## JOSEPH GUY COMMUNITY CENTER KWETHLUK, ALASKA

## **DEMOLITION PLAN**

DRAFT March 29, 2012

Prepared for:

## Alaska Department of Environmental Conservation



825 W. 8th Ave. Anchorage, AK 99501

Prepared by:

Lisa Nicholson Project Manager

Reviewed by:

Max Schwenne Partner in Charge

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## ACRONYMS AND ABBREVIATIONS

AST Aboveground storage tank Bethel Bethel Contracting CIS Alaska Community Information System
CoC Chain of Custody
DEC Alaska Department of Environmental Conservation
DRO Diesel-range organics
E&E Ecology and Environment, Inc.
EPAU. S. Environmental Protection Agency
IDW Investigation-derived waste
JSCC Joseph Guy Community Center
PCBs Polychlorinated Biphenyls
PPE Personal protective equipment
QA/QC Quality Assurance/ Quality Control
RRO Residual-range organics
SVOC Semi-volatile organic compound
TAL Target analyte list
TBA Targeted Brownfields Assessment

## 1. INTRODUCTION

OASIS Environmental, Inc., an ERM company (OASIS) was contracted by the Alaska Department of Environmental Conservation (DEC) to demolish a burned building, the former Joseph Guy Community Center (JSCC), in Kwethluk, Alaska and dispose of the building materials, debris, and ash. The project also involves confirmation sampling the footprint of the building removal and management of known petroleum contaminated soil associated with an aboveground storage tank (AST) that served the building. This work plan covers the demolition phase of the project only.

### 1.1. Site Description and Background

The following community and site information was gathered from the Alaska Community Database Community Information Summaries (CIS) and from the 2010 Targeted Brownfields Assessment (TBA) by Ecology and Environment, Inc. (E&E, 2011). Kwethluk is located approximately 12 miles east of Bethel, Alaska on the Kwethluk River, a tributary to the Kuskokwim River (Figure 1). The community lies at 60.81220° North Latitude and -161.435830° West Longitude (Section 05, T008N, R069W, Seward Meridian.) It is a Yup'ik community with a population of 741. The City of Kwethluk provides water treatment, honeybucket, washeteria, and refuse services. Residents haul water for household use.

The community relies on air transportation for year-round freight and passenger service, with a state-owned gravel airstrip and seaplane base. Snowmachine, all-terrain vehicles and skiffs are used for local travel and the river becomes an ice road during the winter.

The 5,000 square-foot JGCC was built between 1998 and 2002 and burned in 2006. It is owned by the Organized Village of Kwethluk and housed the Kwethluk Indian Reorganization Act Council and eight village social services. It was also used for community functions. The center was primarily constructed of metal with steel I-beam supports and joists with corrugated sheet metal walls and roof. The floor was built of combustible materials. The building was built on a raised earthen platform covered by a geotextile liner and polystyrene foam. Interior walls were constructed of particle board and sheet rock.

### 1.2. Brief Site History

In 2010, E&E performed a TBA funded by the U. S. Environmental Protection Agency (EPA). The TBA involved collecting eight surface soil samples from the building exterior for analysis of Target Analyte List (TAL) metals and semi-volatile organic compounds (SVOC). Five of the eight samples were also analyzed for dioxins and furans.

All eight of the samples contained at least one TAL metal result that exceeded DEC cleanup levels. Only six of the twenty TAL metals exceeded cleanup levels including antimony, arsenic, chromium, cobalt, copper, and nickel. None of the samples exceeded DEC or EPA regulatory criteria for SVOC or dioxins/furans.

Eighteen exterior co-located surface/subsurface soil samples were collected and analyzed for TAL metals and SVOC. Six of the samples were also analyzed for dioxins/furans. Two surface soil samples exceeded DEC cleanup levels for SVOC; a sample located on the west side of the building had a bis(2-ethylhexyl)phthalate result of 2.7 mg/kg, exceeding the DEC cleanup level of 1.3 mg/kg; a sample located on the south side of the building had a n-nitroso-di-n-propylamine result of 0.042 mg/kg, exceeding the cleanup level of 0.0011 mg/kg.

Two surface soil samples were collected from the former location of an AST that contained heating oil and analyzed for diesel-range organics (DRO) and residual-range organics (RRO). One of the samples had a DRO result of 9,000 mg/kg, exceeding the DEC cleanup level for DRO of 250 mg/kg.

Eight wipe samples were collected from the interior and exterior building walls and analyzed for dioxins/furans. All of the wipe samples were positive for dioxins/furans. No regulatory criteria exist for wipe samples.

Twelve bulk samples were collected of suspected asbestos containing building materials. No asbestos was present in any of the samples.

#### 1.3. Permitting

The DEC has requested and received concurrence of a "No Historic Property Affected" finding for the Brownfield Cleanup Action from the Alaska State Historical Preservation Office. The U. S. Fish and Wildlife Service provided concurrence that no federally listed or proposed species or designated or proposed critical habitat is present within the work area of this project. Both concurrence letters are included as Appendix A.

#### 1.4. Project Objective

The project objective is to make the JGCC property ready for building a new community center. This project will initiate the process by removing the burned building and all its contents and transporting the materials to the Bethel landfill over an ice road on the rivers between the two villages.

## 2. FIELD WORK

Field work is scheduled for April 3 - 15, 2012. The tasks are listed and described below and methods are explained in the following section. All fieldwork will be conducted and all field and laboratory quality assurance criteria for this project will be performed in accordance with the January 2010 DEC *Draft Field Sampling Guidance*.

### 2.1. General

OASIS is a prime contractor for this project. OASIS' subcontractor, Bethel Contracting (Bethel), will demolish the JSCC and will haul the building materials and building contents to Bethel where they will be disposed of or staged for recycling.

### 2.2. Building Demolition

Bethel will demolish the building. All unburned materials, with the exception of any potentially hazardous materials, such as electronic waste, will be placed in trucks and hauled to the Bethel landfill over the ice road on the Kwethluk and Kuskokwim Rivers. Once everything but ash and small debris has been removed from the building, Bethel will disassemble the metal walls of the building and prepare them for transport by truck to Bethel for recycling.

Any hazardous materials, such as electronics, will be staged in Kwethluk at a location to be provided by the OVK and/or the City of Kwethluk. The building was built in 1998 and should not have any fluorescent light ballasts or transformers containing polychlorinated biphenyls (PCBs).

### 2.3. Investigation-Derived Waste

The investigation-derived waste (IDW) will include the building materials and building contents. The building and its contents will be treated as one waste stream. This waste stream has been determined to be non-hazardous. The DEC has issued a letter concurring with the OVK that the waste and debris generated by this project can be handled as solid waste for disposal (Appendix A).

## 3. QUALITY ASSURANCE

### 3.1. Personnel

This project will be managed and overseen by Lisa Nicholson. Ms. Nicholson will provide oversight of the demolition activities. Bethel will provide heavy equipment, trucking services, and labor to demolish the JSCC and haul the materials to Bethel where they will be disposed of or staged for recycling. No sampling is planned for the demolition activities.

### 3.2. Field Documentation

Field documentation will include photographs showing the demolition activities. OASIS will maintain a permanently bound field logbook that will contain a detailed description of all field activities and log of photographs. Pages will not be removed from any data logbook for any reason. Any corrections will be made by drawing a single line through the original entry, so that the original entry still can be read. The corrections will be written alongside the crossed-out entry. The corrections will be initialed and dated. OASIS will collect copies of all landfill receipts for inclusion in the project report.

## 4. REPORTING

OASIS will prepare a report of the project activities that will include a narrative of the demolition work, figures showing the locations of the JGCC, the ice road, and the Bethel landfill, tables of any potentially hazardous materials staged in Kwethluk, and photographs showing each phase of the demolition. Landfill tipping receipts will be included as an appendix. The demolition work and soil excavation, sampling, and stockpiling to be completed in June 2012 will be combined into one report.

## 5. REFERENCES

Alaska Community Database Community Information Summaries (CIS), 2012. Kwethluk. http://commerce.alaska.gov/dcra/commdb/CF\_CIS.htm

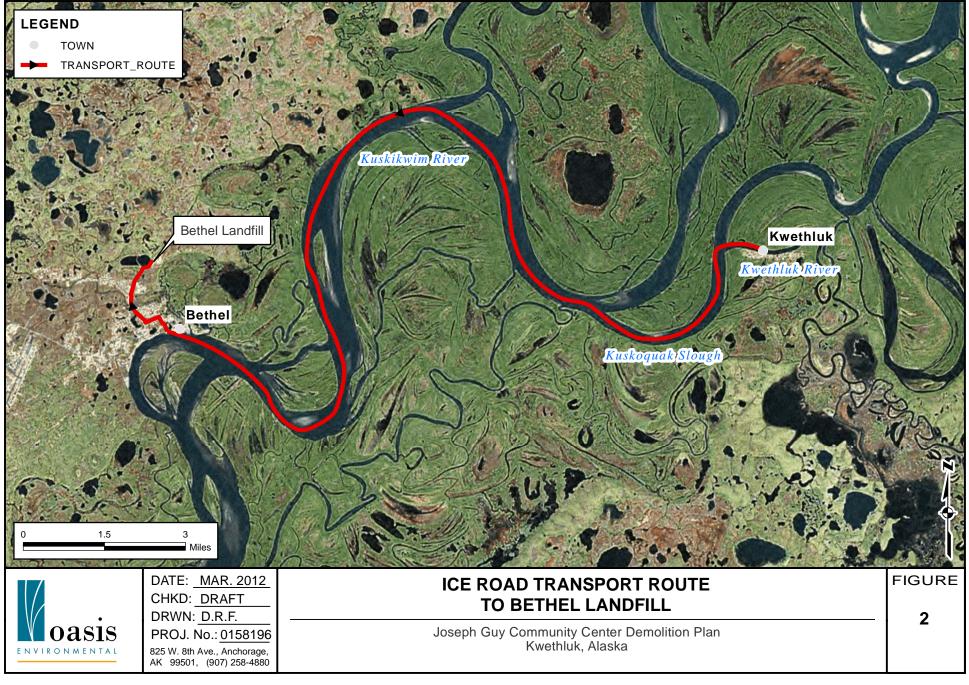
Ecology and Environment (E&E), 2011. Former Joseph Guy Community Center ARRA Funded Targeted Brownfields Assessment, Kwethluk, Alaska. March, 2011.

FIGURES



SOURCE: DCRA COMMUNITY PROFILE MAPS, SEPT. 07 2007, 1 FT. PER PIXEL





## **APPENDIX A**

Letters of Concurrence



# United States Department of the Interior

FISH AND WILDLIFE SERVICE Anchorage Fish & Wildlife Field Office 605 West 4<sup>th</sup> Avenue, Room G-61 Anchorage, Alaska 99501-2249



In reply refer to: AFWFO

August 5, 2011

Ms. Melinda Brunner Alaska Department of Environmental Conservation Contaminated Sites - Reuse & Redevelopment Program 610 University Avenue Fairbanks, AK 99709

Re: ESA Comments on Kwethluk site assessment and cleanup (Consultation number 2011-0182)

Dear Ms. Brunner:

This responds to your email of August 1, 2011, to Ellen Lance, requesting our concurrence that the above-referenced project is not likely to affect any endangered or threatened species. We are providing the following comments pursuant to section 7 of the Endangered Species Act of 1973 (16 U.S.C. 1531 *et seq.* as amended; ESA).

Our records indicate that there are no federally listed or proposed species, or designated or proposed critical habitat, within the action area of the proposed project. Therefore, requirements of section 7 of the ESA have been satisfied, and no further consultation pursuant to ESA section 7 is required at this time. However, you are required to re-initiate section 7 consultation, on behalf of EPA, if project plans change, if a new species is listed, or critical habitat is determined that may be affected by the identified action.

This letter relates only to federally listed or proposed species, and designated or proposed critical habitat under the jurisdiction of the U.S. Fish and Wildlife Service; it does not address species under the jurisdiction of the National Marine Fisheries Service, or other responsibilities under the Fish and Wildlife Coordination Act, Clean Water Act, National Environmental Policy Act, Marine Mammal Protection Act, or Bald and Golden Eagle Protection Act, or other legislation.

Thank you for your cooperation in protecting and enhancing endangered, threatened, and other rare species in Alaska. If you have any questions, please contact me at (907) 271-2768 and refer to consultation number 2011-0182.

Sincerely.

Judy Jacobs Endangered Species Biologist

T:\s7\2011 sec 7\Judy\Completed Consultations\2011-0182 Kwethluk site cleanup concurrence.doc



DEPARTMENT OF ENVIRONMENTAL CONSERVATION DIVISION OF SPILL PREVENTION AND RESPONSE CONTAMINATED SITES PROGRAM **SEAN PARNELL, GOVERNOR** 610 University Avenue Fairbanks, AK 99709-3643 PHONE: (907) 451-5174 FAX: (907) 451-5105 www.dec.state.ak.us

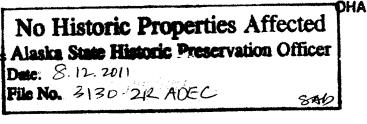
File: 2424.57.001 **RECEIVED** 

August 1, 2011

8.12.2011

AUG 04 2011

Judith Bittner Chief, Office of History and Archaeology Alaska Department of Natural Resource 550 West 7<sup>th</sup> Avenue, Suite 1310 Anchorage, AK 99501-3565



Re: Request concurrence of "No Historic Property Affected" finding for environmental site assessment and clean-up activities at the Former Joseph Guy Community Center in Kwethluk, Alaska

Dear Ms. Bittner:

The Alaska Department of Environmental Conservation (DEC) seeks concurrence that the environmental site assessment and cleanup activities to be performed at the above site will comply with policies of the State Historic Preservation Office. The project is described below. See Figure 1 for a vicinity map of Kwethluk, Alaska. See Photo 1 for an aerial photo of the community with the site labeled.

#### Former Joseph Guy Community Center:

The Former Joseph Guy Community Center (Center) was destroyed by fire in April 2006 (see Photo 2). The Center was built with a combination of federal, state, and private funds between 1998 and 2002 on land owned by the Organized Village of Kwethluk (OVK). The burned-out structure is adjacent to both the post office and Head Start buildings, and is across the street from the Lower Kuskokwim School District school.

The 0.5-acre site is located in Section 5, Township 8 North, Range 69 West, Seward Meridian at 60.810278N, -166.423945W.

The U.S. Environmental Protection Agency (EPA) provided a Targeted Brownfields Assessment (TBA) of the site in 2010, and the report of findings was published in 2011. The limited sampling found three types of soil contamination above cleanup levels at the site: 1) the footprint of the Center is contaminated with Target Analyte List (TAL) metals, 2) the location of the former aboveground storage tank next to the Center is contaminated with diesel range organics, and 3) two locations .

adjacent to the structure's footprint are contaminated with semi-volatile organic compounds.

In order to protect the community from the physical and environmental hazards, the building debris and contaminated soils at the site will be removed so that the property can be reused. The removal area would include the entire footprint of the building plus the three areas outside of the structure where concentrations of contaminants above cleanup levels were detected. The depth for the excavations is estimated at 1 foot, or to the depth of the geotextile liner which was observed at a depth of approximately 6 to 12 inches during field sampling. For the three spots outside the structure slated for excavation, a 10 ft<sup>2</sup> area around each of the sampling locations may be removed to a depth not to exceed 3 to 4 feet. An excavator or backhoe would be used for the soil removal. If contamination is found to exist outside the boundary of excavation in any direction, either through visual observation, presence of an odor, or field screening results, the excavation could continue until all contamination is removed or delineated. It is anticipated that this removal action will be limited in extent.

After the building footprint, location of the former aboveground storage tank, and locations of SVOC contamination are excavated as described above, soil samples would be collected from the areas using hand tools to confirm the success of the cleanup. Either hand shovels/trowels, or small-diameter (up to two inches) slidehammer probes or augers will be used to advance into the subsurface to a maximum depth of five feet. Samples will be collected from the core and the remaining soil material returned to the same hole or location from which it was derived.

If cultural resources are found during digging or other ground altering activities associated with this project, work would be stopped immediately and the Office of History and Archaeology would be consulted regarding the significance of the find and the appropriate actions to be taken.

#### **Project Schedule:**

We intend to complete the field work for this project between September 2011 and May 2012. A unique opportunity to coordinate with the Alaska Native Tribal Health Consortium (ANTHC) for use of their heavy equipment mobilized to Kwethluk for a sewer/water project exists during this timeframe. This coordination would reduce the cost of the site cleanup, enhancing the viability of the venture. Your assistance in meeting this schedule is greatly appreciated.

If you have any questions, please contact me by phone at (907) 451-5174 or via email at melinda.brunner@alaska.gov.

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Alternatively, you can call John Carnahan at (907) 451-2166 or email him at john.carnahan@alaska.gov.

Sincerely,

Menda Brunn

Melinda Brunner Environmental Program Specialist

Attachments: Figure 1, Photos 1 and 2



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

**SEAN PARNELL, GOVERNOR** 610 University Avenue Fairbanks, AK 99709-3643 PHONE: (907) 451-2166 FAX: (907) 451-5105 www.dec.state.ak.us

File: 2424.57.001

#### March 12, 2012

Herman N. Evan, Tribal Administrator Organized Village of Kwethluk Kwethluk Indian Reorganization Act Council P.O. Box 130 Kwethluk, Alaska 99621

Re: Concurrence with Solid Waste Determination for Disposal

Dear Mr. Evan:

Thank you for your letter regarding the clean-up of the Former Joseph Guy Community Center, which is being coordinated between the Alaska Department of Environmental Conservation (DEC), the Alaska Native Tribal Health Consortium, the Organized Village of Kwethluk, and the City of Kwethluk.

Having reviewed the Targeted Brownfield Assessment report (March 2011), and our records of correspondence between DEC's risk assessor and the U.S. Environmental Protection Agency's Resource Conservation Recovery Act specialist, we concur with your determination that the waste and debris generated by the clean-up project can be handled as solid waste for disposal.

Please contact me directly if you have any questions.

Sincerely, John Carnahan

Brownfield Coordinator Environmental Program Specialist

cc: Boris Epchook, City of Kwethluk Lisa Nicholson, OASIS Environmental Michael Roberts, ANTHC Lori Aldrich, DEC

#### City of Kwethluk P.O. Box 50 Kwethluk, Alaska 99621 907-757-6022 Telephone 907-757-6498 Fax kwtocity@unicom-ajaska.com

March 9, 2012

Mr. John B. Carnahan Brownsfield Coordinator-Contaminated Sites Program ADEC Spill Prevention and Response 610 University Avenue Fairbanks, Alaska 99709

Re: Community Center Cleanup Project

Dear Mr. J. Carnahan,

This letter is to follow up our earlier conversation regarding the Community Center Cleanup Project, formerly the Joseph Guy Community Building, and the proposed action plan for debris removal and cleanup of the burned out site.

I appreciate your briefing on the upcoming activities that are to occur during the first week of April 2012 regarding the building and the action plans recommended by the Alaska Native Tribal Health Consortium and the Environmental Remediation Contractor.

The Community of Kwethluk has no objections to the plan for removal of the burned out material and their transportation to a "permitted" landfill, which in this case would be the City of Bethel ADEC Permitted Landfill by means of ground transportation (ice road).

As for the removal and remediation of contaminated soil from the site, the City of Kwethluk, as owner and operator of the landfill, would dedicate a section at the southern end of the community landfill for a cleaning and processing center and site for contaminated soil.

If you have further questions and or concerns, please contact the City Manager, Mr. David Epchook, at the Kwethluk City Office at 907-757-6022 or 907-757-6499.

Respectfully, City of Kwethluk

pchook, Mavor

Cc: Mr. Martin Andrew, President, Organized Village of Kwethluk Mr. Chariton A. Epchook, Chairman, Kwethluk, Incorporated Mr. John Hutchinson, ANTHC, Anchorage Kwethluk Sanitation Committee File