

**FORMER AVEC POWER PLANT
ANVIK, ALASKA**

PHASE I ENVIRONMENTAL SITE ASSESSMENT

OCTOBER 2007

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1.0 INTRODUCTION

BGES, Inc. (BGES) was retained by Mike Grundberg, Environmental Coordinator for the Anvik Tribal Council, to conduct a Phase I Environmental Site Assessment (ESA) of the property located on the west side of Old School Road, between River Road and Chase Drive (hereafter referred to as the subject property), approximately 300 feet south of the Anvik river, in Anvik, Alaska. The purpose of the Phase I ESA was to evaluate the potential for impacts to the subject property from hazardous substances from potential on-site or off-site sources, and to assess related environmental conditions at the property. In addition, Yukon Title Company was contracted to perform a title search on the subject property to determine legal ownership. Responsibility for performing this title search has since been transferred to First American Title Company because the subject property lies outside Yukon Title Company's recording districts.

This report presents the results of our findings. Aerial photographs of the property are included at the end of the report text and recent photographs of the property are included in Appendix A; information from the Alaska Department of Environmental Conservation (ADEC) databases, the National Response Center database, and U.S. Environmental Protection Agency (USEPA) databases is included in Appendix B; correspondence concerning the property is included in Appendix C; our proposal is included in Appendix D, and the award letter naming BGES as the selected contractor to perform this work is included in Appendix E. The Phase I ESA reconnaissance was performed during early October 2007, during a two week extension that was given to allow coordination with the ADEC for other work BGES was selected to perform in Anvik. Our proposal, dated August 15, 2007, detailed our scope of work for conducting this Phase I ESA (attached in Appendix D). The Phase I ESA was also conducted in accordance with American Society for Testing and Materials (ASTM) Standard E 1527-05 and the local standards of practice. The assumptions made while performing this Phase I ESA and the limitations of our scope of work are detailed in our proposal in Appendix D, and in Section 7.0 (Exclusions, Considerations, and Qualifications) of this report. Exceptions to the ASTM-prescribed procedures include the following:

- The ASTM standard practice minimum search distance for the Federal Resource Conservation and Recovery Act (RCRA) generators list is just for the subject and adjoining properties. For this assessment, we utilized the U.S. EPA Enviromapper database and searched to ¼ mile from the subject property.
- The ASTM standard practice minimum search distance for the Federal Emergency Response Notification System (ERNS) list is just for the subject property. For this assessment, we utilized

the U.S. National Response Center database, which has replaced the ERNS list and exceeded the standard by searching the subject property and adjoining properties.

Our Phase I ESA included a combination of research, interviews, and site reconnaissance. Based on the findings of these activities, it is our opinion that there is a recognized environmental condition associated with the subject property; namely the soils that have been identified as containing concentrations of diesel range organics (DRO) and gasoline range organics (GRO) in the vicinity of the former AVEC (Alaska Village Electric Cooperative) tank farm. Other recognized environmental conditions associated with the subject property include reports of releases of solvents and fuel on the subject property in the vicinity of the former AVEC generator building, the possibility of releases associated with a historical pipeline that connected the AVEC tank farm to a fuel terminal on the river as well as to other sites in the village, and the historical presence of drums on the property. The subject property is listed in the ADEC Contaminated Sites data base. In addition, there are nearby contaminated sites that may or may not have contamination plumes that affect the subject property.

2.0 SITE DESCRIPTION

The subject property is located on the west side of Old School Road, between River Road and Chase Drive, approximately 300 feet south of the Anvik River, in Anvik, Alaska (Figure 1); and consists of a bermed area that contained the former AVEC tank farm and the vicinity of a generator building that was formerly located on the property, hereafter referred to as the “subject property.”

A title search was performed on the property by First American Title Company to ascertain the legal owner of the lot upon which the subject property is located. Due to complex land ownership issues, at the time this Phase I ESA was completed, the title search was ongoing. Information gleaned from the title search will be released to our client, the Anvik Tribal Council, in an addendum to this report, when it becomes available. It is believed that the current owner of the subject property is the Delyo Ges Native Corporation, subsequent to an interim transfer from the Episcopal Diocese of Alaska, though the date of this transfer is not known.

2.1 Legal Description

The legal description of the subject property is Lot 1 US survey number 728. The subject property is located in the Southeast Quarter of the Southwest Quarter, Section 29, Township 30N, Range 58W, Seward Meridian, Alaska.

2.2 Geologic and Surface Description

According to an environmental assessment performed by the Bureau of Land Management (BLM) in 2001 in conjunction with the improvement of the Anvik airport, detailed geological maps have not been prepared for this area of the state. According to the same document, the general surficial geology in the region around Anvik is comprised of Holocene alluvium with a thick layer of organic material on top, covering an unknown bedrock that may consist of highly weathered Tertiary-Cretaceous aged volcanics at a depth of 8 to 12 feet.

The subject property is located on a known flood plain and, according to a high water mark located on River Road in Anvik, and according to local testimony, was completely submerged during flooding that took place in the early 1990's.

2.3 Vicinity Description

The land in the vicinity of the subject property has mixed uses including junk storage, commercial storage, a fuel terminal connecting a pipeline to the City tank farm, and a community garden. The subject property is bordered by Old School Road to the east, an unused cabin to the north, a junk storage area to the west, and a driveway and residential home to the south.

2.4 Past and Current Usage

The subject property is believed to be owned by the Deloy Ges Native Corporation. A title search is currently being performed by First American Title Company to determine the legal ownership and the date of transfer to the current owner; however this research was ongoing at the time this assessment was published. When this information is obtained, an addendum to this report will promptly be released.

No historical city directories have been compiled for the Anvik area.

2.5 Review of Aerial Photographs

Aerial photographs of the vicinity of the subject property taken in 1959, 1972, 1983, 1999, and 2005 aerial photographs were briefly reviewed; the 1959, 1983, and 1999 aerial photographs were chosen to print. They are included as Figures 2, 3 and 4, respectively.

The 1959 aerial photograph, included as Figure 2, shows the subject property prior to the installation of the AVEC generator building and tank farm. The subject property appears to be covered with low vegetation. A small structure is located in the northern portion of the subject property and several small square objects are located to the north of the property. What appear to be residential structures are located to the north of the subject property, across old school road to the east of the subject property, and along River Road to the west. A bridge is located over the slough to the east of the subject property, and many residential and commercial structures are present along Main Road. The riverfront to the north of the subject property appears to be used for community farming. Three large storage tanks associated with the school tank farm are located to the south of the subject property. What appears to be a rectangular residential structure is located to the south of the subject property.

The July 8, 1972 aerial photograph showed the subject property as having the AVEC power plant on site. A structure was located to the south of three large tanks. Three drums were present to the west of the generator building. The surrounding area appeared similar to the 1959 aerial photograph. Fewer structures were present along River Road, and the bridge over the slough to the east of the subject property appeared more robust than in the 1959 aerial photograph. The riverfront to the north of the subject property still appeared to be used for community farming.

The May 28, 1983 aerial photograph, included as Figure 3, shows the subject property as being fully developed and actively used as the AVEC power plant. Six large tanks are located in the southern portion of the property. To the north of the tank farm is a generator building. To the west of the generator building are what appear to be several 55-gallon drums, and what appear to be many more drums stacked on their sides. To the north of the subject property are several cylindrical objects that appear to be larger than 55 gallon drums. The surrounding area is similar to the 1959 and 1972 aerial photographs, except that very few buildings remain on River Road near the riverfront. In addition, the area to the west of the subject property appears to have had some of the vegetation removed and be slightly graded. The riverfront area to the north of the subject property still appears to be used for community farming. The tanks associated with the old school are still visible to the south of the subject property, but the rectangular residential structure to the south of the subject property is no longer visible. Two smaller structures are visible in this area. What appears to be a residential structure is located to the southeast of the tanks.

The September 22, 1999 aerial photograph, included as Figure 4, shows the subject property after the AVEC power plant was moved. There is no longer a generator building present on the subject

property and only one of the large tanks remains on site. A berm is present around the tank, though this berm was not evident in earlier photographs. Most of the subject property is covered with low vegetation. A small trail extends into the northwest corner of the subject property. A structure is located to the north of the subject property. Further north, across River Road are several boats. What appear to be three large tanks are located to the west of the subject property. The tanks associated with the old school tank farm are no longer present. The new City tank farm is located to the south of the subject property.

The September 1, 2005 aerial photograph showed the subject property in similar condition to the 1999 aerial photograph. Tall vegetation had grown up around the single storage tank that remained on the site. A boat was parked to the north of the tank farm and construction materials and debris were present on the subject property. Five storage tanks, similar to the tanks that were previously located on the subject property, were located to the west of the subject property. Two additional tanks were located further to the west of the subject property. A cabin was located to the north of the subject property. The cabin that was present across Old School Road, to the east of the subject property, was no longer present. The bridge across the slough to the east of the subject property had been replaced with a culvert.

3.0 RECORDS REVIEW

BGES conducted a review of numerous records and databases to research the potential for known contamination on or near the subject property. The following sections describe the results of these reviews.

3.1 U.S. Environmental Protection Agency (EPA) National Priority List (NPL)

The EPA's NPL, updated as of September 19, 2007, was reviewed on October 12, 2007. Eight sites were listed in the state of Alaska. Three sites are listed on the NPL for the greater Anchorage area; four sites are listed in the Fairbanks North Star Borough; and one site is listed in the Aleutians West Census Area. Three sites have since been deleted from this list. All of these sites are greater than 1 mile from the subject property.

3.2 U.S. EPA Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS) List

The U.S. EPA CERCLIS list, based on data extracted on September 18, 2007, was reviewed on Former AVEC Power Plant, Anvik, AK; Phase I ESA

October 12, 2007. The nearest site to the subject property was the Mountain Top Mine in Aniak, Alaska. All of the CERCLIS sites are greater than 1 mile from the subject property.

3.3 U.S. EPA Resource, Conservation, and Recovery Act (RCRA) Corrective Action Detail Report (CORRACTS)

The U.S. EPA RCRA CORRACTS for Alaska, updated as of September 19, 2007 was reviewed on October 12, 2007. None of the CORRACTS sites are located within the search distance of one mile.

3.4 U.S. EPA RCRA Non-CORRACTS Treatment, Storage and Disposal (TSD) Facilities

The U.S. EPA RCRA Non-CORRACTS TSD Facilities for Alaska, updated as of September 19, 2007 was reviewed on October 12, 2007. None of the Non-CORRACTS sites are located within the search distance of one mile from the subject property.

3.5 Alaska Department of Environmental Conservation (ADEC) Registered Underground Storage Tanks (UST) Database

The ADEC Registered UST database, which we reviewed on October 12, 2007 is updated regularly and indicated that there are no registered USTs on the subject property or on adjoining properties.

3.6 ADEC Leaking Underground Storage Tanks (LUST) Database

The ADEC LUST database, which we reviewed on October 12, 2007 is updated regularly and indicated that there are no LUST sites within ½ mile of the subject property.

3.7 ADEC Contaminated Sites Database

The ADEC Contaminated Sites Database, which is updated regularly, was reviewed on October 1, 2007. According to this database, there are eight contaminated sites located within ½ mile of the subject property. All eight of these sites are listed as being “active” indicating that they may require additional characterization and/or remedial action.

The Former AVEC tank farm is listed as an active contaminated site and is also the subject property of this Phase I ESA. Approximately 52,972 gallons of fuel were stored on this site and the power plant was operated at this location for more than 20 years. A preliminary characterization of the site was performed and a soil sample was collected from inside the tank containment basin; the soil sample

exhibited concentrations of DRO of 26,200 milligrams per kilogram (mg/Kg) and GRO of 991 mg/Kg; both of these concentrations exceed the ADEC cleanup levels and represent a recognized environmental condition with respect to the subject property.

The old Anvik City tank farm was located approximately 100 feet to the northeast of the new City clinic, and approximately 1,800 feet to the southeast of the subject property. This site is reported to have had numerous historical releases and, during a site visit recorded in the ADEC database, was reported to exhibit hydrocarbon odors. Analytical samples were not taken due to the difficulties in obtaining soil samples from the compacted pad upon which the tanks were situated. This site is considered an active site by the ADEC, indicating that further characterization and remedial action may be necessary at this location. Groundwater flow direction in the village of Anvik is not known, but is assumed to be generally towards the Anvik River to the north, placing the subject property likely downgradient from this contaminated site. While the distance between this site and the subject property is considerable and migration of contamination from this site to the subject property is unlikely, pending further characterization, this site is considered to be a recognized environmental condition with regard to the subject property. In addition this tank farm was filled through a pipeline that ran nearby the subject property and may have developed leaks which could have impacted the subject property.

The Anvik Commercial Company Tank Farm was located approximately 500 feet to the northeast of the subject property and is no longer in use. Stained soils located near the tanks was sampled and found to contain concentrations of DRO greater than the ADEC cleanup level. The groundwater flow direction in the village of Anvik is not known, but is assumed to be generally towards the Anvik River to the north, likely placing the subject property side-gradient and slightly upgradient from this contaminated site. This site is considered an active site by the ADEC, indicating that further characterization and/or remedial action may be necessary at this location. Because of the distance between this site and the subject property and the presumed groundwater flow direction, it is our opinion that this site is not a recognized environmental condition with regard to the subject property.

The Alaska Department of Transportation and Public Facilities (ADOT&PF) Airport shop is located approximately ½ mile to the southeast of the subject property. A spill associated with equipment stored in the shop was excavated and soil was land-farmed at a nearby location. Due to the distance between this site and the subject property, the relatively small amount released, and the remedial actions taken, and the fact that this site is presumed to be generally side-gradient from the subject

property, it is our opinion that this site does not constitute a recognized environmental condition with respect to the subject property.

The School tank farm is located approximately ½ mile to the southeast of the subject property. Soil samples taken in association with a fuel spill at this location contained concentrations of DRO and GRO that exceeded the ADEC cleanup levels. As described above, based on the presumed groundwater flow direction in the area, the subject property is likely to be somewhat side-gradient from this contaminated site. This site is considered an active site by the ADEC, indicating that further characterization and remedial action may be necessary at this location. While the distance between this site and the subject property is considerable and the likelihood for migration of contamination from this site to the subject property is reduced, given the presumed groundwater flow direction, pending further characterization, it is our opinion that this site is a recognized environmental condition with regard to the subject property.

The Ingalik Native Corporation tank farm #1 was located adjacent to the subject property to the west. Fuel was released at this site during a flood and may have been spread over a relatively large area. Soil samples taken from the vicinity of this tank farm contained concentrations of DRO and GRO that exceeded the ADEC cleanup levels. Because this site is known to have contamination above the ADEC cleanup levels and is located adjacent to the subject property to the west, it is our opinion that this site constitutes a recognized environmental condition with respect to the subject property.

The Chase Enterprise Store tank farm is located along Main Road, approximately 500 feet to the east of the subject property. A soil sample taken from the vicinity of the tanks contained a concentration of DRO greater than the ADEC cleanup level. As described above, based on the presumed direction of groundwater flow, the subject property is likely side-gradient and slightly downgradient from this contaminated site. This site is considered an active site by the ADEC, indicating that further characterization and/or remedial action may be necessary at this location. While the migration of contamination from this site to the subject property has a reduced likelihood, given the presumed groundwater flow direction, pending further characterization, it is our opinion that this site is a recognized environmental condition with regard to the subject property.

The Ingalik Native Corporation tank farm #2 is located approximately 200 feet to the northwest of the subject property. The #2 tank farm contained aviation fuel and unleaded gasoline. A soil sample collected from this location contained concentrations of DRO and GRO greater than the ADEC

cleanup levels. Although the groundwater flow direction is presumed to be generally towards the Anvik River to the north, placing the subject property generally upgradient from this contaminated site, periodic coastal flooding occurs in this area and contamination may have migrated some distance from this site, regardless of the typical groundwater flow direction. This site is considered to be an active site by the ADEC, indicating that further characterization and/or remedial action may be necessary at this location. It is our opinion that this site is a recognized environmental condition with respect to the subject property.

Additional information concerning the contaminated sites is included in Table 1 and Appendix B, and their locations are shown on Figure 5.

3.8 ADEC Statewide Oil and Hazardous Substance Spills Database

The ADEC Statewide Oil and Hazardous Substance Spills Database contains records concerning spills of oils and other hazardous substances that have occurred throughout Alaska. Records of spills that have occurred since July of 1995 are included in this database. The database is updated regularly and was reviewed on October 12, 2007. Seven spills were reported to have occurred within ½ mile of the subject property. All of these incidents are considered closed by the ADEC, indicating that further cleanup and remedial action is not necessary and with the exception of one spill (described further below), it is our opinion that these sites do not constitute recognized environmental conditions with respect to the subject property. One incident was reported as a truck with an open gasoline tank traveling on Anvik roads that may have spilled up to 10 gallons of diesel as it moved. The location of this release is vague and therefore this site could not be located on Figure 5 as a point source. This incident may have impacted the subject property, which is located adjacent to Old School Road, which provides access to the City tank farm. This incident is considered a recognized environmental condition with respect to the subject property. A copy of the reports concerning these incidents is included in Appendix B, and their locations are shown on Figure 5.

3.9 National Response Center

The National Response Center database, which was last updated on September 27, 2007; was reviewed on October 12, 2007. No incidents were reported to have occurred on the subject property or adjacent properties.

3.10 U.S. EPA Envirofacts/Enviromapper

In response to the Emergency Planning and Community Right to Know Act [42 U.S.C. 11001 et seq. (1986)], also known as Title III of the Superfund Amendments and Reauthorization Act (SARA), EPA maintains the Enviromapper database of transporters or generators of hazardous waste, used oil, etc.; these listings do not indicate the presence or absence of contamination within the surface or subsurface at these sites. The database was reviewed on October 12, 2007 for any sites within ¼ mile of the subject property. No sites were listed in the EPA Enviromapper database as being within ¼ mile of the subject property.

3.11 U.S. EPA Toxic Release Inventory (TRI) Sites Database

The Toxic Release Inventory (TRI) is a publicly available EPA database that contains information on toxic chemical releases and other waste management activities reported annually by certain industry groups as well as federal facilities. This inventory was established under the Emergency Planning and Community Right-to-Know Act of 1986 (EPCRA) as expanded by the Pollution Prevention Act of 1990. The TRI sites database was reviewed on October 12, 2007 for any sites located within ¼ mile of the subject property. The most recent data available from the database is for the year of 2005 and no sites were listed as being located within ¼ mile of the subject property.

3.12 Alaska State List of Landfills and Solid Waste Facilities

The ADEC Division of Environmental Health, Solid Waste Management List of Sites as of October 10, 2007, for the Southwest Region was reviewed. The closest known active landfill to the subject property is the Anvik Landfill. This site is a Class-3 village landfill located approximately one mile southwest of the subject property. Because of its distance from the subject property it is our opinion that this site does not constitute a recognized environmental condition with respect to the subject property. No other landfills or solid waste facilities are listed as being located within 0.5 mile of the subject property.

3.13 Sanborn Fire Maps

Sanborn fire maps were not prepared for the City of Anvik.

4.0 SITE RECONNAISSANCE AND INTERVIEWS

Reconnaissance of the subject property was conducted from October 8 to October 11, 2007. Weather conditions were cold with mixed rain and snow (approximately 32 degrees Fahrenheit). One representative from BGES was on site to perform this reconnaissance. The following paragraphs discuss our findings and observations with respect to the site reconnaissance.

4.1 Subject Property

The property was accessed from Old School Road. The subject property consisted of a vacant piece of land that was formerly used as a fuel storage area, and contained a 6,000-gallon fuel tank located inside an unlined containment basin (Photograph 1 in appendix A). The containment basin was constructed of sandbags and no liner was evident. The tank appeared to be empty and was located on wooden planks which formed a support foundation. The property was covered with low vegetation. Items noted on the subject property included a plywood container used for storage, a boat, a metal pipe, steel I-beams, and a metal frame. To the south of the fuel tank was a pile of pipe that may have been associated with the pipeline that was historically used to fuel the tank farm (Photograph 2 in Appendix A). The grounds surface was partially obscured by approximately 1 inch of snow. The area beneath the storage tank appeared to possibly have been stained, but no hydrocarbon odors were observed (Photograph 3 in Appendix A). No staining or obvious signs of stressed vegetation (except as described in the next paragraph) were visible on the subject property, but the ground surface was frozen and partially covered with snow, and all of the vegetation on site had died back for the winter.

During the course of our field activities, freezing rain melted a portion of the snow cover and revealed two areas of vegetation that appeared to be stressed and possibly stained, to the east and north of the boat that was stored on the property (Photographs 4 and 5 in Appendix A). Shallow soil borings were advanced to a depth of 2 feet in these areas. No hydrocarbon odors were observed and field screening results did not indicate the presence of elevated hydrocarbon vapors in these areas.

4.2 Surrounding Properties

The subject property is bordered by Old School Road to the East, a vacant cabin to the north, Old School Road to the south, and a vacant lot used for storage to the west. A vacant piece of land that was also used to store equipment and building materials and that had a small cache was located across Old School Road to the east. The vacant lot to the west was used to store metal salvage awaiting

backhaul out of the village. Several large storage tanks were present on this lot (Photographs 6 in Appendix A) and this site is a contaminated site listed in the ADEC database. Items noted on this lot included junked snow machines, a refrigerator, a freezer, metal tubing and piping, broken equipment, and old boats (Photographs 7 and 8 in Appendix A). In addition many large connex containers are stored on this lot (Photograph 9 in Appendix A). The lot across Old School Road to the east contained a bulldozer in disrepair, construction materials, and a cache (Photograph 10 in Appendix A).

4.3 Interviews

Interviews were conducted with individuals knowledgeable about current or historic site conditions. The following sections provide pertinent information gathered from the interviews.

4.3.1 Mike Grundberg (Mayor of Anvik, Anvik Environmental Coordinator, Former AVEC Power Plant operator)

Mike Grundberg, currently the Mayor of Anvik and the environmental coordinator for the Anvik Tribal Council, and formerly an operator at the former AVEC power plant that was the subject of this environmental site assessment, was interviewed during the course of our field work. Mr. Grundberg indicated that the subject property had seen numerous releases of fuel oil from the tanks as well as the pipeline that was used to fill the tanks, and that solvents and diesel fuel had been used to clean equipment inside the generator building that was previously located on the site. According to Mr. Grundberg, solvents and fuel were used to clean the generators and was allowed to flow through drains in the bottom of the building and into a 55 gallon drum, which had been allowed to overflow onto the grounds surface many times during the course of plant operation. In addition, he stated that several drums and pallets of transformers had been stored on the property and that rubber joints in the pipeline that was used to fuel the power plant and deliver fuel to other tanks in the village had numerous seeps and leaks. He stated that the generator building did not have water or sewer, and that a personnel shelter located near the generator building had utilized honey buckets for sewage disposal. He stated that the generator building had been removed during the winter of 1997 by placing the building on skids and dragging and pushing the building over an ice road with bulldozers. He also indicated that the tank that is currently on the subject property may not have been one of the tanks that were present during plant operations.

4.3.2 Ken Chase (long-term nearby resident)

Ken Chase, a long-term resident of Anvik, was interviewed on October 8, 2007. He stated that he believed numerous fuel releases had occurred on the subject property and at joints along the pipeline that was used to fuel the tanks and other locations in the village. In particular, he pointed out the location of what he claimed was a large ongoing release at a pipeline joint across Old School Road to the southeast of the subject property that was managed by digging a hole and installing a 55 gallon drum underneath the pipeline to catch dripping fuel.

In addition to these interviews, the landowners, the Deloy Ges Native Corporation, and the previous operator, AVEC, were contacted to obtain additional information on land ownership and site usage. At the time this report was completed, a response had not yet been received by BGES. Pertinent information, if any, obtained from this correspondence will be released as soon as practicable as an addendum to this report.

5.0 TITLE SEARCH

Yukon Title Company in Fairbanks, Alaska, was contacted to perform a title search and to obtain land records and records of ownership for the subject property. Investigations performed by Yukon Title Company indicated that the property records are part of the Kuskokwim recording district, and that they did not have access to this information and would need to transfer the inquiry to another agency. The title search was transferred to First American Title Company, in Anchorage Alaska. They have indicated that their research is ongoing and will likely be completed by October 18, 2007. Bobbi Hamilton, the Title Officer who did the initial inquiry at Yukon Title Company, indicated that the property was likely owned by Deloy Ges Native Corporation via interim conveyance from the Episcopal Diocese of Alaska, though she did not have official records of this transfer. Upon receipt of the title report, BGES will issue an addendum to this report with this updated information.

6.0 FINDINGS AND CONCLUSIONS

6.1 Subject Property

Reconnaissance was performed of the grounds of the subject property. The following paragraphs summarize our findings.

According to an environmental assessment performed by the BLM in 2001 in conjunction with the

improvement of the Anvik airport, detailed geological maps have not been prepared for this area of the state. According to the same document, the general surficial geology in the region around Anvik is comprised of Holocene alluvium with a thick layer of organic material on top, covering unknown bedrock that may consist of highly weathered Tertiary-Cretaceous aged volcanics at a depth of 8 to 12 feet.

The subject property is located on a known flood plain and, according to a high water mark located on River Road in Anvik, and according to local testimony, was completely submerged during flooding that took place in the early 1990's.

Based on a review of historical aerial photographs, it appears that the AVEC Power Plant was operating from the early 1970's until the late 1990's. The Generator building was present in the 1972 aerial photograph, but was absent in the 1999 aerial photograph. Storage capacity was doubled from three tanks to six tanks sometime during the late 1970's or early 1980's.

The subject property is listed in the ADEC Contaminated Sites database, because of documented hydrocarbon contamination found on site. This contamination is considered to be a recognized environmental condition with respect to the subject property. Furthermore, the reports of solvent use and the storage of transformers on the subject property may indicate that other volatile organic compounds and polychlorinated biphenyls contamination may also be present at the subject property.

6.2 Surrounding Properties

The subject property is bordered by Old School Road to the East, a vacant cabin to the north, A residential property to the south, and a vacant lot used for storage to the west. A vacant piece of land that was also used to store equipment and building materials and that had a small cache was located across Old School Road to the east. The vacant lot to the west was used to store metal salvage awaiting backhaul out of the village. Several large storage tanks were present on that lot.

According to the ADEC database, eight contaminated sites (including the subject property) are located within ½ mile of the subject property. All eight of these sites are listed as being "active" indicating that they may require additional characterization and/or remedial action. It is our opinion that six of these sites (including the subject property) represent recognized environmental conditions with respect to the subject property.

No NPL, CERCLIS, CORRACTS, TSD, LUST, TRI, National Response Center or Enviromapper sites are listed as being within their respective prescribed search radiuses from the subject property. Seven spill sites were located within ½ mile of the subject property. All of these spill sites have been issued a “closed” status, indicating no further characterization or remedial actions are required at these locations. One spill site was located along roadways that adjoin the subject property and is considered a recognized environmental condition with respect to the subject property because of its proximity.

We have performed a Phase I Environmental Site Assessment in conformance with the scope and limitations of ASTM Practice E 1527 of the former AVEC Power Plant, in Anvik, Alaska; the subject property. Any exceptions to, or deletions from, this practice are described in Sections 1.0 and 7.0 of this report. This assessment has revealed significant evidence of recognized environmental conditions in connection with the subject property, as identified above.

7.0 EXCLUSIONS, CONSIDERATIONS AND QUALIFICATIONS

This report was prepared for our client, Mike Grundberg, with the Anvik Tribal Council. The scope of work and level of effort were based on our proposal, which was authorized to be implemented by a letter from the Anvik Tribal Council. It is not intended for third parties to rely on the information provided in this report, except at their own risk. This report presents facts, observations, and inferences based on conditions observed during the period of our project activities, and only those conditions that were evaluated as part of our scope of work. Our conclusions and recommendations are based on our observations and the results of our research, and as such, rely on the accuracy of the databases that were reviewed and the information provided by the individuals that were interviewed. In addition, changes to site conditions may have occurred since we completed our initial project activities. These changes may be from the actions of man or nature. Changes in regulations may also impact the interpretation of site conditions. BGES will not disclose our findings to any parties other than our client as listed above, except as directed by our client, or as required by law.

The Phase I ESA was completed by Nick Braman, Environmental Scientist of BGES; and was reviewed by Robert N. Braunstein, C.P.G., Principal of BGES. Nick Braman has conducted dozens of Phase I ESAs in various locations within Alaska. Mr. Robert Braunstein is a Certified Professional Geologist, has over 25 years of professional geologic and environmental experience, and has performed or managed hundreds of ESAs in the lower 48-States and in Alaska. He has extensive knowledge and experience with contaminated sites and remediation.

We declare that, to the best of our professional knowledge and belief, we meet the definition of Environmental Professionals as defined in 312.10 of this part [40 CFR Part 312]. We have the specific qualifications based on education, training, and experience to assess a property of the nature, history, and setting of the subject property. We have developed and performed all appropriate inquiries in conformance with the standards and practices set forth in 40 CFR Part 312.

Prepared by:

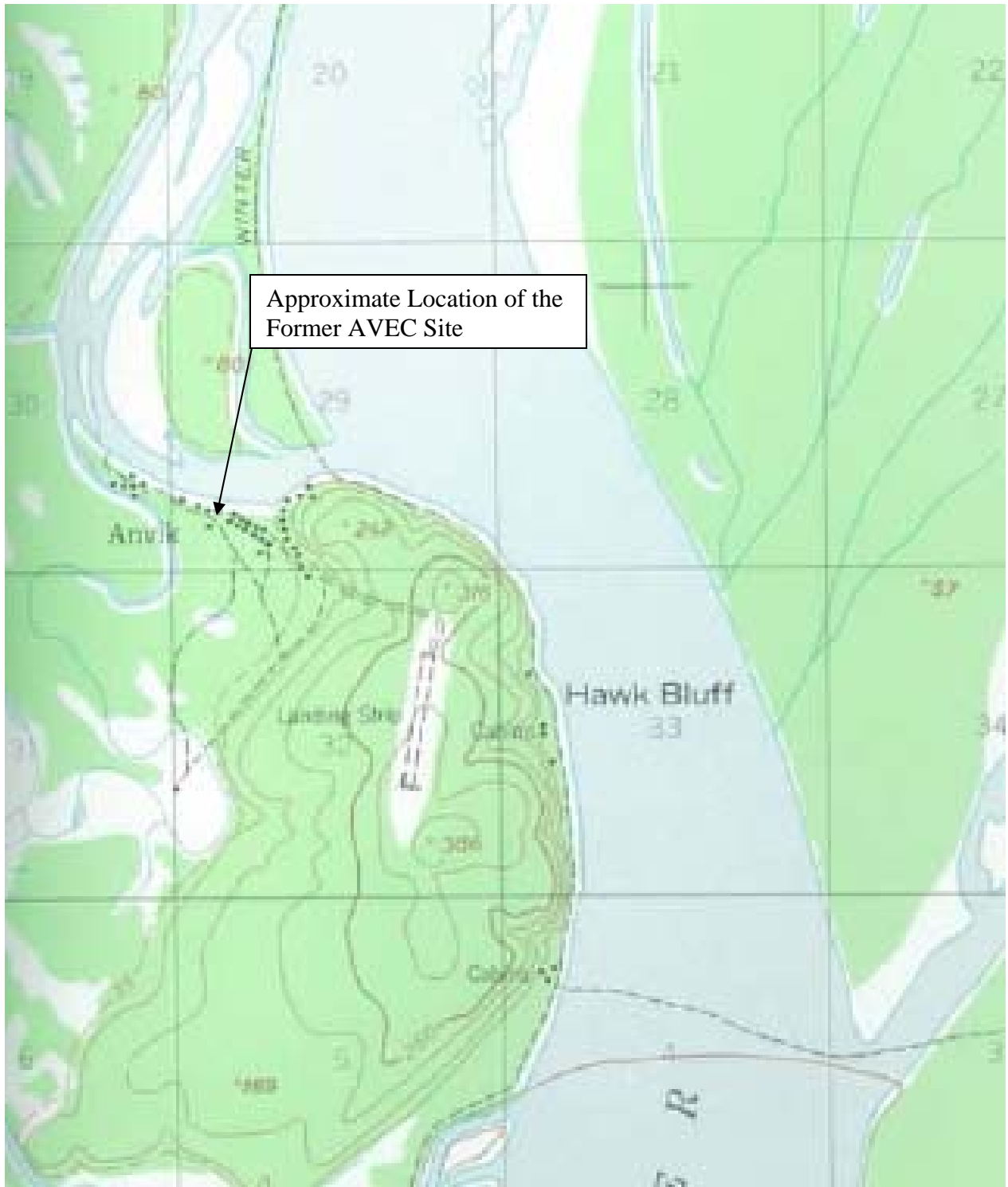


Nick Braman
Environmental Scientist

Reviewed by:



Robert N. Braunstein, C.P.G.
Principal



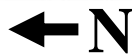
USGS Quadrangle Holy Cross, B-3 (1952)



<p>Anvik Village Phase I Former AVEC Powerplant Anvik Area Map</p>		
BGES, INC.	October 2007	Figure 1



Source: AeroMetric U.S. Approximate Scale: 1 inch = 100 ft.



Former AVEC Power Plant 1959 Aerial Photograph		
BGES, INC.	October 2007	Figure 2



Source: AeroMetric U.S. Approximate Scale: 1 inch = 100 ft.



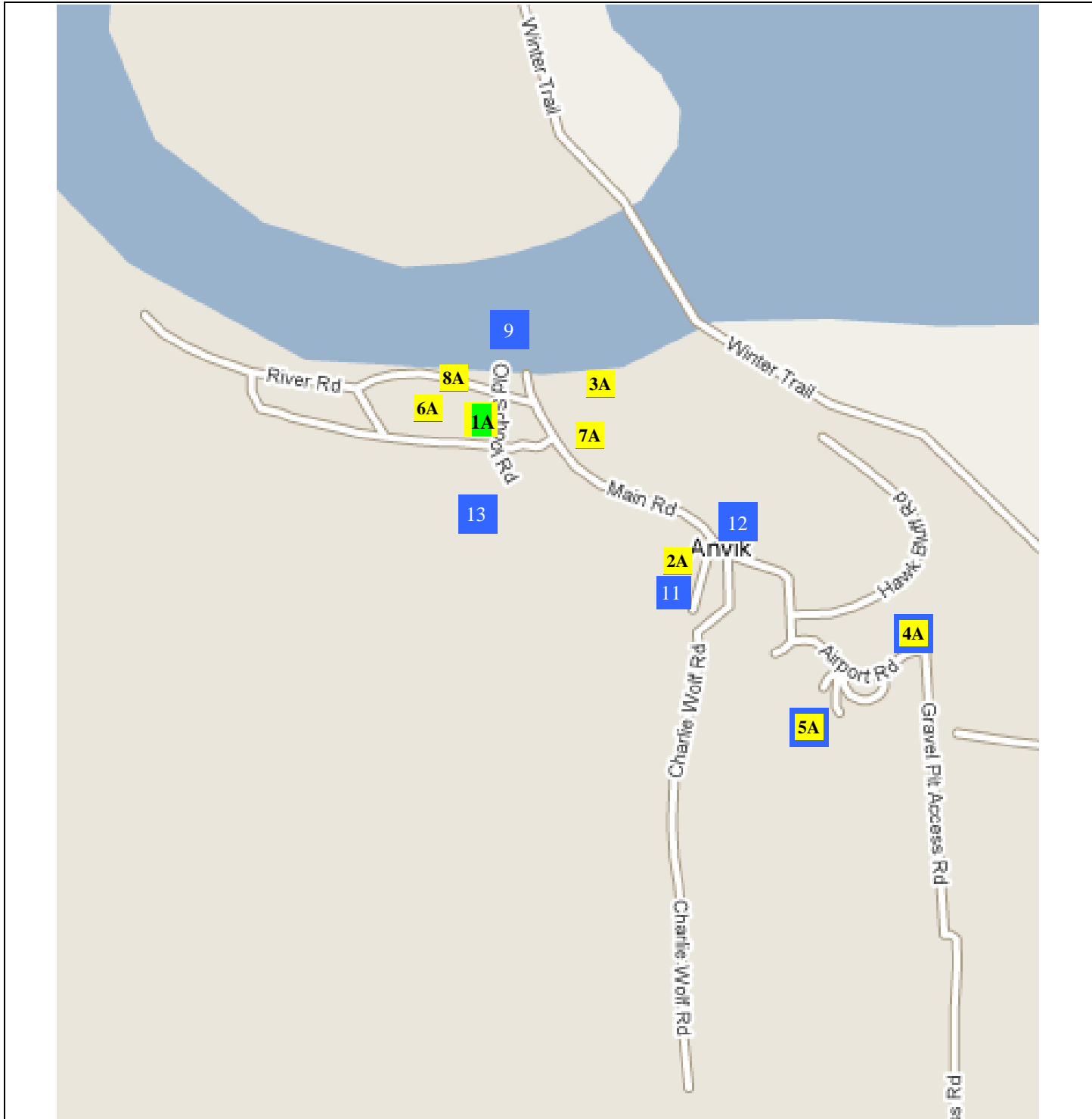
Former AVEC Power Plant May 28, 1983 Aerial Photograph		
BGES, INC.	October 2007	Figure 3



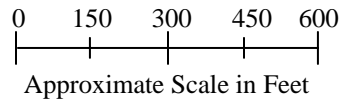
Source: AeroMetric U.S. Approximate Scale: 1 inch = 100 ft.



Former AVEC Power Plant September 22, 1999 Aerial Photograph		
BGES, INC.	October 2007	Figure 4



Note: Site No. 10 – location not specified



KEY

- Subject Property
 - ADEC Contaminated Site; number refers to listing in Table 2
 - ADEC Spills Site; number refers to listing in Table 2
- “A”= Site is an open ADEC LUST or Contaminated site

Former AVEC Power Plant
Anvik, Alaska
**ADEC Contaminated and Spill Sites
Location Map**

BGES, INC.	October 2007	Figure 5
-------------------	---------------------	-----------------

**Former AVEC Power Plant Tank Farm
Anvik, Alaska
ADEC Contaminated and Spill Sites**

Site No.	Contaminated Site Facility	Contaminated Site Location	ADEC Reckey No.	Contaminated Site Information	Contaminated Site Status
1	Anvik Former AVEC Tank Farm	~350 feet south of the Anvik River	2000250129001	The Former AVEC tank farm had a volume of 52,972 gallons. Soil collected from tank area had a concentration of 26,200 ppm DRO and 991ppm GRO.	Contaminated Site Status: Active , Priority: Unranked
2	Old Anvik City Tank Farm	~100 feet to the northeast of the new city clinic.	2000250129006	Former location of the Anvik City tank farm. Hydrocarbon odors were observed, but no analytical samples were collected.	Contaminated Site Status: Active , Priority: Unranked
3	Anvik Commercial Company Tank Farm	~100 feet to the southeast of the Anvik River	2000250129005	The former Anvik Commercial Company tank farm had a volume of 21,835 gallons. Soils collected from a stained area near the tanks had a concentration of 16,200 ppm DRO and 99.7 ppm GRO.	Contaminated Site Status: Active , Priority: Unranked
4	ADOT&PF SREB	Anvik Airport Shop	2004210127401	90 cubic yards of soil were removed and landfarmed at an undisclosed location.	Contaminated Site Status: Active , Priority: Unranked
5	Iditarod Area School Tank Farm	~200 feet southeast of the school	2000250129007	Approximately 3,000 gallons of fuel were spilled. Soil samples contained a concentration of 49,400 ppm DRO and 635 ppm GRO.	Contaminated Site Status: Active , Priority: Unranked
6	Ingalik Native Corporation Tank Farm #1	~250 west of the Anvik River	2000250129002	Tank farm had a total volume of 20,310 gallons. During a flood in 1994 the tanks were floated and spilled their contents. Soil samples collected from this tank farm contained concentrations of 2,570 ppm GRO and 3,750 ppm GRO.	Contaminated Site Status: Active , Priority: Unranked
7	Chase Enterprise Store Tank Farm	~250 feet southeast of the Anvik River	2000250129004	Tank Farm had a total volume of 10,520 gallons. A sample taken from a stained area nearby contained a concentration of 2,780 ppm DRO.	Contaminated Site Status: Active , Priority: Unranked
8	Ingalik Native Corporation Tank Farm #2	~35 feet south of the Anvik River	2000250129003	Tank Farm had a total volume of 9,180 gallons of aviation fuel and gasoline. A soil sample collected from this tank farm contained a concentration of 8,870 ppm DRO and 15,700 ppm GRO.	Contaminated Site Status: Active , Priority: Unranked

**Former AVEC Power Plant Tank Farm
Anvik, Alaska
ADEC Contaminated and Spill Sites**

Site No.	Spills Site Facility	Spill Site Location	Spill Date	Quantity	Status
4	Airport DOT Storage Building	Anvik Airport	2/21/1996	300 gallon diesel	Case Closed
5	Blackwell School	Inside School	10/1/1998	10 gallons diesel	Case Closed
		Blackwell School Day Tank	11/12/1996	200 gallons diesel	Case Closed
9	Anvik and Yukon River	Anvik River	6/14/1999	1 gallon diesel	Case Closed
10	City Road	Not Specified	1/24/1997	10 gallon gasoline	Case Closed
11	Clinic Day Tank	Anvik Clinic	4/27/1998	20 gallons diesel	Case Closed
12	Public Health Service City Shop	Public Health Service City Shop	2/24/1999	180 gallons diesel	Case Closed
			4/23/1998	120 gallons diesel	Case Closed
13	New City Tank Farm	City Tank Farm	8/26/1997	100 gallon gasoline	Case Closed

APPENDIX A
PHOTOGRAPHS



Photograph 1 – Subject Property, Facing South



Photograph 2 – Pipe, South of the Fuel Tank, Looking South



Photograph 3 – Ground Surface Beneath Fuel Tank



Photograph 4 – Possible Stain, East of Boat



Photograph 5 – Possible Stain, North of Boat



Photograph 6 – Neighboring Property to the West, Looking West

**Former AVEC Power Plant
Anvik, Alaska
Property Photographs**

BGES, INC.

October 2007

Figure A-1



Photograph 7 – Neighboring Lot to the West, Looking South



Photograph 8 – Neighboring Lot to the West, Looking South



Photograph 9 – Neighboring Lot to the West, Looking South



Photograph 10 – Neighboring Lot Across Old School Road to the East, Looking East

Former AVEC Power Plant
Anvik, Alaska
Property Photographs

BGES, INC.

October 2007

Figure A-2

APPENDIX B
ADEC CONTAMINATED AND SPILL SITE REPORTS

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Alaska Department of Environmental Conservation

Contaminated Sites Database

Site Report for Anvik Former AVEC Tank Farm

Reckey:	2000250129001	Staff:	Jim Frechione - 9074515175	
File Number:	2405.38.001	Status:	Active	
Site Name:	Anvik Former AVEC Tank Farm	Priority:	Unranked	
Address 1:	~350' S. of Anvik River	Land Owner:	Ingalik Native Corporation	
Address 2:		Legal Description:	SW1/4 Section 29.	
City:	Anvik, AK 99558			
Latitude:	62.656278	Longitude:	-160.20425	Meridian: Seward
Section:	29	Township:	030	Range: 058
Conditional Closure Information:				

Problem: This tank farm is located approximately 350 feet south of the Anvik River and had a total capacity of 52,972 gallons. This is the location of the former AVEC tank farm, which was moved to its new location near the airport in 1997. A vertical BIA style tank is currently situated at this site. The drain plugs at the base of this tank were removed and the tank was empty. The soil sample collected from the site contained 26,200 ppm DRO and 991 ppm GRO. A diesel odor was detected when test holes were made for sample collection in the northern area of the tank farm. The tanks were apparently located in an unlined containment basin constructed of a 2-3 foot high gravel dike topped with sandbags.

Comments:

Glossary/Acronyms

<u>Action Date</u>	<u>Action</u>	<u>Description</u>	<u>DEC Staff</u>
4/21/2003 2:24:35 PM	Site Added to Database	DRO and GRO contamination.	Deborah Williams

4/21/2003 2:40:25 PM	Site Ranked Using the AHRM	Preliminary ranking.	Deborah Williams
7/15/2004 11:54:02 AM	Update	File number changed from 2405.42.002 to 2405.38.001	Sarah Cunningham
11/29/2006	Update	Staff transferred from Pikul to Jaynes.	Aggie Blandford

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Contaminated Sites Database

Site Report for Anvik City Tank Farm

Reckey:	2000250129006	Staff:	Jim Frechione - 9074515175	
File Number:	2405.38.001	Status:	Active	
Site Name:	Anvik City Tank Farm	Priority:	Unranked	
Address 1:	130 mi N of Bethel	Land Owner:	Ingalik Native Corporation	
Address 2:	Anvik Riv, W of Yukon Riv	Legal Description:		
City:	Anvik, AK 99558			
Latitude:	62.653889	Longitude:	-160.195556	Meridian: Seward
Section:	32	Township:	030	Range: 058
Conditional Closure Information:				

Problem: The tank formerly at this location has reportedly been refurbished and moved to the school (capacity of 6,500 gallons). The tank farm is located approximately 100 feet to the northeast of the new city clinic. A 35 ft x 35 ft unlined gravel pad was observed at this location. Field screening results indicate the presence of petroleum hydrocarbons on the surface of the gravel pad but an analytical sample was not collected because of the inability to penetrate the frozen rocky soil more than 1-2 inches with rock hammers.

Comments:

Glossary/Acronyms

<u>Action Date</u>	<u>Action</u>	<u>Description</u>	<u>DEC Staff</u>
4/21/2003 3:49:13 PM	Site Added to Database	Potential DRO contamination.	Deborah Williams
4/21/2003 4:08:13 PM	Site Ranked Using the AHRM	Preliminary ranking.	Deborah Williams

7/15/2004 11:56:25 AM	Update	File number changed from 2405.42.002 to 2405.38.001	Sarah Cunningham
11/29/2006	Update	Staff transferred from Pikul to Jaynes.	Aggie Blandford

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Contaminated Sites Database

Site Report for Anvik Commercial Co. Tank Farm

Reckey:	2000250129005	Staff:	Jim Frechione - 9074515175	
File Number:	2405.38.001	Status:	Active	
Site Name:	Anvik Commercial Co. Tank Farm	Priority:	Unranked	
Address 1:	~100' SE of Anvik River	Land Owner:	Ingalik Native Corporation	
Address 2:		Legal Description:	SW1/4 Section 29.	
City:	Anvik, AK 99558			
Latitude:	62.655	Longitude:	-160.199722	Meridian: Seward
Section:	29	Township:	030	Range: 058
Conditional Closure Information:				

Problem: This tank farm is located approximately 100 feet west of the Anvik River and consisted of four horizontal steel tanks (total capacity of 21,835 gallons). The tanks appear to be empty and not in use. The July 14, 1998 assessment report indicated that a fifth tank was present at that time. A diesel odor was noted in the vicinity of the tanks, and staining was apparent in several areas near the front of the tanks. The soil sample collected from near the dispenser shed contained 16,200 ppm DRO and 99.7 ppm GRO.

Comments:

Glossary/Acronyms

<u>Action Date</u>	<u>Action</u>	<u>Description</u>	<u>DEC Staff</u>
4/21/2003 3:40:05 PM	Site Added to Database	DRO contamination.	Deborah Williams
4/21/2003 3:46:53 PM	Site Ranked Using the AHRM	Preliminary ranking.	Deborah Williams

7/15/2004 11:56:08 AM	Update	File number changed from 2405.42.002 to 2405.38.001	Sarah Cunningham
11/29/2006	Update	Staff transferred from Pikul to Jaynes.	Aggie Blandford

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Spills Database Online Query

Spill Details: DOT ANVIK AIRPORT - 2/21/1996

Facility Name	Street	City	Zip Code
ANVIK AIRPORT DOT STORAGE BUILDING	no address	Anvik	no zip

Facility Type

Air Transportation

Responsible Company	Contact	Address
AK DEPT OF TRANSPORTATION	NO ENTRY, NO ENTRY	no address

Area	Sub Area	Region	Location
Central Alaska	Western Alaska	Iditarod	ANVIK CITY

Substance	Released	Contained	Recovered	Unit
Diesel	300	-	-	Gallons

Causes

Intentional Release

Sources

no source

Reporter's Name	Reporter's Phone	Date Reported
DOT	no phone	2/21/1996

Action	Action Date
Case Closed, No Further Action	8/28/1997
Technical Assistance	no date
Data Problem	no date

Disposal Code	Description
no code	no decription

Comment

No Value - SPNOTE: PUNCTURED TANK WITH LOADER. FIELD VISIT BY BOB CARLSON - MONOTE: No Value

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Contaminated Sites Database

Site Report for ADOT&PF SREB - Anvik

Reckey:	2004210127401	Staff:	Jim Frechione - 9074515175	
File Number:	2405.38.002	Status:	Active	
Site Name:	ADOT&PF SREB - Anvik	Priority:	Low	
Address 1:	Anvik Airport	Land Owner:	ADOT&PF - Fairbanks	
Address 2:		Legal Description:		
City:	Anvik, AK 99558			
Latitude:	62.646389	Longitude:	-160.190556	Meridian: Seward
Section:	32	Township:	030	Range: 058
Conditional Closure Information:				

Problem:	Soil containing DRO up to 6,750 mg/kg and RRO up to 19, 400 mg/kg.
Comments:	90 cubic yards of contaminated soil will be removed. It is proposed that the soil be landfarmed. Prior to landfarming a quarter mile radius must be studied for surface waters and drinking water wells.

Glossary/Acronyms

<u>Action Date</u>	<u>Action</u>	<u>Description</u>	<u>DEC Staff</u>
10/14/2004	Update	Staff completed review of the submitted proposal to screen and landfarm petroleum impacted soil from the snow removal equipment building floor upgrade project into the airport rehabilitation project. DEC issued a letter of non objection for proposed upgrade activities.	David Pikul

10/19/2004 9:09:27 AM	Site Added to Database	DRO, RRO.	Sarah Cunningham
11/10/2004 9:16:00 AM	GIS Position Update	TopoZone Pro. NAD27.	Sarah Cunningham
1/14/2005 2:42:45 PM	Site Ranked Using the AHRM	A quarter-mile radius study will be completed to identify area wells. This may require the site to be reranked.	Sarah Cunningham
11/29/2006	Update	Staff transferred from Pikul to Jaynes.	Aggie Blandford
6/19/2007	Cleanup Plan Approved	A June 2007 work plan submitted by IBC / Nippo Corp (prepared by Tellus) was reviewed by ADEC (Frechione). the plan was approved subject to comments in a June 19, 2007 email to Nippo Corp. Sampling did not need to conform with surface area requirements in LUST procedures manual; a liner was not required to stockpile soil; and a sample plan for stockpile was requested. the contaminated soil was approved for landspreading previously by ADEC (October 2004) following soil characterization data	Jim Frechione

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Spills Database Online Query

Spill Details: ANVIK BLACKWELL SCHOOL INSIDE - 8/19/1997

Facility Name		Street	City	Zip Code	
ANVIK BLACKWELL SCHOOL INSIDE SCHOOL		no address	Anvik	no zip	
Facility Type					
Crude Oil Terminal					
Responsible Company		Contact		Address	
IDITAROD AREA SCHOOL DISTRICT		NO ENTRY, NO ENTRY		no address	
Area	Sub Area	Region	Location		
Central Alaska	Western Alaska	Iditarod	ANVIK CITY		
Substance		Released	Contained	Recovered	Unit
Diesel		10	-	-	Gallons
Causes					
Line Failure					
Sources					
no source					
Reporter's Name		Reporter's Phone		Date Reported	
no name		no phone		no date	
Action				Action Date	
Case Closed, No Further Action				10/1/1998	
Technical Assistance				no date	
Data Problem				no date	
Disposal Code		Description			
no code		no decription			

Comment

No Value - SPNOTE: LEAK OCCURRED IN JUNE. FUMES ARE HEAVY IN SCHOOL. SCHOOL HAS BEEN IN SESSION FOR TWO DAYS. FUEL POOLED IN LIGHT FIXTURE - MONOTE: INSIDE SCHOOL BUILDING

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Alaska Department of Environmental Conservation

Contaminated Sites Database

Site Report for Anvik Iditarod Area School TF

Reckey:	2000250129007	Staff:	Jim Frechione - 9074515175	
File Number:	2405.38.001	Status:	Active	
Site Name:	Anvik Iditarod Area School TF	Priority:	Unranked	
Address 1:	~600' West of Runway	Land Owner:	Ingalik Native Corporation	
Address 2:	~200' Southeast of School	Legal Description:	School Tract.	
City:	Anvik, AK 99558			
Latitude:	62.648333	Longitude:	-160.190444	Meridian: Seward
Section:	32	Township:	030	Range: 058
Conditional Closure Information:				

Problem: This tank farm is located approximately 200 feet southeast of the Anvik School, near the airstrip. The tank farm consists of three riveted steel rail tank cars with the wheels removed situated within a plastic lined dike (total capacity 21,126 gallons). The inside of the dike was covered with 2-6 inches of ice at the time of the visit. The tanks appeared to be empty. Evidence of overfilling was apparent on the three tanks. A strong diesel odor was noted near the rear of the middle tank car. According to Robert Walker, approximately 3000 gallons of fuel were spilled at this tank farm when a valve was inadvertently left open. It is not clear whether the spill was contained inside the dike. A soil sample collected from outside of the dike near a camlock fitting contained 49,400 ppm DRO and 635 ppm GRO.

Comments:

[Glossary/Acronyms](#)

Action Date	Action	Description	DEC Staff
4/21/2003 4:11:00 PM	Site Added to Database	Potential DRO contamination.	Deborah Williams

4/21/2003 4:22:03 PM	Site Ranked Using the AHRM	Preliminary ranking.	Deborah Williams
7/15/2004 11:56:45 AM	Update	File number changed from 2405.42.002 to 2405.38.001	Sarah Cunningham
11/29/2006	Update	Staff transferred from Pikul to Jaynes.	Aggie Blandford

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Spills Database Online Query

Spill Details: ANVIK SCHOOL DAYTANK - 9/30/1996

Facility Name	Street	City	Zip Code
ANVIK IASD BLACKWELL SCHOOL DAY TANK FOR STANDBY G	no address	Anvik	no zip

Facility Type

Crude Oil Terminal

Responsible Company	Contact	Address
IDITAROD AREA SCHOOL DISTRICT	Unknown, Unknown	P.O. BOX 90

Area	Sub Area	Region	Location
Central Alaska	Western Alaska	Iditarod	ANVIK CITY

Substance	Released	Contained	Recovered	Unit
Diesel	200	200	130	Gallons

Causes

Corrosion

Sources

no source

Reporter's Name	Reporter's Phone	Date Reported
CARL JERUE	663-6331	9/30/1996

Action	Action Date
Case Closed, No Further Action	11/12/1996
Final Report	no date
Data Problem	no date

Disposal Code	Description
75	RECYCLED - ENERGY RECOVERY

Comment

No Value - SPNOTE: OIL WENT INTO FABRIC CONTAINMENT WHICH HAS 6" WATER. - MONOTE: No Value

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Alaska Department of Environmental Conservation

Contaminated Sites Database

Site Report for Anvik Ingalik Native Corp. TF#1

Reckey:	2000250129002	Staff:	Jim Frechione - 9074515175	
File Number:	2405.38.001	Status:	Active	
Site Name:	Anvik Ingalik Native Corp. TF#1	Priority:	Unranked	
Address 1:	~250 Feet from Anvik Riv.	Land Owner:	Ingalik Native Corporation	
Address 2:		Legal Description:	SW1/4 Section 29.	
City:	Anvik, AK 99558			
Latitude:	62.656417	Longitude:	-160.20475	Meridian: Seward
Section:	29	Township:	030	Range: 058
Conditional Closure Information:				

Problem: This tank farm is located approximately 250 feet west of the Anvik River with a total capacity of 20,310 gallons. All three tanks are in poor condition with rust visible where the paint had peeled. The tanks appeared to be empty. According to a local source, in 1994 during the Spring flood, the tanks from this tank farm were "floating around," and had spilled their contents. Soil staining was noted near the dispenser end of the three tanks. A soil sample collected from this tank farm contained 2,570 ppm GRO and 3,750 ppm DRO.

Comments:

Glossary/Acronyms

Action Date	Action	Description	DEC Staff
4/21/2003 2:43:26 PM	Site Added to Database	DRO and GRO contamination.	Deborah Williams
4/21/2003 2:53:05 PM	Site Ranked Using the AHRM	Preliminary ranking.	Deborah Williams

7/15/2004 11:54:41 AM	Update	File number changed from 2405.42.002 to 2405.38.001	Sarah Cunningham
11/29/2006	Update	Staff transferred from Pikul to Jaynes.	Aggie Blandford

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Alaska Department of Environmental Conservation

Contaminated Sites Database

Site Report for Anvik Chase Enterprise Store TF

Reckey:	2000250129004	Staff:	Jim Frechione - 9074515175	
File Number:	2405.38.001	Status:	Active	
Site Name:	Anvik Chase Enterprise Store TF	Priority:	Unranked	
Address 1:	SE of Confluence of	Land Owner:	Ingalik Native Corporation	
Address 2:	Village Creek & Anvik Riv	Legal Description:	SW1/4 Section 29. Tract A, Plat No. 99-1.	
City:	Anvik, AK 99558			
Latitude:	62.656694	Longitude:	-160.201222	Meridian: Seward
Section:	29	Township:	030	Range: 058
Conditional Closure Information:				

Problem:	This tank farm is located approximately 250 feet west of the Anvik River and consists of two horizontal steel tanks (total capacity of 10,520 gallons). The tanks appear to be empty. Tank #1 was labeled "GAS" and tank #2 was labeled "STOVE OIL." The tanks appear to be in fair condition. Evidence of overfilling was observed on both tanks. The tanks are situated against a steep slope, which has eroded, covering the back of the tanks with 2 to 5 feet of sandy silt. The soil sample collected from this site was obtained from in front of the tank labeled "STOVE OIL" and contained 2,780 ppm DRO.
Comments:	

Glossary/Acronyms

<u>Action Date</u>	<u>Action</u>	<u>Description</u>	<u>DEC Staff</u>
4/21/2003 3:29:35 PM	Site Added to Database	DRO contamination.	Deborah Williams
4/21/2003 3:36:55 PM	Site Ranked Using the AHRM	Preliminary ranking.	Deborah Williams

7/15/2004 11:55:22 AM	Update	File number changed from 2405.42.002 to 2405.38.001	Sarah Cunningham
11/29/2006	Update	Staff transferred from Pikul to Jaynes.	Aggie Blandford

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Alaska Department of Environmental Conservation

Contaminated Sites Database

Site Report for Anvik Ingalik Native Corp TF#2

Reckey:	2000250129003	Staff:	Jim Frechione - 9074515175	
File Number:	2405.38.001	Status:	Active	
Site Name:	Anvik Ingalik Native Corp TF#2	Priority:	Unranked	
Address 1:	~40' from Anvik River	Land Owner:	Ingalik Native Corporation	
Address 2:		Legal Description:	SW1/4 Section 29.	
City:	Anvik, AK 99558			
Latitude:	62.656639	Longitude:	-160.204806	Meridian: Seward
Section:	29	Township:	030	Range: 058
Conditional Closure Information:				

Problem: This tank farm is situated approximately 35-45 feet west of the Anvik River and consists of two vertical BIA style tanks (total capacity of 9,180 gallons). One of the tanks reportedly contained aviation gasoline and the other contained unleaded gasoline. Three, partially full 55-gallon drums were observed approximately 30 feet to the west of the tanks. The tanks appeared to be empty. The soil sample collected from this tank farm contained 8,870 ppm DRO and 15,700 ppm GRO.

Comments:

Glossary/Acronyms

<u>Action Date</u>	<u>Action</u>	<u>Description</u>	<u>DEC Staff</u>
4/21/2003 3:17:53 PM	Site Added to Database	GRO contamination.	Deborah Williams
4/21/2003 3:25:58 PM	Site Ranked Using the AHRM	Preliminary ranking.	Deborah Williams

7/15/2004 11:55:02 AM	Update	File number changed from 2405.42.002 to 2405.38.001	Sarah Cunningham
11/29/2006	Update	Staff transferred from Pikul to Jaynes.	Aggie Blandford

Report generated: 10/5/2007

[State of Alaska](#) [myAlaska](#) [DEC Staff Directory](#) [CSPWebmaster](#) [SPAR Home](#) [Glossary/Acronyms](#) [Frequently Asked Questions](#) [Photo Gallery](#) [Site Map](#) [Links](#)

Spills Database Online Query

Spill Details: YUTANA BARGE 'F. TURNER' ANVIK - 6/13/1999

Facility Name	Street	City	Zip Code
ANVIK IN YUKON RIVER	no address	Anvik	no zip

Facility Type

Vessel

Responsible Company	Contact	Address
YUTANA BARGE LINES	NO ENTRY, NO ENTRY	no address

Area	Sub Area	Region	Location
Central Alaska	Western Alaska	Iditarod	ANVIK CITY

Substance	Released	Contained	Recovered	Unit
Diesel	1	-	-	Gallons

Causes

Overfill

Sources

no source

Reporter's Name	Reporter's Phone	Date Reported
no name	no phone	no date

Action	Action Date
Case Closed, No Further Action	6/14/1999
Technical Assistance	no date
Final Report	no date

Disposal Code	Description
no code	no decription

Comment

No Value - SPNOTE: No value - MONOTE: No Value

Spills Database Online Query

Spill Details: - 8/22/1996

Facility Name	Street	City	Zip Code	
ANVIK CITY ROADS	no address	Anvik	no zip	
Facility Type				
Vehicle				
Responsible Company	Contact	Address		
INGALIK CORPORATION	NO ENTRY, NO ENTRY	no address		
Area	Sub Area	Region	Location	
Central Alaska	Western Alaska	Iditarod	ANVIK CITY	
Substance	Released	Contained	Recovered	Unit
Gasoline	10	-	-	Gallons
Causes				
Cargo Not Secured				
Sources				
no source				
Reporter's Name	Reporter's Phone	Date Reported		
ANONYMOUS	no phone	8/22/1996		
Action				Action Date
Case Closed, No Further Action				1/24/1997
Technical Assistance				no date
Data Problem				no date
Disposal Code	Description			
no code	no decription			

Comment

No Value - SPNOTE: FUEL DELIVERY TRUCK DROVE AROUND WITHOUT TANK COVERED. FUEL SPLASHED OUT ONTO ROADWAYS. ONGOING PROBLEM. PRP UNCOOPERATIVE. PLANS ARE TO VISIT ALL SITES IN SPRING 97 - MONOTE: No Value

Spills Database Online Query

Spill Details: ANVIK CLINIC - 4/23/1998

Facility Name		Street	City	Zip Code	
ANVIK CLINIC DAY TANK AT REAR OF CLINIC		no address	Anvik	no zip	
Facility Type					
Other					
Responsible Company		Contact		Address	
CITY OF ANVIK		NO ENTRY, NO ENTRY		no address	
Area	Sub Area	Region	Location		
Central Alaska	Western Alaska	Iditarod	ANVIK CITY		
Substance		Released	Contained	Recovered	Unit
Diesel		20	-	-	Gallons
Causes					
Sabotage/Vandalism					
Sources					
Tank, Heating					
Reporter's Name		Reporter's Phone		Date Reported	
no name		no phone		no date	
Action				Action Date	
Case Closed, No Further Action				4/27/1998	
Technical Assistance				no date	
Disposal Code		Description			
no code		no decription			

Comment

No Value - SPNOTE: No value - MONOTE: No Value

Spills Database Online Query

Spill Details: ANVIK PHS CITY SHOP - 3/15/1998

Facility Name		Street	City	Zip Code	
ANVIK PUBLIC HEALTH SERVICE CITY SHOP		no address	Anvik	no zip	
Facility Type					
Maintenance Yard/Shop					
Responsible Company		Contact		Address	
ANVIK PUBLIC HEALTH SERVICE		NO ENTRY, NO ENTRY		no address	
Area	Sub Area	Region	Location		
Central Alaska	Western Alaska	Iditarod	ANVIK CITY		
Substance		Released	Contained	Recovered	Unit
Diesel		180	-	-	Gallons
Causes					
Other					
Sources					
Tank, Heating					
Reporter's Name		Reporter's Phone		Date Reported	
no name		no phone		no date	
Action				Action Date	
Case Closed, No Further Action				2/24/1999	
Technical Assistance				no date	
Final Report				no date	
Disposal Code		Description			
no code		no decription			

Comment

No Value - SPNOTE: No value - MONOTE: No Value

Spills Database Online Query

Spill Details: ANVIK PUBLIC HEALTH SERVICE - 1/26/1998

Facility Name		Street	City	Zip Code	
ANVIK PUBLIC SERVICE TANK		no address	Anvik	no zip	
Facility Type					
Other					
Responsible Company		Contact		Address	
ANVIK PUBLIC HEALTH SERVICE		NO ENTRY, NO ENTRY		no address	
Area	Sub Area	Region	Location		
Central Alaska	Western Alaska	Iditarod	ANVIK CITY		
Substance		Released	Contained	Recovered	Unit
Diesel		120	-	-	Gallons
Causes					
Cargo Not Secured					
Sources					
no source					
Reporter's Name		Reporter's Phone		Date Reported	
no name		no phone		no date	
Action				Action Date	
Case Closed, No Further Action				4/23/1998	
Technical Assistance				no date	
Disposal Code		Description			
no code		no decription			

Comment

No Value - SPNOTE: No value - MONOTE: No Value

Spills Database Online Query

Spill Details: ANVIK YUTANA GAS SPILL - 6/7/1997

Facility Name	Street	City	Zip Code
ANVIK CORPORATION TANK FARM	no address	Anvik	no zip

Facility Type

Crude Oil Terminal

Responsible Company	Contact	Address
YUTANA BARGE LINES	NO ENTRY, NO ENTRY	no address

Area	Sub Area	Region	Location
Central Alaska	Western Alaska	Iditarod	ANVIK CITY

Substance	Released	Contained	Recovered	Unit
Gasoline	100	-	-	Gallons

Causes

Overfill

Sources

no source

Reporter's Name	Reporter's Phone	Date Reported
no name	no phone	no date

Action	Action Date
Case Closed, No Further Action	8/26/1997
Final Report	no date
Data Problem	no date

Disposal Code	Description
no code	no decription

Comment

No Value - SPNOTE: DISGRUNTLED EX-EMPLOYEE REPORTED SPILL THREE WEEKS LATE. SPILL CONFIRMED BY IGNALIK CORP. NOV ISSUED. CORRECTIVE MEMO REQUESTED. - MONOTE: No Value

APPENDIX C
BGES PROPOSAL DATED AUGUST 15, 2007



PHASE I ENVIRONMENTAL SITE ASSESSMENT PROPOSAL

BROWNFIELDS SITE, ANVIK, ALASKA

AUGUST 15, 2007

Submitted to: **MICHAEL GRUNDBERG, ATC ENVIRONMENTAL
COORDINATOR - ANVIK TRIBAL COUNCIL,
ENVIRONMENTAL OFFICE, BROWNFIELDS TRIBAL
RESPONSE PROGRAM**

Submitted by: **BGES, INC.
750 West 2nd Avenue, Suite 104
Anchorage, Alaska 99501
Phone: (907) 644-2900
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Eagle River Office
(907) 696-BGES (2437)

*WWW.BGESINC.COM***

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1.0 INTRODUCTION

BGES, Inc. (BGES) is pleased to present our proposal for conducting a Phase I environmental site assessment (ESA) for a former diesel-electric power generation plant that is located within the city limits of Anvik. It is understood that a containment dike and an abandoned above-ground storage tank remain on the property. BGES has conducted hundreds of Phase I ESAs, with more than 100 completed during the past 24 months. BGES also has experience with the Brownfields program; we are currently completing a site assessment for the Alaska Department of Environmental Conservation (ADEC) at Kwigillingok under the Brownfields program and our term contract with the ADEC.

With this in mind, we have developed this proposal, which is in conformance with American Society for Testing Materials (ASTM) E 1527-05 guidelines, all appropriate inquiry [in accordance with Part 312 of 40 Code of Federal Regulations (40 CFR Part 312)], what we believe to be your expectations, and the local standard of practice. All of the work on this project will be performed by or under the direct supervision of BGES personnel who meet the definition of Environmental Professional as defined in Part 312.10 of Title 40 CFR.

2.0 HISTORY AND DESCRIPTION OF BGES

BGES is a full-service environmental consulting firm located at 750, West 2nd Avenue, in Anchorage, Alaska 99501. Our firm is celebrating its 5th anniversary this year, having been established in 2002, by its current President, Robert Braunstein. Since then, we have grown from two employees to seven employees, with diverse backgrounds. Mr. Braunstein is a Certified Professional Geologist, both nationally and in Alaska, with more than 25 years of geological and environmental consulting experience. In addition to Mr. Braunstein, our staff members have varying backgrounds ranging from biology, to chemistry, to environmental science. BGES provides a wide range of environmental services including the following activities:

- Phase I and II ESAs;
- Remedial design and implementation;
- Preparation of Planning Documents (storm water pollution prevention plans; spill prevention, control, and countermeasure plans; sampling and analysis plans; health and safety plans; environmental protection plans; quality assurance project plans; hazardous materials control plans; etc.);
- Groundwater monitoring programs;
- Underground and aboveground storage tank assessments;
- Lead-based paint and asbestos inspections;

- Hazardous building materials inventories;
- Historical building assessments;
- Environmental data research and statistical analysis;
- Emergency response services;
- Project management and planning; and
- Other ancillary services as required

3.0 BGES QUALIFICATIONS AND EXPERIENCE

3.1 BGES Phase I ESA Experience

BGES has extensive experience in performing Phase I ESAs. As described above, we have completed more than 100 Phase I ESAs during the past two years. In fact, when the State of Alaska Department of Law required Phase I ESAs on several properties in Anchorage during late 2006, they selected BGES, based on our reputation for quality work. Our multiple Phase I ESAs performed for the Great Land Trust, and our multiple research projects conducting for Prince William Sound Regional Citizens' Advisory Council illustrate our experience working with non-profit entities. Some of our more notable Phase I ESA projects are listed below:

- Iccle Seafoods' processing plant in Egegik
- A lodge/bar/restaurant in Soldotna
- A motel/restaurant in Sterling
- A hardware store in Seward
- A former gravel pit in Wasilla
- A housing development in Kodiak
- Two car washes in Anchorage
- An autobody shop in Eagle River
- A fueling station/residential/retail property in Peters Creek
- A former car rental facility in Bethel
- A junkyard in Anchorage
- A metal fabrication facility in Anchorage
- Two former Burger King Restaurants in Eagle River and Soldotna
- A former service station in Tok
- A commercial lot in Palmer
- Four hotels in Anchorage
- A mall in Wasilla
- A 160 acre parcel in Valdez
- A former campground and home in Seward
- A former fish processing facility in Kasiloff
- A car wash in Kenai
- Thirteen undeveloped lots in Kenai
- A large mall in Eagle River
- A 16 acre undeveloped lot in Anchorage

Two examples of our Phase I ESA experience are provided below:

Icicle Seafoods Fish Processing Facility, Egegik, Alaska

BGES has been conducting a site characterization and remediation program at the Icicle Seafoods processing facility in Egegik, Alaska for the past three years, and the project is ongoing. BGES was selected for this project by the Icicle Seafoods, in consultation with the ADEC, who has very closely coordinated all activities through a pre-purchase agreement. Initially, a Phase I ESA was performed of the entire facility. The reconnaissance of the facility took several days to complete because of the magnitude of the plant. As a result of the Phase I ESA, potential asbestos-containing materials that appeared to be in a friable state were identified and subsequently assessed further.

Additional project activities have included advancement of hand soil borings, installation of monitoring wells and piezometers, collection of soil, groundwater, and surface water samples (including water samples in the inter-tidal region of the Egegik River), conduction of a mushroom remediation pilot study (as far as we know this is the first such study conducted in Alaska), and excavation and landfarming of contaminated soils. In some cases, multi-incremental soil sampling has been undertaken, with associated statistical analyses of the data generated by the laboratory. BGES personnel reviewed the entire workings of the processing facility including the wastewater discharge system. We also responded to an emergency, when a diesel spill occurred during our field activities. We also monitored and reported an oil slick that was observed adjacent to the facility in the Egegik River. Activities planned for this summer include additional contaminated soil excavation and land-farming, renovations to the fuel tank farm, and construction of an interception trench to mitigate hydrocarbons seeps that have been observed in the Egegik River.

As evidence of our exemplary performance on this project, we would like to offer the following references: Mr. Mark Denison, Icicle Seafoods, 4019-21st Avenue West, Seattle, WA 98199, Ph: (206) 281-5358; and Mr. Todd Blessing, ADEC, 555 Cordova Street, Anchorage, AK 99501 Ph: (907) 269-7699.

Cook Inlet Housing Authority – Mountain View Revitalization Program

During 2004 through the present, BGES has completed more than 70 Phase I ESAs for Cook Inlet Housing Authority (CIHA) in support of a neighborhood revitalization program. The Phase I ESAs were conducted in accordance with ASTM standards at occupied and unoccupied apartment complexes, single family homes, duplexes, triplexes, four-plexes, and undeveloped lots. BGES conducted research similar to that described below in our scope of work for this project. In addition, we reviewed Polk City Directory

Listings from the earliest available time (1960) through the most recent Directory (2003 through 2006) for the entire community of Mountain View. As is generally routine procedure on all BGES Phase I ESAs, all building materials in every room of every structure, including accessible crawl spaces, were viewed and recorded in our report. Photographs of pertinent building interior and exterior features were also provided in the report, as were photographs of the properties' exterior grounds.

For the 2005 and 2006 Phase I ESAs, BGES provided the client with electronic reports totaling approximately 30,000 pages; thus saving time, money, and natural resources. BGES also provided support to CIHA during selection of the demolition subcontractor, and during follow-up Phase II ESA activities associated with contaminated soils from leaking heating oil tanks. As a result of our Phase I ESAs, approximately 5 wells, one underground storage tank, two aboveground storage tanks, and two dwellings with significant mold (respirators were required during the interior reconnaissance), were noted at the various properties. By providing this information in advance and in a separate summary format, our client was protected from future change orders by the demolition contractor.

The client has been extremely pleased with our services, as indicated by our continued work on the second and third phases of the project, and our recent competitive contract renewal.

As evidence of our exemplary performance on this program, we would like to offer the following reference: Mr. Matt Yeomans or Mr. Jeff Judd, Cook Inlet Housing Authority, 3510 Spenard Road, Suite 201, Anchorage, Alaska, 99503; Matt Yeomans Ph: (907) 793-3036 or Mr. Jeff Judd, Ph: (907) 793-3000.

Hanna Car Care Centers, Muldoon Road and Dimond Boulevard, Anchorage

Extremely successful Phase I and Phase II ESAs were conducted and a groundwater monitoring program is currently being undertaken by BGES at the Hanna Car Care Centers on Muldoon Road and Dimond Boulevard in Anchorage. BGES was initially retained by the former owner, Mr. Tom Snelling, to perform a Phase I ESA at both sites. During our Phase I ESA, we also reviewed another consultant's recommendations for a remediation program with estimated costs exceeding \$100,000 for the Muldoon Road site. Upon careful review, BGES recommended long-term groundwater monitoring at the site as an alternative strategy. In a meeting with the ADEC, the agency not only indicated their approval of this methodology, but their extreme pleasure with the cost savings (the work was being conducted under the ADEC grant program and BGES's recommendations resulted in cost savings of approximately \$100,000).

Work performed by BGES on this project included monitoring well installation (via conventional drilling and also direct-push drilling technology under a canopy), soil boring installation and sampling, soil

stockpile sampling, and semi-annual groundwater monitoring. BGES also coordinated the disposal of solid and liquid wastes that had accumulated at the site during the previous consultant's work. The coordination and disposal of the wastes, the associated reporting, and the invoicing was required to be completed within approximately 72 hours of a request to BGES to accomplish these tasks, because of the impending end of the ADEC grant program. BGES completed all of this required work within this time period.

Illustrating his extreme pleasure with BGES's work on this project, Mr. Snelling has provided us with a letter of recommendation that states:

“During the past 10 years, I have employed the services of five different environmental consulting firms during the course of remediating two different service station locations before employing BGES to complete the unfinished projects. Before beginning to work with BGES, several of the previous firms had already collectively consumed vast amounts of time, orchestrated grandiose remediation plans, and consumed more than a million dollars. With BGES' arrival, things changed quickly, errors in previous methodology were found and in their place, BGES substituted a much more practical and much less expensive approach. In the span of less than four months and at a fraction of the cost that had been previously spent, BGES was able to bring both sites into compliance...Words alone cannot convey my huge appreciation for what BGES was able to quickly accomplish in my case. I strongly recommend them to anyone seeking an economical, no nonsense but truly competent and knowledgeable solution to their environmental problems or concerns...The BGES approach and competency is unmatched in this community, and should therefore be the first choice for anyone looking for environmental answers, solutions and closures...”

In addition, the new owner of the two facilities (the property was sold after BGES was able to gain approval from the ADEC for the long-term groundwater monitoring) was also pleased with BGES' performance and subsequently retained us to continue the groundwater monitoring program. In just the past month, one of the facilities was sold again, and BGES was retained by the newest owner of the property to remove three USTs from the property and associated contaminated soils.

As evidence of our exemplary performance on this program, we would like to offer the following reference: Mr. Tom Snelling, Former Owner, Hanna Car Care Centers, P.O. Box 112163, Anchorage, Alaska Ph: (907) 783-0000.

3.2 BGES Brownfields Experience

BGES' Brownfields experience is exemplified by our ongoing project in Kwigillingok, Alaska, which we are completing under our term contract with the ADEC. The objective of this project is to bring the subject property (a former Bureau of Indian Affairs School site with leaking aboveground storage tanks) to a status, such that its ownership can be transferred to the Village of Kwigillingok for beneficial use.

This project has entailed considerable advance planning including a stakeholder meeting that was coordinated and attended by BGES. Other stakeholders at the meeting included the ADEC's Brownfields Program Coordinator the ADEC Brownfields Program Specialist, the Indian Environmental General Assistance Program (IGAP) coordinator for the Native Village of Kwigillingok, the Project Assistant for the Alaska Department of Early Education Development, the Plant Facilities Manager for the Lower Kuskokwim School District, and several private citizens from the Village of Kwigillingok.

Project activities have included development of decision units and collection of multi-incremental soil samples; collection of discreet soil samples, field screening of the soil samples with a photoionization detector and a PetroFlag test kit, installation and surveying of well points and collection of groundwater samples, collection of surface water samples, laboratory analyses of soil and water samples, reconnaissance of hydrocarbon seeps along the Kwigillingok River, completion of a topographic survey, an inventory of drums and aboveground storage tanks strewn throughout the property, interviews with local residents familiar with the history of the property, and a brief evaluation of the condition of structures on the property. BGES is currently preparing a report of our findings.

As evidence of our exemplary performance on this project, we would like to offer Mr. John Carnahan, ADEC, 610 University Avenue, Fairbanks, Alaska 99709-3643; telephone: (907) 451-2166 and Ms. Sonja Benson, ADEC, 610 University Avenue, Fairbanks, Alaska 99709-3643; telephone (907) 451-2156.

4.0 PERSONNEL QUALIFICATIONS AND EXPERIENCE

BGES personnel are highly qualified to complete the required work. Our proposed Project Manager is Robert N. Braunstein, C.P.G. Mr. Braunstein has more than 25 years of geological and environmental consulting experience. Mr. Braunstein is a Certified Professional Geologist, both in Alaska and Nationally. He has performed or managed hundreds of Phase I ESAs throughout Alaska and the lower 48 States. Mr. Braunstein personally conducted the Phase I ESA at Icicle Seafoods in Egegik and at the former car rental facility in Bethel. He has performed and managed assessments at dozens of other villages of varying sizes throughout Alaska. He is very familiar with multicultural concerns of local persons in remote areas of Alaska.

Depending upon the timing of project activities, the field reconnaissance of the two sites will likely be performed by either Nick Braman or Moana Leirer. Mr. Braman has a B.S. degree in chemistry and more than three years of environmental consulting experience. He has also performed numerous Phase I ESAs in the Anchorage vicinity. Mr. Braman has performed many projects in small villages throughout Alaska;

he was a member of the field sampling team for the Icicle Seafoods project in Egegik for two seasons, and the Kwigillingok Brownfields program, in addition to work in Ekuk (drum hazardous characterization), and Bethel (Phase II ESA). Ms. Leirer has a B.S. degree in environmental science and more than 2 years of environmental industry experience. Ms. Leirer has performed or assisted with approximately 10 Phase I ESAs.

Research for this project will be performed by, or under the direct supervision of Brian Braunstein. Mr. Braunstein has 4 years of experience with environmental site assessments, and has conducted over 100 Phase I ESAs in Alaska, including a large (160 acre parcel) in Valdez. Through this experience, Brian Braunstein has become an expert in conducting Phase I ESA research. Assisting Mr. Braunstein with the research will be Renee Lafata. Ms. LaFata has a B.A. degree in biological science, more than 11 years of environmental consulting experience, and has performed numerous Phase I ESAs in the Anchorage area. She has also been the field team leader for the assessment work performed at the Icicle Seafoods facility in Egegik and the Kwigillingok Brownfields site assessment. She has extensive experience working in villages in Alaska throughout her career. Resumes for BGES personnel mentioned above are included in Appendix A.

5.0 BGES EXPERIENCE WORKING IN REMOTE ALASKAN VILLAGES

As identified above, BGES has considerable experience working in remote Alaskan villages. In addition to many projects in the Anchorage area, and the Phase I ESA project locations throughout Alaska as identified above, we have completed or are currently working on projects in the following locations:

- Kipnuk (transformer sampling)
- Wasilla (Phase II ESA; two storm water pollution prevention plans)
- Seward (test pit excavations)
- Whittier harbor (sediment sampling)
- Chickaloon (Phase II ESA and soils remediation)
- St. Paul (sediment sampling – three projects)
- Circle (storm water pollution prevention plan)
- Palmer (two storm water pollution prevention plans)
- Bethel (Two Phase II ESAs; soil sampling; storm water pollution prevention plan)
- Fairbanks (storm water pollution prevention plan)
- Kodiak (Phase II ESA; emergency response – remediation)
- Skagway harbor (sediment sampling)
- Tanacross (storm water pollution prevention plan review)
- Homer (emergency response – remediation)
- Fort Greely (well installation)
- Egegik (Phase II ESA and site remediation)
- Valdez (dredge sampling)
- Ekuk (asbestos and lead based paint abatement and soil remediation)

- Kenai (Phase II ESA)
- Nikiski (groundwater monitoring)
- Talkeetna (emergency response – remediation; transaction screen; Phase II ESA)
- Elmendorf Air Force Base (soil sampling)
- Prince William Sound (literature review; data management and reporting)
- Kwigillingok (Brownfields assessment)
- Moose Pass (Phase II ESA and site remediation)
- Honolulu Creek (Spill prevention, control, and countermeasure plan)
- Byers Creek (Spill prevention, control, and countermeasure plan)
- Shell Mountain (Spill prevention, control, and countermeasure plan)
- Seldovia (asbestos analysis)

BGES personnel understand the dynamics of multi-cultural features of tribal organizations and villages. Our Project Manager has received multi-cultural diversity training from the U.S. Army Corps of Engineers. Our personnel have worked in many villages throughout Alaska as described above and have experience with Alaska tribal institutions. A notable project was conducted for the Village of Ekuk, where we conducted characterization of numerous drums, asbestos and lead abatement, and disposal of the drums and contaminated soils.

Ms. LaFata, our primary field personnel for this program, has extensive experience working with Native Alaskan organizations. She was a tribal liaison for the Native Village of Tanacross (NVT) from 2001 to 2004. She prepared documents and collected evidence by researching and exploring the Village, and interviewing the elders regarding past historical military events on tribal lands. She documented and prepared a Strategic Project Implementation Plan for the NVT to clean up the Village, which was subsidized by the Federal Government for past actions by the government during World War II. She maintained a residence at the Village during the summer of 2002, and was invited to several potlatches. She represented the NVT at the Native American Lands Environmental Mitigation Program (NALEMP) annual conference in Juneau in 2002. She has attended meetings of the Tanana Chiefs Conference (TCC) regarding the villages along the Alaska Highway, at which the discussion of topics concerning the former CANOL/Haines-Fairbanks pipeline and the herbicides that may have contained dioxins that were applied along the pipeline, and the evaluation of the villages that may have been impacted; took place. She has also worked in Galena, near the Yukon River, collecting samples from a barge that was demolished. The project was performed during the winter, with temperatures reaching 74 degrees below zero. She has additionally performed work for remote villages in Kaktovik, Egegik, Kwigillingok, Kodiak, Afognak, and for the less-remote villages of Bethel, Northway, and Dot Lake.

BGES prepares reports that are complete, and easy to understand. We have facilitated community meetings, and we are experienced at interpreting and presenting information in a manner that is easily

understood by persons with varying professional backgrounds.

6.0 UNDERSTANDING OF PROJECT

It is our understanding that the objective of the Phase I ESA is to identify and evaluate any recognized environmental conditions associated with the subject property from potential on-site and off-site sources. To accomplish this objective, we will work closely with Anvik Tribal Council (ATC) Environmental Department personnel. With this in mind, we have developed the following scope of work for completing this assessment. Following the scope of work, we provide additional information concerning BGES' qualifications, the preliminary project schedule, and a description of costs.

7.0 PHASE I ESA SCOPE OF WORK

Our scope of work includes research, a site visit, and preparation of a report summarizing our findings. During the research phase of our assessment, we will contact numerous entities that may have knowledge of current and/or former site conditions. This information is typically obtained from a subset of the following sources: The Alaska Department of Natural Resources Recorder's office; the tax assessor's office, the Alaska Department of Environmental Conservation's Contaminated Sites, Leaking Underground Storage Tank (LUST), and Registered Underground Storage Tank (UST) databases; the US Environmental Protection Agency's (USEPA) National Priorities List (NPL); The USEPA Enviromapper database; the Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS) database; The USEPA Corrective Action Detail Reports, The USEPA Region 10 Treatment, Storage, and Disposal facilities list, Sanborn Fire Maps, The National Response Center, Polk City Directories; planning and zoning maps; water well surveys; the local electric company, other local utility companies, current and former property owners; community members, tribal officials, other local sources of information (fire department, emergency personnel, etc.); neighboring property owners or occupants; and other persons potentially knowledgeable about the property.

In addition, we will obtain and review relevant information and documentation concerning the subject property, as made available by the ATC Environmental Department personnel. We will procure a title search for the property from a professional title company. If one is held, we will make our personnel available to attend a community and/or Tribal Council meeting during our site reconnaissance. We find this type of venue to be extremely beneficial in gathering historical knowledge about a property.

We will obtain between one and four historical aerial photographs depicting property conditions that may show any pertinent property details. Typically, aerial photographs showing property details before,

during, and after development (if applicable) are reviewed. The photographs will be described in a narrative format in the text, and will be included as figures in the report. After this preliminary research is completed, we will visit the sites and observe the property grounds. During the site reconnaissance, our field personnel will look for evidence of USTs, aboveground storage tanks, drums and other containers, stained soils, stressed vegetation, site drainage patterns, and any other evidence of potential contamination. If a building exists at the subject property, we will walk through the building and record building construction materials, any environmentally sensitive items (the presence of stored chemicals, potential asbestos and lead-based paint in building materials, etc.); and we will look for evidence of fuel storage tanks, such as vent and fill pipes, copper distribution piping, etc. Photographs will be taken to document the property conditions observed at the time of our site visit, and will be included in the report.

Upon completion of the above-described activities, we will prepare a written report of our findings. BGES' reports are very comprehensive and well written. Our typical Phase I ESA reports include the following sections:

- Introduction – includes a description of the property, a summary of our procedures, and a summary of our conclusions;
- Site Description – includes the legal description of the property, the geological and surface description, the vicinity description, past and current usage of the property, and a review of aerial photographs;
- Records Review – includes a discussion of the databases and other information reviewed is provided;
- Site Reconnaissance and Interviews – includes a comprehensive narrative of the interior (if applicable) of buildings and exterior grounds of the property is provided, along with pertinent interviews;
- Findings and Conclusions – includes a summation of our findings (for this project, recommendations for additional work will be provided under separate cover as requested), which will include an opinion of the potential for contamination on the property (recognized environmental conditions will be identified), both from potential on-site and off-site sources;
- Exclusions, Considerations, and Qualifications – includes a description of what was not part of the Phase I ESA scope of work (often sampling of potentially hazardous materials; radon, lead, asbestos, etc.). This section also includes any special considerations (who may rely on the report, special circumstances, etc.). The qualifications of our personnel who worked on the assessment are also provided;
- Figure 1 – includes a topographic map showing the vicinity of the property;
- Figures 2 through 4 or 5 – include historical aerial photographs of the property with the property boundaries shown on an overlay;
- Figure 5 or 6 – includes a map of the vicinity of the subject property and the locations of registered UST sites, contaminated sites, LUST sites, Enviromapper sites, spill sites, National Response Center sites, etc.

- Table 1 – includes Polk City Directory (or equivalent) information as to historical occupancy of properties in the vicinity of the subject property (where available), dating back to the earliest available records;
- Table 2 – includes detailed information concerning the researched sites shown on Figure 5 or 6;
- Appendix A – includes multiple pages of photographs depicting current site conditions;
- Appendix B – includes database printouts of information concerning the sites shown on Figure 5 or 6 and detailed in Table 2;
- Appendix C – includes correspondence concerning the subject property (any faxed responses from utility companies concerning connection dates for the property, title search documents, environmental reports, etc.)
- Appendix D – includes a copy of our proposal, in accordance with ASTM guidelines.

In order to demonstrate what a typical Phase I ESA report, as prepared by BGES, entails; we have included a sample report with limited attachments in Appendix B. Additional materials can be made available to ATC, Environmental Department; upon request.

8.0 EXCLUSIONS

The scope of this Phase I ESA does not include testing for radon, asbestos, or lead, or any other potentially hazardous substance. In addition, we have not included provisions for collecting soil or groundwater samples. These services can be performed concurrently or as follow-up activities to the Phase I ESA as requested.

9.0 SCHEDULE

We have developed the following preliminary project schedule to show our planned progress for project activities. We will provide verbal results to you prior to completion of our report, should any issues of concern become known. Please note that if notice to proceed on the project is received prior to August 31, 2007; scheduled tasks could be completed sooner than as outlined below.

Submission of Proposal	August 17, 2007
Receive Notice to Proceed	August 31, 2007
Conduct Database Research	September 3-7, 2007
Conduct Title Search	September 10-14, 2007
Review Site-Specific Documents Provided by ATC, Environmental Department	September 10-14, 2007
Order Aerial Photographs	September 10, 2007
Conduct Site Reconnaissance and Interviews	September 17, 2007
Participate in Community and/or Tribal Council Meeting	

(if requested)	September 17, 2007
Conduct Additional Interviews	September 18, 2007
Submit Draft Report	September 21, 2007
Receive Comments to Draft Reports from YRITWC	September 25, 2007
Implement Comments and Submit Final Reports	September 28, 2007

10.0 COSTS

We have prepared a cost estimate (included in Appendix C) which shows our estimated costs for completing the work described within this proposal. Our cost estimate assumes that an overnight stay in Anvik will not be required to complete the site reconnaissance activities, and that any transportation that may be required between the subject property and the airstrip will be provided by ATC. We appreciate this opportunity to provide this proposal to ATC, Environmental Department; and we look forward to providing professional environmental consulting services to you.

Prepared by:



Brian R. Braunstein
Environmental Scientist

APPENDIX D
ANVIK TRIBAL COUNCIL AWARD LETTER



**ANVIK TRIBAL COUNCIL
ENVIRONMENTAL OFFICE
BROWNFIELDS TRIBAL RESPONSE PROGRAM**

P.O. BOX 8
ANVIK, ALASKA 99558
PHONE: (907) 663-6352
FAX: (907) 663-6372

*The Anvik Tribal Council is committed to the protection
and preservation of the environment and its natural resources*


Brian R. Braunstein
BGES, INC.
750 W. 2nd Avenue, Suite 104
Anchorage, AK 99501

September 4th, 2007

Dear Mr. Braunstein,

Congratulations! Your firm has been selected to perform Phase I assessment work for the Anvik Tribal Council Brownfields Tribal Response Program. We received 11 proposals for this project, and the BGES proposal was selected on the basis of cost, ESA experience, and the fact that BGES has performed Brownfields Site Assessment activities for the Alaska Department of Environmental Conservation. This Phase I assessment is integral to the Tribal Response Program FY 07 work plan, and will be influential in determining future site specific activities and redevelopment options for the former AVEC power plant site. We look forward to working with your firm on this project. It is vital in the continuation and success of the Tribal Response Program.

Sincerely,


Michael Grundberg
Anvik Tribal Council
Environmental Coordinator

