



JULY, AUGUST, SEPTEMBER 2024

TREATED GROUNDWATER REPORT

PREPARED FOR TESORO ALASKA COMPANY, LLC

October 11, 2024

Project #: TESAL-023-0004

SUBMITTED BY: Tesoro Alaska Company, LLC

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CERTIFICATION STATEMENT
JULY, AUGUST, SEPTEMBER 2024
TREATED GROUNDWATER REPORT
PREPARED FOR TESORO ALASKA COMPANY, LLC

I certify that the work presented in this report was performed by me or under my supervision. To the best of my knowledge, the data contained herein are true and accurate and the work was performed in accordance with professional standards.

Brianna Force

Date: 10/11/2024

Brianna Force, P.G.

Project Manager, Qualified Environmental Professional in accordance with 18 AAC 75.333



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1.0 INTRODUCTION

This report, required by the approved Treated Groundwater Injection Plan (Trihydro 2017), summarizes the treated groundwater activities for the third quarter of 2024 (July, August, and September) at the Marathon Kenai Refinery.

The Marathon Kenai Refinery is permitted to inject treated water from two treatment systems including: 1) the Phillips-Marathon (PM) Tray Strippers inject to a subsurface trench injection system (inactive), and 2) the Calgon Granular Activated Carbon (GAC) Treatment System injects treated groundwater into a series of injection wells (Calgon).

1.1 RESULTS SUMMARY

The PM system is currently inactive; therefore, extracted groundwater is diverted to the Calgon treatment system. Effluent samples were collected monthly from the Calgon treatment system and analyzed for the constituents listed on Table 1. The Calgon effluent samples were non-detect for the listed constituents. The third quarter 2024 Calgon system volume flow and effluent concentrations were below ADEC Permit criteria. The most recent GAC replacement occurred on October 1, 2024.

Table 1 summarizes the flow volume totals and analytical results for the Calgon treatment system.

2.0 REFERENCES

Trihydro. 2017. *Treated Groundwater Injection Plan*. Prepared for Tesoro Alaska Company.

TABLE

**TABLE 1. TREATED WATER FLOW AND EFFLUENT ANALYTICAL RESULTS
MARATHON KENAI REFINERY
JULY, AUGUST, SEPTEMBER 2024**

Calgon Unit		JULY	AUGUST	SEPTEMBER
	Permit Limits			
Total Flow (gpd)*	1,000,000	288,000	302,256	298,656
Sample Collection Date		7/8/2024	8/9/2024	9/16/2024
Effluent Parameters (µg/L)				
Benzene	4.6	U (0.4)	U (0.4)	U (0.4)
Toluene	1,100	U (1.0)	U (1.0)	U (1.0)
Ethylbenzene	15	U (1.0)	U (1.0)	U (1.0)
Total Xylenes	190	U (3.0)	U (3.0)	U (3.0)
n-Butylbenzene	1,000	U (1.0)	U (1.0)	U (1.0)
sec-Butylbenzene	2,000	U (1.0)	U (1.0)	U (1.0)
tert-Butylbenzene	690	U (1.0)	U (1.0)	U (1.0)
Isopropylbenzene(cumene)	450	U (1.0)	U (1.0)	U (1.0)
Napthalene	1.7	U (1.0)	U (1.0)	U (1.0)
1,2,4-Trimethylbenzene	15	U (1.0)	U (1.0)	U (1.0)
1,3,5-Trimethylbenzene	120	U (1.0)	U (1.0)	U (1.0)

µg/L - micrograms per liter

U - Non-Detectable at (detection limit)

gpd- gallons per day

*Flow at time of sample collection

Bolded results are above ADEC standards