



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
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File No: 120.38.004

July 22, 2015

Aemon Wetmore
FAA Alaska Region
222 West 7th Ave., #14
Anchorage, AK 99513-7587

Re: DEC Big Delta FAA Sites Closure Conditions Maintenance Determination

Dear Mr. Wetmore:

The Alaska Department of Environmental Conservation (DEC) is writing in response to a FAA request for confirmation that the closure conditions for multiple FAA Big Delta sites are currently satisfied, and that the sites therefore meet the requirements of their "Cleanup Complete" determination. These closure conditions were originally specified in the December 1, 2009 DEC Record of Decision titled "FAA Big Delta Sites Cleanup Complete Determination," which specified that multiple FAA sites in the Big Delta area were to receive a "Cleanup Complete" determination, as long as the following conditions are maintained:

1. Any proposal to transport soil or groundwater off site requires DEC approval in accordance with 18 AAC 75.370 (b). A "site" as defined by 18 AAC 75.905(115), is an area that is contaminated, including areas contaminated by the migration of hazardous substances from a source area, regardless of property ownership.
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. Due to the presence of petroleum contaminated soil above the migration to groundwater pathway cleanup level for DRO (250 mg/kg), and one small area of PCB contaminated soil slightly above the direct contact cleanup level of 1 mg/kg, the residual contaminant levels on sites will be documented in the U.S. Army's (landowner) Land Use Management Plan for future reference and land use changes. It should be noted that if projects are planned in this area to excavate or drill lower than 15 feet, petroleum contaminated soils may be encountered that exceed human health based cleanup levels.

These closure conditions apply to the following sites:

FAA Big Delta – Fuel Transfer Pipeline

File: 120.38.004 Hazard ID: 25288

Latitude: 630 59' 38.242" N Longitude: 1450 44' 14.244" W

FAA Big Delta – Building 601 Former Utility Facility

File: 120.38.004 Hazard ID: 25285

Latitude: 630 59' 36.884" N Longitude: 1450 44' 27.686" W

FAA Big Delta – Building 603 Former Generator Facility

File: 120.38.004 Hazard ID: 25287

Latitude: 630 59' 36.953" N Longitude: 1450 44' 17.876" W

FAA Big Delta – Pump House Building 604

File: 120.38.004 Hazard ID: 25289

Latitude: 630 59' 37.291" N Longitude: 1450 44' 14.478" W

DEC requested, in a December 4, 2009 letter to Col. Timothy A. Jones, that the site name, site location, and former contamination be noted in the records comprising the Fort Wainwright Property Management System in order to satisfy the closure conditions at Big Delta FAA Sites, with the understanding that this system is consulted as part of the planning process for construction projects. In response, the FAA sites listed above were integrated into the Ft. Greely, AK Administrative Control Areas Map and the Ft. Greely Areas of Environmental Concern Map. The Administrative Control Areas Map lists the sites named above, their locations, and their areas of former contamination. The Ft. Greely Areas of Environmental Concern Map includes the area of the FAA Big Delta sites and is kept updated, with quarterly checks.

Information was provided to DEC in a July 9, 2015 correspondence from Steven R. Becker, CEP, Chief Environmental Division (IMFG-PWE) Installation Sustainability Coordinator & EMSMR Directorate of Public Works at Fort Greely, Alaska, that all proposed construction projects are checked against the Ft. Greely Administrative Control Areas Map prior to approval. The Ft. Greely Areas of Environmental Concern Map is checked by Ft. Greely staff when every dig permit and/or "NEPA-01" Categorical Exclusion documentation is submitted. Item #4 in the NEPA-01 requires the analyst to check the most recent Areas of Environmental Concern map (see example form enclosed). If the project may interact with an area of concern, the NEPA analyst would then go to media-specific map layers (e.g., contaminated sites, cultural resources, wetlands/waters) to determine the specific type of site impacted and the extent of potential impacts. Any conditions to be placed on the project are documented in the comments and conditions section. This form and associated conditions are included in the contract (if applicable) and discussed in the pre-construction meeting.

The US Army has demonstrated to the Department's satisfaction that processes are in place that ensures future site users that the residual contamination is defined on planning maps and will be taken into consideration when any future construction projects in the area are planned. This will be documented in the actions of these sites in the contaminated sites program database. 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 these sites may pose an unacceptable risk to human health or the environment.

If you have any questions, please do not hesitate to contact me at (907) 451-2181, or by email at fred.vreeman@alaska.gov.

Sincerely,



Fred Vreeman
Environmental Program Manager

Enclosure: Fort Wainwright Property Management of FAA Big Delta Site
Record of Decision; FAA Big Delta Sites Cleanup Complete Determination
Ft. Greely Administrative Controls Map
Ft. Greely Areas of Environmental Concern Map
Ft. Greely Dig Permit- November 2014
Ft. Greely NEPA-01 Form – Revision 14, January 2014

STATE OF ALASKA

DEPARTMENT OF ENVIRONMENTAL CONSERVATION DIVISION OF SPILL PREVENTION AND RESPONSE CONTAMINATED SITES PROGRAM

SEAN PARNELL, GOVERNOR

610 University Avenue
Fairbanks, AK 99709-3643
PHONE: (907) 451-2180
FAX: (907) 451-5105
www.dec.state.ak.us

File: 120.38.004
Hazard ID: 24940

December 4, 2009

Col. Timothy A. Jones
HQ, US Army Garrison Fort Wainwright
1060 Gaffney Road #6000
Fort Wainwright, Alaska 99703-6000

Re: Fort Wainwright Property Management of FAA Big Delta Site

Dear Colonel Jones:

The Alaska Department of Environmental Conservation (DEC) staff have been working with the Federal Aviation Administration (FAA) and Gene Clare, Environmental Protection Specialist (Fort Wainwright Directorate of Public Works Environmental Program), to close a formerly contaminated site located on Fort Wainwright's Donnelly Training Area property formerly used by the FAA. As part of our closure decision we requested that the Fort Wainwright Property Management System have a map showing the location of the formerly contaminated site. Your staff has agreed to implement this request.

The FAA Big Delta Facility includes the remote center air/ground communications (RCAG) located on Donnelly Training Area. Contamination was associated with an underground storage tank (UST 6-c-001) located at the RCAG facility. Fuel contaminated soil was excavated and transported off-site for thermal remediation at the time of the 1997 tank removal. Confirmation soil samples collected and analyzed for diesel range organics, benzene, toluene, ethylbenzene, and xylenes indicated DEC 18 AAC 75 cleanup criteria were met.

Fort Wainwright Environmental personnel have agreed to include the RCAG site in the Fort Wainwright Property Management System. Our understanding is that this system is consulted as part of the planning process for construction projects. Inclusion of this site in the database is considered a conservative protective measure to prevent or limit human and environmental exposure to any hazardous substances, pollutants, or contaminants in the event of future construction activities at the RCAG site.

DEC requests the site name, site location and former contamination be noted in the records comprising the Fort Wainwright Property Management System. The letter documenting the FAA Big Delta RCAG site Cleanup Complete Determination is attached.

December 4, 2009

DEC appreciates the Army's cooperation in this matter. If you have questions about this request regarding inclusion of the RCAG site in the Fort Wainwright Property Management System or the RCAG closure decision, please contact the DEC project manager, Tana Robert at (907) 451-2180.

Sincerely,

A handwritten signature in black ink, appearing to read "Fred Vreeman", written over a horizontal line.

Fred Vreeman
Environmental Program Manager

Enclosure: Record of Decision, FAA Big Delta Sites Cleanup Complete Determination Letter

cc: Scott Berglund, Federal Aviation Administration, Anchorage (via email)
Clifford Seibel, Fort Wainwright Environmental Program, Fort Wainwright (via email)
Michael Meeks, Fort Wainwright Department of Public Works, Fort Wainwright (via email)
Milton 'Gene' Clare, Fort Wainwright Environmental Program, Fairbanks (via email)

STATE OF ALASKA

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

SEAN PARNELL, GOVERNOR

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File: 120.38.004 (Hazard ID 24940)
120.38.004 (Hazard ID 25288)
120.38.004 (Hazard ID 25285)
120.38.004 (Hazard ID 25287)
120.38.004 (Hazard ID 25289)
120.38.004 (Hazard ID 25284)

December 1, 2009

Scott Berglund
Federal Aviation Administration
Environmental Section
AAL-471, FAA
222 West 7th Ave., Box 14
Anchorage, AK 99513-7587

Re: Record of Decision, FAA Big Delta Sites Cleanup Complete Determination

Dear Mr. Berglund:

The Alaska Department of Environmental Conservation (DEC), Contaminated Sites Program has completed a review of the environmental records associated with the FAA Big Delta Facility which includes Regulated Tanks at the remote center air/ground communications (RCAG) and very high Omni-directional range/tactical air navigation station (VORTAC) facilities, the Fuel Transfer Station, Building 601, Building 603, Building 604, Building 400, and two areas identified as Tar and Debris sites. This decision is based on the administrative record for the FAA Big Delta Facility sites, which is located in the ADEC offices in Fairbanks, Alaska. This letter summarizes the decision process used to determine the environmental status of these sites and summarizes the regulatory issues considered in the Cleanup Complete Determination.

The Big Delta FAA Station is located at the Army Allen Airfield, which is part of the Fort Greely Army Testing and Training Center. The FAA Facility is located 3 miles south of the city of Delta Junction and 20 miles south of the village of Big Delta. The FAA involvement at the Big Delta Station began in 1941. In 1963, the FAA relinquished ownership of the land and the Big Delta Airport to the U.S. Army. All sites are located on US Army Fort Greely with the exception of the RCAG Facility regulated tank 6-c-001. The RCAG Facility is located in the Donnelly Training Area which is managed by U.S. Army Fort Wainwright.

Groundwater at the site has been encountered at 185 feet and 220 feet during drilling. The regional groundwater movement has been to the northeast at a gradient ranging from 0.001 feet per lineal feet to 0.004 feet per lineal feet.

Name and Mailing Address of Contact Party:

U.S.D.O.T. FAA - Anchorage
222 West 7th Avenue, #14
Anchorage, Alaska 99513-7587

Regulatory authority under which the sites are being cleaned up:
18 AAC 75

Cleanup Levels

The soil cleanup levels for this site are established in 18 AAC 75.341, Method Two, Tables B1 and B2, Migration to Groundwater.

<u>Contaminant</u>	<u>Site Cleanup Level (mg/kg)</u>
DRO	250
PCBs	1
Benzene	0.025

Pathway Evaluation

The exposure pathways for human health that were evaluated include the following: ingestion of soil; indoor and outdoor inhalation of vapors, and dermal contact with soil. The outdoor inhalation and direct contact exposure risk is acceptable as concentrations remaining above 10 feet bgs are below Method Two inhalation and direct cleanup levels. There are no buildings on the site so indoor inhalation of vapors is not an issue.

The groundwater at the site is very deep (185 feet) and is not currently being used as a drinking water source. The U.S. Army Fort Greely groundwater monitoring program has not identified contamination in downgradient monitoring wells which could be attributable to these sites.

FAA Big Delta – Regulated Tanks, RCAG Facility 6-c-001 and VORTAC Facility 6-b-001

File: 120.38.004 Hazard ID: 24940

RCAG Facility: Latitude: 64° 1' 28.880" N Longitude: 145° 41' 56.260" W

VORTAC Facility: Latitude: 64° 0' 15.881" N Longitude: 145° 43' 0.433" W

Background

The RCAG Facility was located approximately 4,200 feet east of the access road entrance to the Range and Peripheral Area Tract. It consisted of Building 403 and adjacent area. Eight feet north of the northeast corner of the former Building 403 laid a 500-gallon underground storage tank (UST) (6-c-001). This UST contained diesel fuel and was associated with emergency generator operations.

The VORTAC facility was located on the west side of Jarvis Creek approximately 1,800 yards northeast of the Quarters Area Tract. It consisted of Building 401 and the adjacent area. A 1,000-gallon UST (6-b-001) was located 5 feet south of the southwest corner of the building. The UST supplied diesel and formerly gasoline to the emergency generator.

Contaminants of Concern

Diesel Range Organics (DRO)

Characterization and Cleanup Activities

During July 1997, these USTs were decommissioned by Montgomery Watson at the FAA Big Delta Station. The UST (6-c-001) at the RCAG facility was removed and the final excavation dimensions were approximately 14 feet long, 9 feet wide and 8 feet deep. The bottom of the tank was approximately 6.5 feet below ground surface. Approximately 37 cubic yards of fuel-contaminated soil was excavated and transported to ESI in Fairbanks for thermal remediation. Eight field-

screening samples were collected from the limits of the excavation. Soil beneath the fuel supply and return piping was removed as part of the excavation. Four confirmation soil samples were collected from the base of the excavation and they were analyzed for DRO and benzene, toluene, ethylbenzene, and xylenes (BTEX). All the soil samples met DEC cleanup levels. No confirmation soil samples were collected from the sidewalls of the excavation but field-screening data from the sidewalls did not indicate any contamination.

The UST (6-b-001) at the VORTAC facility was removed and the final excavation dimensions were approximately 15 feet long, 9 feet wide and 7 feet deep. The bottom of the tank was approximately 7 feet bgs. Approximately 0.5 cubic yards of fuel-contaminated soil was excavated from the excavation. A total of 7 field-screening samples were collected from the sidewalls and the base of the excavation. Three confirmation soil samples and one duplicate were taken from the sidewall and base of the excavation and analyzed for gasoline range organics (GRO), DRO, BTEX and lead. All the sample results were below DEC cleanup levels.

ADEC Decision

DEC has determined there is no unacceptable risk to human health or the environment, and this site will be granted a Cleanup Complete determination. No further action is required at this site.

The DEC Contaminated Sites Database will be updated to reflect the change in site status as detailed above, and will include a description of the contamination remaining at the site.

This determination is in accordance with 18 AAC 75.380(d)(1) 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.

FAA Big Delta – Fuel Transfer Pipeline

File: 120.38.004 Hazard ID: 25288

Latitude: 63⁰ 59' 38.242" N Longitude: 145⁰ 44' 14.244" W

Background

The Fuel Transfer Pipeline was installed in the early 1940s and consisted of approximately 700 feet of 3 inch diameter steel pipe and 124 feet of ¾ inch diameter steel pipe. The pipeline was used for transferring diesel fuel from the CANOL pipeline to the Big Delta Station bulk fuel storage tank farm. CH2-OH, consultant for the FAA, decommissioned the pipeline in 1998.

Contaminants of Concern

Diesel Range Organics (DRO)

Characterization and Cleanup Activities

In 1997, during the field work for the Final Site Cleanup and Investigation Report, a diesel stain was identified south of the former tennis court area. Approximately 3 cubic yards of visibly stained diesel-contaminated soil was removed. This contaminated soil was consolidated with the excavated soil from the tank decommissioning activities and transported to ESI, Inc. for thermal remediation. The source of the contamination was believed to be the 3 inch buried fuel transfer pipeline formerly used to transfer diesel fuel from the CANOL Pipeline to the former bulk fuel storage tanks at the Big

Delta station. During the excavation, the pipeline was uncovered and a broken flange fitting was observed at the location of the contamination.

After the three cubic yards of contaminated soil were excavated from the former tennis court diesel stain (depth of one foot below ground surface (bgs)), soil samples were collected from around the break in the piping and screened for volatile organic compounds and diesel using a photoionization detector (PID) and EnSys[®] kit. Two confirmation soil samples were collected from the excavation. The samples were analyzed for DRO. The results indicated DRO levels at 14,000 milligrams per kilogram (mg/kg) and 33,000 mg/kg.

On the basis of field screening results, the possibly contaminated soil was removed to a depth of 10 feet along the pipeline route including the area of the former tennis court. The total volume of contaminated soil that was excavated along the pipeline route was 3,600 cubic yards. The contaminated soil was transported to OIT, Inc. for thermal remediation.

A total of eighty-three confirmation samples were collected from the bottom and the side walls of the excavation for laboratory analysis offsite. These samples were analyzed for DRO, BTEX, and aliphatics/aromatics. Six of the samples had levels of DRO exceeding 1,000 (mg/kg). The highest DRO level was in the former tennis court area at 5,000 mg/kg at 10 feet bgs. Some of the samples were analyzed for BTEX. All of the sample results met DEC cleanup levels for BTEX.

A release investigation was completed in July 1998 to determine the extent of the remaining contamination. Based on the elevated field-screening results, three soil borings were installed down to 60 feet bgs along the former pipeline excavation. Fourteen soil samples were collected from the three borings. These samples were analyzed for DRO, BTEX and aliphatics/aromatics. All the soil samples were below DEC cleanup levels.

In addition, based on elevated field-screening levels, two soil borings were installed down to 80 feet bgs in the former tennis court area. These soil samples were also analyzed for DRO, BTEX and aliphatics/aromatics. The soil boring (SB015) located in the former tennis court site had DRO levels up to 20,000 mg/kg at 39 – 41 feet bgs, 11,000 mg/kg at 54 – 56 feet bgs, but the DRO decreased to non-detect at 64 feet bgs. Samples collected from SB015 from 14 feet bgs to 36 feet were not analyzed for DRO and BTEX. The PID readings from those samples were low and the highest aliphatic level was 2,700 mg/kg and the highest aromatic level was 310 mg/kg. The soil samples collected from SB015 were analyzed for BTEX from 64 feet bgs down to 80 feet bgs. All the BTEX samples met DEC cleanup levels.

Pathway Evaluation

The exposure pathways for human health that were evaluated include the following: migration to groundwater, incidental ingestion of soil; inhalation of vapors in indoor and outdoor air, and dermal contact with soil. Contaminant concentrations in the deep water table at the site do not exceed the Table C cleanup levels for DRO and the distance from the bottom of the contamination to the groundwater minimizes the possibility of migration. The nearest potable water well is located up-gradient of the site. The outdoor inhalation/ingestion and dermal contact exposure risk have been eliminated by the depth of excavation and remaining concentrations in surface soil are below the Table B concentrations for inhalation/ingestion and dermal contact.

The exposure pathway analysis above was supported by the most recent DEC Exposure Tracking Model (ETM) ranking. The ETM results showed all pathways to be De Minimis Exposure, Exposure Controlled, or Pathway Incomplete.

ADEC Decision

DEC has determined there is no unacceptable risk to human health or the environment, and this site will be granted a Cleanup Complete determination subject to the following.

1. Any proposal to transport soil or groundwater off site requires DEC approval in accordance with 18 AAC 75.370 (b). A "site" as defined by 18 AAC 75.905(115), is 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. Due to the potential presence of petroleum contaminated soil above the migration to groundwater pathway cleanup level for DRO (250 mg/kg), the landowner will record the area of residual contamination in the Property Management System and Master Land Use Plan in accordance with 18 AAC 75.375 (b)(4), and notify DEC if the current land uses changes.

The DEC Contaminated Sites Database will be updated to reflect the change in site status as detailed above, and will include a description of the contamination remaining at the site.

This determination is in accordance with 18 AAC 75.380(d)(1) 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.

FAA Big Delta – Building 601 Former Utility Facility

File: 120.38.004 Hazard ID: 25285

Latitude: 63° 59' 36.884" N Longitude: 145° 44' 27.686" W

Background

Utility building 601 formerly housed drinking water and heating systems for the Former Quarters Area, a repair shop with an auto bay and a general storage area. There were two source areas at this site. The first source was the two floor drains (north floor drain and the south floor drain) that were located in the auto bay. A septic tank system is located just west of the building and the discharge piping runs under the Richardson Highway. The second source of contamination is the former one 2,000-gallon above ground storage tank (AST) (6-A-003).

Contaminants of Concern

Diesel Range Organics (DRO)

Polychlorinated biphenyls (PCBs)

Characterization and Cleanup Activities

The drains in the garage (South floor drain) and the boiler room (North floor drain) were investigated and reported in the Environmental Due Diligence Audit Summary Report dated March 1997. Both

drains were filled with soil and other miscellaneous debris. The North floor drain was square in shape and discharged directly into the soil. The South floor drain was circular and discharged to a piped "P" trap. Two soil samples were collected from the North floor drain and were analyzed for GRO, DRO, residual range organics (RRO), BTEX, Target Analyte List (TAL) metals, semivolatile organic compounds (SVOCs), and polychlorinated biphenyls (PCBs). All the sample results met DEC cleanup levels except for PCBs which had a concentration of 14.5 and 14.7 mg/Kg. The South floor drain was sampled and analyzed for GRO, BTEX, TALs and volatile organic compounds (VOCs). The soil sample results for the South floor drain were all below DEC cleanup levels.

A 3 foot by 3 foot section of concrete floor slab was removed from around the North floor drain and one cubic yard of soil was removed from below and around the North floor drain. Confirmation soil samples were collected from the bottom and the side wall of the excavation. All the confirmation sample results met DEC cleanup levels with the exception of the sample from the East side wall sample that had 1.32 mg/Kg of PCB which was collected 2 inches below the concrete slab.

The septic tank system, located just west of Building 601 consisted of two 2,500 gallon tanks and a 1,500 gallon lift station constructed approximately 10 feet bgs. The water from the septic system was removed and disposed of at the City of Delta Junction sewage lagoon. The tanks and the lift station were filled with 36 cubic yards of cement grout consisting of cement, water and sand and the system was abandoned. Samples were collected from the septic tank and one foot below ground from the sewage outfall located west of Building 601 across the Richardson Highway. The samples were analyzed for GRO, DRO, RRO, BTEX, TAL metals, SVOCs, VOCs, and PCBs. The sample results from the septic system lift tank indicated exceedances of DRO at 429 mg/Kg and benzo(a)anthracene at 36.6 mg/Kg. However, the sample results from the sample collected from the sewer outfall did not indicate any contamination above DEC cleanup levels.

AST 6-A-003 was a 2,000-gallon heating oil tank. At the time of decommissioning, the tank contained approximately 6 gallons of sludge. No holes, dents, or leaks were observed in the tank. The fuel supply piping ran approximately 30 feet into the east side of Utility Building 601. Approximately 18 cubic yards of contaminated-soil were removed from under the former AST. Three soil samples were collected from the bottom of the excavation and analyzed for DRO, and BTEX. DRO concentrations from the excavation had levels up to 6,800 mg/Kg at 2' bgs. All the contaminated-soil was transported to ESI in Fairbanks for thermal remediation. Two soil borings were installed under the former tank location and at the limits of the excavation. The soil borings were installed to a depth of 31 feet bgs. Soil samples were collected from the top 3 feet, 4 to 11 feet bgs, and 29 – 31 feet bgs. All the samples were below DEC cleanup levels.

Pathway Evaluation

The exposure pathways for human health that were evaluated include the following: migration to groundwater, incidental ingestion of soil; inhalation of vapors in indoor and outdoor air, and dermal contact with soil. All contaminants at the site were cleaned up to the maximum extent practicable and the remaining contamination is either fixed in place or otherwise not expected to cause any future exposure.

The exposure pathway analysis above was supported by the most recent DEC Exposure Tracking Model (ETM) ranking. The ETM results showed all pathways to be De Minimis Exposure, Exposure Controlled, or Pathway Incomplete.

ADEC Decision

DEC has determined there is no unacceptable risk to human health or the environment, and this site will be granted a Cleanup Complete determination subject to the following.

1. Any proposal to transport soil or groundwater off site requires DEC approval in accordance with 18 AAC 75.370 (b). A "site" as defined by 18 AAC 75.905(115), is 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. Due to the potential presence of petroleum contaminated soil above the migration to groundwater pathway cleanup level for DRO (250 mg/kg), and one small area of PCB contaminated soil that is slightly above the direct contact level of 1 mg/kg, the landowner will record the area of residual contamination in the Property Management System and Master Land Use Plan in accordance with 18 AAC 75.375 (b)(4), and notify DEC if the current land uses changes.

The DEC Contaminated Sites Database will be updated to reflect the change in site status as detailed above, and will include a description of the contamination remaining at the site.

This determination is in accordance with 18 AAC 75.380(d)(1) 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.

FAA Big Delta – Building 603 Former Generator Facility

File: 120.38.004 Hazard ID: 25287

Latitude: 63° 59' 36.953" N Longitude: 145° 44' 17.876" W

Background

The Generator Facility consisted of Building 603 and adjacent areas. Building 603 was a single-story wooden-frame building with an underground crawl space. Building 603 was located at the east end of the central quarter's tract facility. Pipes entered and exited the crawl space beneath Building 603. The crawl space extended to a storage shed located on the north side of Building 603. A hatch inside the storage shed opened into the crawl space which provided access to the common fill stand for four 500-gallon diesel USTs located under the storage shed. A 500-gallon diesel AST that was used for the emergency generator was located three feet south of Building 603.

Source areas of contamination at this site included areas of stained soil at the ground surface beneath the south end of the AST, stained soil on the floor of the crawlspace below the storage shed and the former underground storage tanks that were adjacent to the north side of Building 603.

Contaminants of Concern

Diesel Range Organics (DRO)

Benzene

Characterization and Cleanup Activities

In August of 1997, Montgomery Watson removed and decommissioned four 500-gallon USTs and four wooden pilings that supported AST 6-A-002. During the removal of the pilings for the AST, contaminated soil was discovered and approximately 18 cubic yards of contaminated soil were removed from the excavation. Nine field screening samples were collected as the pilings and the contaminated soil were removed. Three confirmation soil samples were collected from the excavation and analyzed for DRO and BTEX. Sample results indicated levels of DRO up to 18,000 mg/kg at 0.5 feet below ground surface (bgs). All the BTEX levels met DEC cleanup levels.

Five soil borings were installed at the AST site based on high field screening data. Contaminated soil that was encountered during the installation of the borings was excavated to a depth of approximately 10 feet. One of the soil borings installed in the former AST location had DRO levels up to 5,400 mg/kg at 9 – 11 feet bgs. The levels decreased down to levels below DEC cleanup levels at 43 feet bgs.

Surface staining was evident in the storage shed crawl space below the hatch. The stained soil identified in the crawlspace was sampled at one foot bgs inside the storage shed hatch. The sample was analyzed for GRO, DRO, RRO and BTEX. The sample results were below DEC cleanup levels for GRO and BTEX but the DRO concentration was 10,764 mg/kg and the RRO concentration was 693 mg/kg. The remaining contamination associated with the crawlspace was coordinated with the USTs removal.

Approximately 70 cubic yards of contaminated soil were excavated during the 1997 removal of the four 500-gallon USTs. The final excavation dimensions were 20 feet long by 15 feet wide by 9 feet deep. The top of the tanks were approximately 4.5 feet bgs. The bottoms of the tanks were approximately 8.5 feet bgs. The USTs were above a cement pad. A total of 20 field screening samples were collected from the excavation. The contaminated soil was transported to ESI for thermal remediation. A total of 7 confirmation soil samples were collected from the excavation and analyzed for DRO and BTEX. One confirmation soil sample collected at the east edge of the tank crib slab had a DRO level at 19,000 mg/kg.

During the 2000 Release Investigation, a total of eight soil borings were installed at the UST site. The placement of the soil borings was based on high field screening data and surface observations of soil staining. Contaminated soil was excavated to a depth of approximately 10 feet at the former location of Building 603 and a portion of the building's concrete foundation was removed to facilitate removal of the soil. Soil samples collected from the borings were analyzed for DRO, BTEX, aliphatics/aromatics and SVOCs. Soil samples collected from the soil borings had levels of DRO up to 11,000 mg/kg at 54 feet bgs. The levels of DRO decreased to below DEC cleanup levels at 78 feet bgs. Additional soil borings installed within 100 feet of SB001, which is located closest to the former USTs, all had DRO contaminant levels up to 9,300 mg/kg at 74 feet bgs. According to the data, DRO contamination is present between 50 and 70 feet bgs. In all the soil borings, contamination decreased to below DEC cleanup levels at 75 to 80 feet bgs. One soil sample had a benzene level at 0.05 mg/kg in a sample at 54 feet bgs but all other BTEX and SVOC data met DEC cleanup levels.

Pathway Evaluation

The exposure pathways for human health that were evaluated include the following: migration to groundwater, incidental ingestion of soil; inhalation of vapors in indoor and outdoor air, and dermal contact with soil. Contaminant concentrations in the deep water table at the site do not exceed the

Table C cleanup levels for DRO and Benzene, and the distance from the bottom of the contamination to the groundwater minimizes the possibility of migration. The nearest potable water well is located up-gradient of the site. The outdoor inhalation/ingestion and dermal contact exposure risk have been eliminated by the depth of excavation and remaining concentrations in surface soil are below the Table B concentrations for inhalation/ingestion and dermal contact.

The exposure pathway analysis above was supported by the most recent DEC Exposure Tracking Model (ETM) ranking. The ETM results showed all pathways to be De Minimis Exposure, Exposure Controlled, or Pathway Incomplete.

ADEC Decision

DEC has determined there is no unacceptable risk to human health or the environment, and this site will be granted a Cleanup Complete determination subject to the following.

1. Any proposal to transport soil or groundwater off site requires DEC approval in accordance with 18 AAC 75.370 (b). A "site" as defined by 18 AAC 75.905(115), is 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. Due to the potential presence of petroleum contaminated soil above the migration to groundwater pathway cleanup level for DRO (250 mg/kg), the landowner will record the area of residual contamination in the Property Management System and Master Land Use Plan in accordance with 18 AAC 75.375 (b)(4), and notify DEC if the current land uses changes.

The DEC Contaminated Sites Database will be updated to reflect the change in site status as detailed above, and will include a description of the contamination remaining at the site.

This determination is in accordance with 18 AAC 75.380(d)(1) 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.

FAA Big Delta – Pump House Building 604

File: 120.38.004 Hazard ID: 25289

Latitude: 63° 59' 37.291" N Longitude: 145° 44' 14.478" W

Background

The Former Bulk Oil Storage Pump and Valve House Building 604 controlled the flow of heating oil and diesel fuel to tanks and trucks from the former bulk storage tank system. A truck fill stand was located on the west side of the slab, and piping was located running north, south, and east of the slab.

Characterization and Cleanup Activities

During July and August 1997, Montgomery Watson removed the concrete slab, the piping running south to the slab, and approximately 50 cubic yards of diesel contaminated soil from below the slab down to 4.5 feet bgs. Field screening was conducted during the excavation and five confirmation soil

samples were collected from the limits of the excavation. The soil samples were analyzed for DRO. The sample results ranged from 580 mg/kg to 6,470 mg/kg (2.5 feet bgs). The excavation was lined with plastic and backfilled to grade. The contaminated soil was transported to ESI in Fairbanks for thermal remediation.

In 1998, four soil borings were installed at the former Pump House Building 604 site. The placement of the soil borings was based on field screening data, assumed groundwater flow direction, and surface observations such as soil staining. Contaminated soil that was encountered during the installation of the soil borings was excavated to a depth of approximately 10 feet bgs. Soil samples collected from the borings were analyzed for DRO, BTEX, aliphatics/aromatics, and SVOCs. The highest soil sample result was 6,000 mg/kg DRO at 4 – 6 feet bgs at SB035 which was located under the former Pumphouse Building 604 foundation. DRO soil sample results collected from SB035 decreased to 500 mg/kg at 29-31 feet bgs and 9.2 mg/kg at 49-51 feet bgs. One sample collected from SB045 which was located under the location of the former 3 inch fuel pipeline had 520 mg/kg DRO at 24 – 26 feet bgs. All the other samples collected in 1998 were below DEC cleanup levels.

Pathway Evaluation

The exposure pathways for human health that were evaluated include the following: migration to groundwater, incidental ingestion of soil; inhalation of vapors in indoor and outdoor air, and dermal contact with soil. Contaminant concentrations in the deep water table at the site do not exceed the Table C cleanup levels for DRO, and the distance from the bottom of the contamination to the groundwater minimizes the possibility of migration. The nearest potable water well is located up-gradient of the site. The outdoor inhalation/ingestion and dermal contact exposure risk have been eliminated by the depth of excavation and remaining concentrations in surface soil are below the Table B concentrations for inhalation/ingestion and dermal contact.

The exposure pathway analysis above was supported by the most recent DEC Exposure Tracking Model (ETM) ranking. The ETM results showed all pathways to be De Minimis Exposure, Exposure Controlled, or Pathway Incomplete.

ADEC Decision

DEC has determined there is no unacceptable risk to human health or the environment, and this site will be granted a Cleanup Complete determination subject to the following.

1. Any proposal to transport soil or groundwater off site requires DEC approval in accordance with 18 AAC 75.370 (b). A "site" as defined by 18 AAC 75.905(115), is 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. Due to the potential presence of petroleum contaminated soil above the migration to groundwater pathway cleanup level for DRO (250 mg/kg), the landowner will record the area of residual contamination in the Property Management System and Master Land Use Plan in accordance with 18 AAC 75.375 (b)(4), and notify DEC if the current land uses changes.

The DEC Contaminated Sites Database will be updated to reflect the change in site status as detailed

above, and will include a description of the contamination remaining at the site.

This determination is in accordance with 18 AAC 75.380(d)(1) 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.

FAA Big Delta – Building 400 Former Flight Service Station

File Number 120.38.004 Hazard ID 25286

Latitude: 63° 59' 34.699" N Longitude: 145° 43' 59.801" W

Background

The Flight Service Station Facility included Building 400. The building lies near the southwest end of the Allen Army Airfield at Fort Greely. There was a 515-gallon AST located 2 feet from the north wall of the northwest corner of Building 400. Soil staining was noted at the ground surface area around the AST and on the west side of Building 400 between the south side of the stairs and the outer western wall. In 1998, the AST was decommissioned and the Decommissioning Assessment (CH2-OH) stated that approximately 5 cubic yards of potentially contaminated soil was excavated from below the AST. Three confirmation soil samples were collected from the bottom and the sidewalls of the excavation and analyzed for DRO and BTEX. All the soil sample results were below the most stringent DEC cleanup levels. This previously identified area of concern was determined to be a non-qualifying site by DEC.

FAA Big Delta – VASI and DF Pooled Tar and Misc Debris

File Number 120.38.004 Hazard ID 25284

Latitude: 64° 0' 14.476" N Longitude: 145° 43' 5.650" W

Background

The Direction Finding (DF) Facility and the Visual Approach Slope Indicator (VASI) Facility are located within and near the VHF Omni-directional Radio Range Tactical Air Navigation (VORTAC) facility. The DF facility is located approximately 920 feet southwest of Building 401 and the VASI facility consists of two VASI boxes. The boxes are located near the northern end of the northern runway at Allen Airfield. They are approximately 230 and 210 yards southeast of the VORTAC.

A 1997 walkover inspection of the area noted the DF facility had a large amount of tar and debris spilled throughout the area. The debris consisted of railroad ties and metal tracks, empty rusted 55-gallon drums, discarded electrical equipment and tar pooled throughout the area. The total estimated acreage of affected area is 7 to 7.5 acres of tar and debris (3.5 acres are estimated beyond the FAA-leased property boundaries). The VASI facility had a small patch of tar.

No evidence of railroad ties, metal tracks, 55-gallon drums, electrical equipment or tar was observed during a 2009 walkover inspection of the area by the Army and DEC. No other indications of contamination were observed. These previously identified areas of concern were determined to be non-qualifying sites by DEC.

ADEC Decision

The cleanup actions to date have served to excavate and adequately remove contaminated soil from the sites. Based on the information available, DEC has determined no further assessment or cleanup action is required. There is no longer a risk to human health or the environment, and these sites will be designated as closed on the Department's database.

Although a Cleanup Complete determination has been granted, DEC approval is required for off-site soil disposal in accordance with 18 AAC 75.325(i). 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.

Since contaminated soil remains above the DEC cleanup levels, the residual contaminant levels on sites will be documented in the U.S. Army's (landowner) Land Use Management Plan for future reference and land use changes. The US Army has demonstrated to the Department's satisfaction that processes are in place that ensures future site users that the residual contamination is defined on planning maps and will be taken into consideration when any future construction projects in the area are planned.

This determination is in accordance with 18 AAC 75.380(d) 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 contact the DEC project manager, Tana Robert at (907) 451-2180.

Sincerely,



Fred Vreeman
Environmental Program Manager

cc: Lt. Col. Chris Chronis, Fort Greely Commander, Fort Greely (via email)
Col. Timothy Jones, Fort Wainwright Commander, Fort Wainwright (via email)
Glen Shonkwiler, SMDC/ARSTRAT, Huntsville, AL (via email)

Stephen Hammond, Fort Greely RAB Community Co-Chair, Fort Greely (via email)
Derek 'Dan' Miller, Fort Greely Environmental Program, Fort Greely (via email)
Christine Boerst, Fort Greely Department of Public Works, Fort Greely (via email)
Clifford Seibel, Fort Wainwright Environmental Program, Fort Wainwright (via email)
Michael Meeks, Fort Wainwright Department of Public Works, Fort Wainwright (via email)
Milton 'Gene' Clare, Fort Wainwright Environmental Program, Fairbanks (via email)
Jacques Gusmano, EPA, Anchorage (via email)

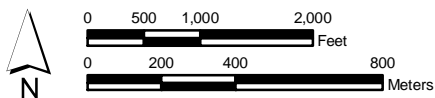


Legend

- Big Delta FAA Sites
- Donnelly Training Boundary

Big Delta FAA Sites

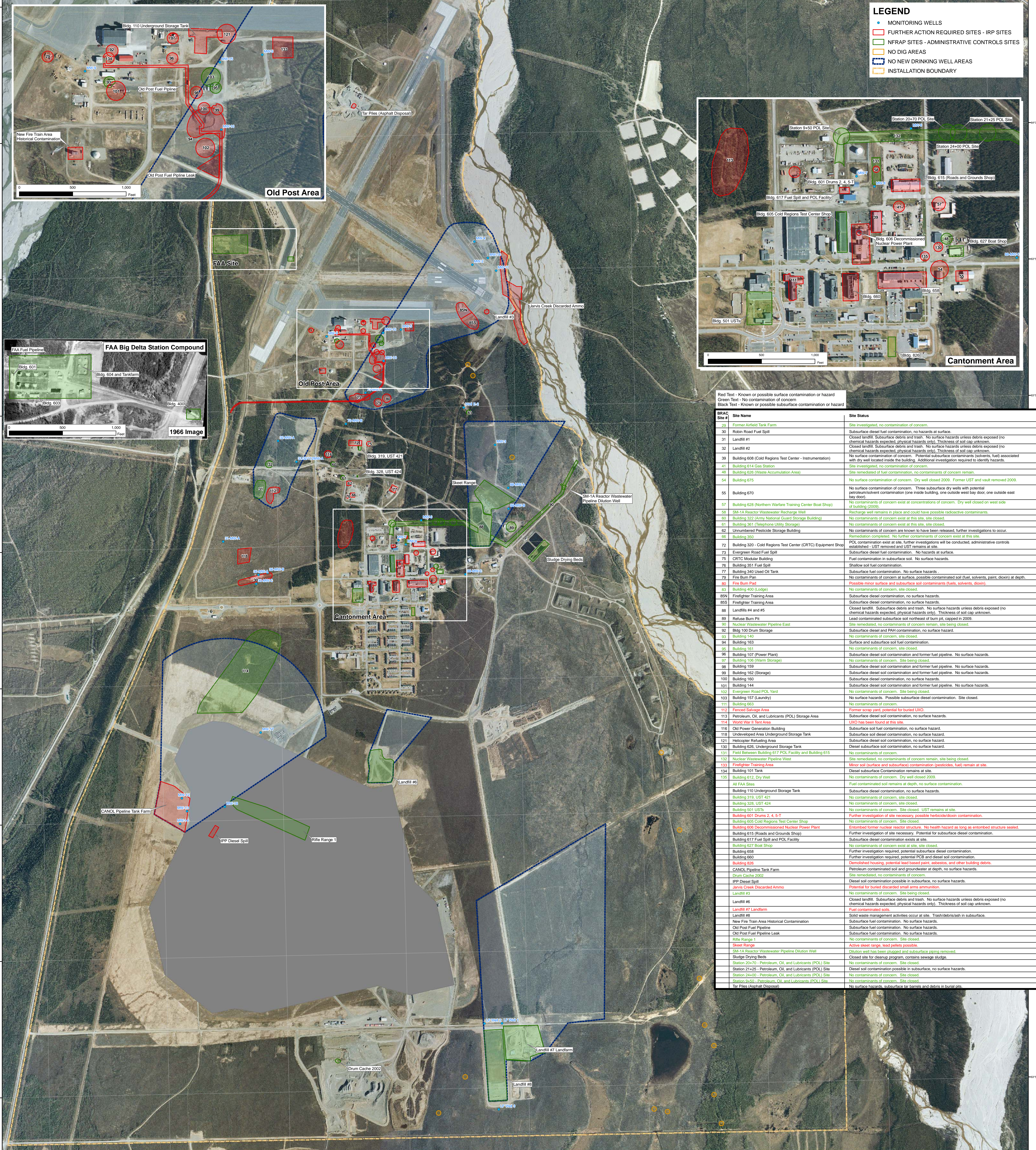
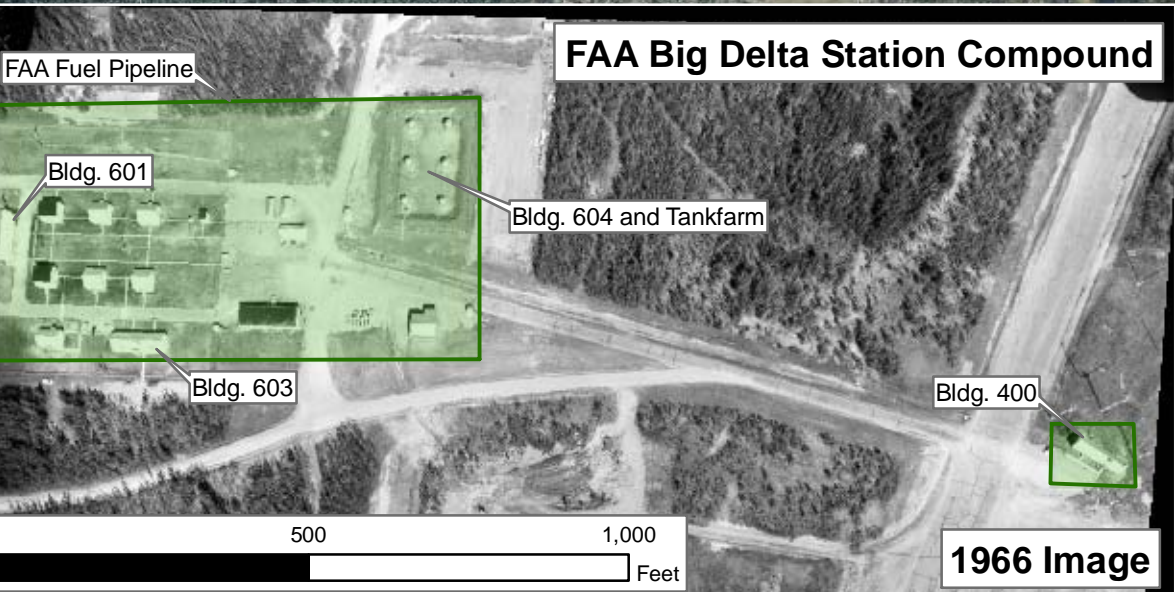
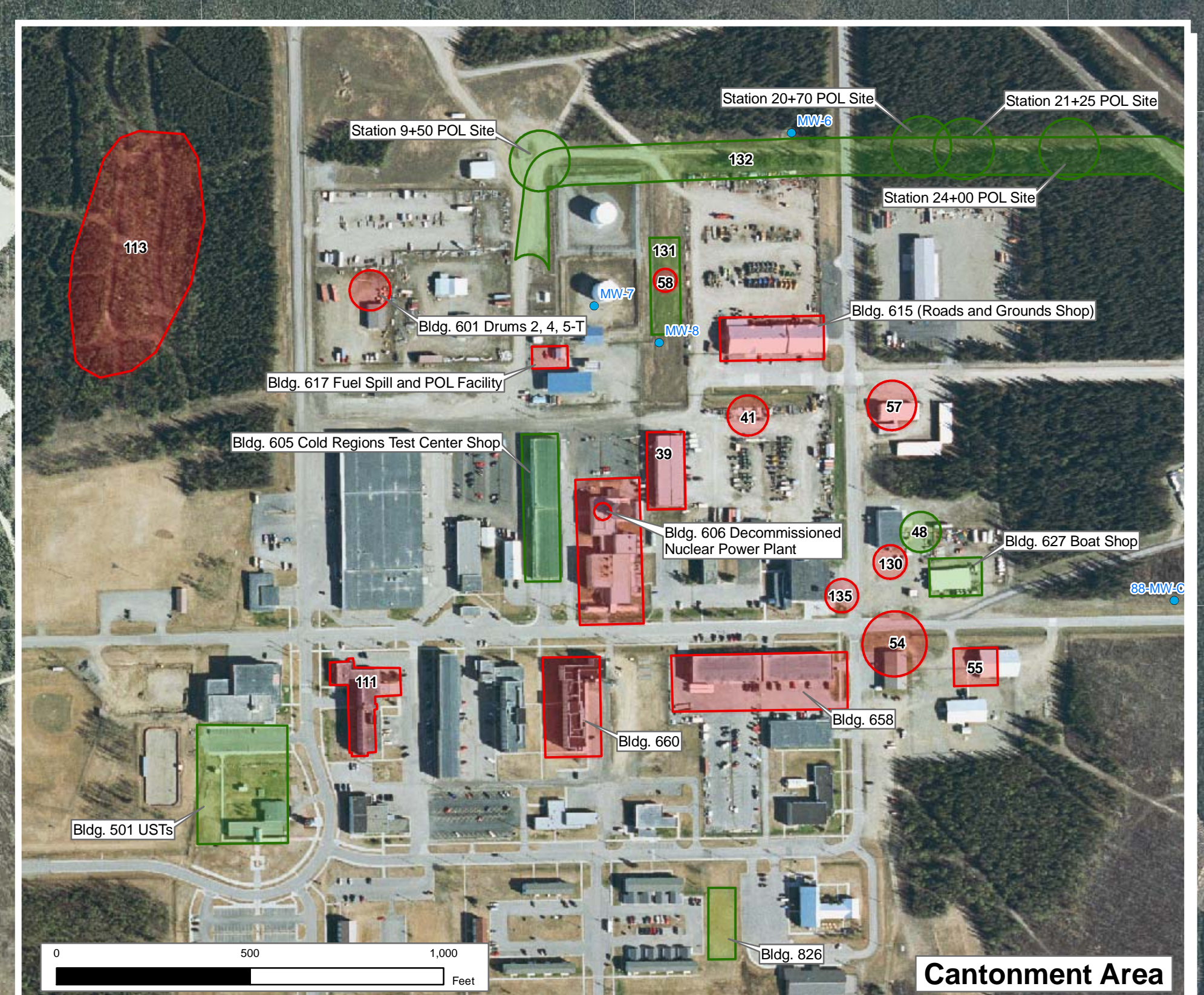
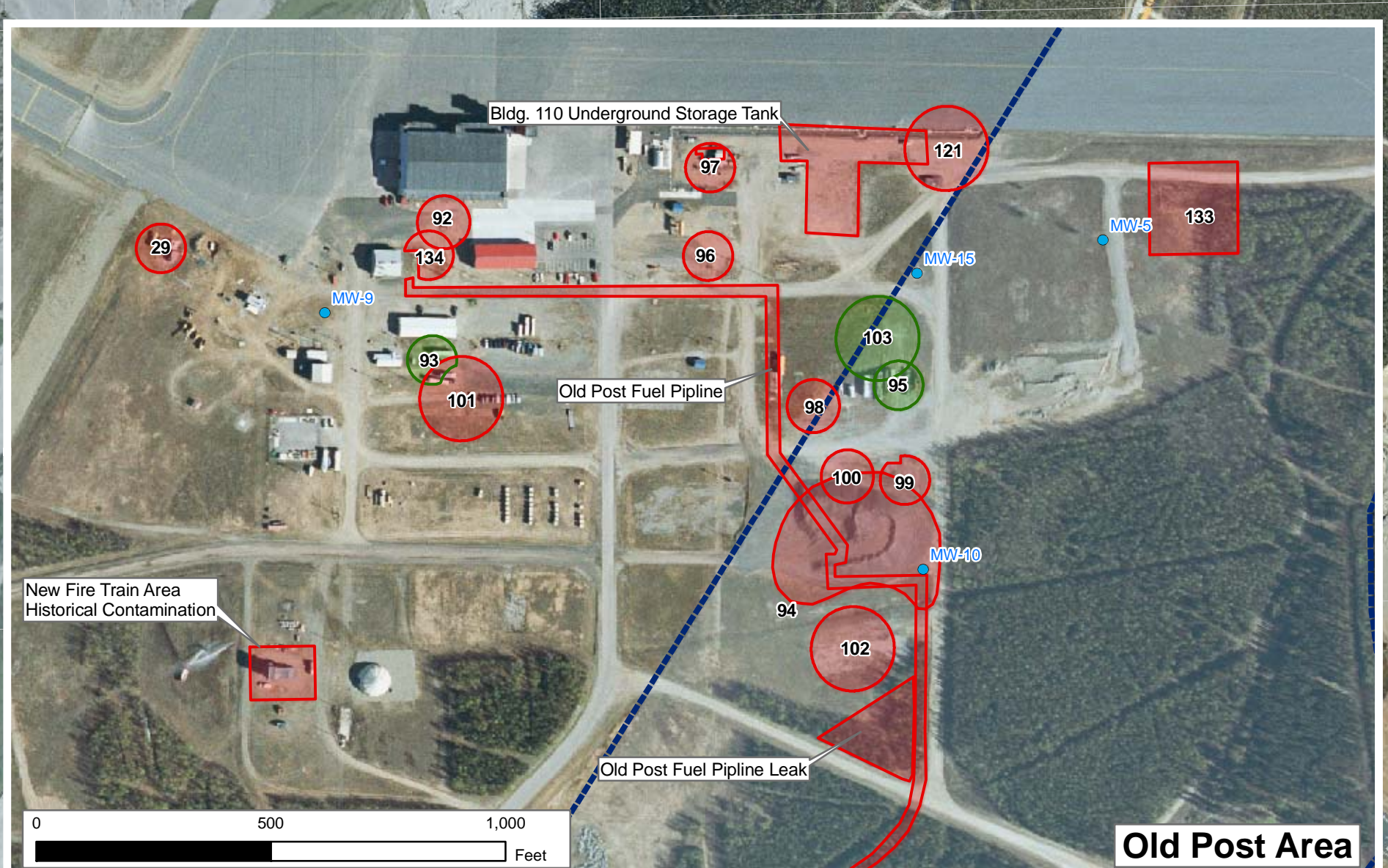
ID#	Latitude	Longitude	Narrative
1	63° 59' 36.884" N	145° 44' 27.686" W	FAA Big Delta Station Bldg 601 Former Utility Facility
2	63° 59' 38.242" N	145° 44' 14.244" W	FAA Big Delta Station Fuel Transfer Pipeline
3	63° 59' 37.291" N	145° 44' 14.478" W	FAA Big Delta Station Pumphouse Bldg 604
4	63° 59' 36.953" N	145° 44' 17.876" W	FAA Big Delta Station Bldg 603 Former Generator Facility
5	64° 0' 14.476" N	145° 43' 5.650" W	FAA Big Delta Station VASI & DF Pooled Tar & Misc Debris
6	63° 59' 34.699" N	145° 43' 59.801" W	FAA Big Delta Station Bldg 400 Frmr Flight Service Station
7	64° 0' 15.881" N	145° 43' 0.433" W	VORTAC and Regulated Tank 6-B-001
8	64° 1' 28.880" N	145° 41' 56.260" W	RCAG and Regulated Tank 6-C-001



DATE: 10 NOV 2009	COORDINATE SYSTEM: WGS 1984 UTM Zone 6N Transverse Mercator	DIRECTORY: R:/GREELYSDS/MAPS	SHEET: 1 of 1
IMAGE: 17 MAY 2009	CREATED BY: KAYA Associates, Inc.	FILE NAME: big_delta_faa_sites _09image_110909	

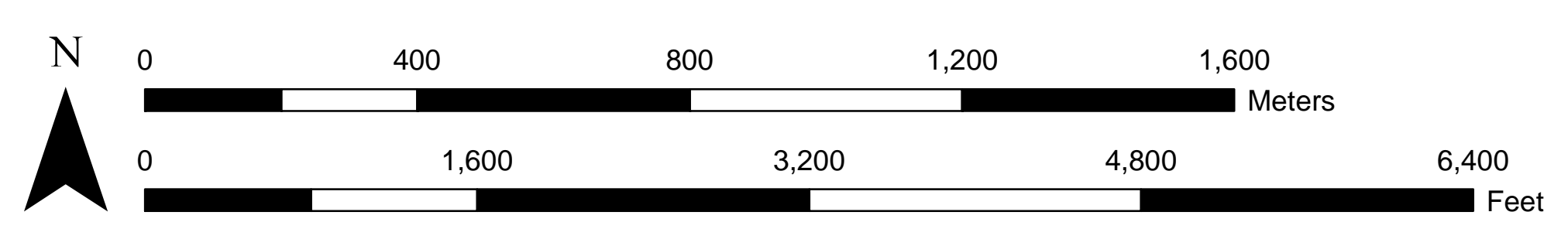
LEGEND

- MONITORING WELLS
- FURTHER ACTION REQUIRED SITES - IRP SITES
- NFRAP SITES - ADMINISTRATIVE CONTROLS SITES
- NO DIG AREAS
- NO NEW DRINKING WELL AREAS
- INSTALLATION BOUNDARY



BRAC Site #	Site Name	Site Status
21	Former Ammunition Tank Farm	Site investigated, no contamination of concern.
22	Robin Road Fuel Spill	Subsurface diesel fuel contamination, no hazards at surface.
31	Landfill #1	Closed landfill. Subsurface debris and trash. No surface hazards unless debris exposed (no chemical hazards expected, physical hazards only). Thickness of soil cap unknown.
32	Landfill #2	Closed landfill. Subsurface debris and trash. No surface hazards unless debris exposed (no chemical hazards expected, physical hazards only). Thickness of soil cap unknown.
39	Building 608 (Cold Regions Test Center - Instrumentation)	No surface contamination of concern. Potential subsurface contaminants (solvents, fuel) associated with dry well located inside the building. Additional investigation required to identify hazards.
41	Building 614 Gas Station	Site investigated, no contamination of concern.
43	Building 626 (Waste Accumulation Area)	Site remediated of fuel contamination, no contaminants of concern remain.
54	Building 675	No surface contamination of concern. Dry well closed 2009. Former UST and vault removed 2009.
55	Building 670	No surface contamination of concern. Three subsurface dry wells with potential petroleum/solvent contamination (one inside building, one outside west bay door, one outside east bay door).
57	Building 528 (Northern Warfare Training Center Boat Shop)	No contaminants of concern exist at concentrations of concern. Dry well closed on west side of building (2009).
58	SM-1A Reactor Wastewater Recovery Well	Recharge well remains in place and could have possible radioactive contaminants.
60	Building 322 (Army National Guard Storage Building)	No contaminants of concern exist at this site, site closed.
61	Building 361 (Telephone Utility Storage)	No contaminants of concern exist at this site, site closed.
62	Unnumbered Pesticide Storage Building	No contaminants of concern are known to have been released, further investigations to occur.
66	Building 350	Remediation completed. No further contaminants of concern exist at this site.
72	Building 320 - Cold Regions Test Center (CRTC) Equipment Shop	POL contamination exist at site, further investigations will be conducted, administrative controls established - UST removed and UST remains at site.
73	Evergreen Road Fuel Spill	Subsurface diesel fuel contamination. No hazards at surface.
75	CRTC Modular Building	Fuel contamination in subsurface soil. No surface hazards.
76	Building 381 Fuel Spill	Shallow soil fuel contamination.
77	Building 340 Used Oil Tank	Subsurface fuel contamination. No surface hazards.
79	Fire Burn Pits	No contaminants of concern at surface, possible contaminated soil (fuel, solvents, paint, dioxin) at depth.
80	Fire Burn Pits	Possible mixed surface and subsurface soil contamination (fuels, solvents, dioxin).
81	Building 400 (Lodge)	No contaminants of concern, site closed.
85N	Firefighter Training Area	Subsurface diesel contamination, no surface hazards.
85S	Firefighter Training Area	Subsurface diesel contamination, no surface hazards.
88	Landfills #4 and #5	Closed landfill. Subsurface debris and trash. No surface hazards unless debris exposed (no chemical hazards expected, physical hazards only). Thickness of soil cap unknown.
89	Refuse Burn Pit	Lead contaminated subsurface soil northeast of burn pit, capped in 2009.
90	Nuclear Wastewater Pipeline East	Site remediated, no contaminants of concern remain, site being closed.
92	Big 100 Drum Storage	Subsurface diesel fuel and PAH contamination, no surface hazard.
93	Building 140	No contaminants of concern, site closed.
94	Building 163	Surface and subsurface soil fuel contamination.
95	Building 161	No contaminants of concern, site closed.
96	Building 107 (Power Plant)	Subsurface diesel soil contamination and former fuel pipeline. No surface hazards.
97	Building 105 (Warm Storage)	No contaminants of concern. Site being closed.
98	Building 159	Subsurface diesel soil contamination and former fuel pipeline. No surface hazards.
99	Building 162 (Storage)	Subsurface diesel soil contamination and former fuel pipeline. No surface hazards.
100	Building 140	Subsurface diesel contamination, no surface hazards.
101	Building 144	Subsurface diesel soil contamination and former fuel pipeline. No surface hazards.
102	Evergreen Road POL Yard	No contaminants of concern. Site being closed.
103	Building 157 (Laundry)	No surface hazards. Possible subsurface diesel contamination. Site closed.
111	Building 663	No contaminants of concern.
112	Federal Storage Area	Former active area, potential for buried UXO.
113	Petroleum, Oil, and Lubricants (POL) Storage Area	Subsurface diesel soil contamination, no surface hazards.
114	World War II Tank Area	UXO has been found at this site.
116	Old Power Generation Building	Subsurface soil fuel contamination, no surface hazard.
118	Underleppa Area Underground Storage Tank	Subsurface soil diesel contamination, no surface hazard.
121	Helicopter Refueling Area	Subsurface diesel soil contamination, no surface hazard.
130	Building 626, Underground Storage Tank	Desert subsurface soil contamination, no surface hazard.
131	Field Between Building 617 POL Facility and Building 615	No contaminants of concern.
132	Nuclear Wastewater Pipeline West	Site remediated, no contaminants of concern remain, site being closed.
133	Firefighter Training Area	Mixed soil surface and subsurface contamination (pesticides, fuel) remain at site.
134	Building 101 Tank	Desert subsurface contamination remains at site.
135	Building 612, Dry Well	No contaminants of concern. Dry well closed 2009.
	All FAA Sites	Fuel contaminated soil remains at depth, no surface contamination.
	Building 110 Underground Storage Tank	Subsurface diesel contamination, no surface hazards.
	Building 318, UST #21	No contaminants of concern, site closed.
	Building 328, UST #24	No contaminants of concern, site closed.
	Building 501 USTs	No contaminants of concern. Site closed. UST remains at site.
	Building 601 Drums 2, 4, 5-T	Further investigation of site necessary, possible herbicide/dioxin contamination.
	Building 606 Cold Regions Test Center Shop	No contaminants of concern. Site closed.
	Building 606 Decommissioned Nuclear Power Plant	Entombed former nuclear reactor structure. No health hazard as long as entombed structure sealed.
	Building 615 (Roads and Grounds Shop)	Further investigation of site necessary. Potential for subsurface diesel contamination.
	Building 617 Fuel Spill and POL Facility	Subsurface diesel contamination exists at site.
	Building 627 Boat Shop	No contaminants of concern exist at site, site closed.
	Building 660	Further investigation required, potential PCB and diesel soil contamination.
	Building 826	Demolished housing, potential lead based paint, asbestos, and other building debris.
	CANOL Pipeline Tank Farm	Petroleum contaminated soil and groundwater at depth, no surface hazards.
	Drum Cache 2002	Site remediated, no contaminants of concern.
	IPP Diesel Spill	Desert soil contamination possible in subsurface, no surface hazards.
	Jarvis Creek Discarded Ammo	Potential for buried discarded small arms ammunition.
	Landfill #3	No contaminants of concern. Site being closed.
	Landfill #6	Closed landfill. Subsurface debris and trash. No surface hazards unless debris exposed (no chemical hazards expected, physical hazards only). Thickness of soil cap unknown.
	Landfill #7 Landfarm	Fuel contaminated soil.
	Landfill #8	Soil waste management activities occur at site. Trash/debris/lash in subsurface.
	New Fire Train Area Historical Contamination	Subsurface fuel contamination. No surface hazards.
	Old Post Fuel Pipeline	Subsurface fuel contamination. No surface hazards.
	Old Post Fuel Pipeline Leak	Subsurface fuel contamination. No surface hazards.
	Rifle Range 1	No contaminants of concern. Site closed.
	Skeet Range	Active skeet range, lead pellets possible.
	SM-1A Reactor Wastewater Pipeline Dilution Well	Dilution well has been plugged and subsurface piping removed.
	Sludge Drying Beds	Closed site for cleanup program, contains sewage sludge.
	Station 20+70, Petroleum, Oil, and Lubricants (POL) Site	No contaminants of concern. Site closed.
	Station 21+25, Petroleum, Oil, and Lubricants (POL) Site	Desert soil contamination possible in subsurface, no surface hazards.
	Station 24+00, Petroleum, Oil, and Lubricants (POL) Site	No contaminants of concern. Site closed.
	Station 24+02, Petroleum, Oil, and Lubricants (POL) Site	No contaminants of concern. Site closed.
	Tar Piles (Asphalt Disposal)	No surface hazards, subsurface tar barrels and debris in burial pits.

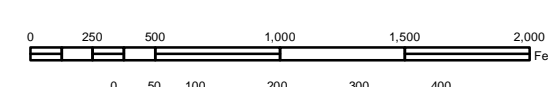
Fort Greely, AK Administrative Control Areas



DATE: 5 FEB 2009	COORDINATE SYSTEM: WGS84 UTM Zone 6N	DIRECTORY: R:\GREL\YSDS\MAPS
IMAGE: 17 MAY 2009	CREATED BY: KAYA	FILE NAME: admin_ctrl_areas_020610

FORT GREELY, AK

- Gate
- Fence
- Area of Environmental Concern
- Installation Boundary



DATE:	COORDINATE SYSTEM:	PROJECTION:
20 FEB 14	NAD 83 (2011 EDITION)	UTM (Zone 18N)
SCALE:	FILE CODE:	PROJECT NUMBER:
1:50,000	AK-000-000-000	AK-000-000-000
APP. PROJ.:		



Name of Contractor & Work Order/Contract #

Applicant Name & Signature:

Contact Phone:

Date

Project Start Date: _____ **Completion Date:** _____

Description and Location of Work/Project - attach drawings and project information:

CONDITIONS OF APPROVAL

General Conditions

For all work:

1. If anomalies (e.g., odors, soil discoloration, unknown material or objects, etc) are encountered during excavation, all work in the area shall stop. Suspected contamination shall be immediately reported to 873-FIRE (873-3473) in accordance with the spill notification procedure and the Fort Greely Environmental Coordinator shall be contacted. Work in the area shall not resume until clearance is received from the Fort Greely Environmental Coordinator, Public Works Director or the Garrison Commander.
2. If historical artifacts are encountered during excavation, all work in the area shall stop and the Fort Greely Environmental Coordinator shall be contacted. Work in the area shall not resume until clearance is received from the Fort Greely Environmental Coordinator, Public Works Director or the Garrison Commander.
3. Any stockpiles of excavated materials shall be maintained in a manner that minimizes and/or contains runoff and fugitive dust emissions.
4. For work within the Alyeska Pipeline corridor, coordination is required with Alyeska Service Company

For work outside the Missile Defense Complex (i.e. Cantonment Area, Airfield):

1. If unanticipated utilities (e.g., pipelines, cabling, drains, etc) are encountered during excavation, all work in the area shall stop and the Director of Public Works shall be contacted. Work in the area shall not resume until clearance is received from the Public Works Director or the Garrison Commander.
2. Hand digging or air knife is mandatory 24 inches from all sides of communications locates

For work Inside the Missile Defense Complex

1. If unanticipated utilities (e.g., pipelines, cabling, drains, etc) are encountered during excavation, all work in the area shall stop and OSG-AK shall be contacted. Work in the area shall not resume until clearance is received from OSG-AK.
2. Locates from Ft Greely DOIM will be requested when working near the 08 Communications cable and/or Admin Communications cable shown on the attached drawing. BKSS to do all other locates. Locate responsibilities are subject to change without notice.
3. Hand digging or vacuum excavation is mandatory within 10 feet of all located structures.

Special Conditions and Requirements

UNIFORM COLOR CODE FOR MARKING LOCATES

WHITE	Proposed Excavation
PINK	Temporary Survey Markings
RED	Electric Power Lines, Cables, Conduit and Lighting Cables
YELLOW	Gas, Oil, Steam, Petroleum or Gaseous Materials
ORANGE	Communication, Alarm or Signal Lines, Cables or Conduit
BLUE	Potable Water
PURPLE	Reclaimed Water, Irrigation and Slurry Lines
GREEN	Sewer and Drain Lines

Page 2 of 2 No.		Fort Greely Excavation Clearance Request/Approval		Request/Approval	
Department	Clearance	Comments / Conditions	Signature	Date	
MDC Engineering Bldg 661 Room 213 873-3025	<input type="checkbox"/> Yes <input type="checkbox"/> No				
BKSS Bldg 675 873-4490 or 803-0154	<input type="checkbox"/> Yes <input type="checkbox"/> No				
49 th Missile Defense Battalion Bldg 609 Room 102 873-4935 / 4936	<input type="checkbox"/> Yes <input type="checkbox"/> No				
ATT ACS / GCI 800-478-3121 AK Digline FAX 278-0696	Yes <input type="checkbox"/> No				
Fire Department Bldg 504 873-3271	<input type="checkbox"/> Yes <input type="checkbox"/> No	Clearance necessary only when closing roads			
Network Enterprise Center Bldg 671 873-3100	<input type="checkbox"/> Yes <input type="checkbox"/> No				
DPW Environmental Bldg 601 2 nd Floor 873-4664	<input type="checkbox"/> Yes <input type="checkbox"/> No				
DPW Engineering Bldg 603 873-1134	<input type="checkbox"/> Yes <input type="checkbox"/> No				
Doyon Utilities Bldg 611 869-3600 Fax: 869-3061	<input type="checkbox"/> Yes <input type="checkbox"/> No				
DPW Maintenance Bldg 601 Tim Hootman 873-3188	<input type="checkbox"/> Yes <input type="checkbox"/> No				
DA Police Bldg 663 873-9134/9135	<input type="checkbox"/> Yes <input type="checkbox"/> No	Clearance necessary only when closing roads			
DPW Operations Bldg 615 873-4589 / 590-2035	<input type="checkbox"/> Yes <input type="checkbox"/> No				
Golden Valley Electric Operations Department 907-451-5692 Fax: 907-458-6374	<input type="checkbox"/> Yes <input type="checkbox"/> No				
Donnelly Training Area - Environmental 873-1614 / 1615 Range Control 873-4714	<input type="checkbox"/> Yes <input type="checkbox"/> No	Clearance necessary only for projects on DTA			

*Signatures required for work inside the Missile Defense Complex

Signatures required for work outside the Missile Defense Complex

Approval

Approval means the project may proceed subject to the general and special conditions noted and any conditions placed on the project by a clearing official, unless otherwise indicated by the approving official below. Dig permit is valid for specified project period.

Only one signature required

Approve	For work <i>outside</i> Missile Defense Complex,	For work <i>inside</i> Missile Defense Complex,
Disapprove	_____ DPW Director Bldg 603 873-4582 Date	_____ OSG-AK Bldg 663 873-3025 Date

For all work - For work inside Missile Defense Complex - For work outside Missile Defense Complex

WORK ORDER (4283) ENVIRONMENTAL ANALYSIS

Work Order Number: _____ Facility: _____

Work Order Description: _____

Project Proponent: _____ Project Engineer: _____

Environmental Analyst & ➔
Date Analyzed: _____

	Y/N
1. Does the project/activity require either an EA or EIS under 32 CFR 651.11? <i>(If "Yes", then STOP)</i>	▼
2. Are any of the answers in the Screening Criteria checklist "Not True"? <i>(If "Yes", then STOP)</i>	▼
3. Is the project/activity covered by a Categorical Exclusion listed in 40 CFR 651, Appendix B? <i>(If "No", then STOP)</i>	▼
a. If "YES", identify the applicable Categorical Exclusion(s):	▼
b. Is a Record of Environmental Consideration (REC) required? <i>(If "YES", requirements in REC are conditions of this approval)</i>	▼
4. Will the project interact with known archaeological, contaminated, or wetland sites?	▼
5. Will the project involve demolition?	▼
a. Will PACM be disturbed?	▼
b. Will LBP debris be generated?	▼
c. Is there potential for C&D diversion or recycling?	▼
d. Is a Waste Management Plan required?	▼
e. Will the contractor require a "green card"?	▼
6. Will the project require a hazardous waste area to be set up?	▼
7. Will the project require additional environmental permits? <i>If "YES", which permits:</i>	▼
8. Will the project involve new or temporary emission units (generators, storage tanks, boilers, etc.) or the modification of existing emission units?	▼
COMMENTS & CONDITIONS:	

SCREENING CRITERIA CHECKLIST

TRUE/ NOT TRUE	
▼	a) There is no likelihood of significant effects on public health, safety, or the environment.
▼	b) There are minimal or no significant environmental effects (direct or indirect cumulative).
▼	c) There is no imposition of uncertain or unique environmental risks.
▼	d) This project involves no greater scope or size than is normal for this category of action.
▼	e) There are no planned reportable releases of hazardous or toxic substances as specified in 40 CFR part 302.
▼	f) There are no planned releases of petroleum, oils, and lubricants (POL) except from a properly functioning engine or vehicle, and there will be no application of pesticides and herbicides as part of the proposed action that would result in the development or amendment of a Spill Prevention, Control, or Countermeasures Plan (SPCC).
▼	g) Air emissions will not exceed <i>de minimis</i> levels or otherwise require that a formal Clean Air Act conformity determination be made.
▼	h) There is no reasonable likelihood of violating any federal, state or local law or requirements imposed for the protection of the environment.
▼	i) The proposed action will not have an unresolved effect on environmentally sensitive resources.
▼	j) This project does not involve effects on the environment that are highly uncertain, involve unique or unknown risks, or are scientifically controversial.
▼	k) This project does not establish a precedent for future or subsequent actions that are reasonably likely to have a future significant effect.
▼	l) There is no potential for an already poor environment being further degraded and the action does not degrade an environment that remains close to its natural condition.
▼	m) This project does not involve the use of unproven technology.
▼	n) There are no threatened or endangered species (or critical habitat), significant archaeological resources, National Register or National Register eligible historical sites, or other statutorily protected resources.
▼	o) This action would not adversely affect prime or unique agricultural lands, wetlands, coastal zones, wilderness areas, aquifers, floodplains, wild and scenic rivers, or other areas of critical environmental concern.
▼	p) This action has been adequately analyzed in existing environmental documentation, or is categorically excluded under the provisions of 32 CFR Part 651 and does not require an EA or EIS as described under the National Environmental Policy Act.