



## Site Summary Update

March 29, 2002

Alaska Department of Environmental Conservation  
Division of Spill Prevention and Response

# COOK'S TESORO- STERLING, ALASKA

### Site Description

Fuel contamination (primarily gasoline) was identified at Cook's Tesoro facility in 1989 during the Alaska Department of Transportation & Public Facilities site assessment work associated with the expansion of the Sterling Highway through Sterling, Alaska. The site is located on the north side of the Sterling Highway, approximately MP 82 of the Sterling Highway. It is located about 1000 feet north of the Kenai River and 1600 feet east of the Moose River.

ADEC hired a contractor to investigate the site in 1989 and interim cleanup measures were initiated in 1990. The contaminated soil was excavated to a depth of 20 feet below the ground surface with approximately 3300 cubic yards of soil removed. The soil was treated and disposed of at John Cook's homestead property, about 8 miles east of the Cook's Tesoro facility. Following the excavation of the accessible soil, there were areas of highly contaminated soil remaining both under and adjacent to the facility building and beneath the fuel tanks (which were still in place at the time of the excavation). It was also noted that soil contamination remained beneath the excavation area down to the groundwater at 25 feet.

Elevated contaminant levels remain in soil and groundwater onsite. The contaminated groundwater is approximately 25 feet beneath the ground surface at Cook's and flows across the Sterling Highway (south of the site) to a depth of about 40 feet. The groundwater contamination did impact several properties across the Sterling Highway but there are no known impacts (in excess of the drinking water standards) in any drinking water wells.

There were about 30 groundwater monitoring wells installed to define the extent of the groundwater plume and sample data indicates a

declining trend in the contaminant levels over the past 13 years. It should also be noted that the monitoring wells closest to the Kenai River consistently indicate no detection of fuel contamination.

The expenditure of State funds allocated towards the investigation and cleanup of this site exceeds \$1,000,000. The majority of that funding was granted to the owner/operator of the station through the Department's Financial Assistance Program. However, there was more than \$300,000 of State funding expended prior to the existence of the Financial Assistance Program.

There was also litigation resulting from the fuel contamination at this site. An adjacent property owner filed a lawsuit naming the State of Alaska, Tesoro Petroleum Company, and the Cooks as defendants. The court dismissed the State from the lawsuit and eventually found Tesoro and the Cooks liable for. The Cooks settled with the plaintiff after being found liable and Tesoro was found liable for compensatory and punitive damages. As we understand it, the case has been appealed to a higher level court. There was conflicting testimony regarding the extent of the contamination and possible off site impacts.

### Threats and Contaminants

The primary contaminants of concern are the numerous petroleum constituents present in gasoline. The primary risk posed by these contaminants is groundwater contamination and the potential impact to drinking water wells.

### Public Health and Environmental Concerns

The possible risks posed by contamination would be to the public's health if the contamination impacted drinking water wells. There are also possible ecological concerns if there was migration to the Kenai or Moose Rivers.

The current information indicates that there are no impacts to drinking water wells. There was a corrective action plan developed that would provide for the installation of water supply wells on two vacant properties affected by the groundwater contamination. The installation of the water wells would be dependent on the property owner agreeing to accept an institutional control that would require that these wells be the only source of groundwater used on the properties.

There are also a series of monitor wells between the contaminant plume and the Kenai and Moose Rivers. The monitoring data has continually shown that there is no migration towards either of these surface water bodies.

DEC has evaluated the groundwater monitoring data and determined there is a continuing decline in contaminant levels and that the groundwater contaminant plume is contracting.

#### **Most Recent Response Actions**

The groundwater continues to be monitored on an annual basis to ensure the plume is not expanding and to continue to demonstrate a decreasing trend in contaminant levels.

#### **Current Status**

The site has undergone extensive cleanup and monitoring activities since 1989 and DEC has determined that there is no current risk to human health or the environment. The site will continue to be monitored to ensure the contamination continues to decrease in concentration and that there is no migration to human or ecological receptors.

There has been current interest expressed in this project by the Kenai River Special Management Area advisory board. They have indicated concerns related to contaminant migration and possible impacts to the Kenai River. DEC staff provided the board with the past monitoring data and our conclusions that the contaminant plume is decreasing in concentration and does not pose a risk to the river.