



**Soil Management Plan
Boiler Building Feedwater Piping Replacement
Excavation Activities
Swanson River Field Plant Area**

**Prepared by Jacobs Engineering Group, Inc.
949 East 36th Avenue, Suite 500
Anchorage, Alaska 99503**

This document has been prepared by Jacobs Engineering. The material and data in this report were prepared under the supervision and direction of the undersigned.

Gregory Rutkowski

Gregory Rutkowski, PMP
ADEC Qualified Environmental Professional

**Revision 2
July 2020**



Soil Management Plan
Swanson River Field Plant Area
Boiler Building Feedwater Piping

TABLE OF CONTENTS

SECTION	PAGE
1 SCOPE AND APPLICATION.....	2
2 PROCEDURES.....	2
2.1 Sampling	2
2.2 Excavation.....	3
2.3 Decontamination.....	3
2.4 Waste Transport and Disposal	4
3 HEALTH AND SAFETY.....	4
4 REPORTING.....	4
5 REFERENCES.....	5

FIGURES

FIGURE 1 Overview Map

FIGURE 2 Proposed Feedwater Piping Excavation Area

1 SCOPE AND APPLICATION

This Soil Management Plan describes the procedure by which Hilcorp Alaska, LLC (Hilcorp) will manage the sampling and excavation of approximately 10 to 12 cubic yards of potentially PCB-contaminated soil. Excavation is needed to replace feedwater piping between the Boiler Building and the HOA Main Office. This project is located in the Swanson River Field plant area, presented on the attached Figure 1.

A trench will be excavated to replace the piping. Soil generated from trenching activities has the potential to be PCB-contaminated based on the proximity of the proposed excavation area to transformers located to the east and potential releases of PCB-containing liquids at the site. The trench will be approximately 100 feet long, 18 inches wide, and 24 inches deep, as shown in the attached Figure 2.

2 PROCEDURES

2.1 SAMPLING

Prior to beginning trench excavation activities, the soil within the proposed excavation area will be characterized to determine the in-place concentration of PCBs. The source of PCB-contamination (if present) in this area would be historical road oiling activities or surface spills resulting from historical damage to the facility. Since PCBs are not readily water soluble the contamination would be confined to surface soil with some possible movement from road grading and vehicle traffic. The location of the proposed excavation is outside of the area where PCB-contaminated soil has been previously identified; however, due to the proximity of these areas this sampling is being conducted as a precaution.

Discreet sample locations will be spaced at 10-foot intervals along the length of the trench to characterize the in situ soil concentrations. The samples will be collected from the depth interval of 0 to 8 inches below ground surface where PCB-contamination would most likely be located. One field duplicate sample will be collected from a sample location chosen in the field. The soil samples will be collected using hand auger, shovel, post hole digger, breaker bar, or similar, as needed to reach the 8 inch depth. Non-disposable sample collection tools will be decontaminated as described in Section 2.3 in between each sample location.

The sample containers will be labeled with the following information to prevent misidentification:

- Project code or number
- Sampling date and time
- Sample number
- Sampler's initials
- Analyses requested

Applicable ADEC-approved sample custody and collection protocols and analytical methods will be used (ADEC 2019a). Sample containers will have labels that display the same information as reported on the chain-of-custody (CoC) records. At the time of sampling, appropriate sample numbers will be recorded in the field logbook. The samples will be analyzed by method SW8082.

The analytical sample results will be compared to the ADEC cleanup level of 1 mg/kg. If any sample concentrations exceed 1 mg/kg, the soil from that sample location will be considered waste and will be placed into labeled super sacks for offsite transport and disposal. This will include all soil excavated up to the adjacent sample locations with results less than 1 mg/kg. At locations where the analytical results are less than 1 mg/kg, the soil will be excavated and placed adjacent to the trench for later use as backfill.

2.2 EXCAVATION

Soil removal will be undertaken using a small excavator or similar machinery, operated by competent staff donning the appropriate levels of personal protective equipment (PPE), as outlined in Section 3 of this document. If the sample results indicate that one or more soil sample locations have PCB concentrations greater than 1 mg/kg, the soil from those sample locations (including all soil up to the adjacent sample location with a concentration less than 1 mg/kg) will be transferred directly from the excavation into super sacks. The super sacks will be staged in a lined containment area within the facility perimeter fence. At the time of excavation approximate volumes of soil will be recorded in the field logbook. If the sample results indicate that the soil within the excavation has PCB concentrations less than 1 mg/kg, the excavated soil will be placed adjacent to the excavation area for later use as backfill.

In the event that some sample locations have PCB concentrations greater than 1 mg/kg and some less than 1 mg/kg, the excavation should proceed by removing the soil less than 1 mg/kg first, if possible, to prevent cross-contamination. If that is not feasible, the excavator bucket should be decontaminated in accordance with Section 2.3 when switching between the removal of contaminated soil to the removal of clean soil.

Once the soil has been removed and the piping replaced, the excavation will be backfilled with either the original soil (with PCB concentrations less than 1 mg/kg) or clean soil or gravel to replace any contaminated soil removed.

If unknown hydrocarbon contamination is encountered during the excavation activities, Hilcorp field personnel will notify all applicable regulatory agencies in accordance with Hilcorp's standard spill reporting guidelines.

2.3 DECONTAMINATION

When possible, disposable equipment will be used during the sample collection activities. A hand auger, shovel, post hole digger, breaker bar, or similar will be used to achieve the 8-inch sample depth. Non-disposable sampling equipment will be decontaminated between sample locations by removing any soil affixed to the equipment will be removed followed by spraying the equipment down with an Alconox (or similar) and water solution

and wiping it down with paper towels or adsorbent pads to minimize water generation. The same process will be used for final decontamination of non-disposable equipment.

Following the completion of sampling activities the disposable sampling equipment and other decontamination wastes will be staged onsite pending the analytical results. If any of the the analytical results exceed 1 mg/kg the disposable sampling equipment will be disposed of with the contaminated soil. If all sample results are less than 1 mg/kg the disposable equipment and other decontamination wastes will be disposed of as general trash.

If the PCBs are identified in the soil at concentrations greater than 1 mg/kg, the following decontamination procedures will be utilized during excavation. Upon the completion of contaminated soil excavation or when switching from the excavation of contaminated soil to clean soil, the excavation bucket will be decontaminated by removing any soil affixed to the bucket above a liner. Next the bucket will be sprayed with an Alconox (or similar) and water solution and wiped down with paper towels or adsorbent pads to minimize water generation.

Any used disposable PPE that has come in contact with potentially contaminated soil will be placed with the contaminated soil. The used PPE will be disposed of in the same manner as the soil.

2.4 WASTE TRANSPORT AND DISPOSAL

The super sacks containing the contaminated soil will be transported off site to an approved disposal facility. Hilcorp will submit for approval a Transport, Treatment, & Disposal Approval Form for Contaminated Media to ADEC before the waste is transported off site.

3 HEALTH AND SAFETY

When handling contaminated soil, the onsite personnel will use level D PPE consisting of hardhats, hi-vis safety vests, safety toe boots, safety glasses, and gloves appropriate to the task. If dust becomes a hazard, Tyvek suits and dust masks will also be worn. When sampling, disposable nitrile gloves and clean stainless steel sampling spoons will be used to prevent exposure to site contaminants and cross-contamination between samples.

4 REPORTING

Hilcorp will provide a letter to the necessary regulatory agencies summarizing all documentation of analytical sample results (including an ADEC Laboratory Data Review Checklist [ADEC 2019b]) and waste transport and disposal information, as applicable.

5 REFERENCES

- ADEC (Alaska Department of Environmental Conservation). 2019a (October). *Field Sampling Guidance for Contaminated Sites and Leaking Underground Storage Tank Sites*.
- ADEC. 2019b (October). *Minimum Quality Assurance Requirements for Sample Handling, Reports, and Laboratory Data*.
- ADEC. 2018 (October). *Oil and Other Hazardous Substances Pollution Control*. 18 AAC 75.

FIGURE 1
Overview Map

150°56'0"W

150°52'0"W

150°48'0"W

60°48'0"N

60°48'0"N

60°46'0"N

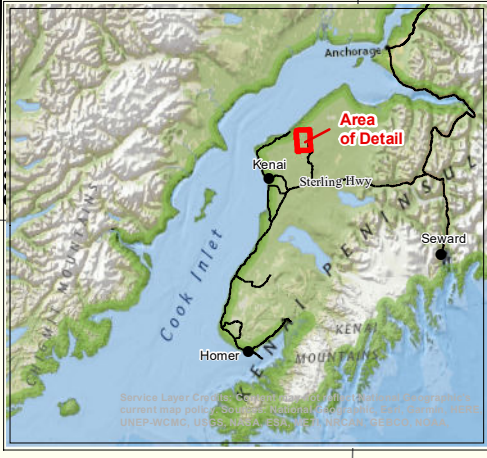
60°46'0"N

60°44'0"N







60°44'0"N

60°42'0"N

60°42'0"N



Legend

-  Project Location
-  Sale Pipelines
-  Major Roads
-  KPB Roads and Trails
-  Existing Well Pads
-  Oil and Gas Unit Boundary

KENAI NATIONAL WILDLIFE REFUGE

SWANSON RIVER FIELD

SWANSON RIVER UNIT

SOLDOTNA CREEK UNIT

Project Location

S008N009W
S007N009W

Swanson River

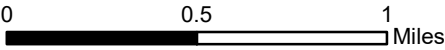
Swanson River Rd

Mink Creek




Swanson River Field Plant Area Proposed Fence Expansion Overview

Map Scale 1:32,000
Alaska State Plane 4 NAD 1983 (feet)



0 0.5 1 Miles



Document Path: D:\Alaska\GIS\cook_inlet\fields\SRF\MXD\SRF_PlantArea_FenceExpansion_Overview_11x17P_v01.mxd

FIGURE 2
Proposed Feedwater Piping Excavation Area

60°43'47"N

150°51'42"W

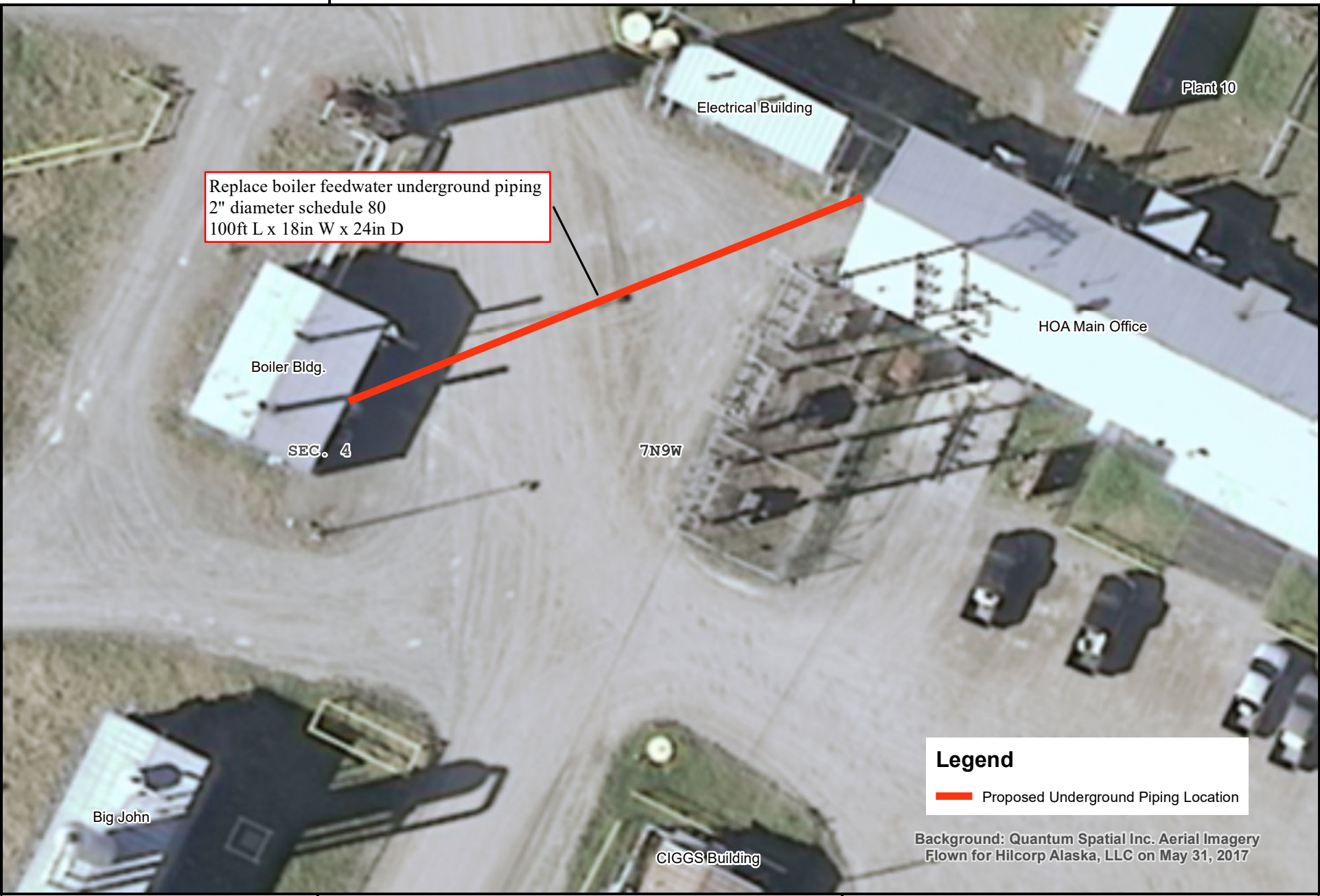
150°51'40"W

60°43'47"N

Document Path: C:\Alaska\GIS\cook_inletfields\SRF\MXDs\SRF_Proposed_2021\mxds\SRF_PlantArea_BoilBldg_SMP_Fig2_GRutkowski_v01.mxd

60°43'46"N

60°43'46"N



Replace boiler feedwater underground piping
 2" diameter schedule 80
 100ft L x 18in W x 24in D

Electrical Building

Plant 10

HOA Main Office

Boiler Bldg.


SEC. 4

7N9W

Big John

CIGGS Building

Legend

 Proposed Underground Piping Location

Background: Quantum Spatial Inc. Aerial Imagery
 Flown for Hilcorp Alaska, LLC on May 31, 2017



Hilcorp Alaska, LLC
 Map Date: 7/7/2020

**Swanson River Field
 Plant Area
 Proposed Underground Piping Location**

1 inch = 25 feet

Alaska State Plane 4 NAD 1983 (feet)

0 10 20 40 Feet

