

**Department of Environmental Conservation  
Response to Comments**

**For**

**APDES/State Hybrid Individual Permit  
AK0055891 – Petro Star, Inc., Valdez Refinery**

**Public Noticed October 17, 2019– November 18, 2019**

**March 31, 2021**



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

## Contents

1	Introduction.....	3
1.1	Summary of Facility / Permit.....	3
1.2	Opportunities for Public Participation .....	3
1.3	Final Permit.....	4
2	Comments Received .....	4
2.1	Comments by Petro Star Inc. ....	4

## 1 Introduction

### 1.1 Summary of Facility / Permit

The Petro Star Inc (PSI), Valdez Refinery (PSVR) has been in operation since 1993 and is located on a 26-acre parcel off Dayville Road in Valdez, Alaska. The PSVR receives oil for the refinery from the Alyeska Trans-Alaska Pipeline System, prior to the Valdez Marine Terminal and produces 60,000 barrels per day (bbl/d) of jet fuel, marine diesel, heating fuel, turbine fuel and ultra-low sulfur diesel fuel. In addition to fuel production, the facility operates a 12,000 bbl/d distillate hydro treater and associated processing units. Wastewater sources at PSVR are categorized as Contact Storm Water, Process Wastewater, and Noncontact Storm Water.

The Alaska Department of Environmental Conservation (Department or DEC) proposes to issue a hybrid Alaska Pollutant Discharge Elimination System (APDES) and State Permit AK005891 – PSVR (Permit). The Permit authorizes discharges of Noncontact Storm Water (Storm Water) from the facility under 18 AAC 83 – APDES Program and imposes limits for pH and various organic and inorganic pollutants under 18 AAC 72 – Wastewater Discharge and Disposal (i.e., State Permit). While the hybrid permit authorizes the discharge of storm water to surface waters of the U.S. the Permit also authorizes disposal of non-domestic wastewater into or onto lands of the State. The Permit requires Disposal Reporting, Groundwater Monitoring, Leach Field Slug Flow Testing and the development and implementation of a Storm Water Pollution Prevention Plan. Mixing zones were not requested by the permittee nor authorized by DEC.

### 1.2 Opportunities for Public Participation

The Department proposes to issue the Permit after considering all substantive public comments. To ensure participation by the public, agencies, and tribal and local governments during Permit reissuance, the Department:

- Identified the permit on the annual Permit Issuance Plan posted online at: <https://dec.alaska.gov/water/wastewater/pip/>,
- Notified potentially affected tribes that the Department would be working on the Permit via letter, fax and/or email on September 4, 2019,
- Posted the Preliminary Draft Permit on-line for a 10-day applicant review on September 25, 2019 and notified tribes, local governments and other agencies,
- Published two consecutive public notice(s) in Anchorage Daily News on October 16, 2019;
- Posted the public notice on the Department’s public notice web page October 17, 2019 for a 30-day public review on the Draft Permit and Fact Sheet,
- Posted the Proposed Final Permit, Fact Sheet and Response to Comments (RTC) on-line for a five-day applicant review on April 7, 2020 and,
- Emailed notifications via the APDES Program List Serve when the Preliminary Draft, Draft, and Proposed Final Permits were available for review.

The Department requested comments on the Preliminary Draft documents from PSI, Environmental Protection Agency, National Marine Fishery Services, United States Fish and Wildlife Service, and State agencies including, but not limited to, the Alaska Departments of Fish and Game and Natural Resources. During the 30-day public review period, only PSI provided comments to the Draft Permit and Fact Sheet.

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

### 1.3 Final Permit

The final permit was adopted by the Department on March 31, 2021. There were changes to the Draft Permit and Fact Sheet after public notice to account for impacts associated with the 2019 coronavirus (COVID-19) outbreak and adjusting the timeline for issuing the hybrid permit to allow for proper commissioning of the new contact storm water/process wastewater treatment and disposal system.

## 2 Comments Received

### 2.1 Comments by Petro Star Inc., Request for a Delayed Permit Issuance

The Department received comments from the permittee during the 30-day public comment and review period for the Draft Permit and Fact Sheet on November 18, 2019. The following summarizes these comments and includes DEC responses.

PSI did not submit specific comments to the Draft Permit or Fact Sheet but rather submitted a request to delay the effective date of the Final Permit until spring 2020 to allow for critical product substitution in the online monitoring system and allow for adequate accumulation of contact storm water and process water that will affect commissioning and start-up. Commissioning is critical to ensure that the three-tiered monitoring requirements can be met.

Rosemount, the makers of the inline meters to be installed at PSI (pH, free-chlorine and turbidity) issued a recall and halt production of these meters. The late delivery of the substitute meters caused a delay in construction and installation of the meters and the fall of 2019 was unseasonably dry in Valdez such that PSI had accumulated an insufficient amount of water to use during start-up and commissioning. The lead storage tank in the effluent flow train (T-1113) must contain an elevation of 20 feet of water to provide the adequate hydraulic head pressure needed to conduct start-up testing and that necessary volume would not be available until spring break-up season.

Given the need to substitute online meters, lack of contact storm water/process water to start the treatment plant and the implications of the 2019 coronavirus (COVID-19) outbreak, PSI requests a delay in issuing the permit to allow adequate time to commission the treatment system and compile data needed to inform the applicability of the final permit requirements.

**DEC Response:** After submitting comments and prior to commissioning the treatment system, Alaska has been impacted by the COVID-19 outbreak such that the proposed plan to use expedited 3<sup>rd</sup> Party laboratory results to confirm effluent quality prior to disposal is no longer logistically practicable. Analytical laboratories in Alaska are reportedly operating with skeleton crews and only hydrocarbon samples being processed locally. All other samples are being shipped out-of-state for processing such that obtaining sample results to confirm effluent quality prior to disposal is not practicable. This will have an impact on the proposed Start-up Batch Standard Operating Procedures (SOPs) that needs to be implemented and revised during the interim approval to operate period. Per Permit Section 2.2.6.1 and Fact Sheet Section 4.2.2.1, the requirements of the Start-Up Batch SOP will be determined in an Interim Approval to Operate issued by DEC separately from the Permit and is to be implemented and revised during the interim operation period. Once commissioning is complete and a revised General Batch SOP developed for use under the Permit (i.e., the revised SOP is the first required under the Permit) must be

submitted to DEC within 30 days of the Permit effective date, which is intentionally undefined. As currently written, the effective date of the Permit is intentionally linked to the outcome of the commissioning period, which is now also affected by the COVID-19 outbreak impacts to 3<sup>rd</sup> Party Laboratories. In addition, with anticipated delays in the 3<sup>rd</sup> party laboratory results the permittee must use the onsite laboratory results to the extent practicable during commission. The reason is during breakup, the amount of water accumulation will likely necessitate a quicker decision concerning the effluent quality prior to disposal. Fortunately, minimal modifications are necessary in the Permit and Fact Sheet to facilitate the request by PSI to delay the effective date of the Permit.

To lessen the emphasis on using 3<sup>rd</sup> party laboratory results, the first sentence of Fact Sheet Section 4.2.1 is modified to include the following bold and underlined text:

“During the General Batch Operation of the CSW/PWW Treatment and Disposal System the permittee must monitor each treated batch of effluent using a combination of inline instrumentation, in-house laboratory confirmation, and third-party (3<sup>rd</sup> Party) laboratory confirmation, **if logistically practicable**, per Table 8 with the ultimate goal of eventually discharging continuously using primarily inline monitoring and in-house confirmation sampling at reduced frequency (See Table 9).

Similarly, Permit Section 1.2.2.1 is modified to include the following bold and underlined text:

“There are two operating scenarios applicable to disposal of treated CSW/PWW covered by this Permit: General Batch Operation and Continuous Operation. During General Batch Operation of the CSW/PWW Treatment and Disposal System the permittee must monitor each treated batch of effluent using a combination of inline instrumentation, in-house laboratory confirmation, and third-party (3<sup>rd</sup> Party) laboratory confirmation, **if logistically practicable**, to confirm effluent quality prior to disposal.

The extension and possible amendment to the Permit requires an evaluation of various administrative procedures applicable to a hybrid permit. A hybrid permit has two (2) components with different administrative procedures, an APDES Component (storm water) per 18 AAC 83 and State Permit Component (treated contact storm water and process water) per 18 AAC 72 and 18 AAC 15.

#### APDES Component (Storm Water) per 18 AAC 83

The delay in commissioning and the potential for changes to the Permit to address monitoring requirements for disposal authorized under 18 AAC 72 will not affect storm water authorized under 18 AAC 83. Hence, the delay in issuance or potential modifications to monitoring requirements for the contact storm water/process water treatment and disposal system has no effect on the nature or quantity of storm water that would necessitate revoking and reissuing the Permit. Hence, there is no cause to modify and reissue the Permit per 18 AAC 83.130(b)(1) and the administrative requirements in 18 AAC 83.120 are adhered to for those sections of the Permit, applicable to storm water, under the APDES Program.

#### State Permit Component (Treated Contact Storm Water/Process Water) per 18 AAC 72 and 18 AAC 15

The administrative requirements for the treatment and disposal of contact storm water and process water is in 18 AAC 15 and is slightly different than that for discharges under the APDES Program. Per 18 AAC 15.100(c) and (d) system modifications that do not result in an increase in pollutants or impacts to the environment do not require an additional public notice. In these situations, the applicant must request an amendment no later than 30 days before the planned effective date of the amendment. Therefore, DEC can allow the delay for commissioning and

allow minor changes to the Permit that do not result in a material or substantial increase to limits or authorized pollutant loads. Hence, near the end of the interim period to operate, the applicant may submit a request to amend the Proposed Final Permit to reflect operational considerations of the treatment system discovered during commissioning. If the amendment requests a material or substantive change resulting in increased pollutants discharged, DEC may have to issue another 30-day public notice period. If the amendment is minor (i.e., no increases in pollutants or pollutant loads), then the Permit can be modified, issued, and become effective after a 30-day appeal period. In the case only minor modifications are made to the amended Permit, the APDES component and the State Permit component both become effective after the 30-day administrative appeal period. This regulatory framework supports amendment to the Permit to address items discovered during commissioning so long as the nature of the effluent remains unchanged. If the commissioning results in amendments to established limits, then the modified permit could require another 30-day public notice period to address substantive changes to the amended Permit.