



THE STATE
of **ALASKA**
GOVERNOR SEAN PARNELL

Department of Environmental
Conservation

DIVISION OF SPILL PREVENTION &
RESPONSE
Contaminated Sites Program

43335 Kalfornsky Beach Road, Suite 11
Soldotna, Alaska 99669
Main: 907.262.5210
Fax: 907.262.2294

File No: 2268.26.008

August 5, 2013

Ms. Anastasia Duarte
Tesoro Refining and Marketing Company
3450 South 344th Way, Suite 201
Auburn, WA 98001-5931

Re: Closure Decision Document: Tesoro Northstore #78
Corrective Action Complete Determination

Dear Ms. Anastasia Duarte:

The Alaska Department of Environmental Conservation, Contaminated Sites Program (ADEC) has completed a review of the environmental records associated with the Tesoro Northstore #78 site, located at Mile 99 Parks Highway, Willow, 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 the Tesoro Northstore #78 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 this Corrective Action Complete Determination.

Site Name and Location:

Tesoro Northstore #78
Mile 99 Parks Highway
Willow, Alaska 99688

Name and Mailing Address of Contact Party:

Ms. Anastasia Duarte
Tesoro Refining and Marketing Company
3450 South 344th Way, Suite 201
Auburn, WA 98001-5931

DEC Site Identifiers:

File No: 2268.26.008
Hazard ID: 25707

Regulatory Authority for Determination:

18 AAC 75 and 18 AAC 78

Property Legal Description:

Lot 2 Mt. McKinley View Plaza Subdivision, according to the official plat thereof, filed under Plat Number 84-25, Records of the Talkeetna Recording District, Third Judicial District, State of Alaska.

Site Description and Background

This site is the location of the Tesoro Northstore #78 retail fuel and convenience store, in Willow, Alaska. In 1998, in order to comply with the 1998 Federal and State UST upgrade requirements, three 12,000-gallon USTs were removed and replaced with a 12,000-gallon unleaded gasoline tank, a 15,000-gallon diesel tank, and a 12,000-gallon compartmentalized tank consisting of two 4,000-gallon diesel compartments and one 4,000-gallon premium fuel compartment. Petroleum contamination was discovered in the soil associated with the fuel tanks during the 1998 UST fuel system upgrade. A total of 3,300 cubic yards of contaminated soil was excavated. Of this, 2,300 cubic yards of soil was stored off-site until 2009 when laboratory results indicated no contaminants were present above the ADEC Method 2 Soil Cleanup Levels. A No Further Remedial Action Planned decision was issued by ADEC for in-situ soil and groundwater contamination in October 2001, followed by a cleanup complete determination in December 2009. In August of 2011 while upgrading the dispenser island and UST product and vent piping, petroleum contaminated soil was encountered beneath the fill ports. It was determined the cause of the release was due to overfills from routine UST fueling operations. Corrective action and remediation efforts included the removal of approximately 30 cubic yards of contaminated soil that was transported off-site for thermal remediation and disposal, and assessment of the soil and groundwater. During site assessment and cleanup response measures, soil and groundwater samples collected at this site were tested for: gasoline range organics (GRO), diesel range organics (DRO), and benzene, toluene, ethylbenzene, and xylenes (BTEX).

Groundwater was encountered at a depth of 38 to 41 feet below ground surface (bgs) during site assessment work. There are no known drinking water wells located immediately down-gradient of the site, and the drinking water well that serves the Tesoro station is located approximately 250 feet from the UST system, and is up-gradient and cross-gradient of the UST system. The onsite drinking water supply well produces water from a deeper confined groundwater aquifer and is not hydrogeologically connected to the shallower ground water table encountered beneath the UST system.

Contaminants of Concern

During the field investigations performed at this site, soil and groundwater samples were analyzed for gasoline range organics (GRO), diesel range organics (DRO), and benzene, ethylbenzene, toluene and xylenes (BTEX). Following the completion of the cleanup measures employed at this site, residual concentrations of the following Contaminants of Concern remained at this site in subsurface soil in excess of the ADEC soil Cleanup Levels:

- Gasoline Range Organics (GRO)
- Diesel Range Organics (DRO)
- Benzene
- Toluene
- Ethylbenzene
- Xylenes

Cleanup Levels

The default **soil** cleanup levels for this site are established in 18 AAC 75.341, Method Two, Tables B1 and B2, Under 40 inch Zone, 'Migration to Groundwater.'

<u>Contaminant</u>	<u>Soil Cleanup Level (mg/kg)</u>
• Gasoline Range Organics	300
• Diesel Range Organics	250
• Benzene	0.025
• Toluene	6.5
• Ethylbenzene	6.9
• Xylenes	63

Site Characterization and Cleanup Actions

On August 12, 2011 while up-grading the dispenser island and UST product vent piping, contaminated soil was encountered beneath the fill ports on the diesel and unleaded gasoline tanks, due to over filling during routine fuel delivery operations. On August 19, 2011, the ADEC's Prevention and Emergency Response Program referred this petroleum spill incident to the Contaminated Sites Program of ADEC for regulatory oversight.

A release investigation under 18 AAC 78.235 was initiated on August 15th through 17th, 2011 to determine the magnitude and extent of the release. Contaminated soil was removed to approximately 6 feet below ground surface (bgs) adjacent to the unleaded gasoline tank, and approximately three feet bgs beneath the diesel fill port. The excavation was halted at this point and further excavation was deemed not feasible due to the presence and continued use of the fueling systems. Soil samples collected at 6 feet bgs detected gasoline range organics, diesel range organics, benzene, toluene, ethylbenzene, and xylenes above the ADEC soil cleanup levels. The excavated contaminated soil, approximately 30 cubic yards, was transported off-site for thermal remediation and disposal.

The on-site drinking water well was sampled and analyzed using EPA test method 524.2 and Alaska test method AK 102 on October 21, 2011. Laboratory analytical results confirmed that the on-site drinking water was not impacted from the release, with none of the analytes being detected.

A second release investigation was conducted on June 20 and 21, 2012 with the advancement of three soil borings, which were completed into groundwater monitoring wells, in order to delineate the extent of the soil and groundwater contamination near the underground storage tanks. Benzene was encountered at a depth of 17 feet bgs in one soil sample, and in one groundwater sample above the ADEC cleanup levels.

Following the completion of remedial action performed at this site from 2011 to 2013, residual soil contamination remains in the subsurface soil exceeding the ADEC's Method Two 'Migration to Groundwater' soil cleanup levels at depths exceeding 6 feet below ground surface.

Groundwater concentrations have tested either below the groundwater cleanup levels, or non-detected, for the last two groundwater sampling events. There are no known drinking water wells located immediately down-gradient of the site, and the drinking water well that serves the Tesoro station is located approximately 250 feet from the UST system, and is up-gradient and cross-gradient of the UST system. The onsite drinking water supply well produces water from a deeper groundwater aquifer that is not hydrogeologically connected to the shallow ground water table encountered beneath the UST system.

Cumulative Risk Evaluation

Based on a review of the environmental record, ADEC has determined that residual contaminant concentrations do not pose a cumulative human health risk.

Exposure Pathway Evaluation

Following release investigation and cleanup work 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 1.

Table 1 – Exposure Pathway Evaluation

Pathway	Result	Explanation
Surface Soil Contact	Pathway Incomplete	The contaminated surface soil was predominantly excavated and transported off site.
Sub-Surface Soil Contact	De-minimis Exposure	Contamination remains in the sub-surface soil exceeding the 'migration to groundwater' cleanup levels at depths exceeding 6 feet bgs.
Inhalation – Outdoor Air	De-minimis Exposure	The residual contamination concentrations do not exceed ADEC 'outdoor air' soil cleanup levels.

Inhalation – Indoor Air (vapor intrusion)	De-minimis Exposure	Based on the minimal mass of remaining contamination, indoor air quality is unlikely to be affected.
Groundwater Ingestion	De-minimis Exposure	Groundwater quality sampling and analyses demonstrated that groundwater quality meets the ADEC groundwater cleanup levels.
Surface Water Ingestion	Pathway Incomplete	No impact to surface water is expected.
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	The residual sub-surface contamination has no potential to contact ecological receptors.

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 adequately remove contaminated soil from this site, and reduce residual soil and groundwater contaminant concentrations. Contamination remains on site above established default soil cleanup levels; however, ADEC has determined there is no unacceptable risk to human health or the environment. Therefore, we are issuing this Corrective Action Complete determination, subject to the following conditions:

1. The most current soil sample analytical data reported BTEX, GRO, and DRO contamination exceeding the applicable soil cleanup levels, in the area of the underground storage tanks, within the AREA OF CONCERN identified on FIGURE 1, SITE PLAN WITH AREA OF CONCERN (see Attachment A). Any proposal to excavate, transport, move, treat, and/or dispose of residual contaminated soil at this “site” requires prior ADEC approval. This is consistent with the requirements of 18 AAC 78274(b), and 18 AAC 78.600(h). A “site” [as defined by 18 AAC75.990 (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 associated with this project must now be properly decommissioned in accordance with ADEC’s November 2011 Monitoring Well Guidance. Tesoro Refining and Marketing Company must now prepare and provide ADEC with a work plan which identifies proposed decommissioning procedures for ADEC review and approval, prior to implementation of those procedures. Decommissioning work should be completed when frost is not present in the soil. The decommissioning of these wells should occur before September 30, 2013, and must be documented in a written report submitted to ADEC by December 30, 2013. This

work must be performed or directly supervised by a 'qualified person', as defined in 18 AAC 78.995(118), and the report must be signed by a qualified person.

The ADEC Contaminated Sites Database will be updated to reflect the change in site status as '*Cleanup Complete*', and will include a description of the contamination remaining 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 remains liable for any additional assessment and/or cleanup action(s), should ADEC impose such a requirement.

It should be noted that movement or use of potentially contaminated material in a manner that results in a violation of 18 AAC 70 water quality standards is prohibited.

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 Closure Decision Document, please contact me at (907) 262-3422, or via e-mail at paul.horwath@alaska.gov

Sincerely,



Paul Horwath
Engineer I, DEC

Attachment A: FIGURE 1, SITE PLAN WITH AREA OF CONCERN

Cc: Wayne A. Gianotti and Carolyn M. Gianotti, Landowners, San Jose, CA
Robert Gilfilian, P.E. MWH, Anchorage
Michael Zidek, MWH, Anchorage