

ALASKA DEPARTMENT OF ENVIRONMENTAL CONSERVATION  
DIVISION OF SPILL PREVENTION AND RESPONSE  
CONTAMINATED SITES PROGRAM

RECORD OF DECISION

Cook's Sterling Tesoro  
Sterling, Alaska

August 16, 2007

FILE COPY

This Record of Decision (ROD) is based upon available data and focuses on the property described as the Cook's Sterling Tesoro site.

Site name and location:

Cook's Sterling Tesoro  
Sterling, Alaska

ADEC Identification Numbers:

File Number 2334.26.002  
Reckey #1989230013701  
Event ID #511  
UST Facility ID #2286

Legal Description:

Lot 1B, Doser Subdivision No. 2, located within the S1/2 NW1/4 SE1/4 Section 7, T5N, R8W, Seward Meridian, AK  
Kenai Peninsula Borough Parcel Number 06503024, consisting of 1.06 acres.

Regulatory authority under which the site is being cleaned up:

This project was reviewed under the applicable regulatory authority in 18 AAC 75, Article 3, as amended through October 16, 2005, and 18 AAC 78, Articles 2 and 6, as amended through January 30, 2003.

Name and mailing address of current facility owner/operator:

Jose G. Puentes  
P.O. Box 49  
Sterling, AK 99672-0049

Former owner/operator:

John and Carol Cook

**Background**

The Cook's Sterling Tesoro site has been a gas station since approximately 1978. The facility borders the north side of the Sterling Highway, near Mile 81.5, and is located about 1600 feet

east of the Moose River and 950 feet north of the Kenai River. Groundwater is the source of drinking water in this area and is encountered about 25 feet beneath the ground surface.

In 1988, the Alaska Department of Transportation & Public Facilities detected petroleum contaminated soil and groundwater during pre-assessment activities related to a Sterling Highway road improvement project. ADEC hired contractors to assess and respond to the contamination, which was predominantly gasoline. The contaminated groundwater plume migrated south under the Sterling Highway and impacted other properties on the south side of the highway. The response efforts included removal of fuel piping, dispensers, and approximately 3300 cubic yards of petroleum contamination soil. The excavated soil was stored in an onsite soil treatment cell and eventually disposed offsite under an ADEC-approved soil disposal plan. Petroleum contaminated soil and groundwater remained at the site following the cleanup work.

From 1993 until 2004, additional assessment, monitoring, and cleanup efforts were funded by ADEC's Underground Storage Tanks (USTs) Financial Assistance Program. Free phase gasoline product was identified in groundwater monitoring and high concentrations of gasoline contaminated soil and groundwater remained onsite. The contamination also exceeded ADEC groundwater cleanup levels on four offsite properties.

Civil lawsuits were filed by an adjacent landowner against several parties, including the ADEC. Also, since State of Alaska funds were spent responding to the contamination at this site, the Alaska Department of Law pursued the recovery of these funds. Out-of-court settlement agreements were finally reached between the involved parties. Under one of these agreements, funds were also allocated to the owner of two offsite properties specifically for the purpose of installing safe drinking water wells. The two properties are: Lot 1, Nobby Heights Subdivision, and Lot 2 Schwanke Subdivision, Section 7, T5N, R8W, Seward Meridian. The Kenai Peninsula Borough Assessing Office's parcel numbers for these two properties are 06505050 and 06552002, respectively.

In October 2006, the State and the Cooks entered into a Settlement Agreement providing that, in exchange of payment of additional cleanup costs, the State would, subject to specific conditions, release the Cooks and their successors for liability for the past contamination at or from the site. The State filed a notice of this settlement in the State Recorder's Office on October 30, 2006. The Department's Decision set forth in this Record of Decision does not alter the terms of that settlement with respect to the Cooks or their successors.

Two other properties impacted by the groundwater contamination did not have impacts to their drinking water wells, which are periodically monitored for petroleum contamination. One of the wells was installed as a corrective action measure during the management of this site in order to provide a safe source of drinking water.

There was documented petroleum contaminated soil remaining onsite adjacent to, and possibly under, the building at depths of less than 15 feet below the ground surface. There was also additional soil contamination located greater than 15 feet below the ground surface.

The data from more than 18 years of groundwater monitoring has demonstrated that the

groundwater contaminant plume is decreasing. There is no evidence that groundwater contamination ever reached either the Kenai or Moose Rivers and it has never been detected and confirmed in any drinking water wells.

In 2007, following an insurance settlement agreement providing funds for ADEC to act as the lead party to cleanup and/or monitor the remaining contamination, a contractor was hired to decommission the existing treatment system and any groundwater monitor wells that were no longer needed. ADEC will continue to monitor groundwater quality at this site, but no further cleanup measures are planned.

### **Contaminants of Concern**

The potential contaminants of concern at this site are:

- Benzene, toluene, ethylbenzene and xylenes (BTEX)
- Diesel range organics (DRO)
- Gasoline range organics (GRO)

### **Pathway Evaluation**

The human health exposure pathways evaluated at this site include: indoor and outdoor inhalation of vapors, ingestion of soil and water, and dermal contact. The contaminant migration pathways evaluated include: migration to ground and/or surface water, and migration to indoor air.

The concentration of GRO remaining in soil in 1989 from the sidewall of the cleanup excavation near the Cook's Sterling Tesoro building exceeded ADEC's current ingestion, inhalation, and 'migration to groundwater' soil cleanup levels. The concentration of benzene remaining in these soils in 1989 exceeded ADEC's current inhalation and 'migration to groundwater' soil cleanup levels. There is no current soil data to determine if these contaminated soils still exceed the risk based cleanup levels for the pathways of concern. However, the ground surface has been covered with asphalt and/or concrete for many years, and exposure is minimized as a result.

The exposure pathways of soil ingestion, dermal contact, and outdoor inhalation are minimized by the asphalt/concrete pavement.

The migration to groundwater pathway is complete and contaminated groundwater has migrated offsite. The monitor data indicates a decreasing trend (and extent) in contaminant concentrations. The drinking water well for the Cook's Sterling Tesoro facility is installed up gradient from the contamination into a deep aquifer, and is not affected by the contamination. The drinking water wells for two of the four impacted offsite properties are monitored to ensure water quality compliance with drinking water cleanup levels. The other two offsite properties affected by the contamination are currently not inhabited, but funds have been transferred to install safe drinking water wells on both properties. Based on the past and present groundwater quality monitoring data, impacts to drinking water wells are not expected, and periodic monitoring will continue.

The surface water migration pathway was considered but no surface water contamination has ever been detected.

The indoor vapor intrusion pathway at the Cook's Sterling Tesoro building has never been evaluated by sampling and laboratory analysis. The residual soil contamination is more than 18 years old and vapors are not expected to pose an unacceptable risk to indoor air quality. Benzene poses the greatest risk to indoor air quality, but it also naturally degrades over time and the most recent soil and groundwater data show that benzene concentrations have decreased substantially. The benzene released by vehicle fueling operations will generate higher benzene concentrations in outdoor and indoor air than will any contribution from the residual contamination in subsurface soil and groundwater. If this facility closes fuel sales operations in the future, ADEC may consider additional sampling at this site to further evaluate the 'migration to indoor air' pathway.

### **Cleanup Levels**

The soil cleanup levels established for this site are the 18 AAC 75.341 (Tables B1 and B2) levels for 'Migration to Groundwater' (under 40 inch zone). The groundwater cleanup levels for this site are the 18 AAC 75.345 (Table C) levels.

### **ADEC Decision**

ADEC has evaluated the response efforts and long term monitor data for the Cook's Sterling Tesoro site and determined that further remediation of the existing contamination at this site is not required.

There is residual soil and groundwater contamination remaining onsite and groundwater contamination has migrated offsite. However, the contaminated media does not pose an unacceptable risk to human health or the environment provided appropriate conditions and restrictions are attached to the property. Therefore, based on current information, ADEC requires no further remedial action and this site is approved for conditional closure, subject to the following conditions:

1. The owner of this property shall allow reasonable access to ADEC and its agents to perform contamination investigation, assessment, monitor and/or cleanup operations in response to any remaining soil and groundwater contamination.
2. Residual contaminated soil or groundwater may not be moved on site, or transported or disposed off-site, without ADEC's prior written approval. In the event contaminated soil or groundwater is proposed to be excavated, moved, or disposed, including movement or disposal on or off site, the facility owner or operator shall contact ADEC for the prior review and approval of the proposed activity in accordance with 18 AAC 78.274(b).
3. The installation of groundwater wells on this property is prohibited without the approval of ADEC.
4. The owner and/or operator of this property shall not disturb the one remaining groundwater monitoring well located on this property, identified as well KS-3. In the event that well KS-3 is damaged the property owner/operator shall, upon knowledge, notify ADEC promptly. ADEC will continue to monitor the groundwater quality at this site in accordance with a groundwater monitor plan.
5. A Notice of Environmental Contamination shall be prepared documenting the conditions established herein and will be recorded on ADEC's database and in the State of Alaska Recorder's Office for the Cook's Sterling Tesoro property.

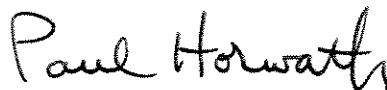
In accordance with 18 AAC 78.276(f)(2), ADEC may choose to proceed with additional site assessment, monitoring, remediation, and/or other necessary actions at this facility should new information become available that indicates contamination at this site may pose a threat to human health or the environment.

This status of this site will be noted as "Conditional Closure" on the ADEC database. An institutional control will be established on the ADEC database to document residual soil and groundwater contamination remaining onsite above the 18 AAC 75.341 (Tables B1 and B2, under 40 inch zone) ingestion, inhalation, and 'migration to groundwater' soil cleanup levels, and above the 18 AAC 75.345 (Table C) groundwater cleanup levels. Site closure (without conditions) will be considered when soil and groundwater samples confirm that soil and groundwater meets the established ADEC soil and groundwater cleanup levels for this site.

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 or concerns about this decision, or any of the attached conditions, please contact me at (907) 262-5210, extension #250.

Sincerely,



Paul Horwath, P.E.  
Environmental Engineer