



Site Summary Update

January 2003
Conservation
Response

Alaska Department of Environmental
Division of Spill Prevention and

Former ADOT&PF Soldotna Maintenance Station

Soldotna, Alaska

Current Status

The former Alaska Department of Transportation & Public Facilities Soldotna Maintenance Facility continues to be monitored for groundwater quality parameters. The October 2002 sample results (collected from 9 monitoring wells) continue to detect petroleum hydrocarbon and chloride contamination above the established cleanup levels. However, the data indicates there is a decreasing trend in concentrations.

All buildings have been removed from the property, and the on-site drinking water well has been abandoned. The property is proposed for transfer to the City of Soldotna in 2003.

Contaminants of Concern

Salt (chloride) and petroleum hydrocarbon contamination have been identified in the soil and groundwater at the site. The concentrations remain elevated above established cleanup levels but there is no risk to human health since the site is not occupied and the groundwater is not used as a drinking water source.

The impact of the contamination on the adjacent Kenai River sediments is being evaluated.

Cleanup Actions

A Phase I Assessment in 1992 identified six areas of concern:

- Area 1 included a dry well, a leachfield, and associated piping.
- Area 2 contained a 3,000-gallon used oil Underground Storage Tank (UST) and 55-gallon drums for used oil storage.
- Area 3 contained diesel and gasoline UST's and their associated pump dispenser.
- Area 4 is the location of an abandoned concrete septic tank, associated piping,

Background

The former Alaska Department of Transportation & Public Facilities Soldotna Maintenance Facility is located at 44149 Sterling Highway, (Mile 94.6 of the Sterling Highway) in Soldotna, Alaska. The property is situated at the intersection of Birch Street and the Sterling Highway, in downtown Soldotna, and is adjacent to the banks of the Kenai River. The property is relatively flat and unpaved, with the surrounding area sloping south towards the Kenai River.

Six areas of contamination were identified in 1992, primarily around storage areas for fuel, oil, salt, paint and solvents, plus an old septic tank. Subsurface soil and groundwater were found to be contaminated with petroleum compounds and chlorides. Cleanup actions in the ensuing decade have included soil treatment and removal, tank removal, abandonment of a drinking water well, and monitoring of soil and groundwater.

Chloride compounds continue to reach the Kenai River, however, monitoring shows declining trends. There is no risk to human health since the site is not occupied and the groundwater is not used as a drinking water source.

and septic drain field.

- Area 5 is a paint, toluene, and calcium chloride (CaCl) storage area.
- Area 6 was formerly used to store salted sand.

A Phase II Assessment in 1993 further delineated the six areas of concern. The field sampling activities identified low levels of petroleum hydrocarbon contamination present in the subsurface soils in Areas 1 through 5. Petroleum hydrocarbon-impacted groundwater was identified in Areas 3 and 5. Chlorides were detected in all of the six groundwater samples. Attempts to locate the dry well and leach field in

Areas 1 and 4 were unsuccessful.

From June to December 1996, site assessment and cleanup activities included:

- Excavation of petroleum hydrocarbon impacted soil in Areas 1, 2 and 4;
- Removal of the dry well and associated piping in Area 1;
- Assessment of soil and groundwater in a newly discovered leachfield and installation of a collection gallery in Area 1;
- Removal and disposal of the 3,000-gallon used oil UST in Area 2;
- In-place closure of the concrete septic tank in Area 4;
- Cleaning and modification of the maintenance shop floor drains; and
- Excavation and treatment of 600 cubic yards of soil.

As a result of the cleanup actions, the dry well in Area 1, the used oil UST in Area 2 and the leachfield and concrete septic tank in Area 4 were determined to meet the applicable cleanup levels for this site.

In 1998, the cleanup activities included:

- Removal of two regulated UST's and one heating oil tank;
- Assessment of a former oil/water separator outflow line;
- Installation of 10 new monitoring wells;
- Implementation of a quarterly groundwater monitoring program;
- Demolition of the main shop building and the movement off-site of auxiliary buildings;
- Exploration for a former tar pit; and
- Excavation and treatment of 3,180 cubic yards of petroleum impacted soil.

Sediment samples were collected from the Kenai River adjacent to the facility in May 1999. The analytical results identified diesel and residual range hydrocarbons and chloride.

In June 1999, S & W further investigated the site to locate a reported tar pit that used to exist at the site and to evaluate the possible methylene chloride source encountered in one of the monitoring wells. The source methylene chloride source was not identified but the former tar pit was discovered. Approximately 700 cubic yards of impacted soil was excavated and treated.

Three additional monitoring wells down gradient of the tar pit and along the south edge of the pad were installed in July 2000. A second round of sediment sampling was conducted which demonstrated low level petroleum and elevated level of salt (chloride) contamination still remain.

For more information:

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