

**Department of Environmental Conservation  
Response to Comments**

**For**

**Alaska Pollutant Discharge Elimination System**

**General Permit AKG332000 –**

**Facilities Related to Oil and Gas Exploration, Production, and  
Development in the North Slope Borough**

**Public Noticed from:  
March 18, 2024 to April 19, 2024**

**August X, 2024**



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

## Contents

1	Introduction .....	4
1.1	Summary of Facility / Permit .....	4
1.2	Opportunities for Public Participation .....	4
1.3	Final Permit .....	5
2	Comments from EPA .....	5
2	Comments Received From EPA During Public Notice .....	11
2.1	EPA Comment 1 and 2 .....	11
2.2	EPA Comments 3 and 4: .....	19
3	Comments from ConocoPhillips Alaska Inc. (CPAI) .....	22
3.1	Comment Summary: Discharges to Water versus Land Disposals .....	22
3.2	Comment Summary: Reduced Monitoring Frequencies for Gravel Pits .....	23
3.3	Comment Summary: Adaptive Permitting Based on Project Scale .....	23
3.4	Comment Summary: Definition of SCA .....	23
3.5	Comment Summary: Define “Large” Sedimentation Basin .....	24
4	Comments from Hilcorp Alaska, LLC (Hilcorp) .....	24
4.1	Comment Summary: Definition of Contained Water .....	24
4.2	Comment Summary: Definition of SCA .....	24
4.3	Comment Summary: More Details are Needed for Predischage Sampling .....	25
4.4	Comment Summary: Timing of Reserve Pit Predischage Sampling .....	25
4.5	Comment Summary: Filtration Mandate .....	26
4.6	Comment Summary: Remove Restriction on Discharges from Drill Site 7 .....	26
4.7	Comment Summary: Eliminate Settleable Solids Monitoring for Disposals .....	27
4.8	Comment Summary: Include Automatic Land Disposal Authorizations .....	27
4.9	Comment Summary: Reconsider the 1,500-foot Setback to Disposal Locations .....	28
4.10	Comment Summary: Clarify and Redefine Disposal Language .....	28
4.11	Comment Summary: e-Reporting Waiver Provision Needs Clarification .....	29
4.12	Comment Summary: Table 1 Note for Reporting Options is Inconsistent .....	29
4.13	Comment Summary: Table 1 Annual Reports Does Not Align with Permit .....	30
4.14	Comment Summary: BMP Language is Not Consistent .....	30
4.15	Comment Summary: Acknowledging QAPP Completion in NOI .....	30
4.16	Comment Summary: Graywater Should Not be in the Section .....	31
4.17	Comment Summary: Sequence of Reporting with Inactivation Process .....	31
4.18	Comment Summary: Attachment versus Appendix 3 .....	32
4.19	Comment Summary: Incomplete Sentence in Permit Section 2.4.1 .....	32
4.20	Comment Summary: Correct Reference for Fact Sheet Section 4.5 .....	32
4.21	Comment Summary: Align Airport Restriction with Multi-Sector Permit .....	32
4.22	Comment Summary: Call Out Appendix A – Standard Conditions .....	33
4.23	Comment Summary: Inspection Documents Misplaced in Section .....	33
4.24	Comment Summary: Combine Sections and Eliminate Duplicative Requirements .....	33
4.25	Comment Summary: Row References in Permit Table 7 and Fact Sheet Table 10 .....	33
4.26	Comment Summary: Correct Reserve Pit Sampling Dates Fact Sheet Attachment C .....	34
4.27	Comment Summary: Incorrect Naming of Mine Sites in Fact Sheet Attachment F .....	34
5	Comments from Arianna Sosnowski .....	34
5.1	Comment Summary: Consider Local Input .....	34
6	Comments from DEC Environmental Health, Drinking Water Program .....	35
6.1	Comments Summary: Add BMPs for Drinking Water Protection Areas .....	35
7	Comments from Cindy Godsey .....	37
7.1	Comment Summary: Preliminary Characterization of Open RPs .....	37
7.2	Comment Summary: Addressing Concerns with Previous SCA Characterization .....	37
7.3	Comment Summary: Citation of CFR Regarding Statements of Basis .....	38

7.4 Comment Summary: Oil and Gas Extraction Point Source Category ..... 38  
7.5 Comment Summary: Typographical Errors..... 38

# 1 Introduction

## 1.1 Summary of Facility / Permit

The Alaska Department of Environmental Conservation (DEC or Department) is reissuing Alaska Pollutant Discharge Elimination System (APDES) general permit AKG332000 – Facilities Related to Oil and Gas Exploration, Production, and Development in the North Slope Borough (Permit or NSGP). The Permit regulates the industry specific discharges from oil and gas related facilities to freshwaters of the United States (U.S.). located in the North Slope Borough and marine waters offshore of the North Slope Borough and landward of the inner boundary baseline. The Permit was first issued by the Environmental Protection Agency (EPA) in 1997 and subsequently reissued by EPA in 2004, 2008 and 2012 and first issued by DEC in 2017 after obtaining program primacy. This is the second reissuance of the Permit by DEC.

The Permit has adjusted “Discharge 008 – Contaminated Secondary Containment Areas (CSAs)” to encompass related discharges under the new designation “Discharge 008 – Contained Water” to streamline both reporting and enforcement. During the effective period of the Permit, pollutants from the following discharges will be permitted to occur:

- Discharge 002 – Graywater
- Discharge 003 – Gravel Pit Dewatering
- Discharge 004 – Excavation Dewatering
- Discharge 005 – Hydrostatic Testing
- Discharge 006 – Storm Water
- Discharge 007 – Mobile Spill Response
- Discharge 008 – Contained Water (Formerly Contaminated CSAs)

The Permit proposes to authorize a 650-foot (200 meter) radius chronic mixing zone for fecal coliform bacteria and residues from Graywater (Discharge 002) discharges, a 500-foot (150 meter) radius mixing zone for gravel pit dewatering (Discharge 003), and a 500-foot (150 meters) radius mixing zone for excavation dewatering (Discharge 004). DEC may issue a mixing zone for onshore marine dredge sedimentation basins based on public notice.

## 1.2 Opportunities for Public Participation

To ensure public, agency, and tribal notification and opportunities for participation in the Permit reissuance process, 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 this permit via letter, fax and/or email;
- posted a preliminary draft of the permit on-line for a 10-day applicant review on January 29, 2024 and notified tribes and other agencies;
- posted the public notice on the Department’s public notice web page March 18, 2024;

- posted the proposed final permit on-line for a 5-day applicant review on August X, 2024; 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 public comment period of the Draft Permit and Fact Sheet, the Department received comments from Hilcorp Alaska LLC (Hilcorp), ConocoPhillips Alaska Inc. (CPAI), EPA, the DEC Environmental Health Division, Drinking Water Program (EH DWP), and Ms. Arianna Sosnowski. The Department also requested comments from the Department of Natural Resources (DNR), Department of Fish and Game (DF&G), the National Fish and Wildlife Service (FWS), and National Marine Fisheries Service (NMFS), Tribes, and local governments.

The Department issued a five-day notice for applicant review August X, 2024.

This document summarizes the comments submitted and the justification for any action taken or not taken by DEC in response to the comments.

### **1.3 Final Permit**

The final permit was adopted by the Department on <<<xxx>>>. There were modifications to the Permit and Fact Sheet based on comments received during the 30-day public comment period. Significant changes resulting from comments received are identified in the response to comments and reflected in the Final Fact Sheet and Permit. In this RTC, additions are shown as bold and underlined and deletions are shown as bold with strikethrough. There were also minor modifications made to correct grammar and to clarify information.

## **2 Comments from EPA**

EPA provided comments during the 10-day applicant review of the Preliminary Draft Permit and Fact Sheet and the public notice of the Draft Permit and Fact Sheet. Specifically, EPA provided comments concerning the discharges from open reserve pits (Discharge 008 – Contained Water) that DEC and EPA could not resolve ahead of issuing the Proposed Final Permit and Fact Sheet resulting in EPA to issue an objection to the permit. The following sections provide background information, responses and proposed changes to the permit in attempt to resolve issues, and the current response to the objection.

### **Background**

**Permit History:** In 2004, EPA issued AKG330000 to include stormwater from closed reserve pits for the first time per Permit Section F.3.a(5):

This GP proposes to cover those storm water discharges that have come in contact with any of those materials or products from industrial activities that may occur in, but are not limited to, the following sites and areas:

5) Production reserve pits which have been closed under 18 AAC 60 – Solid Waste and converted to stormwater storage areas.

EPA received only one comment on this inclusion from the Alaska Oil and Gas Commission noting that the 2004 EPA Permit did not include a definition of “stormwater storage areas.” EPA provided the following response:

“Stormwater storage area means a closed production reserve pit that remains part of a facility and is converted for use in the stormwater collection system by backfilling the area with a minimum of 6 inches of clean material. In some cases, the closed pit may be partially or completely back-filled with gravel to expand the useable surface of the drill site. In both cases, the former reserve pit area is no longer considered a treatment system, but it is part of the facility. This definition will be added to Permit Part VI.”

This stormwater allowance was retained in EPA reissuances for 2008 and 2012 NSPG without further explanation or comment responses of how it satisfied 40 CFR 435 – Oil and Gas Extraction Point Source Category (ELG).

The 2004 NSGP and subsequent EPA Fact Sheets did not provide significant discussion on the allowance for discharges of stormwater from closed reserve pits. The 2004 Permit suggests there was likely contact with drilling fluids that remained in closed reserve pits that were only partially backfilled. DEC understands that there were areas in these closed reserve pits that could not be completely excavated due to proximity to infrastructure or the excavation of the drilling fluid could compromise the containment berm. The EPA fact sheets failed to provide a transparent evaluation of which Subcategory of the ELGs pertained to these closed reserve pits. The 1996 ELGs allow for discharges of dewatering effluent at the discretion of the permitting authority under the Coastal Subcategory. Per the limitations for Best Conventional Pollutant Control (BCT) and New Source Performance Standards (NSPS):

“BCT [or NSPS] limitations for dewatering effluent are applicable prospectively. BCT limitations in this rule are not applicable to discharges of dewatering effluent from reserve pits which as of the effective date of this rule no longer receive drilling fluids and drill cuttings. Limitations on such discharges shall be determined by the NPDES permit issuing authority.”

Furthermore, per 40 CFR 435.40(a), the term “Coastal: shall mean:

“Any location in or on a water of the United States landward of the inner boundary of the territorial seas, or....”

Based on the historic administrative record generated by EPA, DEC agreed with this authorization of discharges from closed reserve pits as it is supported by the CWA and subsequent regulations pertaining to Industrial Stormwater, which was stated as the basis for authorizing discharges from closed reserve pits in the NSGP issued by EPA. Per 2004 NSGP Fact Sheet Section VIII(E)(1) Technology-Based Limitations for Stormwater Discharges from Industrial Facilities:

“EPA has developed Effluent Limitation Guidelines for the Oil and Gas Extraction Point Source Category, Subpart D—Coastal Category [40 CFR Part 435] that

contain provisions that apply to storm water associated with industrial activity. The limitations applicable to oil and gas extraction activities are described below.

BPT, BAT, BCT, and NSPS requirements [40 CFR §§ 435.12, .13, .14, and .15] for discharge of deck drainage (which includes rainfall runoff) require no discharge of free oil, as determined by the presence of a film or sheen upon or a discoloration of the surface of the receiving water (visual sheen).

In evaluating options for controlling pollutants, EPA noted that it does not believe it is necessary to establish specific numeric effluent limitations, or a specific design or performance standard for stormwater discharges associated with industrial activity from oil and gas facilities to meet the BAT/BCT standards. The storm water permit for industrial activities (60 FR 50915, September 29, 1995) did not contain numeric effluent limitations and no limitations were contained in the reissuance of the Multi-Sector GP (65 FR 64761, October 30, 2000).”

After DEC obtained primacy over the APDES Program, DEC reissued the NSGP for the first time in 2017 (2017 NSGP). DEC retained the specific reference to reserve pits closed by the DEC Solid Waste Program (SWP) under per 18 AAC 60.440 as an allowable stormwater discharge and introduced a definition of allowable non-stormwater that includes “any water that meets water quality criteria” (See 2017 NSGP Appendix C – Definitions). This was to allow for discharges from a broader category of sources, including open reserve pits, where samples must be analyzed to demonstrate compliance with water quality criteria prior to obtaining authorization to discharge. Hence, the discharge from open reserve pits and closed reserve pits were to be treated only slightly different. Closed reserve pits could discharge without further demonstration of water quality; whereas, the discharge from open reserve pits required demonstrating compliance with 18 AAC 70 - Water Quality Standards (WQS) via analytical sampling to obtain case-by-case approval as an allowable non-stormwater discharge (See 2017 NSGP Fact Sheet Section 4.5). This approach was based on knowledge of the CWA and 40 CFR 122.25 for permitting industrial stormwater that contacts stored waste material. Note that the drilling fluids stored in the open reserve pits are waste deposits that have not been actively used since before 1996. The CWA established state authority over determination of stormwater in contact with potential pollution per Section 402 and via 40 CFR 122.26(a)(9)(i), which states:

“On and after October 1, 1994, for discharges composed entirely of storm water, that are not required by paragraph (a)(1) of this section to obtain a permit, operators shall be required to obtain a NPDES permit only if:...

(D) The Director, or in States with approved NPDES programs either the Director or the EPA Regional Administrator, determines that the discharge, or category of discharges within a geographic area, contributes to a violation of a water quality standard or is a significant contributor of pollutants to waters of the United States...”

As the APDES Program is the approved state NPDES program, the DEC Director is within appropriate jurisdiction of 40 CFR 122.26(a)(9)(D) to make the determination of whether or not the accumulated precipitation and runoff (stormwater) contained in the open reserve pits can be discharged as stormwater or should be otherwise permitted as a stormwater discharge associated with industrial activity (process wastewater) as defined by 40 CFR 122.26(b)(14). 40 CFR 122.26(b)(14) defines stormwater discharge associated with industrial activity as:

the discharge from any conveyance that is used for collecting and conveying storm water and that is directly related to manufacturing, processing or raw materials storage areas at an industrial plant. The term does not include discharges from facilities or activities excluded from the NPDES program under this part 122. For the categories of industries identified in this section, the term includes, but is not limited to, storm water discharges from industrial plant yards; immediate access roads and rail lines used or traveled by carriers of raw materials, manufactured products, waste material, or by-products used or created by the facility; material handling sites; refuse sites; sites used for the application or disposal of process waste waters (as defined at part 401 of this chapter); sites used for the storage and maintenance of material handling equipment; sites used for residual treatment, storage, or disposal; shipping and receiving areas; manufacturing buildings; storage areas (including tank farms) for raw materials, and intermediate and final products; and areas where industrial activity has taken place in the past and significant materials remain and are exposed to storm water. For the purposes of this paragraph, material handling activities include storage, loading and unloading, transportation, or conveyance of any raw material, intermediate product, final product, by-product or waste product. The term excludes areas located on plant lands separate from the plant's industrial activities, such as office buildings and accompanying parking lots as long as the drainage from the excluded areas is not mixed with storm water drained from the above described areas. Industrial facilities (including industrial facilities that are federally, State, or municipally owned or operated that meet the description of the facilities listed in paragraphs (b)(14)(i) through (xi) of this section) include those facilities designated under the provisions of paragraph (a)(1)(v) of this section. The following categories of facilities are considered to be engaging in “industrial activity” for purposes of paragraph (b)(14):

- (i) Facilities subject to storm water effluent limitations guidelines, new source performance standards, or toxic pollutant effluent standards under 40 CFR subchapter N (except facilities with toxic pollutant effluent standards which are exempted under category (xi) in paragraph (b)(14) of this section);...
- (iv) Hazardous waste treatment, storage, or disposal facilities, including those that are operating under interim status or a permit under subtitle C of RCRA;
- (v) Landfills, land application sites, and open dumps that receive or have received any industrial wastes (waste that is received from any of the facilities described under this subsection) including those that are subject to regulation under subtitle D of RCRA;...
- (xi) Facilities under Standard Industrial Classifications 20, 21, 22, 23, 2434, 25, 265, 267, 27, 283, 285, 30, 31 (except 311), 323, 34 (except 3441), 35, 36, 37 (except 373), 38, 39, and 4221-25.

Per (i), the Oil and Gas Sector is covered by the Stormwater ELGs (See Sector I) as well as 40 CFR 435. However, the only stormwater ELGs in 40 CFR 435 apply to deck drainage and in 2004 EPA correctly applied 40 CFR 122.26 to adopt stormwater discharges. None of the Standard Industrial Classifications (SIC) Codes in (xi) are associated with the Oil and Gas Sector. In suit, DEC essentially applied the same rationale and did not receive EPA comments on this aspect of the 2017 NSGP.



During the 2017 NSGP permit term, DEC requested industry to submit analytical data for both open and closed reserve pits based on recommendations from the SWP and to evaluate whether the contact stormwater that falls under the definition of stormwater discharge associated with an industrial activity requires a permit per 40 CFR 122.26(a)(9)(D). Although the 2017 NSGP Permit did not require sampling for the closed reserve pits, DEC SWP recommended that industry demonstrate compliance with WQS from both open and closed reserve pits because DEC SWP had concerns that closed reserve pits may have been contaminated from unreported spills after closure. This analysis, discussed in Fact Sheet Appendix C, found that the discharge of quiescent contained water from open reserve pits should not pose a concern so long as the drilling fluid does not become resuspended in the water column during discharge events. Hence, this determination that solids could impact receiving waters, DEC determined a permit authorization was appropriate. The NSGP placed conditions, as discussed further below, to prevent such resuspension.

The NSGP history establishes both EPA and DEC precedent that stormwater discharges that have come in contact with any of those materials or products from industrial activities, including reserve pits, may be discharged under the NSGP either as stormwater (closed reserve pits) or as allowable non-stormwater such as stormwater that has come into contact with waste material (drilling fluids) from open reserve pits that meet water quality standards. Data collected indicates that both open and closed reserve pits meet WQS and have essentially inextinguishable water quality.

**Preliminary Draft Permit 10-day Applicant Review:** DEC issued the NSGP for a 10-day applicant review of the Preliminary Draft on January 12, 2024. For the reissued Permit, DEC moved the discharge of contact stormwater as an allowable non-stormwater discharge to a newly created category called “Contained Water” (See Permit Appendix C). Per the Fact Sheet, the Contained Water category was developed to recategorize a number of miscellaneous discharges that were previously authorized under Hydrostatic Test Water with Contaminated Secondary Containment into a new “catchall” for miscellaneous water sources that fall under a general description of being contained. This recategorization broadly includes marine dredge sedimentation basins and the open reserve pits, for example (See Permit Appendix C - Definitions).

Several Contained Water discharges require some form of predischage characterization and/or treatment. For example, DEC requires predischage data that demonstrates the dissolved water quality criteria are met, and mandates filtration on discharges from open reserve pits to ensure no discharge of drilling fluids as required by the Oil and Gas Effluent Limitation Guidelines (ELGs) in 40 CFR 435.32 for the Onshore Subcategory. By ensuring reserve pits meet prerequisite freshwater quality criteria via predischage sampling, DEC can be confident that post filtration discharges from open reserve pits will be protective of all existing uses of the waterbody (e.g., tundra). Recent data from open and closed reserve pits, as well as older data from open reserve pits, indicate that water quality from closed reserve pits consistently comply with water quality criteria (See Fact Sheet Attachment C). Based on this data and analysis, DEC proposed to reissue the NSGP allowing for discharges of contact stormwater contained in open reserve pits contingent on operational Best Management Practices (BMPs) (e.g., filtration, proper intake locations with low intake velocity, and identifying known or suspected locations of drilling

fluids), and ongoing demonstrations that the water continues to meet WQS prior to discharging each year.

On January 29, 2024 DEC received a comment from EPA on the Preliminary Draft stating that:

“Many open Reserve Pits on the North Slope are currently subject to the Resource Conservation and Recovery Act (RCRA) corrective actions, including Hilcorp North Slope’s Prudhoe Bay Facility, which currently covers approximately 380 square miles of the North Slope (EPA RCRA ID: AKD000643239 | US EPA) and is subject to a RCRA Subtitle C Standardized Permit (Hazardous Waste Management Facility Standardized Permit) and a RCRA 3008(h) Corrective Action Order (3008(h) RCRA Administrative Order on Consent). More than 120 reserve pits subject to these orders are still required to complete the RCRA Corrective Action process and remain open under the RCRA Order and Permit, including some that were previously closed out by DEC Solid Waste Program. As written, Outfall 008 in preliminary draft AKG332000 would allow facilities to apply for permit coverage for discharges from RCRA-permitted open Reserve Pits that would be inconsistent with RCRA Subtitle C corrective action (cleanup) requirements.

To avoid regulatory conflict between AKG332000 and applicable RCRA corrective actions, we request that additional language be added to the Permit to clarify that discharges from open reserve pits subject to a current or future RCRA action will not be authorized under AKG332000.”

DEC engaged with the EPA NPDES Program on the comment submitted on behalf of the EPA RCRA Program and requested clarification as to how the discharge of precipitation and runoff (i.e., contact stormwater) in contact with an industrial waste source (drilling fluids and drill cuttings) would be inconsistent with the RCRA Subtitle C Corrective Action when 40 CFR 122.26(b)(14)(iv) and (v) allow it and the overlying contained water meets state WQS. While EPA NPDES Program was seeking such clarification from EPA RCRA, DEC reviewed RCRA and 40 CFR 261 and conducted a follow up meeting with EPA NPDES Program on the RCRA comment. DEC explained that the Preliminary Draft NSGP prohibits the direct discharge of drilling fluids and drill cuttings, which is consistent with the RCRA orders that also restricts release of drilling fluids and drill cuttings.

Prior to receiving EPA comments on the Preliminary Draft, filtration was an optional BMP should other BMPs not be sufficient to prevent resuspension and discharge of drilling fluids. Based on EPA comments on the Preliminary Draft, DEC made filtration on discharges from open reserve pits mandatory per Draft Fact Sheet Section 5.2.1.4 and Draft Permit Sections 2.8, Table 7, Note h and 3.2.5.5. Fact Sheet Section 5.2.1.4 was also updated to reflect what DEC thought was the correct interpretation of applicability as 40 CFR 435 Subpart C – Onshore Subcategory. This interpretation was based on 40 CFR 435.30, which states:

“The provisions of this subpart are applicable to those facilities engaged in the production, field exploration, drilling, well completion and well treatment in the oil and gas extraction industry which are located landward of the inner boundary of the territorial seas as defined in 40 CFR 125.1(gg) and which are not included within subpart D, E, or F, Provided, however, That the applicability of this subpart to (a) facilities in existence on April 13, 1979 or thereafter engaged in the production, field exploration, drilling, well completion and well treatment in the oil and gas extraction industry which are located on

land and which would have been considered “coastal” as defined under the interim final regulations for this industry (40 CFR 435.41, 41 FR 44942, October 13, 1976) or which are (b) located in the Santa Maria Basin of California is suspended.”

DEC issued the Draft Permit and Fact Sheet for 30-day public notice after receiving no additional explanation from EPA on the RCRA inconsistency comment, and an indication from EPA NPDES that EPA would instead provide comments specific to just the Clean Water Act (CWA).

## **2 Comments Received From EPA During Public Notice**

In an April 19, 2024 letter (“EPA Comment”), EPA provided four comments on the Draft Permit that have been combined into two comments as described and responded to below.

### **2.1 EPA Comment 1 and 2**

#### **Comment Summary: Discharges of Contained Water in Open Reserve Pits is in Direct Conflict with the Onshore Subcategory of the ELGs (ELGs) and Violates the Commingling Provision of the Permit.**

The Oil and Gas Extraction Point Source ELGs, Onshore Subcategory (40 CFR 435, Subpart C) applies to facilities engaged in the production, field exploration, drilling, well completion and well treatment in the oil and gas extraction industry which are located landward of the inner boundary of the territorial seas, per 40 CFR 435.30. The Onshore ELG at 40 CFR 435.32 states:

[T]here shall be no discharge of wastewater pollutants into navigable waters from any source associated with production, field exploration, drilling, well completion, or well treatment (i.e., produced water, drilling muds, drill cuttings, and produced sand).

Per 18 AAC 83.435, the more stringent limitation between technology-based effluent limits (TBELs) and water quality-based effluent limits (WQBELs) must be applied to a pollutant. Furthermore, Permit Section 2.1.3 and Fact Sheet Section 6 states:

“When applying effluent limits to commingled discharges, the more stringent effluent limits apply to the commingled discharges.”

And Section 1.1.1 of Attachment C states:

“...the discharge of drilling fluids or drill cuttings to freshwater locations is prohibited.”

Permit Section 1.2.2 includes coverage for discharges of precipitation and runoff stored as Contained Water (Discharge 008) in reserve pits that also contain historic deposits of drilling fluids and drill cuttings as described in Fact Sheet Sections 2.2.3.1, 4.7, 5.2.2.2, 5.3.8, 6.7 and Attachment C. EPA makes reference to a statement in Attachment C of the Fact Sheet that states:

“...there are some concerns over whether accumulated water in the pits can consistently meet [water quality standards] and can be discharged under the General Permit due to being in contact with drilling waste.”

EPA asserts that “the Draft Permit conditions for Discharge 008 fail to comply with the Onshore ELGs by allowing the discharge of water from open reserve pits that contain drilling waste(s)” [EPA Comment, at 2]. EPA also asserts that since the most stringent effluent limit applies to

commingled discharges, and the discharge of drilling fluids or cuttings is prohibited, then because stormwater and drilling waste are commingled in the reserve pits the discharge of that commingled stormwater is also prohibited. Instead, EPA insists the only means available to preserve adequate free board in the open reserve pits is by removing the precipitation and runoff via truck transport and disposal by underground injection.

**DEC Response:** The proposed discharge would only contain drilling fluids and drill cuttings if the drilling fluids are resuspended and the filtration is too coarse to prevent the smallest of the clay particles to pass through the effective pore size of the filter. Note that a type of filter or effective pore size limitation was not presented. However, even without filtration the discharge complies with WQS and would pose no greater concern to the receiving water than the discharges from closed reserve pits where some drilling fluids may exist post closure. To demonstrate the precipitation and runoff in the open reserve pits complies with WQS, DEC has prepared a comparison of recent data from open and closed reserve pits and also older data from the “*Final Human Health and Ecological Risk Assessment for Unexcavated Inactive Production Reserve Pits, Prudhoe Bay Facility, Alaska, May 2019*”(Risk Assessment). All data indicates the precipitation and runoff meets WQS in all cases whether it be an open or closed reserve pit (See Attached Summaries for Metals and Hydrocarbons).

DEC initially agreed that drilling fluids and drill cuttings are prohibited in the discharge per the ELGs when assuming the pits are defined as onshore per 40 CFR 435.30. Draft Fact Sheet Section 5.2.1.4 addressed this concern based on the Onshore assumption as follows:

“40 CFR 435 Subpart C – Onshore Subcategory does not allow for the discharge of drilling fluids and drill cuttings based on BPT. Per 40 CFR 435.32, “there shall be no discharge of wastewater pollutants into navigable waters from any source associated with production, field exploration, drilling, well completion, or well treatment (i.e., produced water, drilling muds, drill cuttings, and produced sand).” Hence the discharge of drilling fluids and drill cuttings remaining in open RPs must not be discharged with the accumulated precipitation and runoff proposed to be discharged under the NSGP. To ensure that there are no discharges of these solid phase pollutants, DEC mandates the use of filtration to separate particulates that may be suspended in the water column in order to comply with 40 CFR 435. Furthermore, DEC makes this mandate the prime enforcement focus because it could be argued based on the data that it may be possible to comply with the prohibition to no discharge of drilling fluids and drill cuttings without filtration just like the closed reserve pits do. Hence, if the permittee implements approved filtration then it is not possible for a violation of the ELGs to occur.”

In other words, with implementation of filtration with appropriate effective pore sizing the NSGP complies with the ELGs by prohibiting the discharge of particulate drilling fluids and drill cuttings. Although ultrafiltration with an effective pore size of 0.02 to 0.05 microns would effectively remove silts and colloids (barite clay), DEC does not believe that ultrafiltration could be implemented due to high capital and operation costs. Despite EPA claims, any fine particulates or dissolved parameters in the discharge would not be a violation of the ELG as the ELGs do not describe in any specificity the intent of the prohibition to included minor amounts of fine particles or dissolved metals and hydrocarbons in the precipitation and runoff. Furthermore, the ELGs do not negate the regulatory authority of DEC to issue authorization for

stormwater associated with an industrial activity per 40 CFR 122.26(a)(9)(D) no more so than EPA RCRA had also claimed in their comment submitted on the Preliminary Draft Permit and Fact Sheet. Per 40 CFR 122.26(b)(14)(iv) and (v), precipitation and runoff are stormwater discharges associated with an industrial activity where DEC has authority.

The NSGP also requires sampling of the reserve pit each year prior to discharge to demonstrate ongoing compliance with WQS based on 40 CFR 122.26(a)(9)(i)(D). The analytes to be sampled include, at a minimum, those shown in the attached Summary Tables for Metals and Hydrocarbons. While overgeneralizing the ELG prohibition, EPA attempts to claim that by coming into contact with drilling waste in an inactive reserve pit, the precipitation and runoff somehow becomes de facto drilling fluids and drill cuttings by virtue of dissolution of metals from clay particles. This interpretation of the ELGs is flawed, especially when considering the different nature of the precipitation and runoff (water) versus drilling fluids and drill cuttings (solids or slurry) and how they exist separately from each other in quiescent water.

The science of drilling fluids that contact stormwater with high Oxidation-Reduction Potential (ORP) is that metals stay absorbed onto the barite clay and do not dissociate into the water column. Citing Schaanning et al. (1996), PERF (2005)<sup>1</sup> showed that mercury and most other metals, except possibly lead, associated with anoxic sediments of cuttings piles do not dissolve from the barite, leach into the sediment pore water, and are not bioavailable to benthic marine animals. Dissolution of barite under reducing conditions when sulfate concentrations are low does not result in dissolution of metal sulfide inclusions in the barite (Trefry et al. 1986 and Trefry 1998, cited in PERF 2005). For hydrocarbons, the higher the Octanol-Water Coefficient the less likely the hydrocarbon will dissociate from the barite clay (See Fact Sheet Appendix C, Section 1.1.1). And, those hydrocarbons with low Octanol-Water Coefficients (i.e., high solubility) tend to be readily biodegradable in high ORP environments and are not likely to be present in the water column. To illustrate this, DEC has conducted a critical analysis of analytical results from open reserve pits, closed reserve pits, on-pad water, and background samples presented in the 2019 Risk Assessment. The critical analysis demonstrates there is no significant difference between these historical studies when it comes to characterizing the contamination in high ORP water associated with any reserve pit, whether open or closed (See Attached Metals and Hydrocarbon Summaries). This analysis also demonstrates the degree to which the drilling fluids and drill cuttings do not commingle with the high ORP precipitation and runoff water that covers those deposits.

The Onshore ELG is not generalized as EPA desires, but rather specific to “produced water, drilling muds, drill cuttings, and produced sand,” per 40 CFR 435.32. That specification is preceded by ‘i.e.’ which “stands for the Latin id est, or ‘that is,’ and is used to introduce a word or phrase that restates what has been said previously. What follows the i.e. is meant to clarify the earlier statement[.]” Merriam-Webster Dictionary.<sup>2</sup> Black’s Law Dictionary likewise provides an example of i.e. preceding a phrase that restates what was said previously.<sup>3</sup> In contrast, EPA’s

---

<sup>1</sup> PERF (Petroleum Environmental Research Forum). 2005. Composition, Environmental Fates, And Biological Effects Of Water Based Drilling Muds And Cuttings Discharged To The Marine Environment: A Synthesis and Annotated Bibliography. Prepared for Petroleum Environmental Research Forum (PERF) and American Petroleum Institute, Duxbury, MA.

<sup>2</sup> <https://www.merriam-webster.com/grammar/ie-vs-eg-abbreviation-meaning-usage-difference>.

<sup>3</sup> Black’s Law Dictionary (11th ed. 2019), (“That is the federal government’s highest judicial body, i.e., the Supreme Court.”).

comment suggests that the ELGs merely provides a qualifying example (e.g.) instead of a full and exact explanation of the preceding prohibition. Precipitation and runoff is not de facto drilling fluids or drill cuttings subject to the ELG. The definitions of these terms from nearby section 40 CFR 435.33 in the same subpart, although not applicable to 40 CFR 435.32, are helpful in understanding EPA’s thinking about these terms:

- (ii) Drill cuttings means the particles generated by drilling into subsurface geologic formations and carried out from the wellbore with the drilling fluid.
- (iii) Drilling mud means the circulating fluid (mud) used in the rotary drilling of wells to clean and condition the hole and to counterbalance formation pressure.
- (iv) Produced sand means the slurried particles used in hydraulic fracturing, the accumulated formation sands, and scales particles generated during production. Produced sand also includes desander discharge from the produced water waste stream, and blowdown of the water phase from the produced water treating system.
- (v) Produced water means the fluid brought up from the hydrocarbon-bearing strata during the extraction of oil and gas, and includes, where present, formation water, injection water, and any chemicals added downhole or during the oil/water separation process. 40 CFR 435.33(a)(2).

None of these definitions include precipitation and runoff which is regulated per 40 CFR 122.26; nor do the ELGs override or negate these stormwater regulations. The Draft NSGP’s mandate for filtration ensures that even if the particles are suspended, they will not be discharged to a significant degree with the precipitation and runoff. This equally applies to the situation where commingling is a concern because the filtration ensures compliance with the ELGs, which represents the more stringent limitation. In the NSGP, DEC imposes a multipronged approach to ensure compliance with WQS and to prevent drilling fluids and drill cuttings in the discharge, including:

1. Predischarge sampling of total and dissolved barite metals and dissolved hydrocarbons;
2. Mapping of known or anticipated zones of drilling waste in the reserve pit;
3. Locating the intake away from those known or anticipated zones;
4. Submitting the pump and filtration systems for approval as a treatment BMP to ensure the floating intake does not reach the bottom of the pit, the intake velocity is low enough to prevent resuspension of deposits, and the filtration is reasonably restricting drilling particles; and
5. Requiring additional monitoring of barite metals during discharge on a case-by-case basis per Permit Section 2.8, Table 7, Note h.

DEC believes these limitations and conditions adequately address the concerns that drilling fluids and drill cuttings could be discharged and does not agree that the discharge of precipitation and runoff contained in inactive reserve pits violates the ELGs, the commingling provision of the Permit, or the CWA. Therefore, no changes to the Permit were made based on this comment.

**EPA Formal Objection to Discharges of Industrial Stormwater from Open Reserve Pits:**

Despite attempts by EPA and DEC to reconcile their positions during discussions on May 22, May 30, and June 12 neither have reconciled the overlying issue on discharges from open reserve pits under Discharge 008 – Contained Water assuming applicability under 40 CFR 435 Subpart C – Onshore Subcategory. In the objection letter, EPA noted that discharge of dewatering

effluent from reserve pits that no longer receive drilling fluids and drill cuttings as of January 15, 1997, is allowable under the Coastal subcategory (see 40 CFR 435.43). However, that provision is exclusive to the Coastal subcategory (40 CFR 435 Subpart D) and does not apply to discharges from the Onshore subcategory (40 CFR 435 Subpart C). Had the EPA intended discharges of dewatering effluent from historical reserve pits to be an allowable discharge under the Onshore ELGs, the EPA would have indicated that in the preamble and development documents and made confirming regulatory changes to the Onshore subcategory regulations at 40 CFR 435.32. Therefore, DEC cannot apply the provision for dewatering of historical reserve pits in the Coastal ELGs to discharges from reserve pits containing waste from onshore wells. EPA acknowledges DEC's position and concerns regarding the differences between the ELGs. However, these cannot be resolved through a permit action; the proper recourse would be to petition the EPA to reconsider the ELGs.

The EPA also stated they do not agree that installation of filtration and compliance with water quality standards meets the no discharge of wastewater pollutants prohibition established in the Onshore ELGs. Filtration is not a zero-discharge technology as it does not remove particulate matter smaller than the pore size of the filter and does not remove dissolved pollutants; thus, pollutants from sources associated with onshore oil and gas production, exploration, drilling, well completion and well treatment may still be discharged to WOTUS. In addition, compliance with water quality standards is not the same as no discharge of pollutants. A discharge can comply with water quality standards but may still include pollutants from sources associated with onshore oil and gas production, exploration, drilling, well completion and well treatment. Therefore, while the EPA appreciates the precautions that DEC has included in the proposed permit, the proposed final permit conditions for Discharge 008 fail to comply with the Onshore ELGs by allowing the discharge of water from open reserve pits that contain drilling waste(s). Historically and currently, this water has been disposed of through underground injection, and that remains an available technology for the industry.

**DEC Response to EPA Objection:** DEC believes that EPA is overreaching their authority over reserve pits assumed to be in the onshore subcategory as discussed previously on the comments received by EPA RCRA and NPDES Programs. While the ELGs clearly prohibit the discharge of drilling fluids (i.e., barite clay), 40 CFR 122.26 clearly regulates the precipitation and runoff as a discharge of stormwater from an industrial activity. Furthermore, the stormwater regulations intentionally overlap with RCRA and ELGs in 40 CFR 122.26(b)(14)(i), (iv), (iv), and (xi). Whereas, EPA has failed to demonstrate that the ELGs had any consideration of stormwater when promulgated in 1979 or the 1982 revision. Essentially, in the void of silence contained in the ELG, EPA is attempting to take an extreme position that circumvents stormwater regulations, that if allowed to stand, would set a dangerous precedent beyond this specific issue. Therefore, DEC holds firmly that if adequate filtration were imposed on discharges from open reserve pits to prevent the discharge of most, but not all, colloidal particles then allowing for the State Director's water quality-based determination under 40 CFR 122.26(a)(9)(D) that allows for the discharge of stormwater associated with an industrial activity around onshore reserve pits is legal and appropriate. Nonetheless, in order to resolve the objection, DEC is willing to remove the authorization from open reserve pits assumed to be under the Onshore Subcategory from the Permit. However, DEC could include a reopener clause in the Permit per 18 AAC 83.130(b)(8) so that this issue may be reconsidered in the future if onshore is, or becomes, the correct subcategory in the ELGs. Meanwhile, DEC proposes to issue authorizations to reserve pits under the Coastal Subcategory as well as to waters of the state that are not WOTUS.

**Misinterpretation of ELG Applicability for North Slope Reserve Pits:** After obtaining the EPA objection, DEC continued review of the ELGs and associated Decisions Documents and Federal Register (FR). During this review, DEC discovered that they made an incorrect assumption that the open and closed reserve pits on the North Slope were applicable to the Onshore Subcategory of the ELGs. Per 40 CFR 435.30 Applicability; description of the onshore subcategory states:

“The provisions of this subpart are applicable to those facilities engaged in the production, field exploration, drilling, well completion and well treatment in the oil and gas extraction industry which are located landward of the inner boundary of the territorial seas as defined in 40 CFR 125.1(gg) and which are not included within subpart D, E, or F, Provided, however, That the applicability of this subpart to (a) facilities in existence on April 13, 1979 or thereafter engaged in the production, field exploration, drilling, well completion and well treatment in the oil and gas extraction industry which are located on land and which would have been considered “coastal” as defined under the interim final regulations for this industry (40 CFR 435.41, 41 FR 44942, October 13, 1976) or which are (b) located in the Santa Maria Basin of California is suspended.”

DEC did not correctly apply the part of the description where the Onshore Subcategory is partly defined by exclusion of those facilities that are included in Subpart D – Coastal Subcategory. Hence, interpretation of onshore applicability requires simultaneously evaluating the coastal applicability. While considering this exclusion of coastal facilities initially, DEC applied 40 CFR 435.40(a) solely as present in the ELG, which states:

“The provisions of this subpart are applicable to those facilities engaged in field exploration, drilling, well production, and well treatment in the oil and gas industry in areas defined as “coastal.” The term “coastal” shall mean:

- (a) Any location in or on a water of the United States landward of the inner boundary of the territorial seas; or...

While calling attention to the lack of transparency about the applicability to the ELGs contained in the EPA-issued 2004, 2008, and 2012 NSGP, DEC failed to realize that the reserve pits on the North Slope fall under the Coastal Subcategory. This realization resulted from statements from EPA when discussing the objection that indicate discharges of dewatering effluent is allowable from coastal facilities but not onshore facilities and that the 1996 ELGs only addresses the Coastal Subcategory and not the Onshore Subcategory. Hence, the inclusion of North Slope reserve pits in the 1996 ELG Development Document was an outgrowth of a determination by EPA that the wells on North Slope coastal plain are essentially applicable to the Coastal Subcategory. This point is reflected in other sections of the Development Document and the FR 96-28659 for the 1996 ELGs. FR 96-28659 includes additional information that illustrates how EPA determined coastal facilities under the ELGs. Per FR 96-28659:

“The term “coastal” refers to a location in or on a water of the United States landward of the inner boundary of the territorial seas. Note that all inland bays and wetlands are included in this definition. In addition, any location in Texas or Louisiana between the Chapman Line and the inner boundary of the territorial seas is defined as “coastal.” The Chapman Line is defined by points of latitude and longitude within the states of Texas and Louisiana which are stated in the rule.



The preceding table is not intended to be exhaustive, but rather provides a guide for readers regarding entities likely to be regulated by this action...”

The FR 96-28659 goes further to characterize North Slope coastal facilities in Section IV. Description of the Industry, which states:

“Coastal oil and gas activities include field exploration, drilling, production, and well treatment. Coastal activities are located on waters of the United States inland of the inner boundary of the territorial seas. These water bodies include inland lakes, bays and sounds, as well as saline, brackish, and freshwater wetland areas. Although the definition includes waters of the U.S. even in all inland states, EPA knows of no existing operations other than those in certain states bordering the coast. The definition also includes certain wells in Texas and Louisiana between the “Chapman Line” and the inner boundary of the territorial seas as coastal. Thus, at this time, the coastal oil and gas operations are located only in coastal states. Table 1 summarizes the number of producing wells and annual drilling activities for the coastal subcategory.”

TABLE 1.—PROFILE OF COASTAL OIL AND GAS INDUSTRY

Coastal location	Region	Number of producing wells (1992)	Number of production facilities (1992)	Annual drilling activity (wells)
Gulf of Mexico .....	Texas and Louisiana .....	4675	853	686
	Alabama and Florida .....	56	<sup>1</sup> ND	7
Alaska .....	Cook Inlet .....	237	8	9
	North Slope .....	2085	12	161
California .....	Long Beach Harbor .....	586	4	7
	Total .....	7639	877	870

<sup>1</sup> Not determined.

The Development Document also supports this determination. Per Chapter IV – Industry Description, Section 4.2.5, third paragraph:

“There are a total of 12 production facilities (gathering centers) on the North Slope, of which all but the Endicott gathering center are in the coastal region. The Endicott field is currently produced from two gravel islands constructed in the Beaufort Sea. The production facilities on these islands are permitted, by the Alaskan Department of Environmental Conservation, as offshore facilities. All the produced water from the Endicott field is injected for waterflooding.”

Based on this renewed understanding of the applicability the Coastal Subcategory versus the Onshore Subcategory of 40 CFR 435, DEC reengaged with EPA to explain their mistake. DEC encouraged EPA to reconsider their objection in light of this new understanding. On August 5, 2024 EPA responded in support of authorizing the discharge from open reserve pits with conditions. Specifically, EPA stated:

“The proposed NSGP established conditions for discharges from open reserve pits (Discharge 008) based upon the Onshore ELGs. Accordingly, additional changes to the draft permit documents are required to ensure compliance with the Coastal ELGs and other applicable CWA requirements. The Coastal ELGs specify “No discharge” of

drilling fluids, drill cuttings, and dewatering effluent, with the caveat that “BAT limitations in this rule are not applicable to discharges of dewatering effluent from reserve pits which as of the effective date of this rule no longer receive drilling fluids and drill cuttings. Limitations on such discharges shall be determined by the NPDES permit issuing authority.” Accordingly, effluent limitations are based on the date the open reserve pit last received drilling fluids and drill cuttings. DEC must include a provision in the permit that explicitly addresses the different conditions for Discharge 008 depending on the date drilling wastes were last disposed of in the relevant pit. Discharges of accumulated stormwater from open reserve pits that received drilling fluids and drill cuttings after January 15, 1997 are prohibited pursuant to 40 CFR 435.43. Discharges of accumulated stormwater from open reserve pits that did not receive drilling fluids and drill cuttings after January 15, 1997 are permitted; however, the permitting authority must establish effluent limitations based on case-by-case best professional judgment (BPJ) analysis. The federal statutory authority for BPJ determinations is based on CWA 1342(a)(1), promulgated at 40 CFR 125.3, and the process for establishing case-by-case limits is described in Part 5.2.3 of the NPDES Permit Writers’ Manual. This analysis must be included in a revised Fact Sheet and effluent limitations and monitoring requirements must be included in the permit.”

In a follow-up meeting with EPA on August 8, 2024 DEC proposed to initially issue the NSGP without the including an ability to authorize discharges from open reserve pits but simultaneously including a reopener clause to modify the permit later once DEC has conducted the case-by-case BPJ analysis as EPA requires. The BPJ analysis will require coordination with industry, which will require additional time. In addition, it is not good practice to conduct such coordination while the NSGP is still in a deliberative process. Lastly, industry needs other elements of the NSGP in the upcoming winter project season. DEC anticipates reopening the NSGP sometime over the winter once projects have discharge authorizations and the case-by-case BPJ TBEL analysis is completed. If successful, this will provide for authorizations for open reserve pits to be available by spring breakup. Note that given the discharges from closed reserve pits have been authorized since 2004, the discharges from closed reserve pits as stormwater will be retained as is. Meanwhile, DEC is modifying Fact Sheet Section 5.2.1.4 to read:

40 CFR 435 Subpart C D – ~~Onshore Coastal~~ Subcategory does not allow for the discharge of drilling fluids and drill cuttings based on ~~BPT Best Available Technology Economically Achievable (BAT) or Best Conventional Pollutant Control Technology (BCT). Because Best Practicable Control Technology Currently Available (BPT) is less stringent than BAT and BCT it is not applicable.~~ Per 40 CFR 435.3243 (BAT) and 40 CFR 435.44 (BCT), ~~“there shall be no discharge of wastewater pollutants into navigable waters from any source associated with production, field exploration, drilling, well completion, or well treatment (i.e., produced water, drilling muds, drill cuttings, and produced sand.”~~ all coastal facilities except Cook Inlet must meet a no discharge prohibition for drilling fluids and drill cuttings. However, for dewatering effluent both the BAT and BCT limitations state in Note 1, that:

**“BCT limitations for dewatering effluent are applicable prospectively. BCT limitations in this rule are not applicable to discharges of dewatering effluent**

**from reserve pits which as of the effective date of this rule no longer receive drilling fluids and drill cuttings. Limitations on such discharges shall be determined by the NPDES permit issuing authority.”**

**The effective date of this rule is January 15, 1997 and none of the affected open reserve pits have actively received drilling fluids or drill cuttings since the promulgation date. The applicant must certify in their request for coverage that this is correct. Hence, the discharge of dewatering effluent is allowable with limitations determined by the NPDES authority (i.e., DEC). The authority for DEC to determine limitations associated with precipitation and runoff that has come into contact with an industrial waste product is consistent with stormwater regulations associated with industrial activities. ~~the discharge of Ddrilling fluids and drill cuttings remaining in open RPs must not be discharged managed to reduce the possibility of being discharged with the accumulated precipitation and runoff proposed to be discharged under the NSGP. To help ensure that there are discharges of these solid phase pollutants are limited, DEC mandates the use of filtration to separate particulates that may be suspended in the water column in order to comply with the intent of 40 CFR 435. Furthermore, DEC makes this mandate the prime enforcement focus because it may be argued that it may be possible to comply with the prohibition to no discharge of drilling fluids and drill cuttings without filtration. Hence, if the permittee implements approved filtration then it is not possible for a violation of the ELGs to occur.~~ However, prior to having EPA approval to authorize discharges from open reserve pits in the Permit, DEC must complete a case-by-case BPJ TBEL analysis per Section 5.2.2.3.**

DEC is adding Section 5.2.2.3 BPJ for Discharges from Open Reserve Pits (Discharge 008), that reads:

**“[Placeholder] To authorize discharges from open reserve pits in the Permit, DEC must complete a case-by-case BPJ analysis in this section at a minimum. DEC will update this section as a Permit Modification as described in the Permit Section 3.5.1 Permit Reopener Clause. Also see Response to Comments Section 2.1.”**

Lastly, DEC is including a reopener clause in the Permit as shown below:

### **3.5 Other Permit Conditions**

#### **3.5.1 Permit Reopener Clause**

**Based on developing a case-by-case BPJ TBEL, DEC may modify and reissue the Permit per 18 AAC 83.135(b)(8) and update the Fact Sheet to authorize discharges from open reserve pits under Discharge 8 – Contained Water.**

In addition, the Table 7, note h) and Permit Sections 2.8.2 and 3.2.6.5 have been modified to state:

**[Placeholder for Discharges from Open Reserve Pits pending Permit Modification (See Fact Sheet Section 5.2.1.4).]**

## 2.2 EPA Comments 3 and 4:

### **Comment Summary: Contaminated versus Uncontaminated SCAs is unclear and discharge requirements are insufficient to ensure contaminated SCA water is not discharged.**

The definition of uncontaminated SCA in the Draft Permit reads:

“...a SCA where a spill has not occurred and a sheen, odor, or discoloration has not been observed. A contaminated SCA may be deemed uncontaminated after 12 months without a spill, observation of a sheen, discoloration, or odor, or an exceedance of Total Aromatic Hydrocarbons (TAH) and Total Aqueous Hydrocarbons (TAqH).”

It is not clear from the above definition if each individual requirement to deem a contaminated SCA an uncontaminated SCA has independent applicability. For instance, is sampling for TAH and TAqH required to deem a contaminated SCA uncontaminated? Or is 12 months without a spill, sheen, discoloration, or odor sufficient to make this determination?

Further, relying on the positive identification of an observed spill, sheen, odor, or discoloration does not appear adequate to decide that a SCA is uncontaminated. All contaminated SCAs should be required to sample for TAH and TAqH over the 12-month period and there should be no detectable hydrocarbons prior to being deemed uncontaminated and discharged as stormwater. As written, it is unclear if “...exceedance of TAH and TAqH” means an exceedance of detection levels, an exceedance of the permit limits applicable to Discharge 008, or something else. Additionally, the Fact Sheet should indicate whether “...12 months without a...” is intended to be 12 consecutive months.

Permit Part 2.8, pg. 21, reads:

“A permittee may request removal of the authorization for Contained Water (Discharge 008) once the SCA is determined to be uncontaminated (Appendix C – Definitions) for four consecutive months.”

Similar language is in the Fact Sheet on pg. 48. Please clarify if this means that after 16 months a contaminated SCA could be declared uncontaminated and discharged as stormwater (12 months to be deemed uncontaminated and four to remove authorization under Discharge 008 and be discharged as stormwater under Discharge 006).

Part 2.2.3.2 of the Fact Sheet related to contaminated SCAs includes the statement:

“In at least one occurrence, the pre-discharge analytical results were below the water quality criteria for hydrocarbons but the official analytical result of the actual discharged water violated the permit limits. This suggests that between the time the pre-discharge sample was sampled and when the supposed uncontaminated SCA water was discharged, the contained water became contaminated.”

It is clear either the pre-discharge sample had Quality Assurance and Quality Control (QA/QC) issues that resulted in a false negative, or it was not representative of the discharge – presumably, as noted in the fact sheet, because the SCA became contaminated between sampling events. The Permit should specify that samples should be taken at the discharge point. Further, TAH and TAqH should be monitored monthly and before each discharge event, to the extent practicable, to ensure that the water meets requirements when it is discharged.

**DEC Response:** DEC agrees that as written the definitions for contaminated and uncontaminated SCAs causes confusion. This issue is further compounded based on a general misunderstanding of what constitutes contamination in general, especially for precipitation and runoff that has come into contact with a waste source. Therefore, DEC establishes the following definition of contaminated stormwater in Permit Appendix C based on the stormwater regulations:

**“For this Permit, Contaminated Stormwater means precipitation or runoff that comes into contact with a potential pollutant source and DEC has determined that the discharge may contribute to a violation of a water quality standard or may be a significant contributor of pollutants to waters of the United States. Alternatively, DEC may determine that the precipitation or runoff despite being in contact with a potential pollutant source consistently meets water quality standards and can be discharged as uncontaminated stormwater.”**

For SCAs, the initial trigger for there to be determination of potential contamination in an SCA only includes the narrative conditions for sheen, odor, discoloration, or a spill of any volume. While odor and discoloration are part of the narrative criteria, these are not well suited for making a definitive determination as to the water quality but rather serves as another supportive observation that the water is contaminated. However, a spill or a sheen is definitive and requires immediate action such as removing the sheen and/or cleaning up the spill. Once the SCA is determined to be contaminated by observation of sheen or a spill, with supporting information such as odor or discoloration “in or on the water,” then the TAH and TAqH limitations are used as the definitive numeric criterion to comply with the limits as well as determining when the SCA is no longer contaminated. Although a sheen would restart the determination of contamination, odor or discoloration would not. Note that EPA suggests that the determination for whether or not the SCA is contaminated should be based on detection of the pollutant rather than meeting water quality criteria. This is an overly conservative position that DEC does not support and is inconsistent with 40 CFR 122.26; any water that meets WQS can be discharged as stormwater or an allowable non-stormwater (See Response to Comment 3.1 and the discussion on treatment in subsequent paragraphs). The determination that water is contaminated is based on exceeding criteria not exceeding analytical method reporting limits. The criteria for TAH and TAqH used in Alaska is the among the most stringent in the U.S. and are adequate for determining whether the SCA is contaminated or not.

In the 2017 NSGP, DEC used 12 consecutive samples to make the determination. However, given an understanding that there may be only four months each year where SCA water may be present on the North Slope, it would take a permittee three years to demonstrate the SCA is uncontaminated. Therefore, DEC is modifying the Permit to require four consecutive analytical results below TAH and TAqH criteria to align with the short thaw season on the North Slope. DEC missed this change in Permit Appendix C - Definitions and is changing the previous 12 sample results to four as shown below. Furthermore, based on discussion of how to apply narrative criteria DEC, is modifying the definition of uncontaminated SCA to:

**“Means a secondary containment area (SCA) where a spill has not occurred in the SCA and a sheen, odor, or discoloration has not been observed in or on the water. After a source of hydrocarbon contamination has been removed/mitigated, a contaminated SCA may be deemed uncontaminated after ~~12~~ four consecutive months ~~without a spill,~~**

~~observation of a sheen, discoloration, or odor, or an~~ **of monitoring demonstrate no exceedance** of TAH and TAqH **criteria.**”

DEC is also modifying the definition of contaminated SCA to:

“Means a secondary containment area where a sheen, discoloration, or odor has been observed **in or on the water,** or a spill has occurred **in the SCA.**”

Per Permit Section 2.1.4:

“The permittee must collect all effluent samples from the effluent stream of each discharge after the last treatment unit prior to discharge into the receiving waters, except as otherwise required by discharge-specific sections of this Permit and/or authorization.”

Hence, the discharge of contaminated SCA must be at the point of discharge. The situation in the Fact Sheet about a pre-discharge sample describes a practice voluntarily adopted by industry in an attempt to ensure that the discharge is in compliance prior to discharging and collecting a compliance sample. While DEC concurs that the high TAH and TAqH results may be from poor QA/QC, DEC does not think that taking a pre-discharge sample a month before discharging is adequate to ensure compliance. Furthermore, DEC understands that the frequency of discharges from SCAs at dispensing/transfer areas does not allow for adequate timing of pre-discharge sampling events. Therefore, Permit Sections 2.8.1 and 3.2.5.3 require treatment BMPs for sheen and dissolved hydrocarbon removal as applicable. This will help ensure compliance with limits and avoid situations where wastewater characteristics may change before discharging occurs. While DEC is not mandating pre-discharge sampling, the additional treatment BMP may reduce reliance on this practice and result in better compliance.

### **3 Comments from ConocoPhillips Alaska Inc. (CPAI)**

#### **3.1 Comment Summary: Discharges to Water versus Land Disposals**

Cover Page: CPAI recommends the following language also be incorporated into the second paragraph on the General Permit cover page:

“Owners and operators of facilities related to oil and gas exploration, production, and development activities, located in the North Slope Borough or coastal marine waters of the U.S. offshore of the North Slope Borough and landward of the inner boundary baseline (Attachment 1 – Coverage Area Map), are authorized to discharge stormwater and wastewater to waters of the United States and to lands and waters of the state, in accordance with effluent limits, monitoring requirements, and other conditions set forth herein.”

**DEC Response:** DEC considers the term “wastewater” to encapsulate “stormwater” in this case and does not believe a modification is needed. The proposed modification of the language pertaining to land is not referred to as a “discharge” to land. Discharges are to water as disposals are to land. DEC is careful not to mix language as it causes confusion in implementing the Permit.

No changes to the Permit or Fact Sheet have resulted from this comment.

### **3.2 Comment Summary: Reduced Monitoring Frequencies for Gravel Pits**

Permit Section 2.3 - Please consider adding language to reduce effluent sampling frequency for North Slope gravel mine sites that are in the process of naturally re-charging (re-filling). Previous weekly results (for settleable solids, pH, turbidity) from mine site waters have demonstrated clean, undisturbed water quality from mine site areas that have not been recently mined and are naturally filling with water. These results have been within authorized limits for withdrawal for ice road and pad use.

**DEC Response:** Frequencies are often determined by the worse-case condition and attempting to adjust frequencies on a project-by-project basis causes confusion. Dewatering of the gravel pits may occur to supply water for ice road construction and for dust suppression, as well as for gravel extraction which establishes the worse-case conditions due to the invasiveness of the activity. Gravel pit dewatering for gravel extraction should be daily based on activity. While the weekly sampling may seem burdensome for the prior, the disruptive nature of the latter leads to weekly sampling as an implementable compromise.

No changes to the Permit or Fact Sheet have resulted from this comment.

### **3.3 Comment Summary: Adaptive Permitting Based on Project Scale**

Permit Section 2.4 and Table 4 - For larger scale excavations where excavation timing, pumping rates, and multi-day engineering controls could be used to offset daily sampling needs, please consider adding options to the sampling table and to Section 2.4 conditions such that the Permittee has ability to work with the Department for a fit for purpose sampling schedule.

**Response:** While it would be advantageous to address each discharge on a project-by-project basis, it would create an extraordinary burden on Department resources and lead to inequalities in application and compliance. For this reason, DEC treats applicants/permittees equal and monitoring frequencies must be applied holistically once permit is effective.

No changes to the Permit or Fact Sheet have resulted from this comment.

### **3.4 Comment Summary: Definition of SCA**

Appendix C - Contained Water is defined in Appendix C. CPAI suggests defining the SCA as in the Fact Sheet to the Permit in Appendix C.

**DEC Response:** The Draft Permit, Appendix C - Definitions included a definition of "Secondary Containment Discharge that incorporates the request wording plus additional wording describing what is discharged and other direct regulatory authority over SCAs. DEC agrees to modify the definition in Permit Appendix C for Secondary Containment Area, which now states:

**“Diked or bermed areas around oil storage tanks, tank farms, fuel transfer stations, and tanker truck loading racks which provide an emergency storage area and help to prevent accidental spills from reaching the environment, state waters, or Waters of the U.S. These areas are typically constructed of steel or synthetic liners with or without**

**gravel on top to protect the synthetic liner and fall under authority of 40 CFR - 112 Oil Pollution Prevention or 18 AAC 75 – Oil and Other Hazardous Substances Pollution Control, Article 1.”**

**3.5 Comment Summary: Define “Large” Sedimentation Basin**

Permit Section 2.4.4 - The newly incorporated concept of “large sedimentation basins” is not defined. Please specify a dimension for what is considered “large” or define in the definitions in Appendix C.

**DEC Response:** DEC agrees that "large sedimentation basins" is not defined but also believes that it is unnecessary to limit the discussion based on a size. Therefore, has removed the qualifier "large." 2.4.4 now reads:

"The use of ~~large~~ sedimentation basins, with or without chemical addition, must be submitted with the NOI for Department review.”

No other changes have been made to the Permit and Fact Sheet due to this comment.

**4 Comments from Hilcorp Alaska, LLC (Hilcorp)**

**4.1 Comment Summary: Definition of Contained Water**

The current definition for Contained Water (Discharge 008) in the Permit is limiting and not inclusive of discharges and associated pollutants that are discussed within the Permit and the Fact Sheet for this discharge category, such as fluids from sedimentation basins that may contain turbidity. As such, Hilcorp recommends the definition for Contained Water (Discharge 008) be modified to:

*“Contained Water means waters from contaminated SCAs, open RPs, sedimentation basins, and other miscellaneous contained water that is outside the narrow description of hydrostatic test water. Water may be generated from infrastructure which includes, but is not limited to, vaults, utilidors, basements, water tanks, water lines, sedimentation basins, or other infrastructure with contained water. It may include additional waters as determined on a case-by-case basis.”*

**DEC Response:** DEC failed to update the definition of “Contained Water” to reflect the description in the Fact Sheet. DEC concurs with the updated definition Hilcorp has provided and has included it in the definition of “Contained Water” in the Permit Appendix C.

No other changes have been made to the Permit and Fact Sheet due to this comment.

**4.2 Comment Summary: Definition of SCA**

The definition of an uncontaminated SCA under Appendix C of the Permit is not consistent with Permit Section 2.8. Hilcorp recommends modifying the definition to:

*“Uncontaminated Secondary Containment Area (SCA) means a secondary containment area (SCA) where a spill has not occurred and a sheen, odor, or discoloration has not*



*been observed. A contaminated SCA may be deemed uncontaminated after **four consecutive months** without a spill, observation of a sheen, discoloration, **odor**, or an exceedance of TAH and TAqH.”*

**DEC Response:** DEC appreciates calling out the definition of “uncontaminated SCA that DEC failed to update. Per previous comment 2.2, DEC has modified the definition of “contaminated and uncontaminated SCAs” based on this previous comment.

No other modifications to the Permit and Fact Sheet have resulted from this comment.

#### **4.3 Comment Summary: More Details are Needed for Predischage Sampling**

For clarity, Hilcorp recommends including the necessary Notice of Intent (NOI) details for DEC open reserve pits within Section 1.5 of the Permit. Currently, these requirements are very briefly discussed within Table 7 Note ‘e’ and within the Fact Sheet. Furthermore, Hilcorp recommends incorporating a list of specific parameters that will require analysis for submittal with the NOI as the actual analyses required for the NOI are not clear within the Permit.

**DEC Response:** DEC cannot necessarily predict exactly which analyses will be required for any given project over the entire permit term, which is the driver for pre-application meetings where details of this nature can be settled. There may be increased sampling requirements that coincide with new human health criteria that we cannot explicitly enumerate in the Permit at this time. Or, there may be a reduction in analytes once sufficient data has been obtained over time. However, the response to Comment 2.1 indicates the initial analytical sampling requirements must include both total and dissolved metals and dissolved hydrocarbons as provided in the Metals and Hydrocarbon Summary Tables attached to this RTC.

No changes to the Permit or Fact Sheet have resulted from this comment.

#### **4.4 Comment Summary: Timing of Reserve Pit Predischage Sampling**

Hilcorp would like to confirm if it is acceptable for the NOI sampling to occur in the fall of the preceding year. Fall is when worst-case water quality conditions are more likely to be encountered due to lower water levels within the reserve pits and wave action impacts. This will alleviate the need for short-notice sample collection and approval during the spring breakup season. If sampling were to occur in the spring, samples may have to be collected under ice to employ the option to dewater during spring breakup. Additionally, samples collected during breakup conditions may be diluted due to high volumes of snowmelt.

**DEC Response:** DEC understands the ideal timing based on logistics would be fall sampling. However, as reflected in concerns from other authorities, fall sampling could be too far prior to discharging to ensure water quality has not changed by the time of discharge, such as from an unknown spill event. Sampling under ice is also a concern because ice tends to expel pollutants as it freezes leaving potential for the water samples to be biased high due to such expulsion. The ideal condition is to capture water quality as close to the time of discharging as possible. However, given the case-by-case ability for DEC to impose sampling while discharging per Permit Section 2.8, Table 7, Note h) and also ability by applicant to self-evaluate seasonal effects there may be flexibility to consider alternative sampling timelines once data is available to alleviate concerns over accurately characterizing predischage water quality.

No modifications to the Permit or Fact Sheet have been made based on this comment.

#### 4.5 Comment Summary: Filtration Mandate

Hilcorp requests that the requirement for filtration of reserve pit waters be limited to only those waters that do not already meet water quality criteria for settleable solids, total suspended solids, turbidity, or barite metals. Filtration of reserve pit waters already meeting those water quality criteria provides no added protection or benefit. BMPs that will be more effective in ensuring there is not a discharge of muds or disruption of solids from the reserve pit include those that are already identified within the Permit and Fact Sheet, such as use of a floating pump, ensuring low intake velocity, and positioning the intake away from known or suspected locations of higher elevation drilling muds within the reserve pit. Suggested wording for Permit Table 7 Note ‘g’ and Section 2.8.2: “To ensure compliance with the prohibition to no discharge of drilling fluids and drill cuttings, the permittee must implement filtration and other precautions per Section 3.2.5.5, **when water sample analyses do not meet water quality standards for discharge to tundra.**”

**DEC Response:** This comment is similar to EPA Comment 2.1. Although DEC agrees that it is possible to prevent the discharge of drilling fluids or drill cuttings from open reserve pits without filtration, the ELGs are absolute; drilling fluids and drill cuttings are prohibited. Mandating filtration matches an absolute prohibition with an absolute barrier preventing discharge of particulates associated with drilling fluids and drill cuttings. All it would take is for the pump intake to rest on the bottom of the reserve pit for the prohibition to be violated and the addition of filtration makes this realistic occurrence moot.

No changes to the Permit or Fact Sheet have resulted from this comment.

#### 4.6 Comment Summary: Remove Restriction on Discharges from Drill Site 7

Hilcorp requests the removal of the restriction on dewatering of specific reserve pits from authorization solely based on results of the reserve pit sampling, such as at Drill Site 7 (DS-7). If filtration is adequate to ensure that discharged fluids will meet water quality criteria post filtration, including barite metals, then the discharge should be able to be authorized. Per Fact Sheet Section 6.7.1.3: “In order to obtain approval, the applicant may submit samples post filtration as appropriate.” This statement indicates that if the filtration or applicable treatment process is sufficient to remove elevated barite metals to a level that meet water quality criteria, then the discharge may still be authorized.

**DEC Response:** DEC agrees that DS-7 should not be treated differently than other reserve pits based on limited data. The statement for obtaining approval post-filtration was intended to reflect DEC authority to require sample collection post-filtration while discharging in addition to the pre-discharge results and align with Permit Section 2.8, Table 7, Note h). The second sentence in Fact Sheet 6.7.1.3 has been modified to read:

“In order to obtain approval, the applicant may **be required to** submit samples post filtration **as appropriate on a case-by-case decision by DEC to supplement pre-discharge results.**”

No other changes to the Permit or Fact Sheet have resulted from this comment.

#### **4.7 Comment Summary: Eliminate Settleable Solids Monitoring for Disposals**

Per Fact Sheet Section 6.8.1, the current application of the limit for Settleable Solids (SS) based on WQS directly to the discharge equates the land disposal to a direct injection into groundwater. This does not account for any natural filtration that may occur during discharge infiltration into the land area prior to the discharge reaching groundwater. Further, having an effluent limitation for SS may not solely prevent sedimentation or siltation of the infiltration area. As such, Hilcorp recommends removal of the SS limit and aligning the Permit limitations for land disposals to be consistent with the land disposal requirements in current General Permit AGK002000 for Excavation Dewatering, the current General Permit AKG003000 for Hydrostatic and Aquifer Pump Testing, and the expired General Permit AKG320000 for Statewide Oil and Gas Pipelines, i.e., flow and visual oil and grease (sheen). Should SS be a concern of the disposal, this can be evaluated in the engineering plan review process under 18 AAC 72 and applicable BMPs or restrictions for SS can be put in place through the approval.

**DEC Response:** DEC disagrees that SS limitations for land disposal should be issued on a case-by-case basis during plan approval. The SS limitation functions as check on best practices that ensure sediment is managed appropriately from the dewatering area. Note too that it helps not only to prevent reducing infiltration capacity but also to protect any vegetation that may be in the infiltration area. Note that disposals in AKG003000 or AKG002000 will include a similar limitation for the same reasons as the NSGP during their next reissuance.

No changes to Permit or Fact Sheet have resulted from this comment.

#### **4.8 Comment Summary: Include Automatic Land Disposal Authorizations**

Hilcorp requests that an option for automatic coverage of certain land disposals be incorporated into the Permit, similar to that of current General Permit AKG002000 for Excavation Dewatering, the current General Permit AKG003000 for Hydrostatic and Aquifer Pump Testing, and the expired General Permit AKG320000 for Statewide Oil and Gas Pipelines (PLGP).

**DEC Response:** DEC has reevaluated the automatic authorization provision for land disposals less than 500,000 gallons per day (gpd) in the PLGP and has concluded that it has not been successfully implemented and possibly gives too much discretion. The automatic authorization appears to be open for very broad interpretation and there was some failure in self-reporting that led to concerns over accountability; DEC was not able to verify whether certain automatic authorizations were valid and appropriate based on follow up reporting. In addition, including automatic authorization for land disposals would contradict the requirement to submit a plan for approving land disposal locations only to areas appropriate for infiltration to groundwater. Given the observed deficiencies in implementation in the PLGP and the desire to limit land disposal approvals, DEC is concerned that applicants may take liberty and shortcut appropriate planning to ensure a disposal location will not result in site runoff thereby transitioning to a discharge instead of disposal to groundwater. In regard to AKG002000, that general permit has much broader statewide application (e.g., small construction projects) whereby an automatic authorization may be deemed prudent. Whereas, the NSGP and PLGP disposals are confined to a better defined range of industrial application and sites. Hence, the NSGP and the PLGP may diverge from AKG002000 on this issue for good cause.

No modifications to the Permit and Fact Sheet have resulted from this comment.

#### **4.9 Comment Summary: Reconsider the 1,500-foot Setback to Disposal Locations**

Hilcorp recommends removing plan review condition number three from Section 2.9. Land disposals in the proximity of these areas do not necessarily result in a discharge to WOTUS or state waters. Nor would they definitively result in an impact to nearby groundwater wells that supply public or private water systems or impact nearby contaminated sites. Potential impacts ultimately depend on the nature of the discharge (e.g., volume). Rather than a blanket limitation on disposals within 1,500 feet of these areas, Hilcorp recommends potentially sensitive receptors or areas be identified within the NOI process. For contaminated sites, Hilcorp recommends that a coordination with the DEC Contaminated Sites Program be conducted by permittees. This aligns with current General Permit AKG002000 for Excavation Dewatering, current General Permit AKG003000 for Hydrostatic and Aquifer Pump Testing, and the expired General Permit AKG320000 for Statewide Oil and Gas Pipelines. If deemed necessary to afford additional protection, the DEC could require BMPs for land disposals within 1,500 feet of potentially sensitive areas.

**DEC Response:** DEC acknowledges that the 1,500-foot requirement may be arbitrary unless coupled with knowledge of the disposal such as volume and water quality. Therefore, DEC is restating Plan Submittal review item 3 to read:

3. Disposal ~~location does will~~ not ~~have a well, wetland, or waterbody within 1,500 feet~~ result in an adverse effect to nearby sensitive receptors (e.g., water wells, wetlands, or waterbodies) or known contaminated groundwater.

#### **4.10 Comment Summary: Clarify and Redefine Disposal Language**

For clarity, Hilcorp recommends modifying Permit Section 2.9 to state: “Land disposals under the Permit may include Gravel Pit Dewatering (Discharge 003), Excavation Dewatering (Discharge 004), Hydrostatic Test Water (Discharge 005), and certain Contained Water (Discharge 008). For this Permit only, land disposal is considered a location where water is placed *onto and infiltrates into the ground*. *Disposal to a wetland, dry stream channel, or upland area that does not infiltrate into the ground, are not examples of land disposal. To obtain coverage for the applicable land disposals (Discharges 003, 004, 005, and 008), the applicant is responsible for ensuring the disposal does not result in a discharge to WOTUS or state waters. Table 8 provides the limits and monitoring for disposals.*”

**DEC Response:** DEC disagrees with this modification. The modification could restrict the ability to construct a subsurface infiltration system, if appropriate. DEC does not intend to limit land disposal in that manner and intentionally envisions a broad application so long as it complies with 18 AAC 72 and 18 AAC 70. In addition, the inclusion of land disposal in the NSGP provides flexibility in issuing an approval letter separately from a Permit authorization or as part of the authorization depending on alignment with the NSGP.

No modifications to the Permit or Fact Sheet have resulted from this comment.

#### 4.11 Comment Summary: e-Reporting Waiver Provision Needs Clarification

Hilcorp requests clarity of reporting for situations where a permittee declines or accidentally fails to seek the e-reporting waiver under 40 CFR 127.15(b)(2) discussed in Section 1.5.1.3 of the permit. Currently, there is no discussion of the reporting requirements in this scenario, especially since seeking the waiver is at the option of the permittee.

**DEC Response:** DEC is adamant about mandating reporting in the Environmental Data Management System (EDMS) by directly applying waiver provisions of 40 CFR 127.15(b)(2) without requests by the applicant. The waiver is now to be automatically granted to permittees with an ability for the applicant to contest the granting for good cause. Permit Section 1.5.1.3 e-Reporting Waivers **Requests** now reads:

**“For any potential discharges to WOTUS, the ~~applicant may request~~ Department will apply a waiver to the Electronic Reporting (e-Reporting) Rule per 40 CFR 127.15(b)(2). ~~The applicant is responsible for verifying WOTUS designations, if not already defined, as described in 40 CFR Part 120.~~ Existing administratively extended authorizations receiving automatic renewals will ~~be assumed to~~ have a waiver unless the permittee provides a written ~~request not to be granted~~ justification that a waiver should not be granted automatically, if applicable (i.e., WOTUS discharge). Once EDMS is upgraded to transfer data directly to EPA, all waivers will become null and void.”**

In addition, the second to last sentence in the first paragraph of Fact Sheet Section 2.2.2 is being deleted as shown below:

**~~“Application forms for short-term authorizations under the NSGP will contain a required section satisfying the requirements for temporary waiver from electronic reporting as seen in 40 CFR Part 127.15(b)(2).”~~**

No other modifications to the Permit and Fact Sheet have resulted from this comment.

#### 4.12 Comment Summary: Table 1 Note for Reporting Options is Inconsistent

Table 1 Note ‘a’ indicates that submittals can be submitted in EDMS, but also indicates that alternative submittal methods are available upon request. This does not align with the paragraph prior to Table 1 and the following Permit sections: 1.5.1, 2.11.1, 2.11.2, 2.11.3, and 3.4.1. Hilcorp recommends ensuring these discussions are aligned for clarity, and that the option for alternative submittal methods outside of EDMS be retained. Additionally, if the e-reporting waiver is not sought by the permittee, then the flexibility of alternative submittal methods needs to be retained, such as for submittals within netDMR.

**DEC Response:** DEC Wastewater Discharge Authorization Program (WDAP) is in a transitional phase of moving all reporting to EDMS. Although adamant about transitioning completely to EDMS, WDAP cannot predict all situations that could pose problems during this transition so intends to make allowances for unique, unanticipated situations. Alternate submittal methods are technically allowed, but DEC wishes to streamline the process and promote consistency, as such alternate methods have not been stressed to discourage their use. To clarify this limited allowance, Permit Table 1, Note a) is modified to read:

“Submittals ~~can~~ must be submitted in the EDMS. Alternative submittal methods ~~are available~~ may be considered temporarily based on extenuating circumstances ~~available upon request~~.

No other modifications to the Permit and Fact Sheet have resulted from this comment.

#### **4.13 Comment Summary: Table 1 Annual Reports Does Not Align with Permit**

In Table 1, for annual reports, it is recommended that the due date indicate “No later than January 31 *of the following year or upon submittal of a NOT*” to align with Section 2.11 of the Permit.

**DEC Response:** DEC agrees and has modified Table 1 to read:

“No Later than January 31 of **the following each** year or upon submittal of an NOT.”

Based on this comment, DEC has also modified Permit Section 3.4.1 to be consistent with this modification.

No other modifications to the Permit or Fact Sheet have been made based on this comment.

#### **4.14 Comment Summary: BMP Language is Not Consistent**

For clarity, Hilcorp recommends including discharge specific BMP requirements within Section 3.2.5 rather than repeating the requirements within the applicable discharge limitation sections (Sections 2.1-2.5 and 2.7-2.8). This will also provide clarity as these sections are often not aligned. For example, Permit Section 2.3.1, which applies to Gravel Pit Dewatering (Discharge 003) currently does not align with Permit Section 3.2.5.2. Furthermore, Section 2.3.1 references Section 3.2.5.1 which only applies to Graywater (Discharge 002).

**DEC Response:** As written, the discharge-specific limitations sections contain only brief BMP instructions and direct the permittee to section 3.2.5 for more information. Each section has been revised for consistency, but DEC believes the BMP directions deserve a mention with each discharge-specific limitation. The typographical error in section 2.3.1 in which the section 3.2.5.1 is referenced has been fixed, now 3.2.5.2 has been referenced.

No other modifications to the Permit or Fact Sheet have been made based on this comment.

#### **4.15 Comment Summary: Acknowledging QAPP Completion in NOI**

Permit Section 1.5 - To align with Section 3.1.1, Hilcorp recommends incorporating a section within Section 1.5 that highlights the need for a permittee to acknowledge within the NOI that a Quality Assurance Project Plan (QAPP) is required to be implemented and available prior to discharge.

**DEC Response:** DEC agrees that additional language in Permit Section 1.5 should be included to align with Permit Section 3.1.1 but also 3.2.1. Therefore, DEC is adding Permit Section 1.5.4 QAPP/BMP which states:

**“The QAPP/BMP should be completed and ready to implement before any discharges take place. In the NOI, the applicant must indicate the QAPP and BMP Plan will have been developed and be available for implementation. The authorization effective date may be determined based on a future date when completion has been accomplished. The date of the QAPP/BMP must be prior to the effective date of the authorization.”**

No other modifications to the Permit or Fact Sheet have been made based on this comment.

#### **4.16 Comment Summary: Graywater Should Not be in the Section**

Permit Section 1.5.4.1.2 - Hilcorp recommends the removal of the reference to graywater in this section. This section is only applicable to Contained Water (Discharge 008).

**DEC Response:** DEC did not intend Permit Section 1.5.4 to only apply to authorizations to discharge marine dredge decant water but rather ensure inclusion of those discharges and other potentially unknown discharges under Discharge 008 – Contained Water that require a public notice prior to issuing an authorization. The intent of Section 1.5.4 is to establish the minimum content of authorizations, which could include approval of graywater per 18 AAC 72. To clarify this intent, DEC is modifying Permit Section 1.5.4 to read:

“Upon completion of ~~the either an~~ NOI review, or a 30-day public notice for a Statement of Basis in the specific case of discharges ~~from contained marine dredge material, or other contained water sources~~ not considered in the public notice of the permit, the Department will do one of the following:”

No other modifications to the Permit or Fact Sheet have been made based on this comment.

#### **4.17 Comment Summary: Sequence of Reporting with Inactivation Process**

Permit Section 1.6.2.1 - Hilcorp would like to point out that not all data for the reports and certifications may be available 30 days prior to the notification requirement. As such, Hilcorp recommends that this section indicate that all required reports and certifications for the specific discharge be submitted to the DEC within 30 days of inactivating the discharge.

**DEC Response:** Permit Section 1.6.2.1 covers inactivation of an outfall whereby the authorization is revised rather than terminated with an NOT. Because the authorization is not terminated and reporting is annual, DEC has flexibility on the timing of inactivating outfalls and can do so retroactively once the information has been reported. Note that DEC anticipates the ability or the permittee to enter report data in EDMS at any time. DEC envisions that the permittee will enter the last discharge data for the outfall to be inactivated and then submit an NOI, rather than an NOT, to inactivate an outfall that is no longer needed. If the permittee does not want to revise their authorization to remove the outfall timely, this will only mean that when it comes time to submit the annual report the outfall will have numerous months where there is no discharge and only have to report the months where discharges occurred. This is one of the reasons DEC is moving toward annual reports only in EDMS because it eliminates the issues of failing to report “Discharge Monitoring Reports” on a monthly basis. For the NSGP, DEC does not believe there will be as many occurrences of inactivating outfalls on long-term authorizations as much as there will be terminating short-term authorizations under Permit Section 1.6.2.2.

Nonetheless, the ability to inactivate outfalls will be available if for no other reason to be consistent with other general permits (e.g., PLGP).

No changes to the Permit or Fact Sheet have resulted from this comment.

#### **4.18 Comment Summary: Attachment versus Appendix 3**

Permit Table 3 Note ‘e’ and Table 4 Note ‘d’ - Hilcorp believes the reference to “Appendix 3” should be “Attachment 3”. Furthermore, Attachment 3 is currently mislabeled as Attachment 2.

**DEC Response:** Agreed, Table 3, Note e) and Table 4, Note d) have been modified to change from **Appendix 3** to **Attachment 3**.

No other changes to the Permit or Fact Sheet have been modified based on this comment.

#### **4.19 Comment Summary: Incomplete Sentence in Permit Section 2.4.1**

Permit Section 2.4.1 - The last statement of this section is incomplete.

**Response:** Agreed, the error has been corrected in the last sentence that now reads:

“**Additional BMP requirements** may be added to the authorization based on unique project components identified in the NOI and plan reviews.”

No other changes to the Permit or Fact Sheet have been modified based on this comment.

#### **4.20 Comment Summary: Correct Reference for Fact Sheet Section 4.5**

Permit Section 2.6.1 - For clarity, Hilcorp recommends indicating that Section 4.5 is in the Fact Sheet.

**DEC Response:** Agreed, DEC has modified the second sentence in Permit Section 2.6.1 to read:

“Examples of common support activities and facilities can be found in the characterization section for storm water discharges (**Fact Sheet** Section 4.5).

No other modifications to the Permit or Fact Sheet have resulted from this comment.”

#### **4.21 Comment Summary: Align Airport Restriction with Multi-Sector Permit**

Permit Section 2.6.1.3 - To be consistent with the Multi-Sector General Permit AKR06000 for Storm Water, Hilcorp recommends that this section indicates it is for airstrips with less than 1,000 annual *non-propeller aircraft* departures.

**DEC Response:** Agreed, DEC has modified Permit Section 2.6.1.3 to read:

“The support activity or ancillary facility is not a commercial operation serving multiple, unrelated projects or entities (e.g., commercial gravel pit operation or public airport or an airstrip with more than 1000 **non-propeller aircraft** departures per year).”

No other modifications to the Permit or Fact Sheet have resulted from this comment.



#### 4.22 Comment Summary: Call Out Appendix A – Standard Conditions

Permit Section 2.11.3.1 - For clarity, Hilcorp recommends indicating that the Standard Conditions are within Appendix A.

**DEC Response:** Agreed, has modified Section 2.11.3.1 to read:

“The instructions for reporting in Standard Conditions Sections 1.1.1 or 1.1.2 are superseded by this Permit. The Standard Conditions will be modified to reflect the new reporting restrictions at a later time. **The Standard Conditions can be found in Appendix A.**”

No other modifications to the Permit or Fact Sheet have resulted from this comment.

#### 4.23 Comment Summary: Inspection Documents Misplaced in Section

Permit Section 2.11.10 - Hilcorp believes that the statement “...and documenting biannual inspections and maintaining these documents onsite is their responsibility” within this section was intended to be in Section 2.11.9.

**DEC Response:** Agreed, the phrase “documenting biannual inspections and...” does not apply to QAPP/BMPs and has been removed per below:

“For Discharges 002-005 and 007-008 the permittee must acknowledge in the annual report the understanding that certification of BMP and QAPP and ~~documenting biannual inspections and~~ maintaining these documents onsite is their responsibility (See Section 3.2.6).”

No other modifications to the Permit or Fact Sheet have resulted from this comment.

#### 4.24 Comment Summary: Combine Sections and Eliminate Duplicative Requirements

Permit Section 3.4 - Hilcorp recommends combining Section 3.4 with Section 2.11 and then eliminating 3.4 entirely.

**DEC Response:** DEC has deliberately repeated the specific points described in section 3.4 to stress the change in the how the annual reporting will be performed. To align with a previous comment on Table 1, Permit Section 3.4.1 has been modified to read:

“Effluent Monitoring and Compliance Reporting must be submitted through the EDMS annually no later than January 31 ~~each~~ **of the following** year or upon submittal of an NOT.”

No other modifications to the Permit or Fact Sheet have resulted from this comment.

#### 4.25 Comment Summary: Row References in Permit Table 7 and Fact Sheet Table 10

Fact Sheet Section 6.7.1.3 - Hilcorp believes that Row 8, Total/Dissolved Barite Metals, of Table 10 (Table 7 of the Permit) was the intentional referenced monitoring parameter “if data suggests that dissolved metals may be near respective water quality criteria”, not Row 7, Marine Turbidity.

**DEC Response:** DEC has corrected the reference to Fact Sheet Table 10, row 7 to be row 8. To correct Fact Sheet Table 10, Note h) and Permit Table 7, Note h) DEC has added “or hydrocarbons” as shown below:

“A filtration BMP on the discharge from RPs is mandatory. Prior to obtaining authorization to discharge from Open RPs, the applicant must submit dissolved and total recoverable barite metals with the NOI using a four-grab composite in the area surrounding the proposed pump intake. DEC may require additional monitoring of barite metals or hydrocarbons during discharge on a case-by-case basis.”

No other modifications to the Permit or Fact Sheet have resulted from this comment.

**4.26 Comment Summary: Correct Reserve Pit Sampling Dates Fact Sheet Attachment C**  
Fact Sheet Attachment C Section 1.2.3 - Hilcorp would like to clarify that the sampling effort for DEC open reserve pits occurred in 2021, not 2022 as is indicated within this section. The data was provided to the DEC in 2022.

**DEC Response:** DEC has corrected the error.

No other modifications to the Permit or Fact Sheet have resulted from this comment.

**4.27 Comment Summary: Incorrect Naming of Mine Sites in Fact Sheet Attachment F**  
Fact Sheet Attachment F - Hilcorp would like to clarify that ‘Sag Mine Site C’ and ‘Vern Lake/MS C’ are the same mine site. Furthermore, this mine site has been rehabilitated. As such, Hilcorp recommends the removal of the mine site from Table E.1 and combining the two applicable names into a single line item within Table E.2.

**DEC Response:** This has been addressed, as have other errors in the Tables ~~E.1~~ and ~~E.2~~ including correcting them to Tables F.1 and F.2 to be consistent with the Attachment F.

No other modifications to the Permit or Fact Sheet have resulted from this comment.

## **5 Comments from Arianna Sosnowski**

### **5.1 Comment Summary: Consider Local Input**

There are hundreds of articles and thousands of people speaking out against oil and gas exploration on the North Slope. There are many people for the exploration; however, the people speaking against it are the ones living off the land and the ones with the most to lose. I implore you to consider the people speaking out when reviewing this permit.

**DEC Response:** DEC contacts local and tribal governments well in advance of issuing a permit through our Tribal Liaison. The first outreach happens once we have received an application from the permittee months prior to the next Permit is available for review. We subsequently conduct outreach at the 10-day applicant review of the Preliminary Draft, at the 30-day public notice, the five-day applicant review of the Proposed Final Permit, and once it is issued final

(See RTC Section 1.2). Despite our outreach efforts unfortunately we have not received any input or comments resulting from outreach efforts to local and Tribal Governments for us to consider at this time.

No changes to the Permit or Fact Sheet have resulted from this comment.

## 6 Comments from DEC Environmental Health, Drinking Water Program

### 6.1 Comments Summary: Add BMPs for Drinking Water Protection Areas

The Division of Environmental Health, Drinking Water Program (DEH DWP) submitted comments recommending that DEC include in the Permit source water protection language from 18 AAC 80.015(a) - **Well protection, source water protection, and well decommissioning**, which states:

- a) A person may not
  - (1) cause pollution or contamination to enter a public water system; or
  - (2) create or maintain a condition that has a significant potential to cause or allow the pollution or contamination of a public water system.

DEH DWP then provides 8 recommendations for additional BMPs relating to Drinking Water Protection Areas (DWPAs) as briefly summarized below:

1. Map the location of the DWPA near the project site,
2. If overlap, contact the Public Water System (PWS) with project information,
3. Within the DWPA, direct Stormwater and wastewater away from the PWS,
4. Within the DWPA, restrict project/permit activities that could significantly and/or permanently change the natural surface water immediately contributing to the PWS,
5. Within the DWPA, implement voluntary BMPs to locate other potential sources away from the PWS,
6. Restrict or limit potential sources of contamination away from high-priority DWPA zones (typically a 1,000-foot buffer around the PWS),
7. Any and all non-proprietary data should be made available to EH DWP upon request, and
8. Maintain agency and PWS contacts so to immediately notify in case of potential contamination such as spills or excess erosion.

**DEC WDAP Response:** The recommendations provided by EH DWP are not appropriate for inclusion into an APDES Permit under the CWA and demonstrates a significant lack of understanding over the purpose and implementation of the APDES Program (18 AAC 83) and State WQS (18 AAC 70). For example, APDES Permits, or authorizations under an APDES General Permits, must comply with State WQS. State WQS applies water quality criteria in a manner that protects “all” uses of the receiving water, including drinking water by adhering to Drinking Primary Water Maximum Contaminant Levels (MCLs) codified in the “Alaska Water Quality Criteria Manual for Toxic and Other Deleterious Organic and Inorganic Substances, September 8, 2022” or other criteria that may be more stringent. Focusing on freshwater and groundwater (marine water excluded), 18 AAC 70.050 classification of State Water states:

“Except as specified in 18 AAC.230(e), state water is protected for the following use classes:

1. Freshwater – Classes (1)(A), (1)(B), and (1)(C);
2. Groundwater – Classes (1)(A)...

Note that 18 AAC 70.230(e) lists waterbodies where the receiving water has been reclassified. None of the waterbodies on the North Slope have been reclassified and DEC must protect all classes that apply. Applicable Use Classes for the North Slope is in 18 AAC 70.020(a)(1):

(1) fresh water

(A) water supply

- (i) **drinking**, culinary, and food processing;
- (ii) agriculture, including irrigation and stock watering;
- (iii) aquaculture;
- (iv) industrial;

(B) water recreation

- (i) contact recreation;
- (ii) secondary recreation;

(C) growth and propagation of fish, shellfish, other aquatic life, and wildlife;

When applying criteria for a waterbody, including those that may be a drinking water source, 18 AAC 70.040(1) applies, which states:

“In applying the appropriate water quality criteria for any waterbody or portion of a waterbody, the department will use the following procedures:

- (1) if a waterbody is protected for more than one use class under 18 AAC 70.050 or 18 AAC 70.230(e), the most stringent water quality criteria for all the included use classes will apply;...”

Since none of the waterbodies on the North Slope have had a reclassification of applicable uses, DEC must apply the more stringent among those listed under 18 AAC 70.020(1)(A) and (B) as shown above. Primary MCLs are not typically the most stringent criteria that is applied to receiving waters; growth and propagation of fish, shellfish, other aquatic life, and wildlife are normally the most stringent. Hence, the discharge of wastewater does protect the drinking water use, does not enter the PWS, nor “create or maintain a condition that has a significant potential to cause or allow the pollution or contamination of a PWS.” This assertion includes of mixing zones authorized per 18 AAC 70.240.

Mixing zones are allowed when the effluent cannot meet the most stringent water quality criterion at the point of discharge despite having adequate and appropriate treatment. All criteria for all uses must be met at the boundary of the mixing zone approved by WDAP. In order to approve a mixing zone, the applicant must demonstrate the mixing zone will not result in adverse

effects to drinking water systems to the satisfaction of WDAP per 18 AAC 70.240. Specifically, per 18 AAC 70.240(c):

“The department will approve a mixing zone, as proposed or with conditions, only if the Department finds that available evidence reasonably demonstrates that...(4) the mixing zone will not...(B) create a public health hazard that would preclude or limit existing uses of the waterbody for water supply or contact recreation; ...”

To comply with 10.240(c)(4)(B), the applicant must identify any drinking water intake within the receiving water so that WDAP may consider impacts. Based DEC review of the discharges authorized in the NSGP, their potential location relative to PWS, WDAP does not need to add the additional suggested BMPs suggested by EH DWP. Furthermore, the NSGP is under the authority of the CWA and WDAP does not overreach that authority by allowing other agencies to add their “rider clauses” that go beyond CWA authority.

No modifications to the Permit or Fact Sheet have resulted from this comment.

## 7 Comments from Cindy Godsey

### 7.1 Comment Summary: Preliminary Characterization of Open RPs

Page 10, 2.2.3.1 Open RPs: submit analytical results demonstrating compliance with the water quality criteria for hydrocarbons **and/or** metals.

**Comment:** The first characterization should demonstrate compliance with both (so delete /or) then further testing be determined as to what the contaminant is.

**DEC Response:** The Department disagrees as DEC intends to use discretion on what analytes are necessary overtime. Note that DEC intends to require both hydrocarbons and metals initially and then reassess thereafter. This approach accounts for the data already collected such that the sampling provides confirmation of past results rather than a first-time characterization (See Fact Sheet Attachment C and attached Summary Tables).

### 7.2 Comment Summary: Addressing Concerns with Previous SCA Characterization

Page 11, top: “This suggests that between the time the pre-discharge sample was sampled and when the supposed uncontaminated SCA water was discharged, the contained water became contaminated.”

**Comment:** While this may very well be the case, it could also indicate that the initial sample was not representative of the wastewater to be discharged so sampling techniques should also be reviewed.

**DEC Response:** A phrase has been added to specifically suggest sampling techniques could be responsible for inconsistent data rather than actual contamination. The second to last sentence in the referenced paragraph now reads:

“This suggests that between the time the pre-discharge sample was sampled and when the supposed uncontaminated SCA water was discharged, the contained water became contaminated **or that the original sample was not representative of the wastewater.**”

### **7.3 Comment Summary: Citation of CFR Regarding Statements of Basis**

Page 25, 4.7.3, last line: cite the regulatory basis for a Statement of Basis (used here and elsewhere in the Fact Sheet on pages 26, 38, 47, 48, 49, 56, 57, 61, and 70).

**DEC Response:** A reference to 18 AAC 83.120 has been inserted at the prescribed locations in the Fact Sheet. In addition, DEC has added the same reference to 18 AAC 83.120 in Permit Section 1.1.4.

### **7.4 Comment Summary: Oil and Gas Extraction Point Source Category**

Page 27, 5.2.1.1 The Oil and Gas Extraction Point Source Category is further divided into Subpart C (Onshore Subcategory) and Subpart D (Coastal Subcategory); both subcategories are applicable to the regions authorized by the NSGP.

**Comment:** The Fact Sheet should indicate where each subpart is applicable.

**DEC Response:** DEC disagrees that DEC is required to describe exactly where each Subpart is applicable as this is provided in the ELG Development Documents and Federal Register. DEC also points out that the former EPA permit writer did not conduct a similar approach when permitting Sanitary Waste (i.e., domestic wastewater pr 18 AAC 72). Based on this comment, DEC has added the following sentence to the of Fact Sheet Section 5.2.1.1:

**“The geographical regions to which each subpart apply are detailed in the aforementioned CFR subsections.”**

No other changes have been made to the Permit or Fact Sheet based on this comment.

### **7.5 Comment Summary: Typographical Errors**

Page 33, 5.3.4, Most Stringent Limits: “Sectio” should be “Section”

Page 50, 6.8.1.1, last bullet: water quality “criterium” should be “criterion”

**DEC Response:** These errors have been corrected as suggested.