ALASKA POLLUTANT DISCHARGE ELIMINATION SYSTEM

PERMIT FACT SHEET – DRAFT

Individual Permit: AK0000370 – CPD Alaska, LLC
Anchorage Bulk Fuel Terminal

DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Wastewater Discharge Authorization Program

555 Cordova Street

Anchorage, AK 99501

Public Comment Period Start Date: **August 7, 2015**
Public Comment Period Expiration Date: **September 7, 2015**
Alaska Online Public Notice System

Technical Contact: Jim Heumann, P.E.
Alaska Department of Environmental Conservation
Division of Water
Wastewater Discharge Authorization Program
410 Willoughby Ave., Suite 303
P.O. Box 111800
Juneau, AK 99811-1800
(907) 465-5171
Fax: (907) 465-5177
Jim.Heumann@alaska.gov

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

CPD ALASKA, LLC
ANCHORAGE BULK FUEL TERMINAL

For wastewater discharges from:

Anchorage Bulk Fuel Terminal (facility)
459 West Bluff Road
Anchorage, Alaska.

The Alaska Department of Environmental Conservation (DEC or Department) proposes to reissue APDES individual permit AK0000370 CPD Alaska LLC, Anchorage Bulk Fuel Terminal (permit). The permit authorizes and sets conditions on the discharge of pollutants from this facility to waters of the United States (U.S.). 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 the requirements 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, and
- 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, in accordance with the state's appeals process at 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 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.

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 15 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
410 Willoughby Avenue, Suite 303
Juneau, AK 99811-1800

Interested persons can review 18 AAC 15.185 for the procedures and substantive requirements regarding a request for an informal Department review.

See http://www.dec.state.ak.us/commish/InformalReviews.htm 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
410 Willoughby Street, Suite 303
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://www.dec.state.ak.us/commish/ReviewGuidance.htm 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://www.dec.state.ak.us/water/wwdp/index.htm.

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

1.1 Applicant

This fact sheet presents information for reissuance of the Alaska Pollutant Discharge Elimination System (APDES) permit for the following entity:

Name of Facility:	CPD Alaska, LLC, Anchorage Bulk Fuel Terminal
APDES Permit No.:	AK0000370
Facility Location:	459 West Bluff Road
Mailing Address:	Anchorage AK 99501
Facility Contact:	Mr. Greg Miller

Outfall Location

Discharge Location	Receiving Water	Latitude	Longitude
Outfall 001	Cook Inlet	61° 13’ 56” North	149° 53’ 41” West

The location of Outfall 001 is shown on Appendix A, Figure A-1.

1.2 Authority

On October 31, 2008, the Environmental Protection Agency (EPA) approved the application from the State of Alaska to administer the National Pollutant Discharge Elimination System (NPDES) Program in the State of Alaska, which regulates the discharge of wastewater to waters of the United States (U.S.) under the jurisdiction of the State of Alaska. The state program is known as the APDES Program. Transfer of authority to administer the APDES Program occurred in four phases with oil and gas facilities transferring as part of the fourth and final phase on October 31, 2012. At the time of transfer, all NPDES permits for facilities discharging wastewater to waters of the U.S. under the jurisdiction of the State became APDES permits. Accordingly, the Alaska Department of Environmental Conservation (Department or DEC) is now the APDES permitting authority for regulating wastewater discharges associated with individual permit AK0000370 – CPD Alaska, LLC (CPD Alaska), Anchorage Bulk Fuel Terminal (permit).

Section 301(a) of the Clean Water Act (CWA) 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 or NPDES permit. The proposed reissuance of 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) 46.03.020(13).

1.3 Permit History

The first NPDES permit for the facility was issued by EPA to Standard Oil Company of California, Inc. on November 22, 1974 and authorized the discharge of rain and snowmelt water from the facility’s secondary containment areas (SCAs) and storm water collection systems. The permit was administratively extended in June 1979 and, while under extension, the terminal was sold and the permit transferred to Chevron USA, Inc. On April 1, 2009 EPA reissued the existing permit to Chevron USA, Inc., who sold the facility to Crowley Petroleum Distribution, Inc. effective July 25, 2011. On September 27, 2013 CPD Alaska, LLC (a wholly owned subsidiary of Crowley Petroleum Distribution, Inc.) submitted a complete and timely application for permit reissuance 180 days prior to expiration of the existing permit and DEC administratively extended the permit until the time a reissued permit becomes effective.

2.0 BACKGROUND

2.1 Vicinity Information

The facility is located within the Port of Anchorage (POA) industrial area owned by the Alaska Railroad Corporation (ARRC). Other facilities within the area include the ARRC rail yard, fuel tank farms, pipelines, and freight handling facilities (See Appendix A, Figure A-2).

2.2 Facility Description

The facility was constructed in the 1940s and is the oldest active petroleum bulk fuel terminal in the POA industrial area. The facility has operated under various owners and has been used to store multiple products including, but not limited to, aviation fuel, diesel fuel, gasoline, lube oils, asphalt products and various additives.

In July 2011, the facility was purchased by Crowley Petroleum Distribution, Inc. to supply approximately three million gallons of jet fuel per month, via pipeline, to nearby Joint Military Base Elemendorf/Fort Richardson (JBER). The facility currently has 12 fuel storage tanks, of which nine are in service, and has a total capacity of 21 million gallons. CPD Alaska is planning to construct four additional tanks which will increase total capacity to approximately 35 million gallons. A fuel pipeline, linked to the nearby POA docks, transfers petroleum products between oceangoing tankers/barges and the facility. The fuel pipeline is the facility's primary means of fuel deliveries and it also has an onsite fuel transfer rack to allow fuel to be transferred to and from railroad tank cars.

In addition to operating the bulk fuel terminal, CPD Alaska also leases the facility parking area and warehouse space to Inlet Petroleum Company (IPC), a local vendor of fuel, lubricants & coolants, heat transfer fluids, filters, environmental products, and related products. IPC receives various bulk products via railcar and packages those products in the warehouse for distribution.

2.3 Subsurface Contamination History and Site Improvements

2.3.1 Contamination History

Multiple petroleum spills have occurred throughout the POA industrial area and have resulted in the facility and adjacent properties being listed as active sites in DEC's contaminated sites data base. There are both onsite and offsite sources of petroleum contamination affecting the facility. The onsite groundwater contamination is attributed to onsite fuel spills, presumably gasoline that occurred at some unknown time in the past that contributes gasoline range organics (GRO) to the groundwater down gradient from the SCA. The offsite source is associated with a jet fuel release from a neighboring up-gradient property that contributes contamination of diesel range organics (DRO) to the groundwater at certain locations on the property. Not all of the up-gradient groundwater flowing beneath the facility is impacted to the degree that it would exceed water quality criteria for hydrocarbons if discharged to surface water. In addition, the local shallow aquifer has been classified as a non-potable groundwater source by DEC's Spill Prevention and Response Contaminated Sites Program (CSP); however, the aquifer is monitored annually to evaluate attenuation of the hydrocarbon impacts.

Available reports indicate the site was investigated for groundwater contamination as early as 1987 and that twenty-one onsite monitoring wells were originally installed in 1989 to characterize groundwater impacts at the site. In 2010, the CSP approved the current groundwater monitoring program for the facility, which requires annual sampling of five of the original monitoring wells (wells MW-1, MW-6B, MW-13A, MW-14, and MW-19R at the locations shown on Appendix A,

Figure A-3). The other wells were approved to be decommissioned to facilitate installation of the Drainage Area A liner system described in Section 2.4. The groundwater monitoring program requires analyzes for GRO, DRO, residual range organics (RRO),benzene, toluene, ethylbenzene, and total xylenes. The most recent testing occurred in October 2014 and the corresponding test results indicate that GRO, DRO, RRO, benzene, and ethyl benzene continue to exceed DEC cleanup levels in several of the wells. Comparison of the 2014 and previous years data indicates that contaminant concentrations are decreasing and those observed in 2014 were the lowest reported to date (ref. Table 2: Summary of Monitoring Well MW-14 Historical Groundwater Data).

2.3.2 Site Improvements

In recent years, facilities within the POA industrial area have made significant improvements to mitigate contaminated soil and groundwater including the following onsite improvements made by CPD Alaska since purchasing the facility in 2011:

- double bottoms in all active fuel storage tanks,
- a new cathodic corrosion protection system,
- new tank gauging and liquid high-level detection equipment,
- a new liquid-tight collection system piping and structures to prevent contaminated groundwater inflow to the storm water collection system, and
- an impermeable geomembrane liner in the SCA.

The uncontrolled inflow of petroleum contaminated groundwater into the collection system piping appears to be the main cause of previous permit limit violations for total aromatic hydrocarbons (TAH) and the recently installed liquid tight collection system was installed to prevent future occurrences.

The recently installed geomembrane liner in Drainage Area A also prevents uncontrolled inflows of contaminated groundwater but must be protected during periods of heavy rainfall or snowmelt when the underlying water table raises high enough to lift and potentially damage the integrity of the liner. The only practical way to protect the liner system during these events is to open a valve and allow enough groundwater to flow into the SCA to offset the pressure from the rising groundwater. Released groundwater mixes with the rainwater and snowmelt already present in the SCA. For these reasons, the reissued permit will authorize contingency releases of groundwater from the SCA when it is necessary to protect the SCA liner system provided the discharge parameters do not exceed permit limits.

2.4 Facility Drainage Areas

Wastewater discharges from the facility drainage areas are either treated, or controlled using best management practices (BMPs), for oil and grease prior to discharge into the Municipality of Anchorage (MOA) storm drain system that discharges into Cook Inlet. During the next permit cycle, DEC will be evaluating regional storm water discharge and alternative permitting for the facility (e.g., coverage under the Multi-Sector General Permit, or under the MOA Separate Storm Water Permit, etc.). Compliance monitoring samples of the facility's wastewater discharge will be collected from the onsite lift station well located downstream of the oil/water separator (OWS) shown on Appendix A, Figure A-2 and prior to entering the POA storm drain system. The facility drainage areas are shown in Appendix A, Figure A-2 and summarized in Table 1.

Table 1: Terminal Drainage Areas

Drainage Area	Wastewater Source	Treatment	Outfall
Drainage Area A	Tank SCA and groundwater	OWS	001
Drainage Area B	North Parking Lot	OWS and BMPs	001
Drainage Area C	South Parking Lot	Catch Basin Filters and BMPs	N/A
Drainage Area D	Rail Car Rack SCA	OWS	001
Pump House SCA	Pump House Floor	OWS	001

Drainage Area A

Drainage Area A is a bermed and geomembrane lined SCA enclosing the above ground fuel storage tanks. Accumulated water in the SCA is inspected to verify there is no visible sheen/residue on the water surface before allowing it to flow out of the SCA. Rain and snowmelt water, occasionally mixed with groundwater as discussed in Section 2.3, flows from catch basins to Storm Drain Manhole SDMH #1 via a pipe network. The SCA outflow is directed to Valve Pit E where it comingles with flows from other onsite drainages (described below) and onward to the OWS for treatment prior to discharge.

The occasional groundwater discharged under the permit to protect the liner is potentially impacted by up-gradient diesel contamination. The groundwater that is discharged into the SCA is near MW-14, which is monitored annually as discussed in Section 2.3.1. Table 2 summarizes the historical groundwater data from MW-14 located within the SCA.

Table 2: Summary of Monitoring Well MW-14 Historical Groundwater Data

Sample Date	Parameter Tested (Cleanup Level [1,2])			
	GRO (2.2 mg/L)	DRO (1.5 mg/L)	RRO (1.1 mg/L)	Benzene (0.005 mg/L)
06/08/04	**4.70**	**11.0**	-	**0.011**
05/11/05	**5.00**	**11.0**	-	**0.012**
15/15/06	**5.20**	**15.0**	-	**0.018**
08/21/08	**4.38**	**13.4**	-	**0.00804**
10/08/08	-	-	**1.65**	**0.00715**
08/19/09	**2.38**	**5.25**	0.596	0.0021
09/01/10	**2.70**	**9.00**	<0.780 [3]	0.0040
10/07/11	**2.64**	**8.44**	**1.18**	0.00371
10/26/12	1.56 J+ [4]	**2.90**	0.195 J [5]	**0.00723**
10/22/13	**3.06**	**3.98**	0.332 J	**0.00731**
10/23/14	0.641 J	1.03	< 0.250	0.00498 J

Notes:
1. Groundwater cleanup levels are from Table C, 18 AAC 75.345 (October 2014).
2. Bold indicates reported concentration equals or exceeds cleanup level.
3. "<" indicates the analyte was not detected at or above the laboratory reporting limit.
4. "J+" indicates the result may be biased high due to surrogate failure.
5. "J" indicates the analyte was detected, but at a concentration less than the laboratory reporting limit.

The Department requested the applicant to provide characterization data for the occasional groundwater releases necessary to protect the liner system. These characterization samples were collected from an upgradient location in the northeast portion of the facility (shown on Appendix A, Figure A-3) and analyzed for TAH and total aqueous hydrocarbons (TAqH). Table 3 provides a summary of the results.

Table 3: Summary of Shallow Groundwater Testing for TAH and TAqH

Parameter Tested (Water Quality Criteria)	Date of Sampling					
	5/16/13	6/27/13	7/30/13	8/16/13	8/27/13	9/13/13
TAH	**12.6**	ND	1.56	ND	ND	ND
TAqH	12.7	ND	1.90	ND	ND	ND

Notes:
1. Bold indicates the concentration exceeds water quality criteria.
2. "ND" indicates the result was below minimum levels of reporting.
3. Water quality criteria for TAH is 10 micrograms per liter (µg/L) and 15 µg/L for TAqH.

The data in Table 3 shows that the groundwater slightly exceeded the TAH water quality criteria during one of the six sampling events and indicates only minor potential for the comingled discharges to exceed water quality criteria. Based on the recent characterization data and historic groundwater monitoring results, groundwater treatment does not appear to be necessary to ensure permit compliance and protection of the receiving water.

Drainage Area B

Drainage Area B collects rain and snowmelt water from the north half of the paved parking lot and nearby building roof drains. The area drains to catch basin B, which is connected to Valve Pit E. As noted in Per Section 2.3, a liquid tight collection system was recently installed to prevent contaminated groundwater from entering the collection system. Because existing data may have been impacted by GRO contaminated groundwater, the data is not considered to be representative of existing conditions.

Drainage Area C

Drainage Area C collects storm water from the south half of the paved parking lot and associated roof drains and drains directly to a MOA storm drain system without being treated in the OWS. There is no practicable way to transfer the storm water from this drainage area to Valve Pit E. Therefore, the discharge is controlled using catchbasin filters and BMPs that include street sweeping and portable spill containment berms.

Drainage Area D

Drainage Area D is an SCA for the railcar loading/unloading rack located on the western boundary of the facility. Rain and snowmelt water from this SCA drains through a valved piping system to Valve Pit E.

Pump House Drainage

The pump house has a floor drain that connects to Valve Pit E.

2.4.1 Wastewater Treatment

Individual drainage area wastewater sources, except Drainage Area C, are commingled in Valve Vault E and treated by an OWS prior to discharge. The OWS is a two compartment 4,000 gallon double-walled steel tank equipped with coalescing plates and is connected to a 20,000 gallon overflow tank for additional storage capacity. Accumulated oil in the OWS is periodically pumped out by vacuum truck and disposed at a permitted offsite location.

The OWS effluent drains into a four foot diameter nine by nine foot deep steel lift station sump. The sump is the point of compliance as this is where samples are collected for Outfall 001. The lift station is equipped with a 500 gallon per minute pump that discharges to the MOA storm drain system. Discharge flow volumes are calculated by multiplying the pump runtime by the pumps operating flowrate.

2.5 Facility Performance and Wastewater Characterization

2.5.1 Discharge Flows

Discharges from the facility are intermittent depending on rain and snowfall events and are controlled by operation of the lift station. Review of monthly Discharge Monitoring Reports (DMRs) indicate the majority of facility discharges occur during the thawed season. In addition, discharges during 2012 were substantially higher than normal due to handling excavation water associated with installation of the liner and subsurface collection systems in the tank farm SCA. Table 4 summarizes flow records from 2010 through 2014.

Table 4: Discharge Flow Record (2010 through 2014)

Year	Total Annual Discharge (gallons)	Maximum Monthly Discharge (gallons)
2010	1,188,676	506,416
2011	1,064,867	368,580
2012	4,844,400	1,953,000
2013	410,522	279,000
2014	70,077	21,400

2.5.2 Characterization of Discharge Parameters with Limits

Parameters having numeric effluent limits in the existing permit were examined by reviewing the DMR data submitted during the permit cycle. The parameters reviewed include pH, oil and grease (O&G), total suspended solids (TSS), five-day biological oxygen demand (BOD_5), chemical oxygen demand (COD), TAH, and TAqH. Parameters with narrative limitations (i.e., Sheen/Residue) instead of numeric limits were not included in this analysis.

Table 5 compares the maximum daily limits (MDL) and the average monthly limits (AML) in the existing permit to monitoring results from October 2009 through December 2014.

Table 5: Characterization of Parameters with Limits (10/2009 through 12/2014)

Parameter	Units	Existing Limits		Observed Range (Low – High, Avg.)	
		MDL	AML	Chevron USA, Inc. 10/2009 to 6/2011	CPD Alaska LLC 7/2011 to 12/2014
pH[2]	standard unit (s.u.)	6.5 to 8.5 at all times		See note 3	6.5 – 8.5, 7.5
O&G	Milligrams per liter (mg/L)	15	8	4.35 – 11.4, 6.36	See note 4
TSS	mg/L	33	21	2.46 – 18.00, 5.76	0.48 – **87.50**, 18.59
BOD_5	mg/L	48	26	2.19 – 9.07, 4.43	0.13 – 13.0 [5], 6.31
COD	mg/L	470	240	10.7 – 30.1, 18.37	0.68 – 77.70, 36.79
TAH	µg/L	10	---	0.68 – **93.26, 29.73**	0.41 – **213.24, 24.28**
TAqH	µg/L	15	---	0.08 – 1.07, 0.36	0.41 – **213.24, 24.46**

Notes:
1. Values that exceed limits are shown in **bold**.
2. Median values are used instead of average values for pH.
3. DMRs reported that limits were "not exceeded" rather than reporting numeric values.
4. All DMRs Reported "ND" without identifying the minimum detection limit.
5. BOD_5 excludes an outlier of 98.5 mg/L determined to be not representative (Section 2.6.1).

All parameters in Table 5 are considered parameters of concern (POCs). Several of these POCs that were technology-based effluent limits (TBELs) in the previously issued permit are being critically reviewed before retaining in the reissued APDES permit. TAH and TAqH are water quality POCs that typically would be included in the reasonable potential analysis (RPA) to determine whether the POCs could cause or contribute to an excursion of water quality criteria. However, the Department does not consider their historical observed concentrations as being representative of the effluent discharge now that groundwater is excluded from infiltrating into the Drainage Area B collection system. Therefore, an RPA is not being conducted during reissuance of the permit. An RPA may be conducted in the next reissuance pending verification of the efficacy of the repaired collection system improvements and obtaining data representative of current pollution control measures employed at the facility. However, as discussed in Section 3.2, TAH and TAqH limits set at the water quality criteria have been retained in the permit given the historical exceedances further negating a need to complete an RPA for the subject parameters.

2.5.3 Characterization of Discharge Parameter Requiring Monitoring Only

Chloride is the only chemical parameter that only required monitoring in the existing permit. Monitoring was not done consistently during the permit cycle. Data collected from January 2012 through December 2014 demonstrated a range between 0.65 mg/L to 54.1 mg/L and an average of 10.1 mg/L. There is no marine water quality criteria for chloride so this parameter is not considered a POC.

2.6 Compliance History

2.6.1 Limit Exceedances

A review of DMRs and effluent violations, from the EPA Integrated Compliance Information System (ICIS) for the previous permit cycle, was conducted to assess compliance with the existing permit. Table 6 summarizes parameters that were exceeded by each permittee from October 2009 through December 2014.

Table 6: Limit Exceedances (10/2009 through 12/2014)

Parameter	Number of Observed Exceedances	
	Chevron USA, Inc. 10/ 2009 to 6/2011	CPD Alaska, LLC 7/ 2011 to 12/2014
TSS	0	11
BOD_5	0	1
TAH	3	5
TAqH	0	5
O&G	2	0

Review of the administrative record indicates that two of the three reported TAH limit exceedances by Chevron USA were caused by contaminated groundwater infiltration in the collection system. The record does not include a determination for the cause of the remaining TAH exceedance or the two O&G limit exceedances.

Review of administrative record indicates the TSS and some of the TAH and TAqH limit exceedances by CPD Alaska were associated with the unauthorized discharge of contaminated groundwater during earthwork activities for installation of the SCA liner system. EPA took enforcement action by issuing the Consent Agreement and Final Order (CAFO) as summarized in section 2.6.3.

The other TAH and TAqH exceedances were originally believed to be due to gasoline leaks from vehicles in the parking area because the facility was only handling diesel fuel when they occurred. Ultimately, the infiltration of the contaminated groundwater into the Drainage Basin B collection system was determined to be the cause. The permittee reported that the single BOD_5 limit exceedance occurred as a result of allowing the local fire department to test a new piece of firefighting equipment that discharged a one-percent solution of AFFF (aqueous film forming foam) into the Drainage Area A SCA. CPD Alaska communicated they were not aware that AFFF contains large concentrations of BOD_5 when it allowed the fire department to proceed with the equipment testing and this activity will not be allowed in the future. Although shown as an exceedance in Table 6, the resulting high BOD_5 result of 98.5 mg/L was not considered to be representative of normal effluent conditions and included in the characterization information in Table 5.

2.6.2 Reporting Violations

The existing permit requires monitoring of the parameters summarized in Table 3 and submittal of monthly DMRs on a quarterly basis. Review of reporting violations from ICIS indicates that the CPD Alaska failed to collect and report sampling results on at least two occasions, and submitted late DMRs on at least four occasions, since assuming responsibility for the existing permit. Several of the failures to collect samples occurred because the first monthly discharge was not sampled in anticipation of additional discharge(s) occurring later in the same month, which subsequently did not occur.

2.6.3 CAFO

EPA responded to the violations that occurred during the 2012 installation of the geomembrane liner by issuing a CAFO (Docket No. CWA-10-2014-0035) to CPD Alaska. The alleged permit violations it addressed include unpermitted discharges of groundwater, deficient BMPs, and effluent limit and sampling violations between August 2011 and November 2012. The CAFO was finalized on April 2, 2014 and included a civil penalty amounting to $147,000.

3.0 EFFLUENT LIMITS AND MONITORING REQUIREMENTS

3.1 Basis for Effluent Limits

Per 18 AAC 83.015, the Department prohibits the discharge of pollutants to waters of the U.S. unless the permittee has first obtained a permit issued by the APDES program that meets the purposes of AS 46.03 and is in accordance with the CWA Section 402. Per these statutory and regulatory provisions, the permit includes effluent limits that require the discharger to (1) meet standards reflecting levels of technological capability, (2) comply with 18 AAC 70 - Water Quality Standards (WQS), and (3) comply with other state requirements that may be more stringent.

The CWA requires that the limits for a particular pollutant be the more stringent of either TBELs or water quality-based effluent limits (WQBELs). TBELs are set via EPA-rule makings in the form of Effluent Limitation Guidelines (ELGs) and correspond to the level of treatment that is achievable using best available technology. There are currently no ELGs applicable to bulk fuel terminals. 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 WQS 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. The permit contains TBELs based on BPJ and WQBELs for pH, TAH, and TAqH.

3.1.1 Technology Based Effluent Limits (TBELs)

EPA has not established ELGs for bulk fuel terminals. In the previous 2009 permit, case-by-case TBELs based on BPJ were developed using final effluent limits contained in the Petroleum Refining Point Source Category, Title 40 Code of Federal Regulations (40 CFR) Part (§)419, which is adopted by reference in 18 AAC 83.010(b)(g)(3). Specifically, the best practicable control technology currently available (BPT) effluent limits established in 40 CFR §419.12(c) for ballast water discharges from petroleum refineries were used. Ballast water is not treated and discharged by the facility and the permit includes a prohibition to discharge ballast water. The Department maintains that pH, O&G, and total organic carbon (TOC) in the ELGs of 40 CFR §419.11 are applicable to discharges from the bulk fuel terminal. After reviewing facility discharge practices and monitoring results, the Department has determined that the discharges from the facility more closely resemble contaminated runoff discharges as described in the definitions found in 40 CFR §419.11:

> **§419.11 Specialized definitions**
>
> For the purpose of this subpart:
>
> > (c) The term *ballast* shall mean the flow of waters, from a ship, that is treated along with refinery wastewaters in the main treatment system.
> >
> > (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.

The Department is using the effluent limits found in 40 CFR §419.12(e)(1), Effluent limitations for contaminated runoff, as the basis for establishing case-by-case TBELs based on BPJ. Similar to the 2009 permit developed by EPA, the Department is adopting case-by-case BPJ daily maximum TBELs for O&G of 15 mg/L as a concentration-based final limit. A daily maximum TBEL for TOC of 110 mg/L is a newly established effluent limit. TOC is being used as an indicator parameter for other organic compounds (e.g., lube and hydraulic oils) and is being supplemented with existing permit monitoring requirement and effluent limits for TAH and TAqH. SCA water is discharged intermittently as batch discharges and is dependent on precipitation or snowmelt events. The Department has determined that daily maximum limits are the most effective means to control pollutants discharged from the facility.

The permit continues the existing MDL for TSS to monitor and document the effectiveness of the recent physical and operational improvements at the facility. This parameter may be revaluated as part of the following permit reissuance process. The Department has also determined that daily maximum limits are the most effective means to monitor and control discharge of this parameter.

Effluent limits for BOD_5, COD and monitoring of chloride are being removed from the permit because the facility does not discharge ballast water. In reviewing the appropriate subcategory and POCs, the Department determined that a full characterization of the discharge and pollutants would not have resulted in limits or monitoring requirements for these parameters in the original permit for this facility. The discharge consists of

accumulated rain and snow melt within SCAs as well as occasional groundwater released to protect the geomembrane liner in Drainage Area A. The discharge is not wastewater generated at a petroleum refinery, or from ballast water discharges, and therefore, not all pollutant parameters applicable to a petroleum refinery are applicable to the facility. Additional rationale for removing these limits and revising select monitoring requirements is found in Section 5.0.

The permit will continue to stipulate no discharge of free oil in all discharges. This limitation is determined by the presence of film, sheen, or a discoloration of the surface of the SCA containment water prior to discharge and any observed sheen must be removed prior to discharging.

3.1.2 Water Quality Based Effluent Limits (WQBELs)

WQBELs have been developed for pH, TAH, and TAqH.

- The ELGs in 40 CFR §419.11 provide a range of pH from 6.0 to 9.0. The existing permit, and state WQS, require pH to be between 6.5 and 8.5 at all times. The Department has determined the permittee can meet the between 6.5 and 8.5 pH requirement and it will be included in the reissued permit.
- Alaska also has numeric criteria of 10µg/L for TAH and 15µg/L for TAqH. Although the permittee repeated exceeded the discharge limits for TAH and TAqH in the previous permit, recent improvements to the collection system to prevent contaminated groundwater infiltration may eliminate future exceedance(s). The Department finds there is insufficient information at this time to warrant changing their WQBELs until the efficacy of these improvements is determined. Accordingly, the Department retains the TAH and TAqH WQBELs from the existing permit that are equal to state water quality criteria.

Alaska WQSs also have a narrative criterion for petroleum hydrocarbons stating that discharges “may not cause a film, sheen, or discoloration on the surface or the floor of the water body or adjoining shoreline.” This applies for the contact recreation designated use for marine waters per 18 AAC 70.020(b)(17)(B)(i).

Similar to petroleum hydrocarbons, per 18 AAC 70.020(b)(20) 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 Department has included a narrative limitation prohibiting the discharge of such residues in the permit. Visual monitoring for residues is required prior to and during discharge episodes and shall be conducted from the wastewater lift station. Sheen observations must be reported in the “Comments” section of the DMR.

3.1.3 Reasonable Potential Analysis (RPA)

An RPA using the DMR data submitted under the existing permit was not performed because the data is not representative of the recently improved facility conditions instituted by the permittee. Nonetheless, the Department retains stringent effluent limits for TAH and TAqH and monitoring requirements and is including conditions to collect representative data to support the next permit reissuance.

3.2 Effluent Limits and Monitoring Requirements

The permit retains the MDLs for O&G, TSS, TAH and TAqH and adds TOC, all with a monthly monitoring frequency. The AMLs from the existing permit are discontinued. The permit also retains pH, sheen and residue monitored on a daily basis when discharges occur. The limits and monitoring requirements for the permit are shown in Table 7.

Table 7: Outfall 001 - Effluent Limits and Monitoring Requirements

Parameter	Effluent Limits and Monitoring Requirements				
	Units	Limits Values	Limit Type	Monitoring Frequency	Sample Type
Total Discharge Flow [1, 2]	Gallons per Month	---	---	Monthly [3]	Recorded
Sheen/Residue	---	No visible Sheen/Residue	Observation	Monthly [3]	Visual
pH	SU	6.5-8.5 at all times	Range	Monthly [3]	Grab
O&G	mg/L	15	MDL	Monthly	Grab
TSS	mg/L	33	MDL	Monthly	Grab
TOC	mg/L	110	MDL	Monthly	Grab
TAH	µg/L	10	MDL	Monthly	Grab
TAqH	µg/L	15	MDL	Monthly	Grab

Notes:

1. Flow shall be recorded for each discharge event (batch). Total flow measurements shall be recorded per each batch, month, and year. The total monthly flow volume shall be reported on the DMR with the number of discrete discharge events noted in the comments field. A summary table showing the date and volume of each batch discharge, total monthly, and total annual flows shall be reported with the application for permit reissuance.
2. Discharge of groundwater is authorized only as required to protect the Drainage Area A liner system. Report the date of each groundwater discharge in the comment field of the DMR or in a cover letter for each month such a discharge occurs.
3. Monitored daily while discharge occurs and reported monthly on the DMR.

3.2.1 Monitoring Requirements

With the associated TBELs removed, the permit does not require monitoring for BOD_5, COD, and chloride. The WQS do not have marine water quality criteria for these parameters as a result, there is limited value in collecting data which does not support an RPA. The low observed concentrations during the previous permit cycle for COD, chloride, and BOD_5 (excluding the AFFF outlier) also supports the Department decision to discontinue monitoring for these parameters.

Per Permit Standard Conditions, compliance samples shall be collected downstream of the last treatment unit. The last treatment unit at the facility is currently the OWS located in the facility's main parking lot. Unless otherwise approved by DEC, effluent samples shall be collected from the lift station wet well located downstream of the oil/water separator as shown on Appendix A, Figure A-2.

The reissued permit will require the permittee to address appropriate sample collection timing in the Quality Assurance Project Plan (QAPP) and will require monthly DMRs to be

postmarked, or submitted electronically through the eDMR system, on or before the 28th day of the month following each reporting period.

3.2.2 Additional Effluent Monitoring

Per Permit Appendix A – Standard Conditions, the permittee has the option of taking more frequent samples than required under the permit at the point of compliance or at upstream locations for the purpose of making operational decisions. Samples must be conducted using Department approved test methods that have an MDL less than the effluent limits or water quality criteria. These methods are generally found in 18 AAC 70 and in 40 CFR 136, adopted by reference in 18 AAC 83.010.Upon request, all data collected during the permit term must be provided to the Department with the next application for reissuance. This information is necessary to adequately determine facility performance, characterize the effluent, and conduct an RPA.

4.0 RECEIVING WATER BODIES

4.1 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 water body use classifications, numeric and/or narrative water quality criteria, and an antidegradation policy. The use classification system designates the beneficial uses that each waterbody 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 waterbody. The antidegradation policy ensures that the beneficial uses and existing water quality are maintained. The Department has determined that all marine use classes must be protected in the state waters in Cook Inlet. These marine use classes include: water supply; water recreation; growth and propagation of fish, shellfish, other aquatic life, and wildlife; and harvesting for consumption of raw mollusks or other raw aquatic life.

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 water bodies 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 in Cook Inlet.

An Ocean Discharge Criteria Evaluation (ODCE) is not required for discharges from the facility. Per 40 CFR 125, Subpart M an ODCE is required for a point source that occurs seaward of the baseline of the territorial sea. Because the facility is located landward of the baseline, further analysis under the ODCE regulations is not required.

The applicant has not requested DEC to evaluate a mixing zone for any of the pollutants in Outfall 001. Accordingly, no mixing has been authorized by the Department and all authorized discharged pollutants are required to meet water quality criteria at the point of compliance downstream of the OWS.

4.2 Water Quality Status of 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.

Cook Inlet is not included on the *Alaska's Final 2010 Integrated Water Quality Monitoring and Assessment Report*, July 15, 2010 as an impaired waterbody nor is the subject waterbody listed as a CWA 303(d) waterbody requiring a TMDL.

5.0 ANTIBACKSLIDING

18 AAC 83.480. Reissued permits requires that "…effluent limitations, standards, or conditions must be at least as stringent as the final effluent limitations, standards, or conditions in the previous permit..." 18 AAC 83.480(c) also states that a permit may not be reissued "to contain an effluent limitation that is less stringent than required by ELGs in effect at the time the permit is renewed or reissued."

Effluent limitations may be relaxed as allowed under 18 AAC 83.480, CWA §402(o) and CWA §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 §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 §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 §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.18 AAC 83.480(c) prohibits relaxed limits that would result in violations of WQS or ELGs.

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 previously established case-by-case TBELs developed using BPJ. To determine if backsliding is allowable under 18 AAC 83.480(b), the regulation provides five regulatory criteria (18 AAC 83.480[b][1-5]) that must be evaluated and satisfied.

This permitting action modifies case-by-case TBELs established in the 1974 permit for BOD_5, TSS, and O&G. The basis of the original mass-based TBELs using case-by-case BPJ is not known. The modification merely converts these mass-based limits to concentration-based limits, which are effectively equivalent. The evaluation and justification for the modification of these limits is discussed below:

18 AAC 83.480. Reissued permits

(b) In the case of effluent limitations established on the basis of 33 U.S.C. 1342(a)(1)(B), a permit may not be renewed, reissued, or modified on the basis of effluent guidelines promulgated under 33 U.S.C. 1314(b) after the original issuance of the permit to contain effluent limitations that are less stringent than the comparable effluent limitations in the previous permit, except that a permit under this subsection may be renewed, reissued, or modified to contain a less stringent effluent limitation applicable to a pollutant, if:

(2) information other than revised regulations, guidance, or test methods that would have justified the application of a less stringent effluent limitation is now available but was not available at the time of permit issuance, or the Department determines that technical mistakes or mistaken interpretations of law were made in issuing the permit under 33 U.S.C. 1342(a)(1)(b);

Based on the information in the permit's administrative record, the Department has determined that there was a technical error (18 AAC 83.480(b)(2)) in previously adopting the TSS TBEL based on case-by-case BPJ citing 40 CFR 419(c). The Department has determined that the appropriate comparison for the subject waste streams is the contaminated runoff definition found in 40 CFR 419(e)(1), which imposes limits for O&G of 15 mg/L and TOC of 110 mg/L. Accordingly, the Department is removing the BOD_5 and COD TBEL from the permit. As discussed in Section 2.4, wastewater discharges from the facility through Outfall 001 consist of accumulated rain and snowmelt water collected in SCAs and site runoff. The permit has been updated to include a stipulation prohibiting ballast water discharges. In reviewing the appropriate ELG subcategory and pollutants of concern, it was determined that a full characterization of the discharge and pollutants should have resulted in BOD_5 and COD not being limited in the original permit.

Effluent limits have not been established for chloride in either the reissued permit or the existing permit. In addition, based on both old and new information in the administrative record for the permit (e.g., permit application) that ballast water is not discharged at the facility, the Department has determined that the previously applied ballast water TBELs are not applicable. Accordingly, the continued monitoring of the BOD_5, COD, and chloride parameters derived from the ballast water portion of the ELG (40 CFR 419(c)) would also be inappropriate. As a result, the monitoring for BOD_5, COD, and chloride are discontinued in the permit consistent with 18 AAC 83.480(a) and 18 AAC 83.135(b)(2). In addition, because these parameters were observed to generally have low concentrations and secondarily, do not have corresponding marine water quality criteria in the WQS, there is limited value in collecting monitoring data for the subject parameters if it does not support a future RPA. Further, the Department finds that the receiving waters are not impaired and that the level of water quality is maintained and protected. Therefore, the removal of these monitoring parameters will not negatively affect the receiving water and is consistent with the State's antidegradation policy.

AMLs for O&G and for TSS will not be included in the reissued permit because these discharges are weather dependent and there are times where it is not possible for the permittee to collect more than one sample in a month. In such instances, the permittee can be in compliance with the daily maximum effluent limit and out of compliance with the AML. Where discharges are continuous, or occur several times a month, the permittee has the opportunity to collect multiple samples in order to comply with AMLs. The AML was a case-by-case limit based on BPJ and utilizing the TSS limits found in 40 CFR Part 419.12(e)(2) for contaminated runoff from petroleum refineries. Those limits were based on two scenarios, either the contaminated runoff was commingled with process wastewater or the O&G and TOC values were greater than 15 mg/L and 110 mg/L, respectively. Commingling with process wastewater does not occur and in no instance have O&G values been greater than 15 mg/L. The Department has determined that a technical error in the establishment of an AML for O&G occurred based on an incorrect characterization of the wastewater discharge. Although the MDL for TSS is retained during the next permit cycle to evaluate the efficacy of recent improvements and BMPs, the removal of the AML for TSS will not result in a violation of WQS (i.e., since there is no water quality criteria for TSS) and no ELGs are applicable to the waste stream.

6.0 ANTIDEGRADATION

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. The antidegradation policy per 18 AAC 70.015 states that the existing water uses and the level of water quality necessary to protect existing uses must be maintained and protected. This section of the fact sheet analyzes and provides rationale for Department decisions in the Permit issuance with respect to the antidegradation policy.

The approach used by the Department to implement the antidegradation policy is based on the requirements in 18 AAC 70 and the Department's Policy and Procedure Guidance for Interim Antidegradation Implementation Methods, July 14, 2010 (Interim Methods). Using these requirements and policies, the Department determines whether a waterbody or portion of a waterbody is classified as Tier 1, Tier 2, or Tier 3. A higher numbered tier indicates a greater level of water quality protection. At this time, no Tier 3 waters have been designated in Alaska. Accordingly, this antidegradation analysis conservatively assumes that all discharges under the Permit will be to Tier 2 waters, which is the next highest level of protection and is more rigorous than a Tier 1 analysis. As a result, any discharges to Tier 1 waterbodies are not eligible for coverage under the Permit and would require individual permit coverage. The receiving water for the discharges from the CPD Alaska bulk fuel terminal is Cook Inlet, which is a Tier 2 water.

Wastewater discharged under the Permit is subject to a Tier 2 antidegradation analysis, as detailed in the Interim Methods and outlined in 18 AAC 70.015(a)(2). Per 18 AAC 70.015(a)(2), if the quality of water exceeds levels necessary to support propagation of fish, shellfish, and wildlife and recreation in and on the water, that quality must be maintained and protected unless the Department finds that the five specific requirements of the antidegradation policy at 18 AAC 70.015(a)(2)(A)-(E) are satisfied. The Department's findings are as follows:

1. **18 AAC 70.015 (a)(2)(A).** Allowing lower water quality is necessary to accommodate important economic or social development in the area where the water is located.

   Per finding four, the Department has determined that the methods of pollution prevention, control, and treatment are the most effective and reasonable and that lowering water quality in the vicinity of the discharge is necessary.

   The CPD Alaska Anchorage Bulk Fuel Terminal's principal activity is to supply jet fuel to JBER and it is the base's sole source for this fuel. The facility supplies approximately three million gallons per month of jet fuel to the JBER to help ensure local and national security by serving mission requirements. The facility supports these critical functions by storing essential fuel and distributing it to JBER as needed. The Department concludes that lowering water quality in the vicinity of the discharge is necessary and supports the social importance of JBER and that this finding is met.

2. **18 AAC 70.015 (a)(2)(B).** Except as allowed under this subsection, reducing water quality will not violate the applicable criteria of 18 AAC 70.020 or 18 AAC 70.235 or the whole effluent toxicity (WET) limit in 18 AAC 70.030.

   The permit limits and conditions ensure WQS are not violated in the receiving water. The permit includes limits for pH, TAH, and TAqH that are based on meeting water quality criteria at the point of discharge. As discussed in Section 4.1, no site-specific criteria has been developed for Cook Inlet in the vicinity of the discharge. Per 18 AAC 83.425(f), the Department has determined that a chronic WET limit is not required as the chemical-specific WQBELs based on meeting water quality criteria at the compliance point contained in the permit are adequate to control

chronic toxicity such that the chronic toxicity criteria in 18 AAC 70.235 will not be violated. Therefore, the Department concludes that this finding is met.

3. **18 AAC 70.015(a)(2)(C).** The resulting water quality will be adequate to fully protect existing uses of the water.

   Water quality criteria are developed to protect the uses of the waterbody. As previously mentioned, Cook Inlet is protected for all marine use categories per 18 AAC 70.020(a)(2)(A-D) and all WQBELs are equal to water quality criteria without an authorization of a mixing zone. The Department concludes that the resulting water quality will be adequate to fully protect existing uses and that this finding has been met.

4. **18 AAC 70.015(a)(2)(D).** The methods of pollution prevention, control, and treatment found by the department to be most effective and reasonable will be applied to all wastes and other substances to be discharged.

   The permittee is required remove free oil/residue from the discharge using an OWS and to follow a QAPP and BMP plan that includes pollution prevention measures and controls appropriate for the facility. Adherence to permit limits and requirements will ensure that the treatment will be the most effective and reasonable, and the Department concludes that this criterion to address pollution prevention, control, and treatment is met.

5. **18 AAC 70.015(a)(2)(E).** All wastes and other substances discharged will be treated and controlled to achieve (i) for new and existing point sources, the highest statutory and regulatory requirements; and (ii) for nonpoint sources, all cost-effective and reasonable BMPs.

   Applicable "highest statutory and regulatory requirements" are defined in 18 AAC 70.990(30), as amended through June 26, 2003, and Interim Methods. Accordingly, there are three parts of the definition, which are:

   - Any federal TBEL identified in 40 CFR 125.3 and 40 CFR 122.29, as amended through August 15, 1997, adopted by reference at 18 AAC 83.010;
   - Minimum treatment standards in 18 AAC 72.040; and
   - Any treatment requirement imposed under another state law that is more stringent than a requirement of this chapter.

   EPA has not published specific ELGs for bulk fuel terminals. Therefore, TBELs are established based on technology utilized by a similar sector, oil refineries, for which ELGs are available. Specifically, TBELs for certain parameters are adopted using case-by-case BPJs citing certain applicable effluent limits for contaminated storm water discharges from petroleum refineries per 40 CFR §419.12(e)(2).

   The second part of the definition from the WQS appears to be in error, as 18 AAC 72.040 considers discharge of sewage to sewers and not minimum treatment. The correct reference appears to be 18 AAC 72.050, minimum treatment for domestic wastewater. Because there is no domestic wastewater authorized by the permit, no further analysis is required.

   The third part of the definition includes any treatment required by state law that is more stringent than 18 AAC 70. Other regulations beyond 18 AAC 70 that may apply to this permitting action include 18 AAC 15 (Administrative Procedures), 18 AAC 75 (Oil and Other Hazardous Substances Pollution Control) and 18 AAC 83 (Alaska Pollutant Discharge Elimination System). Review of these regulations reveals that the limitations of the permit are more stringent than those imposed by 18 AAC 75 and the permit is consistent with 18 AAC 83. Neither the regulations of

18 AAC 15, or other legal requirement the Department is aware of, impose more stringent treatment requirements than 18 AAC 70.

7.0 OTHER PERMIT CONDITIONS

7.1 Quality Assurance Project Plan

The permittee is required to develop and implement a QAPP to ensure that all monitoring data required by the permit is accurate and to explain data anomalies if they occur. The permittee is required to complete, implement, and submit a letter notifying DEC that the QAPP has been implemented, within 120 days of the effective date of the final permit. The QAPP may be developed by reviewing and updating the QAPP required under the existing permit to make sure it is up to date with the monitoring and reporting requirements of the new permit. The QAPP shall consist of standard operating procedures the permittee must follow for scheduling, collecting, handling, storing and shipping samples, laboratory analysis, and data reporting. The QAPP must be retained onsite and made available to the Department upon request.

7.2 Best Management Practices (BMP) Plan

BMPs are measures that are intended to prevent or minimize the generation and potential for the release of pollutants from industrial facilities to the waters of the U.S. at all times. Pursuant to CWA Section 402(a)(1), development and implementation of BMP plans may be included as a condition in APDES permits. CWA Section 402(a)(1) authorizes DEC to include miscellaneous requirements that are deemed necessary to carry out the provision of the CWA in permits on a case-by-case basis. BMPs are required to control or abate the discharge of pollutants in accordance with 18 AAC 83.475.

The permittee is required to develop a BMP Plan aimed at preventing or minimizing the generation and release of pollutants from the facility. The BMP Plan shall include specific measures to prevent and minimize the generation and potential for the release of pollutants from the Drainage Area C parking area because this portion of the facility drains directly to Outfall 001 without passing through the facility's OWS system. The BMP Plan shall address specific methods to monitor and remove pollutants and avoid unpermitted discharges from Drainage Area C.

The BMP plan shall include specific measures to prevent and minimize the generation and potential release of pollutants from the handling of bulk shipments, packaging, and distribution of miscellaneous hydrocarbon products (e.g., lube oil, hydraulic oil, etc.) at the facility. The BMP Plan must be adhered to by the permittee and any lessees operating at the facility.

The permittee shall amend the BMP Plan whenever there is a change in the configuration or operation of the facility that may materially increase the generation, release, or potential release of pollutants to the receiving waters. All changes to the BMP Plan must be reviewed by the facility engineering/operations staff and manager. Changes to the BMP Plan shall be consistent with the objectives and specific requirement. The permit requires the permittee to develop, or update, the BMP Plan and submit a letter notifying DEC that the BMP Plan has been implemented within 120 days of the effective date of the final permit. The BMP Plan must be retained onsite and made available to the Department upon request.

7.3 Groundwater Infiltration Corrective Action

Some of the previous discharge exceedances at the facility have been attributed by the permittee to infiltration of contaminated groundwater into the subsurface collection system. The permittee

reports having identified and repaired all existing known leaks in the system and that this source of contamination is now contained. In the event that future violation(s) occur for TAH or TAqH during the permit cycle that are determined to be attributable to impacted groundwater, the permittee is required to investigate and identify the source of the problem and develop a plan to correct the problem. Note that this requirement will not preclude enforcement actions associated with the violation(s).

7.4 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.

8.0 OTHER LEGAL REQUIREMENTS

8.1 Endangered Species Act

The Endangered Species Act (ESA) requires federal agencies to consult with the National Oceanic and Atmospheric Administration (NOAA) National Marine Fisheries Service (NMFS), and the US 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; however, the Department voluntarily requested information from them regarding threatened or endangered species in the vicinity of the facility.

NMFS responded to DEC's request in a letter dated May 9, 2014 and noted that the following endangered species may occur in Cook Inlet in the vicinity of the facility's discharge:

> Cook Inlet beluga whales (Delphinapterus leucas) are listed as endangered under the ESA and are regularly observed in the waters near the Port of Anchorage in lower Knik Arm. These whales should be considered by DEC when evaluating the effects of the APDES permit. Critical habitat for the Cook Inlet beluga whale includes two geographic areas of marine habitat, comprising 7,800 square kilometers (3,013 square miles) and is bounded by Mean Higher High Water datum on the upland (76 FR 20180; April 11, 2011). However, the Port of Anchorage, where the facility is located, was excluded as critical habitat in consideration of national security interest.
>
> Several Pacific salmon stocks are also listed under the ESA and occur within Alaskan waters. These include the following Evolutionarily Significant Units (ESA): Lower Columbia River spring Chinook, Upper Columbia River spring Chinook, Lower Columbia River steelhead, Middle Columbia River steelhead, Upper Columbia River steelhead, Snake River Basin steelhead, and Upper Willamette River steelhead. These stocks range throughout the North Pacific. However, the specific occurrence of listed salmonids within the project area is highly unlikely.
>
> All marine mammals are protected under the Marine Mammal Protection Act, including the harbor porpoise (*Phocoena phocoena)* and harbor seal (Phoca vitulina), which have been documented in and around the Port of Anchorage area.

FWS responded to DEC's request in an email dated March 21, 2014 and provided a link to their website at http://ecos.fws.gov/ipac/ for determination of species under their jurisdiction. DEC accessed the website and utilized its Information, Planning, Conservation System (IPaC) feature to generate a Natural Resources of Concern listing for the facility site, which indicated there are no listed species within the vicinity of the project.

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. Although DEC, as a state agency, is not required to consult with these federal agencies regarding permitting actions, the Department also voluntarily requested information from the NMFS regarding essential fish habitat in the vicinity of the facility.

NMFS's May 9, 2014 letter noted that EFH, consisting of the aquatic habitat necessary to allow salmon production needed to support a long-term sustainable salmon fishery, has been designated in the project area. The letter noted that further information on habitat and EFH within Alaska can be found at http://www.alaskafisheries.noaa.gov/habitat/efh.htm . DEC accessed the NMFS website and did not identify any additional EFH species in the vicinity of the facility.

8.3 Permit Expiration

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

9.0 REFERENCES

1. Alaska Department of Environmental Conservation, 2008. *Alaska Water Quality Criteria Manual for Toxics and Other Deleterious Organic and Inorganic Substances*, as amended through December 12, 2008.
2. Alaska Department of Environmental Conservation, 2010. *Alaska's Final 2010 Integrated Water Quality Monitoring and Assessment Report*, July 15, 2010.
3. Alaska Department of Environmental Conservation, 2012. *Alaska Water Quality Standards*. Amended as of April 6, 2012.
4. National Oceanic and Atmospheric Administration, 2013. *EFH Mapper. N.p.,n.d.* Web August 22, 2013, Essential Fish Habitat Mapper.
5. United States Environmental Protection Agency, 1996. *Interim Guidance for Performance-Based Reduction of NPDES Permit Monitoring Frequencies* April, 1996.
6. United States Environmental Protection Agency, 1991. *Technical Support Document for Water Quality-based Toxics Control*, EPA/505/2-90-001, Office of Water, the Department, 1991.
7. United States Environmental Protection Agency. *Consent Agreement and Final Order in the Matter of CPD ALASKA, LLC, Docket No. CWA-10-2014-003,* Service Date April 3, 2014.
8. United States Fish and Wildlife Service, 2013. *List of Endangered, Threatened, Proposed Candidate and Delisted Species*, May 24, 2013.
9. Shannon & Wilson, Inc., October 2013 Groundwater Monitoring, 459 West Bluff Drive, Anchorage, AK; ADEC FILE NO. 2100.38.321, January 3, 2014.

APPENDIX A. FIGURES

Figure A-1: CPD Alaska, LLC: Anchorage Bulk Fuel Terminal - Vicinity Map

Figure A-2: CPD Alaska, LLC: Anchorage Bulk Fuel Terminal - Drainage System Line Diagram

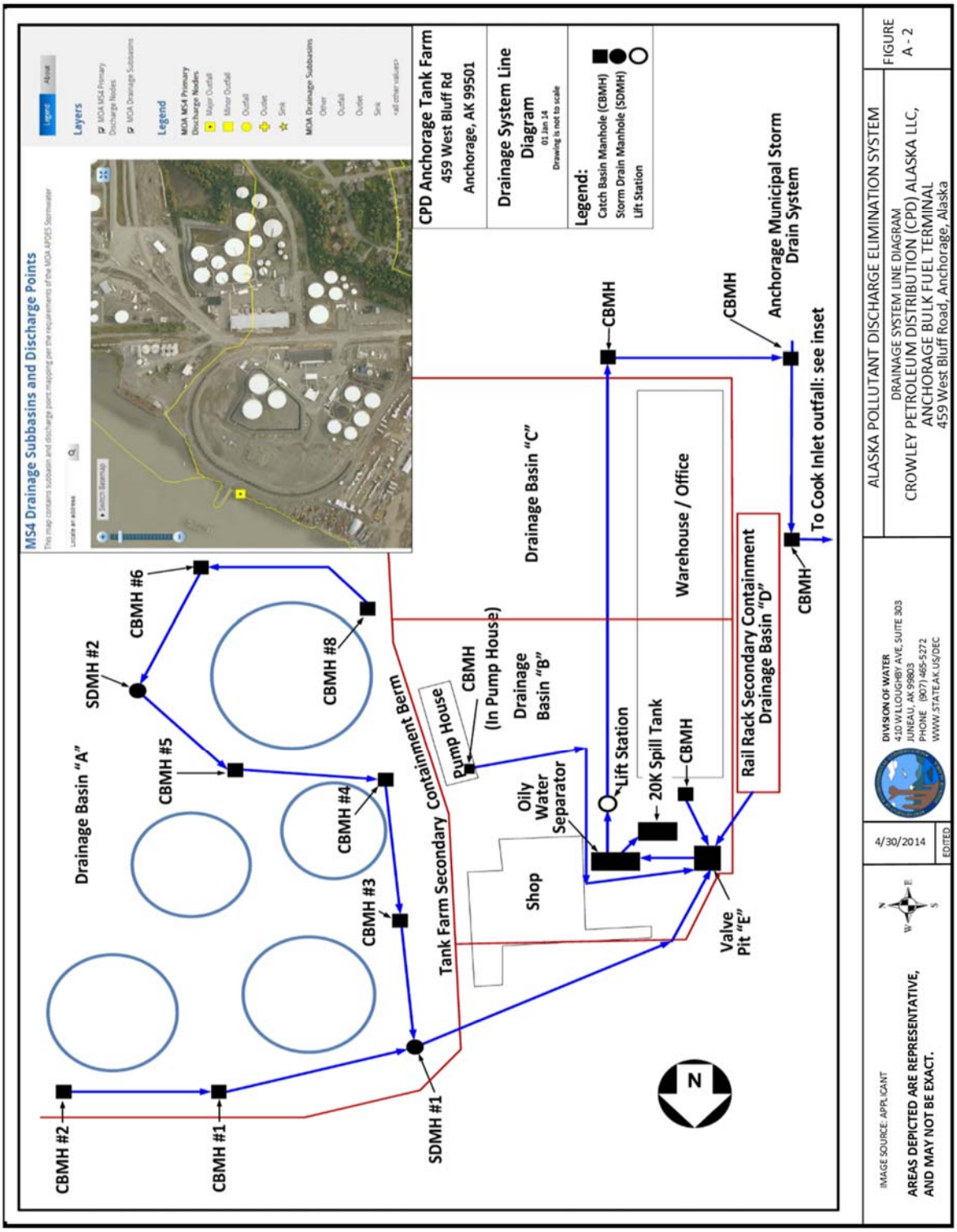
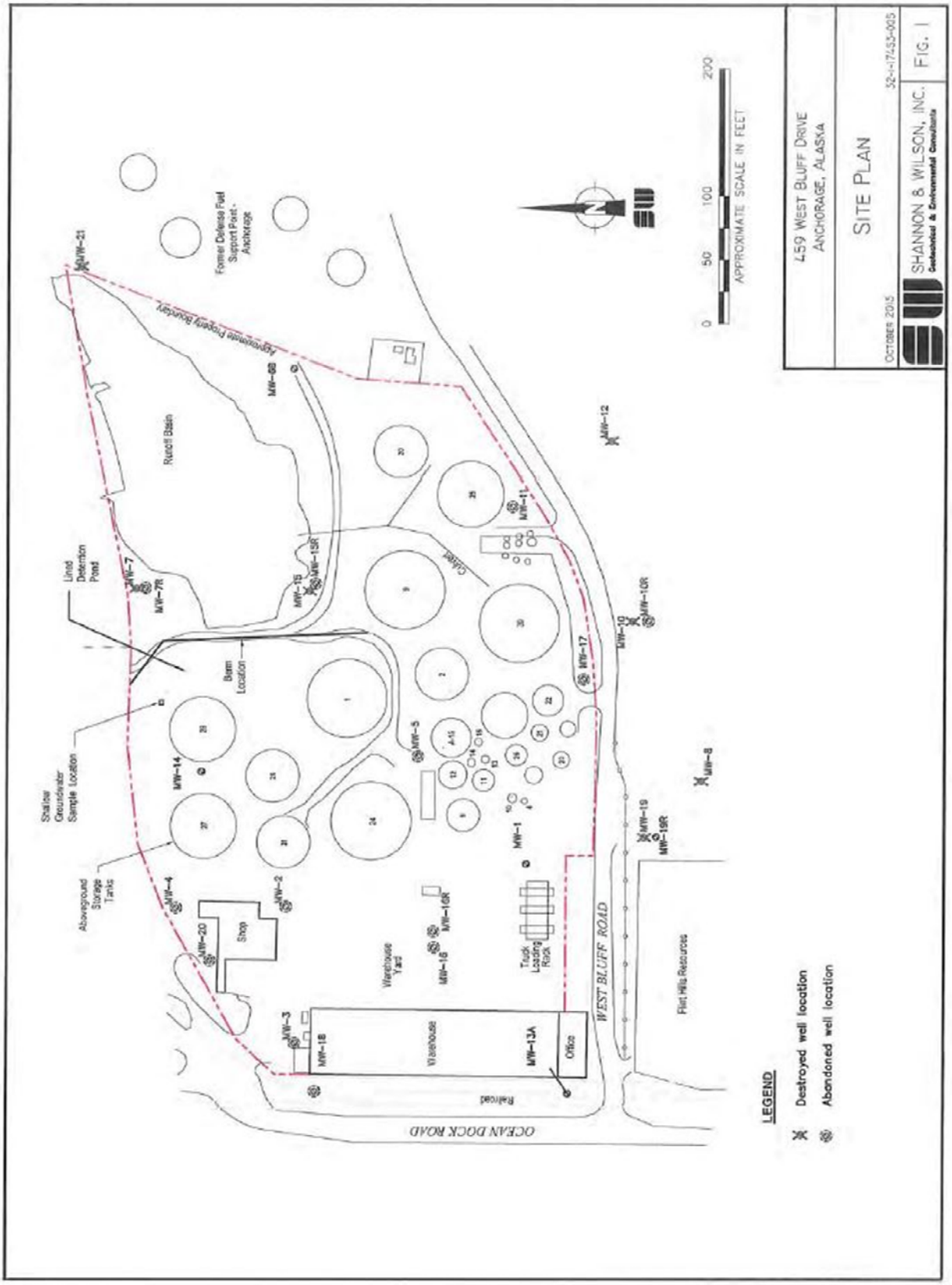
Figure A-3: Groundwater Monitoring Locations