

STATE OF ALASKA
DEPT. OF ENVIRONMENTAL CONSERVATION
DIVISION OF SPILL PREVENTION AND RESPONSE
CONTAMINATED SITES PROGRAM

SEAN PARNELL, GOVERNOR

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File: 2265.26.007

July 8, 2010

Anastasia Duarte-Wilkinson
Retail Environmental Remediation Administrator
Tesoro Refining and Marketing Company
3450 South 344th Way, Suite 100
Auburn, WA 98001-5931

Re: ADEC Decision Document; Tesoro Northstore #53
Corrective Action Complete Determination

Dear Ms. Duarte-Wilkinson:

The Alaska Department of Environmental Conservation, Contaminated Sites Program (ADEC) has completed a review of the environmental records associated with the former Tesoro Northstore #53 site, located in Wasilla, 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 at this time.

This decision is based on the administrative record for this site, which is located in the offices of the ADEC in Soldotna, Alaska. This letter summarizes the decision process used to determine the environmental status of this site and provides a summary of the regulatory issues considered in the Corrective Action Complete determination.

Introduction

Site Name and Location:

Tesoro Northstore #53
1601 East Parks Highway
Wasilla, Alaska 99654

Name and Mailing Address of Contact Party:

Ms. Anastasia E. Duarte-Wilkinson, RS
Tesoro Refining and Marketing Company
Retail Environmental Remediation Administrator
3450 South 344th Way, Suite 100
Auburn, WA 98001-5931

Name and Mailing Address of Land Owner:

Preston Rudderow
Susitna Investments, LLC
13340 Ridgewood Circle
Anchorage, AK 99516

ADEC Site Identifiers

ADEC Reckey: 1994220021501
ADEC File Number: 2265.26.007
Hazard ID: 23539

Regulatory authority under which the site is being cleaned up:

18 AAC 75 and 18 AAC 78

Background

This site was developed into a retail fuel sales and convenience store business in 1985 and is currently an operating retail fuel sales and convenience store. The original fueling systems consisted of two 10,000-gallon underground storage tanks (UST's) and one fuel island with two dispensers. In August of 1997, these fueling systems were replaced with one new three-compartment double-walled UST, piping, and two new canopies with several new dispensers.

Groundwater is located approximately 20 to 22 feet below ground surface, and this property and the adjacent properties are reported to be served by City of Wasilla public water and sewer systems.

Site Characterization and Cleanup Actions

In 1994 a Site Assessment was performed consisting of two soil borings being drilled in the vicinity of the UST systems. Gasoline Range Organics (GRO) and benzene, toluene, ethylbenzene, and xylene (BTEX) soil and groundwater contamination was detected in both soil boring locations. Following the Site Assessment two tank tightness (leakage) tests were performed at the site, with one tank failing the tightness tests. It was determined that the eastern most 10,000 gallon UST vent line was damaged, and it was repaired in December of 1994.

In the fall of 1995 a Phase II Environmental Site Assessment was performed. Seven groundwater monitoring wells were installed to better delineate the extent of petroleum contamination. Soil contamination was detected during installation of one of the monitoring wells, and groundwater contamination was detected in four of the monitoring wells, with 42.0 mg/L benzene reported in monitoring well MW-1.

In August of 1997 the original two 10,000-gallon UST's and single fuel island with two dispensers were replaced with one single three-compartment double-walled 26,000-gallon UST, new piping, and two new canopies with several new dispensers. Approximately 356 tons of contaminated soil was excavated from and transported to Clean Soils in Anchorage, Alaska for thermal treatment and disposal. The depth of excavation extended up to 22 1/2 feet below

ground surface (bgs), which is the approximate depth to groundwater. Benzene at 19.0 mg/kg and GRO at 8,800 mg/kg soil contamination was encountered at a depth of 19 feet bgs under the dispenser island. Benzene at 73.0 mg/kg and 120.0 mg/kg and GRO at 3,300 mg/kg and 8,200 mg/kg was encountered at a depth of 15 and 22 1/2 feet bgs under the USTs. Two vertical soil vapor extraction (SVE) treatment wells were installed at locations with the highest concentrations of residual petroleum contamination. In September of 1998 the SVE treatment system was started.

In 2002 one air sparge (AS) treatment well was drilled, installed, and activated. In October of 2007, ADEC approved a work plan for the installation of two additional AS treatment wells in order to increase the effectiveness of the in-situ groundwater treatment efforts at this site. These additional AS wells were installed on October 30, 2007, and were located 12 feet to the West and Southwest, respectively, of AS-1. The three AS and two SVE treatment wells were then operated until May, 2009.

Groundwater quality has been monitored at this site since 1996. Maximum historical groundwater contaminant concentrations were reported to ADEC in 1997 to 1998 in monitoring well MW-1, as follows:

benzene	83.0 mg/L,
toluene	160.0 mg/L,
ethylbenzene	11.0 mg/L,
xylenes	57.0 mg/L, and
GRO	810.0 mg/L

In 2009, following corrective action efforts, a 180-day rebound test (groundwater sample collection and analysis event occurring more than 180 days after groundwater treatment systems were turned off) was performed. Groundwater quality now substantially meets ADEC groundwater cleanup levels in the monitoring wells that historically exceeded these levels.

Historical soil concentrations immediately following excavation and removal of contaminated soil exceeded ADEC soil cleanup levels. Soil samples have not been collected and analyzed following the completion of in-situ soil and groundwater treatment efforts. Residual benzene concentrations reported in subsurface soil at this site at depths greater than 15 feet, may exceed ADEC Method Two 'Migration to Groundwater' soil cleanup levels within the AREA OF CONCERN identified on the attached Figure 1, SITE PLAN WITH AREA OF CONCERN drawing, which was prepared by environmental consulting firm MWH.

Contaminant of Concern

During the investigations at this site, soil and water samples were analyzed for GRO, and the volatile organic compounds BTEX. Based on these analyses, knowledge of the source area, and knowledge of the in-situ soil and groundwater treatment efforts expended at this site, the following Contaminant of Concern may remain in subsurface soil at concentrations exceeding the applicable soil cleanup levels:

- benzene

Cleanup Levels

The default soil cleanup levels for this site are established in 18 AAC 75.341, Method Two, Table B1, Migration to Groundwater.

Contaminant	Site Cleanup Level (mg/kg)
• benzene	0.025

Pathway Evaluation

Following investigation and cleanup at the site, exposure to the residual contamination 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 1.

Table 1 – Exposure Pathway Evaluation

Pathway	Result	Explanation
Surface Soil Contact	Pathway Incomplete	Surface soils meet direct contact soil cleanup levels.
Sub-Surface Soil Contact	Pathway Incomplete	Surface, and subsurface soil to a depth of 15 feet, meets direct contact soil cleanup levels.
Inhalation – Outdoor Air	De-minimis exposure	Surface, and subsurface soil to a depth of 15 feet, meets outdoor inhalation soil cleanup levels.
Inhalation – Indoor Air (vapor intrusion)	De-minimis exposure	The residual soil and groundwater concentrations are too low to pose any unacceptable risk to indoor air quality.
Groundwater Ingestion	Pathway Incomplete	Drinking water is supplied by the City of Wasilla public water system.
Surface Water Ingestion	Pathway Incomplete	Contamination has not been detected offsite, so there is no potential to impact surface water.
Wild Foods Ingestion	Pathway Incomplete	Contaminants of concern do not have the potential to bioaccumulate in plants or animals.
Exposure to Ecological Receptors	Pathway Incomplete	There is no potential for exposure to ecological receptors, unless subsurface soils are excavated and relocated/transported offsite.

Notes to Table 1: “De-minimis exposure” means that in ADEC’s judgment receptors are unlikely to be affected by the minimal volume of remaining contamination. “Pathway incomplete” means that in ADEC’s judgment contamination has no potential to contact receptors.

ADEC Decision

The cleanup actions to date have served to excavate and remove contaminated soil from the site, and to reduce residual soil and groundwater contaminant concentrations to acceptable levels. Contamination may remain on site in subsurface soil above an established default soil cleanup level; however ADEC has determined there is no unacceptable risk to human health or

the environment. Therefore this site will be issued a Corrective Action Complete determination subject to the following conditions:

1. Petroleum contaminated soil exceeding the applicable soil cleanup levels may remain within the AREA OF CONCERN identified on the attached Figure 1, **SITE PLAN WITH AREA OF CONCERN** (See Attachment A). Excavation of soil within this AREA OF CONCERN could encounter this contaminated soil. Any proposal to excavate, transport, move, treat, and/or dispose of residual contaminated soil at this "site" requires ADEC approval. This is consistent with the requirements of 18 AAC 78.274(b), and 18 AAC 78.600(h). 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. All groundwater monitoring wells, treatment wells, and subsurface treatment piping must be decommissioned in accordance with ADEC guidance, and an ADEC approved monitoring well decommissioning plan. Decommissioning work must be completed by October 31, 2010, and documented within a written report submitted to ADEC by December 31, 2010.
3. Movement or use of contaminated material in a manner that results in a violation of 18 AAC 70 water quality standards is prohibited.

The ADEC Contaminated Sites Database will be updated to reflect the change in site status as detailed above, and will include a description of the contamination which may remain at the site.

This determination is in accordance with 18 AAC 78.276(f), 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. The Tesoro Refining and Marketing Company would remain liable for any additional assessment and/or cleanup action(s), should ADEC impose such a requirement.

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 99801, 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 99801, 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 Corrective Action Complete decision, or any other aspect of this project, you may phone me at (907) 262-5210 Extension 250, or contact me via e-mail at paul.horwath@alaska.gov

Sincerely,

A handwritten signature in black ink that reads "Paul Horwath". The signature is written in a cursive, flowing style.

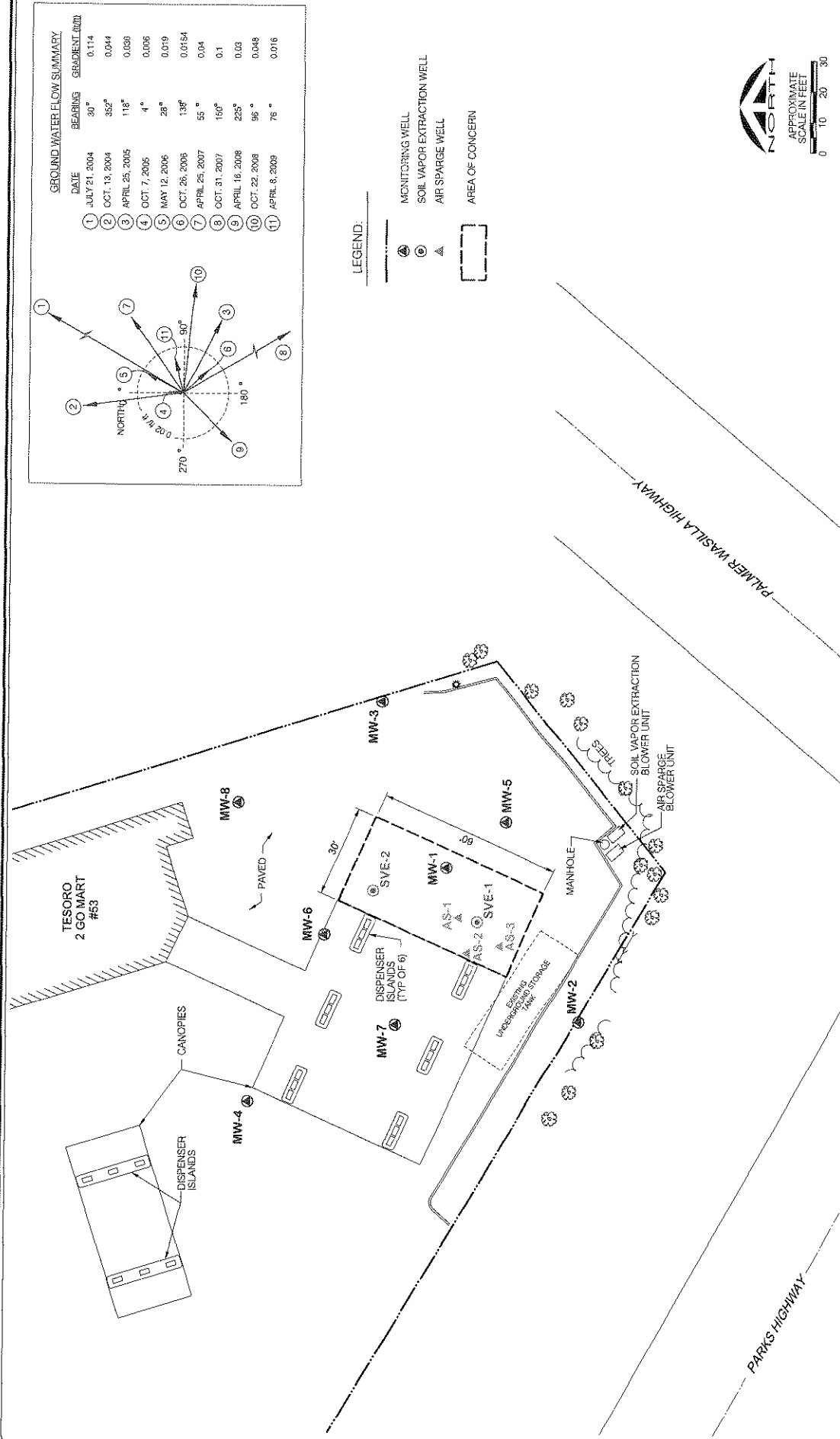
Paul Horwath, PE
Environmental Engineer

Attachment A: MWH Figure 1, **SITE PLAN WITH AREA OF CONCERN**

Cc: Robert Gilfilian, P.E., MWH, Anchorage
Michael Zidek, MWH, Anchorage
Preston Rudderow, Susitna Investments, Anchorage

Pdh.Tesoro Northstore #53 Corrective Action Complete_7-8-10

ATTACHMENT A



MWH
AECOM, Alstom

FIGURE 1
TESORO COMPANY - 2 GO MART #53
2010 CCIC REPORT

SITE PLAN WITH AREA OF CONCERN