

## Department of Environmental Conservation

DIVISION OF SPILL PREVENTION AND RESPONSE Contaminated Sites Program

410 Willoughby Avenue, Suite 303 P.O. Box 111800 Juneau, AK 99811-1800 Phone: 907-465-5390 Fax: 907-465-5218 www.dec.alaska.gov

File No: 400.38.031

December 13, 2021

John Handeland General Manager/Chief Operating Office Nome Joint Utility System PO Box 70 Nome, AK 99762

Re: Institutional Controls (ICs) Verification for Nome New Power Plant, located at 504 Port Road in Nome, Alaska 99762

The Contaminated Sites Program conducts periodic verification of closed sites where institutional controls (land use restrictions) are required under 18 AAC 75.375. We have identified Nome New Power Plant as a site with institutional controls.

In order to prevent people from being exposed to any remaining contamination on the property, **this letter is being sent as a <u>reminder</u>** of the conditions placed on the property as part of the 2007 Conditional Closure Notification, the 2008 Notice of Environmental Contamination, and the 2014 Decision Document: Institutional Controls Modification granted by the Alaska Department of Environmental Conservation (ADEC). At the time of closure, soil and groundwater contamination were documented as remaining on the property.

Policy and regulations have evolved since this site was closed with conditions in 2007. Please be advised that the Nome New Power Plant site is subject to the following site-specific and standard conditions and/ or controls:

- 1. As of December 2014, security measures in place at the Nome New Power Plant site include internal and external security cameras outfitting the building and area, which is staffed 24 hours a day. There are also "Restricted Area" and "Authorized Personnel Only" signs posted on the outside of the building. You are required to notify the ADEC if these security measures change in any way. You will need to provide photo documentation of the changes so that we may evaluate their effectiveness in ensuring that conditions at the site remain protective of human health and the environment.
- 2. Groundwater should not be used as a drinking water source. A deed restriction precluding the installation of any groundwater wells without ADEC approval shall be attached to the property. The notice was filed with the ADNR Recorder's Office on July 18, 2008 and is identified by the Document Number 2008-001262-0. A copy of the notice is enclosed.

- 3. The soil cap of 4 to 7 feet over the contaminated soil areas shall be maintained to prevent soil and water exposure pathways.
- 4. The owner/operator of the site shall ensure oversight and screening by a qualified environmental consultant when (or if) soil excavation is proposed. In the event that contamination is discovered, ADEC shall be notified.
- 5. Construction activities may require workers to wear appropriate personal protection equipment in accordance with the facility's site safety plan.
- 6. Any future change in land use may impact the exposure assumptions cited in this document. If land use and/or ownership changes, these management conditions may not be protective and ADEC may require additional remediation and revised conditions. Therefore, the Nome New Power Plant shall report to ADEC every 2 years to document land use, or report as soon as you become aware of any change in land ownership and/or use, if earlier. The report can be sent to the local ADEC office or electronically to <a href="mailto:DEC.ICUnit@aiaska.gov">DEC.ICUnit@aiaska.gov</a>.
- 7. Any proposal to transport soil or groundwater off-site requires ADEC 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. *This is a standard condition*.
- 8. Movement or use of contaminated material in a manner that results in a violation of 18 AAC 70 water quality standards is prohibited. *This is a standard condition*.
- 9. Groundwater in the state of Alaska is protected for aquaculture use. In the event that an aquaculture facility uses groundwater from this site in the future, additional treatment may be required to meet aquatic life criteria under 18 AAC 70. *This is a standard condition*.

Failure to maintain these requirements may result in re-opening the site by the Contaminated Sites Program, in which case, further remediation could be mandatory.

In accordance with 18 AAC 75.380(d)(2), ADEC may require additional site assessment, monitoring, remediation, and/or necessary actions at this facility should new information become available that indicates contamination at this site may pose a threat to human health or the environment.

If you seek to have the institutional controls removed from this site, you can choose at any time to voluntarily conduct additional assessment, monitoring or further cleanup to demonstrate that contamination at the site now meets the applicable cleanup levels under 18 A.AC 75.

This site information is a matter of public record and is available at ADEC's online database record at: https://dec.alaska.gov/Applications/SPAR/PublicMVC/CSP/SiteReport/3971

The ADEC will issue a reminder letter such as this on a scheduled basis, every two years. If you have any questions regarding this site, please contact me at (907) 465-5229 or evonne.reese@alaska.gov and I will be glad to assist you.

Sincerely,

Evonne Reese

Environmental Program Specialist Institutional Control Unit

Encl: 2007 Record of Decision

Ehme Reese

# STATE OF ALASKA

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

SARAH PALIN, GOVERNOR

610 University Avenue Fairbanks, AK 99709-3643 PHONE: (907) 451-2192 FAX: (907) 451-5105 www.dec.state.ak.us

File: 400.38.031

October 24, 2007

John Handeland General Manager/Chief Operating Officer Nome Joint Utility System P.O. Box 70 Nome, Alaska 99762

Re: Nome Joint Utilities New Power Plan Facility, Nome, Alaska

Reckey 2002320128201

Dear Mr. Handeland:

The Alaska Department of Environmental Conservation, Contaminated Sites Program, (DEC), reviewed the site specific information associated with the Nome Joint Utilities System (NJUS) New Power Plant site, site located in Nome, Alaska. Based on the information presented to date, ADEC has determined that soil contamination remains at the site above the most stringent 18 AAC 75 cleanup levels. However, the information provided to the DEC indicates that onsite contamination known to be present does not pose an unacceptable risk to human health or the environment at this time. As a result, a conditional closure status will be issued for this property subject to conditions established in this document.

Please note the following information that was considered in making the determination on the environmental status of the site.

#### Site name and location

The site is known as the new Nome Joint Utility System, located within the City of Nome, Alaska. The legal description of the site is: Block 21, Tract II, Nome Airport Subdivision, located within Section 26, Township 11 South, Range 34 West, Kateel River Meridian, (64° 30.3' North, 165° 25.6' West).

The physical location of the power plant site is 504 Port Road, Nome, Alaska 99762.

#### Regulatory authority

18 AAC 75 and 18 AAC 78

#### **Contaminated Sites Program File Numbers**

ADEC file # 400.38.021 RECKEY # 2002320128201

#### **Site History**

The property was originally part of the United States Air Force Marks Field facility in 1923 and is located north of the West Nome Tank Farm site (another contaminated site in the Nome area). In 1970, the Alaska Department of Transportation & Public Facilities (ADOT&PF) acquired the property and used it as a highway maintenance facility. There was petroleum contamination identified during geotechnical investigations of the property but the source(s) of contamination is not specifically known. However, it predated ownership by NJUS.

Multiple environmental assessments have been completed for this site, including the following:

- 1. Travis/Peterson Environmental Consulting (TPEC) report titled Electric power Systems, Nome Joint Utilities System Expansion, November 2002.
- 2. NJUS request for brownfield assessment, March 17, 2003.
- 3. Shannon & Wilson Corrective Action Report, July 2003.
- 4. Travis/Peterson Conceptual Site Model, April 2, 2003.
- 5. North Creek Analytical, Inc. Corporate Quality Assurance Manual, January 2004.
- 6. Travis/Peterson Quality Assurance Project Plan July & September 2004 versions.
- 7. Travis/Peterson NJUS Work Plan for Constructing a New Power Plant and Water and Sewer Line, August & September 2004 versions.
- 8. Travis/Peterson Decommissioning Plan for Monitoring Wells on the Site of the New NJUS, November 2006.
- 9. Travis/Peterson 13 Quarterly Progress Reports, November 2004 April 2007.

The contaminants of concern (COCs) identified in groundwater include: Diesel Range Organics (DRO), Residual Range Organics (RRO), and benzene. The maximum concentrations of contaminants were: DRO at 4.87 milligrams per liter (mg/L) (Oct 2002); benzene at 0.0145 mg/L (Oct 2002); and RRO at 1.77 mg/L (Sept 2005).

The COCs in the soil include: gasoline range organics (GRO), DRO, benzene and ethylbenzene. The maximum concentrations of contaminants were: DRO at 12,300 mg/kg (Sept 2004), GRO at 847 mg/kg (Oct 2004); benzene at 0.0298 mg/kg (Oct 2004); and ethylbenzene at 14.9 mg/kg (Oct 2004). The soil contamination was excavated and removed from the site to the extent practicable.

As a condition of the sale to NJUS, ADOT&PF hired Shannon & Wilson, Inc. (S&W) to excavate soil contamination. Five locations were identified by the ADOT&PF Project Manager and 300 cubic yards of contaminated soil were excavated and transported off site to other property owned by ADOT&PF one mile north of this site.

Soil samples were collected in the five excavation areas and sample results indicated the majority of contaminated soil was removed, with the following exceptions: excavation #5, excavation #2, where the road and a utility pole precluded additional excavation. In addition to the five excavations, sixteen test pits were field screened for any remaining contamination.

In 2004, TPEC conducted additional sampling and contaminated soil removal. A trench for a sewer line was excavated and sampled with contaminated soil stored in a containment area.

TPEC installed three groundwater wells to monitor flow direction and quality parameters. Groundwater was sampled with DRO contamination detected at 4.37 mg/L.

In 2006, a fuel pipe line trench was excavated on the west side of the property with DRO detected at 571 mg/kg. The soil was used as fill material and was estimated to be minimal in volume.

In September 2007, it was reported that the groundwater wells were destroyed during construction activities

#### **Pathway Evaluation**

A conceptual site model (CSM) for NJUS was drafted in December 2006. The model identified the following exposure pathways:

- 1. incidental soil ingestion,
- 2. dermal absorption of contaminants from soil,
- 3. ingestion of groundwater,
- 4. dermal absorption of contaminants in groundwater, and
- 5. inhalation of outdoor and indoor air.

#### **Incidental Soil Ingestion**

The *pathway of incidental ingestion of subsurface soil* is considered complete. Although the maximum concentration of DRO in the soil exceeds the cleanup level for ingestion, most of the soil sample results were below this value. Potential receptors are workers, construction workers, site visitors, and trespassers.

Engineering controls such as signs and fences should keep the majority of receptors from the property. Additionally, a soil cap would minimize contact with the contaminated soil. In order to address worker safety, any future excavation of soil should be subject to oversight by a qualified environmental consultant.

#### Dermal Absorption of Contaminants from Soil

DRO is considered a semi-volatile organic compounds and therefore able to permeate the skin. The *pathway of dermal absorption of contaminants in soil* is considered complete. Due to the lack of contamination evident at the surface, it is unlikely that power plant workers and site visitors would be exposed to this pathway. This risk is negligible for both of these types of receptors.

Construction workers may be at risk for exposure to this pathway during excavation activities but the requirement for oversight of any excavation by a qualified environmental consultant should address any possible risks from this exposure pathway.

## **Groundwater Ingestion**

There are no drinking water wells in close proximity of the site (SECOR, 2003). The groundwater is not a current drinking water source and a municipal water system distributes drinking water to the residences and industries of Nome. It is unlikely that groundwater will ever be used as a drinking water source in the future, but an 18AAC 75.350 determination has not been made for this site. Therefore, the *ingestion of groundwater pathway* may be considered complete but institutional controls will be established to prevent groundwater use without DEC review and approval.

NJUS has agreed to place a deed restriction on the property precluding installation of any additional wells in order to reduce the risk of ingestion of groundwater as well as accidental absorption.

## Dermal Absorption of Contaminants in Groundwater

The pathway of dermal exposure to contaminants in groundwater is considered complete. It is possible that dermal exposure to groundwater could occur during construction activities. The contaminants of concern are DRO and RRO which are unlikely to be encountered by plant workers, site visitors, or trespassers, since groundwater is six to eight feet below the ground surface.

Administrative controls mandating the use of personal protection equipment during construction activities and environmental oversight during such operations will effectively protect future workers at this site.

## Inhalation of Outdoor and Indoor Air

GRO and BTEX can volatilize, enter the gas phase, and migrate through the soil to diminish air quality outside on site and within site structures. The *pathways of inhalation of outdoor and indoor air* are considered complete. Though these pathways may be complete, the low concentrations identified indicate there is no unacceptable risk from inhalation of outside or inside air.

## Summary of Proposed Controls to Reduce Risk of Exposure

NJUS shall institute the following land use restrictions or controls:

- 1. A *deed restriction* precluding the installation of any groundwater wells without DEC review or approval shall be attached to the property.
- 2. Perimeter fencing shall be placed (and maintained) around the property and maintained to prevent unauthorized access.
- 3. A soil cap of 4 to 7 feet over the contaminated soil areas shall be maintained to prevent soil and water exposure pathways.
- 4. Signs shall be posted (and maintained) notifying the public of the restricted access requirements.

- 5. The owner / operator of the site shall ensure oversight and screening by a qualified environmental consultant when (or if) soil excavation is proposed. In the event that contamination is discovered, DEC shall be notified.
- 6. The owner / operator shall ensure any exposure risks are incorporated into the facility's health and safety plan.
- 7. Construction activities may require workers to wear appropriate personal protection equipment in accordance with the facility's site safety plan.

#### **Cleanup Levels**

The soil cleanup levels established for this site are the 18 AAC 75.41 Table B1 and B2, method two, under 40 inch zone.

The groundwater cleanup levels are the 18 AAC 75.345 table C levels.

#### **ADEC Decision**

Based on information provided to date, DEC has determined that soil and groundwater contamination remains on site above the established cleanup levels. However, the contamination does not pose an unacceptable risk to human health or the environment provided the owners and / or operators of the site comply with the site specific conditions established in this decision document.

ADEC will not require further active cleanup actions at this site and approves conditional closure status subject to the following:

- 1. The owner / operator of the site shall notify DEC prior to any proposed excavation and / or transport of contaminated soil off site in accordance with 18 AAC 75.325(i). The residual soil contamination remaining on site may pose a human health risk if proper safety measures are not employed when (or if) the soil is encountered. In order to minimize risks, the owner / operator of the site shall contract with a qualified environmental person to prepare a work plan (for DEC review and approval) that properly addresses the management and handling of any soil contamination prior to its excavation.
- 2. The owner / operator of the site shall file a Notice of Environmental Contamination (NEC) with the State of Alaska's Recorder's Office that provides information regarding the contamination issues associated with this property and any land use restrictions and / or controls applicable to the site, as established in this decision document.

Site closure (without conditions) can be achieved when soil samples confirm that all soil meets the 18 AAC 75.341 'migration to groundwater' cleanup levels for the Under 40 inch zone. The soil must be sampled in accordance with a DEC approved work plan.

In accordance with 18 AAC 75.380(d), DEC may require additional cleanup action if new information is discovered which indicates this determination is not protective of human health, safety, and welfare or the environment.

In accordance with 18 AAC 15.185, any person who disagrees with this decision may request an informal agency review by the director of the department's Division of Spill Prevention and Response. A request for informal review must be made within 15 days after receiving the department's decision reviewable under this section, and should be addressed to Larry Dietrick, Director, Department of Environmental Conservation, at P.O. Box 111800, 410 Willoughby Avenue, Suite 303, Juneau, Alaska 99811-1800. In addition, any person who is aggrieved by this decision may request an adjudicatory hearing under 18 AAC 15.195 – 18 AAC 15.920. If any person wishes to request an adjudicatory hearing, the request should be submitted to the Commissioner, Department of Environmental Conservation, P.O. Box 111800, 410 Willoughby Avenue, Suite 303, Juneau, Alaska 99811-1800, within 30 days after the date of issuance of this letter, or within 30 days after the department issues a final decision under 18 AAC 15.185. If a review is not requested within 15 days, or if a hearing is not requested within 30 days, the right to appeal is waived, and the decision becomes final.

Sincerely,

Jim Frechione

Environmental Manager

Attachments: Figure 1, Site Plan

Figure 2: Well Locations

Figure 3: Soil Sample Locations





