



THE STATE  
of **ALASKA**  
GOVERNOR BILL WALKER

## Department of Environmental Conservation

Division of Spill Prevention and Response  
Contaminated Sites Program

610 University Ave.  
Fairbanks, Alaska 99709-3643  
Main: 907.451.2181  
Fax: 907.451.5105

File No: 2339.38.001

December 22, 2014

Dave Hanneman  
FAA Alaska Region  
222 W. 7<sup>th</sup> Avenue, Box 14  
Anchorage, AK 99513-7587

Re: Decision Document: FAA Fire Island VOR and Former Valve Box.  
Cleanup Complete Determination

Dear Mr. Raymore,

The Alaska Department of Environmental Conservation (DEC) has reviewed the environmental records for the Federal Aviation Administration (FAA) Fire Island VOR, Valve Box, and 2-inch pipeline areas of concern at Fire Island Station, Alaska. This decision letter memorializes the site history, cleanup actions, and standard conditions for long-term site management. No further remedial action will be required. Contaminants remaining at the sites do not pose a risk to human health under an unrestricted land use scenario. This determination was made using Methods 2 and 3 of the site cleanup rules.

**Site Name and Location:**

FAA – Fire Island Station  
~6 miles West of Anchorage Int. Airport  
Anchorage, Alaska

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

Dave Hanneman  
FAA Alaska Region  
222 W. 7th Ave, Box 14  
Anchorage, AK 99513-7587

**DEC Site Identifiers:**

File No: 2339.38.001  
Hazard IDs: 1774 & 23669

**Regulatory Authority for Determination:**

18 AAC 75 & 18 AAC 78

## Site Description and Background

The FAA Fire Island Station is located near the center of Fire Island. The 4,242-acre island lies in Cook Inlet, approximately six miles west of Anchorage International Airport. The U.S. Air Force (USAF) withdrew the island for use in 1950. FAA constructed a Very Long Range Onmidirectional Radar (VOR) on United States Air Force (USAF) land in 1956. A Remote Center Air/Ground Communications (RCAG) facility and tactical aid to navigation system (TACAN) were added in 1964 and 1966 respectively. The FAA station remained active until 1980, when a Kenai-based radar became active. The FAA formerly maintained the combined VOR and TACAN (VORTAC), the airport runway, and the non-directional radio beacon (NDB); however, the FAA discontinued maintenance in 2012.

Buildings associated with the station were largely demolished in 1997. Demolished buildings included living quarters (Buildings 100 and 101), a utility shed (Building 206), an outhouse (Building 245), a wooden hanger, a generator building (Building 620), an electrical building (Building 202), and a VOR storage shed (Building 207). A valve box and pipeline, approximately 0.5 miles long, 2 inches diameter, and 3 feet deep was associated with the housing area.

Fire Island is accessible by boat and plane only. There are no permanent residents; however, the area is used seasonally by subsistence fishermen. The FAA station is unmanned. The site is situated on sand and gravel deposits; depth to bedrock is not known. Groundwater has not been encountered in environmental work to date. An aquifer is located more than 250 feet below ground surface (bgs) according to boring logs for a well constructed on the site in the 1960's. Since the 1970s, 3,212 acres of land has been conveyed to Cook Inlet Region, Inc., with the only remaining FAA-owned property being the VORTAC, former housing site, former RCAG facility and active outer marker site, and the airfield near north Point.

### *Fire Island VOR Facility Area of Concern (AOC)*

The 500-gallon UST 48-A-2, which supplied gasoline to a former vehicle dispenser at the Fire Island VOR, was decommissioned in 1993. Approximately 60 cubic yards of petroleum-impacted soil was excavated and disposed of during UST decommissioning activities and confirmation samples collected at the limits of the excavation indicated elevated concentrations of volatile petroleum hydrocarbons (VPH) and benzene, toluene, ethylbenzene, and xylenes (BTEX) remained at depths of approximately 4 to 6 feet below ground surface (bgs). The remaining impacted soil was not able to be excavated due to the proximity to an active transformer and the VOR building.

### *Former Valve Box and 2-inch pipeline AOC*

Fuel for the former FAA housing facilities and USAF facilities was supplied via an underground pipeline system. The underground pipeline system consisted of a single pipe from the fill point on the beach to a former Valve Box, from which two separate 2-inch pipelines emerged, one supplying the FAA facilities and one supplying the USAF facilities.

## Contaminants of Concern

The following contaminants of concern were identified above approved cleanup levels during the course of the site investigations summarized in the Characterization and Cleanup Activities section of this decision letter.

- Diesel Range Organics (DRO)
- Residual Range Organics (RRO)
- BTEX
- Benzo(a)pyrene

### Cleanup Levels

Modeling to determine alternative cleanup levels was done using the approved Hydrocarbon Risk Calculator, an alternative cleanup levels and risk calculator developed in accordance with Method 3 under 18 AAC 75.340. The model demonstrated that residual petroleum contaminants in soil at the VOR and Valve Box AOCs do not pose a migration to groundwater risk/concern. The groundwater at this site is greater than 250 feet below ground surface. Given the measured contaminant concentrations, soil conditions, and infiltration rates, contaminants will not migrate to groundwater.

The Department has determined that for these AOCs the Method 3 cleanup levels that apply will be the residual contaminant levels that were used to model the migration and human health risks for the Contaminants of Concern (COCs). The approved levels for each COC are detailed in Table 2 below. This determination means that no further work will be required unless new contamination is discovered in the future with higher concentrations than these measured residual contaminant levels.

At the 2-inch Pipeline AOC, the most restrictive of the Method Two cleanup levels established in 18 AAC 75.341 (d) apply. The Hydrocarbon Risk Calculator was not run for this AOC, so the Method 3 cleanup levels established at the other AOCs do not apply.

**Table 1 – Cleanup Levels**

Contaminant	Soil (mg/kg)
DRO	250
RRO	11,000
Benzene	0.025
Toluene	6.5
Ethylbenzene	6.9
Xylenes (total)	63
Benzo(a)pyrene	0.49

mg/kg = milligrams per kilogram

### Characterization and Cleanup Activities

Characterization and cleanup activities conducted under the regulatory authority of the Contaminated Sites Program began in 1993. These activities are described below.

In 1993, four underground storage tanks (USTs) at the Fire Island Very High Frequency Omnidirectional Range (VOR) station were decommissioned. Releases had occurred at three of the four USTs. ADEC approved no further action for two of the tanks, UST-48-C-1 and UST-48-C-2, in a letter dated March 11, 1994. UST 48-A-1 was given a cleanup complete designation in a letter dated January 3, 2011. UST-48-A-2

required further characterization as the presence of a building prevented delineating the horizontal extent of contamination.

In 1997, the former Valve Box was removed and 63 cubic yards of diesel-impacted soil was excavated from the former Valve Box location. Confirmation samples were collected from the limits of the former Valve Box excavation by the contractor and a United States Army Corps of Engineers (USACE) field representative. Diesel-range organics (DRO) was detected at concentrations ranging from 400 to 4,000 milligrams per kilogram (mg/kg) at the limits of the excavation. The excavation was lined with plastic sheeting and backfilled with approximately 20 cubic yards of uncontaminated soil.

Also in 1997, the former FAA housing facilities supply pipeline was exposed at approximately 100 foot sections and 12 test pits were advanced to sample for impacted soil. The pipeline was found to be buried at approximately 3 feet below ground surface (bgs) and was noted to be in good condition. Petroleum impacted soil was detected at two test pit locations. Approximately 7 cubic yards of petroleum impacted soil was removed from the test pit located at pipeline station 3+70. DRO was detected at a concentration of 200 mg/kg in a soil sample collected at 5 feet bgs on the base of the test pit excavation. DRO was also detected at a concentration of 580 mg/kg in the test pit located at pipeline station 0+76.

#### *2013 Site Characterization and Remediation*

In 2013, three field activities were conducted at Fire Island as part of the site characterization and remediation. They included site characterization at the VOR (where UST 48-A-2 was located), soil excavation and site characterization at the former Valve Box, and pipeline removal between the former Valve Box and the former FAA housing facilities. Analytical samples were collected for DRO, RRO, GRO, BTEX, and PAHs and submitted for analysis. Additionally, samples for EPH and VPH were collected for Hydrocarbon Risk Calculator calculations.

#### *2013 VOR AOC Activities*

At the VOR, petroleum-impacted soil was not initially observed based on field screening results. Therefore, HRC sampling, including the collection of EPH, VPH, and geotechnical soil samples, was not initially performed. Analytical results for soil samples collected at the VOR were received after field work was complete and the drill rig was demobilized from Fire Island. Analytical results for two samples collected from one soil boring (SB003) at 4-5 feet bgs and 5-6 feet bgs indicated DRO concentrations were greater than the DEC Method Two, Under 40-Inch Zone, Migration to Groundwater soil cleanup level of 250 mg/kg (589 and 1,020 mg/kg), so these two samples were selected for EPH analysis, although the analysis was performed outside of the method-specific holding time. GRO was non-detect in all soil samples collected at the VOR. RRO, BTEX and PAH compounds were detected at concentrations less than the most stringent ADEC Method Two soil cleanup levels in all soil samples collected at the VOR.

Although two samples were collected which had concentrations above the DEC Method Two Migration to Groundwater cleanup levels, the HRC demonstrated that these contaminants concentrations were not a migration to groundwater risk. Given the site conditions and remaining contaminant concentrations, a Method Three determination under AAC 75.340(e) was made at this AOC to establish the migration to groundwater cleanup levels as the maximum remaining concentrations. All of the remaining concentrations are below the applicable Method Two direct contact and ingestion/inhalation cleanup levels.

**Table 2 – Remaining Contaminant Concentrations at VOR**

Contaminant	Remaining Maximum Concentration (mg/kg)
DRO	1020
RRO	6090
Benzene	0.0177
Toluene	0.0768
Ethylbenzene	0.0115
Xylenes, Total	0.0992

ND = Non-Detect

mg/kg = milligrams per kilogram

### *2013 Valve Box AOC Activities*

Approximately 34 cubic yards of petroleum-impacted soil were removed from the former Valve Box area of concern in 2013. The petroleum-impacted soil was removed to depths up to 22 feet bgs. Five confirmation soil samples were collected from the limits of the excavation at the former Valve Box AOC and analyzed for DRO, RRO, GRO, BTEX, and PAHs. One soil sample collected from the location with the greatest potential for contamination based on field screening results was also analyzed for EPH and VPH. Four soil samples were also collected from the overburden stockpiles and analyzed for DRO, RRO, GRO, BTEX, and PAH. DRO was detected in several samples at concentrations greater than the DEC Method Two Migration to Groundwater soil cleanup levels in the southeast corner of the excavation.

Additionally, a total of 11 soil borings were advanced to collect analytical soil samples required for input to the HRC and determine the horizontal and vertical extent of contamination at the former Valve Box AOC. Twenty-one (21) soil samples were collected from the borings and analyzed for DRO, RRO, GRO, BTEX, and PAH. Four soil samples collected from locations with the greatest potential for contamination based on field screening results were also analyzed for EPH and VPH. A physical parameter sample was collected from soil boring SB008 and analyzed for grain size, bulk density, and specific gravity. Six samples were collected from soil borings and analyzed for TOC. One confirmation sample in the excavation area had a benzo(a)pyrene concentration of 0.71 mg/kg at 22 feet bgs, which is greater than the applicable ADEC Method Two Direct Contact soil cleanup level. However, as this analyte was only detected below 15 feet bgs it is not a direct contact risk per 18 AAC 75.340 (j) (2), which allows for higher contaminant concentrations to remain on site if the contaminant is detected deep enough below the ground surface. 0.71 mg/kg benzo(a)pyrene is below the ADEC Method Two Migration to Groundwater cleanup level (2.1 mg/kg), so the remaining concentration is neither a direct contact or migration to groundwater risk. The Department agreed that this concentration did not need to be included in the final cumulative risk calculation as it is not representative of the exposure area.

Although there were several detections of petroleum contaminants at this AOC above the ADEC Method Two Migration to Groundwater cleanup levels, the HRC demonstrated that these contaminants were not a migration to groundwater risk. Given the site conditions and remaining contaminant concentrations, a Method Three determination under AAC 75.340(e) was made at this AOC to establish the migration to groundwater cleanup levels as the maximum remaining concentrations. All of the remaining petroleum hydrocarbon contaminant concentrations are below the applicable Method Two direct contact and ingestion/inhalation cleanup levels.

**Table 3 – Remaining Contaminant Concentrations at the Valve Box**

Contaminant	Remaining Maximum Concentration (mg/kg)
DRO	5520
RRO	274
Benzene	0.0024
Toluene	0.0424
Ethylbenzene	0.192
Xylenes, Total	2.75
Benzo(a)pyrene	0.71*

mg/kg = milligrams per kilogram

\* This single exceedance of benzo(a)pyrene is below 15' bgs and does not require further cleanup per 18 AAC 75.340(j)(2)

### *2013 Pipeline Removal*

Approximately 790 linear feet of 2-inch steel fuel pipeline was removed from the area northeast of the former Valve Box AOC. Ten analytical soil samples were collected along the length of the pipeline after removal. Field screening results and field observations indicated that petroleum impacted soils were present at the northeast end of the pipeline. Approximately 3 cubic yards of petroleum-impacted soil were removed and 6 confirmation soil samples were collected from the limits of this excavation. Analytical results indicated that all impacted soils above the applicable Method Two cleanup levels were removed from the northeast end of the pipeline and no other impacted soil was detected along the length of the pipeline.

### **Cumulative Risk Evaluation**

Per 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.

The HRC was used to evaluate risk from petroleum contamination at the VOR and Valve Box AOCs at the FAA Fire Island Station. The HRC is designed for sites with petroleum contamination—specifically the petroleum fractions, BTEX, PAHs, and other compounds dissolved in petroleum—with the intention and purpose of assessing human health risk from this type of contamination. A separate HRC was calculated for each AOC, although the VOR AOC HRC used the EPH hydrocarbon fractions sampled from the Valve Box AOC. The Department agreed with FAA that the fuel characterization from the Valve Box site is representative of the other sites, and is likely conservative.

The estimated rounded cumulative cancer risks at the VOR and Valve Box AOCs for the current and hypothetical exposure scenarios, across all exposure pathways, are below the regulatory risk standard of  $1 \times 10^{-5}$  for petroleum hydrocarbons.

The estimated cumulative non-cancer health indices at the VOR and Valve Box AOCs for the current and hypothetical exposure scenarios, across all exposure pathways, are below the regulatory risk standard of 1. The VOR and Valve Box AOCs meet the DEC risk criteria [18 AAC 75.325(g)] for petroleum hydrocarbons. The risk posed by the DRO aromatic and aliphatic surrogate fractions meets the risk standard for each exposure pathway, assuming a residential land use scenario.

## Exposure Pathway Evaluation

Following investigation and cleanup at the site, exposure to the remaining contaminants was evaluated using DEC'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, Exposure Controlled, or Pathway Incomplete. A summary of this pathway evaluation is included in Table 4 for the VOR AOC and in Table 5 for the Valve Box AOC.

**Table 4 – Exposure Pathway Evaluation for the VOR AOC**

Pathway	Result	Explanation
Surface Soil Contact	De-Minimis Exposure	Contamination is not present above cleanup levels in the surface soil. The primary contamination source was an underground storage tank.
Sub-Surface Soil Contact	De-Minimis Exposure	The contamination remaining in the subsurface is below direct contact cleanup levels (1,020 mg/kg DRO).
Inhalation – Outdoor Air	Pathway Incomplete	Contamination remains in the sub-surface, but is below inhalation cleanup levels.
Inhalation – Indoor Air (vapor intrusion)	De-Minimis Exposure	Contamination underlies a building at this site. While the contamination under the building has not been fully characterized, the sample borings nearest the building indicate contamination below inhalation cleanup levels, indicating that contamination under the building is de minimis.
Groundwater Ingestion	Pathway Incomplete	Groundwater is approximately 250 feet bgs. A SESOI model predicts the contamination will not reach groundwater. Additionally, modeling using the Hydrocarbon Risk Calculator, in accordance with Method 3 under 18 AAC 75.340, demonstrated that residual petroleum contaminants in soil do not pose a migration to groundwater risk/concern.
Surface Water Ingestion	Pathway Incomplete	Modeling using the Hydrocarbon Risk Calculator, in accordance with Method 3 under 18 AAC 75.340, demonstrated that residual petroleum contaminants in soil do not pose a migration to surface water risk/concern.
Wild and Farmed Foods Ingestion	Pathway Incomplete	Fire Island is used as a subsistence fishing area. The contaminants remaining at this site are not bioaccumulative and do not present a health hazard to plants or animals in the area.
Exposure to Ecological Receptors	Pathway Incomplete	There is no evidence of direct ecological impacts at this site, and no terrestrial or aquatic exposure routes are present.

**Table 5 – Exposure Pathway Evaluation for the Valve Box AOC**

Pathway	Result	Explanation
Surface Soil Contact	De-Minimis Exposure	Contamination is not present above cleanup levels in the surface soil. Cumulative risk is below the carcinogenic risk and hazard index thresholds, as calculated in the hydrocarbon risk calculator.
Sub-Surface Soil Contact	De-Minimis Exposure	The contamination remaining in the subsurface is below direct contact cleanup levels.
Inhalation – Outdoor Air	De-Minimis Exposure	Contamination remains in the sub-surface, but is below inhalation cleanup levels.
Inhalation – Indoor Air (vapor intrusion)	De-Minimis Exposure	There are no buildings at this site and it is not expected that there will be buildings in the future. Furthermore, modeling using the Hydrocarbon Risk Calculator indicates that the cumulative carcinogenic and non-carcinogenic risk is sufficiently protective in the scenario that all potential pathways, including indoor inhalation, are complete.
Groundwater Ingestion	Pathway Incomplete	Groundwater is approximately 250 feet bgs. A SESOI model predicts the contamination will not reach groundwater. Additionally, modeling using the Hydrocarbon Risk Calculator, in accordance with Method 3 under 18 AAC 75.340, demonstrated that residual petroleum contaminants in soil do not pose a migration to groundwater risk/concern.
Surface Water Ingestion	Pathway Incomplete	Modeling using the Hydrocarbon Risk Calculator, in accordance with Method 3 under 18 AAC 75.340, demonstrated that residual petroleum contaminants in soil do not pose a migration to surface water risk/concern.
Wild and Farmed Foods Ingestion	Pathway Incomplete	Fire Island is used as a subsistence fishing area. The contaminants remaining at this site do not present a health hazard to plants or animals in the area. The remaining benzo(a)pyrene contamination is bioaccumulative though it is present at a depth that will not be exposed to plants or animals.
Exposure to Ecological Receptors	Pathway Incomplete	There is no evidence of direct ecological impacts at this site, and no terrestrial or aquatic exposure routes are present.

**Notes to Tables 4 and 5:** “De-Minimis Exposure” means that in ADEC’s judgment receptors are unlikely to be affected by the minimal volume or concentration of remaining contamination. “Pathway Incomplete” means that in DEC’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.



**DEC Decision**

Based on site-specific contaminant and non-contaminant input parameters and assuming that all exposure pathways are complete at the present time, the HRC results for the source areas located at the VOR and Valve Box at the Fire Island FAA Station indicate that site conditions meet the DEC human health risk standard established in 18 AAC 75.325. That is, the soil direct contact, outdoor air vapor inhalation, indoor air vapor inhalation, and groundwater ingestion pathways pose acceptable risk for each compound and hydrocarbon fraction, and the cumulative risk meets the risk standard under an unrestricted land use scenario. In addition, the migration to groundwater criteria are attained in surface and subsurface soils in accordance with 18 AAC 75.340.

Remaining petroleum contamination in soil is below approved cleanup levels. These sites will receive a "Closed" designation on the Contaminated Sites Database, subject to the following standard conditions.

**Standard Conditions**

1. Any proposal to transport soil or groundwater off-site requires DEC approval 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 from a source area, regardless of property ownership. (See attached site figure.)
2. Movement or use of contaminated material in a manner that results in a violation of 18 AAC 70 water quality standards is prohibited.
3. 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 testing may be required to ensure that aquatic life criteria under 18 AAC 70 are not exceeded.

This determination is in accordance with 18 AAC 75.380 and does not preclude DEC 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.

**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 reviewable under this section. 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.

If you have questions about this closure decision, please feel free to contact me at (907) 451-2181.

Sincerely,



Fred Vreeman  
Project Manager

**Enclosed:**

Fire Island Location Map

Fire Island FAA Station Areas of Concern Location Map

VOR Area of Concern Sampling Locations and Results

Valve Box Area of Concern Sampling Locations and Results

Pipeline Sampling Locations and Results

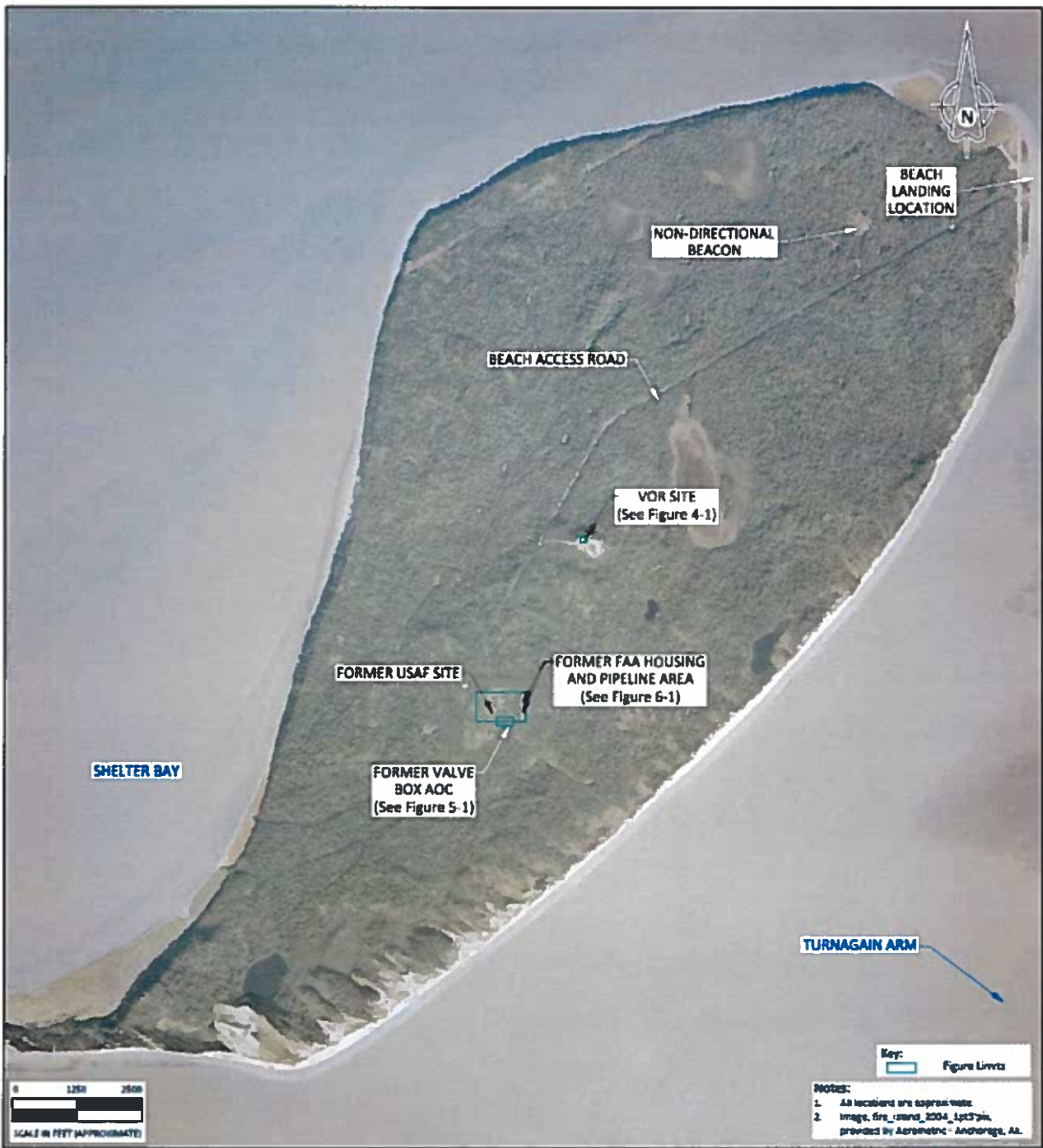


Site Characterization and Remediation Report  
FAA Station Fire Island, Alaska



State and Vicinity Maps

Project Number 20131.000	Issue Number 1-1
Date 12.02.2013	
Drawn By G.S.	



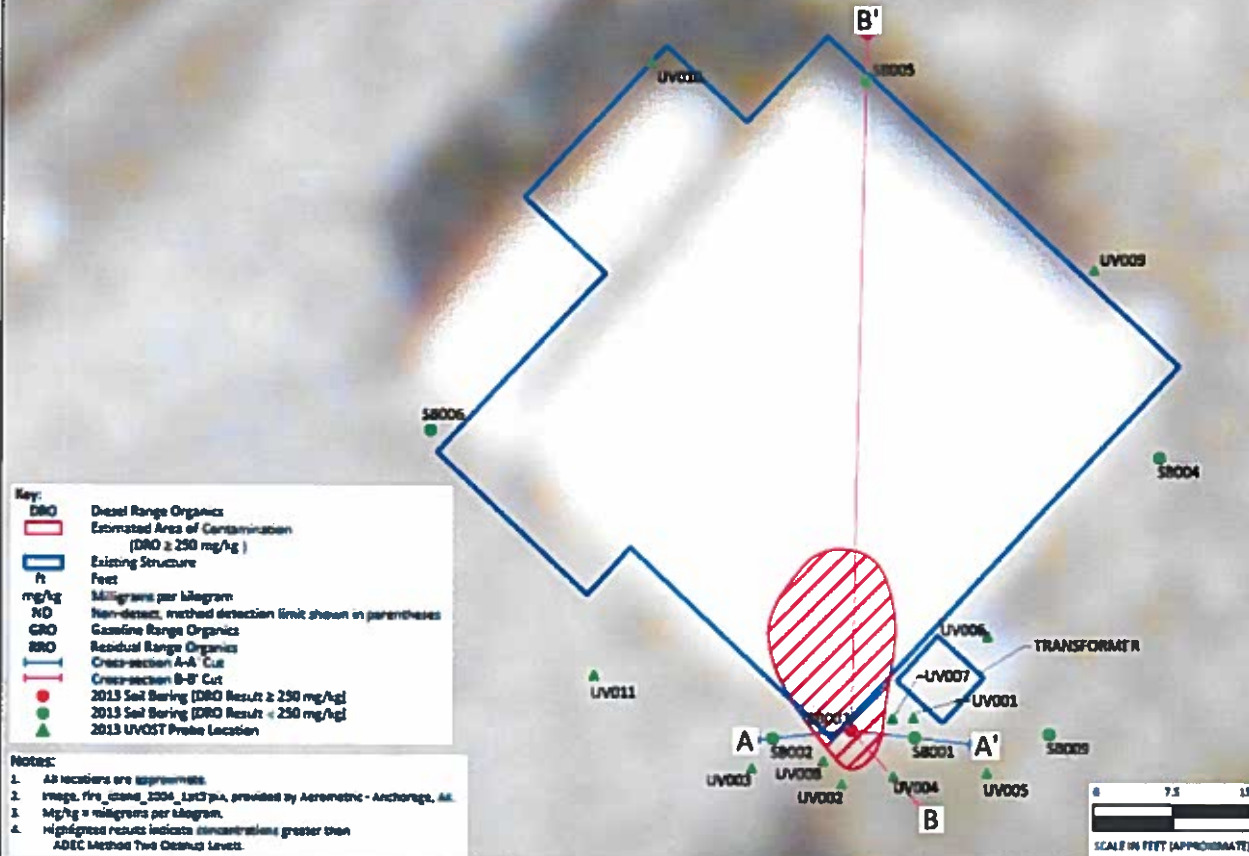
Site Characterization and Remediation Report  
FAA Station Fire Island, Alaska



Site Plan

Project Number: 2012-1040	Figure Number: 1-2
Date: 12.08.2013	
Drawn By: E.S.	

Location	Date Collected	Depth (ft)	DRO (mg/kg)	GRO (mg/kg)	RRO (mg/kg)	Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Xylenes, Total (mg/kg)
SB001	5/29/2013	5-6	8.05	ND (0.201)	35.1	0.00101	0.00449	0.00158	0.00781
SB001	5/29/2013	15-16	4.37	ND (0.433)	8.72	0.00339	0.014	0.00402	0.0235
SB001	5/29/2013	8-9.5	6.49	ND (0.233)	12.5	0.00161	0.00632	0.00234	0.0136
SB002	5/29/2013	2-4	6.38	ND (0.325)	23.3	0.00209	0.00693	ND (0.0017)	0.00869
SB002	5/29/2013	4-6	17.3	ND (0.315)	31.8	0.00636	0.013	0.0021	0.0128
SB002	5/29/2013	6-8	135	ND (0.254)	883	0.0048	0.0156	0.0037	0.0255
SB002	5/29/2013	8-10	5.59	ND (0.248)	19.6	0.00236	0.00862	0.00177	0.0104
SB002	5/29/2013	10-12	6.23	ND (0.31)	26.9	0.00248	0.0101	0.00336	0.0188
SB002	5/29/2013	12-14	4.24	ND (0.225)	10.2	0.00232	0.0111	0.00299	0.0167
SB002	5/29/2013	14-16	5.22	ND (0.247)	12.7	0.00217	0.00974	0.00257	0.0154
SB003	5/30/2013	4-5	589	ND (0.574)	4020	0.00473	0.0159	ND (0.003)	0.0269
SB003	5/30/2013	5-6	3022	ND (0.31)	6090	0.0177	0.0768	0.0115	0.0992
SB003	5/30/2013	8-9	12.7	ND (0.418)	25	0.00439	0.0192	0.00344	0.0246
SB003	5/30/2013	15-16	ND (4.32)	ND (0.375)	5.47	0.00298	0.0179	0.00442	0.0281
SB004	5/30/2013	10-12	ND (4.2)	ND (0.355)	3.82	0.00264	0.00951	ND (0.00186)	0.00734
SB004	5/30/2013	14-16	ND (4.4)	ND (0.309)	4.14	0.0019	0.0066	ND (0.00161)	0.00567
SB005	5/30/2013	4-6	ND (4.44)	ND (0.391)	4.34	ND (0.00136)	0.0037	ND (0.00204)	ND (0.00545)
SB005	5/30/2013	8-12	ND (4.92)	ND (0.465)	4.39	ND (0.00162)	0.00497	ND (0.00243)	ND (0.00648)
SB005	5/30/2013	14-16	ND (4.06)	ND (0.19)	4	ND (0.0017)	ND (0.0041)	ND (0.0041)	ND (0.0041)
SB006	5/30/2013	4-6	ND (4.09)	ND (0.288)	4.28	ND (0.001)	0.00252	ND (0.0015)	ND (0.00401)
SB006	5/30/2013	14-16	4.94	ND (0.351)	ND (3.81)	ND (0.00122)	0.00329	ND (0.00183)	0.00528

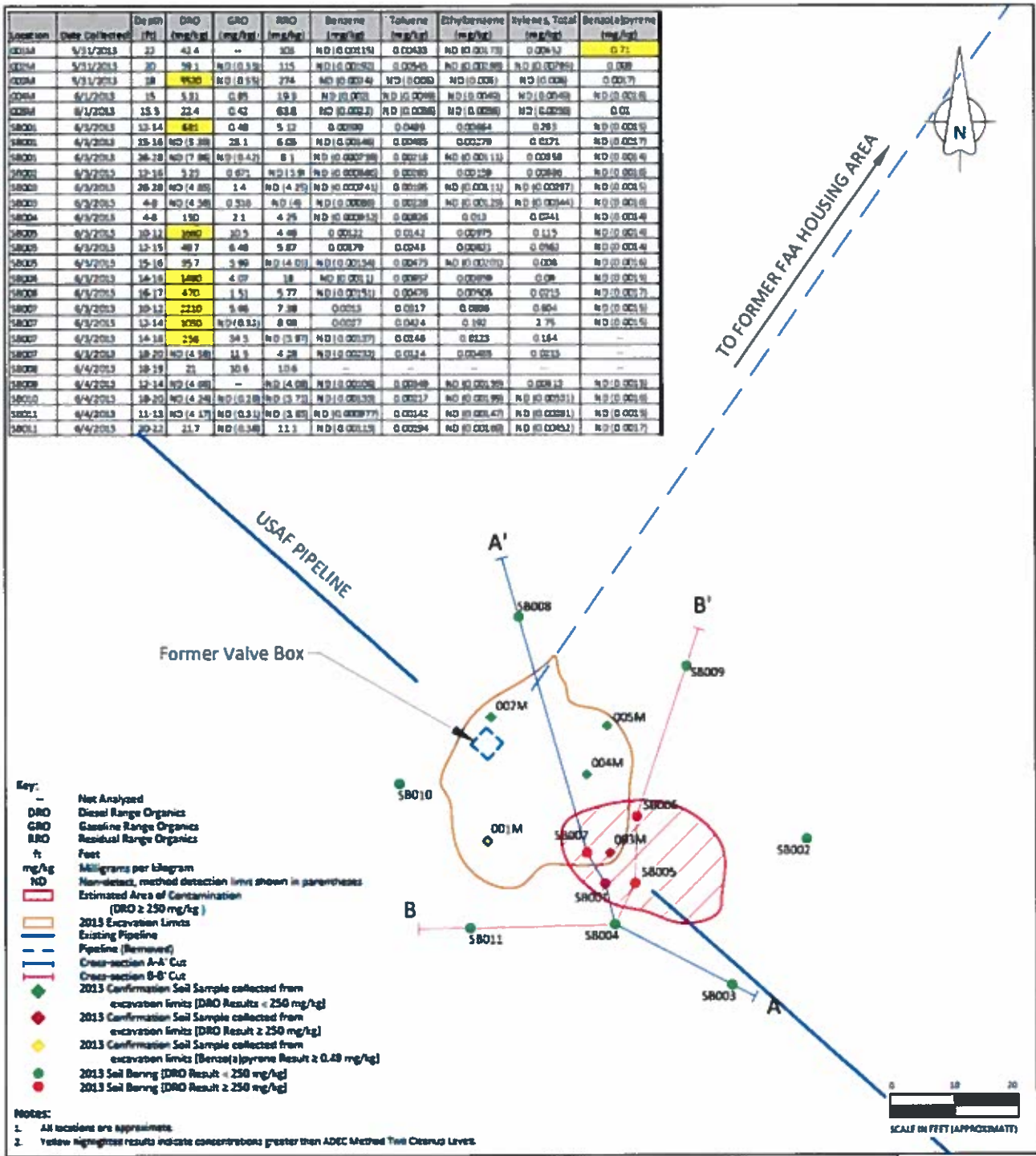


Site Characterization and Remediation Report  
FAA Station Fire Island, Alaska



VOR  
Analytical Soil Sampling Locations and Results

Project Number: 2013L-006	Figure Number:
Date: 12.19.2014	4-1
Drawn By: G.A.	



**Site Characterization and Remediation Report  
FAA Station Fire Island, Alaska**

**Former Valve Box AOC  
Analytical Soil Sampling Locations and Results**

**Ahtna**  
Engineering

Project Number 20125.006	Figure Number
Date 12.22.2013	<b>5-1</b>
Drawn By G.A.	

