



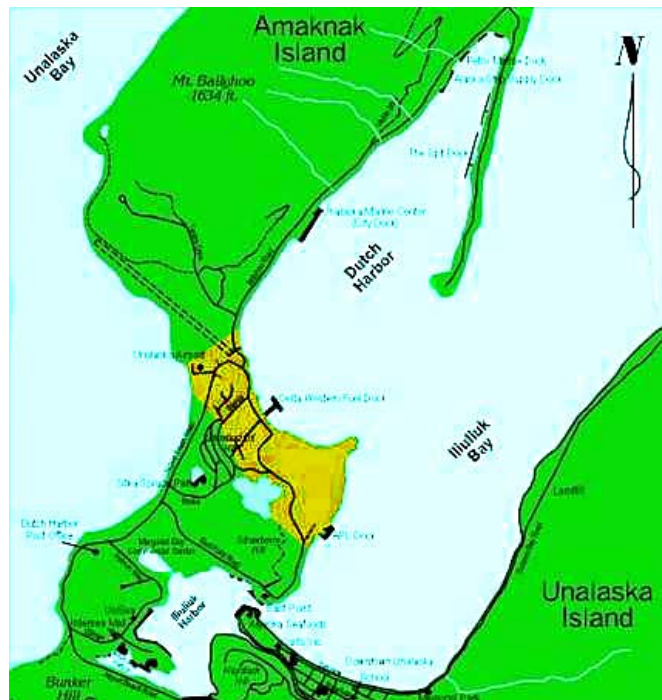
ALASKA DEPARTMENT OF ENVIRONMENTAL CONSERVATION
CONTAMINATED SITES PROGRAM

ROCKY POINT – AMAKNAK ISLAND
Public Review and Comment
on Cleanup Levels

DECEMBER 2002

DEC is seeking your comments
On soil and groundwater cleanup levels for
Petroleum contamination at and near Rocky Point

The Alaska Department of Environmental Conservation (DEC) is working with Chevron, Delta Western and the U.S. Army Corps of Engineers to clean up petroleum contamination in soil and groundwater around Rocky Point on Amaknak Island, near Dutch Harbor. Contamination in the area resulted from spills or releases from the fuel tank farms and associated pipelines dating back to World War II. The site includes the areas around the main tank farms on and below Rocky Point, underground tanks located on Strawberry Hill, fuel lines associated with the tanks, and the utilidor and pipelines between the Delta Western Fuel Dock the City Power Plant and continuing on to the airport (see attached figure).



This fact sheet and the public review and comment period are focused on the groundwater cleanup levels and soil cleanup levels as they relate to the potential for contaminants in soil to migrate into groundwater.

Site History

During World War II the United States military conducted a major build-up in the Aleutians as part of the national defense efforts. This included substantial construction on Amaknak and Unalaska Islands. Bulk fuel storage tank farms and pipelines were installed on Rocky Point and Strawberry Hill. These fuel facilities were used during the war. Shortly after the war the U.S. government leased the facilities to Standard Oil of California, which subsequently changed its name to Chevron. In the mid 1970s, the land was transferred to the Ounalashka Corporation (OC) in accordance with the Alaska Native Claims Settlement Act. OC continued to lease the tank farms to Chevron and more recently to Delta Western, which operates tank farms on portions of the site today.

During the more than sixty years that these areas have been used as fuel storage and distribution facilities, numerous spills, leaks and releases have occurred. DEC has been working with Chevron, Delta Western and the Corps of Engineers since 1989 to identify the sources and extent of environmental contamination, determine who is responsible for cleanup, and determine how to conduct the necessary cleanup. Fuel has been removed from many in-active tanks and lines. The extent of contamination has been fairly well characterized. Some cleanup work has been done in localized areas such as the former “tar ponds” and near an old steam plant. Groundwater monitoring has been conducted in the area for several years.

Additionally, since 1998 the Corps of Engineers has excavated and thermally treated more than 13,000 cubic yards of petroleum contaminated soil from a Pre-WWII Tank Farm site located near the corner of Biorka Drive and East Point Road.

Soil and Groundwater Characterization

Sampling over the past several years has documented soil and/or groundwater contamination around the tank farms and the pipeline corridors. The main areas of impact are:

- at the base of Rocky Point hill along East Point Road,
- near the APL facility,
- in a drainage area on top of Rocky Point hill (east of the underground tanks) and
- at the Pre-WWII Tank Farm.

Other areas with more limited contamination are located on Strawberry Hill and near the former aqua-fuel system adjacent to the airport.

Groundwater Use and Cleanup Levels

Alaska’s Oil and Hazardous Substance Pollution Control regulations, 18 AAC 75.345-.350, establish soil and groundwater cleanup levels. The default groundwater cleanup levels are based on safe drinking water levels. In areas where groundwater is not a current or reasonably potential future source of drinking water, the regulations allow increasing the groundwater cleanup levels, making them less strict by a factor of ten. This is commonly referred to as “the ten times rule”. DEC decides whether these higher levels are appropriate by evaluating several factors including:

- whether groundwater in the area is currently used as drinking water,
- the depth to groundwater,
- the aquifer quality (both quantity and quality of the water),
- whether institutional controls, such as deed restrictions or a local ordinance, limit groundwater use,
- land use in the area,
- the availability of an alternative water supply and
- consultation with the landowners, community and local government(s).

Additionally, where groundwater discharges into surface water, Alaska’s Water Quality Standards must be met for protection of surface water.

Chevron, Delta Western and the Corps of Engineers have requested that DEC approve cleanup levels for these sites using the ten times rule.

Based on information available at this time, DEC agrees that it appears groundwater is not a current or reasonably potential future drinking water source in these areas on Amaknak Island. Groundwater in this area has not been used as a drinking water source in the past. Surface water from Ilulaq Lake was used for drinking water during and after the war. However, all drinking water on the island is now supplied by the City of Unalaska from surface and groundwater sources on Unalaska Island. The City has an ordinance that requires property owners within 300 feet of a water main to connect to the City water supply. A water main runs through the areas of the sites that are currently developed. The land is currently zoned marine-dependant or marine-related industrial. OC, the primary landowner, has indicated it may want to develop portions of Strawberry Hill into residential property.

Additional institutional controls may be needed to address groundwater use in undeveloped areas, such as Strawberry Hill, and management of residual contaminated soil (future excavation and movement) and groundwater (dewatering or other non-drinking water use).

Prior to approving alternative cleanup levels for these sites, DEC is seeking input from any affected landowners, the public, the City of Unalaska and the Qawalangin Tribe.

The table below shows the highest groundwater contaminant levels measured throughout the sites over the past seven years in comparison with the proposed groundwater cleanup levels.

Proposed Groundwater Cleanup Levels (in milligrams/Liter)

Contaminant	Highest level measured	Default Cleanup Level	Proposed 10X Level	Surface Water Quality Standard
DRO	1,200	1.5	15*	NA
GRO	27.4	1.3	13*	NA
RRO	20.6	1.1	11*	NA
Benzene	0.228	0.005	0.05	0.005
TAH	0.421	NA	NA	0.010
TAqH	0.569	NA	NA	0.015
Lead	1.230	0.015	0.15	0.006

DRO – diesel range organics

GRO – gasoline range organics

RRO – residual range organics

TAH – total aromatic hydrocarbons (benzene, toluene, ethylbenzene, xylenes or “BTEX”)

TAqH – total aqueous hydrocarbons (BTEX plus polynuclear aromatic hydrocarbons)

* - this concentration may exceed the saturation limit for this range of petroleum hydrocarbons; 18 AAC 325(f) requires free phase product be removed.

Recent groundwater sampling results indicate that contaminant levels have decreased in many of the monitoring wells to levels that are below the proposed cleanup levels.

Soil cleanup levels are proposed to be raised to either ten times the migration to groundwater cleanup levels or safe levels based on the ingestion or inhalation pathways, whichever is lower.

Additional Information

More detailed information on these sites may be found in reports on file at the Unalaska Public Library, at the Ounalashka Corporation’s Office or by contacting DEC using the information provided below.

Providing input

If you have questions, comments or concerns over the proposed alternative cleanup levels or the assumption that groundwater will not be used as a drinking water source in the future, please contact DEC at:

Department of Environmental Conservation
Contaminated Sites Program
Attn: John Halverson
555 Cordova Street, Anchorage, AK 99501
Phone: 269-7545 or fax: 269-7649
Email: john_halverson@envircon.state.ak.us
Department of Environmental Conservation

Comments must be received by January 31, 2003.

The State of Alaska, Department of Environmental Conservation, complies with Title II of the Americans with Disability Act of 1990. Individuals with disabilities who may need auxiliary aids, services, and/or special modifications should contact the Human Resources Manager at (907) 465-5040 (TTY compatible)