



Department of Environmental Conservation

DIVISION OF SPILL PREVENTION AND RESPONSE Contaminated Sites Program

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File: 2314.38.028

June 18, 2021

Sent via electronic submittal only Patti Williams Kenai Peninsula Borough 144 N. Binkley Street Soldotna, Alaska 99669 pwilliams@kpb.us

Re: Decision Document South Peninsula Hospital 2006 Expansion Cleanup Complete Determination

Dear Ms. Williams:

The Alaska Department of Environmental Conservation, Contaminated Sites Program (ADEC) has completed a review of the environmental records associated with the South Peninsula Hospital 2006 Expansion. 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 unless new information becomes available that indicates residual contaminants may pose an unacceptable risk.

This Cleanup Complete determination is based on the administrative record for the South Peninsula Hospital 2006 Expansion, which is located in the ADEC office in Anchorage, Alaska. This decision letter summarizes the site history, cleanup actions and levels, and standard site closure conditions that apply.

Site Name and Location:

South Peninsula Hospital 2006 Expansion 4300 Bartlett Street; Homer, AK 99603

Name and Mailing Address of Contact Party:

Patti Williams Kenai Peninsula Borough 144 N. Binkley Street Soldotna, AK 99669

Regulatory Authority for Determination: 18 AAC 75

DEC Site Identifiers: File No.: 2314.38.028 Hazard ID.: 4272

Site Description and Background

The South Peninsula Hospital, (SPH), (formally known as the Homer Hospital) is located at 4300 Bartlett Street, Homer, Alaska 99603. The current hospital was initially constructed in the mid-1970s, adjacent to one of the early clinic sites. The Kenai Peninsula Borough (KPB) & SPH had the underground fiberglass fuel oil tank installed and in use from the mid-1970s until 1999. In the early 1990's, it was discovered that there was a diesel smell coming from the footing drain of the adjacent clinic building, (the original hospital) next to the main hospital. Eventually it was determined this diesel smell was emanating from the hospital's 20K gallon UST in use at the time and that it was probably leaking causing a contaminated soil issue. A primary and initial remediation effort commenced, the tank was removed, and 310 cubic yards of contaminated soil associated with the spill removed and stockpiled for remediation. Removal was made to the extent possible without undermining existing facilities, (Figure 2). The stockpiled contaminated soil was transported to Alaska Soil Recycling (ASR) in Anchorage for remediation. Some soil identified as contaminated was left in place to not undermine adjacent facilities. ADEC closed the site with the stipulation that upon further construction work at the hospital site, KPB would further remediate. In preparation for the SPH expansion planned for 2006, KPB started the process of decommissioning the old clinic adjacent to the contaminated site. This allowed access to additional contaminated soil. (Figure 3) An additional 550 to 600 cubic yards of soil was removed and transported to ASR for remediation, and again the site conditionally closed with the stipulation that any fuel oil discovered in further excavations that could not be retrieved, because of adjacent facilities, would be removed at the time it was encountered. 20 to 25 cubic yards of potentially contaminated soil were estimated left in place. The old clinic was subsequently torn down and removed.

Cleanup Levels

The applicable soil cleanup levels for the South Peninsula Hospital 2006 Expansion are those found in 18 AAC 75.341 Tables B1 and B2, over 40-inch precipitation zone, Migration to Groundwater, Ingestion, and Human Health cleanup levels.

At the South Peninsula Hospital 2006 Expansion all analytes for all samples were below ADEC's Human Health cleanup levels.

Contaminant	Human Health Soil (mg/kg)	Migration to Groundwater Soil (mg/kg)	Highest Remaining Contamination on Site
DRO	10,250	250	6490 mg/kg
GRO	1,400	300	584 mg/kg
Benzene	11	0.022	0.08 mg/kg

Table I – Approved Cleanup Level	Table 1 –	- Approved	Cleanup	Levels
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Characterization and Cleanup Activities

During the 2006 expansion of SPH, a third area of contaminated soil from the original UST removal was encountered. Again, this was not removed earlier because of existing facilities, particularly a concrete encased bank of the total electric supply to the hospital. (Figure 4.) The third area of contamination was found June 20, 2006. This situation presented difficult sequencing as Homer

Electric Association's (HEA) electrical service to SPH had been cut, and temporarily replaced by stand by generators while a new electrical supply system was being buried and encased to SPH. This new supply system was powered by both main electrical supply feeds in to Homer to enable SPH to receive power should either supply serving Homer go down. The location of this new feed was in an area that the second remediation (2000) identified as still possibly contaminated. This contaminated soil was estimated at 25 cubic yards and was allowed to remain in place due to impact to the existing facility. ADEC stipulated in their closure report that this soil would be removed if future renovation ever encountered it. This contaminated soil was encountered during the 2006 hospital renovations. KPB Capital Projects was immediately notified and within a few days a third remediation effort commenced. SPH remained on temporary power. All soil determined contaminated was again excavated, stockpiled, and sent to ASR for remediation. During this phase of the remediation a small remaining portion of the old tank (empty since the first remediation, was removed, cleaned and disposed).

The two-story Acute Care (locally referred to as the 'Half Moon' because of its shape), was built in the next phase of construction in 2008 immediately adjacent to and partially overlapping the previously cleaned up spill site.(Figure 5) An adjacent parking lot presently covers the remainder of the former spill area.

Soil remains above migration to groundwater; however, groundwater at the site was sampled and met ADEC groundwater cleanup levels. In 1999, one sample from the dewatering well which was removed from the north end of the site and installed as a temporary monitoring well was tested for DRO and BTEX. In 2001, one sample was taken at the draining pipe at the edge of the property for DRO, GRO, and BTEX. Although this groundwater sampling was prior to the contamination reported during the expansion project performed June 21-24, 2006, ADEC finds that this data can be considered representative and conservative since the source are was also present prior to 2006.

The hospital and surrounding city of Homer are provided water via a public water supply. According to the Department of Natural Resources Well Log Tracking System, the closest well to the hospital is approximately .24 miles down gradient with a depth of 57 feet, with very few wells past that.

Cumulative Risk Evaluation

Pursuant to 18 AAC 75.325(g), when detectable contamination remains on-site following a cleanup, a cumulative risk determination must be made that the risk from hazardous substances does not exceed a cumulative carcinogenic risk standard of 1 in 100,000 across all exposure pathways and does not exceed a cumulative noncarcinogenic risk standard at a hazard index of one across all exposure pathways.

Based on a review of the environmental record, ADEC has determined that residual contaminant concentrations meet the human health cumulative risk criteria for residential land use.

Exposure Pathway Evaluation

Following investigation and cleanup at the site, exposure to the remaining contaminants 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 pathways to be one of the following: De-Minimis Exposure or Pathway Incomplete. A summary of this pathway evaluation is included in Table 1.

Pathway	Result	Explanation
Surface Soil	De-Minimis	DRO is present in surface soils;
Contact	Exposure	however, contamination is below the
		Human Health cleanup levels.
Sub-Surface	De-Minimis	DRO is present in sub-surface soils;
Soil Contact	Exposure	however, contamination is below the
		Human Health cleanup levels.
Inhalation –	Pathway	Outdoor Air is not impacted by
Outdoor Air	Incomplete	contamination and residual
		contaminant are below human health
		cleanup levels.
Inhalation –	Pathway	Indoor Air is not believed to be
Indoor Air	Incomplete	impacted by contamination and
(vapor		residual contaminants are below
intrusion)		human health cleanup levels.
Groundwater	De-Minimis	DRO is present in groundwater;
Ingestion	Exposure	however, contamination is below the
		Groundwater cleanup level.
Surface	Pathway	Surface water was not impacted by
Water	Incomplete	contamination.
Ingestion		
Wild and	Pathway	Wild and Farmed Foods Ingestion
Farmed	Incomplete	was not impacted by contamination.
Foods		
Ingestion		
Exposure to	Pathway	Exposure to Ecological Receptors
Ecological	Incomplete	was not impacted by contamination.
Receptors		

Table 2 – Exposure Pathway Evaluation VOR Former North Drum Storage Area

<u>Notes to Table 1</u>: "De-Minimis Exposure" means that in ADEC's judgment receptors are unlikely to be adversely affected by the minimal volume or concentration of remaining contamination. "Pathway Incomplete" means that in ADEC's judgment contamination has no potential to contact receptors.

ADEC Decision

Soil contamination at the South Peninsula Hospital 2006 Expansion have been cleaned up to concentrations below the approved cleanup levels suitable for residential land use. Sufficient site characterization has been completed and the CSP determines that contaminants in soil have achieved steady-state equilibrium and will not migrate to groundwater; residual contaminants in soil do not pose an unacceptable migration to groundwater risk. This site will receive a "Cleanup Complete" designation on the Contaminated Sites Database, subject to the following standard conditions.

Standard Conditions

Any proposal to transport soil or groundwater from a site that is subject to the site cleanup rules or for which a written determination from the department has been made under 18 AAC 75.380(d)(1) that allows contamination to remain at the site above method two soil cleanup levels or groundwater

cleanup levels listed in Table C requires DEC approval in accordance with 18 AAC 75.325(i). A "site" as defined by 18 AAC 75.990 (115) means an area that is contaminated, including areas contaminated by the migration of hazardous substances from a source area, regardless of property ownership. (See attached site figure.)

- 1. Movement or use of contaminated material in a manner that results in a violation of 18 AAC 70 water quality standards is prohibited.
- 2. Groundwater throughout Alaska is protected for use as a water supply for drinking, culinary and food processing, agriculture including irrigation and stock watering, aquaculture, and industrial use. Contaminated site cleanup complete determinations are based on groundwater being considered a potential drinking water source. In the event that groundwater from this site is to be used for other purposes in the future, such as aquaculture, additional testing and treatment may be required to ensure the water is suitable for its intended use.

This determination is in accordance with 18 AAC 75.380 and does not preclude ADEC from requiring additional assessment and/or cleanup action if future information indicates that contaminants at this site may pose an unacceptable risk to human health, safety, or welfare or to the environment.

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, 555 Cordova Street, Anchorage, Alaska 99501-2617, within 20 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, P.O. Box 111800, Juneau, Alaska 99811-1800, within 30 days after the date of issuance of this letter, or within 30 days after the department is not requested within 30 days, the right to appeal is waived.

If you have questions about this closure decision, please feel free to contact me at (907) 269-7553, or email at jessica.hall@alaska.gov.

Sincerely,

Jema Dall

Jessica Hall Project Manager

cc: Spill Prevention and Response, Cost Recovery Unit

Enclosures: Figures





Figure 2:







Figure 4





2

6/18/2021

Figure 6: Current Site Figure



3