

STATE OF ALASKA

**DEPT. OF ENVIRONMENTAL CONSERVATION
DIVISION OF SPILL PREVENTION AND RESPONSE
CONTAMINATED SITES PROGRAM**

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September 24, 2003

Mr. Gerry Rieger
Department of the Navy
Engineering Field Activity, Northwest
Naval Facilities Engineering Command
19917 Seventh Avenue N.E.
Poulsbo, WA 98370-7570

Mr. Walter Weyapuk, President
Wales Native Corporation
P.O. Box 529
Wales, AK 99783

Re: Site Closure: Wales Naval Field Station, Wales, Alaska

Dear Gentlemen:

I am pleased to inform you that the Alaska Department of Environmental Conservation (DEC) has determined that no further cleanup is required at the Wales Naval Field Station Site under the site cleanup rules in the Oil and Hazardous Substances Pollution Control Regulations (18 AAC 75.325 – 18 AAC 75.390), and that the Wales Naval Field Station Site has been listed as “closed” on the DEC Contaminated Sites Program database. This closure is effective July 14, 2003, the date of the final signature on the *Environmental Cleanup Decision Document – Wales Naval Field Station, Wales, Alaska*.

The Decision Document formalizes the cleanup levels and cleanup requirements for the Wales Naval Field Station site, and summarizes the process that was followed to determine appropriate cleanup levels and cleanup actions for this site. Normally, a decision document is completed and signed before a cleanup is conducted. The decision document for the Wales Naval Field Station was drafted prior to the 1999 cleanup, but was not finalized or signed by the Navy and DEC at that time. Site closure was therefore delayed until the cleanup criteria for this site were formalized with signing of the decision document.

Mr. Kevin Ball, lead for the Navy’s Environmental Restoration Team, Engineering Field Activity Northwest signed the decision document on June 24, 2003. Two copies of the decision document were then forwarded to DEC, and Mr. John Halverson, acting Section Manager in the DEC Contaminated Sites Program, signed the decision documents on July 14, 2003.

The Decision Document does not describe the actual cleanup that was conducted at the Wales Naval Field Station. Therefore, in this letter I have summarized information on general background of the Wales Naval Field Station, interim actions, the rationale used in developing final cleanup decisions, and the actions that were taken during the final cleanup.

Location and Background

The Wales Naval Field Station occupied approximately 24 acres located at the northern edge of the Village of Wales, on the eastern shore of the Bering Strait. The Army established a post in Wales in the 1940s to help supply the Russian Army during World War II. The National Weather Service built a weather station at the site in 1947. In 1951 the site was transferred to the Deep Submergence Laboratory which later became the Arctic Submarine Laboratory. The site was transferred to the Keyport Division of the Naval Undersea Warfare Center in 1992.

Historical activities that resulted in environmental impacts at this site included the storage and use of fuels, electrical power, heat, solvent for cleaning, electrical transformers containing PCB oil, and burning of debris and garbage. During the time that this site was being investigated and cleaned up, the Navy owned the buildings, but leased the land from Wales Native Corporation.

Interim Cleanup Actions

Several investigations and cleanup actions have been conducted at the Wales Naval Field Station. Interim cleanup actions included:

- 1994 Removal Action – Site wastes, including drum contents and unused chemicals stored in the paint shed, were characterized. Approximately 300-cubic yards of petroleum-contaminated soil were excavated and placed in a biocell.
- 1996 Removal Action – Additional characterization of site wastes was performed, and wastes were transported off site for disposal. Wastes removed consisted of 12 gallons of chlorodifluoromethane, 336 gallons of acids and flammable liquids, 30 pounds of dry metal salts and photo processing chemicals, 15 gallons of dry metal salts, 12 gallons of waste mercury, 990 gallons of used generator oil and diesel/water mix, 27 pounds of sodium hydroxide, 440 gallons of used solvent, 600 pounds of various non-regulated material, 450 pounds of used personal protective equipment, and 9,250 pounds of scrap metal, empty containers, and asbestos.
- 1997 Fuel Tank Decommissioning – Several above ground fuel storage tanks were taken out of service and associated distribution lines were purged and capped.

Summary of Risk Assessment Findings

Human health and ecological risk assessments were completed for the Wales Naval Field Station in 1999. The human health risk assessment evaluated potential cancer and non-cancer risks to the occasional site visitor, a future resident, and a subsistence consumer of plants and animals exposed to the site. Based on historic sampling, and additional sampling conducted to support the risk assessment, the contaminants of concern at this site were methylene chloride, found in the soil near the northeastern corner of the bulk fuel tanks, and diesel range and residual range petroleum, found at several areas of the site. In summary:

- The risk assessment identified potential cancer and non-cancer effects for occasional visitors and future residents from exposure to methylene chloride in the soil.

- No risk to human health was found for subsistence consumers of plants or animals. Sampling of groundwater near the beach and of beach sediments showed that site contaminants are not leaching to the nearby marine environment, thus subsistence aquatic resources (fish, clams, marine mammals) are not exposed to site contaminants. Land mammals do not have significant exposure to the site, birds do not nest at the site, and the site does not contain plants that are harvested for subsistence use.
- The ecological risk assessment found a low risk to burrowing mammals on the site, and no significant risks to any other environmental receptors.

Cleanup Levels

The decision document establishes the cleanup levels for the Wales Naval Field Station to address site risks, to comply with regulations, and to address aesthetics.

1. Cleanup levels to eliminate site risks: A cleanup level of 144 mg/kg was established for methylene chloride in soil to eliminate the risks identified in the risk assessment.
2. Cleanup levels to address regulations: No significant risks were identified for exposure to petroleum compounds. Therefore the method 2 arctic zone cleanup levels from 18 AAC 75.340 Table B2 were selected for petroleum. These cleanup levels are 12,500 mg/kg for diesel range organics, and 13,700 mg/kg for residual range organics.
3. Cleanup levels to address site aesthetics: A cleanup level of 1000 mg/kg was established to a depth of 1 foot throughout the site to eliminate surface staining and potential odors from surface soil.

Final Site Cleanup

Final cleanup of this site was performed during summer of 1999. *The Closeout Report – Treatment of Petroleum Contaminated Soil* (Bristol Environmental And Engineering Services Corporation, February 2000) documents that the cleanup actions specified in the decision document have been completed, and that the soil cleanup levels were met. Cleanup included the following actions.

- A total of 1883-cubic yards of petroleum-contaminated soil were excavated from various locations. The soil was excavated from the former diesel tank area, the old biocell, the former burn area, north and south beach areas, and at the former fuel tank sites behind the BOQ and Resident Building. The petroleum cleanup levels were successfully met in the excavated areas. The soil was treated by hot air vapor extraction. Following treatment, the soil was used to backfill the excavated areas.
- Due to lack of treatment space and time, 25 tons of soil with diesel range organics and 3 tons of soil with residual range organics were excavated from the former burn area and the north and south beach areas, bagged in supersacks, and shipped to Anchorage for treatment.
- Confirmation sampling near the northeastern corner of the bulk fuel tanks, the area with suspected methylene chloride contamination, found the maximum concentration of methylene chloride to be 0.083 mg/kg, which is below the risk-based cleanup level of 144 mg/kg. Therefore no cleanup was conducted for methylene chloride. (It is believed to have evaporated between the time it was originally identified and the time the cleanup was conducted.)
- The Generator Building and adjacent fuel station were demolished. Asbestos-containing material was placed in “superboxes” and transported to the asbestos cell at the United States Air Force Tin City landfill. Non-hazardous wood was burned, and other associated demolition debris was shipped to the Nome landfill.

- Approximately 300 feet of galvanized pipe was removed from various locations.
- Drums were excavated from sand dunes, based on a previous electromagnetic survey. These included 29 empty drums and two drums containing fluids. Drums and contents were disposed off-site.
- Batteries and battery parts were found, excavated and removed from two locations, the north drum removal area, and south of the garage building.

Concurrently with this final cleanup action, the Navy demolished additional structures, including the BOQ and Resident Building, and conducted debris disposal at this site. These additional activities were not covered by the decision document, or by any reports submitted to DEC.

I am returning one copy of the Decision Document with original signatures to the Navy, and am sending a photocopy to the Wales Native Corporation for its records, as well as courtesy copies to the Native Village of Wales, City of Wales, and Ms. Cindy Thomas, attorney for the Wales Native Corporation.

DEC may reopen the site and require the Navy to conduct additional investigation or cleanup if new information becomes available in the future that leads DEC to make a determination that the cleanup of the Wales Naval Field Station is not protective of human health, safety, and welfare, or of the environment, or if new information becomes available which indicates the presence of previously unidentified contamination or exposure routes related to Navy activities. If you have any questions, please call Tamar Stephens at (907) 451-2131.

Sincerely,



Tamar J. Stephens
Environmental Specialist

Enclosure

cc (w/enc.): Cindy Thomas
Luther Komonaseak, Native Village of Wales
Ellen Richard, City of Wales