comment Period Start Date: **January 21, 2020**
Public Comment Period Expiration Date: **February 24, 2020**
Alaska Online Public Notice System

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Proposed issuance of an Alaska Pollutant Discharge Elimination System (APDES) permit to

USCG BASE KODIAK

For wastewater discharges from

BULK FUEL STORAGE FACILITY

The Alaska Department of Environmental Conservation (Department or DEC) proposes to reissue APDES individual permit AK0031429 – USCG Base Kodiak, Bulk Fuel Storage Facility (Permit). The Permit authorizes and sets conditions on the discharge of pollutants from this facility to waters of the United States. 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 the facility and outlines best management practices to which the facility must adhere.

This Fact Sheet explains the nature of potential discharges from the facility and the development of the Permit including:

- information on public comment, public hearing, and appeal procedures
- a listing of proposed effluent limitations and other conditions
- technical material supporting the conditions in the permit
- proposed monitoring requirements in the permit

Public Comment

Persons wishing to comment on, or request a public hearing for the Draft Permit for this facility, may do so in writing by the expiration date of the public comment period.

Commenters are requested to submit a concise statement on the Permit condition(s) and the relevant facts upon which the comments are based. Commenters are encouraged to cite specific Permit requirements or conditions in their submittals.

A request for a public hearing must state the nature of the issues to be raised, as well as the requester's name, address, and telephone number. The Department will hold a public hearing whenever the Department finds, on the basis of requests, a significant degree of public interest in a draft permit. The Department may also hold a public hearing if a hearing might clarify one or more issues involved in a permit decision or for other good reason, in the Department's discretion. A public hearing will be held at the closest practicable location to the site of the operation. If the Department holds a public hearing, the Director will appoint a designee to preside at the hearing. The public may also submit written testimony in lieu of or in addition to providing oral testimony at the hearing. A hearing will be tape recorded. If there is sufficient public interest in a hearing, the comment period will be extended to allow time to public notice the hearing. Details about the time and location of the hearing will be provided in a separate notice.

All comments and requests for public hearings must be in writing and should be submitted to the Department at the technical contact address, fax, or email identified above (see also the public comments section of the attached public notice). Mailed comments and requests must be postmarked on or before the expiration date of the public comment period.

After the close of the public comment period and after a public hearing, if applicable, the Department will review the comments received on the Draft Permit. The Department will respond to the comments received in a Response to Comments document that will be made available to the public. If no substantive comments are received, the tentative conditions in the Draft Permit will become the proposed Final Permit.

The proposed Final Permit will be made publicly available for a five-day applicant review. The applicant may waive this review period. After the close of the proposed Final Permit review period, the Department will make a final decision regarding permit issuance. A Final Permit will become effective 30 days after the Department's decision per Alaska Administrative Code (AAC) 18 AAC 15.185.

The Department will transmit the Final Permit, Fact Sheet (amended as appropriate), and the Response to Comments to anyone who provided comments during the public comment period or who requested to be notified of the Department's final decision.

Appeals Process

The Department has both an informal review process and a formal administrative appeal process for final APDES permit decisions. An informal review request must be delivered within 20 days after receiving the Department's decision to the Director of the Division of Water at the following address:

Director, Division of Water

Alaska Department of Environmental Conservation
555 Cordova Street
Anchorage, AK 99501

Interested persons can review 18 AAC 15.185 for the procedures and substantive requirements regarding a request for an informal Department review. See http://dec.alaska.gov/commish/review-guidance/informal-reviews for information regarding informal reviews of Department decisions.

An adjudicatory hearing request must be delivered to the Commissioner of the Department within 30 days of the permit decision or a decision issued under the informal review process. An adjudicatory hearing will be conducted by an administrative law judge in the Office of Administrative Hearings within the Department of Administration. A written request for an adjudicatory hearing shall be delivered to the Commissioner at the following address:

Commissioner

Alaska Department of Environmental Conservation
P.O. Box 111800
Juneau AK, 99811-1800.

Interested persons can review 18 AAC 15.200 for the procedures and substantive requirements regarding a request for an adjudicatory hearing. See http://dec.alaska.gov/commish/review-guidance/adjudicatory-hearing-guidance/ for information regarding appeals of Department decisions.

Documents are Available

The Permit, Fact Sheet, application, and related documents can be obtained by visiting or contacting DEC between 8:00 a.m. and 4:30 p.m. Monday through Friday at the addresses below. The Permit, Fact Sheet, application, and other information are located on the Department's Wastewater Discharge Authorization Program website: http://dec.alaska.gov/water/wastewater/

Alaska Department of Environmental Conservation Division of Water Wastewater Discharge Authorization Program 555 Cordova Street Anchorage, AK 99501 (907) 269-6285	Alaska Department of Environmental Conservation Division of Water Wastewater Discharge Authorization Program 410 Willoughby Avenue, Suite 310 Juneau, AK 99801 (907) 465-5180	Alaska Department of Environmental Conservation Division of Water Wastewater Discharge Authorization Program 43335 Kalifornsky Beach Road Soldotna, AK 99615 907-262-5210

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1.0 INTRODUCTION

On March 4, 2019, the Alaska Department of Environmental Conservation (DEC or Department) received an application from the United States Coast Guard (USCG) Base Kodiak for reissuance of Alaska Pollutant Discharge Elimination System (APDES) Individual Permit AK0031429 – USCG Base Kodiak, Bulk Fuel Storage Facility (Permit). This Fact Sheet was developed based on the application and supplemental information obtained through the application process.

1.1 Applicant

This Fact Sheet provides information on the reissuance of the Permit for the following entity:

Permittee:	USCG Base, Kodiak
Name of Facility:	Bulk Fuel Storage Facility (facility)
APDES Permit Number:	AK0031429
Facility Location:	USCG Base Kodiak, 11555 Middle Bay Rd., Kodiak Island, AK
Mailing Address:	P.O. Box 195025, Kodiak Island, AK
Onsite Facility Contact:	Ms. Jennifer Nutt

Outfall Summary

Outfall	Description	Receiving Water	Latitude	Longitude
001 (NP-1)	Air Station Tanks	Womens Bay	57.754617	-152.505429
002 (IA-3)	Truck Stand and AS Tanks (Treated)	St. Paul Harbor	57.739170	-152.493610
003 (NP-18)	Nyman Peninsula Tanks	St. Paul Harbor	57.724642	-152.511273
004 (NP-6)	Nyman Peninsula Tank	Womens Bay	57.726303	-152.516245

All discharges are to the locations shown in Appendix A, Figure A-3 and Figure A-4.

1.2 Authority

The National Pollutant Discharge Elimination System (NPDES) Program regulates the discharge of wastewater to the waters of the United States (U.S.). For waters of the U.S. under jurisdiction of the State of Alaska, the NPDES Program is administered by DEC as the APDES Program. This is the second reissuance of the Permit under authority of the APDES Program.

Clean Water Act (CWA) Section 301(a) and Alaska Administrative Code (AAC) 18 AAC 83.015 provide that the discharge of pollutants to waters of the U.S. is unlawful except in accordance with an APDES permit. The Permit is being developed per 18 AAC 83.115 and 18 AAC 83.120. A violation of a condition contained in the Permit constitutes a violation of the CWA and subjects the permittee of the facility with the permitted discharge to the penalties specified in Alaska Statute (AS) 46.03.760 and AS 46.03.761.

1.3 Permit History

USCG submitted an application on February 1981 to the Environmental Protection Agency (EPA) for an NPDES permit authorizing wastewater discharges from the bulk fuel storage facility (facility) at the USCG Base Kodiak, Alaska. EPA issued the Permit on March 1, 2008 that provided authorization for the discharge of accumulated rain and snowmelt water from secondary containment areas (SCA) surrounding storage tanks, a truck stand (TS), and an air station refueling pit (pit) at the facility. In 2014, the APDES Program reissued the Permit and removed

preexisting technology-based effluent limits (TBELs) that had been developed based on the assumption the effluent would resemble ballast water. Characterization data demonstrated this initial assumption was not appropriate and DEC developed new TBELs based on the working assumption that the effluent would be more similar to that of contaminated runoff from refineries. DEC will reevaluate this working assumption in this Fact Sheet using data collected during the term of the 2014 Permit (2014 Permit).

The Department received the current application for reissuance on March 4, 2019. This complete application was submitted more than 180 days prior to the expiration date and DEC administratively extended the 2014 Permit until it could be reissued.

2.0 BACKGROUND

2.1 Facility Information

The USCG Base Kodiak is located on Kodiak Island, Alaska approximately four miles southwest of the community of Kodiak. The City of Kodiak is located on the northeastern end of Kodiak Island, approximately 250 miles south-southwest of Anchorage. Travel to and from the community is via commercial or private aircraft, the Alaska Marine Highway System, and other private marine craft only. The facility provides fuel storage and distribution to support critical USCG air station and base operations. Fuel supplies are received by barge and aircraft, and distributed via pipeline and tanker trucks. Distributed fuels are used on USCG and U.S. Navy vessels, aircraft, and at the base central heating plant.

The facility consists of five above ground fuel storage tanks, a TS and air station pit (pit) located in four separate SCAs. The purpose of an SCA is to protect the surrounding environment, including waters of the U.S. from a release of hydrocarbons, should a tank or pipe failure occur. The SCAs are designed to contain the volume of the largest tank within the SCA and precipitation from a two-year, 24-hour storm event (approximately 110 percent of the largest tank volume in the SCA). Accumulated rain or snowmelt water is periodically discharged from the SCAs to preserve containment volume necessary to capture fuel in the case of a release. The discharge of SCA containment is to the nearby marine surface waters of Womens Bay and St. Paul Harbor. The SCAs are located at the facility AS Tank Farm (located on the southeast boundary of the base's aircraft apron area) and the Nyman Peninsula (NP) Tank Farm (located on the Nyman Peninsula approximately ¾ miles southwest of the air station). Descriptions of the physical operational components of the SCAs are provided in subsequent sections. Table 1 presents a summary of fuel products, total nominal capacity in million gallons (mg), outfall number (#) with USCG description #, and receiving water for each SCA.

Table 1: Summary of USCG Base Kodiak Tank Farms

Tank Farm, SCA	Product	Total Tank Capacity (mg)	Outfall # (USCG #)	Receiving Water
Tanks N-19/N-20	JP-5 Jet Fuel	0.176	Outfall 001 (NP-1)	Womens Bay
TS and Air Station Pit	JP-5 Jet Fuel	0.176	Outfall 002 (IA-3)	St. Paul Harbor
NP Tanks N-10/N-12	JP-5 Jet Fuel	3.64	Outfall 003 (NP-18)	St. Paul Harbor
NP Tank N-60	Gas and Diesel	1.73	Outfall 004 (NP-6)	Womens Bay

2.1.1 Air Station Tank Farm (N-19 and N-20 SCA)

Tanks N-19 and N-20 are each above ground steel tanks that share a common SCA sized for a capacity of 2.05 mg of snowmelt or rain water. The SCA drains to a sump inside the SCA that is connected to two outlets with control valves located just outside of the SCA. The first outlet from the SCA discharges through the storm drain system connected to Outfall 001 (NP-1). If no sheen is observed by the operator, the SCA is discharged through Outfall 001 (NP-1) to Womens Bay near the air station (Inner Womens Bay) (See Figure A-3). Compliance and monitoring samples are collected directly from the containment water present in the SCA prior to discharging. Unlike the previous permit that called for rerouting the effluent via a second outlet to the oil-water separator (OWS) for treatment prior to the discharge through Outfall 002 (IA-3), if the operator observed a sheen on the containment water surface, the contaminated water will be treated (e.g., sorbents applied) to remove the prior to discharging through Outfall 001(NP-1).See Section 2.1.2.

2.1.2 Air station Tank Farm (Truck Stand and Air Station Refueling Pit)

The air station tank farm consists of a truck stand and air station pit. If a sheen is observed on the water surface within the associated SCAs, the sheen is removed in an OWS at Hangar 1 prior to discharging to St. Paul Harbor from the through Outfall 001 (NP-1). DEC understands that the Hanger 1 OWS may receive wastewater from sources other than the TS and the air station pit located on the tarmac. More information is needed to determine whether there are other contributing sources or input lines that have not been accounted for associated with this area of the facility (See Section 2.2.3). In addition, during the term of the previous Permit, contaminated SCA water from Tanks N-19/N-20 could also be treated in the OWS and discharged through Outfall 001. The overlapping of N-19/N-20 SCA with the TS and air station pit wastewater creates confusion and complicates characterization of the effluent. The wastewater from the air station pit pit may have dissimilar characteristics than the characteristics of the wastewater from the Tank N-19/N-20 SCA wastewater. As a result, the practice of discharging N-19/N-20 SCA water that has a sheen through the Hanger 1 OWS prior to being discharged from Outfall 002 (IA-3) is being discontinued in the Permit.

2.1.3 Nyman Peninsula Fuel Farm Tanks N-10 and N-12

Above ground storage tanks N-10/N-12 share a common SCA sized for a capacity of 2.0 mg. The containment water from the SCA drains to a small baffled sump inside the SCA that is connected by pipe to a locked, manually operated control valve located outside of the SCA. The SCA sump is monitored using oil sensors that sends alarms to the operation room at the central heating plant and a control panel in the N-11 pump house. If a sheen is present, the sheen must be removed prior to discharge. Upon opening the valve, SCA water flows through a series of piping and surface ditches that ultimately discharges to St. Paul Harbor through Outfall 003 (NP-18). Compliance and monitoring samples for the containment water in this SCA are collected from a manhole located next to the control valve (See Figure A-4).

2.1.4 Nyman Peninsula Fuel Tank N-60

Above ground storage tank N-60 has an SCA sized to a capacity of 1.8 mg; containment water drains to a large baffled sump inside the SCA. The sump is monitored by oil sensors that send alarms to the operation room at the central heating plant and an alarm control panel at the N-11 pump house. If a sheen is observed on the water surface in the SCA, the water must be treated to remove the sheen prior to discharge. If there is no sheen observed, the

operator initiates the discharge to Outfall 004 (NP-6) by opening a valve located adjacent to the sump. The discharge travels through surface ditches to a drain box and then via pipe to Womens Bay near the Fuel Pier (Outer Womens Bay) (See Figure A-4).

2.2 Facility Performance and Wastewater Characterization

Discharge flows from designated outfalls at the facility range from intermittent to quasi-continuous (i.e., Outfall 002) depending on the amount of precipitation the area receives. Table 2 gives a summary of total estimated annual discharge volumes reported in mg and monthly average discharges reported in million gallons per day (mgd) from August 2014 through November 2018.

Table 2: Discharge Flows

Outfall # (USCG #)	Year	Total Annual Discharges (mg)	Flow Ranges (mgd) (Low - High, Average)
Outfall 001 (NP-1)	2014	0.379	0.0 – 0.105, 0.0316
	2015	0.250	0.0 – 0.066, 0.0208
	2016	0.300	0.0 – 0.056, 0.0250
	2017	0.214	0.003 – 0.057, 0.0179
	2018	0.207	0.004 – 0.070, 0.01730
Outfall 002 (IA-3)	2014	35.85	0.376 – 19.760, 0.2617
	2015	280.35 [1]	1.998 – 64.574, 11.816
	2016	49.78	0.0 – 14.447, 4.1465
	2017	0.340	0.0 – 0.254, 0.0280
	2018	No Discharge	No Discharge
Outfall 003 (NP-18)	2014	27.478	0.0 – 0.872, 0.0309
	2015	2.056	0.0 – 0.528, 0.1714
	2016	2.677	0.0267 – 0.452, 0.2231
	2017	1.889	0.0 – 0.319, 0.1572
	2018	2.059	0.0 – 0.472, 0.1716
Outfall 004 (NP-6)	2014	1.484	0.0 – 0.500, 0.1237
	2015	0.722	0.0 – 0.333, 0.06016
	2016	0.941	0.0 – 0.222, 0.0784
	2017	0.567	0.0 – 0.133, 0.0473
	2018	1.326	0.0 – 0.387, 0.1105

Note -

1. This volume has been reported with the clarification that the meter (now replaced) was broken and not working correctly at the time of the recording.

2.2.1 Characterization of Discharge Parameters Requiring Monitoring Only

Parameters that did not have limits and only required monitoring during the previous permit cycle were evaluated by reviewing Discharge Monitoring Reports (DMRs) and original analytical laboratory reports from August 2014 through November 2018. The parameters that were required to be monitored in the previously issued permit but did not have corresponding effluent limits include total aromatic hydrocarbons (TAH) and total aqueous hydrocarbons (TAqH). Table 3 provides a summary of observed ranges and average of monitoring results in units of micrograms per liter (µg/L) and a comparison to water quality criteria where applicable.

Table 3: Characterization of Parameters Requiring Monitoring Only

Parameter (units)	Water Quality Criteria	Observed Range (Low-High; Average)			
		Outfall 001 (NP-1)	Outfall 002 (IA-3)	Outfall 003 (NP-18)	Outfall 004 (NP-6)
Annual Flow (mg)	--	0.30 – 0.38; 0.27	0.336 – 280.25; 9.16	1.887 – 2.75; 2.29	0.567 – 1.48; 1.01
TAH (μg/L)	10	<1.05 – <1.05; <1.05	<1.05 – 4.7; 2.0	<1.05 – <1.05; <1.05	<1.05 – <1.05; <1.05
TAqH (μg/L)	15	0.0372 – <1.10; 0.84	0.454 – 11.4; 3.6	0.0274 – <1.10; 0.82	<1.07 – <1.48; <1.14

Table 3 also shows that TAH and TAqH values recorded for all outfalls, were very low and did not result in any exceedances of the criteria. Because the SCA water is from precipitation and typically meets water quality criteria, the discharges appear to meet the definition of storm water. Based on this characterization data, a mixing zone does not appear to be necessary and there is no reasonable potential for TAH and TAqH to exceed, or contribute to an exceedance, of water quality criteria.

2.2.2 Characterization of Parameters with Limits

DEC examined limited parameters by reviewing DMR data from August 2014 through November 2018 and conducted a comparison to numeric limits under the 2014 Permit; narrative limitations (i.e., sheen observations) were not included. The parameters reviewed include pH reported in standard units (su) as well as oil and grease and total organic carbon (TOC) reported in milligrams per liter (mg/L). Table 4 provides a summary of observed ranges and averages of compliance monitoring results, and a comparison to the existing permit limits.

Table 4: Characterization of Parameters with Limits

Parameter (Units)	Limit		Observed Range[1] (Low-High, Average)			
	MDL	AML	Outfall 001 (NP-1)	Outfall 002 (IA-3)	Outfall 003 (NP-18)	Outfall 004 (NP-6)
pH [2] (su)	6.5 ≤ pH ≤ 8.5		6.65 – 8.37; 7.18	6.71 – **9.43**; 7.43	6.38 – 8.34; 7.03	6.62 – 8.49; 7.22
Oil and Grease (mg/L)	15	NA	<1.04 – 4.4; 2.9	<1.06 – 8.5; 3.65	<1.03 – 5.7; 3.0	<1.03 – 4.6; 2.8
TOC (mg/L)	110	NA	<0.5 – 11.9, 3.9	<0.5 – **481**, 29.6	<0.36 – 7.8; 2.3	<0.15 – 5.5, 2.1

Notes:
1. Values that exceed limits are shown in bold.
2. Median values are used instead of average values for pH.

Table 4 shows that the reported values were low and did not result in an exceedance of limits for any parameter at Outfalls 001, 003 and 004. However, Outfall 002 had elevated TOC concentrations on five occasions with several of those occasions also demonstrating elevated pH, both resulting in an exceedance of their respective limits. Because the elevated TOC and pH did not have a corresponding increase in oil and grease, TAH, or TAqH, the exceedances in Outfall 002 do not appear to be related to hydrocarbons from the facility. Given Outfall 002 appears to have significantly different characteristics, more information is needed to identify what the source of elevated TOC is at Outfall 002 (AI-3). For the three remaining discharges, the assumption that the contained water is storm water appears further justified based on the reported low concentrations of oil and grease and TOC. In addition, the three remaining discharges suggest the previously established TBELs for oil and grease and TOC may not be appropriate for controlling the effluent quality and supports re-evaluation.

2.2.3 Discussion

As mentioned in Sections 2.1.2 and 2.2.2, it is unclear based on current schematics and DEC's understanding of contributing sources as to why Outfall 002 (I-A3) demonstrates occasional elevated pH and TOC concentrations when none of the other outfalls authorized under the Permit do. DEC suspects it may have to do with the contributions from the AS refueling pit. Recently, a spill of aqueous fire-fighting foam (AFFF) occurred at the AS but this spill was contained in a lined contingency containment area and did not impact the discharges authorized by the Permit. However, given there is potential for similar illicit sources at the pit and Hanger 1, DEC suspects there is an unidentified non-hydrocarbon based source of TOC that is not associated with fuel product entering the collection system and being discharged. Given the elevated TOC has caused limit exceedances, the Permit must be modified to account for this illicit source.

2.3 Compliance History

2.3.1 Limit Exceedances

A review of facility compliance during the previous permit cycle was conducted by comparing compliance monitoring data from DMRs to limits required in the 2014 Permit. The comparative review included DMR data from August, 2014 through November 2018. Table 5 shows the number of exceedances observed during the previous permit cycle.

Table 5: Limit Exceedances (8/2014 to 11/2018)

Parameter	Number of Observed Exceedances			
	Outfall 001 (NP-1)	Outfall 002 (IA-3)	Outfall 003 (NP-18)	Outfall 004 (NP-6)
pH	None	4	None	None
Oil and Grease	None	None	None	None
TOC	None	3	None	None

There were fewer exceedances for pH overall for the facility than during the previous permit term and these only occurred at Outfall 002 (IA-3). The range of pH exceedance at Outfall 002 (IA-3) was 8.58 - 9.43 with the higher values for pH corresponding with elevated concentrations of the three reported TOC limit exceedances. The second highest reported pH was 9.29 and corresponded with a TOC exceedance of 481 in January 2017.

2.3.2 Reporting Violations

The permittee had numerous reporting violations late in the permit cycle due a sudden loss of the longtime operator. Beginning November 2017, failed submittals resulting in 45 non-reporting violations, were assessed due to late DMRs or incorrect reporting methods. A total of 45 reporting violations were reported of which all but 13 have been resolved.

3.0 RECEIVING WATERBODIES

3.1 Water Quality Standards

Section 301(b)(1)(C) of the CWA requires the development of limits in permits necessary to meet WQS by July 1, 1977. Regulations in 18 AAC 83.435 require that conditions in permits ensure compliance with WQS. The WQS are composed of waterbody use classifications, numeric and/or narrative water quality criteria, and an Antidegradation policy. The use

classification system designates the beneficial uses for each waterbody. The Antidegradation policy ensures that the beneficial uses and existing water quality are maintained.

Waterbodies in Alaska are designated for all uses unless the water has been reclassified under 18 AAC 70.230 as listed under 18 AAC 70.230(e). Some waterbodies in Alaska can also have site-specific water quality criterion per 18 AAC 70.235, such as those listed under 18 AAC 70.236(b). The Department has determined that there has been no reclassification nor has site specific water quality criteria been established at the location of the permitted facility.

3.2 Water Quality Status of the Receiving Water

Any part of a waterbody for which the water quality does not, or is not expected to, intrinsically meet applicable WQS is defined as a "water quality limited segment" and placed on the state's impaired waterbody list. For an impaired waterbody, Section 303(d) of the CWA requires states to develop a Total Maximum Daily Load (TMDL) management plan for the waterbody. The TMDL documents the amount of a pollutant a waterbody can assimilate without violating WQS and allocates that load to known point sources and nonpoint sources.

Neither St. Paul Harbor nor Womens Bay are included in *Alaska's Final 2014/2016 Integrated Water Quality Monitoring and Assessment Report*, November 2, 2018 (*2014/2016 Integrated Report*) as being impaired. Accordingly, no TMDL has been developed for the receiving water.

4.0 EFFLUENT LIMITS AND MONITORING REQUIREMENTS

4.1 Basis for Permit Effluent Limits

Per 18 AAC 83.015, the Department prohibits the discharge of pollutants to waters of the U.S. unless first obtaining a permit issued by the APDES Program that meets the purposes of AS 46.03 and is in accordance with CWA Section 402. Per these statutory and regulatory provisions, the Permit includes effluent limits that require the discharger to meet standards reflecting levels of technological capability, comply with Water Quality Standards (WQS), and comply with other state requirements that may be more stringent.

The CWA requires that the limits for a particular parameter to be the more stringent of either TBELs or water quality-based effluent limits (WQBEL). TBELs are typically set via EPA-rule makings in the form of Effluent Limitation Guidelines (ELG) and correspond to the level of treatment that is achievable using available technology. In situations where ELGs have not been developed, or have not considered specific discharges or pollutants, a regulatory agency can develop TBELs using best professional judgment (BPJ) on a case-by-case basis. A WQBEL is designed to ensure that the WQS codified in 18 AAC 70 are maintained and the waterbody as a whole is protected. WQBELs may be more stringent than TBELs. In cases where both TBELs and WQBELs have been generated, the more stringent of the two limits will be selected as the final permit limit. WQBEL limits for all four authorized outfalls include visual sheen and pH. In addition to pH and visual sheen, Outfall 002 also retains the TBELs from the existing Permit due to characterization and permit development discussed in Section 4.1.1.

4.1.1 Technology Based Effluent Limits

EPA has not established ELGs for bulk fuel storage facilities. The discharge consists of rain and snowmelt accumulated in SCAs that has the potential for hydrocarbon contamination (i.e., contaminated runoff). During the reissuance of the 2014 Permit, DEC conducted a

critical evaluation of the preexisting TBELs derived by EPA for chemical oxygen demand, biochemical oxygen demand, and chloride that had been established based on the assumption the wastewater would be similar to ballast water. Based on the analytical results available at the time, DEC concluded discharges from SCAs do not resemble the characteristics of ballast water and DEC replaced these TBELs with ones for oil and grease and TOC based on a new working assumption. After reviewing facility discharge practices and monitoring results, the Department adopted TBELs based on the working assumption that the discharges from the facility could resemble contaminated runoff discharges as described in the following definition from Title 40 of the Code of Federal Regulations, Part 419, Section 11 (40 CFR 419.11) Petroleum Refining Point Source Category Definitions:

> **419.11 (g)**
>
> The term *contaminated runoff* shall mean runoff which comes into contact with any raw material, intermediate product, finished product, by-product or waste product located on petroleum refinery property.

To reevaluate the 2014 TBELs for oil and grease and TOC, DEC reviewed analytical results generated from August 2014 through November 2018 for four similar bulk fuel permits including the USCG Permit. Overall statistics for TOC and oil and grease for all four permits were compared to those of just the USCG Permit; Outfall 002 was excluded in some of the scenarios to demonstrate the uniqueness of this type of discharge common to all four bulk fuel storage facilities. Table 6 shows the summary of the statistics used to reevaluate the applicability of the 2014 TOC TBEL and Table 7 summarizes for the applicability of the oil and grease TBEL.

Table 6: Statistical Evaluation of TOC in Four Bulk Fuel Permits

Statistical Parameter	AK0031429 by Outfall # (USCG #)				All Four Permits	
	001 (NP-1)	002 (AI-3)	003 (NP-18)	004 (NP-6)	With 002	Without 002
Maximum	11.9	481	7.78	5.47	481	23.4
Minimum	0.50	0.50	0.36	0.15	<0.05	< 0.05
Average	3.87	29.59	2.31	2.11	6.42	3.53
Standard Deviation	2.81	90.59	1.90	1.18	31.5	3.45
Coefficient of Variation	0.73	3.06	0.82	0.56	4.90	0.98
Data Set	52	50	52	52.00	485	435
Detected Data	50	47	48	48	438	391
Percent (%) Detected	96 %	94 %	88 %	92 %	90 %	90 %

Based on the comparison of statistical parameters in Table 6, Outfall 002 appears to be an anomaly supporting the assertion there is a potential illicit source contributing to the outfall that has not yet been identified (See Sections 2.1.2 and 2.2.3). Until this source is identified and eliminated, or minimized, DEC retains the 2014 TBEL for TOC of 110 mg/L solely for Outfall 002. For the remaining three outfalls, the limit is being removed as a technical mistake based on obtaining data since initiation of the TBEL.

Table 7: Statistical Evaluation of Oil and Grease in Four Bulk Fuel Permits

Statistical Parameter	AK0031429 by Outfall # (USCG #)				All Four Permits
	001 (NP-1)	002 (AI-3)	003 (NP-18)	004 (NP-6)	
Maximum	4.49	8.48	5.68	5.10	8.48
Minimum	< 1.04	< 1.06	< 1.03	< 1.03	< 1.00
Average	2.93	3.65	3.01	2.85	2.73
Standard Deviation	1.47	1.61	1.56	1.51	1.66
Coefficient of Variation	0.50	0.44	0.52	0.53	0.61
Data Set	52	50	52	52	483
Detected Data	2	6	2	2	83
Percent Detected	4 %	12 %	4 %	4 %	17 %

Based on the comparison of statistical parameters in Table 7, oil and grease also does not appear to be an appropriate TBEL for all four outfalls based on the observed averages compared to the 15 mg/L limit, as well as the low occurrence of detectable concentrations. DEC considered whether the data for Outfall 002 supports the previous assertion that the elevated TOC in Outfall 002 is not associated with hydrocarbons. Although Outfall 002 provided the highest concentration of oil and grease among those evaluated, the maximum concentration of 8.48 mg/L observed during November 2018 did not correspond to an elevated concentration of TOC, which was 3.09 mg/L during that sample event.

Except for Outfall 002, none of the discharges evaluated during this reissuance had results for TOC that indicate the TBELs are applicable; the calculated average concentrations for the three outfalls were < 3 % of the 110 mg/L TBEL for TOC. Per Section 2.2.2 and Section 2.2.3, the high TOC in Outfall 002 does not appear to be from contact with hydrocarbons. For all four outfalls, the calculated average for oil and grease was 20% of the 15 mg/L TBEL (see Table 7). Hence, the effluent does not appear to be impacted by hydrocarbons and the oil and grease and TOC limits do not appear to be applicable; the effluent characteristics resemble that of storm water. Based on this comparison and conclusions, the oil and grease TBELs are being eliminated from the Permit as a technical mistake realized upon review of recent data. With TBELs essentially eliminated from the Permit, except TOC on Outfall 002, DEC will impose WQBELs to the extent necessary to control discharges and comply with WQS. Because Outfall 002 exceeded TOC multiple times during the permit term, TOC is a parameter meriting special consideration during this reissuance.

4.1.2 Water Quality Based Effluent Limits (WQBELs)

Per 18 AAC 70.020(b)(A)(i), pH must be less than 6.5 or greater than 8.5 at all times ($6.5 \leq pH \leq 8.5$). Similar to the existing Permit, DEC sets the WQBEL for pH to be equal to the quality criterion based on a determination through characterization that the facility can attain the criteria.

Per 18 AAC 70.020(b)(17)(B)(ii), discharges “may not cause a film, sheen, or discoloration on the surface or the floor of the waterbody or adjoining shoreline.” DEC is imposing this narrative limitation of no discharge of petroleum hydrocarbons as determined by the presence of film, sheen, or a discoloration of the surface of the SCA containment water prior to discharge. An observed sheen must be removed by treatment methods prior to discharge. This narrative WQBEL prohibiting the discharge of SCA water that has a sheen has been carried over from the previous permit and will be used as a trigger for additional testing for TAH and TAqH.

The 2014 Permit required semiannual monitoring of TAH and TAqH, which resulted in just a few observed concentrations above detection and no reasonable potential for either TAH or TAqH when considering past and current characterization data. Therefore, routine monitoring is not retained in the Permit for TAH and TAqH. Instead, monitoring for TAH and TAqH is triggered by an observation of sheen on the SCA water surface or reporting of spills in the SCA from tank farm appurtenances or equipment. The intent of making monitoring for TAH and TAqH based on trigger conditions is to move toward regulating SCA water that has not been in contact with petroleum, or other deleterious pollutants, as storm water in future reissuances, if appropriate.

Similar to petroleum hydrocarbons, 18 AAC 70.020(b)(20) also requires 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." The Permit will contain a general requirement for this narrative to ensure these conditions do not occur from discharges authorized by the Permit.

4.2 Effluent Limits and Monitoring Requirements

Per AS 46.03.110(d), the Department may specify the terms and conditions for discharging wastewater in a permit. The Permit includes monitoring requirements so that compliance with effluent limits can be determined, but may also be required to characterize the effluent and to assess impacts to the receiving water. Sufficiently sensitive methods as required in 40 CFR 136 are required for analyzing collected samples. When appropriate, DEC requires development and implementation of specific best management practices (BMPs) as described in Section 7.3.1.

4.2.1 Effluent Limits and Monitoring Requirements for Outfall 002 (IA-3)

As discussed in Section 4.1.1, the effluent associated with Outfall 002 (IA-3) is impacted by potential pollutant sources that are atypical for SCAs. Therefore, Outfall 002 will have different parameters and associated limits than the other outfalls and require development and implementation of specific BMPs to identify and reduce, or eliminate, illicit sources of TOC per Section 7.3.1.1. The unique effluent limits and monitoring requirements for Outfall 002 (AI-3) is provided in Table 8.

Table 8: Effluent Limits and Monitoring Requirements Outfall 002 (IA-3)

Parameter (Units)	Effluent Limits	Monitoring Requirements	
		Frequency	Sample Type
Flow Volume (mgd) [1]	Report	Daily	Measure or Estimate
Oil and Grease (Sheen)	No visible sheen	Daily	Visual
pH (su)	$6.5 \leq pH \leq 8.5$	Monthly	Grab
TOC (mg/L) [2]	110	Monthly	Grab
TAH (µg/L) [3]	Report	Per Event [4]	Grab
TAqH (µg/L) [3]	Report	Per Event [4]	Grab

Notes:

1. Flow volumes and visual observations for sheen must be measured daily when discharges occur and recorded in a daily log. Report total monthly flow volumes and average monthly flow volumes determined by dividing the total monthly volume by the number of discharge events for the month.
2. The permittee must develop and implement specific BMPs per Section 7.3.1 to identify and reduce or eliminate pollutant sources contributing to exceedances of TOC.
3. See Section 4.2.3 details for reporting TAH and TAqH results below detection.
4. Monitoring for TAH and TAqH is triggered based on an observation of a sheen on the water surface or a spill in the SCA. The permittee must contact DEC upon detection of sheen or spill and conduct monthly monitoring for TAH and TAqH until four consecutive sample events demonstrate the SCA water is not contaminated (See Permit Appendix C for definition of contaminated SCA). The permittee must submit a written request for DEC written approval to reestablish the TAH and TAqH monitoring based on triggers of sheen or a spill.

4.2.2 Effluent Limits and Monitoring Requirements for Outfalls 001 (NP-1); 003 (NP-18); and 004 (NP-6)

As discussed in Section 4.1.1, the effluent associated with Outfall 001 (NP-1), Outfall 003 (NP-18), and Outfall 004 (NP-6) resemble storm water and are consistent with typical SCAs. Because the previous limits for TOC and oil and grease have been determined to be inappropriate for these SCAs, the limits for oil and grease and TOC have been removed for these three outfalls. The applicable effluent limits and monitoring requirements for Outfall 001, Outfall 003, and Outfall 004 are provided in Table 9.

Table 9: Effluent Limits and Monitoring Requirements [Outfalls 001 (NP-1), 003 (NP-18), and 004 (NP-6)]

Parameter (Units)	Effluent Limits	Monitoring Requirements	
		Frequency	Sample Type
Flow Volume (mgd) [1]	Report	Daily	Measure or Estimate
Oil and Grease (Sheen)	No visible sheen	Daily	Visual
pH (su)	$6.5 \leq pH \leq 8.5$	Monthly	Grab
TAH (µg/L) [2]	Report	Per Event [3]	Grab
TAqH (µg/L) [2]	Report	Per Event [3]	Grab

Notes:

1. Flow volumes and visual observations for sheen must be measured daily when discharges occur and recorded in a daily log. Report total monthly flow volumes and average monthly flow volumes determined by dividing the total monthly volume by the number of discharge events for the month.
2. See Section 4.2.3 details for reporting TAH and TAqH results below detection.
3. Monitoring for TAH and TAqH is triggered based on an observation of a sheen on the water surface or a spill in the SCA. The permittee must contact DEC upon detection of sheen or spill and conduct monthly monitoring for TAH and TAqH until four consecutive sample events demonstrate the SCA water is not contaminated (See Permit Appendix C for definition of contaminated SCA). The permittee must submit a written request for DEC written approval to reestablish the TAH and TAqH monitoring based on triggers of sheen or a spill.

4.2.3 Reporting TAH and TAqH Results

For purposes of reporting on the DMR for a single sample for TAH or TAqH where the parameter is a summation of results of individual analytes, estimated (e.g., "J" estimates) are considered as nondetectable. When all individual analytes are nondetectable, or estimates, the permittee must report the categorical summation of the common method detection limits with a "less than [categorical summation of method detection limits]." If any of the analytes are detectable, the permittee must report the summation of only the detected analytes on the DMR without a less than symbol. See Permit Appendix C for Definition of Categorical Sum.

4.3 Electronic Discharge Monitoring Reports

4.3.1 E-Reporting Rule, Phase I (DMRs)

The permittee must submit a DMR for each month by the 28th day of the following month. DMRs shall be submitted electronically through NetDMR per Phase I of the E-Reporting Rule (40 CFR 127). Authorized persons may access permit information by logging into the NetDMR Portal (http://cdxnodengn.epa.gov/oeca-netdmr-web/action/login). DMRs submitted in compliance with the E-Reporting Rule are not required to be submitted as described in Permit Appendix A - Standard Conditions unless requested or approved by the Department. Any DMR data required by the Permit that cannot be reported in a NetDMR field (e.g., full WET reports, mixing zone receiving water data, etc.), shall be included as an attachment to the NetDMR submittal. DEC has established an e-Reporting Information website at http://dec.alaska.gov/water/compliance/electronic-reporting-rule/ that contains general information about this new reporting format. Training materials and webinars for NetDMR can be found at https://netdmr.zendesk.com/home.

4.3.2 E-Reporting Rule, Phase II (Other Reporting)

Phase II of the E-Reporting Rule specifies that permittees will integrate electronic reporting for all other reports required by the Permit (e.g., Annual Reports and Certifications) and implementation is expected to begin during the term of the Permit. Permittees should monitor DEC's E-Reporting website at: http://dec.alaska.gov/water/compliance/electronic-reporting-rule/ for updates on Phase II of the E-Reporting Rule and will be notified when they must begin submitting all other reports electronically. Until such time, other reports required by the Permit may be submitted in accordance with Permit Appendix A – Standard Conditions.

4.4 Additional Monitoring

4.4.1 Additional Monitoring Upon DEC Request

DEC may require additional monitoring of effluent or receiving water for facility or site-specific purposes, including, but not limited to: data to support applications, demonstration of water quality protection, obtaining data to evaluate ambient water quality, evaluating causes of elevated concentrations of parameters in the effluent, and conducting chronic WET toxicity identification and reduction. If additional monitoring is required, DEC will provide the permittee or applicant the request in writing.

4.4.2 Optional Additional Monitoring by Permittee

The permittee also has the option of taking more frequent samples than required under the Permit. These additional samples must be used for averaging if they are conducted using the Department approved test methods (generally found in 18 AAC 70 and 40 CFR 136 [adopted by reference in 18 AAC 83.010]). The results of any additional monitoring must be included in the calculation and reporting of the data (e.g., calculation of averages) on eDMRs as required by the Permit and Standard Conditions Part 3.2 and 3.3 (Permit Appendix A).

4.4.3 Sufficiently Sensitive Methods

Monitoring for effluent limitations must use methods with method detection limits that are less than the effluent limitations or are sufficiently sensitive. Monitoring effluent or receiving water for the purpose of comparing to water quality criteria must use methods that are less than the applicable criteria or are sufficiently sensitive. Per 40 CFR 122.21(e)(3)(i), a method approved under 40 CFR 136 is sufficiently sensitive when:

(A) The method minimum level (ML) is at or below the level of the applicable water quality criterion for the measured parameter, or

(B) The method ML is above the applicable water quality criterion, but the amount of the pollutant or pollutant parameter in the discharge is high enough that the method detects and quantifies the level of the pollutant or pollutant parameter in the discharge (e.g., not applicable to effluent or receiving water monitored for characterization), or

(C) The method has the lowest ML of the analytical methods approved under 40 CFR 136 for the measured pollutant or pollutant parameter (e.g., the receiving water concentration or the criteria for a given pollutant or pollutant parameter is at or near the method with the lowest ML).

The determination of sufficiently sensitive methods discussed above for a single analyte is not applicable to TAH and TAqH due to the summation of multiple analytes. Therefore, for TAH and TAqH, DEC will apply a typical multiplier of 3.2 to the categorical sum of the method detection limits to “estimate” an ML for comparison with water quality criteria for TAH and TAqH. If the “estimated ML” is greater than the criteria, 10 µg/L and 15 µg/L respectively, DEC may request submittal of the analytical report to conduct a comprehensive review of those particular results.

5.0 ANTIBACKSLIDING

Per 18 AAC 83.480, “effluent limitations, standards, or conditions must be at least as stringent as the final effluent limitations, standards, or conditions in the 2012 Permit.” Per 18 AAC 83.480, a permit may not be reissued “to contain an effluent limitation that is less stringent than required by effluent guidelines in effect at the time the Permit is renewed or reissued.”

Effluent limitations may be relaxed as allowed under 18 AAC 83.480(b), CWA Section 402(o) and CWA Section 303(d)(4). 18 AAC 83.480(b) allows relaxed limitations in renewed, reissued, or modified permits when there have been material and substantial alterations or additions to the permitted facility that justify the relaxation, or, if the Department determines that technical mistakes were made.

CWA Section 303(d)(4)(A) states that, for waterbodies where the water quality does not meet applicable WQS, effluent limitations may be revised under two conditions, the revised effluent limitation must

ensure the attainment of the WQS (based on the waterbody TMDL or the waste load allocation) or the designated use which is not being attained is removed in accordance with the WQS regulations.

CWA Section 303(d)(4)(B) states that, for waterbodies where the water quality meets or exceeds the level necessary to support the waterbody's designated uses, WQBELs may be revised as long as the revision is consistent with the State's Antidegradation Policy. Even if the requirements of CWA Section 303(d)(4) or 18 AAC 83.480(b) are satisfied, 18 AAC 83.480(c) prohibits relaxed limits that would result in violations of WQS or ELGs (if applicable).

State regulation 18 AAC 83.480(b) only applies to effluent limitations established on the basis of CWA Section 402(a)(1)(B), and modification of such limitations based on effluent guidelines that were issued under CWA Section 304(b). Accordingly, 18 AAC 83.480(b) applies to the relaxation of previously established case-by-case TBELs developed using BPJ. To determine if backsliding is allowable, the regulation provides five regulatory criteria in 18 AAC 83.480(b)(1-5) that must be evaluated and satisfied. 18 AAC 83.480(c) prohibits relaxed limits that would result in violations of WQS or ELGs.

5.1 Technology-Based Backsliding

TBELs for TOC and oil and grease have been removed from the Permit for Outfall 001 (NP-1), Outfall 003 (NP-18), and Outfall 004 (NP-6). For Outfall 002 (IA-3), the limit for oil and grease has been removed but not the limits for TOC due to observed elevated concentrations of TOC that are considered to be atypical and may be related to activities associated with Hanger 1 or the AS refueling pit (See Section 4.1.1). The basis for removing these TBELs is based on obtaining new data since the first imposition of the limits that indicate assigning the TBELs based on similarity with contaminated runoff from refineries was a technical error. The Department finds the changes outlined above are consistent with 40 CFR 122.44(l) and 18 AAC 83.480 and does not result in a violation of WQS.

6.0 ANTIDEGRADATION

6.1 Legal Basis

Section 303(d)(4) of the CWA states that, for waterbodies where the water quality meets or exceeds the level necessary to support the waterbody's designated uses, WQBELs may be revised as long as the revision is consistent with the State's antidegradation policy. Alaska's current antidegradation policy and implementation methods are presented in 18 AAC 70.015 *Antidegradation Policy* (Policy) and in 18 AAC 70.016 *Antidegradation implementation methods for discharges authorized under the federal Clean Water Act* (implementation methods). The Policy and implementation methods have been amended through April 6, 2018; are consistent with 40 CFR 131.12; and were approved by EPA on July 26, 2018.

6.2 Receiving Water Status and Tier Determination

Per the implementation methods, the Department determines a Tier 1 or Tier 2 classification and protection level on a parameter by parameter basis. The implementation methods also describe a Tier 3 protection level applying to designated waters, although at this time no Tier 3 waters have been designated in Alaska.

The marine waters of Saint Paul Harbor and Womens Bay, covered under the Permit, are not listed as impaired (Categories 4 or 5) in the *2014-2016 Integrated Report*. Therefore, no parameters have been identified where only the Tier 1 protection level applies. Accordingly, this antidegradation analysis

conservatively assumes that the Tier 2 protection level applies to all parameters, consistent with 18 AAC 70.016(c)(1).

Per 18 AAC 70.015(a)(2), if the quality of water exceeds levels necessary to support propagation of fish, shellfish, wildlife, and recreation in and on the water, that quality must be maintained and protected, unless the Department authorizes a reduction in water quality.

Prior to authorizing a reduction of water quality, the Department must first analyze and confirm the findings under 18 AAC 70.015(a)(2)(A-D) are met. The analysis must be conducted with implementation procedures in 18 AAC 70.016(b)(5)(A-C) for Tier 1 protection, and under 18 AAC 70.016(c)(7)(A-F) for Tier 2 protection. These analyses and associated finding are summarized below.

6.3 Tier 1 Analysis of Existing Use Protection

The summary below presents the Department's analyses and findings for the Tier 1 analysis of existing use protections per 18 AAC 70.016(b)(5) finding that:

> ***(A) existing uses and the water quality necessary for protection of existing uses have been identified based on available evidence, including water quality and use related data, information submitted by the applicant, and water quality and use related data and information received during public comment;***
>
> The Department reviewed water quality data and information on existing uses in the vicinity of Outfalls 001 – 004 submitted by the applicant. The Department finds the information reviewed as sufficient to identify existing uses and water quality necessary for Tier 1 protection.
>
> ***(B) existing uses will be maintained and protected****;*
>
> Per 18 AAC 70.020 and 18 AAC 70.050, marine waters are protected for all uses. Therefore, the most stringent water quality criteria found in 18 AAC 70.020 and in the *Alaska Water Quality Criteria Manual for Toxic and Other Deleterious Organic and Inorganic Substances* (DEC 2008) have been applied where appropriate. The Permit includes WQBELs that are based on meeting water quality criteria at the point of discharge. Because the criteria are developed such that meeting the criteria protects the uses of the waterbody and all applicable criteria are met at the point of discharge, the uses of the waterbody as a whole are being maintained and protected.
>
> ***(C) the discharge will not cause water quality to be lowered further where the department finds that the parameter already exceeds applicable criteria in 18 AAC 70.020(b), 18 AAC 70.030, or 18 AAC 70.236(b).***
>
> The Permit will require that the discharge shall not cause or contribute to a violation of WQS. As previously stated the marine waters of Saint Paul Harbor and Womens Bay covered under this Permit are not listed as impaired; therefore, no parameters were identified as already exceeding the applicable criteria in 18 AAC 70.020(b) or 18 AAC 70.030.

The Department concludes the terms and conditions of the Permit will be adequate to fully protect and maintain the existing uses of the water and that the findings required under 18 AAC 70.016(b)(5) are met.

6.4 Tier 2 Analysis for Lowering Water Quality Not Exceeding Applicable Criteria

6.4.1 Scope of Tier 2 Analysis

Per 18 AAC 70.016(c)(2), an antidegradation analysis is only required for those waterbodies needing Tier 2 protection and which have any new or existing discharges that are being

expanded based on permitted increases in loading, concentration, or other changes in effluent characteristics that could result in comparative lower water quality or pose new adverse environmental impacts. Additionally, per 18 AAC 70.016(c)(3), DEC is not required to conduct an antidegradation analysis for a discharge the applicant is not proposing to expand.

Given this Fact Sheet is the basis for reissuing the Permit authorizing four discharges, DEC reviewed information provided by the applicant to determine if any of the discharges require a Tier 2 evaluation. The review indicates the information provided is sufficient and credible per 18 AAC 70.016(c)(4) and does not identify there is an expanded limit or introduction of a new discharge. Based on this analysis, there is no increase in limited loadings, concentrations, or other effluent changes that would result in a comparative lower water quality or pose new adverse environmental impacts to trigger Tier 2 analysis. Accordingly, a Tier 2 analysis has not been performed.

7.0 OTHER PERMIT CONDITIONS

7.1 Standard Conditions

Appendix A of the Permit contains standard regulatory language that must be included in all APDES permits. These requirements are based on the regulations and cannot be challenged in the context of an individual APDES permit action. The standard regulatory language covers requirements such as monitoring, recording, reporting requirements, compliance responsibilities, and other general requirements.

7.2 Quality Assurance Project Plan

The permittee is required to develop and implement a facility-specific Quality Assurance Project Plan (QAPP) that ensures all monitoring data associated with the Permit are accurate and to explain data anomalies if they occur. The permittee is required to develop and implement procedures in a QAPP that documents standard operating procedures the permittee must follow for collecting, handling, storing and shipping samples; laboratory analysis (e.g., most sensitive methods); and data reporting. If a QAPP has already been developed and implemented, the permittee must review and revise the existing QAPP to ensure it includes the necessary content required by the Permit. The permittee must submit a letter to the Department within 90 days of the effective date of the Permit certifying that the QAPP has been developed, or revised, and implemented. The QAPP shall be retained onsite and made available to the Department upon request.

7.3 Best Management Practices Plan

A BMP Plan presents operating and housekeeping measures intended to minimize or prevent the generation and potential release of pollutants from a facility to the waters of the U.S. during normal operations and additional activities. Per 18 AAC 83.475(4), “A permit must include best management practices to control or abate the discharge of pollutants and hazardous in a permit when the practices are reasonably necessary to achieve effluent limitations and standards…”

Within 90 days of the effective date of the Permit, the permittee must review, revise as necessary, implement the BMP Plan to address current activities at the terminal and submit written certification of the review, revision and implementation to DEC.

In each subsequent year of the Permit, the permittee must establish a committee to review and revise the BMP Plan as necessary to address any modifications or changes to operational

practices at the terminal and to continue to meet the objectives and specific requirements of the Permit. The permittee must submit written certification to DEC that the BMP Plan review committee has reviewed the BMP Plan, and modified if necessary, by January 31st of each year the Permit remains in effect.

7.3.1 Specific BMP Plan Requirements

In addition to implementing and updating a BMP Plan that achieves the overall objectives and specific requirements to prevent or minimize the generation and release of pollutants from the facility, the permittee must also develop and implement a specific BMP as described in the following sections.

7.3.1.1 Outfall 002 (IA-3) Specific TOC Reduction BMP

For Outfall 002 (IA-3), the permittee must identify pollutant sources generated by activities taking place in Hanger 1, the AS refueling pit, and tarmac drainage that may be contributing to elevated concentrations of TOC and pH. Upon successfully identifying and reducing, or eliminating, the source(s) of TOC, the permittee may submit a written request to DEC to reduce the monitoring frequency for TOC from monthly to quarterly on Outfall 002. DEC will provide written approval to reduce the monitoring frequency upon successfully demonstrating 1) identification of the sources and 2) reduction or elimination of the source. Success in reducing TOC will be based on the average of the preceding 12 months being less than 5 mg/L.

7.3.1.2 Specific BMPs for Reducing Discharge of Aqueous Fire Fighting Foam

The permittee must maintain BMPs to limit, manage, and control discharges from fire foam system testing and hydrant maintenance and testing. The uncontrolled release of Aqueous Fire-fighting Foam (AFFF) containing perfluorooctanoic acid (PFOA) and perfluorooctanesulfonic (PFOS) to the environment is not permitted unless such action is warranted by an emergency. Any non-emergency action associated with AFFF must be performed with appropriate controls to prevent releases to the environment, including storage, training, and maintenance of the firefighting system. If an environmentally suitable substitute becomes available and approved for use by other agencies having jurisdiction, USCG must evaluate the substitute foam and if appropriate, remove, dispose, and replace the legacy AFFF.

8.0 OTHER LEGAL REQUIREMENTS

8.1 Endangered Species Act

The Endangered Species Act (ESA) requires federal agencies to consult with National Oceanic and Atmospheric Administration (NOAA), the National Marine Fisheries Service (NMFS) and the U.S. Fish and Wildlife Service (FWS) if their actions could beneficially or adversely affect any threatened or endangered species. As a state agency, DEC is not required to consult with these federal agencies regarding permitting actions. DEC did however voluntarily send an email to both the FWS and NOAA on June 4, 2019 notifying the agencies of current permit development activities and requesting critical habitat listings in the vicinity of the terminal and has not received a response from either agency.

DEC consulted the NOAA Marine Mammal Species Range and Critical Habitat Interactive map located online at https://alaskafisheries.noaa.gov/esa-consultations and accessed the ESA Species interactive map to identify ESA species of concern in the waters adjacent to the facility.

DEC also accessed the FWS Information, Planning, and Conservation System website at https://ecos.fws.gov/ipac/location. The Department used this website to gain an approximate determination that the greater area surrounding the facility that the location overlaps critical habitat for the Northern Sea Otter (*Enhydra lutirs kenyoni*).

8.2 Essential Fish Habitat

Essential fish habitat (EFH) includes waters and substrate (sediments, etc.) necessary for fish from commercially-fished species to spawn, breed, feed, or grow to maturity. The Magnuson-Stevens Fishery Conservation and Management Act (January 21, 1999) requires federal agencies to consult with NOAA when a proposed discharge has the potential to adversely affect (reduce quality and/or quantity of) EFH. As a State agency, DEC is not required to consult with these federal agencies regarding EFH. DEC did however voluntarily send an email request to FWS on June 4, 2019 notifying the agency of current permit development activities and requesting critical habitat listings in the vicinity of the terminal and has not received a response.

DEC additionally accessed EFH information at NOAA's Alaska Essential Fish Habitat (EFH Mapper located at https://www.fisheries.noaa.gov/resource/map/alaska-essential-fish-habitat-efh-mapper. The tool identified habitat areas of particular concern in the vicinity of the discharge and reported EFH for 19 species of rockfish (*Sebastes ssp.*), two species of flounder (*Athesresthes spp.*), two species of skate (*Bathyraja spp.*), 5 species of salmon (*Oncorhynchus spp.*), the Alaska plaice (*Pleuronectes quadrituberculatus*), 6 species of sole, (*Solea spp*., *Lepidopsetta spp*., and *Glyptocephalus spp.*), the Atka mackerel (*Pleurogrammus monoterygius*), two species of sculpin (*Myoxocephalus spp.*, and *Hemitripterus spp.*), Pacific cod (*Gadus macrocephalus*), the giant octopus (*Enteroctopus dofleini*), Pacific ocean perch (*Sebastes alutus*), two species of pollock (*Theragra chalcogramma* and *Gadus chalcogrammus*), sablefish (*Anoplopoma fimbria*), Yellow Irish lord (*Hemilepidotus jordani*) and finally, the Weathervane scallop (*Patinopecten caurinus*).

8.3 Ocean Discharge Criteria Evaluation

CWA Section 403(a), Ocean Discharge Criteria, prohibits the issuance of a permit under CWA Section 402 for a discharge into the territorial sea, the water of the contiguous zone, or the oceans except in compliance with Section 403. Permits for discharges seaward of the baseline on the territorial seas must comply with the requirements of Section 403, which include development of an Ocean Discharge Criteria Evaluation (ODCE).

The Permit requires compliance with Alaska WQS. Consistent with 40 CFR 125.122(b), adopted by reference at 18 AAC 83.010(C)(8), discharges in compliance with Alaska WQS shall be presumed not to cause unreasonable degradation of the marine environment. EPA made the connection between the similar protections provided by ODCE requirements and WQS when promulgating ocean discharge criteria rules in 1980, as stated, "the similarity between the objectives and requirements of [state WQS] and those of CWA Section 403 warrants a presumption that discharges in compliance with these [standards] also satisfy CWA Section 403." (Ocean Discharge Criteria, 45 Federal Register 65943.). As such, given the Permit requires compliance with Alaska WQS, unreasonable degradation to the marine environment is not expected and further analysis under 40 CFR 125.122 is not warranted for this permitting action.

An Ocean Discharge Criteria Evaluation (ODCE) is not required for the reissued permit. 40 CFR 125, Subpart M requires an ODCE for a point source that occurs seaward of the baseline of the territorial sea. Because USCG Base Kodiak is located landward of the baseline, development of an ODCE is not required.

8.4 Permit Expiration

The Permit will expire five years from the effective date of the Permit.

9.0 References

1. Alaska Department of Environmental Conservation, *Alaska's Final 2014-2016 Integrated Water Quality Monitoring and Assessment Report*.
2. Alaska Department of Environmental Conservation, 2003. *Alaska Water Quality Criteria Manual for Toxics and Other Deleterious Organic and Inorganic Substances*, as amended through December 12, 2008.
3. Alaska Department of Environmental Conservation. *Alaska's Final 2010 Integrated Water Quality Monitoring and Assessment Report*.
4. Alaska Department of Environmental Conservation. *18 ACC 70. Water Quality Standards*, as amended through June 26, 2003.
5. Alaska Department of Environmental Conservation. *18 ACC 70. Water Quality Standards*, as amended through July 1, 2008.
6. Alaska Department of Environmental Conservation. *18 ACC 70. Water Quality Standards*, as amended through April 8, 2012.
7. Alaska Department of Environmental Conservation. *18 ACC 70. Water Quality Standards*, as amended through February 19, 2016.
8. Alaska Department of Environmental Conservation. *18 ACC 70. Water Quality Standards*, as amended through April 6, 2018.
9. Alaska Department of Environmental Conservation. *18 AAC 83. Alaska Pollutant Discharge Elimination System Program*. As amended Through October 23, 2008.
10. Alaska Department of Environmental Conservation. 18 ACC 72. Wastewater Disposal, as amended through December 23, 2009.
11. Alaska Department of Environmental Conservation. *Interim Antidegradation Implementation Methods*. Division of Water. Policy and Procedure No. 05.03.103. July 14, 2010.
12. United States Coast Guard. U.S. Coast Guard, Base Kodiak Integrated Emergency Response and Prevention Plan, January 2015.
13. U.S. EPA, *Technical Support Document for Water Quality-based Toxics Control*. Office of Water, EPA/505/2-90-001, PB91-127415. Washington D.C., March 1991.
14. U.S. EPA, *Interim Guidance for Performance-Based Reduction of NPDES Monitoring Frequencies*. Office of Water, EPA 833-B-96-001, Washington D.C., April 1998.
15. United States Fish and Wildlife Service, 2013. *List of Endangered, Threatened, Proposed Candidate and Delisted Species*, May 24, 2013.

APPENDIX A - FIGURES

Figure A-1: USCG Base Kodiak, Bulk Fuel Storage Facility – Vicinity Map

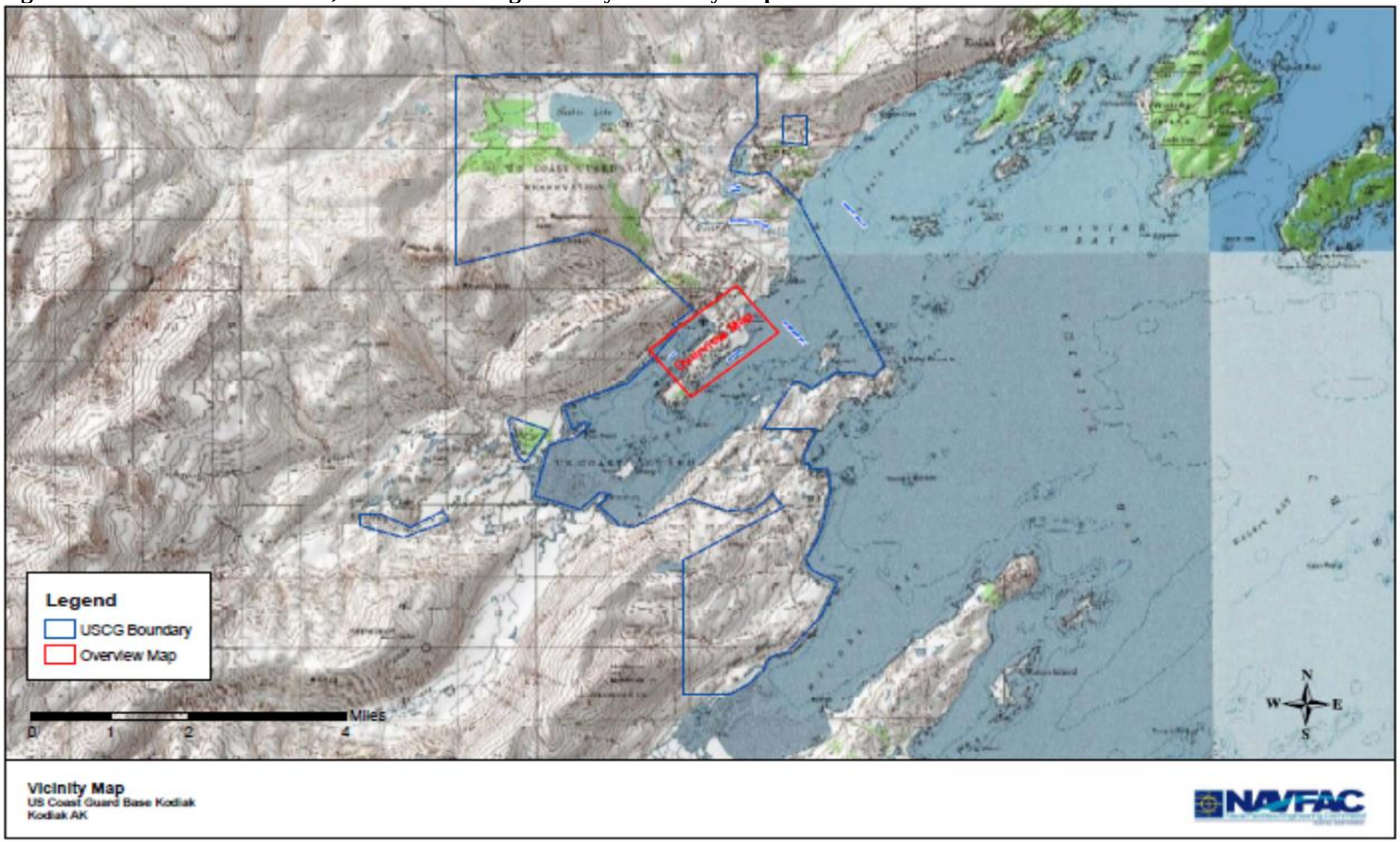

Figure A-2: USGS Base Kodiak, Bulk Fuel Storage Facility - Overview

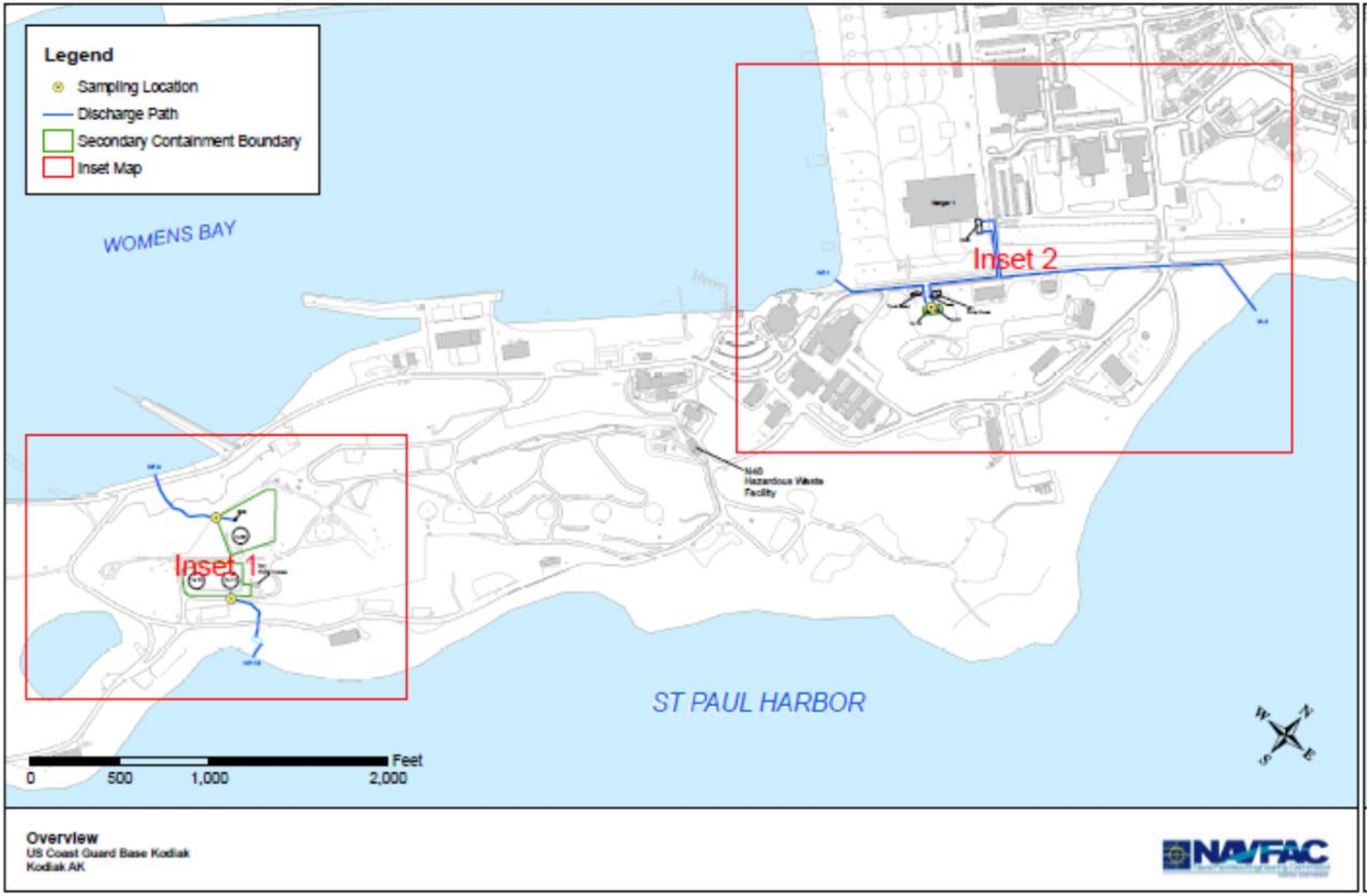

Figure A-3: USCG Base Kodiak, Bulk Fuel Storage Facility – Insert 1

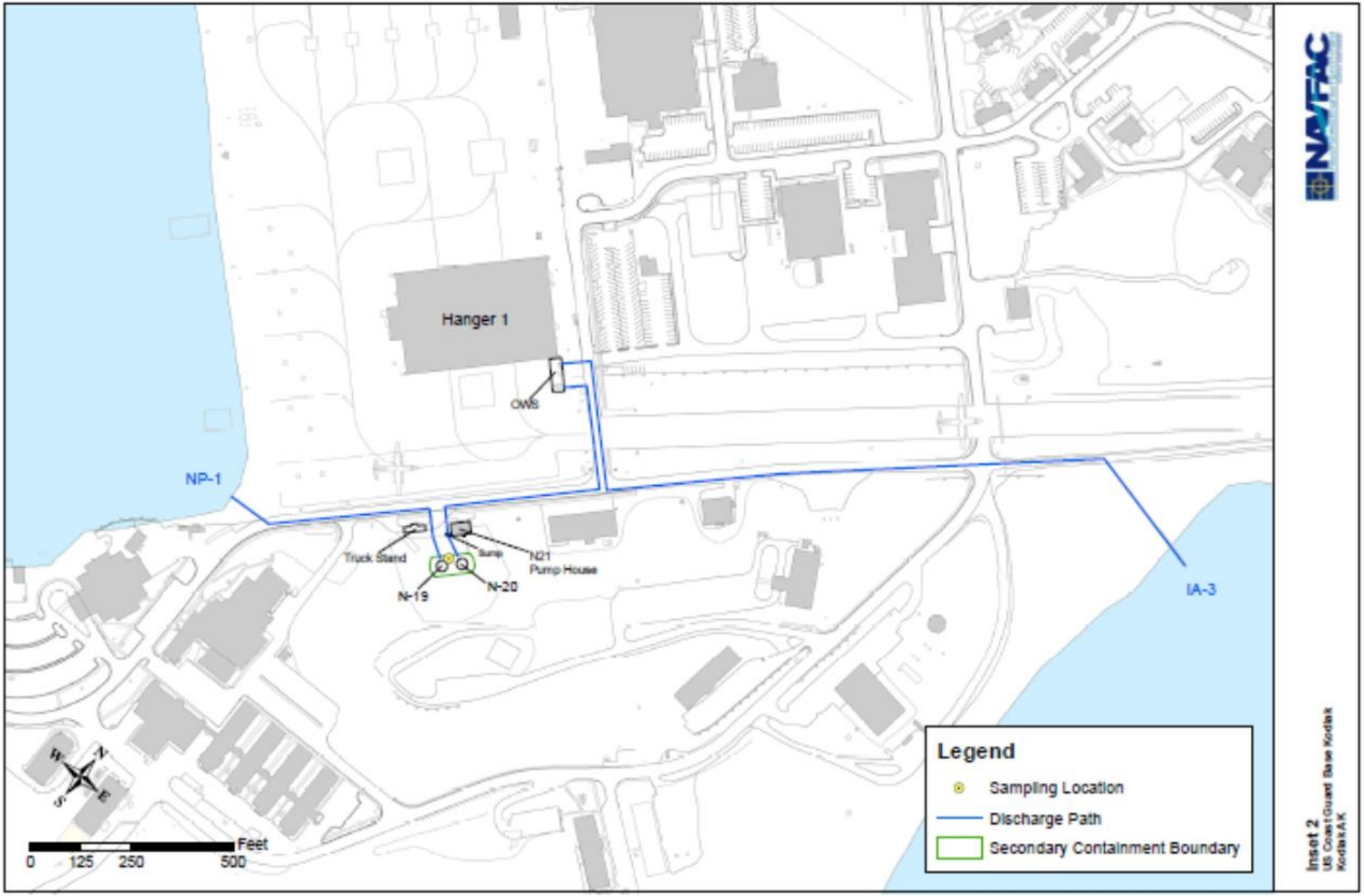
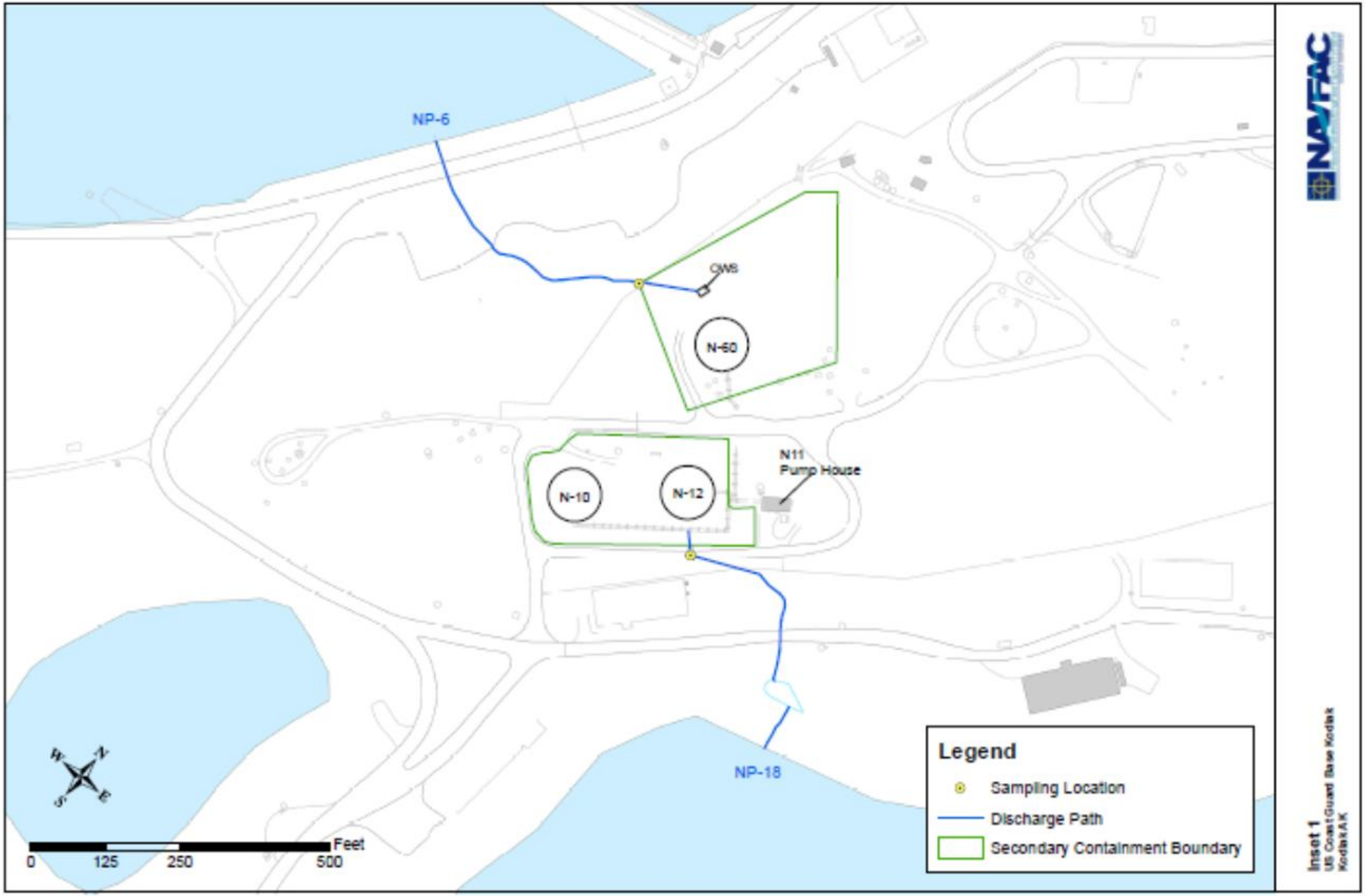
Figure A-4: USCG Base Kodiak, Bulk Fuel Storage Facility – Insert 2