THE STATE of ALASKA
GOVERNOR SEAN PARNELL

Department of Environmental Conservation

DIVISION OF SPILL PREVENTION & RESPONSE
Contaminated Sites Program

610 University Ave
Fairbanks, AK 99709
907-451-2177
907-451-2155

File No: 100.38.233

June 20, 2014

Kit Duke, Associate Vice President
Facilities and Land Management
University of Alaska
1815 Bragaw Street, Suite 101
Anchorage, Alaska 99508

Loana O'Reilly-Rosenblatt
University of Califonia, Los Angeles
Asset Management Department
10920 Wilshire Boulevard, Suite 815
Los Angeles, California 90024

Re: Decision Document: HIPAS Observatory
Cleanup Complete Determination – Institutional Controls

Dear Ms. Duke and Ms. O'Reilly-Rosenblatt:

The Alaska Department of Environmental Conservation, Contaminated Sites Program (ADEC) has completed a review of the environmental records associated with the HIPAS Observatory at 7795 Chena Hot Springs Road (Tax Lot 3604), Two Rivers, Alaska, located about 25 miles east of Fairbanks at Mile Post 26.5 Chena Hot Springs Road. Based on the information provided to date, it has been determined that the contaminant concentrations remaining on site do not pose an unacceptable risk to human health or the environment and no further remedial action will be required as long as the site is in compliance with established institutional controls (ICs).

This decision is based on the administrative record for the HIPAS Observatory which is located in the offices of the ADEC in Fairbanks, Alaska. This letter summarizes the decision process used to determine the environmental status of this site and provides a summary of the regulatory issues considered in the Cleanup Complete with ICs determination.

Site Name and Location:
HIPAS Observatory
7795 Chena Hot Springs Road
Two Rivers, Alaska 99712
Section 36, T1N, R4E, Fairbanks Meridian

Name and Mailing Address of Contact Party:
Kit Duke
University of Alaska
Facilities and Land Management
1815 Bragaw Street, Suite 101
Anchorage, Alaska 99508

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HIPAS Observatory

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ADEC Site Identifiers:
File No: 108.38.233
Hazard ID: 25570

Regulatory Authority for Determination:
18 AAC 75

Site Description and Background

This site was first developed as a radio astronomy observatory (known as Chena Valley Radio) in the 1960's, by the University of Alaska Fairbanks (UAF) Geophysical Insititute, and included a bunkhouse, a garage, and several antennae arrays. Additional development occurred in the 1980s when UAF entered into a joint venture with The University of Califonia, Los Angeles (UCLA) to form the High Power Aurora Stimulation (HIPAS) Observatory. A lease was developed with UCLA in 1985 and the HIPAS facility expanded to approximately 10 buildings and a more than a dozen antennae arrays. Grant-funded research diminished by 2006, and final research was terminated in 2008.

As steps towards terminating the lease, UCLA conducted a Phase I Environmental Assessment in 2008, drum and containerized waste removal in 2009, and equipment, structure, and materials auctions in 2010 and 2011. This included the removal of surface debris and an asbestos-containing exhaust stack for a large electrical generator. A site-wide environmental characterization was conducted in 2010, and final decommissioning and cleanup activites were conducted in 2011 and 2012. At DEC's request, additional site assessment was conducted in 2013 to address exposure pathways where information was lacking.

Seven primary structures were used at the HIPAS facilty: a Bunkhouse, an ATCO unit, a Laser Radar (or LIDAR) Building, a Shop/Garage adjacent to the LIDAR building (LIDAR Garage), a Dipole shed/antenna, a Generator Building, and a Transmitter Building. Additional structures included two trailer structures in a "Boneyard" used equipment storage area, numerous connex boxes at multiple locations, and several modified semi-trailers used for storage. Most of the permanent building structures had aboveground storage tanks (ASTs) for storing diesel/heating oil.

Primary sources of contamination at the site included:

- LIDAR Garage AST;
- LIDAR Building AST;
- LIDAR area abandoned transformer;
- Boneyard area Transformer shed;
- Generator Building AST;
- Generator Buidling floor and pedestals;
- Boneyard Area Equipment Storage Hydraulic Petroleum Oil lubricant (POL) Surface Stain;
- Parts Generator and Heavy Equipment Parking Area POL (Petroleum, Oil and Lubricants) Surface Stain; and
- LIDAR Building Liquid Mercury Telescope.

The property contained five drinking water wells and five on-site septic systems for wastewater. The wastewater systems were decommissioned by removal and backfilling. All drinking water wells were decommissioned and filled with bentonite, in accordance with 18 AAC 80.015(e) and AWWA A100-97, during 2012.

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Contaminants of Concern
During the investigations at this site, soil and groundwater samples were analyzed for gasoline range organics (GRO), diesel range organics (DRO), residual range organics (RRO), volatile organic compounds (VOCs) including benzene, toluene, ethylebnzene, and xylenes (BTEX), polychlorinated biphenyls (PCBs), ethylene glycol, propylene glycol, and Resource Conservation and Recovery Act of 1976 (RCRA) metals including: lead, mercury, arsenic, barium, cadmium, chromium, selenium, and silver. Based on these analyses and knowledge of the source areas, the following Contaminants of Concern were identified:

- DRO
- RRO
- PCBs
- Mercury

Arsenic and chromium were detected above cleanup levels at various soil sampling locations at the site, but were within the range of naturally-occurring elevated concentrations of these metals in native soils, and are considered to be representative of background concentrations.

Groundwater was not investigated at this site, because soil contamination was limited to the vadose zone; no contaminated soil was observed within 15 feet of the groundwater. Groundwater at the site ranged from a depth of 19.9 to 27.2 feet bgs across the site. The deepest contaminated soil was removed from approximately 10 feet bgs at a location where groundwater was at 27.2 feet bgs.

Cleanup Levels
The default soil cleanup levels for this site are established in 18 AAC 75.341, Method Two, Tables B1 and B2 Under 40 inch Zone, Migration to Groundwater.

Contaminant	*Site Cleanup Level (mg/kg)*
• DRO	250
• RRO	11,000
• PCBs	1.0
• Mercury	1.4

Characterization and Cleanup Activities –Petroleum Contamination

Excavations were conducted at the following source areas for petroleum contamination. All soils transported off-site were thermally remediated at Organic Incineration Technologies (OIT, Inc.) in North Pole, Alaska.

LIDAR Garage AST: Approximately 20 cubic yards (cu yds) of soil containing DRO at concentrations up to 431 mg/kg were excavated from beneath the LIDAR Garage AST and temporarily stockpiled on-site. BTEX, RRO and RCRA metals were detected in stockpiled soils, but were below ADEC cleanup

levels. PCBs were not detected in a composite soil sample collected from the stockpile. Stockpiled soils were sent off-site for thermal remediation. Confirmation sampling in the excavation indicated residual DRO was below ADEC cleanup levels.

LIDAR Building AST: Approximately 30 cu yd of soil were excavated from beneath the heating oil AST and building footprint (after building removal) and stockpiled on-site. Confirmation sampling indicated that DRO, RRO, and BTEX compounds were not detected following excavation. Excavated soils were sent off-site for thermal remediation.

LIDAR Area abandoned transformer: Approximately 3 cu yds of surface soils and leaf litter were excavated by hand from a spill from leaking transformer, located north of the LIDAR building. DRO and RRO contamination was present (68,900 and 10,300 mg/kg, respectively). PCBs were not found in contaminetd soils, nor in the transformer oil. Confirmation sampling indicated DRO, RRO, and BTEX compounds were not detected in remaining soils after excavation. Excavated soils were sent off-site for thermal remediation.

Boneyard Area transformer shed: A single electrical transformer was located in a derelict shed within the boneyard storage area. PCBs were detected in the transformer oil (8.68 mg/kg Arclor 1260) and in the shed building materials – both were removed for PCB-containing materials disposal. PCBs were not detectd in three soils samples collected beneath the shed; however, DRO up to 4,580 mg/kg remained in soils underneath the shed, while RRO was detected, but below cleanup levels. Approximetely 10 cu yds of DRO-contaminted soil were excavated and sent off-site for thermal remediation. Confirmation sampling indicated residual DRO was detected in remaining soils, but below the cleanup level.

Boneyard Area equipment storage POL surface soil stain: A POL surface soil stain was idenitified where a trailor-mounted aerial lift had been parked in the Boneyard area. Approximately two cu yds of soil were excavated and stockpiled. Confirmation sampling indicated DRO remained at concentrations slightly above the cleanup level. An additional one cu yd of soil was removed, and confirmation sampling indicated DRO and RRO were below cleanup levels in remaining soils. Stockpiled soils were transported off-site for thermal remediation.

Generator Building AST: Approximately 10 cu yds of DRO-contaminated soils were removed from beneath a bermed and lined 10,000 gallon AST, that supplied fuel for generators located inside the Generator Building, and the building's space-heating boiler. Confirmation sampling indicated residual DRO in remaining soils was below the cleanup level, while GRO, BTEX, and RRO was not detected. At the request of ADEC, additional composite sampling was conducted with the stockpiled materials and analyzed for PCBs. No PCBs were detected in the composite sample; stockpiled soils were transported off-site for thermal remediation.

Generator Building Floor and Pedestals: Approximately 50 cu yds of DRO-contaminated soils were excavated beneath the Generator Building concrete floor slab, and an additonal 2 to 3 cu yds of RRO-contaminated soils were excavated from the perimeter of concrete pedestals on which the diesel generators stood. In addition to DRO and RRO, stockpiled soils were analyzed for GRO, VOCs, RCRA metals, PCBs, and ethleyne and propylene glycol. Only arsenic, DRO and RRO exceeded cleanup levels in excavated soils; no PCBs or glycols were detected. Confirmation sampling indicated remaining DRO and RRO in soils were below cleanup levels. Excavated soils were transported off-site for thermal remediation.

Parts Generator and Heavy Equipment parking area POL surface soil stains: An area of approximately 3 square feet (sq ft) of lubrication oil-contaminted soil was hand-excavated from where a parts generator for auction was temporarily stored near the Generator Building, during equipment removal and cleanup activities. Confirmation sampling indicated remaining soils contained DRO and RRO below cleanup levels. An additional 10 sq ft of POL contaminated soil was removed from where heavy equipment had been parked by persons that removed the Generator Building in 2011. Confirmation sampling indicated remaining soils contained RRO below cleanup levels, while DRO was not detected. Confirmation samples collected from both surface stain locations exceed chromium and arsenic soil cleanup levels, but were consistent with levels being attributed to soil background concentrations for both metals.

Characterization and Cleanup Activities – PCB Contamination

PCBs were detected in transformers and on building materials where dielectric oil had leaked. These materials were removed for off-site non-hazardous waste disposal. At the request of ADEC, additional soil sampling for PCBs was conducted at leach fields of decommissioned septic tanks, located at the Bunkhouse, the LIDAR Building, the Generator Building, and Transmitter Building. No evidence of PCB contamination was found through field screening or laboratory analysis.

Additional PCB sampling was also conducted at areas where doorways were located in former buildings known to house electrical transformers, the transformer pad area, and in locations were electrical equipment was staged prior to off-site dispsosal. ADEC requested sampling at doorways based on PCB contamination patterns observed at other radar and communication facilties across Alaska. Five doorway locations were identied at the former LIDAR Buidling, the LIDAR Garage, the Generator Building, the Transmitter Building, and the trailers located within the Boneyard Area. Soil was hand excavated from three locations and mixed to form a composite sample at each location; similar samples were collected at the transmitter pad and at the electrical equipment staging area. Laboratory analysis indicated that PCBs were not detected in any of the composite soil samples collected.

Characterization and Cleanup Activities – Mercury Contamination

The LIDAR Building contained a 2.7 meter diameter liquid mercury reflecting surface telescope. The liquid mercury telescope was isolated in a separate room from a second floor mezzanine (referred to as the LIDAR Tower), which contained mercury monitoring and other laser control equipment. After removal of the liquid mercury and mercury-containing building materials as hazardous waste, the Lidar Tower was disposed of as demolition waste after Toxicity Characteristic Leaching Procedure (TCLP) testing indicated that this portion of building was non-hazardous waste. The concrete slab foundation of the LIDAR Tower was removed and soils beneath were found to contain mercury above the soil cleanup level along former seams and cracks in the slab. Approximately 10 cu yds of soil and demolition dust and debris were removed, using mercury headspace field screening to guide soil removal activities. Confirmation sampling within the footprint of former building indicated mercury remained in soils, but below the soil cleanup level. Mercury was not detected in confirmation samples collected exterior to the building footprint.

At the request of ADEC, additional surface soil sampling for mercury was conducted around the former LIDAR Tower building footprint, and soil gas sampling for mercury was conducted within the building footprint.. Mercury was not detected in any of the soil samples, except for one sample which was below the soil cleanup level.. Field screening at soil gas sample locations indicated mercury was not detected within the the former building footprint, and laboratory analysis of confirmation samples verified that mercury was not detected at a Limit of Quantification (LOQ) of 0.0024 mg/m^3. This LOQ was below

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EPA's Vapor Intrusion Screening Level (VISL) value of 0.003 mg/m^3 for mercury in soil gas, below which soils are considered safe for residential use.

Cumulative Risk Evaluation

Pursuant to 18 AAC 75.325(g), when detectable contamination remains on-site following a cleanup, a cumulative risk determination must be made that the risk from hazardous substances does not exceed a cumulative carcinogenic risk standard of 1 in 100,000 across all exposure pathways and does not exceed a cumulative noncarcinogenic risk standard at a hazard index of one across all exposure pathways.

Based on a review of the environmental record, ADEC has determined that residual contaminant concentrations are not likely to pose a cumulative human health risk. As a precautionary measure, ADEC has requested recording a Notice of Environmental Cleanup in the property records, and establishment of an IC where ADEC will contact UAF every five years for land ownership information, any additional environmental information should it become available, and notification that further investigation/cleanup should be conducted if additional soil contamination is found at this site. This precautionary IC has been established because persistent compounds, such as mercury and PCBs, may cause impacts to human health and the environment at concentrations below ADEC soil cleanup levels, and municipal zoning designates the land in the site vicinity for agricultural use.

Exposure Pathway Evaluation

Following investigation and cleanup at the site, exposure to the remaining contaminants was evaluated using ADEC's Exposure Tracking Model (ETM). Exposure pathways are the conduits by which contamination may reach human or ecological receptors. ETM results show all pathways to be one of the following: De Minimis Exposure, Exposure Controlled, or Pathway Incomplete. A summary of this pathway evaluation is included in Tables 1.

Table 1 – Exposure Pathway Evaluation

Pathway	Result	Explanation
Surface Soil Contact	De Minimis Exposure	Mercury remains in surface soil at concentrations below the direct contact cleanup levels.
Sub-Surface Soil Contact	De-minimis exposure	DRO, RRO, and BTEX remain in subsurface soil at concentrations below the ingestion or direct contact cleanup levels.
Inhalation – Outdoor Air	De-minimis exposure	DRO, RRO, and BTEX remain in soil below the outdoor inhalation cleanup levels.
Inhalation – Indoor Air (vapor intrusion)	De-minimis exposure	Buildings have been demolished and only partial concrete slabs remain. Remaining concentrations of BTEX do not exceed levels of concern for vapor intrusion. Mercury was not detected in soil gas at 1.6 ft bgs.
Groundwater Ingestion	Pathway Incomplete	Groundwater was not investigated at this site, because soil contamination was limited to the vadose zone and no contaminated soil was observed within 15 feet of the groundwater. Groundwater at the site ranged from a depth of 19.9 to 27.2 feet bgs.
Surface Water Ingestion	Pathway Incomplete	There is no surface water located within ¼ mile of the site.
Wild or Farmed Foods Ingestion	De Minimis Exposure	Mercury remains in surface soil at low concentrations; the likelihood of significant accumulation into wild or farmed foods, including agricultural crops, is considered low. A Notice of Environmental Contamination will be recorded to inform future landowners of the cleanup.
Exposure to Ecological Receptors	De Minimis Exposure	Mercury remains in surface soil at low concentrations; the likelihood of significant accumulation into ecological receptors is considered low.

Notes to Table 1:
De-minimis exposure means that in ADEC's judgment receptors are unlikely to be affected by the minimal volume of remaining contamination.
Pathway incomplete means that in ADEC's judgment contamination has no potential to contact receptors.
Exposure controlled means there is an administrative mechanism in place limiting land or groundwater use, or a physical barrier in place that deters contact with residual contamination.

ADEC Decision

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Remaining contamination in soil is below established default cleanup levels, and ADEC has determined there is no unacceptable risk to human health or the environment. However, this site will be issued a Cleanup Complete - ICs determination subject to the following.

1. Any future change in land use may impact the exposure assumptions cited in this document. If land use and/or ownership changes, current ICs may not be protective and ADEC may require additional remediation and/or ICs. Therefore, ADEC (IC Unit) will contact the University of Alaska every five years to ask for a reporting of documented land use and notification as soon as the University of Alaska becomes aware of any change in land ownership and/or use, any additional environmental information about the site should it become avialbale, and to provide notification that further investigation/cleanup should be conducted additional soil contamination is found at this site.

2. A Notice of Environmental Cleanup (deed notice) shall be recorded in the State Recorder's Office by ADEC that identifies the nature and extent of previous contamination at the property and any conditions that the owners and operators are subject to in accordance with this decision document. A copy of this NEC shall be included in ADEC's administrative file.

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

This determination is in accordance with 18 AAC 75.380(d) and does not preclude ADEC from requiring additional assessment and/or cleanup action if future information indicates that this site may pose an unacceptable risk to human health or the environment.

Appeal
Any person who disagrees with this decision may request an adjudicatory hearing in accordance with 18 AAC 15.195 -18 AAC 15.340 or an informal review by the Division Director in accordance with 18 AAC 15.185. Informal review requests must be delivered to the Division Director, 410 Willoughby Avenue, Suite 303, Juneau, Alaska 99811-1800, within 15 days after receiving the department's decision reviewable under this section. Adjudicatory hearing requests must be delivered to the Commissioner of the Department of Environmental Conservation, 410 Willoughby Avenue, Suite 303, Juneau, Alaska 99811-1800, within 30 days after the date of issuance of this letter, or within 30 days after the department issues a final decision under 18 AAC 15.185. If a hearing is not requested within 30 days, the right to appeal is waived.

Please sign and return *Attachment A* to ADEC <u>within 30 days of receipt of this letter</u>. If you have questions about this closure decision, please contact the ADEC project manager, James Fish at (907) 451-2117.

Jim Fish

Digitally signed by Jim Fish
DN: cn=Jim Fish, o=ADEC, ou=SPAR \CS Program, email=james.fish@alaska.gov, c=US
Date: 2014.06.20 13:06:15 -08'00'

Jim Fish
Environmental Program Specialist

Kit Duke
HIPAS Observatory

June 20, 2014

Attachment A: Cleanup Complete-ICs Agreement Signature Page
Attachment B: Notice of Environmental Cleanup
Attachment C: Site Figures (1-5)

Attachment A: Cleanup Complete-ICs Agreement and Signature Page*

The University of Alaska agrees to the terms of this Cleanup Complete with ICs determination as stated in this Closure Decision Document dated **June 20, 2014** for the HIPAS Observatory. Failure to comply with the terms of this agreement may result in ADEC reopening this site and requiring further remedial action in accordance with 18 AAC 18 AAC 75.380(d).

8.7.14

Signature of Authorized Representative, Title
University of Alaska

UNIVERSITY OF ALASKA
Kit Duke, AVP Facilities and Land Management

Printed Name of Authorized Representative, Title
University of Alaska

Note to Responsible Person (RP):
After making a copy for your records, please return a signed copy of this form to the ADEC project manager at the address on this correspondence within 30 days of receipt of this letter.

Attachment B: Notice of Environmental Cleanup

Notice of Environmental Cleanup

Grantor: State of Alaska
Department of Environmental Conservation
Contaminated Sites Program

Grantee: Facilities and Land Management, 1815 Bragaw Street, Suite 101, Anchorage, Alaska 99508

Legal Description: 7795 Chena Hot Springs Road (Tax Lot 3604; Milepost 26.5)
SECTION 36: S2NE4, N2N2SE4, NE4NE4SW4
TOWNSHIP 1 NORTH, RANGE 4 EAST, FAIRBANKS MERIDIAN, ALASKA

Recording District: Fairbanks

Return to: James Fish, ADEC, 610 University Avenue, Fairbanks, AK 99709

State Business- No Charge

NOTICE OF ENVIRONMENTAL CLEANUP

THIS NOTICE OF ENVIRONMENTAL CLEANUP ("Notice")

As required by the Alaska Department of Environmental Conservation whose address is 610 University Avenue, Fairbanks, AK 99709 ("ADEC"), Grantor, pursuant to 18 AAC 78.625 the University of Alaska, whose address is Facilities and Land Management, 1815 Bragaw Street, Suite 101, Anchorage, Alaska 99508 ("University"), Grantee(s), as the owner of the subject property, hereby provides public notice that the property located at:

7795 Chena Hot Springs Road (Tax Lot 3604; Milepost 26.5) in the Fairbanks Recording District, Fourth Judicial District, State of Alaska and more particularly described as:

SECTION 36: S2NE4, N2N2SE4, NE4NE4SW4
TOWNSHIP 1 NORTH, RANGE 4 EAST, FAIRBANKS MERIDIAN, ALASKA

("Former HIPAS Observatory Site").

The University of California at Los Angeles ("UCLA") has continuously occupied the Former HIPAS Observatory Site since 1981. UCLA and the University signed the most recent Lease concerning the Former HIPAS Observatory Site on April 2, 2001. On July 14, 2008, UCLA gave notice to the University that it was terminating the Lease. Under the terms of the Lease, UCLA was required to clean up the Former HIPAS Observatory Site upon termination. UCLA employed NORTECH, Inc., a qualified entirety as required under 18 AAC 75.360, to conduct and supervise the cleanup efforts on the Former HIPAS Observatory Site. All required sampling and testing has been completed as well as all fieldwork.

The University and ADEC now provide public notice that the Former HIPAS Observatory Site has been subject to a discharge or release of oil or other hazardous substances regulated under 18 AAC 78, revised as of April 8, 2012, at multiple locations. Contaminants of concerns included:

Petroleum hydrocarbons,
Polychlorinated biphenyls (PCBs), and
Mercury.

The HIPAS Observatory Site has been the subject of a subsequent cleanup as required by 18 AAC 75, Article 3. The Former HIPAS Observatory Site cleanup actions are documented in the ADEC's contaminated sites database under Hazard I.D. 25570 and file number 100.38.233. All known remaining or residual contamination after cleanup is below ADEC's migration to groundwater cleanup levels.

All known contamination has been addressed by the cleanup efforts of UCLA. ADEC approves the cleanup of Former HIPAS Observatory Site as being protective of human health, safety,

welfare and the environment. No further cleanup is necessary at the Former HIPAS Observatory Site unless ADEC determines, based on future information or discovery of new or previously unknown contamination, that the Former HIPAS Observatory Site poses an unacceptable risk to human health, safety, welfare or the environment. The release and cleanup are documented in the Alaska Department of Environmental Conservation (ADEC) contaminated sites database at http://www.dec.state.ak.us/spar/csp/db_search.htm under Hazard ID number 25570.

Therefore ADEC has issued a written determination (attached hereto as "Exhibit A") that the environmental cleanup is complete, with institutional controls, and subject only to a future ADEC determination under 18 AAC 75.380(d)(1) that further cleanup efforts are necessary to protect human health, safety or welfare or the environment. The Institutional Controls will assume the form of this informational Notice of Environmental Cleanup, with stipulations that:

1. Any future change in land use may impact the exposure assumptions cited in ADEC's closure document. If land use and/or ownership changes, current ICs may not be protective and ADEC may require additional remediation and/or ICs. Therefore, ADEC (IC Unit) will contact the University of Alaska every five years to ask for a reporting of documented land use and notification as soon as the University of Alaska becomes aware of any change in land ownership and/or use, any additional environmental information about the site should it become available, and to provide notification that further investigation/cleanup should be conducted additional soil contamination is found at this site.

2. This Notice of Environmental Cleanup (deed notice) shall be recorded in the State Recorder's Office by DEC that identifies the nature and extent of previous contamination at the property and any conditions that the owners and operators are subject to in accordance with this decision document. A copy of this NEC shall be included in DEC's administrative file.

For documentation on past cleanup activities, prospective users are able to review information on file at the ADEC office in Fairbanks, Alaska; see Contaminated Sites Program file number 100.38.233 for the site named *HIPAS Observatory*.

Signature of Authorized ADEC Representative

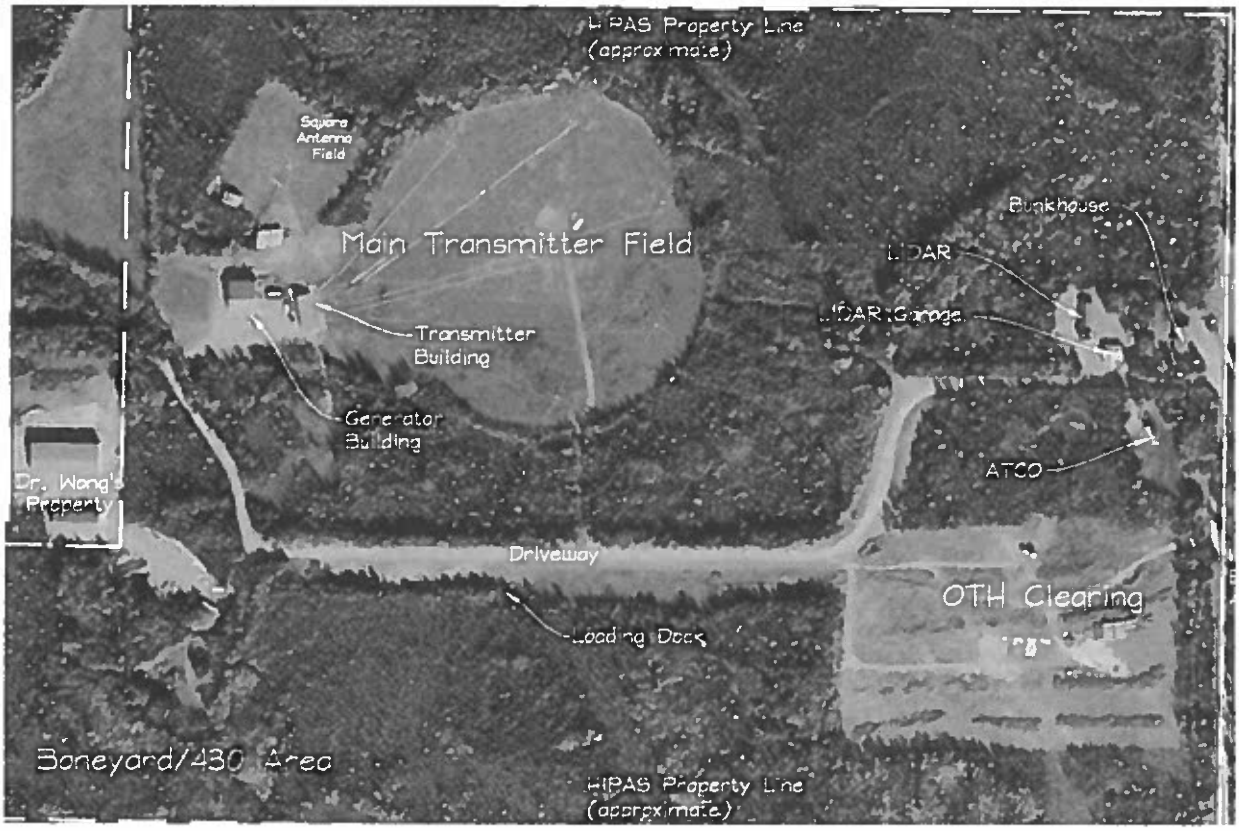
5/12/14

Date

Attachment C: Site Figures

1) HIPAS Observatory Site

2) ***Major Structures at the HIPAS Observatory Site***



3) *Source areas of Petroleum Contamination at the HIPAS Observatory Site*

KEYED NOTES

P1 LIDAR Garage AST, Loader and Drum
-Clean closure achieved for this site.
-See Figure 05c for details.

P2 LIDAR Heating Oil Tank
-Clean closure achieved for this site.
-See Figure 05a for details.

P3 LIDAR Abandoned Transformer
-Clean closure achieved for this site.
-See Figure 05b for details.

P4 Boneyard Transformer Shed
-Clean closure achieved for this site.
-See Figure 06b for details.

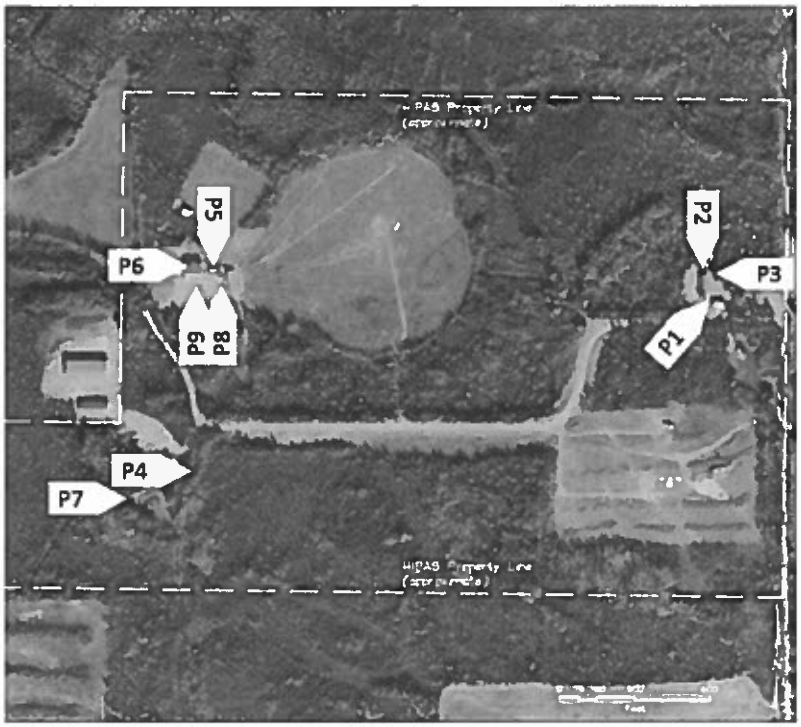
P5 Generator Diesel AST
-Clean closure achieved for this site.
-See Figure 06a for details.

P6 Generator Pedestal and Floor
-Clean closure achieved for this site.
-See Figure 07 for details.

P7 Boneyard Hydraulic Stain
-Clean closure achieved for this site.
-See Figure 06a for details.

P8 Parts Generator Surface Stain
-Clean closure achieved for this site.
-See Figure 06b for details.

P9 Heavy Equipment Surface Stain
-Clean closure achieved for this site.
-See Figure 06c for details.



4) ***Areas investigated for PCB Contamination at the HIPAS Observatory Site***

5) ***HIPAS Lidar Building where Mercury Contamination was located***