

DEPT. OF ENVIRONMENTAL CONSERVATION

**DIVISION OF SPILL PREVENTION AND RESPONSE
CONTAMINATED SITES PROGRAM**

43335 K-Beach Rd, Suite 11
Soldotna, AK 99669
PHONE: (907) 262-5210
FAX: (907) 262-2294
<http://www.state.ak.us/dec/>

File: 2100.26.562

October 20, 2011

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

Re: Decision Document; Tesoro Northstore #56 - 2009
Corrective Action Complete Determination

Dear Ms. Duarte:

The Alaska Department of Environmental Conservation (ADEC), Contaminated Sites Program has completed a review of the environmental records associated with the Tesoro Northstore #56 - 2009 site, located in Anchorage, 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 this Corrective Action Complete determination.

Introduction

Site Name and Location:

Tesoro Northstore #56 - 2009
2844 Tudor Road
Anchorage, Alaska

Legal Description of Property

That portion of the Northeast Quarter of the Northwest Quarter of the Northeast Quarter of the Northwest Quarter (NE1/4 NW1/4 NE1/4 NW1/4), also known as Government Lot Six (6), of Section 33, Township 13 North (T13N), Range 3 West (R3W), Seward Meridian, according to the Official Bureau of Land Management survey thereof; being located in the Anchorage Recording District, Third Judicial District, State of Alaska.

Name and Mailing Address of Land Owner:

Won K & Pok H Cho
211 Washington Avenue
Anchorage, Alaska 99515-2509

ADEC Site Identifiers

Reckey: 2009210003501
File: 2100.26.562
Hazard ID: 25379

Regulatory authority under which the site is being cleaned up:

18 AAC 78

Background

This site is the location of a former retail fuel sales station, which was impacted by gasoline from leaks and/or spills associated with two 10,000-gallon underground fuel storage tanks (USTs) and associated piping and dispenser systems. These two USTs contained automotive gasoline during their history of use from 1985 to 2009. During site assessment and cleanup response measures, soil and/or groundwater samples collected at this site were tested for: gasoline range organics (GRO); benzene, toluene, ethylbenzene, and xylenes (BTEX); tetrachloroethylene (PCE); and trichloroethylene (TCE). The site is served by public water and sewer systems. A more detailed history of this site is contained within MWH's July 27, 2011, Summary Report and Request for Clean-up Complete report. A copy of this report is present in ADEC's project file, which is available for public review.

Site Characterization and Cleanup Actions

The UST's were upgraded in 1998, followed by subsequent site assessments that indicated that petroleum contamination was present in the soil and groundwater. On-site remediation systems were activated in 2001 that consisted of soil vapor extraction and vapor stripping and circulation treatment systems to treat the residual soil contamination at the site. Site data collected in 2004 depicted that these treatment systems were effective in removing the contamination. On June 27, 2005, ADEC issued a No Further Remedial Action determination for the site.

During routine UST system maintenance on February 4, 2009, gasoline was discovered in the turbine pump sump. This newly discovered and reported release caused the entry of this new site into ADEC's database for this UST facility. It was determined that the release was due to a fuel return line associated with the dispenser supply line leak detection system that had not been properly reattached. A Release Investigation was conducted in February of 2009 in order to investigate for impacts to the groundwater below the project site, and to delineate the soil contamination around the USTs. Three soil borings were drilled in order to assess the subsurface soil conditions. One groundwater monitoring well was constructed from one of the soil borings in order to assess the groundwater quality. Confirmation soil samples taken around the two 10,000-gallon USTs detected 0.0921 mg/kg benzene at 5.5 feet below ground surface (bgs) and PCE at 0.0892, 0.241 and 0.181 mg/kg at 5.5, 6.0, and 9 feet bgs, respectively. Groundwater contamination was not encountered in the groundwater monitoring well.

The two 10,000-gallon USTs, dispenser islands, associated piping and overhead canopy were removed in August of 2009. A total of 112.7 tons (65 cubic yards) of contaminated soil was excavated from the USTs and the dispenser islands excavations. The excavated soils were found to contain PCE, in addition to gasoline contamination. The source of the PCE was attributed to releases of dry cleaning solvent from a Laundromat and Dry Cleaning business which historically operated adjacent to the gas station business. The presence of the dry cleaning solvent (PCE) required that these excavated soils be transported to a hazardous waste permitted disposal site for final disposal, because the PCE is an F-listed RCRA waste. Confirmation soil samples collected from the excavation following the UST removals indicated that the contaminated soil was successfully removed from the former UST location. A groundwater sample collected from the bottom of the UST excavation was analyzed, and no contamination was detected. However GRO at 1,159 mg/kg, benzene 0.0604 mg/kg, toluene at 8.98 mg/kg, ethylbenzene at 13 mg/kg and xylenes at 185 mg/kg were detected at 6 feet bgs in the fuel dispenser island excavation.

In September of 2009 five soil borings were drilled and made into monitoring wells to further investigate the extent of any remaining soil and/or groundwater contamination at the former fuel dispenser island location. Xylenes were encountered at 6 feet bgs at a concentration of 85.0 mg/kg. The groundwater samples taken from the monitoring wells demonstrated that the groundwater quality met the ADEC groundwater cleanup levels.

In 2011, an additional 40 cubic yards of soil was excavated in the area of the former dispenser islands in an effort to remove the residual soil contamination. Approximately 30 cubic yards was not contaminated, and was returned to the excavation. Eight to ten cubic yards was deemed contaminated and was transported off-site for thermal remediation and final disposal. The confirmation soil samples taken from the excavation at 7.5 feet bgs (above the groundwater), 11 feet bgs (excavation bottom) and the four sidewalls at 8.5 feet bgs (north, south, east, and west) did not detect any contamination above the ADEC soil cleanup levels, indicating that the remaining soil contamination had successfully been removed from the subsurface in the area of the former dispenser islands.

Maximum historical soil contaminant concentrations reported to ADEC during the assessment and cleanup work at this site were:

Benzene	Less than 0.188 mg/kg,
Toluene	8.98 mg/kg,
Ethylbenzene	13 mg/kg,
Xylenes	185 mg/kg, and
GRO	1,159 mg/kg
PCE	0.241 mg/kg

Groundwater contamination was not detected from the 2009 release.

Contaminants of Concern

During the release investigations and corrective action/cleanup work performed at this site, soil and water samples were collected and analyzed for GRO, BTEX, PCE, and TCE. Following the completion of the cleanup measures employed at this site, both soil and groundwater were shown to meet their applicable cleanup levels.

Soil Cleanup Levels

The default soil cleanup levels applicable for this site are established in 18 AAC 75.341, Method Two, Tables B1 and B2, Migration to Groundwater.

Groundwater Cleanup Levels

The default groundwater cleanup levels applicable for this site are established in 18 AAC 75.345, Table C.

Pathway Evaluation

Following investigation and cleanup at the site, exposure to any remaining 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 current pathways to be: 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 ADEC soil cleanup levels and asphalt pavement covers this site.
Sub-Surface Soil Contact	De-minimis Exposure	Sub-surface soils meet the applicable ADEC soil cleanup levels.
Inhalation – Outdoor Air	De-minimis Exposure	Soils meet the applicable ADEC soil cleanup levels.
Inhalation – Indoor Air (vapor intrusion)	De-minimis Exposure	Groundwater meets the ADEC groundwater cleanup levels, and the vast majority of soil contamination has been excavated and removed from the site.
Groundwater Ingestion	Pathway Incomplete	Drinking water is supplied by the Municipality of Anchorage public water system.
Surface Water Ingestion	Pathway Incomplete	There is surface water located within ¼ mile of the site; however, no offsite migration of gasoline contamination has been detected.
Wild Foods Ingestion	Pathway Incomplete	Contaminants of concern are not bio-accumulative in plants or animals.
Exposure to Ecological Receptors	Pathway Incomplete	There is no potential for exposure to ecological receptors.

Notes to Table 1: “De-minimis Exposure” means that in ADEC’s judgment, receptors are unlikely to be affected by the minimal mass 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 reduce soil and groundwater contaminant concentrations to acceptable levels. ADEC has determined no further assessment or cleanup

action is required. There is no longer an unacceptable risk to human health or the environment. Therefore this site is being issued a Corrective Action Complete determination, and will be designated as 'Cleanup Complete' on the ADEC database.

This determination is in accordance with 18 AAC 78.276(f) and does not preclude ADEC from requiring additional release investigation and/or cleanup action if future information indicates that this site may pose an unacceptable risk to human health or the environment.

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

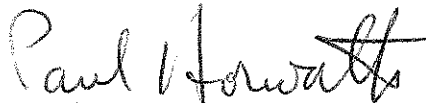
On August 5, 2011 ADEC approved a Monitoring Well Decommissioning Work Plan. A final report documenting the completion of the monitoring well decommissioning work must still be submitted to ADEC.

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

Sincerely,



Paul Horwath, PE
Environmental Engineer

Cc: Michael Zidek, MWH, Anchorage, AK
Robert E. Gilfilian, P.E., MWH, Anchorage, AK
Won K & Pok H Cho, Anchorage, AK