



ALASKA POLLUTANT DISCHARGE ELIMINATION SYSTEM

PERMIT FACT SHEET –DRAFT

**Individual Permit: AK0000396 - Cook Inlet Pipeline Company
Drift River Terminal**

DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Wastewater Discharge Authorization Program

555 Cordova Street

Anchorage, AK 99501

Public Comment Period Start Date: **November 16, 2015**

Public Comment Period Expiration Date: **December 17, 2015**

[Alaska Online Public Notice System](#)

Technical Contact: Marc Bentley
Alaska Department of Environmental Conservation
Division of Water
Wastewater Discharge Authorization Program
555 Cordova St., 3rd Floor
Anchorage, AK 99501-2617
(907) 269-6287
Fax: (907) 269-6287
marc.bentley@alaska.gov

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

COOK INLET PIPELINE COMPANY

For wastewater discharges from:

Drift River Terminal
Redoubt Bay
West Side of Cook Inlet

The Alaska Department of Environmental Conservation (Department or DEC) proposes to reissue APDES individual Permit AK0000396 - Cook Inlet Pipeline Company, Drift River Terminal (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 Drift River Terminal 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 Final Permit.

The 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 Final Permit review period, the Department will make a final decision regarding permit reissuance. A Final Permit will become effective 30 days after the Department's decision. The state's appeals described in the Alaska Administrative Code (AAC) section 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.

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 Street, 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 DEC review.

See <http://www.dec.state.ak.us/commish/InformalReviews.htm> for information regarding informal reviews of DEC 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 DEC 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
43335 Kalifornsky Beach Rd. - Suite 11
Soldotna, AK 99669
(907) 262-5210

This Page Left Blank Intentionally

TABLE OF CONTENTS

1.0 INTRODUCTION.....	3
1.1 Applicant.....	3
1.2 Authority.....	3
1.3 Permit History.....	4
2.0 BACKGROUND	4
2.1 Facility Information	4
2.2 Discharge Descriptions and Effluent Characterization.....	5
2.2.1 Domestic Wastewater (Outfall 001).....	5
2.2.2 Deck Drainage (Outfall 002).....	6
2.2.3 Treated Landfarm Leachate (Outfall 003).....	6
2.3 Compliance History	7
3.0 EFFLUENT LIMITS AND MONITORING REQUIREMENTS.....	8
3.1 Basis for Permit Effluent Limits	8
3.1.1 Technology Based Effluent Limits.....	8
3.1.2 Water Quality Based Effluent Limits.....	9
3.1.3 Requirements Based on Other State Regulations (Outfall 001).....	10
3.2 Effluent Limits and Monitoring Requirements.....	10
3.2.1 Outfall 001 Domestic Wastewater	10
3.2.2 Outfall 002 Deck Drainage.....	11
3.2.3 Outfall 003 Treated Landfarm.....	11
3.2.4 Monitoring Requirements.....	12
3.2.5 Additional Effluent Monitoring.....	12
4.0 RECEIVING WATERBODY.....	12
4.1 Water Quality Standards	12
4.2 Water Quality Status of Receiving Water.....	13
5.0 ANTIBACKSLIDING	13
6.0 ANTIDegradation	14
7.0 OTHER PERMIT CONDITIONS	17
7.1 Quality Assurance Project Plan	17
7.2 Operation and Maintenance Plan	17
7.3 Best Management Practices Plan	17
7.4 Domestic Wastewater Characterization.....	18
7.5 Standard Conditions.....	18

8.0 OTHER LEGAL REQUIREMENTS	18
8.1 Endangered Species Act	18
8.2 Essential Fish Habitat	19
8.3 Permit Expiration	19
9.0 REFERENCES.....	20

APPENDIX A: FIGURES

Figure 1: CIPL Drift River Facility Map	21
Figure 2: CIPL Christy Lee Loading Platform	22
Figure 3: CIPL Drift River Terminal Historical BWT and Landfarm Discharge Location	23
Figure 4: Cook Inlet Essential Fish Habitat.....	24

LIST OF TABLES

Table 1: Treated Landfarm Leachate Characterization Data	7
Table 2: RPA Outfall 003	9
Table 3: Outfall 001 Domestic Wastewater.....	10
Table 4: Outfall 002 Deck Drainage	11
Table 5: Outfall 003 Treated Landfarm Leachate.....	11

1.0 INTRODUCTION

On February 18, 2015, the Alaska Department of Environmental Conservation (DEC or Department) received a revised Alaska Pollutant Discharge Elimination System (APDES) individual permit application from Cook Inlet Pipeline Company (CIPL or Applicant). Information contained in this fact sheet is based on the application and follow-up information requested by DEC and submitted by CIPL, a recently acquired subsidiary of Hilcorp Alaska, LLC, that reflected significant changes to the facility and authorized discharges. The application includes a request for the Department to develop an APDES individual permit to authorize discharges to Cook Inlet from CIPL facilities including the Drift River Terminal (DRT) and Christy Lee loading platform (Christy Lee) located at the mouth of Drift River and approximately one mile offshore respectively, (See Figure 1).

1.1 Applicant

This fact sheet provides information on the APDES permit for the following entity:

Name of Facility:	Drift River Terminal
APDES Permit Number:	AK0000396
Facility Location:	Redoubt Bay, West Side of Cook Inlet
Mailing Address:	Cook Inlet Pipeline Company 3800 Centerpoint Drive, Suite 1400 Anchorage, Alaska 99503
Facility Contact:	Messrs. Thad Henry or Kenneth White, Lead Facility Operators

The Permit authorizes the following discharges:

Outfall	Description	Receiving Water	Latitude	Longitude
001	Domestic Wastewater	Cook Inlet	60.553556	-153.136503
002	Deck Drainage	Cook Inlet	60.553556	-153.136503
003	Treated Landfarm Leachate	Drainage to Cook Inlet	60.578611	-152.138333

See Figures 1, 2 and 3 in Appendix A to for the location of the facilities and discharges.

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, which regulates the discharge of wastewater to waters of the United States (U.S.). The state NPDES program is known as the APDES Program and is administered by DEC. Transfer of the NPDES Program occurred in four phases with oil and gas facilities transferring as part Phase IV on October 31, 2012. Accordingly, DEC is now the permitting authority for regulating the discharges associated with AK0000396 – CIPL, Drift River Terminal (Permit).

Section 301(a) of the Clean Water Act (CWA) and 18 AAC 83.015 provide that the discharge of pollutants to water of the U.S. is unlawful except in accordance with an APDES permit. The individual permit reissuance is being developed in accordance with regulations 18 AAC 72 and 18 AAC 83. 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 Statutes (AS) 46.03.020(13).

1.3 Permit History

CIPL is the permitted operator of the Drift River Terminal. When Hilcorp purchased Cook Inlet oil and gas facilities from Chevron, Hilcorp became the majority shareholder of CIPL through their subsidiary company Harvest Alaska, LLC. The first NPDES permit for the discharges from the facility was issued by EPA in December 1973 and was subsequently reissued in September 1979, September 1987, October 28, 1998, and December 15, 2003 (existing Permit). CIPL submitted a complete application for permit reissuance to EPA on December 12, 2008 and the existing Permit was administratively extended upon its expiration on February 1, 2009.

The existing Permit included multiple ancillary wastewater sources under the ballast water discharge, including hydrostatic test water, pipeline displacement water, spill response water, monitoring well, purge water, and excavation dewatering associated with maintenance projects. Since the discontinuance of ballast water treatment (BWT), some of these ancillary wastewater sources have been authorized under other APDES general permits that provide equivalent coverage. Given the ownership transfer and significant facility modification that affected the 2008 EPA application, CIPL submitted a revised application to DEC on February 18, 2015 that did not include a request to discharge ballast water or the other ancillary wastewater sources previously associated with the ballast water discharge. DEC bases the reissuance of the Permit on the revised application.

2.0 BACKGROUND

2.1 Facility Information

The Terminal and Christy Lee are located approximately 40 miles southwest of Tyonek, Alaska on the west side of Cook Inlet at the mouth of Drift River.

The terminal includes:

- An airstrip and Barge Loading Pipeline,
- The Christy Lee Platform,
- Crew Quarters and Accommodations,
- Operations and Maintenance (O & M) Facilities,
- Abandoned or Decommissioned Infrastructure, and
- A Contaminated Soil Landfarm

The Cook Inlet Pipeline delivers crude oil from the Trading Bay and Granite Point production facilities to storage tanks at the terminal (Figure 1). When an adequate volume of oil is available, it is transferred to tankers via pipeline at the platform, located approximately one mile offshore (Figure 2). Oil transfers occur approximately every 20 days based on current oil production at Trading Bay and Granite Point. Currently, tankers transport crude to the Tesoro Refinery located on the east side of Cook Inlet from the terminal; however, crude could also be shipped to other refineries if necessary. CIPL considers their terminal to be a critical facility for ensuring delivery of crude to market should the delivery to Tesoro be halted for any reason in the future.

During the previous permit cycle, new, double-hulled tankers replaced obsolete tankers that required BWT. The implication is that there has been no discharge of ballast water and the BWT system has been dismantled. In addition, several other minor sources that were treated in the

BWT have been eliminated. As a result of eliminating ballast water and other wastewater sources, the Department no longer considers this facility to be a major discharger and is beginning the process of modifying the facility's designation to a minor discharger through EPA procedures. Based on current terminal operations, CIPL requested individual permit coverage for domestic wastewater, deck drainage at the platform, and treated landfarm leachate. The following sections describe specific discharges with respect to the facility function, treatment, or pollution strategies, and the resulting effluent characteristics.

2.2 Discharge Descriptions and Effluent Characterization

2.2.1 Domestic Wastewater (Outfall 001)

Treated domestic wastewater associated with Outfall 001 consists of treated blackwater from a marine sanitation device (MSD) and graywater generated by kitchen galleys, showers and laundries on the Christy Lee. After treatment via the MSD, treated blackwater is commingled with graywater and discharged from Outfall 001 to Cook Inlet. During routine transfer operations, the discharge is an intermittent, low volume due to the small number of personnel (2-4) manning the platform for two to five days a month during oil transfers. During maintenance operations, the duration of staffing could increase in a given month. The platform is fitted with a 24 volts direct current Electro Scan Type I MSD (EST24) that provides maceration and disinfection to reduce five-day biochemical oxygen demand (BOD₅), total suspended solids (TSS) and fecal coliform bacteria. The EST24 is rated to treat up to 575 gallons per day (gpd). Comparatively, the reported maximum daily discharge volume is 102 gpd and the long-term average flow rate is 5 gpd for the combined treated blackwater and graywater discharge. Hence, the treated blackwater proportion in the discharge is even less than these reported low discharge volumes.

The EST24 has two 1.5 gallon treatment compartments interconnected by an overflow pipe. The overflow pipe decants liquid to the second compartment while settled solids remain in the first tank to receive additional treatment during subsequent flushes. The first compartment macerates the sewage and provides first stage disinfection of bacteria and oxidation of BOD₅ and TSS using chlorine generated from electrolysis of seawater. Hydrochloric acid and hypochlorous acid is generated in both compartments using electrode plates and seawater as the conductive medium. During each flush, a treatment cycle is initiated that lasts approximately 3.75 minutes. Given each flush consists of approximately 0.75 gallons, there are four treatment cycles prior to the effluent being discharged out of the second compartment. The treatment performance to reduce BOD₅, TSS, and fecal coliform bacteria is predicated, in part, by the amount of chlorine contact time during each treatment cycle as a function of time between flushes. The concentration of total residual chlorine (TRC) remaining in the effluent also depends on the contact time allowed between flushes. The longer the contact time, the more the TRC is dissipated by the demand imposed by the effluent. In addition, electrolysis of salt water into hydrochloric and hypochlorous acid is temporary and, after oxidizing and disinfecting influent, the treated effluent reverts back to its original state of salt and water prior to discharge overboard. DEC currently assumes the EST24 discharges effluent that is typically below water quality criteria for fecal coliform bacteria and TRC due to operating significantly below the rated capacity. This assumption will be verified during the next permit cycle (See Fact Sheet Section 7.4.

18 AAC 72.050 requires minimum treatment (secondary treatment as defined in 18 AAC 72.990(59)) unless a waiver is granted per 18 AAC 72.060. Secondary treatment refers to the method of removal of dissolved and colloidal material that achieves certain concentrations of BOD₅ and TSS (e.g., 30 milligrams per liter (mg/L) on a monthly average basis). In order to receive a waiver to minimum treatment, the effluent must receive primary treatment defined per 18 AAC 72.990(50) as 30 percent (%) removal of BOD₅ and TSS and disinfection, when appropriate, to ensure protection of human health and the environment. The combined graywater and treated blackwater discharge attains aforementioned primary treatment requirements. In the CWA Section 401 Certification of Reasonable Assurance for the existing EPA-issued Permit, the Department provided a waiver and established narrative limits that are commensurate with the potential environmental impacts of the discharge. There are no changes in domestic wastewater that warrant reconsideration of the previously issued waiver and this waiver is being retained.

2.2.2 Deck Drainage (Outfall 002)

Intermittent deck drainage from the Christy Lee consists of precipitation and washdown water void of any chemical additives. Flow is estimated to be 6,250 gallons per day (gpd) and is based on deck dimensions and historic maximum recorded precipitation (rainfall and snowmelt). Deck drainage occurs under two different modes of operation, manned and unmanned. When unmanned, the only discharge from the deck is due to precipitation and the discharge is directly to Cook Inlet. While manned, deck drainage is held in sump pumps until the oil transfer to the tanker is completed, and then discharged as a batch.

The Christy Lee is unique in that it operates solely as an oil transfer terminal and cannot be compared to typical oil and gas production platforms that include exploration or production activity that pose risk of contaminants contributing to deck drainage. As a terminal, the Christy Lee includes a closed piping system that is subject to preventive maintenance and corrosion testing to prevent leaks. The only time contaminated deck drainage could reasonably occur is during oil transfer or planned maintenance activities.

The Christy Lee is also unique in that the configuration does not allow for the installation of an oil water separator or means to collect effluent samples. The deck drains are not interconnected so each deck drain discharges directly to Cook Inlet. The unique nature of the Christy Lee requires emphasis on preventative measures along with stringent Standard Operating Procedures (SOP) and Best Management Practices (BMP) to control pollution. For example, deck drains are sealed when oil transfer is underway and any significant release is full containment in a sump that is equipped with a pump to inject the oil contaminated precipitation back into the pipeline. The sump is for containment of oil only and is not part of the deck drainage system. Once the oil transfer is completed, the water on the deck is observed for residues or sheen and if residues or sheen are observed, they are removed using sorbent pads prior to discharging.

2.2.3 Treated Landfarm Leachate (Outfall 003)

CIPL constructed the existing landfarm adjacent to the fire test facility to treat contaminated soil from the test facility. This activity was permitted by DEC Contaminated Sites Program and the treated landfarm leachate was approved for disposal to the land area in the test facility

where the contaminated soil was removed. The contaminated soil from the fire test facility has been completely remediated. CIPL plans to use the landfarm to remediate other impacted soils at the DRT but cannot continue discharging to the land at the fire test facility. Therefore, CIPL requested coverage to discharge to a drainage ditch near the landfarm that connects to Cook Inlet (i.e., waters of the U.S.), which requires coverage under an APDES permit.

The landfarm at Drift River Terminal (DRT) consists of two lined cells where contaminated soil is spread to be biologically and physically treated to remove hydrocarbons (Figure 3). The effectiveness of this removal is dependent on the optimum moisture content of the soil being treated. When treating contaminated soil, the cells are left uncovered and frequently saturated with precipitation mainly during fall and spring months. Discharge of leachate likewise occurs during periods of higher precipitation. Landfarm operations cease in the fall and the cells are covered with an impervious liner during the winter months. Discharge from the landfarm is contingent on future soil remediation and of this writing, there is no discharge.

Decommissioned BWT components have been reconstructed on a skid to provide treatment for sediment and dissolved hydrocarbons in the landfarm leachate. Parallel treatment trains, each consisting of a cartridge filter and two carbon canisters in series, provide for the removal of sediment and dissolved hydrocarbons. Operational samples taken between the first and second carbon canisters show that water quality criteria is met after treatment through the first canister. Levels of dissolved hydrocarbons are typically non-detect after treatment with the second canister. When contaminated soil has been remediated, treatment is ceased if the leachate meets the water criteria for total aromatic hydrocarbons (TAHs) of 10 micrograms per liter ($\mu\text{g/L}$) without treatment. Table 1 shows levels measured between 2003 and 2011.

Table 1: Treated Landfarm Leachate Characterization Data

Parameter	Data ¹	Range low – high	Average
Maximum Daily Flow - gallons per day (gpd)	18	102 – 53,779	24,022
Total Aromatic Hydrocarbons (TAH) micrograms per Liter ($\mu\text{g/L}$)	16	<0.4 – 0.98 ²	0.44
Diesel Range Organics (DRO) milligrams per Liter (mg/L) ³	16	<0.3 – 16.9	2.39
Notes:			
1. Number of valid data points evaluated.			
2. The two highest values represent leachate from remediated soil with no treatment. All other data points representing contaminated soil leachate with treatment were below detection levels.			
3. There is no applicable water quality criterion for DRO.			

In 2011, the treatment system was discontinued prior to discharge because the contaminated soil had been remediated to acceptable levels. From 2003 until leachate treatment was discontinued, none of the results for TAH were above method detection levels. TAH was sampled infrequently and all of the results were below MDLs. Only after treatment was discontinued were levels above detection levels, but even these results were well below the water quality criterion for TAH. The treatment system appears to be effective and efficient in removing hydrocarbons.

2.3 Compliance History

Discharge Monitoring Reports (DMRs) from January 2010 to December 2014 were reviewed to determine the facility’s compliance with effluent limits. There were no exceedances for domestic

wastewater discharges from the platform for the term of the existing Permit. Furthermore, there has been no discharge of ballast water during the term of the existing Permit. A review of EPA's Compliance Data revealed no violations under the existing Permit in the previous five years.

3.0 EFFLUENT LIMITS AND MONITORING REQUIREMENTS

3.1 Basis for Permit Effluent Limits

Per 18 AAC 83.015, the Department prohibits the discharge of pollutants to waters of the U.S. unless the permittee has first obtained a permit issued by the APDES Program that meet the purposes of Alaska Statute 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 technology-based effluent limits (TBEL) or water quality-based effluent limits (WQBEL). TBELs are set according to 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 case-by-case TBELs based on Best Professional Judgment (BPJ). 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 and consequently be selected as the final permit limit. Per Section 3.1.1, the Department has determined there are no applicable TBELs for the discharges authorized by the Permit. The Permit includes narrative WQBELs and BMPs for the control of oil and grease, foam, oily sheen, solids, and petroleum hydrocarbons in deck drainage (Outfall 002) and numeric WQBEL's for TAH, total aqueous hydrocarbons (TAqH), and pH for treated landfarm leachate (Outfall 003). Narrative WQBELs are established for domestic wastewater and a waiver is granted under authority of 18 AAC 72 as described in Section 3.1.3.

3.1.1 Technology Based Effluent Limits

There are no ELGs applicable to the discharges authorized under the Permit. As discussed in Section 2.2.2, the Christy Lee operates as a terminal and not as an oil and gas exploration, development, or production facility. Accordingly, the ELGs in 40 CFR 435 do not apply to this facility. Similarly, BPJ numeric limits cannot be applied because it is not currently feasible to collect samples or treat deck drainage (Outfall 002). Currently, sample collection is also infeasible for the commingled graywater and treated blackwater in the domestic wastewater discharge (Outfall 001). Per 18 AAC 83.515 and 18 AAC 83.475 (3), a permit must include BMPs to control or abate the discharge of pollutants when numeric limits are infeasible. Therefore, the Permit includes BMPs and narrative WQBELs for Discharge 001 – Domestic Wastewater and Discharge 002 – Deck Drainage. However, Discharge 003 – Treated Landfarm Leachate includes numeric limits for hydrocarbons and pH.

3.1.2 Water Quality Based Effluent Limits

3.1.2.1 Domestic Wastewater (Outfall 001)

The Department has determined based on available information and operational knowledge of the ETS24 MSD (See Section 2.2.1) there is not likely reasonable potential for the discharge of domestic wastewater to exceed, or contribute to and exceedance, of numeric water quality criteria for fecal coliform bacteria and TRC due to the treatment capacity of the MSD and the low volume of blackwater being treated and commingled with graywater. A characterization study is required during the next permit cycle to verify this determination (Section 7.4).

The Permit retains the narrative limits based on the water quality criteria for residues in the domestic wastewater discharge. Per 18 AAC 70.020(b)(17), the discharge may not alone or in combination with other substances or wastes cause a film, sheen, or discoloration on the surface of the water. Nor can the discharge cause a sludge, solid, or emulsion to be deposited beneath or upon the surface of the water per 18 AAC 70.020(b)(20). Therefore, the Permit requires visual observations of the water surface when the facility is manned and discharging.

3.1.2.2 Deck Drainage (Outfall 002)

Due to the activity associated with the platform deck and helipad, a limitation of no discharge of floating oil that is determined by the presence of film, sheen, or a discoloration of the surface of the receiving water is imposed for deck drainage discharge per 18 AAC 70.020(b)(17). In situations where the observation of sheen on the water surface is not possible (e.g., due to ice conditions), the Permit requires that deck drainage be inspected for oily sheen and that no floating oil be discharged. Similarly, the discharge of residue is prohibited in amounts that causes deleterious effects per 18 AAC 70.020(b)(20).

3.1.2.3 Treated Landfarm Leachate (Outfall 003)

The Department’s evaluation of the discharge of treated landfarm leachate identified only low concentrations of TAH and TAqH. Because all of the analytical results were very low, there was no reasonable potential for either TAH or TAqH to exceed, or contribute to an exceedance, of water quality criteria. The Department conducted a reasonable potential analysis (RPA) using the characterization data, which is summarized in Table 2.

Table 2: RPA Outfall 003

Pollutant of Concern	Maximum Observed Effluent Concentration (µg/L)	Number of Effluent Data (n)	User Defined Coefficient of Variation	Reasonable Potential Multiplier	Maximum Expected Effluent Concentration (µg/L)	WQ Criteria (µg/L)	RP (Yes or No)
TAH	0.98	16	0.6	2.19	2.14	10	No

DEC understands that this determination is based on the contaminated soil being remediated at the time of characterization and future contaminated soil treated at the facility may not be representative. Therefore, DEC establishes numeric limits for TAH and TAqH equal to the water quality criteria in 18 AAC 70.0201(b)(A). In addition, DEC requires visual observation of no sheen as narrative limits per 70.020(2)(17)(C) and a numeric pH limit of not less than 6.5 nor greater than 8.5 Standard Units (SU) as water quality limits per 18 AAC 70.020(2)(18)(C). In the event of discharge without treatment (See Section 2.2.3), turbidity shall be monitored to determine possible need for WQBELs in the future.

3.1.3 Requirements Based on Other State Regulations (Outfall 001)

Domestic wastewater discharges must meet minimum treatment requirements per 18 AAC 72.050 unless granted a waiver to minimum treatment requirements per 18 AAC 72.060. In order to receive a waiver, the discharge must receive at least primary treatment and the permittee must demonstrate that the reduced level of treatment will adequately protect human health and the environment. The CWA Section 401 Certification of reasonable assurance issued by DEC for the existing Permit granted this waiver. Based on review of available information, the Department finds no reason to revise the waiver and retains it, and the associated narrative limits of the existing Permit. The Permit also establishes a maximum daily discharge limit of 575 gpd based on a review of manufacturer’s information to ensure that the applicability of the waiver is maintained.

3.2 Effluent Limits and Monitoring Requirements

Per AS 46.03.110(d), the Department may specify in a permit the terms and conditions under which waste material may be disposed. The following sections provide the effluent limits and monitoring requirements for each outfall.

3.2.1 Outfall 001 Domestic Wastewater

While the Christy Lee is unmanned, there is no potential for the system to discharge domestic wastewater. However, while the Christy Lee is manned, the Permit requires the limitation and monitoring requirements per Table 3.

Table 3: Outfall 001 Domestic Wastewater

Parameter	Effluent Limits		Monitoring Requirements	
	Maximum Daily	Sample Location	Sample Frequency ¹	Sample Type
Total Discharge Flow (gpd) ²	575	Effluent	Daily	Estimated
Floating Solids, Waste, or Visible Foam ³	No Discharge	Receiving Water	Daily	Visual
Oil and Grease (O&G) Visual (Oily Sheen) ³				
Notes:				
1. Daily monitoring is required only when the facility is manned (See Section 3.2.1).				
2. Total Discharge Flow is an estimate of the combined graywater and treated blackwater.				

3.2.2 Outfall 002 Deck Drainage

While the Christy Lee is unmanned, there is no feasible means to monitoring by observation for compliance with the narrative WQBEL. BMPs and SOPs are used to control discharges during periods where the Christy Lee is unmanned. However, while the Christy Lee is manned, the Permit requires the limitation and monitoring requirements per Table 4.

Table 4: Outfall 002 Deck Drainage

Parameter	Effluent Limits		Monitoring Requirements	
	Maximum Daily	Sample Location	Sample Frequency ¹	Sample Type
Total Discharge Flow (gpd)	Report	Effluent	Daily	Estimated
O&G Visual (Oily Sheen) ²	No Discharge	Deck	Daily	Visual
Floating Solids, Waste, or Visible Foam ³		Receiving Water		
Notes:				
1. Daily Monitoring is required only when facility is manned (See Section 3.2.2).				
2. Prior to discharging deck water, the permittee must monitor the surface of the deck water by observation for sheen.				
3. The permittee must monitor for the presence of floating oil, solids, waste or visible foam by observing the surface of the receiving water in the vicinity of the outfall(s) during daylight at the time of maximum estimated discharge and during conditions when observation on the surface of the receiving water is possible in the vicinity of the discharge. Visual observations must be recorded in daily operating logs and made available upon request.				

3.2.3 Outfall 003 Treated Landfarm

While discharging landfarm leachate at the DRT, the Permit requires the limitation and monitoring requirements per Table 5.

Table 5: Outfall 003 Treated Landfarm Leachate

Parameter	Effluent Limits		Monitoring Requirements	
	Maximum Daily	Sample Location	Sample Frequency	Sample Type
Total Discharge Flow (gpd)	Report	Effluent	Daily	Recorded
pH (S.U.)	6.5 - 8.5		Daily ¹	Grab
TAH (µg/L)	10		Monthly	
TAqH (µg/L)	15			
Turbidity ²	Report		Water Surface	Visual
O&G Visual (Oily Sheen) ^{3, 4}	No Discharge			
Notes:				
1. The monthly maximum and minimum will be reported on the monthly DMR. For discharges from remediated landfarm soils that do not receive treatment prior to discharge the permittee must report and assess levels of turbidity to determine possible WQBELs in the future (see 2.2.3 in Fact Sheet).				
2. Daily monitoring is required only while discharging.				
3. The permittee must monitor for the presence of floating oil or oily sheen by observing the surface of the receiving water in the vicinity of the outfall(s) during daylight at the time of maximum estimated discharge and during conditions when observation on the surface of the receiving water is possible in the vicinity of the discharge. Visual observations must be recorded in daily operating logs and made available upon request.				

3.2.4 Monitoring Requirements

Monitoring in a permit is required to determine compliance with effluent limits. Per Permit Appendix A - Standard Conditions, compliance samples shall be collected downstream of the last treatment unit. For Outfall 3 – Treated Landfarm Leachate, the last treatment unit is the carbon canister(s). Collection of compliance samples downstream of the last treatment unit is not applicable to Outfall 1 – Domestic Wastewater and Outfall 2 – Deck Drainage. Applicable monitoring results shall be submitted on monthly DMRs.

3.2.5 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. 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 WATERBODY

4.1 Water Quality Standards

Section 301(b)(1)(C) of the CWA requires the development of limits in permits necessary to meet water quality standards by July 1, 1997. Regulations in 18 AAC 83.435 require that conditions in permits ensure compliance with Alaska 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 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.

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 in 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. Accordingly, the Department has determined that all marine uses classes must be protected in State waters of 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.

The applicant has not requested a mixing zone for any of the discharges. All discharges will meet water quality criteria at the point of discharge and no mixing zone has been authorized.

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 meet applicable WQS is defined as a “water quality limited segment” and placed on the state’s impaired waterbody list. Cook Inlet is not included on *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 Total Maximum Daily Load (TMDL).

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 previous permit.” Per 18 AAC 83.480(c), 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, 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.

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.

The Drift River Terminal no longer takes on ballast water from oil tankers and subsequently does not treat or discharge ballast water. For the remaining ancillary wastewater sources from hydrostatic testing and excavation dewatering that were previously treated by the BWT, the permittee now obtains coverage under AKG003000 and AKG002000, respectively. The Department has compared the limits previously required for ballast water with limits in AKG02000 and AKG03000 and has concluded the limits in AKG02000 and AKG03000 are more stringent than the limits for ballast water in the existing Permit and no backsliding has occurred. Effluent limits and monitoring requirements for discharges associated with the landfarm and deck drainage are new requirements and therefore exempt from considerations regarding backsliding. The Department has therefore concluded that the five regulatory criteria per 18 AAC 83.480(b) do not warrant further evaluation because no backsliding has occurred.

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 designated uses of the waterbody, WQBELs may be revised as long as the revision is consistent with the State 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 the Department decision to reissue the Permit with respect to the antidegradation policy.

The Department's approach in implementing the antidegradation policy, found in 18 AAC 70.015, is based on the requirements in 18 AAC 70 and the *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 where a higher numbered tier indicates a greater level of water quality protection. The receiving water for discharges from the facility is Cook Inlet, which is a Tier 2 water.

Wastewater discharged under this Permit is subject to a Tier 2 antidegradation analysis, as detailed in the *Interim Methods*. The State antidegradation policy in 18 AAC 70.015(a)(2) states that if the quality of water exceeds levels necessary to support propagation of fish, shellfish, and wildlife and recreation in and on the water (Tier 2), 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. These five findings are:

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.*

Based on the evaluation required per 18 AAC 70.015(a)(2)(D) below, the Department has determined that the most reasonable and effective pollution prevention, control, and treatment methods are being used and that the localized lowering of water quality is necessary.

The Alaska Oil and Gas Association (AOGA) 2014 Economic Impact Study (AOGA Study) reports the petroleum industry is estimated to be five of the top ten employers on the Kenai Peninsula generating 6,000 direct, support, or indirect jobs with wages paid totaling \$430 million in 2013.

The 2014 Annual Report by the Alaska Department of Natural Resources, Oil and Gas Division states that a total of 34 tracts in Cook Inlet representing a total of 108443.03 acres were leased by the State. The AOGA Study reports that Hilcorp is the second largest tax payer operating in the Kenai Peninsula Borough next to Conoco Phillip Alaska Inc. Demonstrating Hilcorp's commitment to development and increased production of affordable gas for Alaskans, Hilcorp Alaska, LLC won 13 of 16 tracts bid on as reported in the Cook Inlet Areawide 2014 Sale Results Summary. This also addresses recent concerns of reliable and affordable energy in this area of Alaska. Hilcorp has invested more than \$300 million dollars in Alaska's oil and gas infrastructure concentrating on efficiency and reliability in addition to exploration and production. This has resulted in more than 300 highly paid, full time employees in Kenai Peninsula and Cook Inlet at large. The terminal is of critical importance to the new owners, as it is needed to ship crude oil to local as well as potentially other markets abroad and is an essential

CIPL asset that assures oil can be delivered to any market should the local refinery cease to be an option.

DEC concludes that the operation of the Drift River Terminal and the authorization of the discharges accommodates the important economic and social development in the vicinity of the discharges.

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 limit in 18 AAC 70.030.*

The Department evaluated the applicable criteria in 18 AAC 70.020 while establishing permit limits and conditions. Narrative water quality criteria prohibit discharges that result in foam, floating solids, and residues that alone, or in combination with other substances or wastes, make the water of Cook Inlet unfit or unsafe for the designated use.

Similarly, the narrative water quality criteria for hydrocarbons prohibits a discharge that causes a film, sheen, discoloration on the surface, floor, or adjoining shorelines. All discharges authorized by the Permit have narrative limits for residues and hydrocarbons. In addition, the discharge of treated landfill leachate is controlled by numeric limits for pH, TAH and TAqH. These limitations ensure the discharges will not violate the applicable criteria. Note that 18 AAC 70.235 pertains to site-specific criteria, and site-specific criteria have not been developed for the waterbody in the vicinity of the discharges. In addition, 18 AAC 70.030 pertains to whole effluent toxicity (WET) limits and there are no WET limits or WET monitoring requirements contained in the Permit based on the Department's evaluation of effluent quality. Permit limits and BMP requirements will ensure consistent effluent quality for the life of the Permit and this effluent quality is adequate to protect aquatic life. The Department has determined the finding has been 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 established such that, if the criteria are met, the uses of the waterbody will be protected. DEC developed and incorporated narrative and numeric permit limits at the point of discharge based on meeting the most stringent water quality criteria applicable to all uses of the waterbody. Because the criteria are being met at the point of discharge and these criteria protect the uses of the waterbody, DEC concludes that the finding is 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.*

- **Domestic Wastewater Outfall 001:** Human wastes (blackwater) generated on the platform by a small crew conducting oil transfers twice per month, is treated with a 24V Class I MSD that provides reduction of BOD₅ and TSS, and disinfection of bacteria. Graywater generated by the crew is controlled through BMPs and commingled with treated blackwater prior to discharge. Greater than primary treatment is achieved overall for the commingled sources of domestic wastewater. Considering the small volume (approximately 30 gpd), intermittent discharge (4 days per month), and the level of treatment provided, DEC has determined human health and the environment is protected

and has provided a waiver to minimum treatment per 18 AAC 72.060. DEC finds this method of pollution control is the most effective and reasonable.

- **Deck Drainage Outfall 002:** The platform effectively operates a closed system to transfer oil that is subjected to preventive maintenance including leak detection and corrosion control as well as implementation of strict SOPs. The SOPs require drains to be closed during oil transfer and observation for sheen prior to discharge. If sheen is present, it is removed with sorbents to prevent the discharge of oil. The Department concludes that these SOPs, BMPs, and preventative measures are the most reasonable and effective pollution control measures for the Christy Lee Platform deck drainage.
- **Landfarm Leachate Outfall 003:** Portions of the previous BWT system were dismantled and reconfigured onto a skid for the purpose of treating landfarm leachate. The treatment skid consists of parallel trains consisting of cartridge filtration to remove sediment and two granular activated carbon units to remove dissolved hydrocarbons. As discussed in Section 2.2.3, the performance of this treatment system is exceptional as exemplified by the discharge data indicating removal of TAH and TAqH to undetectable levels.

Each waste stream is either treated using the most effective and reasonable methods or controlled by implementing practicable and effective prevention and control strategies. DEC has concluded the most effective methods of pollution prevention, control, and treatment are being applied to all wastes discharged.

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 best management practices.*

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 to 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 the requirement of this chapter.

The first part of the definition includes all applicable federal technology-based ELGs adopted by reference at 18 AAC 83.010(g)(3). There are no applicable federal ELGs. Nor are there applicable TBEL’s established using case-by-case BPJ. Therefore this part of the definition does not apply to the Permit.

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. Minimum treatment is defined as achieving secondary level of treatment. The MSD on the Christy Lee does not achieve minimum treatment as required by 18 AAC 72.050. However, the combined discharge of treated blackwater from the MSD and graywater achieves greater than primary treatment. A

waiver to minimum treatment was granted per 18 AAC 72.060 previously for the domestic wastewater discharge on the Christy Lee. The Department retains this waiver and establishes limits and conditions in the Permit that are appropriate, and that adequately protect human health and the environment. The waiver is consistent with the requirements to evaluate minimum treatment requirements in the context of protecting human health and the environment as allowed in 18 AAC 72.

The third part of the definition includes any treatment required by state law that is more stringent than 18 AAC 70. The Department is not aware of any other state laws that are more stringent than those in 18 AAC 70.

DEC has concluded that discharges are treated to the highest statutory and regulatory requirements and this requirement has been met.

7.0 OTHER PERMIT CONDITIONS

7.1 Quality Assurance Project Plan

The permittee is required to develop procedures to ensure that the monitoring data submitted are accurate and to explain data anomalies if they occur. The permittee is required to update the Quality Assurance Project Plan (QAPP) within 120 days of the effective date of the final Permit. Additionally, the permittee must submit a letter to the Department within 120 days of the effective date of the Permit stating that the plan has been implemented within the required time frame. The QAPP shall consist of standard operating procedures the permittee must follow for collecting, handling, storing and shipping samples; laboratory analysis; and data reporting. The plan shall be retained on site and made available to the Department upon request.

7.2 Operation and Maintenance Plan

The Permit requires the permittee to properly operate and maintain all facilities and systems of treatment and control. Proper operation and maintenance is essential to meeting discharge limitations, monitoring requirements, and all other permit requirements at all times. The permittee is required to develop or update and implement an O&M Plan for the MSD on the Christy Lee and landfarm treatment skid within 120 days of the effective date of the final permit. Manufacturer manuals and operation plans approved by other agencies may be supplemented or adapted for this requirement. If an O&M Plan has already been developed and implemented, the permittee need only to review the existing plan to make sure it is up to date and all necessary revisions are made. The O&M Plan(s) shall be retained on site and made available to the Department upon request.

7.3 Best Management Practices Plan

In accordance with AS 46.03.110 (d), the Department may specify in a permit the terms and conditions under which waste material may be disposed. In addition, CWA Section 402(a)(1) authorizes DEC to include additional requirements that are deemed necessary to carry out the provision of the CWA in permits on a case-by-case basis including development and implementation of BMP Plans as a condition in APDES permits. BMPs are measures that are intended to prevent or minimize the generation and potential for the release of pollutants in accordance with 18AAC 83.475.

The Permit requires the permittee to develop a BMP Plan in order to prevent or minimize the potential for the release of pollutants to waters and lands of the State of Alaska through runoff, spillage or leaks, or erosion. The BMP Plan must contain specific BMP components to address housekeeping practices that reduce pollutants in Outfall 001 Domestic Wastewater, with an emphasis on sources of pollution in graywater, and Outfall 002 – Deck Drainage. All changes to the BMP Plan must be reviewed by the facility engineering staff and manager. The Permit requires the permittee to develop or update and implement a BMP Plan within 120 days of the effective date of the Final Permit and submit a letter certifying completion. The BMP Plan must be kept on site and made available to the Department upon request.

7.4 Domestic Wastewater Characterization

During Permit development, DEC evaluated the commingled, treated blackwater and graywater discharge authorization under Outfall 001 – Domestic Wastewater. DEC concluded that there is no reasonable potential to exceed, or contribute to an exceedance of water quality criteria for fecal coliform bacteria and TRC in the discharge. This was based on a review of the treatment capacity of the system, chemistry of the treatment, and low volume of the blackwater component in the commingled discharge. Sample collection and analysis during the next permit cycle is required to confirm this conclusion as no effluent data currently exists.

Monitoring for TRC and fecal coliform bacteria is required in the Permit during the next permit cycle to characterize the effluent in Outfall 001. No less than one year prior to submitting an application on August 4, 2020 for the next reissuance of the Permit, the permittee must submit results from at least five samples in five discrete sample events to adequately characterize the effluent and demonstrate to the satisfaction of the Department that the discharge complies with applicable water quality criteria for fecal coliform bacteria and TRC.

The permittee must submit a sampling and analysis plan in January 2019 that describes sample location, frequency, and EPA-approved analytical methods that will adequately characterize the effluent. The permittee must submit the results to DEC to allow adequate time for coordination prior to the deadline for submitting an application for the next reissuance of the Permit. The results will be reviewed by DEC and discussed with the applicant in a pre-application meeting to establish application requirements to support permit development during the next reissuance.

7.5 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 U.S. Fish and Wildlife Service (USFWS) 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 this information from these services on April 7, 2015 to inform permit development. The Department received a reply the same day informing us of the availability of a website that contains interactive maps for habitat ranges and a new contact person at NOAA's Ecological Services Branch. The Department reviewed the Marine Mammal Protection Map (MMPA) - interactive map for habitat ranges and found the following may occur in Cook Inlet at the vicinity of one of the discharges: Stellar Sea Lion, Harbor Porpoise, Harbor Seal, Killer Whale, and Cook Inlet Beluga Whale. The MMPA interactive map listed the area in the vicinity of the discharge as Critical Habitat Area 2 for the Cook Inlet Beluga Whale. No other critical habitat was listed on the website for any other of the species cited above. The USFWS Information, Planning, and Conservation System provides a web-based tool to interested parties to delineate the immediate area of the discharges and determine whether any listed endangered species may frequent the area. The Short-Tailed albatross (*Phoebastria albatrus*) and Steller's eider (*Polysticta stelleri*), listed as endangered species of concern, can be in the vicinity of the discharge.

8.2 Essential Fish Habitat

Essential fish habitat (EFH) includes the 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 activities, the Department voluntarily requested this information April 8, 2015, from these services to inform permit development. The Department also inspected the NMFS interactive map of EFH and found the area in the vicinity of the discharges is EFH for the following salmon species: Chum Salmon, Coho Salmon, Sockeye Salmon, Pink Salmon, and Chinook Salmon.

In addition, per a letter received from the NMFS dated March 12, 2013 for the Cook Inlet area, several ESA-listed stocks of Pacific salmon may occur within Alaska's waters and though the services have no specific information, they include the following Evolutionary Significant Units: Snake River fall Chinook, Snake River spring/summer Chinook, Puget Sound Chinook, Upper Columbia River spring Chinook, Lower Columbia River Chinook and steelhead, Upper Columbia River steelhead, Upper Willamette River steelhead, Middle Columbia River steelhead, and Snake River basin steelhead.

No other North Pacific marine fish species were listed on the NMFS interactive website as having EFH in the general area of the discharges.

8.3 Permit Expiration

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

9.0 REFERENCES

1. Alaska Department of Commerce, Community, and Economic Development. *Alaska Economic Performance Report*, 2013.
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, 2010. *Alaska's Final 2010 Integrated Water Quality Monitoring and Assessment Report*, July 15, 2010.
4. Alaska Department of Environmental Conservation, 2003, 2009, and 2012. Alaska Water Quality Standards.
5. Alaska Department of Environmental Conservation. Interim Antidegradation Implementation Methods. Division of Water. Policy and Procedure No. 05.03.103. July 14, 2010.
6. Alaska Department of Natural Resources – Division of Oil and Gas, *Annual Report*, 2014.
7. Alaska Oil and Gas Association. *Economic Impact Report – The Role of the Oil and Gas Industry in Alaska's Economy*, May 2014.
8. CIPL Alaska Pollutant Discharge Elimination System Supplemental Application Information, March 16, 2015.
9. Cook Inlet Pipeline Company, Christy Lee Loading Platform Schematic, 2012.
10. Alaska Pollutant Discharge Elimination System Discharge and Monitoring Report, 2010 – 2014.
11. MOA 2007. Municipality of Anchorage, Drainage Design Guidelines. Document No. WMP CPg09001, March 2007 version 4.09, Project Mgt. & Engineering Dept.
12. National Oceanic and Atmospheric Administration, 2015 *EFH Mapper*. N.p.,n.d. Web January 13, 2015.
13. National Oceanic and Atmospheric Administration, 2015 *MMPA Mapper*. N.p.,n.d. Web January 13, 2015.

APPENDIX A. FIGURES

Figure 1: CIPL Drift River Facility Map

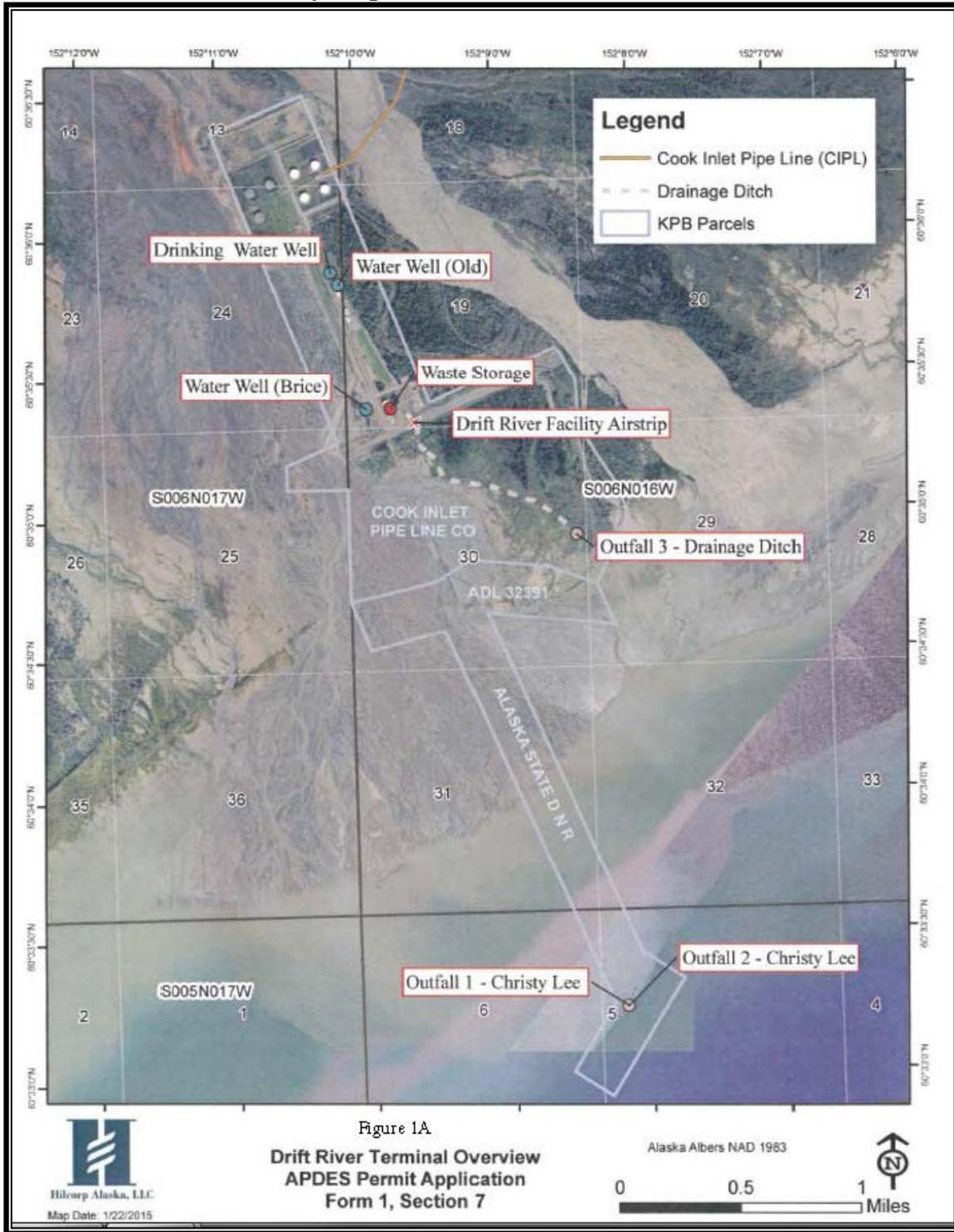


Figure 2: CIPL Christy Lee Loading Platform



Figure 3: CIPL Drift River Terminal Historical BWT and Landfarm Discharge Location



Figure 4: Cook Inlet Essential Fish Habitat

