# DELTA JUNCTION TRESPASS SHOOTING RANGE CLEANUP ACTION WORK PLAN
# DELTA JUNCTION, ALASKA

**ADEC SPAR TERM CONTRACT #18-3007-18**
**4 OCTOBER 2019**

**Prepared for:**

**Alaska Department of Environmental Conservation**
**Division of Spill Prevention and Response**
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**APPROVAL PAGE**

This work plan for conducting a cleanup action at the Delta Junction Trespass Shooting Range site in Delta Junction, Alaska has been prepared for the Alaska Department of Environmental Conservation, Division of Spill Prevention and Response by Ahtna Engineering Services, LLC.

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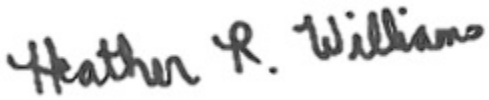

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## ACRONYMS AND ABBREVIATIONS

°C .....degrees Celsius
mg/kg .....milligrams per kilogram
mg/L.....milligrams per liter
mL.....milliliter
AAC .....Alaska Administrative Code
ABCA .....Analysis of Brownfield Cleanup Alternatives
ADEC.....Alaska Department of Environmental Conservation
ADNR .....Alaska Department of Natural Resources
ADS.....Arctic Data Services, LLC
Ahtna.....Ahtna Engineering Services, LLC
AOC .....Area of Contamination
ATC.....ATC Group Services, LLC
BCY .....bank cubic yard(s)
bgs.....below ground surface
CAP.....Corrective Action Plan
CDJ .....City of Delta Junction
DBAC .....Alaska Department of Environmental Conservation Assessment and Cleanup
DU.....decision unit
HAZWOPER .....Hazardous Waste Operations and Emergency Response
IDW.....investigation-derived waste
ISM .....Incremental Sampling Methodology
lb .....pound
oz.....ounce
PPE.....personal protective equipment
RCRA.....Resource Conservation and Recovery Act
SPAR.....Spill Prevention and Response
SPLP .....Synthetic Precipitation Leaching Procedure
TBD.....to be determined
TCLP.....Toxicity Characteristic Leaching Procedure
TS.....Treatability Study
TSR .....Trespass Shooting Range
UCL.....Upper Confidence Level
USEPA.....United States Environmental Protection Agency
WP.....work plan
XRF.....X-ray fluorescence

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# 1.0 INTRODUCTION AND SITE DESCRIPTION

This work plan (WP) details cleanup actions Ahtna Engineering Services, LLC (Ahtna) will take to implement the selected remedy at the former Trespass Shooting Range (TSR) in Delta Junction, Alaska, under contract to the Alaska Department of Environmental Conservation (ADEC), Division of Spill Response (SPAR). The preferred remedial alternative of excavation, stabilization and off-site reuse was selected during the Analysis of Brownfield Cleanup Alternatives (ABCA) process to address environmental contamination, considering site characteristics, the surrounding environment, potential future uses, community input, and cleanup goals (Ahtna, 2019a). The selected remedy and suggested implementation are documented in the Corrective Action Plan (CAP, Ahtna, 2019d). These activities are all administered by the ADEC Brownfields Assessments and Cleanup (DBAC) program.

The former TSR site is located on the west side of the Richardson Highway, east of the Delta River, and north of the airstrip in Delta Junction, Alaska (Figure 1). Specifically, it is located at 145° 44' 12.51" West, 64° 03' 20.26" North within USGS Quadrangle "Big Delta (A-4) SE", at Township 10 South, Range 10 East, Fairbanks Meridian. The location is along a section line easement between Sections 11 and 14. The parcel numbers are Tracts 8A, 8B, and 8C. Tract 8A encompasses 14.634 acres of undeveloped land owned by the City of Delta Junction (CDJ) since 1982. Tracts 8B and 8C encompass 21.389 acres of undeveloped land owned by the Alaska Department of Natural Resources (ADNR). North of the tracts is an operating concrete plant (Delta Concrete Products, Inc.), and south of the tracts is additional undeveloped land owned by ADNR, a portion of which is used as a biomass (tree and brush debris) drop-off center for area residents. Figure 2 shows the three tracts and surrounding lands.

The former TSR site is located on the southern portion of Tract 8A along a former access road that led to a former dump site on Tract 8B. The dump was used by area residents during the 1970s and early 1980s and was accessed by a road along the Section line leading from the Richardson Highway toward the Delta River (Figure 2). In 1982, a soil berm and cable fence were constructed across the road to block unauthorized vehicular access to the dump. The original berm was 6 feet high, and over time came to be used as the backstop (i.e., impact berm) for the TSR. In 1998 or 2000, additional measures were taken to block access to the former dump. The CDJ placed large boulders at the access road entrance along the Richardson Highway and expanded the original berm. The expansion added material on top of the old berm to raise its height to 12 feet. Another berm was added on the northern side in front of the cable fence to entirely block vehicle access.

The impact berm is U-shaped and consists of three parts: a backstop berm flanked by two berm arms, one on the south (southern berm) and one on the north (northern berm) depicted on Figure 3. A mound of soil is present within the U-shape of the impact berm that is presumably comprised of soil scraped off the range floor, although this is unconfirmed, and the date at which it occurred is not known[1]. In July 2018, ADNR conducted a survey of the impact berm to determine the location of the property boundaries. The northern berm is within Tract 8A on CDJ property, but the southern berm extends onto ADNR property to the south (Figure 2, Berm Area Inset). The survey also estimated the volume of soil in the entire berm at 320 bank cubic yards, with 210 bank

[1] Note that the information included in the 2018 ADEC characterization report (ADEC, 2018a) stating that this range floor scraping was conducted by the Delta Junction Trails Association in 2017 is incorrect.

cubic yards (BCY) on CDJ property and 110 BCY on ADNR property. The impact berm is now heavily overgrown with brush, grasses, and small trees.

# 2.0 IMPLEMENTATION OF SELECTED REMEDY

Planned steps to implement the CAP (Ahtna, 2019d) selected remedy are listed below and detailed in the following sections.

- Excavate impacted soil at the site
- Conduct excavation confirmation soil sampling to ensure all soil exceeding the ADEC lead cleanup level is removed
- Identify and remove bullets and fragments from portions of soil where they are most highly concentrated by sieving
- Chemically fix metals to soil to prevent leaching and render the soil non-hazardous, according to Resource Conservation Recovery Act (RCRA) hazardous waste characteristics regulations
- Conduct confirmation soil sampling of treated soil to ensure it is below RCRA hazardous waste characteristics levels
- Obtain approvals for transport and reuse of soil at Delta Junction Landfill
- Transport treated soil to Delta Junction Landfill for reuse
- Transport recyclable metals to Fairbanks
- Conduct additional excavation confirmation soil sampling to document no soil remains on site that exceeds the ADEC lead cleanup level
- Prepare report to support ADEC site closure request

Note that because the soil has lead concentrations that would be considered hazardous waste once the soil becomes generated as waste, soil will not be removed from the site until after stabilization is complete and confirmed. This is known as the Area of Contamination (AOC) approach. As long as the soil remains within the AOC, the soil is not considered "generated" as waste and is therefore not yet subject to waste regulations. A RCRA Permit is not required under the AOC approach. Similarly, land disposal restrictions are not triggered under the AOC approach because the media being treated is soil, not waste.

The AOC is defined as the entire impacted area: the range floor and the berm as shown on Figure 3. If an alternative treatment and reuse or disposal approach is considered other than that described in this WP, consideration must be given to the impact on the RCRA Permit process and land disposal restrictions.

## 2.1 Changes to CAP Implementation Plan

This WP includes the following modifications to the CAP remedy implementation plan (Ahtna, 2019d):

- Updated equipment list to increase project efficiency
- Revised plan to stockpile and treat impacted soil on the East End decision unit (DU) instead of forming a windrow across both East End DU and West End DU
    - Improves treatment efficiency per the chemical manufacturer
    - Potentially reduces post-transport excavation confirmation sample quantities by eliminating need to re-sample the West End DU

  - Reduces treated soil haul distance
- Revised total volume of treatment chemical to reflect change in shipping containers
- Revised plan for identifying excavated soil volumes to sieve for elemental lead, adding visual observation and metal detection screening
- Added As and Cu synthetic precipitation leaching procedure (SPLP) analyses for treatment confirmation samples
- Removed Sb SPLP analysis for treatment confirmation samples
- Revised plan to use remote instead of on-site chemical manufacturer technical support
- Added option to dispose of mixed bullet and overburden material as hazardous waste instead of separating for recycling, depending on quantities encountered in the field

## 2.2 Mobilization

Upon approval of the WP and CDJ/ADNR site access permission confirmations, Ahtna will mobilize equipment and field crew to the road system accessible site (Figures 1 and 2). We plan to utilize a field crew of one site superintendent/operator, one operator, one laborer, and a field sampler. Equipment required to remove soil from the impact berms, soil mound and a 6-inch lift of the range floor will include a 624-size loader with bucket and forks, light plant, 135-size tracked excavator with cleanout bucket, and an EZ-Screen 1000 XL double-decker screen plant for sieving bullets. The equipment will remain outside the AOC to the extent possible, to minimize tracking across the site.

## 2.3 Initial Site Survey

Ahtna will first locate and mark the boundaries of the shooting lane and the berms using a Trimble GeoXH mapping grade Global Positioning System (GPS) and paint. A team member will flag the trees nearby the 0-, 30-, and 50-yard firing areas (Figure 3), in preparation for field screening at those locations. The AOC will be divided into an East End DU and a West End DU for excavation confirmation sampling, and DU boundaries will be marked and surveyed. Approximate planned DU boundaries are depicted on Figure 3 for reference. East End DU will be approximately 4,000 square feet and the West End DU will be approximately 8,000 square feet. Survey coordinates will be collected and reported in WGS84 latitude/longitude decimal degrees.

## 2.4 Grubbing

All brush and vegetation will be removed from the AOC and stockpiled to mix with excavated soils for treatment and reuse at the Delta Junction Landfill. Prior to mixing with excavated soils, brush and vegetation will be manually shaken, inspected visually and scanned with a metal detector. Any bullets or bullet fragments found will be placed in a container for recycling. Brush larger than 1-inch diameter will be cut into approximately 6-foot sections to reduce air gaps in the treated material.

## 2.5 Excavation and Sieving of Impacted Soil

Excavation of impacted soils and evaluation for bullet-sieving will begin following the initial site survey and grubbing. The total volume of soil to be removed is estimated at 432 BCY (Ahtna, 2019d). Care must be taken to follow the AOC approach and all excavated soil must remain within the AOC prior to treatment.

Approximately 85 BCY of the excavated soil, detailed below in Table 2-1, were identified in the CAP as likely impacted with elemental lead. Those volumes will be observed during excavation, scanned with a metal detector, and sieved for bullets as appropriate depending on findings.

**TABLE 2-1: SOILS PREVIOUSLY IDENTIFIED AS LIKELY IMPACTED WITH ELEMENTAL LEAD**

| Soil Location | Description | Estimated Volume (BCY) | Rationale for Sieving |
|---|---|---|---|
| Soil Mound | Entire mound in the center of the U shape | 60 (20 feet by 30 feet by 3 feet tall) | Believed to be from scraping the range floor. Bullets found in mound during TS field work. |
| Backstop Berm | First six inches of the eastern face of the U-shaped berm | 4.5 (30 feet long, 8 feet tall, and 0.5 feet thick) | During TS field work, majority of bullets found in backstop berm; approximately 80% of bullets found in the top 6 inches. |
| Range Floor | Top two inches of the range floor nearest the impact berm | 20 (100 feet long, 20 feet wide, 0.17 feet thick) | Reasonable assumption that bullets would be present along the range floor; the floor was scraped once before so only the 100 feet nearest the impact berm will be sieved. |

Key:
BCY = bank cubic yards
TS = Treatability Study

The excavator operator will remove the top 6 inches of the soil from the face of the berm and place it on top of the soil mound, and then scrape the top 2 inches of soil from the shooting range 100 feet closest to the mound, and pile it on the mound.

The remaining estimated 347 BCY of soils consisting of the next 4 inches of the range floor in the 100 feet nearest the impact berm (approximately 24 BCY), the top 6 inches of the range floor in the 200 feet away from the impact berm (74 BCY), and the U-shaped berm (248.5 BCY), will be observed during excavation, scanned with a metal detector, possibly sieved for bullets, and then added to the treatment stockpile. Ahtna will attempt to sieve any suspect areas discovered during evaluations of these additional volumes, unless Ahtna documents the absence of bullets and fragments in these areas. Ahtna will document suspect areas with field notes, photographs and GPS locations. Ahtna field team will remain in close contact with the Ahtna PM regarding field conditions encountered during the scanning and sieving effort, so that additional client authorization can be obtained if required during the fieldwork.

Ahtna will likely stage soils requiring sieving for bullets (Table 2-1 plus suspect areas discovered by visual observation and/or metal detection) in the location of the soil mound on the West End DU. Bullet fragments are anticipated to range in size from 10 to 30 mm long and 8 to 15 mm wide (Ahtna, 2019b). The soil is primarily sandy silt with 3% to 10% coarse gravel and was found in

April to be dry to damp. There is also organic matter (sticks, leaves) present in the soil, particularly along the range floor and on the surface of the U-shaped berm and soil mound.

The EZ-Screen 1000 XL double-deck screen plant will be set up adjacent to the soil mound, fitted with a 1-inch screen on top to remove coarse gravel and organic debris, and a 5/32-inch (4-millimeter) screen on the bottom. Ahtna will separate 1" plus material from 5/32"-1" material from 5/32" minus material using plywood chutes leading from the screen plant. Following visual and metal detector inspection for presence of bullets, rocks larger than 1" screened out during bullet sieving operations may be left on site to reduce landfill tipping fees. Note that Ahtna does not plan to screen out rocks larger than 1" from the entire 432 BCY, unless high volumes of such rocks are encountered during excavation operations that would incur excessive landfill tipping fees. Depending on the volume of 5/32"-1" mixed bullet-containing material generated and project progress, Ahtna will either: 1) manually segregate the lead for recycling and add the remaining overburden to the stockpile for treatment (perhaps assisted by metal detection), 2) containerize, transport and dispose the mixed material as hazardous waste, or 3) combination of both approaches. 5/32" minus material will be added to the stockpile for treatment. Any bullets and fragments separated from vegetation or soil will be packaged in 5-gallon buckets for transport to C&R Pipe in Fairbanks for metals recycling. The field team will visually inspect the bullets for live rounds, and remove bullets from casings if live rounds are found.

Ahtna will use an X-ray fluorescence (XRF) analyzer to assist in determining if sufficient soil has been removed. Ahtna will excavate the east end of the shooting lane to 6 inches below ground surface (bgs) and stockpile the removed soil on the West End DU, immediately east of the bullet screening operation. The field sampler will utilize an XRF analyzer to field screen the floor of the 6-inch bgs excavation, using a 200 milligrams per kilogram (mg/kg) or parts per million (ppm) threshold to ensure adequate lead removal to below the ADEC soil cleanup level of 400 ppm. Because lead does not readily leach in neutral conditions and the annual precipitation in Delta Junction is low, it is unlikely any lead exceedances would be found below 6 inches bgs, unless bullets were fired directly into the ground. Therefore, special attention will be paid when XRF field screening the areas where shooting occurred, such as the 0-, 30- and 50-yard firing areas shown on Figure 3, and flagged during the initial site survey.

Once XRF field screening indicates that East End DU removal is complete, the field sampler will perform excavation confirmation sampling for lead on the East End DU in accordance with Section 2.6 and Section 4.4.

If the bullet-screening operation is progressing slowly, the screen plant and bullet-containing stockpile may be moved to the eastern end of the East End DU that was just sampled, and continue the screening operation there. If it is progressing quickly, we will finish that operation at its original location.

Ahtna will then remove the West End DU soil down to 6 inches bgs, remove the berm, and stockpile this material on the East End DU that was already sampled. The field sampler will perform in-situ screening using the XRF analyzer as described previously, paying close attention to the area immediately in front of the berm, where bullets may have penetrated deeper. Once XRF field screening indicates that removal is complete, the sampler will perform excavation confirmation sampling per Section 2.6 and Section 4.4 on the West End DU for lead.

## 2.6 Excavation Confirmation Sampling

To confirm that all impacted soil has been excavated and that the remedial goal established in the CAP (Ahtna, 2019d) has been met prior to soil treatment, confirmation soil samples will be collected from the ground surface, analyzed for lead by Method 6020, and compared with the excavation confirmation level shown in Table 2-2.

**TABLE 2-2: EXCAVATION CONFIRMATION LEVEL**

| Metal | ADEC Under 40-Inch Human Health Cleanup Level[1] (mg/kg) |
|---|---|
| Lead | 400 |

mg/kg = milligrams per kilogram
[1] Method Two, Table B1 Soil Cleanup Levels; ADEC 18 AAC 75, September 2018
Note that "Under 40 Inch" refers to the amount of precipitation at the Site

Incremental Sampling Methodology (ISM), in accordance with the Interstate Technology and Regulatory Council's guidance (ITRC, 2012), will be employed to obtain representative confirmation soil samples from each of the two DUs (East End and West End) established during the initial site survey.

Three ISM replicate samples will be obtained from each DU. Each DU will be divided into 50 approximately equal-sized cells. The first replicate sample from each DU will consist of approximately 10 grams of soil taken from the surface at the approximate center of each cell. The aliquots will be combined for a total of approximately 500 grams of soil. The second and third replicates of each DU will consist of aliquots obtained from other locations within each cell, such as midway between the cells' centers and the northern border of each cell, or similar. 95% Upper Confidence Levels (UCLs) of the mean from each DU will be reduced from the replicate results and compared to the excavation confirmation level in Table 2-2.

## 2.7 Soil Stabilization Treatment

After both DUs have been confirmed to meet the remedial goals and the bullets and fragments have been removed from sieved soils, all soils to be treated will be stockpiled on the East End DU in preparation for stabilization treatment with Maectite™, a proprietary product used primarily for lead fixation. If treatment is delayed by laboratory result, Maectite™ delivery, or any other operational delays, the untreated stockpile will be covered to reduce airborne dust transport potential. Based on an estimated weight of 2,500 pound (lb) of soil per BCY, and 14 lb of Maectite™ per gallon (Ahtna, 2019d), six, 242-gallon totes containing a total of approximately 1,450 gallons of Maectite™ will be required to treat the estimated mass of excavated soil. This is about 100 gallons less Maectite™ than identified in the CAP due to a change in shipping container volumes, but is still sufficient volume to treat the estimated contaminated material.

An Ahtna operator will lift each of the approximately 3,400 lb totes using a loader with forks inserted into the fork pockets on the bottom (Photo 2-1). The totes should not be lifted from the top. The Ahtna laborer will empty each tote of Maectite™ liquid by gravity feed into a large bowl excavated into the top of the stockpile, using a hose attached to the tote's 2" male camlock with a

¼ turn ball-valve. An Ahtna operator will then mix the pooled Maectite™ into the stockpile with the excavator bucket until the pile is of uniform consistency. The treatment process will be repeated for all six totes. The Ahtna site superintendent will determine when mixing is complete and sampling can occur. It is anticipated that treatment may take several hours.

**Photo 2-1: Maectite™ Tote**

## 2.8 Treatment Confirmation Sampling

Soil samples will be collected from the treated soil stockpile to confirm successful treatment. The treatment confirmation sampling frequency will follow Table 2a in the *Field Sampling Guidance* (ADEC, 2017a). The treated stockpile is estimated to be approximately 540 loose cubic yards, assuming a 25% expansion of the 432 BCY of removed soil, resulting in an estimated sample count of six primary samples and one duplicate. Each sample will be composited from 15 aliquots of soil from various depths and locations in the treated stockpile. The samples will be taken to SGS Fairbanks by courier, logged, and transported to SGS Anchorage for rush analysis of:

- Method 6020 for lead, arsenic, antimony, copper;
- TCLP for lead, arsenic, antimony; and
- SPLP for lead, arsenic, copper.

Successful treatment includes 1) reduction of TCLP levels to less than RCRA hazardous waste characteristic levels for lead and arsenic, 2) reduction of TCLP and SPLP levels to less than the levels required for reuse at the Delta Junction Landfill, and 3) confirmation that total lead, arsenic, antimony and copper concentrations are less than levels required for reuse at the Delta Junction Landfill. These levels are presented in Table 2-3.

**TABLE 2-3: TREATMENT CONFIRMATION LEVELS**

| Metal | Level | Source |
|---|---|---|
| TCLP Lead<br>SPLP Lead | 5.0 mg/L | Hazardous waste concentration from 40 CFR 261.24, Table 1.<br>Maximum allowed for reuse at Delta Junction Landfill |
| TCLP Arsenic<br>SPLP Arsenic | 5.0 mg/L | Hazardous waste concentration from 40 CFR 261.24, Table 1 |
| TCLP Antimony | 2.0 mg/L | Maximum allowed for reuse at Delta Junction Landfill |
| SPLP Copper | 0.8 mg/L[1] | Maximum allowed for reuse at Delta Junction Landfill |
| Lead | 20,000 mg/kg[2] | 95% Upper Confidence Level of mean of characterization sample results.<br>Maximum allowed for reuse at Delta Junction Landfill |
| Arsenic | 30.51 mg/kg[2] | 95% Upper Confidence Level of mean of characterization sample results. Maximum allowed for reuse at Delta Junction Landfill |
| Antimony | TBD | Results will be evaluated in conjunction with TCLP antimony data to determine suitability for reuse at Delta Junction Landfill |
| Copper | 107.50 mg/kg[2] | 95% Upper Confidence Level of mean of characterization sample results. Maximum allowed for reuse at Delta Junction Landfill |

[1] *18 AAC 75, Table C, Groundwater Cleanup Levels (ADEC, 2018b)*
[2] *Delta Junction Trespass Shooting Range Brownfield Revitalization Demonstration of Lead, Antimony, Arsenic, and Copper Transport Potential from Stabilized Shooting Range Soils Theoretically Placed in the City of Delta Junction Landfill* (Ahtna, 2019c).
mg/L = milligrams per liter
mg/kg = milligrams per kilogram
SPLP = Synthetic Precipitation Leaching Procedure
TBD = to be determined
TCLP = Toxicity Characteristic Leaching Procedure

Treatment will be considered complete, and transportation as non-hazardous waste for reuse at the Delta Junction Landfill can occur, if results are below the levels listed in Table 2-3. If results are greater than Table 2-3 concentrations, additional treatment or fate and transport modeling with subsequent stakeholder approvals would need to occur prior to transportation and re-use.

## 2.9 Transport and Reuse of Treated Soil

Following receipt of approvals from the ADEC Contaminated Sites Program, the ADEC Solid Waste Program, and the CDJ (see Section 6.2.1 and Appendix B transport approval form), the treated soil will be loaded into dump trucks operated by Delta Concrete Products, who will cover the loads and transport to the Delta Junction Landfill (Figure 1) for reuse as an upper layer of daily cover, immediately beneath the final cover. Ahtna will coordinate delivery timing with the CDJ to ensure that landfill operators will have cover material and operators available to permanently place the temporarily stockpiled material in accordance with any ADEC SWP disposal approval requirements.

"Trucks Entering Highway" signs will be placed on either side of the shooting range access road during hauling activities. Ahtna will ensure the dump truck tires and bed rails are brushed clean of soil before they leave the East End DU. Ahtna will brush away any soil tracked onto the highway from the TSR pull-out using a skid-steer with brush attachment.

## 2.10 Post-Transport Excavation Confirmation Sampling

After all treated soil is removed from the AOC, Ahtna will sample the East End DU for lead in accordance with Section 2.6 to ensure that all treated soil was removed from the site. If stabilization treatment also occurred on the West End DU, it will be sampled as well.

## 2.11 Site Restoration

Approximately 75% of the soil being treated and removed from the TSR is located above grade. Soil along the range floor will be removed from the ground surface to a depth of 6 inches. Following receipt of excavation confirmation samples showing that remedial goals have been met, the range floor will be graded to prevent trip hazards. No other site restoration will occur because of the impending redevelopment.

# 3.0 WASTE MANAGEMENT

Investigation-derived waste (IDW) will consist of PPE, disposable sampling equipment/supplies, and decontamination supplies. Other waste such as empty bullet casings and empty shotgun shells will likely be encountered.

Used Tyvek coveralls, boot covers, HEPA cartridge filters, heavy equipment decontamination rags and paper towels, empty bullet casings, and empty shotgun shells will be accumulated in a segregated waste drum. Bullet casings might be segregated for reuse depending on quantities encountered and project progress. Ahtna will submit a TCLP sample of the drum contents for lead analysis to characterize the drummed waste for appropriate disposal as hazardous or non-hazardous waste.

Ahtna will obtain lead wipe samples for lead from equipment surfaces following their final use and decontamination to document effectiveness.

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# 4.0 QUALITY ASSURANCE PROJECT PLAN

## 4.1 Personnel

This project will be managed by Heather Williams, PMP of Ahtna. Table 4-1 presents the anticipated Ahtna team personnel, who are qualified environmental professionals/samplers in accordance with 18 AAC 75.333. If scheduling requires use of alternate staff, they will be similarly qualified. The regulatory team and stakeholders are also included for reference.

**TABLE 4-1 PROJECT PERSONNEL**

| Person / Subcontractor | Firm | Responsibility | Contact Information |
|---|---|---|---|
| Heather Williams, PMP | Ahtna | Project Manager | Office: 907-433-0761<br>Cell: 907-250-6852 |
| Andrew Weller, PE | Ahtna | Project Engineer | Office: 907-771-4401<br>Cell: 907-590-7979 |
| Olga Stewart, PE, PMP | Geosyntec | Technical Advisor | Office: 907-290-2946 |
| Bridget Eckhardt, EIT | Geosyntec | Field Team | Office: 907-290-2789<br>Cell: 530-306-4788 |
| George Mack | Ahtna | Site Superintendent / Operator | Cell: 907-441-2252<br>Cell (Delta Junction): 907-310-6606 |
| Ben Craig | Ahtna | Operator | Cell: 907-539-1908 |
| Aaron Johns | Ahtna | Laborer | Cell: 907-519-5248 |
| Bill Schilling | Sevenson Environmental Services, Inc. | Soil Treatment Remote Tech Support | Office: 219-756-4686<br>Cell: 732-904-4793 |
| Rodney Guritz | Arctic Data Services | Chemist, Chemical Data Review | Phone: 907-457-3147 |
| Justin Nelson | SGS Anchorage | Analytical Services – Confirmation Samples | Office: 907-562-2343 |
| | SGS Fairbanks | Analytical Services - Sample Forwarding | Office: 907-474-8656 |
| Joel Hicklin | ATC Group Services, LLC | Analytical Services – Personnel Exposure / Equipment Decon | Office: 907-258-8661<br>Cell: 907-884-0478<br>After-Hr: 907-332-0582 |
| Anne Marie Palmieri | ADEC SPAR | Project Manager | Office: 907-766-3184 |
| Neil Lehner | ADEC SWP | Environmental Program Specialist | Office: 907-451-2134 |
| Adam Leland | ADNR | Natural Resource Specialist | Office: 907-451-2722 |
| Patty Burns | ADNR | Natural Resource Specialist | Office: 907-451-3014 |
| Mary Leith | City of Delta Junction | City Administrator | Office: 907-895-4656 |
| Dennis Burke | City of Delta Junction | Landfill Manager | Office: 907-895-1807 |
| Mindy Eggleston | Delta Junction Trails Association | Chair | mde@alaska.net |

## 4.2 Field Procedures

Fieldwork and laboratory analyses will be conducted in accordance with 18 AAC 75 and the ADEC Field Sampling Guidance (ADEC, 2017a). Field personnel will collect samples in a manner that preserves the integrity of the sample matrix. Samplers will use dedicated personal protective equipment (PPE) to prevent cross-contamination between samples. Sampling supplies will be dedicated to each sample location. Sample matrices will have minimal disturbance prior to collection. Sample containers will be sealed, labeled, and immediately placed on gel ice, maintaining the samples at a temperature within the method's required range of 0-6°C until delivery to an ADEC-certified laboratory under chain-of-custody control.

All equipment will be calibrated, maintained and operated according to manufacturer recommendations. Field documentation will consist of the use of field logs, sample identification labels and photographs. A field notebook will be maintained to record a description of field activities and samples collected. Corrections will be struck, initialed, and dated.

### 4.2.1 In-Situ Lead XRF Field Screening

1. Calibrate XRF analyzer daily prior to use, in accordance with user manual.
2. The XRF analyzer should be in the "Standard Bulk Mode" and should be started at least 10 minutes before use.
3. Using a gloved-hand, place the probe window of the XRF analyzer in direct contact with the soil surface to be analyzed. Remove any large or non-representative debris (i.e., rocks, pebbles, leaves, vegetation, roots, and concrete) from the soil surface before analyzing.
4. As much as possible, ensure the soil surface is smooth so that the probe window will have good contact with the ground surface. This may require some leveling of the surface with a stainless-steel trowel or similar tool.
5. Ensure the sample location is not saturated with water.
6. Tamp the soil sample location to increase soil density and compactness for better repeatability and representativeness.
7. Pull the trigger and hold for 60 seconds. Alternatively, set the analyzer to read for a specified window of time by navigating menus to Common Setup/Instrument Setup/Hardware Setup – check Proximity Sensor box and in the Max Time field enter 60. This will allow the trigger to be pulled once and released, rather than holding it down for the full duration. Lights on the XRF analyzer will blink while the shutter is open to take a reading.
8. After the test, inspect the probe window of the instrument for contamination, which may affect future analysis. If the probe window appears to be soiled, clean it with a paper towel.

### 4.2.2 Metal Detection

1. Metal detection will be performed using a Whites MXT Pro metal detector in accordance with the Owner's Guide.
2. Prior small arms shooting range project experience indicates that use of "Relic" and/or "Prospecting" operational modes may yield best results for the purpose of identifying small lead bullets and fragments.

3. Checks of the metal detector against a metallic source will be conducted before and after each shift or period of use to ensure the batteries were correctly installed and the device is working properly. These checks will be achieved by placing a lead object on a non-interfering object such as wood, and testing the detection/non-detection response of the metal detector. If the test object is not detected, battery placement, battery charge and operating mode selection will be checked.
4. Daily maintenance could include cleaning, minor repairs to the equipment, and battery changes when needed. Repairs may include replacing control knobs and tightening connections as stated in the Owner's Guide. Major repairs would require return to the equipment supplier.

## 4.3 Field Documentation

Field documentation will consist of the use of a field notebook, field forms, sample identification labels, and photographs. A written record of all field activities will be kept in a field logbook or on field forms. All entries will be legible, written in waterproof ink, and contain accurate and inclusive documentation of the field activities. Errors or changes will be noted using a single line to cross out the entry and will be dated and initialed. The logbook will be maintained as part of the permanent record for the site. All field logbook entries will be dated and signed. Activities and observations to be noted in the logbook include the following:

- Name of author and date and time of entry
- Names and affiliations of personnel on-site
- Location of activity and site conditions
- Field observations and comments
- Documentation of instrument calibration
- Weather conditions
- Rationale for sampling locations and for any changes to sampling protocol
- Locations of site photographs
- Site sketches
- Health and safety comments

## 4.4 Sample Handling and Labeling

Treatment confirmation samples will be numbered using the following format:

19-TSR-T0000-0072

where "19" represents the year; "TSR" represents "Trespass Shooting Range"; "T" represents "treatment"; and "0000-0072" is the cubic yards sampled. Duplicate samples will named by adding 9000 to the cubic yards. For example "19-TSR-T9000-9072".

Excavation confirmation samples will be numbered using the following format:

19-TSR-EAST/WEST-E01

where "19" represents the year; "TSR" represents "Trespass Shooting Range"; "EAST" or "WEST" designate the decision unit sampled; "E" represents "excavation" and "01" is a sequential sample number.

Personnel air exposure ("AE"), equipment decontamination ("ED"), and waste characterization ("WC") samples will be numbered using the following format:

19-TSR-AE/ED/WC-01

where "19" represents the year; "TSR" represents "Trespass Shooting Range"; "AE" or "ED" or "WC" designate the sample type; and "01" is a sequential sample number by sample type.

Samples will be tracked by use of chain-of-custody laboratory forms. Each sample will be individually identified on a chain-of-custody form. These forms will include sample identification number, sample date, sample time, requested analyses, type and number of sample containers, sample preservatives, quality control information, and requested analytical turnaround time. The chain-of-custody record must accompany the coolers in which the samples are packed. When transferring samples, the individuals relinquishing and receiving the coolers must sign, date, and note the time on the chain-of-custody record.

Samples for SGS will be couriered to SGS Fairbanks (Arctic Courier or Delta Freight) for forwarding to SGS Anchorage. SGS Fairbanks is located at 3180 Peger Rd.

Samples for ATC Group Services, LLC (ATC) will either be 1) couriered to Ahtna Fairbanks staff for forwarding to Ahtna Anchorage staff, 2) couriered to Ahtna Anchorage staff for delivery to ATC, or 3) couriered to ATC depending on timing, courier availability and schedules. ATC is located at 383 Industrial Way, Suite 300. ATC receiving hours are Monday through Friday 8am-5pm. There is an after-hours sample drop box on the long side of the building, half way down on a red metal pole in front of the garage door. ATC has an 11am delivery cutoff for same-day rush results.

Project-specific pre-filled COCs are provided in Appendix B.

## 4.5 Analytical Program

Soil samples will be submitted to SGS Anchorage, an ADEC-approved laboratory. Due to project time constraints, analyses will be requested on a 2-3 day rush basis. Laboratory analytical methods and containers to be used for soil samples during this project are presented in Table 4-2.

**TABLE 4-2: SOIL SAMPLE ANALYTICAL METHODS AND CONTAINERS**

| Parameter | Analytical Method | Sample Container | Preservation | Holding Time |
|---|---|---|---|---|
| Lead Only or Total Metals | SW6020 | 1-liter amber glass wide-mouth jar (discrete) or zippered plastic bag (ISM) | 0-6°C | 180 days |
| TCLP/SPLP Metals | SW6020/1311 | 8 oz. amber glass (discrete) or zippered plastic bag (ISM) | None | 28 days to extraction/ 180 days to analysis |

**Key:**
oz. = ounce
TCLP = Toxicity Characteristic Leaching Procedure
SPLP = Synthetic Precipitation Leaching Procedure
°C = degrees Celsius

Personnel air exposure and heavy equipment decontamination verification wipe samples will be submitted to ATC in Anchorage for same-day rush analyses. TCLP lead for IDW drum content waste characterization will be submitted (if needed) to SGS or ATC depending on project progress and turn-around requirements.

Anticipated sample types and containers to be used for non-soil samples are presented in Table 4-3.

**TABLE 4-3: NON-SOIL SAMPLE ANALYTICAL METHODS AND CONTAINERS**

| Sample Type | Parameter | Sample Item and Container | Preservation | Holding Time |
|---|---|---|---|---|
| Airborne lead exposure | Lead | Personal air monitoring pump filter in a 1-gallon zippered plastic bag | None | N/A |
| Equipment decontamination | Lead | Post-decontamination equipment wipe in a 1-gallon zippered plastic bag | None | N/A |
| IDW Waste Characterization | TCLP Lead by SW6020/1311 | Representative sample of drummed IDW waste (PPE, casings, etc.) in a 1-gallon zippered plastic bag | None | 28 days to extraction/ 180 days to analysis |

**Key:**
TCLP = Toxicity Characteristic Leaching Procedure

## 4.6 Field Quality Control

Field quality control samples will be collected to assess potential errors introduced during sample collection, handling, and analyses. The field quality control samples are identified in Table 4-4.

**TABLE 4-4: FIELD QUALITY CONTROL SAMPLES**

| Sample Type | Media | Analysis Method | Frequency |
|---|---|---|---|
| Field Duplicate | Soil | All | At least 1 per 10 for non-ISM samples (10%) [or 1 per day for multi-day event] for each analytical method |
| Temperature Blank | 40 mL vial of tap water | -- | 1 per sample cooler |

**Key:**
mL = milliliter
ISM = Incremental Sampling Methodology

The allowable tolerance for field duplicates is a relative percent difference of 50% for soil samples. Laboratory quality control samples shall include method blanks, laboratory control samples, and matrix spike/matrix spike duplicates.

Laboratory performance and analytical results will be checked through a quality assurance review, which will include ADEC's Laboratory Data Review Checklists. The review will assess analytical quality through six data quality indicators: completeness, accuracy, precision, comparability, representativeness, and sensitivity.

# 5.0 HEALTH AND SAFETY CONSIDERATIONS

Site activities shall proceed in accordance with state and federal regulations and the attached site-specific Health and Safety Plan (Appendix A). Protective measures will include compliance with Hazardous Waste Operations and Emergency Response (HAZWOPER) regulations, use of personal protective equipment, air monitoring for lead, decontamination procedures to prevent mobilization of contaminants, and proper signage and barriers for site control.

Ahtna will pay special precaution to public exposure to dust during the bullet screening process. Dry, windy conditions could spread lead-containing dust at unacceptable levels into the surrounding area. Therefore, Ahtna will only operate the screen plant when conditions are favorable or explore dust suppression under a mist.

If soil treatment is delayed by laboratory result, Maectite™ delivery, or any other operational delays, the untreated stockpile will be covered to reduce airborne dust transport potential.

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# 6.0 SCHEDULE AND REPORTING

## 6.1 Schedule

Figure 4 presents the project schedule for the Delta Junction TSR cleanup action. Ahtna will advise ADEC if circumstances arise that require schedule adjustment.

## 6.2 Reporting

### 6.2.1 Interim Data Memorandum

After excavation and treatment confirmation soil sample results are obtained, an interim data memorandum will be prepared for ADEC SPAR submittal to the ADEC Solid Waste Program and to the CDJ requesting approval to re-use the treated soil at the Delta Junction Landfill. The memo will reference the *Demonstration of Lead, Antimony, Arsenic, and Copper Transport Potential from Stabilized Shooting Range Soils Theoretically Placed in the City of Delta Junction Landfill* memorandum (Ahtna, 2019c) which found that lead-, antimony-, arsenic- and copper-impacted soil would not migrate to surface water or groundwater from the landfill.

### 6.2.2 Corrective Action Report

A Corrective Action Report (CAR) will be prepared following receipt of the final excavation confirmation sampling results to document the cleanup action. The CAR will describe the methods used and activities conducted to excavate, stabilize, and reuse the soil, depict sample locations, report treatment and excavation confirmation sample results, and compare the analytical data to the applicable levels listed in this WP. Supporting documents will be appended, such as field notes, laboratory reports, data review checklists, recycling certificate(s) and landfill tonnage receipts. The CAR will include information required for ADEC to request Cleanup Complete Without Institutional Controls.

A draft CAR will be provided to ADEC for review and comment. After receipt and incorporation of ADEC comments, the final CAR will be submitted to ADEC.

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# 7.0 REFERENCES

Ahtna Engineering Services, LLC (Ahtna), 2019a. *Analysis of Brownfield Cleanup Alternatives, Delta Junction Trespass Shooting Range Brownfield Revitalization, Delta Junction, Alaska*, 13 March.

Ahtna, 2019b. *Treatability Study, Delta Junction Trespass Shooting Range, Delta Junction, Alaska*, May.

Ahtna, 2019c. *Delta Junction Trespass Shooting Range Brownfield Revitalization Demonstration of Lead, Antimony, Arsenic, and Copper Transport Potential from Stabilized Shooting Range Soils Theoretically Placed in the City of Delta Junction Landfill*, 25 September.

Ahtna, 2019d. *Corrective Action Plan, Revision 1.0, Delta Junction Trespass Shooting Range Brownfield Revitalization, Delta Junction, Alaska,* 29 July.

Alaska Department of Environmental Conservation (ADEC), 2017a. *Field Sampling Guidance*, August.

ADEC, 2017b. *Chapter 60, Title 18 Alaska Administrative Code (18 AAC 60)*, *Solid Waste Management*, as amended through 7 November.

ADEC, 2018a. *Limited Field Report, Delta Junction Trespass Shooting Range*, October.

ADEC, 2018b. *Chapter 75, Title 18 Alaska Administrative Code (18 AAC 75)*, *Oil and Other Hazardous Substances Pollution Control,* as amended through 27 October.

Interstate Technology & Regulatory Council (ITRC), Incremental Sampling Methodology Team, 2012. *Incremental Sampling Methodology*, February.

US EPA. Code of Federal Regulations, Title 40, Section 261.24 (40 CFR 261.24).

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# FIGURES

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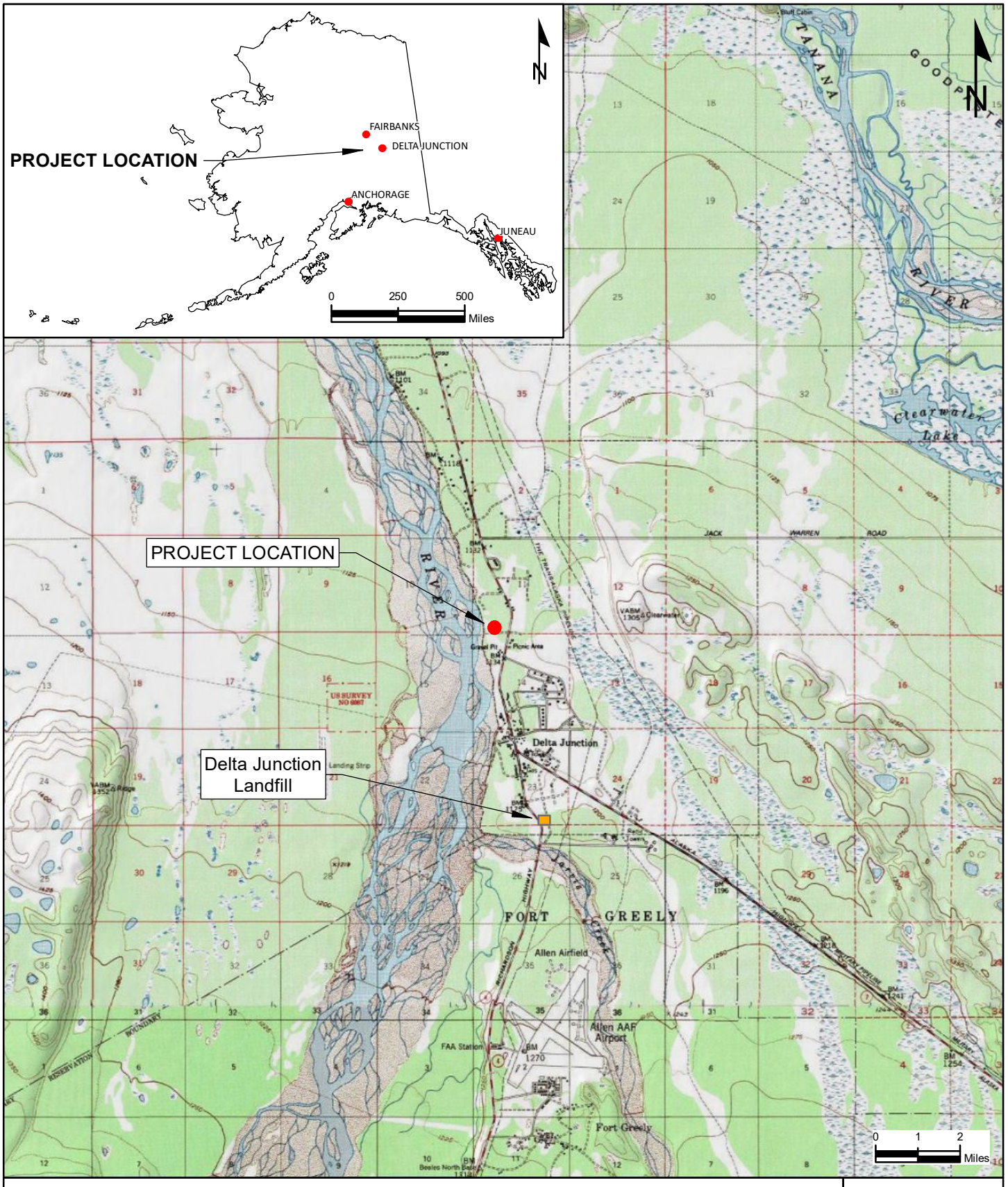


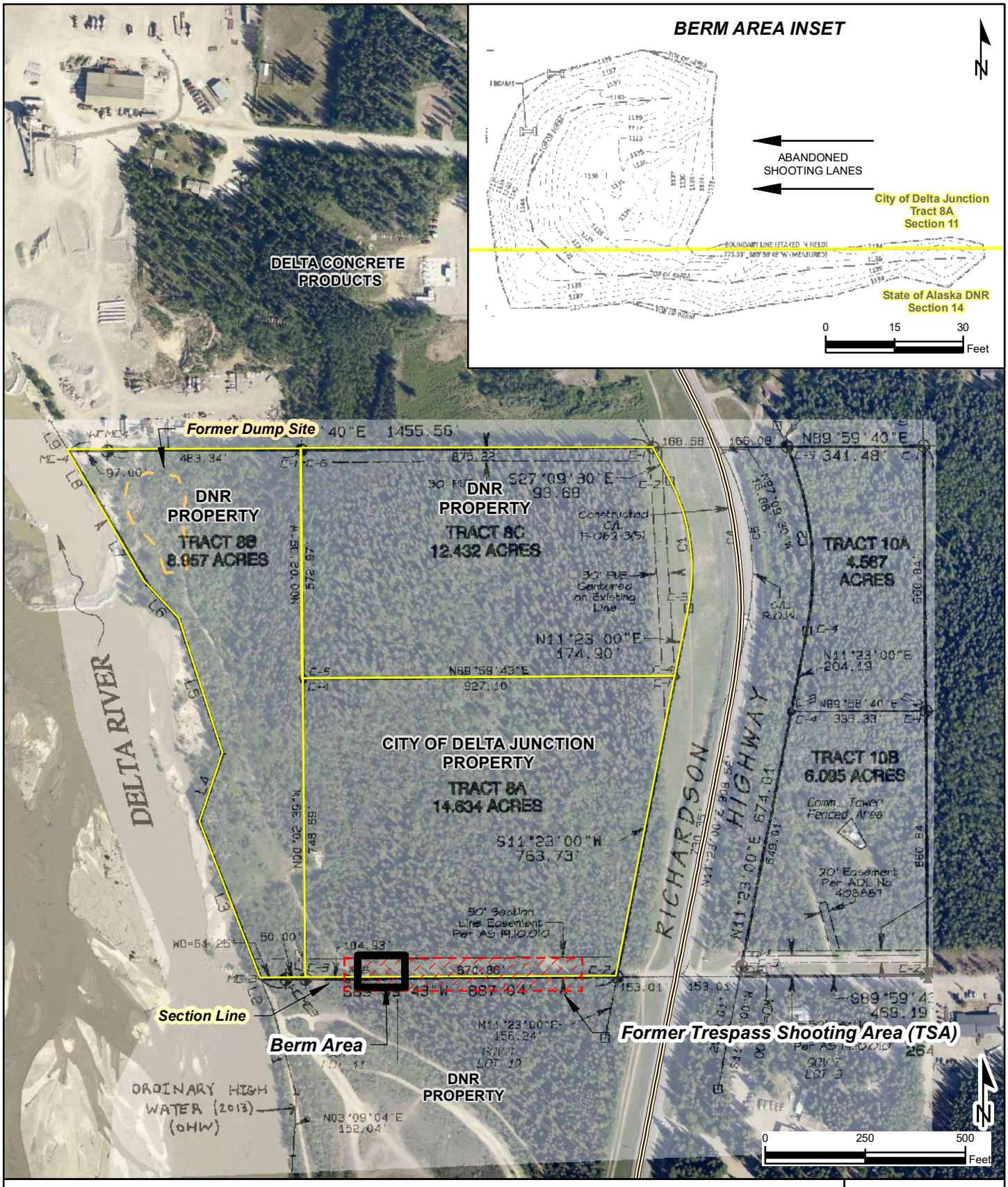

DELTA JUNCTION TRESPASS SHOOTING RANGE
DELTA JUNCTION, ALASKA

Ahtna Engineering Services, LLC

**STATE AND SITE VICINITY**

| Project Number: | Figure Number: |
|---|---|
| 20301.010 | 1 |
| Date: 9/3/2019 | |
| Drafted By: L.D. | |

Prepared by ldavis, 9/3/2019; K:\Delta Junction\MXD\TSR_Cleanup\Fig1_State&Site.mxd




DELTA JUNCTION TRESPASS SHOOTING RANGE
DELTA JUNCTION, ALASKA

Ahtna Engineering Services, LLC

**PROPERTY TRACTS**

| Project Number: | Figure Number: |
|---|---|
| 20301.010 | 2 |
| Date: 9/3/2019 | |
| Drafted By: L.D. | |

Prepared by ldavis, 9/3/2019; K:\Delta Junction\MXD\TSR_Cleanup\Fig2_ProperyTracts.mxd


**LEGEND**

- Decision Unit Boundary
- Backstop Berm Impact Area
- Target Berm
- Shooting Lanes
- Section Line

DELTA JUNCTION TRESPASS SHOOTING RANGE
DELTA JUNCTION, ALASKA

Ahtna Engineering Services, LLC

**TRESPASS SHOOTING RANGE SITE LAYOUT**

| Project Number: | Figure Number: |
|---|---|
| 20301.010 | 3 |
| Date: 9/3/2019 | |
| Drafted By: L.D. | |

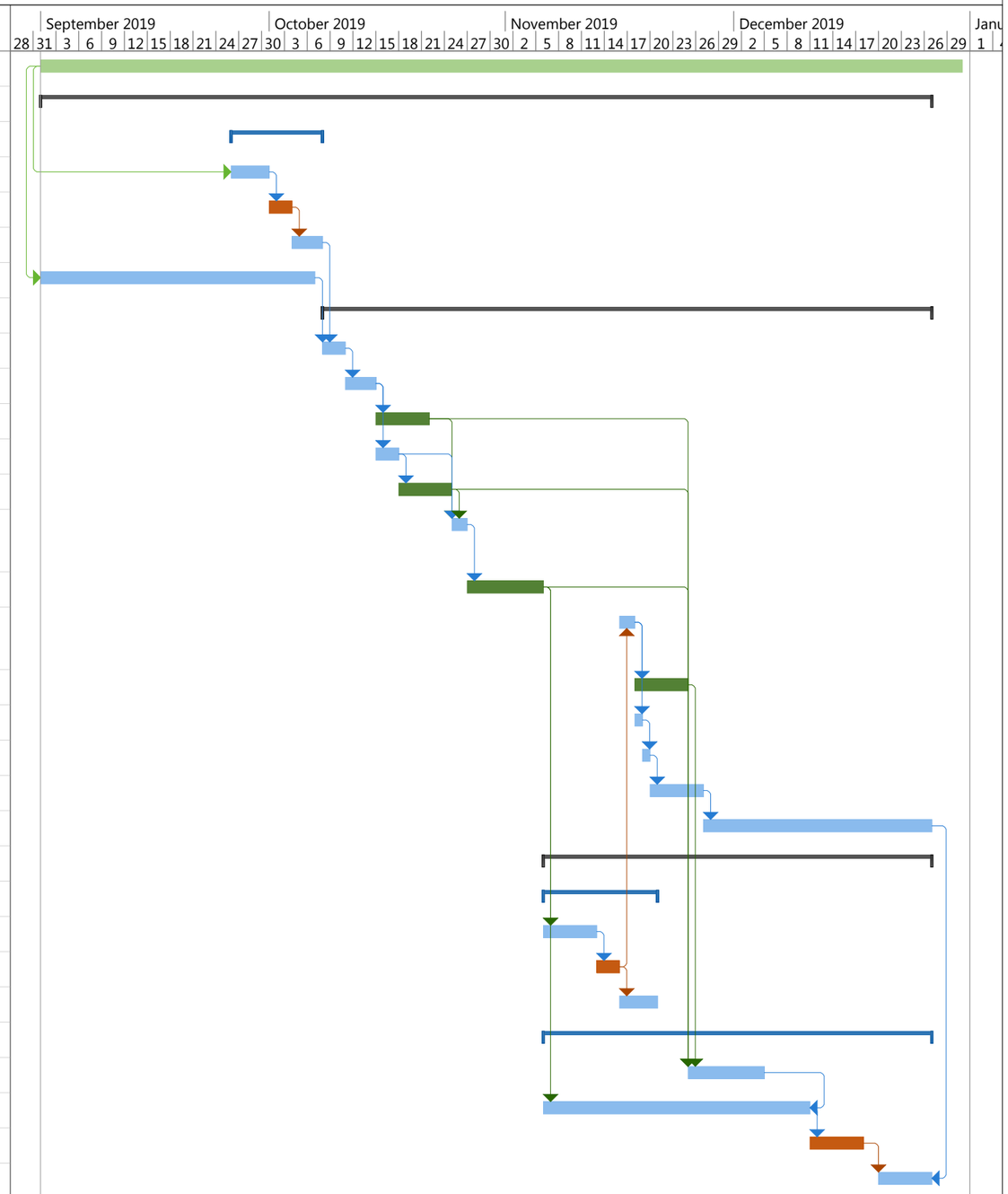
Document Path: K:\Delta Junction\MXD\TSR_CleanupPlan_TSR_SiteLayout.mxd

Figure 4

# Project Schedule
## Trespass Shooting Range Cleanup Action
## Delta Junction, Alaska

ADEC Contract No. 18-3007-18
NTP No. 200000179

| ID | Task Name | Start | Finish | Duration | Predecessors |
|---|---|---|---|---|---|
| 1 | Period of Performance | Sun 9/1/19 | Tue 12/31/19 | 121 edays | |
| 2 | **Task I - Soil Treatment and Disposal** | **Sun 9/1/19** | **Thu 12/26/19** | **84 days** | |
| 3 | Cleanup Action Work Plan | Wed 9/25/19 | Mon 10/7/19 | 8 days | |
| 4 | Draft WP | Wed 9/25/19 | Mon 9/30/19 | 5 edays | 1SS |
| 5 | *ADEC SPAR WP Review, CDJ/ADNR Site Access Approvals* | *Tue 10/1/19* | *Thu 10/3/19* | *3 days* | 4 |
| 6 | Final WP | Thu 10/3/19 | Mon 10/7/19 | 4 edays | 5 |
| 7 | Procurement and Mobilization | Sun 9/1/19 | Mon 10/7/19 | 36 edays | 1SS |
| 8 | Field Work | Mon 10/7/19 | Thu 12/26/19 | 58 days | |
| 9 | Initial Site Survey, Site Prep, Exposure Sampling | Mon 10/7/19 | Thu 10/10/19 | 3 edays | 7,6 |
| 10 | Excavation, Sieving, XRF and Conf Sampling (East End DU) | Thu 10/10/19 | Mon 10/14/19 | 4 edays | 9 |
| 11 | Excavation Confirmation Analyses (East End DU) | Mon 10/14/19 | Mon 10/21/19 | 7 edays | 10 |
| 12 | Excavation, Sieving, XRF and Conf Sampling (West End DU) | Mon 10/14/19 | Thu 10/17/19 | 3 edays | 10 |
| 13 | Excavation Confirmation Analyses (West End DU) | Thu 10/17/19 | Thu 10/24/19 | 7 edays | 12 |
| 14 | Soil Stabilization Treatment and Treatment Confirmation Sampling | Thu 10/24/19 | Sat 10/26/19 | 2 edays | 13,11,12 |
| 15 | Treatment Confirmation Analyses (Stockpile) | Sat 10/26/19 | Tue 11/5/19 | 10 edays | 14 |
| 16 | Soil Transport to Delta Junction Landfill and Excavation Conf Sampling (East End DU) | Fri 11/15/19 | Sun 11/17/19 | 2 edays | 25 |
| 17 | Excavation Confirmation Analyses (East End DU) | Sun 11/17/19 | Sun 11/24/19 | 7 edays | 16 |
| 18 | Site Restoration | Sun 11/17/19 | Mon 11/18/19 | 1 eday | 16 |
| 19 | Final Decon, IDW Sampling | Mon 11/18/19 | Tue 11/19/19 | 1 eday | 18 |
| 20 | IDW Analyses (PPE, mixed bullets/overburden) | Tue 11/19/19 | Tue 11/26/19 | 7 edays | 19 |
| 21 | IDW Transport/Disposal | Tue 11/26/19 | Thu 12/26/19 | 30 edays | 20 |
| 22 | **Task II - Reporting** | **Tue 11/5/19** | **Thu 12/26/19** | **37 days** | |
| 23 | Interim Data Memorandum (IDM) | Tue 11/5/19 | Wed 11/20/19 | 11 days | |
| 24 | Draft IDM | Tue 11/5/19 | Tue 11/12/19 | 7 edays | 15 |
| 25 | *ADEC SPAR/ADEC SW/CDJ IDM Review* | *Wed 11/13/19* | *Fri 11/15/19* | *3 days* | 24 |
| 26 | Final IDM | Fri 11/15/19 | Wed 11/20/19 | 5 edays | 25 |
| 27 | Corrective Action Report (CAR) | Tue 11/5/19 | Thu 12/26/19 | 37 days | |
| 28 | Chemical Data Review (including holiday) | Sun 11/24/19 | Wed 12/4/19 | 10 edays | 17,11,13,15 |
| 29 | Draft CAR | Tue 11/5/19 | Tue 12/10/19 | 35 edays | 15,28FF |
| 30 | *ADEC SPAR CAR Review* | *Tue 12/10/19* | *Tue 12/17/19* | *7 edays* | 29 |
| 31 | Final CAR | Thu 12/19/19 | Thu 12/26/19 | 7 edays | 30,21FF |



# APPENDIX A

HEALTH AND SAFETY PLAN

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# APPENDIX B

FIELD FORMS

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383 Industrial Way Suite 300 Anchorage, AK 99501 (907)258-8661

# CHAIN OF CUSTODY

Date:_____ P.O # 2002404

Customer Name: Ahtna Engineering Services, LLC - Heather Williams

Project Name: ADEC Delta Junction TSR Cleanup Project #: 20301.010.01

Billing Address: 110 W 38th Ave, Suite 200A City: Anchorage State: AK Zip Code: 99503

Phone: 907-433-0761 Cell: 907-250-6852

**Send report via (choose one): Email:** hwilliams@ahtna.net **or Fax:**_____

***Only for SAME DAY T.A.T* Verbal (circle one) Y / N If yes, please provide name/contact #:** _____

****By signing for these samples you are responsible for payment. We will not bill someone else on your behalf.****

Samples Relinquished By (please print):_____ Date:_____ Time:_____ am/pm

Samples Received By (please print):_____ Date:_____ Time:_____ am/pm

Samples Analysis Type: **PCM PLM TEM LEAD TCLP MOLD Other (specify)**

Composite: **Y N**

Turn-around Time: **SAME DAY NEXT DAY 2-DAY 3-DAY 5-DAY**

Method of Payment: **CASH CHECK CREDIT CARD ACCOUNT**

| Sample # | Collection Date | T.A.T. | Analysis Type | Location/Worker: Task | Volume (L) | Sample Condition |
|---|---|---|---|---|---|---|
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*It is the responsibility of the Customer to ensure that samples are correctly taken and packaged. ATC reserves the right to refuse samples for analysis which are obviously unsuitable due to damage, incorrect or insufficient labeling, or incorrect sample loading. ATC will contact the Customer as soon as such a problem is identified and will discuss with the Customer the course of action to be taken.*

# SGS NORTH AMERICA INC. CHAIN OF CUSTODY RECORD

**SGS Environmental Services**
200 West Potter Road
Anchorage, AK 99518
(907) 562-2343
www.sgs.com/alaska

**SECTION 1**

**CLIENT:** Ahtna Engineering Services, LLC

**CONTACT:** Heather Williams **PHONE #:** 907-250-6852

**PROJECT NAME:** Delta Junction Trespass Shooting Range Cleanup **PROJECT/ PWSID/ PERMIT #:** 20301.010

**REPORTS TO:** Heather Williams & Rodney Guritz **E-MAIL:** hwilliams@ahtna.net, rodney@arcticdataservices.com

**INVOICE TO:** Heather Williams **QUOTE #:** 364438 R1 **P.O. #:** 2002397

**INSTRUCTIONS: SECTIONS 1-5 MUST BE FILLED OUT. OMISSIONS MAY DELAY THE ONSET OF ANALYSIS.**

Page ____ of ____

**SECTION 2**

| RESERVED FOR LAB USE | SAMPLE IDENTIFICATION | DATE MM/DD/YY | TIME HH:MM | MATRIX/ MATRIX CODE | SECTION 3 # CONTAINERS | SECTION 3 SAMPLE TYPE: Comp Grab MI (Multi-incre-mental) | SECTION 3 PRESERVATIVE | | | | | | | | | | REMARKS/ LOC ID |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
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**SECTION 5**

| | | | |
|---|---|---|---|
| **RELINQUISHED BY: (1)** | **DATE** | **TIME** | **RECEIVED BY:** |
| **RELINQUISHED BY:(2)** | **DATE** | **TIME** | **RECEIVED BY:** |
| **RELINQUISHED BY:(3)** | **DATE** | **TIME** | **RECEIVED BY:** |
| **RELINQUISHED BY:(4)** | **DATE** | **TIME** | **RECEIVED FOR LABORATORY BY:** |

**SECTION 4** **DOD Project?** NO

**COC ID:**

**Cooler ID:**

**DATA DELIVERABLE REQUIREMENTS:** Level 2, SEDD

**REQUESTED TURNAROUND TIME AND/OR SPECIAL INSTRUCTIONS**

RUSH TAT, Need Groundwater Limits

**TEMP BLANK °C:** _____ **OR AMBIENT [ ]**

(See attached Sample Receipt Form)

**CHAIN OF CUSTODY SEAL: (CIRCLE)**

**INTACT BROKEN ABSENT**

(See attached Sample Receipt Form)



http://www.sgs.com/terms-and-conditions

**ALASKA DEPARTMENT OF ENVIRONMENTAL CONSERVATION**
**DIVISION OF SPILL PREVENTION AND RESPONSE**
**Contaminated Sites and Prevention and Emergency Response Programs**

# Transport, Treatment, & Disposal Approval Form for Contaminated Media

| DEC HAZARD/SPILL ID # | NAME OF SPILL OR CONTAMINATED SITE | |
|---|---|---|
| | | |
| **SITE OR SPILL LOCATION** | | |
| | | |
| **CURRENT LOCATION AND TYPE OF CONTAMINATED MEDIA** | **SOURCE OF THE CONTAMINATION** | |
| | | |
| **COMPOUNDS OF CONCERN** | **ESTIMATED VOLUME** | **DATE(S) GENERATED** |
| | | |
| **POST TREATMENT ANALYSIS REQUIRED** *(such as GRO, DRO, RRO, BTEX, and/or Chlorinated Solvents)* | | |
| | | |
| **COMMENTS** | | |
| | | |

## Facility Accepting the Contaminated Media

| NAME OF THE FACILITY | PHYSICAL ADDRESS/PHONE NUMBER |
|---|---|
| | |

## Responsible Party and Contractor Information

| BUSINESS/NAME | ADDRESS/PHONE NUMBER |
|---|---|
| | |
| | |

Name of the Person Requesting Approval (printed) _____ Title/Association _____

Signature _____ Date _____ Phone Number _____

**----------DEC USE ONLY----------**

Based on the information provided, ADEC approves transport of the above-described media for treatment in accordance with the approved facility operations plan. The Responsible Party or their consultant must submit to the DEC Project Manager a copy of weight/volume receipts of the loads transported to the facility and a post treatment analytical report. If the media is contaminated soil, it shall be transported as a covered load in compliance with 18 AAC 60.015.

DEC Project Manager Name (printed) _____ Project Manager Title _____

Signature _____ Date _____ Phone Number _____