

Tesoro Alaska Company LLC

Kenai Refinery 54741 Tesoro Road Kenai, AK 99611 Tel: 907-776-8191

October 2, 2023

Pete Campbell Environmental Specialist. Alaska Department of Environmental Conservation 43335 K-Beach Road, Suite 11 Soldotna, Alaska 99669

Submitted via email: Peter.Campbell@alaska.gov

Re: Treated Groundwater Injection Permit Quarterly Report

Dear Mr. Campbell:

Enclosed is the report for Tesoro's Kenai Refinery groundwater remediation system for July 1 through September 30, 2023. This data is to be submitted on a quarterly basis required by the Treated Groundwater Injection Plan.

The Treated Groundwater Injection Plan was revised and approved by the Alaska Department of Environmental Conservation, Contaminated Sites Program (ADEC), on October 31st 2017. As per the revised plan, Trihydro Corporation supplied a Qualified Environmental Professional (QEP) to collect and report the required data.

If you have any questions, please contact me at (907) 776-2090.

Sincerely,

Stephanie Plate, PE

Adv. Environmental Engineer

Enclosure (1)



DRAFT FOR REVIEW JULY, AUGUST, SEPTEMBER 2023 TREATED GROUNDWATER REPORT PREPARED FOR TESORO ALASKA COMPANY, LLC

September 29, 2023

Project #: 39B-003-009

SUBMITTED BY: Tesoro Alaska Company, LLC

54741 Tesoro Road, Kenai, AK 99611

PREPARED BY: Trihydro Corporation

312 Tyee Street, Soldotna, AK 99669

SOLUTIONS YOU CAN COUNT ON. PEOPLE YOU CAN TRUST.

CERTIFICATION STATEMENT JULY, AUGUST, SEPTEMBER 2023 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.

Date: 9/29/2023

Joe McElroy, P.E. Senior Engineer

Qualified Environmental Professional in accordance with 18 AAC 75.333

1.0 INTRODUCTION

This report summarizes the treated groundwater activities for the third quarter of 2023 (July, August, and September) at the Marathon Kenai Refinery as required by Treated Groundwater Injection Plan.

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

1.1 RESULTS SUMMARY

The PM system is inactive; therefore, all pumped groundwater is diverted to the Calgon treatment system. Samples were collected monthly from the Calgon treatment system effluent and analyzed for the constituents listed on Table 1. The Calgon effluent samples were non-detect for the regulated constituents. The Calgon system flow limits and effluent concentrations were below ADEC criteria for the quarter. The latest carbon replacement occurred on September 27, 2022.

Table 1 summarizes flow and sample results for the Calgon treatment system.

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TABLE 1. TREATED WATER FLOW AND EFFLUENT ANALYTICAL RESULTS

MARATHON KENAI REFINERY

JULY, AUGUST, SEPTEMBER 2023

Calgon Unit		JULY	AUGUST	SEPTEMBER
	Limit			
Total Flow (gpd)*	1,000,000	233,280	230,400	230,400
Sample Collection Date		7/5/2023	8/8/2023	9/5/2023
Effluent Limits (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

Bolded results are above ADEC standards

^{*}Flow at time of sample collection