Department of Environmental Conservation
Response to Comments

For

APDES Authorization of Produced Water Under AKG315200 Statement of Basis for Authorization AKG315220

Furie Operating Alaska, LLC (Furie)
Allegra Leigh Platform (ALP)

Public Noticed January 12, 2026 – February 12, 2026

Issued March 31, 2026

Alaska Department of Environmental Conservation
Wastewater Discharge Authorization Program
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1 Introduction

1.1 Summary of Facility / Authorization

The proposed authorization to discharge produced water under the Cook Inlet General Permit (CIGP) as described in the Statement of Basis (SOB) requires public notice to obtain coverage. Currently Furie discharges produced water under existing individual permit (IP) AK0053686 but seeks to transfer all discharges from the IP to CIGP Authorization AKG315220 – Furie, ALP. Because the CIGP did not include produced water for the Furie ALP during reissuance, DEC can add the produced water volume to the CIGP and authorize it under AKG315220 by conducting public notice of an SOB per CIGP Sections 1.1.7, 1.3.4.2, and 3.4.9. The SOB includes, but may not be limited to, background information, characterization of the produced water, mixing zone evaluation, reasonable potential analysis, limit development (including BMPs), anti-backsliding (compared to AK0053686), and an antidegradation analysis.

The discharge of Produced Water includes the authorization of acute and chronic mixing zones based on the driving parameters copper (acute) and chronic whole effluent toxicity (WET) for the chronic mixing zone. In addition, copper, pH, Total Aromatic Hydrocarbons (TAH), Total Aqueous Hydrocarbons (TAqH), nickel, and manganese, and mercury are included in the chronic mixing zone as non-driving parameters. Although it had minimal impact on the outcome, the authorized mixing zones account for the recent minor relocation of the discharge port as approved by the Department. The acute and chronic mixing zones are described below:

Mixing Zone Location	Dilution Factor	Mixing Zone Length	Mixing Zone Width
Platform Leg	145	138 meters (69 ebb/flood)	30.75 meters
Platform Leg	59	54 meters (27 ebb/flood)	15.25 meters

Based on the outcome of the Public Notice of the SOB, DEC may authorize Outfall 015 – Produced Water in the existing CIGP Authorization AKG315220.

1.2 Compliance Order by Consent Considerations

As described in SOB Section 2.3, Furie is currently under a Compliance Order by Consent (COBC) that was negotiated in good faith and signed May 8, 2024. The COBC establishes obligations and findings under authority of Alaska Statutes (AS 46.03) and the Administrative Enforcement regulations in the Alaska Administrative Code (18 AAC 95). While DEC may rely on the factual findings and obligations in the COBC for enforcement history and schedules, those findings were resolved through the enforcement process and are not subject to revision resulting from comments received during the public notice of the SOB for permitting actions under 18 AAC 83. The COBC is neither a permit or permit modification that would fall under 18 AAC 83 and any modification of the COBC would require reopening enforcement records or renegotiating COBC findings under 18 AAC 95. Hence, comments received that request modification of factual information derived from the COBC are outside of the scope of the Public Notice of the SOB and must be addressed under AS 46.03 and 18 AAC 95 instead. Hence, DEC will not consider comments that may compromise the findings contained in the COBC and consider such comments outside of the scope of the SOB Public Notice. However, DEC can, and should, modify the SOB based on

comments received to ensure alignment with the COBC and retain the independence and binding of the enforcement agreement.

1.3 Opportunities for Public Participation

The Department of Environmental Conservation (DEC or Department) proposes to issue revisions to Authorization AKG315220 after considering all substantive public comments. To ensure participation by the public, agencies, and tribal and local governments during the public notice of the SOB, the Department posted the proposed Statement of Basis for public notice on the Department public notice web page January 12, 2026, for a 30-day public review on the Draft Permit and Fact Sheet.

During the 30-day public review period, the Department received comments on the Draft Permit and Fact Sheet from the permittee only. This document summarizes the comments submitted during the public review period of the Draft Statement of Basis and the justification for any action taken or not taken by DEC in response to each comment.

1.4 Authorization under the CIGP

After considering the public comments the department decided to issue Authorization AKG315220 – Furie, ALP to include Produced Water and any other discharge previously under AK0053686. Once the AKG315220 becomes effect, DEC will terminate the IP. The revised authorization and the termination of the IP will both become effective April 1, 2026.

There were minor changes from the Draft Statement of Basis after public notice to correct typographical and grammatical errors and to clarify information. Changes resulting from comments received are identified in this response to comments (RTC) and reflected in the Final Statement of Basis.

2 Comments Summary

2.1 Comments by the Permittee

The Department received comments from Mark Slaugther of Furie Operating Alaska LLC (Furie) during the 30-day Public review on February 11, 2026, and the Department revised the Statement of Basis document to clarify information as described in these comments. The Furie Operating Alaska LLC comments from the public review period are summarized and responded to in the following paragraphs. Note that when changes are accepted, they will be shown as a track-change.

2.1.1 Application date correction in Section 1.1

Furie: In section 1.1 commenter noted that Furie initially applied for authorization under the CIGP on December 15, 2023. Furie recommends using this initial submittal date to match the dates provided in the COBC referenced in section 2.3.3 and its quarterly reports.

DEC Response: Instead of the initial Notice of Intent, DEC referenced the latest supplemental application received on April 14, 2024 based on it containing the necessary content to complete the SOB. However, the COBC indicates that DEC received an administratively complete application with supplemental

information to be provided upon request if necessary on December 15, 2023 as stated by Furie. DEC agrees that it would be appropriate to align these dates to maintain consistency with the COBC. DEC has modified the first sentence in Section 1.1 to read:

> "On **December 15, 2023** ~~**April 14, 2024**~~, the Alaska Department of Environmental Conservation (DEC or Department) Alaska Pollutant Discharge Elimination System (APDES) Program received an **administratively complete** application from Furie Operating Alaska LLC (Furie or applicant) to support a Statement of Basis (SOB) to allow for adding produced water to existing general permit authorization AKG315220 issued under General Permit AKG315200 – Oil and Gas Exploration, Development, and Production Facilities in State Waters in Cook Inlet (CIGP)."

2.1.2 Clarification of methanol injection point in Section 1.4.2

Furie: In section 1.4.2, commenter noted that methanol was also injected in the gathering line and suggested some additional language.

DEC Response: The clarification that methanol is injected both at the well and into the pipeline to the onshore facility has been accepted by DEC as it better describes the process. The paragraph was updated to read:

> "Furie injected methanol into the well **and gathering line** to reduce the potential formation of hydrates ~~**at the wellhead**~~."

While there were other comments presented, they appeared to be mostly stylistic and were considered but not incorporated in the revised SOB as the proposed changes would not affect the technical basis of SOB or add considerably better clarity to the permit conditions.

2.1.3 Notes on timeline of exceedances in section 1.4.3

Furie: In section 1.4.3, Furie suggests the system operated as expected from June 2021 until August 16, 2021.

DEC Response: DEC has considered Furie's comment but does not agree that changes to this section are warranted or appropriate as it would result in inconsistency with paragraph 14 of the COBC. Note that DEC appropriately described expectations during system startup in Section 2.2.3, which states:

> "The treatment system began operating in June 2021 and had trouble meeting permit limits during start-up, which is common. Beyond initial start-up, the treatment system appeared to perform as intended until August 16, 2021, when wireline work was conducted on the KLU A-4 well."

While difficulties at startup are common and forgivable, it is not true the system performed as designed immediately upon startup. No modification to the SOB or Authorization has resulted from this comment.

2.1.4 Clarification of Timeline in Section 2.1

Furie: Furie seeks to clarify information in Section 2.1 and suggests that DEC has implied the treatment system was constructed in 2015 rather than in 2019. Furie informs that in 2015 the first well was installed in the sterling formation and produced only 120 barrels per day (bbl/d) of produced water. Whereas the second well in 2015 was in the beluga formation and was drier. In 2017 through 2019, wells in the sterling formation were operated intermittently with water production approaching 2,000 bbl/d. Therefore, the produced water system was designed and tested in 2019 not 2015 as DEC implies and was based on the potential of 5,000 bbl/d assuming multiple operating wells.

DEC Response: DEC is not surprised that there may be minor inconsistencies in the historic background given the complex history of the platform with shifting operational scenarios that are not easily tracked. DEC has considered the potential impacts of these inconsistencies on the technical basis of the SOB and find there are no anticipated technical impacts as the modifications appear to only affect historic perspectives and superfluous details. DEC is also confused by the claim that DEC implied an incorrect treatment system timeline; DEC does not mention a timeline in this section other than when the facility was constructed prior to issues arising. In paragraph one, sentence two, DEC states:

> "In 2014 and 2015, Furie constructed the ALP with one production well in Kitchen Lights Unit (KLU) of the Cook Inlet oil and gas lease area, an onshore CPF located near Nikiski, and a single connecting marine pipeline between the two facilities (See Figure A-1)."

DEC does not believe that clarifying information around past events that are no longer pertinent to the discussion other than establishing a background. Instead, DEC elects to focus on the importance of the present and future discharging of produced water at the ALP instead of rehashing superfluous, minute details.

No modification to the SOB has been made based on this comment.

2.1.5 Clarification of Hydrate and Sediment Consequences in Section 2.2.2

Furie: Furie states that the discussion of hydrate formations as being "unpredictable" and affecting the produced water treatment system is misleading. Furie points out that hydrates affect the facility by plugging pipelines but not the treatment system because pressure drops that trigger hydrate formation occur well before it. Furie also does not approve of the word "slug" to refer to hydrate formations in pipelines.

DEC Response: Note that SOB Section 2.2.2 intermixes to concepts: treatment system failures due to sediment and facility shutdowns due to hydrate formations in pipelines. In addition, also consider that even though hydrates may not affect the produced water treatment system directly, the use of methanol associated with hydrate mitigation strategies can affect permit compliance for chronic whole effluent toxicity (WET). While it is true that Furie has a better understanding of the hydrate issue now than initially, there is yet an unproven history of successful implementation. Although cautiously optimistic, DEC prefers to make statements based on historic facts rather than projections. DEC reminds that it has been only approximately six months since the last occurrence of hydrate formations plugging the onshore

pipeline. In addition, there was initial confusion as to whether the recent pipeline blockage was sediment or hydrates. These events do not convey predictability as much as it shows progress toward that end. DEC does not agree to remove the "unpredictable" descriptor at this time.

The term slug has meaning both for sediment and hydrates, but are not directly interchangeable. Hydrates often form due to "slug flow" in pipelines (two-phase liquid-gas flows that separate and cause highly variable pipeline pressures. Slugs can also refer to the onrush sediments from the well, or similarly, as a slug of hydrates blocking the pipeline. DEC understands that the word slug is not used in a consistent context and to improve consistent use of terminology, DEC has made the following edits to Section 2.2.2.

Paragraph one, sentence seven has been modified to read:

> "When multiple wells are operating out of both formations, it is not easy to characterize the produced water impacted by unexpected sediment ~~**slugs**~~ and/or hydrate**s** **slugs**."

The following sentence is added to the end of the first paragraph:

> **"However, if methanol enters the produced water treatment system, compliance with chronic whole effluent toxicity limit may be impacted."**

Paragraph two, sentence two has been modified to read:

> "If the increase in influent flow and concentration is the new normal, then the existing treatment system will likely be inadequate unless there is a means to detect and mitigate sediment and/or ~~**hydrates**~~ **manage methanol concentrations for hydrate control.**"

To align with Furie's current understanding of hydrates,

2.1.6 Oil and Grease AML correction in Table 1

Furie: The applicant pointed out that there was a Typo in Table 1 and the AML should be 29 mg/L, not 19 mg/L.

DEC Response: The applicant is correct and the typo has been corrected to be 29 mg/L, matching the limits in the General Permit.

2.1.7 Chronic WET Dilution Series in Section 4.1.2.

Furie: The applicant requested an adjustment to the chronic WET dilution series so to reduce the volume of sample collection while still potentially meeting the requirements in Section 4.1.4 to reduce monitoring frequency in the future. "This will bring the sample volume required back to the amount that will fit in one sample container using the current system of shipment logistics while still proving compliance and additional characterization data."

DEC Response: DEC disagrees with Furie that removing the highest dilution of "approximately 70 percent (%), which is an approximate value because it represents the "maximum effluent dilution after hypersaline adjustment. DEC does not support this rationale for characterization because it could result in rejecting the data because the test may not be deemed "sufficiently sensitive" if there is an inability to

observe or interpolate to the endpoint should toxicity be low and require this maximum dilution in order to detect or extrapolate to the endpoint. Hence, Furie risks obtaining nonrepresentative data that could not be used for future characterization and essentially does not meet the overall data requirements. By requiring only one test rather than two and an ability to reduce sampling burden and costs and over the term of the permit, DEC believes this to be a reasonable compromise. If Furie believes DEC made a mistake in this assessment and is increasing overall monitoring burden for chronic WET, DEC can consider going back to the pass/fail for compliance and then another for WET test for characterization in order to accomplish both objectives of compliance and characterization.

No modification to the SOB has resulted from this comment.