



THE STATE
of **ALASKA**
GOVERNOR BILL WALKER

Department of
Environmental Conservation

DIVISION OF SPILL PREVENTION AND RESPONSE
Contaminated Sites Program

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File: 2323.38.025

Date: July 25, 2017

David Waltemyer
ASRC Energy Services, Inc.
3900 C Street, Suite 700
Anchorage AK 99503

Re: Decision Document: Rig Tenders Dock
Cleanup Complete Determination

Dear Mr. Waltemyer:

The Alaska Department of Environmental Conservation, Contaminated Sites Program (ADEC) has completed a review of the environmental records associated with the Rig Tenders Dock located at 55751 Rig Tenders Dock Road, Nikiski, Alaska. Based on the information provided to date, it has been determined that the contaminant concentrations remaining on site do not pose an unacceptable risk to human health or the environment and no further remedial action will be required unless new information becomes available that indicates residual contaminants may pose an unacceptable risk.

This Cleanup Complete determination is based on the administrative record for the Rig Tenders Dock, which is located in the ADEC office in Soldotna, Alaska. This decision letter summarizes the site history, cleanup actions and levels, and standard site closure conditions that apply.

Site Name and Location:

Rig Tenders Dock
55751 Rig Tenders Dock Road
Nikiski AK 99635

Name and Mailing Address of Contact Party:

David Waltemyer
ASRC Energy Services, Inc.
3900 C Street Suite 700
Anchorage AK 99503

DEC Site Identifiers:

File No: 2323.38.025
Hazard ID: 2802

Regulatory Authority for Determination:

18 AAC 75

Site Description and Background

The Rig Tenders Dock site is associated with one other site; the Chevron ASRC Pipeline (2323.38.040). The Dock is an industrial shipping dock used by Cook Inlet marine service companies. It is a manmade structure that extends into Cook Inlet and is clad in steel sheet piling. The property is owned by the Alaska Department of Natural Resources (see Figure 1, attached). The dock is associated with an

adjacent upland property that includes shops and office structures. This closure letter refers to the dock property. Characterization and cleanup work performed at the Rig Tenders Dock site began in 1997 when contamination was discovered during dock upgrades being performed by Crowley Marine Services.

Beginning in 1969, Tesoro Alaska Petroleum Company installed and operated seven pipelines across the face of the dock. Tesoro ceased operation of the pipelines in 1988 and subsequently decommissioned the lines. The lines transported JP4, JP5, gasoline, diesel fuel and possibly waste oil to and from the dock. There were two fuel dispensers on the dock associated with the Tesoro pipelines. The fuel was supplied from the former Chevron Refinery and the Tesoro Refinery.

In 1997, Crowley Marine Services entered into an agreement to sell the Rig Tenders Dock to Alaska Petroleum Contractors (APC). APC commissioned a site assessment from Dames & Moore (September 1998) which identified petroleum contamination. The property is currently leased from the Alaska Department of Natural Resources by Arctic Slope Regional Corporation (ASRC). The dock and associated shop buildings and land have been vacated in preparation for a currently pending sale.

Contaminants of Concern

'Contaminants of Concern' include any hazardous substances that exceed ADEC's approved soil or groundwater **Cleanup Levels**. The following contaminants of concern were identified during the course of the site investigations summarized in the **Characterization and Cleanup Activities** section of this decision document.

- Diesel Range Organics (DRO).
- Benzene, toluene, ethylbenzene, total xylenes (BTEX).
- Aliphatic and aromatic hydrocarbons in the C-6 to C-24 range.

Cleanup Levels

In May 1998, the cleanup levels were established under the Draft Oil and Hazardous Substance Pollution Control Regulation (May 4, 1998). Since groundwater at this site is tidally influenced, it was determined that the site would not be a current or future source of drinking water. Cleanup levels were set at the Level C soil cleanup standards:

DRO 1000 mg/kg
GRO 500 mg/kg
RRO 2,000 mg/kg
Benzene 0.5 mg/kg
Total BTEX 50 mg/kg

Analytical testing in 1998 also included aliphatic and aromatic fraction of gasoline range organics (GRO), DRO, and residual range organics (RRO) hydrocarbons.

Neither the groundwater cleanup levels or the "migration to groundwater" soil cleanup levels apply to this site, because the dock is constructed in the tideland waters of Cook Inlet, and groundwater below the dock is brackish and not used for drinking water. The approved soil cleanup levels are listed in Table 1.

Table 1 – Approved Cleanup Levels

Contaminant	Soil (mg/kg) Human Health	Soil (mg/kg) Ingestion	Soil (mg/kg) Inhalation
Benzene ¹	11		
Toluene ¹	5760		
Ethylbenzene ¹	49		
Xylenes ¹	486		
DRO ²		10,250	12,500
C-6 – C10 Aliphatic/Aromatic ²		1,000/1,000	1,000/1,000
C-10 – C-25 Aliphatic/Aromatic ²		10,000/4,100	10,000/5,000

mg/kg = milligrams per kilogram

¹Table B1 Under 40 Inch Zone, 2016 Human Health Cleanup Criteria

²Table B2 Under 40 Inch Zone, Ingestion/Inhalation Cleanup Criteria

Characterization and Cleanup Activities

Characterization and cleanup activities conducted under the regulatory authority of the Contaminated Sites Program began in 1997. These activities are described below.

Twenty seven soil borings and twelve hydro punch borings, drilled during the July 1997 site assessment indicated there was an estimated 1,570 cubic yards of impacted soil in the southwest corner of the dock. The area of impact was located 5 to 15 feet below ground surface within the tidally influenced zone, which was at approximately 10 feet below ground level. Petroleum hydrocarbons in the tidally influenced groundwater indicate that the footprint of the impacted groundwater area is similar to that of the impacted soil. Hydrocarbons in groundwater, sampled at location HP-2 on Figure 2, did not exceed ADEC’s 18 AAC 75.345 Table C1 groundwater cleanup levels.

A corrective action plan (CAP) was developed in 1997 that covered sampling of excavated soils and improvements to the dock face. The improvements included upgrades to the dock face and associated tie-backs that would be trenched into the area of impacted soils up to 10 feet below ground surface (saturated level), leaving any contaminated media in place below the water table.

Trenching through impacted soils for dock tie-backs generated 338 cubic yards of contaminated soil. The area of impacted soils is depicted on Figure 2 Site Detail (Emcon). Excavation work stopped at the soil water interface. The excavated soils were thermally remediated. This work was documented in Crowley Marine Services Rig Tenders Dock, Nikiski, Excavation and Thermal Remediation of Petroleum Impacted Soil, (Emcon Alaska, Inc. 9/18/1998).

1998 Highest Concentrations found in Excavation Base Samples:

Benzene	3.8 mg/kg
Toluene	2.3 mg/kg
Ethylbenzene	25 mg/kg
Total xylenes	67 mg/kg
DRO	8,500 mg/kg
C6-C10 Aliphatics	220 mg/kg

C6-C10 Aromatics	63 mg/kg
C10-C24 Aliphatics	8,100 mg/kg
C10-C24 Aromatics	1,650 mg/kg
C25-C36 Aliphatics	32 mg/kg
C25-C36 Aromatics	36 mg/kg

Cumulative Risk Evaluation

Pursuant to 18 AAC 75.325(g), when detectable contamination remains on-site following a cleanup, a cumulative risk determination must be made that the risk from hazardous substances does not exceed a cumulative carcinogenic risk standard of 1 in 100,000 across all exposure pathways, and does not exceed a cumulative non-carcinogenic risk standard at a hazard index of one across all exposure pathways.

Based on a review of the environmental record, ADEC has determined that residual contaminant concentrations meet the human health cumulative risk criteria for residential land use.

Exposure Pathway Evaluation

Following investigation and cleanup at the site, exposure to the remaining contaminants was evaluated using ADEC’s Exposure Tracking Model (ETM). Exposure pathways are the conduits by which contamination may reach human or ecological receptors. ETM results show all pathways to be one of the following: De-Minimis Exposure or Pathway Incomplete. A summary of this pathway evaluation is included in Table 2.

Table 2 – Exposure Pathway Evaluation

Pathway	Result	Explanation
Surface Soil Contact	Pathway Incomplete	Contamination is not present in surface soil (0 to 2 feet below ground surface).
Sub-Surface Soil Contact	De-Minimis Exposure	Residual contamination remains in the sub-surface, in concentrations below the approved ingestion-based soil cleanup levels.
Inhalation – Outdoor Air	De-Minimis Exposure	Contamination remains in the sub-surface but is below inhalation-based cleanup levels.
Inhalation – Indoor Air (vapor intrusion)	De-Minimis Exposure	Residual petroleum contamination is unlikely to affect receptors in future buildings. There are currently no buildings in the area of impacted soil, and future building construction at the edge of the dock is unlikely.
Groundwater Ingestion	Pathway Incomplete	Groundwater in the area of contamination is not a current, or a potential future, source for drinking water.
Surface Water Ingestion	Pathway Incomplete	Surface water is not used as a drinking water source in the vicinity of the site.
Wild and Farmed Foods Ingestion	Pathway Incomplete	Contaminants of concern do not have the potential to bioaccumulate in plants or animals.
Exposure to Ecological Receptors	Pathway Incomplete	Contamination has no potential to contact ecological receptors.

Notes to Table 2: “De-Minimis Exposure” means that in ADEC’s judgment receptors are unlikely to be affected by the minimal volume or concentration of remaining contamination. “Pathway Incomplete” means that in ADEC’s judgment contamination has no potential to contact receptors.

ADEC Decision

Residual petroleum contamination in soil does not exceed the approved soil cleanup levels. This site will receive a "Cleanup Complete" designation on the Contaminated Sites Database, subject to the following standard conditions.

Standard Conditions

1. Any proposal to transport soil or groundwater off-site requires ADEC approval in accordance with 18 AAC 75.325. A "site" [as defined by 18 AAC 75.990 (115)] means an area that is contaminated, including areas contaminated by the migration of hazardous substances from a source area, regardless of property ownership.
2. Movement or use of contaminated material in a manner that results in a violation of 18 AAC 70 water quality standards is prohibited.

This determination is in accordance with 18 AAC 75.380 and does not preclude ADEC from requiring additional assessment and/or cleanup action if future information indicates that this site may pose an unacceptable risk to human health or the environment.

Appeal

Any person who disagrees with this decision may request an adjudicatory hearing in accordance with 18 AAC 15.195 – 18 AAC 15.340 or an informal review by the Division Director in accordance with 18 AAC 15.185. Informal review requests must be delivered to the Division Director, 410 Willoughby Avenue, Suite 303, Juneau, Alaska 99811-1800, within 15 days after receiving the department's decision reviewable under this section. Adjudicatory hearing requests must be delivered to the Commissioner of the Department of Environmental Conservation, 410 Willoughby Avenue, Suite 303, Juneau, Alaska 99811-1800, within 30 days after the date of issuance of this letter, or within 30 days after the department issues a final decision under 18 AAC 15.185. If a hearing is not requested within 30 days, the right to appeal is waived.

If you have questions about this closure decision, please feel free to contact me at (907) 262-3412.

Sincerely,



Peter Campbell
Project Manager

Cc: Ki Jung Lee: Department of Natural Resources



Google Earth Pro


feet 3000
km 1

Figure 1



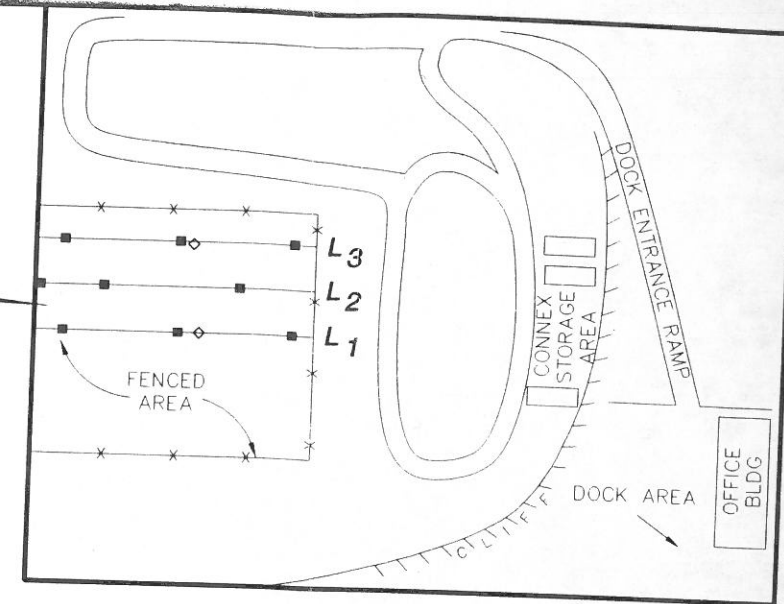
DATE SEPT 1998
DWN. CDS9824SD
CKD. J. DAIGLE
REV. 0
PROJECT No. 55119-060.000

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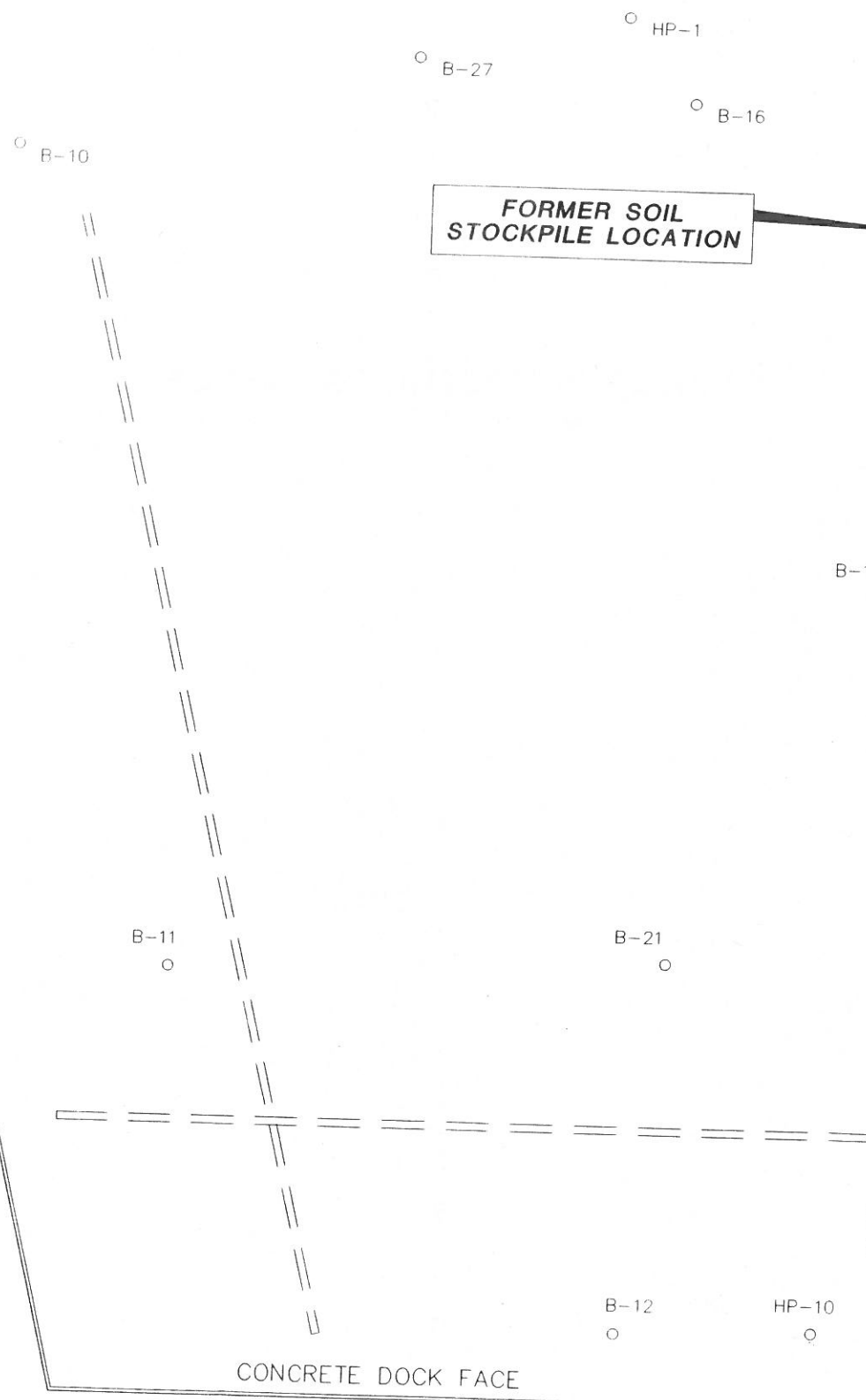


EXPLANATION

- 1997 DAMES & MOORE SAMPLE LOCATION
- ◻ PETROLEUM IMPACTED SOIL IDENTIFIED AT HIGH WATER LEVEL IN 1997 BY DAMES & MOORE
- ▨ PETROLEUM IMPACTED SOIL IDENTIFIED BETWEEN 5 FEET BGS AND HIGH WATER LEVEL IN 1997 BY DAMES & MOORE
- ▭ APPROXIMATE MAXIMUM EXTENT OF COMBINED TRENCH EXCAVATIONS IN AREA OF INTEREST
- 1998 EMCON CONFIRMATION SOIL SAMPLE LOCATION
- ◊ COMPOSITE SURFACE SOIL SAMPLE
- HEADSPACE SAMPLE LOCATION
- ND NOT DETECTED
- NA NOT ANALYZED
- ALL CONCENTRATIONS IN MILLIGRAMS PER KILOGRAM (mg/kg)
- ALL DEPTHS IN FEET



UPPER APC LAY DOWN AREA
NOT TO SCALE



ID	DEPTH	DRO	B	T	E	+
RT-4	10	1,600	0.21	0.31	2.0	14
NRT-4	10	3,600	0.37	0.41	4.8	25
DUPLICATE						

ID	DEPTH	DRO	B	T	E	+
RT-6	10	32	ND	ND	ND	ND

ID	DEPTH	DRO	B	T	E	+
RT-7	10	8,300	3.8	2.3	25	67

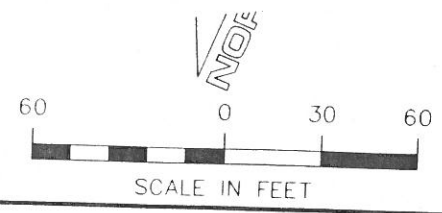
ID	DEPTH	DRO	B	T	E	+
RT-2	10	22	0.1	ND	0.13	0.37

ID	DEPTH	DRO	B	T	E	+
RT-3	10	ND	NA	NA	NA	NA

ID	DEPTH	DRO	B	T	E	+
RT-5	10	11	NA	NA	NA	NA

ID	DEPTH	DRO	B	T	E	+
RT-8	10	22	0.12	0.08	0.23	0.74

SOURCE:
DAMES & MOORE GROUP,
FIGURE 1, DATED 7-9-97
JOB NO. 32499-003-220
FILE FIG01.CDR



Cook Inlet