Department of Environmental Conservation Final Permit - Response to Comments

For

APDES Individual Permit

AKG320000 - Statewide Oil and Gas Pipelines

Public Noticed - December 7, 2016 to January 20, 2017

June 14, 2017



Alaska Department of Environmental Conservation Wastewater Discharge Authorization Program 555 Cordova Street Anchorage, AK 99501

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1 Introduction

1.1 Summary of Facility / Permit

The Alaska Department of Environmental Conservation (Department or DEC) proposes to issue Alaska Pollutant Discharge Elimination System (APDES) General Permit AKG320000 – Statewide Oil and Gas Pipelines (Permit). Once effective, the Permit will supersede individual permit AK0050563 – Alyeska Pipeline Services Company (existing APSC permit) and provide coverage to all other pipeline entities that qualify for coverage under the Permit. The Permit proposes to authorize discharge of pollutants from facilities and activities related to oil and gas pipeline construction and operation to freshwaters of the United States located in Alaska or dispose wastewater onto, or into, the lands of the State. During the effective period of the Permit, the following discharges and disposals may be permitted to occur:

- Outfall 001 Drilling Fluids and Drill Cuttings (Discharges Only)
- Outfall 002 Domestic Wastewater (Discharges Only)
- Outfall 003 Gravel Pit Dewatering
- Outfall 004 Excavation Dewatering
- Outfall 005 Hydrostatic Testing
- Outfall 006 Storm Water (Discharge Only)
- Outfall 007 Mobile Spill Response (Discharges Only)

The Permit may authorize a 500-foot chronic mixing zone for turbidity and residues in discharges from gravel pit and excavation dewatering, and inadvertent releases of drilling fluids and drill cuttings.

1.2 Opportunities for Public Participation

To ensure participation by the public, agencies, and tribal and local governments during Permit issuance, the Department:

- identified the Permit on the annual Permit Issuance Plan posted online at: http://www.dec.state.ak.us/water/wwdp/index.htm;
- notified potentially affected tribes that the Department would be working on the Permit via letter, fax and/or email on March 8, 2013, March 11, 2015, and again on August 11, 2016.
- posted the Preliminary Draft Permit on-line for a 10-day applicant review on November 23, 2016 and notified tribes, local governments and other agencies;
- held stakeholder workshops in Anchorage, Alaska on March 19, 2016, March 27, 2016, and March 28, 2016.
- published public notice(s) in the Alaska Dispatch News on December 8 and 9, 2016 and the Arctic Sounder on December 8, 2016.
- posted the public notice on the Department public notice web page December 7, 2016 for a 45-day public review on the Draft Permit and Fact Sheet;
- posted the Proposed Final Permit on-line for a five-day applicant review on May 31, 2017; and
- sent email notifications via the APDES Program List Serve when the Preliminary Draft, Draft, and Proposed Final Permits were available for review.

During the 10-day applicant review, DEC received comments on the Preliminary Draft Permit and Fact Sheet from: ExxonMobil Alaska Liquefied Natural Gas, Hilcorp Alaska, LLC (Hilcorp), Alyeska Pipeline Services Company (APSC), Donlin Gold, LLC. The Department also requested comments from the Department of Natural Resources, Department of Fish and Game, Fish and Wildlife Service, the

Environmental Protection Agency (EPA), the National Marine Fisheries Service, Tribes, and local governments although no other comments were received.

During the 45-day public review period, the Department received comments on the Draft Permit and Fact Sheet from APSC and Hilcorp. This document summarizes the comments resulting from the 45-day public review period and the justification for any action taken or not taken by DEC in response to each comment.

1.3 Final Permit

The Final Permit was adopted by the Department on June 14, 2017. While developing the Final Permit and Fact Sheet, there were minor changes to the Draft Permit and Fact Sheet after public notice to correct typographical and grammatical errors and to clarify information. Changes resulting from comments received during the public review of the Draft Permit and Fact Sheet are identified in this response to comment (RTC) document and reflected in the Final Permit and Fact Sheet.

2 Unique Hilcorp Comments Summary

Hilcorp submitted some comments that were unique and others that were similar in scope to comments submitted by APSC. After addressing the unique comments for both Hilcorp and APSC, DEC will respond to those similar comments together subsequently in this RTC document.

The unique comments received from Hilcorp on the Draft Permit and Fact Sheet are summarized and responded to in the following paragraphs. In these comments, Hilcorp noted that many of the comments they provided on the Preliminary Draft Permit and Fact Sheet during the 10-day applicant review had not been addressed and attached those previous comments with their comments on the Draft Permit. Although not obligated to accept or respond to comments received during the 10-day applicant review, DEC reviewed the comments Hilcorp attached from the 10-day applicant review to ensure any comments DEC intended to accept previously are adequately addressed in this RTC document. Any comments that DEC did not agree with from the 10-day and still does not agree with did not result in changes to the Final Permit and Fact Sheet.

2.1 Previous Hilcorp comments on the Preliminary Draft Permit received during the Public Noticed of the Draft Permit that did not result in changes in the Final Permit

Comment on Permit Section 1.5.4: Hilcorp commented that sentence should be revised to read "spawning beds" instead of original text "spawning redds."

DEC Response: No change was made and reflected in the public noticed Draft Permit because spawning redd is the correct term per 18 AAC 70.255(h)1 and 2 (Amended 2003).

No changes to the Draft Permit leading to the Final Permit based on this previous comment received on the Preliminary Draft Permit.

Comment on Permit Section 1.2.1.2: Sentence should read "Class A3 drilling fluids...".

DEC Response: DEC agreed and made changes reflected in the public noticed Draft Permit.

No changes to the Draft Permit leading to the Final Permit based on this previous comment on the Preliminary Draft Permit.

Comment on Permit, Note 5 in Tables 5 and 6: Note 5 should state "mixing zone." This same error exists in Fact Sheet Tables 7 and 8.

DEC Response: DEC agreed and made changes reflected in the public noticed Draft Permit and Fact Sheet.

No changes were made to the Draft Permit leading to the Final Permit based on this previous comment on the Preliminary Draft Permit.

Comment on Permit Sections 2.5.1.2 and 2.6.1.2: Please clarify in these sections if the 1/8th inch of sediment accumulation pertains to all vegetation or just sensitive vegetation

DEC Response: DEC agreed and made changes reflected in the public noticed Draft Permit and Fact Sheet whereby "sensitive vegetation" refers to "tundra."

No changes were made to the Draft Permit leading to the Final Permit based on this previous comment on the Preliminary Draft Permit.

Comment on Mixing Zones in Permit Sections 2.12: Although in favor of the ability to obtain authorization for a 500-foot mixing zone for excavation dewatering, Hilcorp questions the need to provide flow estimates of the seven-day low flow over a ten year period (7Q10) and stream characteristics. Hilcorp states that this means they need to hire a hydrologist and obtain stream data from gauging stations, which is usually not available for most streams in Alaska. Hilcorp points out that AKG375000 – Small Suction Dredges authorizes a 500-foot mixing zone without a similar requirement for the applicant to submit supporting information and asks DEC to explain this discrepancy. The Fact Sheet states years of compliance data from APSC supports the adoption of a 500-foot mixing zone so why does additional information need to be submitted with the NOI?

DEC Response: Although referenced in support of the 500-foot mixing zone for excavation dewatering, the approach used in AKG375000 for suction dredging is not directly applicable to mixing zones for excavation dewatering. The standardized 500-foot mixing zones authorized in AKG375000 are the result of three studies focused specifically on discharges from suction dredging. Two were completed by EPA to support previous issuances of AKG375000 and another conducted in cooperation between the U.S. Geologic Survey and Alaska Department of Natural Resources. These industry-specific studies supported DEC's decision to authorize standardized mixing zones for placer mining. Based on these studies, DEC places limitations on discharge diameter and pump sizes as a means to ensure the applicability with the studies are maintained. No similar studies that DEC is aware of have been conducted for discharges from excavation dewatering to Alaskan streams and it is not appropriate to limit the discharge flow rate for excavation dewatering to support using the same approach used for AKG375000.

The rationale for requiring hydrologic and stream characteristics is so that DEC can evaluate whether the site-specific conditions associated with the request for a 500-foot mixing zone are consistent with DEC's evaluation included in Fact Sheet Section 7.2. Specifically, DEC requests information on anticipated discharge flow rates and an estimate of the 7Q10 flow to ensure there is adequate dilution available. Estimating the 7Q10 does not require stream gauge data. Per 18 AAC 70.255(f)(2), the 7Q10 flow applies to chronic mixing zones in streams and "must be calculated using the methods of Ashton and Carlson, *Determination of Seasonal, Frequency and durational Aspects of Streamflow with Regard to Fish Passage Through Roadway Drainage*

Structures (1984), Carlson, Seasonal, Frequency and Durational Aspects of Streamflow in Southeast and Coastal Alaska (1987), or another appropriate regional regression flow model approved by the Department." While gauged stream data can be used for estimating 7Q10, the desktop analysis offered by regression models is adequate for 7Q10 flow estimates. The approximate width, depth, and slope can also be estimated based on topographic maps, aerial photographs, or other means. Whether a hydrologist needs to be hired to perform these tasks is left to the discretion of the applicant.

No changes were made to the Draft Permit leading to the Final Permit based on this previous comment on the Preliminary Draft Permit.

2.2 Previous Hilcorp comments on the Preliminary Draft Permit that DEC reconsidered and resulted in the Draft Permit leading to the Final Permit

Comment on Permit Section 1.5.1.2: Please clarify that the storm water pollution prevention plan (SWPPP) serves as the Best Management Practices (BMP) Plan for storm water discharges.

DEC Response: DEC agrees and has modified Draft Permit Section 1.5.1.2 by inserting the following sentence after the first sentence, "A SWPPP satisfies BMP Plan requirements for storm water discharges authorized under this Permit."

Comment on Permit Section 2.2.2.1: Hilcorp suggested consist use of "End of Drilling Report" and modifying Table 2 – Schedule of Submissions to consider a request for project extension discussed in Section 2.2.2.1

DEC Response: DEC agrees and has modified Draft Permit Section 2.2.2.1 by replacing "annual report" with "End of Drilling (EOD) Report" everywhere in the first paragraph, and adding "or Request for Extension" in the submissions table to End of Drilling Report.

Comment on Permit, Note 8 in Tables 7: Note 8 should state "discharging greater than 500,000 gallons must collect." The same error exists in Fact Sheet Table 9.

DEC Response: DEC agrees and has added "500,000 gallons" in note 8 in Permit Table 7 and Fact Sheet Table 9.

Comment on Permit Section 2.9: Hilcorp commented that the land disposal section is silent on whether disposal of secondary containment to land is allowed outside of permit coverage and recommends including a footnote stating land disposals of drilling fluids and cuttings, water from secondary containments, and domestic wastewater is allowed but are regulated under different programs.

DEC Response: DEC disagrees because the Permit is a legal document and typically permit language is applicable to what is covered under the Permit rather than what is not covered. Instead, DEC includes these qualifying discussions in the Fact Sheet so the permittee may be informed on the decisions why not to include land disposals for domestic wastewater, secondary containment, or drilling fluids and drill cuttings.

Comment on Permit Section 3.5: Hilcorp commented that certain requirements found in the Construction Storm Water General Permit have been excluded (25-feet buffer near waterbodies and stabilization deadlines) in the comparable storm water sections in the Permit and questions whether these should be included.

- **DEC Response:** DEC intended to include a discussion of buffers and final stabilization requirements in the Permit but were inadvertently left out during the public notice of the Draft Permit. Based on this comment, DEC is adding the following Section in the Final Permit to cover requirements for "Natural Buffers":
 - 3.5.4 Natural Buffers: The permittee must maintain a minimum natural buffer of 25 feet around the edge of any waters of the U.S. and at stream crossings unless the crossing is a necessary and dependent water access construction activity (e.g. open trench pipeline crossing).

To cover temporary and final stabilization, DEC is deleting "Stabilization and" in the title of Section 3.5.7 and adding the following new sections to the Final Permit for stabilization:

- 3.5.8 Stabilization: Stabilization of disturbed areas must be initiated as soon as practicable whenever any clearing, grading, excavating, or other earth disturbing activities have permanently ceased on any portion of the site or temporarily ceased on the site and will not resume for a period exceeding 14 days.
- 3.5.8.1 Temporary Stabilization: No later than 14 days after initiating temporary stabilization, the permittee must complete all activities necessary to initially revegetate the area and/or install non-vegetative measures.
- 3.5.8.2 Final Stabilization and Terminating Construction Storm Water Authorizations: To eliminate a site or terminate authorization for construction storm water coverage under this Permit, the permittee must achieve final stabilization for the affected area of coverage. See Appendix C for definition of final stabilization.

Lastly, DEC is adding the following definitions to Appendix C for "Temporary Stabilization" and "Final Stabilization" to the Final Permit:

For the purposes of this Permit, Temporary Stabilization means protecting soils from erosion and sediment loss by rainfall, snow melt, runoff, or wind, with a temporary vegetative and/or non-vegetative protection cover. Temporary stabilization may include a combination of surface roughening (track walking), temporary seeding, geotextiles, mulches, surface tackifers, rolled erosion control products, gravel or paving, and other techniques to reduce or eliminate erosion until either final stabilization can be achieved or until further construction activities take place to re-disturb this area.

For the purposes of this permit, Final Stabilization means that all soil disturbing activities at the site have been completed and either of the two following criteria shall be met:

- a) a uniform (e.g., evenly distributed, without large bare areas) perennial vegetative cover with a density of 70 percent of the native background vegetative cover for the area has been established on all unpaved areas and areas not covered by permanent structures, or
- b) equivalent non vegetative permanent stabilization measures have been employed including but not limited to riprap, gabions, porous backfill per Alaska Department of Transportation and Public Facilities (ADOT&PF) Specification 703-2.10, railroad ballast or subballast, ditch lining per ADOT&PF Specification 610-2.01, or geotextiles, or fill material with low erodibility as determined by an engineer familiar with the site and documented in the SWPPP.

Comment on Permit Section 2.11.8: Hilcorp commented that the last sentence should read "The resulting average value must be compared to the compliance <u>limit</u>, <u>ML</u>, in assessing compliance."

DEC Response: DEC agrees and has modified Permit Section 2.11.8 as suggested by Hilcorp in the Final Permit.

Comment on Fact Sheet Section 1.6.11: Section title for permits for geotechnical surveys appears to be error as the text discusses bulk fuel.

DEC Response: DEC is removing this section entirely based on the response to comments from Hilcorp and APSC comments. See Comment Response 4.3.

Comment on Fact Sheet Section 10.3.4: Hilcorp commented that the first sentence discussing gravel pit dewatering may have an error as it refers to "...requirements for construction (short) term, and operations (long term)."

DEC Response: DEC agrees and has modified the first sentence in Final Fact Sheet Section 10.3.4 to read as follows: "...discharges conducted for the purpose of gravel extraction have specific BMP Plan requirements."

2.3 New Hilcorp comments received during public comment period on the Draft Permit

Comment on Permit Section 2.2.1.1: Hilcorp recommends including a reference to Section 3.2 for the drilling fluid plan (DFP) requirements.

DEC Response: DEC agrees and has provided reference to Section 3.2 in the Final Permit Section 2.2.1.1.

Comment on Permit Section 2.2.2.1: Hilcorp recommends including a reference to Section 3.2 for the drilling fluid plan (DFP) requirements.

DEC Response: DEC reviewed the Draft Permit Section 2.2.2.1, which included the correct reference to Section 3.3 for EOD Reports in the first sentence (See similar comment in RTC Section 2.2). No changes to the Final Permit have been made based on this comment.

Comment on Permit Sections 2.3.1, 2.4.1, 2.6.1, 2.7.2, 2.8.1, and 2.9.1: Hilcorp points out that an inappropriate reference to Section 0 is made in the listed Sections.

DEC Response: DEC reviewed the Draft Permit and discovered the cross-reference link in the document point to Section 2.1 had been broken. All references in these sections have been corrected to point to Section 2.1.

Comment on Permit Section 2.3.1.2: Hilcorp points out that a cover letter with a discharge monitoring report (DMR) is not discussed anywhere else in the Permit and recommends just having the required description of the method for meeting the limit be recorded on the affected DMR.

DEC Response: DEC agrees and has modified the section to remove reference to a cover letter.

Comment on Permit Section 2.9: Hilcorp states that it is not clear if the limits and requirements in Table 10 for land disposals supersedes the limits for the same limits for discharging.

DEC Response: DEC disagrees that it is necessary to state that disposal limits supersede discharge limits as it can only be one or the other. However, based on this comment DEC added clarifying language to Section 2.9 as italicized and underlined in the following: "In addition to restrictions <u>applicable to land disposal</u> set out in Section 2.1, the permittee must comply with the following limitations and monitoring requirements <u>for land disposals</u>."

Comment on Permit Sections 2.11.11: Hilcorp points out that there is reference error in the listed Sections.

DEC Response: DEC agrees as the reference field was broken and it has been fixed to read "Section 2.2."

Comment on Tables in Fact Sheet Section 5.0 and those in the Permit: Hilcorp points out that the tables in Fact Sheet Section 5.0 and the Permit do not match and recommends that they do so there is no confusion over the limits and monitoring requirements.

DEC Response: DEC disagrees that there has to be exact alignment between the Fact Sheet limit tables and the Permit limit tables so long as they are consistent. Note that the Permit limit tables are enforceable and Fact Sheet tables are not. No changes have been made based on this comparative review of tables in the Fact Sheet with the Permit.

3 Unique APSC Comments Summary

APSC submitted comments that were unique and others that were similar with comments received from Hilcorp. Response to similar comments are in RTC Section 4. The unique comments received from APSC on the Draft Permit and Fact Sheet are summarized and responded to in this section.

3.1 New Hilcorp comments received during public comment period on the Draft Permit

Comment on Applicability to Trans-Alaskan Pipeline Operations and Resulting Burden: APSC states that the Permit is flawed and should be withdrawn permanently or until it is significantly modified to resolve concerns raised in their comments. APSC states that requiring APSC to obtain authorization under a general permit developed to include large scale construction results in unreasonable permit conditions without commensurate environmental benefits to the extent that APSC will be unjustifiably adversely affected. ASPC claims DEC is attempting to force APSC to comply with a one-permit-fits-all general permit that is slanted toward accommodating the magnitude of large-scale construction that creates unnecessary complexity, disparate terms and conditions, and administrative burden associated with coverage for the small projects that APSC conducts under their existing APSC permit. APSC points to several other general permits that other similar pipeline operators are currently allowed to obtain coverage under that are less onerous than AKG320000.For these reasons, APSC suggests that an individual permit that is similar to their existing APSC permit would be more appropriate than imposing unreasonable, arbitrary and capricious terms and conditions on APSC as outlined in the Permit.

DEC Response: The existing APSC permit was issued in 1993 and expired in 1998. Hence, APSC has been operating under an expired permit for almost 20 years. DEC understands that changing to a new permit such as AKG320000 can seem intimidating after so many years. However, DEC disagrees with APSC that the Permit imposes conditions that are unrealistic, arbitrary and capricious. As can be expected after 20 years, there are some new permit conditions imposed that are necessary to bring the Permit up to the current standard of care that has evolved since the existing APSC permit was issued in 1993. Some approaches that APSC wishes to retain in the Permit have either become outdated or are not supported by regulations. Some concerns raised by APSC about the Permit are misplaced because their existing APSC permit is flawed in the same fundamental manner and not well explained. For example, both the existing APSC permit and the Permit allowed coverage for both discharges to Waters of the U.S. and disposals into, or onto, the land of the State. The existing APSC permit did not provide any explanation as to how land disposals would be implemented under 18 AAC 72. Whereas, AKG320000 provided significant detail for which APSC claims results in an amalgamation of regulatory programs in a single permit that raises scenarios that highlight potential problems and ambiguities. DEC's viewpoint is that the antiquated expired existing APSC permit is more ambiguous than AKG320000, which left it open to misinterpretations and subsequent misconceptions. Based on this misconception that the existing APSC permit was for only discharges to Waters of the U.S., APSC inappropriately attempts to claim AKG320000 creates a capricious burden because it includes land disposals in a more informed manner than their existing APSC permit.

While developing AKG320000, DEC considered APSC input as paramount based on an understanding that AKG320000 should be as consistent as possible with the existing APSC permit with obvious consideration of antibacksliding provisions. Because the Permit will supersede the existing APSC permit, antibacksliding was a key consideration in developing limitations in the Permit that are more stringent than some limitations in other related general permits. As discussed in the Antibacksliding Section of the Fact Sheet, this approach resulted in no backsliding issues. While APSC is quick to call attention to the fact that other general permits exist that are less stringent, they fail to acknowledge that their existing ASPC permit is also more stringent in some of these same areas. In addition, upon reissuance of other cited general permits, DEC will evaluate the appropriateness of upgrading those permit provisions as well. While DEC understands the desire of APSC to be covered under a general permit that has alternate conditions, it may not be allowable when considering antibacksliding.

Some conditions in the Permit are different than in the existing APSC Permit because they are required per regulation (e.g., 7Q10 flow estimates to support mixing zones). Permit coverage was expanded to cover the needs of other stakeholders that may use the Permit for large-scale construction (e.g., gravel pit dewatering discharges). Although there is accommodation for large-scale construction, the Permit strikes a balance for smaller maintenance excavations and repairs by retaining automatic coverage based on discharge flow rates and notice of intent and authorization procedures similar to those in their existing APSC permit. None of the limitations in AKG32000 were developed in an arbitrary manner and, where possible, substantially follow the limitations and procedures provided by the existing APSC permit.

As demonstrated in responses to specific comments that follow, DEC believes APSC concerns are more about resistance to change rather than about being adversely impacted by the Permit. Nonetheless, DEC has agreed that certain limitations in the Permit can be modified within the

legal framework to lessen APSC concerns over perceived impacts. In addition, DEC anticipates working closely with APSC during the transition to the Permit to help ensure impacts are not adverse as portrayed in comments.

3.2 Combining Disposal to Land in an APDES Permit is Inappropriate

Comment on Authorizing Land Disposal: APSC indicates the blending of discharges to Waters of the U.S. with land disposals in a single general permit may not be statutorily legal and raises concerns over ambiguous compliance expectations for both DEC and the Permittee that could result in double enforcement. As an example, APSC poses a situation where the permittee is disposing to land but may not have fulfilled all requirements under 18 AAC 72. APSC is concerned that because plan review and permitting are two separate programs it will result in a compliance double jeopardy.

DEC Response: DEC is confused by the APSC comment. Existing Permit (AK0050563) also authorizes both discharges to Waters of the U.S. and disposals into, or on to, the land and groundwater of the State. Per existing Permit Section VI.A, last paragraph:

"This permit applies to domestic and nondomestic discharges "into or onto land, surface water, or groundwater of Alaska" in addition to discharges authorized to "Waters of the U.S. This is in accordance with 18 AAC 72.010 and 18 AAC 72.500."

DEC has full statutory authority (Alaska Statute 46.03.100) to issue a hybrid general permit and has successfully implemented other hybrid general permits (e.g., AKG002000 and AKG003000). Given that APSC has successfully operated under the existing APSC permit that covers both land disposal and discharges to Waters of the U.S., DEC does not understand why APSC now questions the legality of the "hybrid" general permit approach. DEC is also confused as to why APSC is concerned that it will be ambiguous and lead to double jeopardy compliance concerns when none has existing over the past 23 years, especially when considering the ambiguity in the existing APSC permit about this subject. Because DEC has added significant content to the Permit and Fact Sheet explaining how to comply with land disposals, there is less likely to be confusion over implementation and compliance than with the existing APSC Permit. Furthermore, plan reviews under the Permit may be conducted through either the Engineering Support and Plan Review Section or the APDES Oil and Gas Permitting Section. Both Sections fall under the Wastewater Discharge Authorization Program (WDAP). The Oil and Gas Section employs engineers with the authority to conduct plan reviews when linked to a permitting action as is planned for plan reviews under the Permit. Hence, double compliance jeopardy is highly unlikely within WDAP while implementing a hybrid permit such as AKG320000. No changes were made to the Final Permit or Fact Sheet as a result of this comment.

3.3 Comments on Section 1.3 – Individual Permits

Comment on Possible Coverage Under Alternative Permits: APSC stated support for the possibility for the permittee to request coverage under an individual permit.

DEC Response: DEC acknowledges this comment.

3.4 Comments on Section 2.1.8

Comment on Maintenance Waste Prohibition: APSC points out that DEC Solid Waste Program allows for direct burial of pipeline maintenance waste (e.g., sandblasting sand, paint chips) within the excavation for pipeline repairs. Therefore, it would be inappropriate to prohibit land disposal of this waste and the language should be changed to reflect the prohibition applies to only discharges.

DEC Response: DEC agrees that this prohibition should reflect only discharges to water and previously removed the word disposal from this section based on comments received on the Preliminary Draft Permit. Given ongoing APSC concerns, DEC has added qualifying language to the end of the last sentenced as underline and italicized in the following: "...the permittee must develop and implement a BMP Plan for minimization and containment of the waste material <u>to prevent it from being discharged to Waters of the U.S.</u>"

3.5 Comments on Discrepancy of Types of Drilling Fluids Authorized

Comment on Drilling Fluids: APSC states that they perform very few drilling events and the scale and scope of work is limited compared to that for horizontal direction drilling (HDD). There appears to be a discrepancy between the Fact Sheet discussion on what drilling programs are intended to be covered in the Permit and Permit Section 2.2.1 that identifies "inadvertent releases from HDD" as the only type of drilling activities covered. APSC recommends adding language that clarifies which activities are include or excluded from coverage.

DEC Response: DEC received a similar comment on the Preliminary Draft Permit and attempted to address this concern by including a definition for HDD that encompassed a larger universe of drilling activities and excluded drilling using brine solutions. Given the ongoing concern raised by APSC, DEC has made the following changes to the Draft Permit leading to the Final Permit:

"HDD" has been replaced with the word "drilling": everywhere in the Permit.

The previous definition for Horizontal Direction Drilling has been modified to read: "Drilling for the purpose of installing an underground pipeline or conduit using a rotary drill bit that can affect the direction of the drilling path near horizontal. HDD is predominantly referred to in this Permit based on being the most common drilling activity to be covered but is intended to capture other drilling activities. For the purpose of this Permit, coverage is also available for vertical drilling using drilling fluids, except brines, for conducting geotechnical investigations and installing pipeline infrastructure including, but not limited to, vertical support members and cathodic protection anodes."

3.6 Comments on Domestic Wastewater Overland Treatment Areas/Mixing Zones

Comment on Domestic Wastewater Mixing Zones: APSC states that they discharge domestic wastewater at four different pump stations along TAPS and each of these discharges are currently provided an "overland treatment area/mixing zone" for reduction of fecal coliform

bacteria. The Permit eliminates these treatment/mixing zones and APSC anticipates it will result in noncompliance. Given there has been no demonstrated environmental impacts to receiving waters over 23 years of operating under the existing APSC permit, these overland treatment areas/mixing zones should be retained. Or, DEC should demonstrate why these no longer work.

DEC Response: The combination of an overland treatment area with a mixing zone authorized under the existing APSC permit is a legacy condition that is no longer considered to be appropriate by the Department. The concept that an overland area, or drainage ditch, can be both treatment and a mixing zone is flawed. Per definition in 18 AAC 70, mixing zone means "a volume of water adjacent to a discharge, in which waste discharged mixes with the receiving water." Per 18 AAC 70.240(a)(3)(circa 2003), a mixing zone can only be authorized after the Department determines the most effective and technologically and economically feasible treatment has been used to control or treat the effluent. Hence, treatment is addressed prior to authorizing a mixing zone. The mixing zone definition implies a waterbody where dilution is available and quantifiable. In order to authorize a mixing zone, DEC must evaluate information provided by the applicant per 18 AAC 70.240 to 70.270. Per 18 AAC 70.260, the applicant, not DEC, bears the burden of proof for justifying a mixing zone through compliance with 18 AAC 70.240 to 70.270. DEC may reconsider authorization of a mixing zone for domestic wastewater discharges to ditches or overland flow areas if APSC submits the information necessary for DEC to evaluate the mixing zone per regulations (e.g., fate and transport, dilution factors, distance from discharge point to boundary where water quality criteria is met). Unless the applicant submits information that reasonably demonstrates the applicable requirements in 18 AAC 70.240 to 70.270 will be met, DEC cannot authorize a mixing zone. Although a mixing zone was previously authorized in the existing APSC permit, DEC lacks the necessary evidence that demonstrates that this legacy decision should be continued when applying applicable regulations.

DEC disagrees that removal of the mixing zone will result in significant noncompliance. DEC reviewed fecal coliform bacteria data from the four domestic wastewater discharges in Fact Sheet Section 3.2.1.1. For all four pump stations, the proposed effluent limits in the Permit for fecal coliform bacteria would have been met greater than 85 % of the time. Predominantly, the reason for those times existing limits were exceeded, upset conditions was commonly described as the reason. One occasion, the reason stated for the fecal coliform bacteria exceedance was due to impacts from wildlife within the overland treatment area/mixing zone. Hence, the mixing zone was implicated in the noncompliance and eliminating the mixing zone will also eliminate future noncompliance related to impacts from wildlife. Based on review of the information and compliance history for these domestic wastewater discharges, DEC concludes that proper operation and maintenance of the disinfection treatment systems should result in consistent compliance with permit limits. Hence, the limits appear attainable without a mixing zone and authorization of an overland mixing zone is not appropriate under 18 AAC 70 given current Department regulatory interpretations and lack of supporting information that could justify a mixing zone per 18 AAC 70.240 to 70.270. No changes to the Permit or Fact Sheet have been made based on this comment.

3.7 Comments on Monitoring for Proposed Bacteria Criteria Escherichia coli (E.coli)

Comment on E. coli Monitoring: APSC objects to the requirement to monitoring for E. coli that had not been approved by EPA for use in APDES permits at the time of the Draft Permit because it is speculative, premature, burdensome, and unwarranted.

DEC Response: On May 15, 2017 DEC received notification from EPA that the proposed criteria for E. coli has been approved for use under 18 AAC 83. Given the criteria is legally adopted and approved by EPA for use in APDES permits, DEC retains this requirement in the Permit and no changes have been made based on this comment.

3.8 Comments on Coverage for Gravel Pit Dewatering

Comment on Gravel Pit Dewatering: APSC leases and/or operates numerous material sites along TAPS but does not anticipate the need to obtain authorization for gravel pit dewatering discharges. However, APSC may elect to obtain storm water coverage for these ancillary facilities and wishes to reserve their right to comment in the future.

DEC Response: DEC acknowledges APSC comment but points out that the comment may not contain substantive content that could support consideration of future comments if received during the five-day applicant review.

3.9 Comments on Hydrostatic Test Water Discharges

Comment on Hydrostatic Test Water Mixing Zones: APSC takes note that there has been no mixing zone authorized for total aromatic hydrocarbons (TAH) or total aqueous hydrocarbons (TAqH). APSC believes that even if a sophisticated treatment system is used, meeting the stringent limits for TAH and TAqH may be unachievable and recommends a mixing zone.

DEC Response: DEC considered authorizing a mixing zone under the Permit but realized that it would be difficult to authorize a mixing zone based on assumptions on treatment processes, effluent quality, receiving water assimilative capacity, and other aspects DEC is required to consider under 18 AAC 70.240 to 70.270. Authorization of a mixing zone for hydrostatic test water would be dependent on evaluation of treatment, including plan review, and other site-specific information submitted by the applicant to the Department for an evaluation to determine the appropriate size and allowable dilution factor. Given that the Department would be making a decision for mixing zone that was not determined during development of the Permit, it would trigger a 30-day public review of the mixing zone authorization. DEC decided not to pursue such mixing zones as it would create delays in authorizations and regulatory burden.

DEC disagrees that a sophisticated treatment system would be unable to meet the limits for TAH and TAqH. As discussed previously, authorization of a mixing zone is contingent upon treatment. Therefore, DEC included the ability for an applicant to submit information on proposed treatment process or systems for Department review with the Notice of Intent (NOI). DEC would evaluate treatment systems based on their ability to achieve limits without a mixing zone. Approval of the treatment system would be granted within the authorization to discharge

and would not result in a significant delay due to public notice requirements. No changes were made to the Draft Permit leading to the Final Permit based on this comment.

Comment on Hydrostatic Test Water Contamination: APSC disagrees that existing pipelines that have been in contact with hydrocarbons automatically require limits for TAH and TAqH. APSC states that DEC has not specified any methodology they used to arrive at this conclusion and should consider a waiver whereby a permittee can demonstrate the cleaning of existing pipelines is adequate to remove dissolved hydrocarbons.

DEC Response: DEC is confused by this comment. In the previous comment, APSC indicates that a sophisticated treatment system may not be able to attain the stringent limits but yet indicates in this comment that simple cleaning is all that should be required to ensure compliance with limits for TAH and TAqH. Regardless, DEC considered the nature of pipelines, in-situ cleaning techniques, detention time in the pipeline, available treatment and disposal options, and the stringent water quality criteria for TAH and TAqH in the decision to include limits. DEC's professional opinion is that even a well-cleaned existing pipeline could exceed the stringent, low-level TAH and TAqH criteria depending on how long water is in contact with residual amounts of hydrocarbons on the inner surface of the pipeline. Note also that the only reasonable demonstration that cleaning was adequate (i.e., meets water quality criteria) would be to collect samples and analyze them for TAH and TAqH. Hence, DEC would require TAH and TAqH monitoring to comply with water quality criteria anyway for each such request during the term of the Permit. No changes were made to the Draft Permit leading to the Final Permit based on this comment.

3.10 Comments on Mobil Spill Response:

Comment on Permit Section 2.7.2.1: APSC points out that this section references "disposals" multiple times and should be removed as this section only applies to discharges.

DEC Response: DEC agrees and has substituted "discharges" for "disposal" in this section in the Final Permit.

3.11 Comments on Best Management Practices (BMP) Plan Requirements:

Comment on BMP Plan Section 3.4: APSC states that mandating development and implementation of BMPs for each discharge and mixing zones is unwarranted and achieves no reasonable purpose while imposing significant burden. BMP Plans that follow EPA Manual 833-B-93-004 is overkill for the simplistic needs of the Permit. APSC is very familiar with development and maintenance of BMP Plans due to similar requirements contained in individual permit AK0023248 – APSC, Valdez Marine Terminal, which is a considerable undertaking that is not commensurate with the objectives of the Permit. Furthermore, APSC points out that other general permits covering similar discharges (e.g., AKG003000 or AKG002000) do not require adherence to the EPA BMP Manual. By requiring the permittee to prepare BMP Plans that follow this manual, DEC is ignoring these other related permits and is setting up conflicting regulatory processes, assigning arbitrary and capricious requirements to a single industry and creating unnecessary complexity to an otherwise simple process.

DEC Response: DEC disagrees that the requirement to develop and implement a permit-specific BMP Plan is arbitrary and capricious. Per 18 AAC 83.475, "A permit must include best management practices to control or abate the discharge of pollutants in the permit when the practices are reasonably necessary to achieve effluent limitations and standards or to carry out the purposes and intent of the Clean Water Act." DEC believes that BMPs are reasonably necessary to consistently achieve effluent limitations in the Permit and to protect Waters of the U.S. DEC does not prescribe the content as long as the BMP Plan developed by the permittee meets the objectives established in the Permit.

The EPA Manual was cited in the Permit as an example guidance that "should" be followed rather than being prescribed or required to be followed. Although AKG002000 and AKG003000 do not include a reference to the EPA Manual, those referenced permits do include BMP requirements as does the existing APSC permit. Even though not stated explicitly, the existing APSC permit included BMP language in Section I.2.e where each notice of disposal (NOD) must include a description of the treatment and control methods to be used to meet permit requirements, including information on the designated treatment area and design features of the treatment and control system." APSC has been submitting BMPs with each NOD since issuance in 1993. By developing a BMP Plan, APSC will no longer be required to submit this information with each NOD, which will be a reduction in paperwork and burden once developed.

DEC understands that APSC has developed various, BMP-related resources over the years of operation under the existing APSC permit including, but not limited to: a Draft BMP Plan for Wastewater Streams dated April 24, 2001; Excavation Dewatering Field Sampling and Testing Handbook; Environmental Protection Manual EN-43-004; Excavation Dewatering, Hydrostatic Testing, and Domestic Wastewater Discharges ED-108-1, April 2004; Quality Assurance Program Plan ED-108-2 April 2004; and Linewide Storm Water Pollution Prevention Plan for Excavation Dewatering, April 2004. DEC believes that these existing documents can be readily compiled in manner consistent with the EPA Manual, resulting in a permit-specific BMP Plan without unnecessary burden. DEC believes it is justifiable to require APSC to have one single document, rather than multiple documents, describing appropriate practices based on experience to ensure compliance with the Permit. No changes were made to the Draft Permit leading to the Final Permit based on this comment.

3.12 Comments on Operational Storm Water Coverage for Material Sites:

Comment on Storm Water Discharges from Material Sites: APSC indicates that they intend to continue to claim the oil and gas exemption for construction storm water coverage but is considering obtaining operational storm water coverage for five material sites that they operate or lease along TAPS. These sites are critical ancillary facilities that support TAPS operations. APSC indicates DEC intended to include coverage for gravel pits under Discharge 006 and requests that DEC state this explicitly in the Permit.

DEC Response: DEC does intend to allow operational storm water coverage under the Permit if the ancillary facility meets the conditions explained in Fact Sheet Section 5.3.1.1. The key condition for obtaining storm water coverage for operational gravel pits is that they are not being operated as a commercial activity by APSC. Based on an understanding of the nature of the

material sites leased or operated by APSC, they would satisfy the conditions for coverage under the Permit. However, DEC disagrees that it is necessary to include coverage for gravel pits explicitly in the Permit as there are many possible facilities that could be covered in a similar manner and singling out material sites in the Permit could create confusion. No changes were made to the Draft Permit leading to the Final Permit based on this comment.

3.13 Comments on Transition from existing Permit to new Permit:

Comment on Effective Date of Permit: APSC is concerned that the transition to the Permit from existing APSC permit could be complicated if it occurs during the construction field season. APSC has several ongoing maintenance digs under authorization of the existing APSC permit that are due to be terminated December 31, 2017. APSC suggests that the Permit not be implemented until after the close of the field season that typically occurs in November or December each year.

DEC Response: DEC agrees that it would be best to close out the 2017 field season under the existing APSC permit and then transition to the Permit in 2018. Accordingly, DEC has decided to establish the effective date of the Permit to be January 1, 2018.

4 Similar Hilcorp and APSC Comments Summary

Hilcorp and APSC had similar comments for certain topics that DEC responds to in the following sections.

4.1 Comments on Inconsistent Monitoring Frequencies

Comment on Monitoring Frequencies: Both APSC and Hilcorp indicated that the Permit requires daily monitoring of pH, settleable solids, and turbidity for discharges of gravel pit and excavation dewatering and hydrostatic test water. However, other comparable DEC permits AKG002000 and AKG003000 require measurement of these parameters once before discharging to confirm adequacy of BMPs and then weekly thereafter. APSC calls attention to DEC claims that a comparison and contrast was performed to attempt to reach consistency among permits. Alyeska believes they are justified in seeking authorization under whichever permit that affords the more favorable conditions. Hilcorp requests an explanation for the different frequencies and asks DEC to consider the short duration of discharges.

DEC Response: Although DEC conducted a comparison and contrast to other applicable permits (i.e., AKG002000 and AKG003000), the consideration of antibacksliding provisions remained paramount when establishing monitoring frequencies in the Permit because it will supersede the existing APSC permit. Per 18 AAC 83.480, when a permit is renewed, effluent limitations, standards, or conditions must be at least as stringent as the effluent limitations, standards, or conditions in the previous permit. Because existing APSC permit required daily monitoring for excavation dewatering and hydrostatic test water, the daily frequency was retained to avoid antibacksliding concerns. However, based on this comment and Comment 4.2 DEC has decided to change the monitoring frequency for gravel pit and excavation dewatering to weekly and address antibacksliding in the Fact Sheet. Given the historic data presented by APSC, a reduction in monitoring frequency is allowable so long as the less stringent monitoring frequency does not

result in a violation of 18 AAC 70 – Alaska Water Quality Standards, including the Antidegradation Policy. Due to the exemplary performance of APSC under the existing Permit, no violation of WQS, including the Antidegradation Policy, would result from reducing monitoring to weekly. However, hydrostatic test water discharges could occur over a single day or a period of several days such that a weekly frequency would be in conflict with other provisions such as composite sampling for large discharges (See Permit Table 7, note 8). The following paragraph and modification is added to the last paragraph in Fact Sheet Section 8.0:

DEC reviewed data and compliance history for discharges of excavation dewatering from the existing APSC permit. Based on a long history of meeting water quality criteria and sustained permit compliance, DEC establishes a weekly monitoring frequency rather than daily as required in the existing APSC permit. The weekly frequency will not result in violations of WQS, including the Antidegradation Policy.

Except for less frequent monitoring for excavation dewatering discharges, the Department finds the reissued Permit effluent limitations, standards, and conditions are at least as stringent as the existing APSC Permit.

4.2 Comments on pH Monitoring

Comment on pH limit for Excavation Dewatering: Both APSC and Hilcorp indicated that the Permit should not require monitoring of pH for excavation dewatering discharges. Excavation dewatering discharges are comprised of naturally occurring groundwater that does not impart pH outside the water quality criteria. This is demonstrated by 23 years of data provided by APSC under the existing APSC Permit. APSC claims this is inflicting unreasonable burden on permittees as they have to purchase and maintain equipment, train staff, maintain records and quality assurance and quality control program to monitor a parameter that has no reasonable potential to exceed water quality criteria. Hilcorp acknowledges that pH could exceed criteria if chemicals are used to enhance turbidity removal but it would be reasonable to only require pH monitoring if chemicals are used. APSC indicates an alternative to opt out of the pH limit should be provided based on particular circumstances.

DEC Response: DEC agrees with Hilcorp that pH criteria could be exceeded if chemically enhanced treatment is used to remove turbidity. Neither the existing APSC Permit nor the Permit prohibit the use of chemicals for treatment; treatment chemicals can be approved for use in BMP Plans under the Permit. DEC acknowledges that naturally occurring, uncontaminated groundwater should not typically exceed the criteria for pH. However, excavation dewatering that occurs in areas with industrial applications could be impacted by unknown contaminants that may only be identified via pH monitoring. DEC is not removing pH monitoring for excavation dewatering as it is an easily implementable field measurement that helps ensure that unknown contamination is not being discharged with excavation dewatering effluent. However, based on the data indicated by ASPC, DEC is reducing the monitoring frequency to weekly (See Comment Responses 4.1 and 5.1).

4.3 Comments on Secondary Containment

Comments on Secondary Containment Discharges: Both APSC and Hilcorp indicated that the Permit should not require monitoring of pH for secondary containment or should be explained as to why DEC concluded there is reasonable potential. Hilcorp pointed out that there is no minimum volume that must be monitored and reported for discharges from secondary containment areas and request clarifications if the requirements in Section 2.8 apply no matter what volume. Lastly, Hilcorp indicated that the Permit only covers discharges of secondary containment and it would be appropriate to include a statement the Permit that land disposal is allowable even though not covered by the Permit.

DEC Response: DEC has received input during the development of the Permit and in comments received during the public notice of the Draft Permit indicating inclusion of secondary containment discharges may not be necessary as other regulations and other permitting options are available. This results from an understanding that unless the secondary containment water is contaminated, (e.g., has an oily sheen or violates other water quality criteria) it is considered storm water. Hence, permit coverage Discharge 008 – Secondary Containment would only be necessary in situations where containment water violates water quality criteria. DEC believes these situations will be infrequent for the permittees identified to be covered under the Permit and has decided that such a contingent permitting action is not necessary under the Permit so long as it is clear that uncontaminated secondary containment water can be discharged as storm water. Therefore, the Permit and Fact Sheet have been modified to entirely remove discussions pertaining to Discharge 008 – Secondary Containment and has modified the following storm water sections to clarify that secondary containment water is storm water:

Permit

DEC adds new Section 1.4.7 Prohibition of Reportable Quantities and Contaminated Storm Water: Storm water discharges with reportable quantities for which notification is or was required per 40 CFR 117.21, 40 CFR 302.6, or 40 CFR 110.6 or any storm water that contributes to a violation of a water quality standard [40 CFR 122.26(c)(1)(iii)]) is prohibited. If a sheen has been reported, or a spill has occurred, in an SCA the contaminated water cannot be discharged as storm water. The permittee must verify by confirmation sampling that the affected SCA water does not exceed water quality for TAH and TAqH prior to reinitiating a storm water discharge from that SCA after observation of a sheen or spill (See Section 3.5 and definitions of contaminated and uncontaminated SCAs in Appendix C).

Section 3.5, first sentence is modified as underlined and italicized as follows: "Permittees, or Copermittees, authorized to discharge storm water (*including uncontaminated secondary containment*), or allowable non-storm water,..."

Section 3.5.10.2, add new third bullet: "Documentation of confirmation sampling of TAH and TAqH to demonstrate an individual SCA is no longer contaminated after observation of sheen or a spill (See Section 1.4.7)."

Appendix C – Definitions, changed definition of Secondary Containment Discharge to "Uncontaminated Secondary Containment Discharges: For this Permit, uncontaminated

precipitation or snow melt water that has accumulated in the diked areas around hydrocarbon tanks, tank farms, fuel transfer stations and tanker truck loading racks is considered storm water and may be discharged to storm water conveyances. See also Contaminated Secondary Containment.

Appendix C – Definitions, added new definition for Contaminated Secondary Containment "Means a secondary containment area where a sheen, discoloration, or odor has been observed, a spill has occurred, or the contained water has not been demonstrated to comply with water quality criteria after a sheen or spill that would allow the water to be characterized as storm water. See also Uncontaminated Secondary Containment."

Fact Sheet

Section 5.3.2.2 – Non-Allowable Storm Water Discharges. DEC modified first sentence as underlined and italicized in the following: "Discharges that exceed water quality criteria (e.g., contaminated secondary containment water)..."

4.4 Comments on Using Permits that have Less Stringent Requirements

Comments on Other Permits with Less Stringent Requirements: Both APSC and Hilcorp indicated a desire to use other permits that have more favorable (i.e., less stringent) limitations. Specifically, Hilcorp and APSC want to use AKG002000 – Excavation Dewatering and AKG003000 – Hydrostatic Test Water for their permitting needs. Both AKG002000 and AKG003000 prohibits authorization if the discharges are eligible for coverage under the Permit after it becomes effective. Hilcorp sees no advantage in requiring existing pipelines to be limited to the broad-ranging coverage offered by AKG320000.

DEC Response: Because the Permit supersedes their existing APSC permit, APSC must use AKG320000 in order to ensure compliance with antibacksliding provisions. As discussed in response 3.1, DEC held compliance with antibacksliding provisions paramount while attempting to meet the overall needs of other important industry stakeholders the Permit may serve. DEC also considered pipeline operations under Hilcorp. Recently, Hilcorp has used AKG002000 and AKG003000 in unique and complex situations that were not originally contemplated during development of these permits. AKG320000 was developed to accommodate such broad-range applications that Hilcorp has requested special considerations for under AKG002000 and AKG003000. DEC has determined that AKG320000 is the appropriate general permit for oil and gas pipeline construction and operations. No changes to the Permit of Fact Sheet have been made as a result of these comments.

5 Additional Comments Received During Five-Day Applicant Review

During the five-day applicant review for the proposed final permit documents, DEC received additional comments from Hilcorp, DGLLC, and APSC. Some of these comments were in character with comments received during the 45-day public review period while others were not. Per Section 6.2.6 of the APDES Program Description (August 2010), only comments that are in character with the public noticed Draft Permit and Fact Sheet and an outgrowth of a comments received during the public notice can potentially result in changes leading to the Final Permit and Fact Sheet. Where changes are

appropriate and allowable, DEC will include those changes within the following response to the comments and permit documents.

5.1 APSC Comments on Proposed Final Permit

APSC Comment on Antibacksliding: APSC comments that not being allowed to pursue coverage under other permits (i.e., AKG002000 and AKG003000) that have less stringent requirements than their existing APSC permit because of antibacksliding concerns appears to be inconsistent with other APDES permits. Specifically, the antibacksliding approach used in the Permit is inconsistent with the recently reissued APDES mining permit AK0053341 – Sumitomo Metal Mining Pogo, LLC (Pogo permit). According to APSC, the Pogo permit did not retain monitoring requirements for certain parameters and increased the effluent limits of other contaminants without invoking antibacksliding provisions. These actions appear to have been done using a different set of interpretations. DEC should use the same interpretations for all industries to remove any unnecessary barriers to responsible resource development and avoid arbitrary and capricious application of State regulatory requirements.

DEC Response: APSC's claim that DEC was inconsistent with antidegradation between the Pogo permit and the Permit was not supported by examples or details for DEC to respond directly. Therefore, DEC reviewed the previous Pogo permit and the recently reissued Pogo permit. DEC concludes that the antidegradation analysis in all permits discussed are appropriate for the specific permits given the unique situations being addressed in each. DEC also points out that neither Pogo permits referenced in the APSC comment involve a situation where an individual permit would be terminated and superseded by an authorization under a general permit that has less stringent limitations. Such a permitting action remains appropriate with respect to antibacksliding provisions.

No changes have been made leading to the issuance of the Final Permit as a result of this comment.

APSC Comment on BMP Plans: APSC comments that DEC misstated that they do not prescribe the content of BMP Plans and points to several BMP sections in the Permit where DEC uses the word "must" to describe content in the BMP. APSC also points out that this content is directly from the EPA Manual. These statements made in the RTC are conflicting with the verbiage in the Permit. APSC also points out that the fact sheet describes three different types of BMP Plans described as short-term construction, long-term facility operation, and those specific to certain discharges yet a similar description is not provided in the Permit. While the response previously provided points to DEC's broad authority under 18 AAC 83.475 to require BMPs when the permitting authority believes they "reasonably necessary" to attain limitations or meet the objectives of the CWA, APSC does not agree that they are reasonably necessary in this case. As an example, APSC points out the 23 years of compliance history for their sewage treatment plants (STPs) that has been accomplished without BMPs and that by virtue of this record, it is not reasonably necessary to impose BMPs on that discharge. APSC claims 18 AAC 83.475 clearly sets a requirement that there be a degree of uncertainty of collective demonstration of non-compliance before a reasonable conclusion can be made to require BMPs and neither of

these conclusion exists based on STP compliance history. Accordingly, BMPs should only be required for new domestic wastewater systems that have not met these thresholds.

DEC Response: DEC concedes that the statement made in the previous response did not account for specifying in the Permit minimum content requirements in BMP Plans. Per the introductory paragraph in Permit Section 3.4.3.1, "The BMP Plan must include, at a minimum, the following items:..." and the sections that follow do include "must" statements. The intent of DEC original response was to illustrate that other than these minimum "outlined" requirements, APSC is responsible for developing the details for BMPs that are specific for the various discharges, facilities, and operational practices of APSC. Hence, the minimum content prescribed in the Permit serves as a framework for which the permittee must customize and expand upon based on unique considerations for APSC.

The language in the fact sheet indicating there are three types of BMP Plans was intended to be a generalized statement alluding to differences between BMPs depending on the scope of activities (e.g., construction, operation, or discharge-specific). Intensive construction activities that could apply to multiple sites over a large area for a short-term duration result in a BMP Plan that may be different than a BMP Plan developed for long-term operation of a specific facility that does not result in significant variations or contingencies. Examples include BMPs developed to support maintenance work on TAPS that may be short-term and very specific to the activity (e.g., drilling activities to install cathodic protection) versus BMPs developed for discharges from fixed facility operated by APSC over a long-term period that does not vary (e.g., camp housekeeping and operation and maintenance of camp STPs). The third type is in reference to BMPs that need to be developed to support specific discharges. DEC points out that domestic wastewater discharges do not require development of discharge specific BMPs in the Permit. However, DEC does expect APSC to develop and implement operational BMPs in the form of housekeeping and operation and maintenance to help ensure compliance with Permit limits (e.g., fecal coliform bacteria).

APSC states that the STPs operating under the existing APSC permit without BMPs routinely achieved limits. DEC points out that there were limit violations that may have been avoided if appropriate BMPs had been developed and implemented. If specific BMPs had been developed under the previous APSC permit associated with third-party contractors working within the mixing zone for Pump Station 5, a violation for exceeding total suspended solids may have been avoided. Another example would be operational BMPs to ensure adequate disinfection at Pump Station 3 or preventative maintenance to prevent accumulation of bacteria in piping at Pump Station 4 (See Fact Sheet Section 3.2.1 for Pump Station Compliance History). All these examples exemplify what DEC considers "reasonably necessary" BMPs and are in reference to violations previously reported for STP discharges.

DEC understands that the existing APSC permit did not reference the EPA BMP Guidance. DEC points out that the EPA BMP Manual was under development at the same time as development of the existing APSC permit but had not been officially published. The existing APSC permit became effective July 1993. Whereas, the EPA BMP Manual was published in October 1993. Since issuance of the existing APSC permit in 1993, the EPA BMP Manual has become widely accepted as a resource for developing BMP Plans in NPDES permits. Hence, BMP requirements have evolved while the existing APSC permit has become obsolete since expiring 19 years ago.

No changes have been made leading to the Final Permit based on this comment.

APSC Comment on Mobile Spill Response: APSC calls attention to Fact Sheet Sections 5.1.6 and 10.3 that indicate that land disposals of mobile spill response wastewater is covered by the Permit but the Permit indicates that only discharges to Waters of the U.S. are covered.

DEC Response: DEC appreciates pointing out this typographic error. DEC has modified the referenced Fact Sheet sections to clarify that only discharges of mobile spill response is covered in the Permit.

APSC Comment on Mixing Zones: APSC points out that the Permit, Fact Sheet and RTC reference 18 AAC 70.240 to 70.270 for mixing zone regulations but the most current version of WQS indicates section 70.245, 70.250, 70.255, 70.260, and 70.270 have been repealed.

DEC Response: Newly state-adopted WQS are not automatically available for use in developing Clean Water Act Section 402 permits under 18 AAC 83. Prior to implementing WQS in APDES permits, EPA must also approve those new versions of regulations. Until the new version of mixing zone regulations are approved, the most recently EPA-approved version of the mixing zone sections of the WQS must be used in APDES permits. The last version of mixing zone regulations approved by EPA is the 2003 version, which include those sections APSC indicates have been repealed in the 2017 version. DEC appropriately referenced the version in the Fact Sheet. Per the second to last sentence in Fact Sheet Section 7.2, "All criteria must be met in order to authorize a mixing [18 AAC 70.240 – 270 (2003)]. For additional information on EPA-approved content, see "Comparison of State and Federally Approved Water Quality Standards" at the following DEC website: http://dec.alaska.gov/water/wqsar/wqs/index.htm.

No changes have been made leading to the Final Permit based on this comment.

APSC Comment on pH Monitoring: APSC disagrees with DEC's perspective that pH monitoring is appropriate for excavation dewatering due to potential unknown underground contamination as this would only be appropriate if the excavation is within proximity of a contaminated site and this occurrence is not likely based on the history of pH monitoring conducted by APSC along TAPS. Furthermore, APSC disagrees that pH monitoring is easily implementable. Field measurements of pH is burdensome due to remoteness, training, calibration, recording, transportation, verification, certification, weather, darkness, and equipment failures.

DEC Response: DEC disagrees that pH monitoring should be removed from the Permit for excavation dewatering. DEC concurs with APSC that pH monitoring is justifiable when excavations are within 1,500 feet of a contaminated site but this is not the only reason. DEC points out that contaminated sites represent a known area of contamination rather than an unknown site. Accordingly, APSC argument does not negate DEC's previous justification that pH monitoring should be retained due to potential unknown sources of contamination (i.e., not yet a contaminated site regulated by DEC Contaminated Sites Program). Furthermore, the Permit allows for use of chemical additives to enhance removal of settleable solids and turbidity. Monitoring for pH is also appropriate given the built-in flexibility to implement enhanced treatment as a BMP tool under the Permit.

As for implementation, APSC has been required to conduct daily pH monitoring under the existing APSC permit for 23 years. Based on this track record, DEC reduced the frequency from daily to weekly, which aligned the frequency with AKG003000 (See Response 4.2). It is unclear to DEC as to why after 23 years of successfully implementing daily monitoring for pH in excavation dewatering that continuing this field monitoring at a reduced frequency represents an overwhelming burden especially when APSC would be willing to accept those same conditions by seeking authorizations under AKG003000.

No changes to have been made leading to the Final Permit and Fact Sheet based on this comment.

5.2 Hilcorp Comments on Proposed Final Permit

Hilcorp Comment on Permit Section 1.1.4: Hilcorp recommends for clarity that instead of saying land disposals less than 500,000 gallons per day are automatically authorized "without prior notification" to "without submitting an amended Notice of Disposal."

DEC Response: No comment submitted during the public review period is in character with this comment. Therefore, DEC cannot consider changes to the Final Permit and Fact Sheet as an outgrowth of this comment.

Hilcorp Comment on Permit Section 1.4.1: Hilcorp points out that the Permit prohibits the discharge of any pollutant not expressly authorized by the Permit and recommends including authorization language that covers the Storm Water Oil and Gas Exemption per CWA Section 402(1)(2).

DEC Response: No comment submitted during the public review period is in character with this comment and no modifications resulting from this comment have been made leading to the Final Permit. However, DEC provides the following response to clarify the Oil and Gas Exemption.

The Oil and Gas Section does not require authorization under a permit. Per CWA 402(1)(2), "The Administrator shall not require a permit under this section, nor shall the Administrator directly or indirectly require any State to require a permit, for discharges of storm water runoff from ... oil and gas exploration, production, processing, or treatment operations, or transmission facilities..." The oil and gas exemption does not require authorization under the Permit as it is available per rule (e.g., regulation) for facilities discharging uncontaminated, noncontact storm water from oil and gas facilities.

Hilcorp Comment on Fact Sheet Section 3.3: Hilcorp points out that the fact sheet indicates use of gravel pit water for gravel road dust control and ice road and pad construction is allowable under the Permit. However, the Permit is silent on this use of gravel pit water and Hilcorp recommends adding language in the Permit to cover this possible use.

DEC Response: No comment submitted during the public review period is in character with this comment and no modifications resulting from this comment have been made leading to the Final Permit. However, DEC provides a response to clarify the use of gravel pit water for ice construction and dust suppression.

Similar to other permits that authorize the discharge of gravel pit water for ice road and pad construction and dust suppression, the NOI will have the ability to request authorizations. In addition, the written authorization from DEC will include whether this request has been authorized. This process does not require modifications to the Permit because the requirements are the same regardless of the discharge locations (i.e., Waters of the U.S.).

Hilcorp Comment on Fact Sheet Section 3.5: Hilcorp points out that Fact Sheet Section 3.5 indicates use of chemicals in hydrostatic test water including biocides and antifreeze or heat addition is atypical but Section 4.3.5 prohibits biocides and antifreeze in discharges. If chemical use is prohibited, Hilcorp recommends indicating this in Fact Sheet Section 3.5 and Permit Section 2.6.

DEC Response: No comment submitted during the public review period is in character with this comment and no modifications resulting from this comment have been made leading to the Final Permit. However, DEC provides a response to clarify when chemicals are prohibited and when they man not be.

Fact Sheet Section 3.5 describes the general characteristics of hydrostatic wastewater. Accordingly, DEC calls attention to the atypical use of chemicals but then declares their use as prohibited for discharges to Waters of the U.S. in Section 4.3.5 and Permit Section 2.6.1.2. However, for land disposals in Section 6.2, the Fact Sheet indicates that the atypical use of biocides or antifreeze chemicals may be permissible for land disposals if approved by DEC. Because there are differences between discharges and disposals with respect to chemical use, Fact Sheet Section 3.5 is not the appropriate place to state the prohibition or conditional use.

5.3 DGLLC Comments on Proposed Final Permit

DGLLC Comment on Fact Sheet Section 2.2.1: DGLLC requests DEC to modify the language in Fact Sheet Section 2.2.1 that describes when DGLLC would seek coverage under the Permit from "pending full-scale development" to "pending project sanction" similar to what was used in Sections 2.2.2 and 2.2.3.

DEC Response: DEC appreciates DGLLC's comment concerning clarification of the appropriate terminology for initiating the project. Based on this comment, DEC has made the recommended change in Fact Sheet Section 2.2.1 as a clarification.

DGLLC Comment on Applicability of Statutory Exemptions for Drilling Waste: DGLLC requests clarification that discharges described under Alaska Statutes (AS) 46.03.100(e)(4) do not require waste management and disposal authorizations under the Permit. In addition, DGLLC recommends adding to Section 1.5 of the Fact Sheet the following: "Drilling discharges as described in AS 46.03.100(e)(4) do not require authorization under the Permit."

DEC Response: No comment submitted during the public review period is in character with this comment and no modifications resulting from this comment have been made leading to the Final Permit. Although modification to the Fact Sheet is not possible, DEC provides the following response to provide clarification of the exemption under AS 10.46.03.100(e)(4).

In general, permits describe what is permissible rather than listing everything that is not. Similar to the discussion on the oil and gas storm water exemption (See response to Hilcorp comment for Permit Section 1.4.1), it is not necessary to state overarching regulations, or in this case statutes, that are applicable with or without the Permit. Accordingly, the coverage for drilling fluids and drill cuttings in the Permit is for those situations where the discharge is a point source that reaches Waters of the U.S., which covers the situation where the exemption does not apply.