



THE STATE  
of **ALASKA**  
GOVERNOR SEAN PARNELL

Department of  
Environmental Conservation

DIVISION OF SPILL PREVENTION & RESPONSE  
Contaminated Sites Program

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File No: 1516.26.034  
Return Receipt Requested  
Article No: 7012 1010 0003 0389 0450

May 9, 2013

Mr. Morgan Barry  
City of Ketchikan Public Works Dept.  
2930 Tongass Avenue  
Ketchikan, AK 99901

Re: Decision Document; *City of Ketchikan Pump Station 3*; Corrective Action Complete  
Determination

Dear Mr. Barry;

The Alaska Department of Environmental Conservation (ADEC), Contaminated Sites Program (CSP) has completed a review of the environmental records and project files associated with *City of Ketchikan Pump Station 3*, which is located within the city of Ketchikan, Alaska. Based on the information provided to date, ADEC has determined that the remaining contaminant concentrations and disposition do not pose unacceptable risks to human health or the environment, and this site will be closed in the CSP database.

This decision is based on the administrative record for the subject site, which is located in ADEC's offices in Anchorage, Alaska. This letter summarizes the decision process used to determine the site's environmental status and provides a summary of the regulatory issues considered in this Corrective Action Complete determination.

**Site Name and Location:**

City of Ketchikan Pump Station 3  
1091 Tongass Avenue  
Ketchikan, Alaska 99901

**DEC Site Identifiers:**

File No.: 1516.26.034  
Hazard ID: 25989

**Name and Mailing Address of Contact Party:**

Mr. Morgan Barry, Contract Administrator  
City of Ketchikan Public Utilities  
2930 Tongass Avenue  
Ketchikan, AK 99901

**Regulatory Authority for Determination:**

18 AAC 78

## Background

The site known as *City of Ketchikan Pump Station 3* is located along the eastern shores of Tongass Narrows in downtown Ketchikan at 1091 Tongass Avenue (Figure 1). This facility uses “lift pumps” to move wastewater through Ketchikan’s main sewer pipeline into the city’s wastewater treatment plant.

A site assessment was performed in conjunction with the closure and removal of a 550 gallon, fiberglass underground storage tank (UST) and its associated piping on November 27, 2012. This tank supplied diesel fuel to a backup generator that powered the entire pump station, including the sewer’s pump motor, during power outages. As the UST aged and power outages became less frequent and of shorter duration, Ketchikan Public Works Department chose to replace the aging UST with a 125 gallon aboveground fuel storage tank. The UST was installed in May 1981 and was replaced in June 2011. Pump Station 3 remains operational, and there is no evidence of elevated risk from historic petroleum releases or ongoing operations.

Drinking water for the city of Ketchikan comes from a surface water intake located at Fawn Lake, approximately 1.5 miles northeast, and hydraulically upgradient from the subject site. Drinking water is treated by a Community (formerly Class A) water treatment system before being distributed throughout the city of Ketchikan. Testing by EPA method 524.2 in May 2011 did not reveal BTEX or chlorinated solvent contamination in this public drinking water system.

## Contaminants of Concern

During site investigations, soil samples were analyzed for diesel range organics (DRO); gasoline range organics (GRO); benzene, toluene, ethylbenzene, and xylenes (BTEX) and polynuclear aromatic hydrocarbons (PAHs). Based on these analyses and knowledge of the source area, the following Contaminants of Concern (COCs) were identified:

- Diesel Range Organics (DRO)
- Total Xylenes

## Cleanup Levels

Ketchikan receives an average of 162 inches (13.5 ft.) of precipitation annually and is therefore subject to soil cleanup levels established in 18 AAC 75.341, Method Two, Tables B1 and B2 in the *Over 40 Inch Zone*, which are presented in Table 1.

**Table 1. ADEC Cleanup Levels.**

| Contaminants of Concern | Medium         | Method Two, Direct Contact* | Method Two, Inhalation* | Migration to Groundwater* | Groundwater# |
|-------------------------|----------------|-----------------------------|-------------------------|---------------------------|--------------|
| DRO                     | Soil / (Water) | 8,250                       | 12,500                  | 230                       | (1.5)        |
| Total Xylenes           | Soil / (Water) | 16,600                      | 63                      | 63                        | (10)         |

**Notes to Table 1.** \*All soil contaminant concentrations are presented as mg/Kg. #All groundwater contaminant concentrations are presented as mg/L.

**Characterization and Cleanup Activities**

Soil was excavated, segregated into temporarily stockpiles, screened and sampled for BTEX, GRO, DRO, and PAHs during the UST closure investigation. Volatile organic compounds were not detected in any photoionization detector readings, but DRO and total xylenes were detected at maximum concentrations of 24.2 and 0.0178 mg/Kg, respectively, which are both below ADEC’s Method Two regulatory criteria. No other analytes were detected. Upon reviewing these analytical results, stockpiled soil was used to backfill the UST and piping’s excavations. Groundwater was not encountered during characterization activities, and sample results do not indicate that groundwater testing is warranted since only trace concentrations of DRO and xylene were detected.

**Pathway Evaluation**

Following investigation and cleanup at this site, exposure to remaining contaminants was evaluated using ADEC’s Exposure Tracking Model (ETM). Exposure pathways are conduits by which contamination may reach human and/or ecological receptors. ETM results show all pathways to be one of the following: De Minimis Exposure, Exposure Controlled, or Pathway Incomplete. A summary of this pathway evaluation is depicted in Table 2.

**Table 2 – Exposure Pathway Evaluation**

| Exposure Pathway                          | Result              | Explanation  |
|---|---------------------|--|
| Surface Soil Contact                      | De Minimis Exposure | Trace contaminant concentrations (below ADEC’s regulatory criteria) were noted before the concrete parking lot was patched and restored over the former UST.   |
| Sub-Surface Soil Contact                  | De Minimis Exposure | Trace DRO and xylene concentrations (below Method Two regulatory criteria) were detected in subsurface soil before the concrete parking lot was patched and restored over the former UST excavation.       |
| Inhalation – Outdoor Air                  | Pathway Incomplete  | DRO was the primary COC, and contaminant concentrations were less than inhalation regulatory criteria. Therefore, this pathway is incomplete.  |
| Inhalation – Indoor Air (vapor intrusion) | Pathway Incomplete  | DRO was the primary COC, and contaminant concentrations were less than the most stringent regulatory criteria. Therefore, this pathway is incomplete.  |
| Groundwater Ingestion                     | Pathway Incomplete  | Groundwater was not encountered during excavation activity, and contaminant concentrations were less than migration to groundwater cleanup levels. Therefore, this pathway is considered to be incomplete. |
| Surface Water Ingestion                   | Pathway Incomplete  | Contaminant concentrations do not pose a migration to surface water risk. Therefore, this pathway is incomplete.   |
| Wild Foods Ingestion                      | Pathway Incomplete  | This site is within Ketchikan’s city limits where wild foods are not harvested. Therefore, this pathway is considered to be incomplete.  |
| Exposure to Ecological Receptors          | Pathway Incomplete  | There is no evidence of ecological damage at this paved facility. Therefore, this pathway is incomplete.   |

**Notes to Table 2:** “De Minimis Exposure” means that in ADEC’s judgment receptors are unlikely to be affected by the minimal volume of contamination remaining. “Pathway Incomplete” means that in ADEC’s judgment contamination has no potential to contact receptors. “Exposure Controlled” means there is an administrative mechanism in place limiting land or groundwater use, or a physical barrier in place that deters contact with residual contamination.

### **ADEC Decision**

Based on available information, ADEC has determined that there is not an unacceptable risk to human health or the environment at this facility, and no further assessment or cleanup will be required. Therefore, the site identified as *City of Ketchikan Pump Station 3* will be designated as "Corrective Action Complete" in the Department's database.

Although a Corrective Action Complete determination is being granted, ADEC approval is required prior to off-site transport of soil or groundwater that has been subjected to the release of hazardous substances in accordance with 18 AAC 78.600(h). 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, regardless of property ownership. Since this site has met the most conservative soil cleanup levels, this letter will serve as your approval for future off-site movement and disposal of soil associated with this release. It should be noted that movement or use of potentially contaminated soil in a manner that results in a violation of 18 AAC 70 "Water Quality Standards" is unlawful, so confirmation samples should be analyzed prior to soil transport and deposition. This determination is in accordance with 18 AAC 78.276(f) and does not preclude ADEC from requiring additional assessment and/or cleanup action if future information indicates that this site may pose an unacceptable risk to human health or the environment.

Alaska Statutes 46.04.010 and 46.08.070 establish cost recovery procedures for certain costs, including oversight activities incurred by the State in responding to pollution incidents. Therefore, ADEC may bill you at a later date for expenditures associated with this pollution incident. Expenses for which we may seek reimbursement include: staff time associated with general or technical assistance; work plan review; project oversight; general project management; legal services; interest; travel; equipment and supplies; and any contracting costs. Pursuant to Alaska Statute 46.08.075, the State may also file liens against all property owned by a person who is responsible or liable for State expenditures.

### **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, 410 Willoughby Avenue, Suite 303, Juneau, Alaska 99801, within 15 days after receiving the Department's decision. Adjudicatory hearing requests must be delivered to the Commissioner of the Department of Environmental Conservation, 410 Willoughby Avenue, Suite 303, Juneau, Alaska 99801, 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 hearing is not requested within 30 days, the right to appeal is waived.

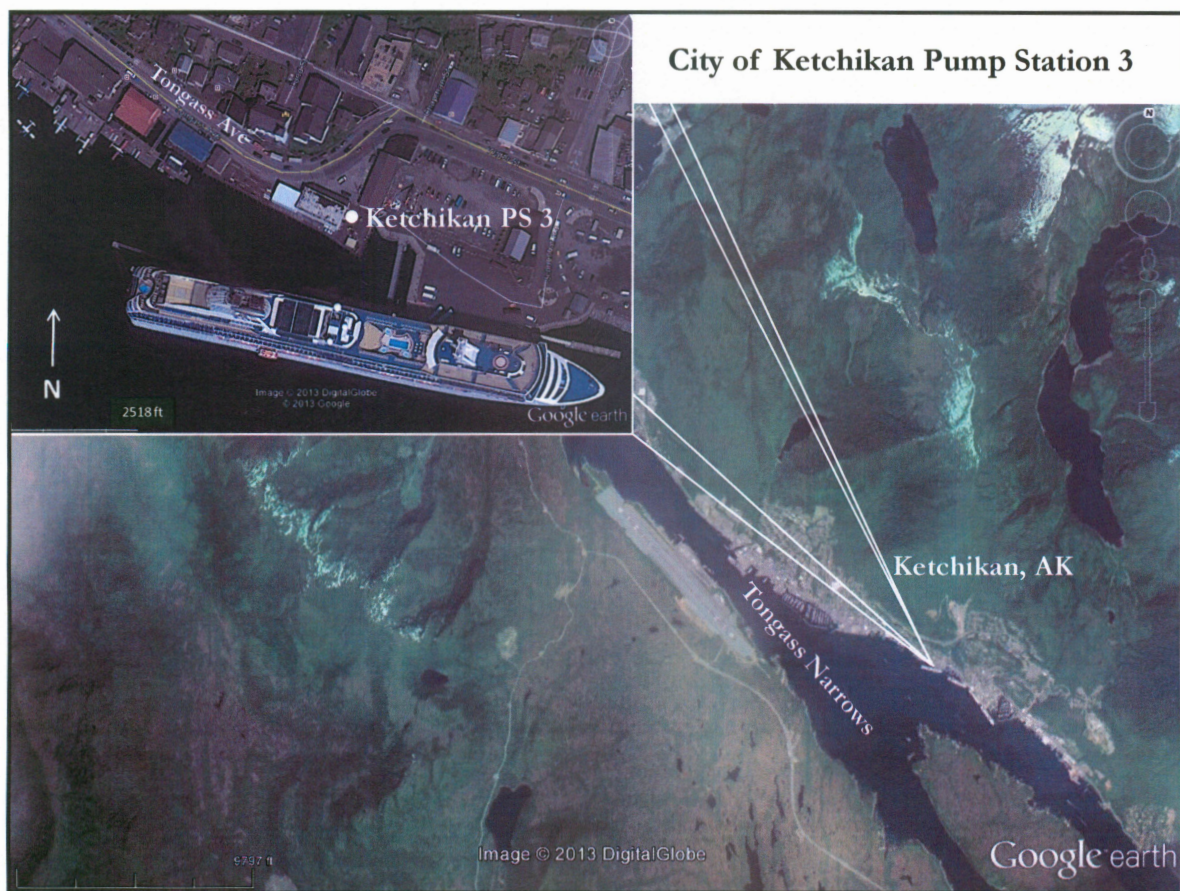
Sincerely,



Richard R. Bernhardt, PhD  
Environmental Program Specialist

Attachment A - Site Figure

### Attachment A - Site Figure



**Figure 1. City of Ketchikan Pump Station 3.** Trace concentrations of diesel fuel were detected during the closure assessment of a 550 gallon underground diesel fuel storage tank in November 2011. Any contamination that may have remained in place has been capped by concrete pavement and is therefore inaccessible. Consequently, this site does not pose an unacceptable risk to human health or the environment.