



**TATALINA LRRS  
ALASKA**

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**ADMINISTRATIVE RECORD  
COVER SHEET**

AR File Number 55

**TECHNICAL DOCUMENT TO SUPPORT  
INSTALLATION RESTORATION DECISION**

**PART I**

**DECLARATION**

**SITE NAME AND LOCATION**

Installation Restoration Program Site DP-005, which includes Hardfill No. 2, the Northeast Landfill, and Morrison-Knudsen (MK) Debris Site, at Tatalina Long Range Radar Station (LRRS), Alaska.

**STATEMENT OF BASIS**

This decision is based on information contained in the Administrative Record, including but not limited to the results of Installation Restoration Program (IRP) Records Search, Technical Support Document for Record of Decision, Preliminary Assessment, Site Inspection study, and a Remedial Investigation (RI) completed in 1997 at the Tatalina LRRS, Alaska, with reports dated 1985, 1988, 1991, 1993, and 1998, respectively.

This Decision Document (DD) presents the selected remedial actions for the above listed site. This DD has been developed in accordance with the Defense Environmental Restoration Program, 10 *United States Code* (USC) 2701, consistent with the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), 42 USC 9601 and Executive Order 12580 (*52 Federal Register* 2923), and to the extent practicable with the National Oil and Hazardous Substances Pollution Contingency Plan (*40 Code of Federal Regulations* 300).

**ASSESSMENT OF THE SITE**

IRP Site DP-005 received construction and demolition debris from the WACS and MAR site in the 1970s and 1980s. The estimated depth of cover is approximately 2 to 6 feet. On the basis of the 1997 RI and risk assessments conducted at IRP Site DP-005, there are currently no contaminants of concern (COC) at this site and there is no need for further remedial action. This determination is protective of human health and the environment and complies with Applicable or Relevant and Appropriate Requirements (ARARs) for the site.

**DESCRIPTION OF THE SELECTED REMEDY**

Based upon investigations conducted at IRP Site DP-005 to date, there is presently no unacceptable risk or threat to public health or the environment. Therefore, the selected remedy for IRP Site DP-005 is no further action under CERCLA. Institutional control in the form of notice in land records will be developed by the Air Force, with ADEC concurrence, for waste left in place and within a base master plan. The State of Alaska supports and concurs with the selected remedy of no further action.


Visual inspections of cover material will be conducted and documented over a 5 year period (the first, third, and fifth years) to check that no erosion of the cover is occurring. After the

last inspection, a 5-year review will be conducted to review the results of the inspections. If the cover material has remained in good condition, no further inspections will be required.

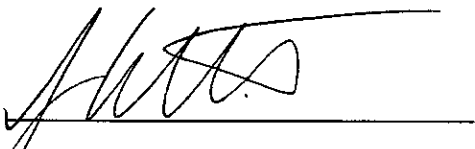
**DECLARATION AND STATUTORY DETERMINATIONS**

The selected remedy is protective of human health and the environment, complies with federal and state requirements that are legally applicable or relevant and appropriate, and is cost-effective. The statutory preference for treatment is not satisfied because treatment was not found to be necessary. Contaminant levels at the site have been determined to present no unacceptable threat to human health or the environment; thus, no treatment is necessary.

This decision may be reviewed and modified in the future if new information becomes available which indicates the presence of previously undiscovered contamination or exposure routes that may cause a risk to human health or the environment.

  
MICHAEL M. WYKA, Colonel, USAF  
Commander, 611<sup>th</sup> Air Support Group  
United States Air Force

17 Jan 01  
Date

  
Jennifer Roberts  
Contaminated Sites Section Manager  
Alaska Department of Environmental Conservation

Nov 21 2000  
Date

**PART II**  
**DECISION SUMMARY**  
**for**  
**SOURCE AREA DP-005**  
**(Hardfill No. 2, Northeast Landfill, MK Debris Site)**  
**at**  
**TATALINA LONG RANGE RADAR STATION, ALASKA**  
**FEBRUARY 1999**

This Decision Summary provides an overview of the No Further Action determination for Source Area DP-005 at Tatalina Long Range Radar Station (LRRS), Alaska. This Decision Document presents the physical features of the site, the contaminants present, and the associated risks to human health and the environment. It also describes the rationale for a no further action determination and states how the determination satisfies requirements of the Defense Environmental Restoration Program, 10 *United States Code* (USC) 2701, consistent with the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), 42 USC 9601 and Executive Order 12580, and the National Oil and Hazardous Substances Pollution Contingency Plan.

The U.S. Air Force (USAF) completed a Remedial Investigation (RI) at DP-005 to provide information regarding the nature and extent of contamination in the soils. A baseline Human Health Risk Assessment and Ecological Risk Assessment were developed and used in conjunction with the RI to determine the need for remedial action. The RI and risk assessments were completed for Alaska Department of Environmental Conservation (ADEC) review and approval. On the basis of the results of the RI and risk assessments, it has been determined that no unacceptable risk or threat to public health or the environment exists. Therefore, there is no need for remedial action under CERCLA. Complete details regarding the remedial investigation and risk assessment methodology and results are included in the *Tatalina Long Range Radar Station Remedial Investigation Report* (October 1998).

## **1.0 SITE NAME, LOCATION, AND DESCRIPTION**

The Tatalina LRRS is in the upper Kuskokwim River area, 240 miles northwest of Anchorage. The nearest settlement is Takotna (population of 58), a community about 6 miles by road north of the Tatalina LRRS. The larger community of McGrath (population of 441) is about 20 air miles east. Figure 1 shows the location of the Tatalina LRRS and surrounding communities within southcentral interior Alaska. (Figures are provided at the end of Part II.)

The Tatalina LRRS is owned by the U.S. Government and is under the jurisdiction of the USAF. It is one of many communication installations owned by the USAF as part of a defense communication network and aircraft warning system across Alaska. It consists of 4,968 acres at the base of Takotna Mountain, on the eastern flank of the Kuskokwim Mountains. The Tatalina LRRS consists of four distinct areas: Upper Camp on Takotna Mountain, Lower Camp, Airstrip, and Sterling Landing. Figure 2 shows the general layout of the Tatalina LRRS.

The Tatalina LRRS was established in November 1952 as the Tatalina Air Force Station. It was one of the 10 original Aircraft Control and Warning systems in Alaska. In 1957, a White Alice Communications System (WACS) was established at Upper Camp and operated continuously from 1957 until 1979. In 1979, a satellite earth terminal owned by AT&T Alascom replaced communications at the Tatalina WACS, which was deactivated. Several additional system upgrades and personnel changes have occurred at the Tatalina LRRS. The most recent reduction in personnel occurred in 1985, when the Minimally Attended Radar (MAR) was activated. Currently, six people live onsite at the Tatalina LRRS at the Lower Camp to monitor and maintain the facilities. There are no current plans to change the land use status at the installation from USAF ownership. The land surrounding the installation is owned by several Native corporations. The Sterling-Ophir Highway, which extends from the community of Takotna to the Sterling Landing at the Kuskokwim River, runs through the installation. This road has a 100-foot right-of-way for private and public use.

Site DP-005 is located on top of Takotna Mountain at Upper Camp and consists of three separate former landfill areas situated north of the existing MAR building. The landfills have been designated as Hardfill No. 2, Morrison-Knudsen (MK) Debris area, and the Northeast Landfill and are shown in Figures 2 and 3.

## **2.0 SITE HISTORY AND ENFORCEMENT ACTIVITIES**

### **2.1 SITE HISTORY**

The three former landfills at DP-005 received construction and demolition debris from the WACS and MAR site in the 1970s and 1980s. Hardfill No. 2 received demolition debris from the WACS and MAR sites in 1984. The MK Debris area was a former disposal site for debris associated with the MK construction camp that existed during the early years of Upper Camp construction and operation. The Northeast Landfill also was used during the early days of Upper Camp operations for disposal of non-hazardous debris from the WACS and MAR sites. The USAF has conducted partial cleanups of material that had been disposed of in the past at these two landfill areas. The cleanup included removal of buried asbestos waste and disposal in permitted landfills at Lower Camp. The estimated depth of cover is approximately 2 to 6 feet.

## 2.2 REGULATORY AND ENFORCEMENT ACTIVITIES

The Hardfill No. 2 area was first identified as Installation Restoration Program source area 13 during a Phase I Records Search (1985). A Technical Support Document for Record of Decision in 1988 recommended no further action for the site. Hardfill No. 2 was also evaluated during the Preliminary Assessment in 1991 and received a no further action recommendation. Two additional former construction debris disposal sites, the MK Debris area and Northeast Landfill, were added to DP-005 along with the Hardfill No. 2 site for a 1997 RI.

## 2.3 COMMUNITY RELATIONS ACTIVITIES

Past hazardous waste investigations and cleanup activities at the Tatalina LRRS have been documented in several USAF reports. These reports are listed and summarized in the *Tatalina Long Range Radar Station Remedial Investigation Report* (October 1998). An administrative record has been established at the USAF 611 Civil Engineering Squadron. A community relations program was initiated by the USAF for the Tatalina LRRS, the *Community Relations Plan* was produced (June 1997); and a community relations meeting was held in May 1997 in Takotna, Alaska, before the RI field investigation. The Proposed Plan was distributed for public review in February 1999. The public comment period was from February 18, 1999, to March 19, 1999. A community meeting in Takotna was held on February 18, 1999, to discuss the results of the RI and the Proposed Plan. Responses to all comments received on the Proposed Plan are presented in the Responsiveness Summary provided in Part III, and a copy of the administrative record index is provided in Appendix A.

## 3.0 SITE CONTAMINATION AND RISKS

### 3.1 REMEDIAL ACTION OBJECTIVES

As part of the 1997 RI, remedial action objectives (RAOs) were developed for all source areas at the Tatalina LRRS. The RAOs were presented in the *Remedial Investigation/Feasibility Study Work Plan, Tatalina LRRS* (1997) and were developed along with preliminary applicable or relevant and appropriate requirements (ARARs), to-be-considered (TBC) criteria, and a conceptual site model. RAOs were established that were protective of human health and the environment and complied with ARARs as defined in current state and federal regulations. The information used to establish RAOs included site-specific data from the RI about contaminants detected in the baseline risk assessments, safety and logistical considerations for mobilizing to the remote site for additional investigation and remedial activities, and costs associated with further action relative to the benefit derived at a remote site. Additional consideration also was given to the length of time contaminants may have been present at the site and to the fact that most of the sources of the contamination, such as fuel storage tanks, were removed as early as the 1980s.

The baseline risk assessment included screening of contaminants for both human health and ecological risks. The screening levels used for the human health risk assessment represented cancer risks of  $1 \times 10^{-5}$  for an individual chemical,  $5 \times 10^{-5}$  for all chemicals for an exposure route, and  $1 \times 10^{-4}$  for all chemicals across all exposure routes. Hazard indexes of 1.0 for individual chemicals and 10.0 cumulative per exposure pathway were used to screen non-carcinogens. In the ecological risk assessment, concentrations of detected chemicals were

compared to critical toxicity values for representative species. Hazard quotients of less than or greater than 1 were calculated for toxicity and risk screening.

Chemical-specific ARARs and TBC criteria used for establishing RAOs included ADEC regulations for cleanup of hazardous substances (Title 18, Chapter 75, of the *Alaska Administrative Code* [AAC]), U.S. Environmental Protection Agency (EPA) spill cleanup policy for polychlorinated biphenyls (PCBs) (Title 40, Part 761.120-135, of the *Code of Federal Regulations*), and water quality standards (18 AAC 70; federal Clean Water Act) and risk management standards developed in the baseline human health and ecological risk assessment. In addition, draft hazardous substances cleanup regulations in 18 AAC 75 were used to estimate soil and groundwater cleanup levels for several organic and inorganic contaminants, including petroleum hydrocarbons. The draft regulations used during the RI were promulgated and became effective January 22, 1999. The promulgated regulations did not result in any changes to the RI results, conclusions, or recommendations. The Tatalina LRRS RI used Method 2 (Tables B1 and B2) of the 18 AAC 75 cleanup standards to propose maximum allowable petroleum hydrocarbon cleanup levels for sites at the Tatalina LRRS Upper Camp that have less than 40 inches of rainfall and pose no potential threat to groundwater.

Groundwater that may exist at Upper Camp is not considered a drinking water source by application of 18 AAC 75.350. Specific criteria to demonstrate the groundwater is not a drinking water source are discussed below.

1. No groundwater aquifer was encountered during the RI at Upper Camp, where bedrock was encountered at an average 4-foot depth at all but one sampling location. The Upper Camp is located at the top of Takotna Mountain, which is the top of a granite-diorite pluton. The area is rocky and exposed. A locally absent, thin gravelly residuum overlies the shallow bedrock. Outcrops of bedrock are common. Upper Camp is located at an elevation of 3200 feet. From the top, the terrain descends to an elevation of 1,250 feet at Lower Camp over a distance of approximately 1 mile.
2. There are no drinking water sources at Upper Camp and groundwater that may exist at this location is not within a zone of contribution of an active private or public drinking water system.
3. The nearest drinking water is the Tatalina LRRS gallery system located on the east side of Lower Camp, approximately 1 mile from Upper Camp on Takotna Mountain. Results of the RI did not indicate any direct groundwater or surface water connection from Upper Camp to the water gallery.
4. The groundwater that may exist at Upper Camp is not within a recharge area for a private or public drinking water well, or a wellhead protection area, or a sole source aquifer.
5. The groundwater that may exist in the bedrock is not a reasonably expected potential future source of drinking water based on the following considerations:
  - No one resides at Upper Camp, and groundwater, if present, is not currently needed or desirable as a drinking water source. The USAF has no plans to house people at Upper Camp or provide an onsite groundwater or surface water drinking water supply at this

location. If ownership is transferred in the future, it is unlikely that people would live at this location and need to use the groundwater, if present, as drinking water.

- The hydrogeology of Upper Camp consists primarily of rain and snowmelt that infiltrates through the residual soil to shallow bedrock. The underlying bedrock then acts as a lower flow boundary, along which water can continue until it infiltrates into fractured bedrock or resurfaces as a surface spring. Although the extent and nature of fracturing of the bedrock was not characterized during the RI, it is anticipated that the continuity and transmissivity of these fractures would decrease rapidly with depth. Quantity and quality of groundwater is unknown but it is likely that both may be insufficient for a drinking water source.
6. Hazardous substances above ADEC cleanup levels or risk-based levels were not encountered in subsurface soils at Upper Camp, with the exception of one subsurface soil sample at source area SS-001, which was collected at a depth of 4 feet (just above bedrock). Additional investigation at the SS-001 location will be conducted in the future when the onsite building is removed. Results of RI at the location did not indicate any potential threat to groundwater or surface water at this location or in seep and sediment samples collected downgradient from Upper Camp source areas.

Because of the location of Site DP-005 and the lack of a groundwater exposure pathway at the site, cleanup standards for an ingestion exposure pathway were applicable. These standards are provided below.

Analyte	Cleanup Standard (soil)	Cleanup Standard (groundwater)
Gasoline-range organic compounds	1,400 mg/kg	1,300 µg/L
Diesel-range organic compounds	10,250 mg/kg	1,500 µg/L
Residual-range organic compounds	10,000 mg/kg	1,100 µg/L

µg/L = Micrograms per liter

mg/kg = Milligrams per kilogram

### 3.2 RI RESULTS

No environmental sampling had occurred at the DP-005 source area before the 1997 RI. No hazardous waste contamination or hazardous substance releases have been reported for these areas in the past. During the RI, sampling focused on downgradient soil, seeps, and sediment to determine whether past disposal had created a source area for contamination, and to identify and characterize the presence of potential surface water migration pathways. Test pits were excavated to bedrock at depths of 3 to 4 feet below ground surface. Surface and subsurface soils were collected and analyzed for petroleum hydrocarbons, solvents, lead, PCBs, and pesticides by using the following analytical methods: Refer to Table 1 for analytical methods used for each media.



Chemical	Analytical Method
Petroleum hydrocarbons	ADEC Methods: AK 101, AK 102, AK103
Volatile organic compounds	EPA Method 8260A
Semivolatile organic compounds	EPA Method 8270B
Lead	EPA Method 7421
PCBs and pesticides	EPA Method 8081

No seeps were observed or sampled in the area, and no groundwater was encountered during the RI.

Analytical results were compared to Upper Camp background values obtained during the RI, ADEC cleanup levels (18 AAC 75), and risk management standards developed in the baseline human health and ecological risk assessments completed for this source area. Figure 4 shows the sampling locations and significant analytical results for petroleum hydrocarbons. Table 1 shows the requested analyses for each sample. During the initial sample collection in July 1997 and subsequent analysis, the AK 102 and AK 103 results were qualified as "R - the data are unusable due to deficiencies in the ability to analyze the sample and meet QC criteria." In October 1997, a second round of samples were collected and analyzed for AK 102; no AK 103 analyses were conducted.

**Hardfill No. 2.** Analytical results from soil samples collected from two test pits at Hardfill No. 2 included very low detectable levels of fuel-related organic compounds and pesticides; all levels were below human health and ecological risk-based levels developed in the risk assessment. Gasoline-range organic (GRO) compounds were not detected above the analytical method reporting limit and levels of diesel-range organic (DRO) compounds were detected in one test pit at a maximum of 23.5 milligrams per kilogram (mg/kg). The DRO result is well below ADEC-recommended cleanup levels and also can likely be attributed to biogenic interference in the sample matrix. No chlorinated solvents or PCBs were detected.

**MK Debris Area.** Analytical results from soil samples collected from the test pit at the MK Debris area included volatile organic compounds (VOCs) detected at levels that were barely above detection limits and well below levels based on human health and ecological risk that were developed in the baseline risk assessment. GRO and DRO were not detected above the method reporting limit. No PCBs were detected. All levels of detected contaminants were well below ADEC-recommended cleanup levels.

**Northeast Landfill.** Analytical results from soil samples collected from the test pits at the Northeast Landfill for VOCs and pesticide residues also were reported at barely above detection limits and well below human health and ecological risk-based levels. GRO was not detected above the method reporting limit. The maximum DRO was detected at 24 and 36 mg/kg; however, review of the laboratory chromatogram data did not indicate a pattern match for diesel, indicating that biogenic material in the soil matrix likely contributed to the result. No PCBs were detected. All levels of detected contaminants were well below ADEC-recommended cleanup levels.

Analytical results from the Hardfill No. 2, MK Debris area, and Northeast Landfill test pits indicated contaminants were detected near method reporting limits at very low levels that

pose no unacceptable risk to human or ecological receptors. The baseline risk assessment did not identify any chemicals as contaminants of concern or contaminants of ecological concern for the DP-005 source area. In addition, all levels of detected contaminants were below current ADEC cleanup standards (for ingestion, because of the lack of a groundwater migration pathway) in 18 AAC 75 regulations. Analytical results do not indicate that contaminants were released to the area as a result of past disposal activities.

#### **4.0 SELECTED REMEDY**

On the basis of the 1997 RI and risk assessments conducted at DP-005, no contaminants of concern exist at this site and there is no need for further remedial action. This determination is protective of human health and the environment and complies with ARARs for the site. The State of Alaska supports and concurs with the selected remedy of no further action.

IRP Site DP-005 received construction and demolition debris from the WACS and MAR site in the 1970s and 1980s. Institutional control in the form of notice in land records will be developed by the Air Force, with ADEC concurrence, for waste left in place and within a base master plan.

Visual inspections of cover material will be conducted and documented over a 5 year period (the first, third, and fifth years) to check that no erosion of the cover is occurring. After the last inspection, a 5-year review will be conducted to review the results of the inspections. If the cover material has remained in good condition, no further inspections will be required.

This decision may be reviewed and modified in the future if new information becomes available which indicates the presence of previously undiscovered contamination or exposure routes that may cause a risk to human health or the environment.

**PART III**  
**RESPONSIVENESS SUMMARY**

**OVERVIEW**

The U.S. Air Force and the Alaska Department of Environmental Conservation distributed a Proposed Plan for No Further Response Action planned (NFRAP) at seven source areas at Tatalina LRRS. The seven source areas include SS-001, DP-005, OT-012, SS-007, SS-009, LF-010, and OT-006.

The Proposed Plan described the results of the RI conducted at these source areas and the recommendations for NFRAP. Verbal comments about the Proposed Plan were received at a public meeting conducted at Takotna, Alaska, during the public comment period. The comments are summarized and presented in this Responsiveness Summary.

**BACKGROUND OF COMMUNITY INVOLVEMENT**

The public was encouraged to participate in the NFRAP decision at the seven source areas during a public comment period from February 18, 1999, to April 15, 1999. The original public comment period was scheduled for February 18 to March 19, 1999. The U.S. Air Force extended the public comment period to allow more time for community members to review the Proposed Plan and submit comments. The Proposed Plan was released to the public and copies delivered to Takotna residents on February 18. Copies of the Proposed Plan were also sent to all known interested parties, including Tatalina LRRS workers and residents.

The Proposed Plan summarizes available information about the seven source areas. Additional information will be placed into three information repositories: the U.S. Air Force 611 CES/CEVR offices at Elmendorf Air Base, the Takotna Community Library, and the McGrath Public Library. An Administrative Record, including all items to be placed into the information repositories and other documents used in the selection of the NFRAP recommendation for the seven source areas, was established at the 611 CES/CEVR offices at Elmendorf Air Force Base. The public was encouraged to inspect materials available in the Administrative Record during business hours.

Interested citizens were invited to comment on the Proposed Plan and the NFRAP recommendations by mailing comments to the 611 CES/CEVR Community Relations Coordinator, by calling a toll-free telephone number to record a comment, or by attending and commenting at a public meeting conducted on February 18, 1999, at the Takotna Community Center in Takotna, Alaska. The proceedings of the meeting were recorded, and the transcript became part of the Administrative Record for the seven NFRAP source areas at Tatalina LRRS.

## SUMMARY OF COMMENTS RECEIVED DURING THE PUBLIC COMMENT PERIOD AND U.S. AIR FORCE RESPONSES

### Verbal Comments from the Public Meeting

**Comment:** If the EPA and ADEC told the Air Force to clean something up, and the Air Force didn't want to do that, does the Air Force have the power to say "No"? In this case, who has the authority to say "Look at it; do it"?

**Response:** The Air Force follows regulations regarding investigations and cleanups of potentially contaminated sites. The regulations are based on whether an animal or human could be harmed. If a site can cause harm, then the ADEC has the authority to tell the Air Force to clean up the site.

**Comment:** Has the U.S. Air Force investigated the old tram site on the hill at the Tatalina LRRS, where there was a building? A transformer building was reportedly formerly located at that site.

**Response:** The tram building was not included in the 1997 remedial investigation (RI). The Air Force and the ADEC are planning to conduct further investigation at that site and will request input from community members at that time.

**Comment:** I am not comfortable only using water samples to investigate, and would prefer using heavy equipment to do excavations. I am not certain how long biodegradation takes, and whether contaminants would get into the groundwater. This is regarding IRP site LF-004.

**Response:** The Air Force has determined that there is not enough information to make a decision regarding future action at this source area. It is not one of the NFRAP source areas discussed in the Proposed Plan. The Air Force will be conducting further investigation at LF-004.

**Comment:** Regarding the reporting of environmental concerns, I know a man who is reluctant to come forward about things he might have done. Even though local people have said they know where contaminants are buried, they did not share this information with the Air Force when there was an opportunity to do so. A community member said he had not been asked for any information about the area.

**Response:** A bulk mailing was conducted 2 years ago and public meetings were held, including one public meeting conducted before the 1997 RI field work. Newspaper notices requesting information about the Tatalina LRRS site and any potentially contaminated areas were also published. It is not too late to provide information to the Air Force. The easiest way to contact the Air Force is through the toll-free number provided in the Proposed Plan. The U.S. Air Force encourages individuals to contact them regarding any information or concerns they have about the sites. If new information becomes available about a site that has already been closed for further action, the ADEC and the Air Force can re-open the site and conduct additional work.

**Comment:** What are the plans for Sterling Landing?

**Response:** The Air Force is planning to conduct a follow-up investigation at Sterling Landing in late summer 1999 because the 1997 field investigation did not fully determine the extent of contamination.

**Comment:** It is all right if sites are closed, as long as they can be re-opened in the future if new information is available or new contamination is found.

**Response:** The Air Force will return to an area for further investigation if new information indicates that contamination exists that may cause harm to the environment or human health.

**Comment:** There is a concern about the tanks that were removed from Sterling Landing and that are now left in pieces alongside the road to Takotna.

**Response:** The Air Force no longer owns the tanks and is unable to remove the tank remnants. The tanks were cleaned during the tank closure process the Air Force conducted, so there are no hazardous substances associated with the tanks. In this case, because the Air Force does not own the tanks, the current owner of the tanks is responsible for removing the pieces from the road.

**Comment:** Can an information repository be established in McGrath?

**Response:** Yes, according to the Proposed Plan, an information repository will be established at the McGrath Public Library.

**Comment:** How long will the monitoring wells at Sterling Landing be monitored and what is the normal procedure when sites are obviously contaminated?

**Response:** The Air Force has not determined how long the wells will need to be monitored. The normal procedure for addressing a potential contaminated site is to conduct an investigation and then, depending on the results of the investigation, a cleanup may be conducted. The decisions regarding the investigation and cleanup are made in consultation with the ADEC and the community members. It is too early to determine if a cleanup will be conducted at Sterling Landing or what type of cleanup may be conducted. These decisions will be made after the follow-up investigation in 1999 and further discussions with the ADEC and community members.

**Comment:** There is a concern regarding the scheduling of additional site investigations at Sterling Landing. When fuel barges deliver fuel to Sterling Landing in the summer, the community residents and others that need the fuel need access to Sterling Landing and the road to Takotna. Will Sterling Landing need to be closed down in the summer?

**Response:** The Air Force will coordinate the scheduling of further investigation activities at Sterling Landing with the community members, and every effort will be made to accommodate access to Sterling Landing and the roadways for fuel deliveries at Sterling Landing and transporting of the fuel to Takotna.

**Comment:** What are the property boundaries at Sterling Landing, and who owns the property where the Air Force tanks were formerly located?

**Response:** The Air Force is currently researching the property boundaries at Sterling Landing and associated real estate issues. This information is needed before additional investigation is conducted at this location. If there are fuel storage tanks at Sterling Landing

that the Air Force does not own and that are leaking, the tanks will need to be repaired before the additional investigation can be conducted. The current owners of the fuel tanks at Sterling Landing are responsible for maintaining the tanks, or replacing them if necessary.

**Comment:** How does the Air Force know when a site is clean?

**Response:** The Air Force begins by sampling at the site and then removing the contamination. The site is again sampled, after the contaminated area has been removed, to confirm all the contamination was removed. Then the site is monitored for a length of time that is negotiated with the ADEC and the community to be sure that the cleanup was successful. If additional contamination is found during the monitoring, the Air Force needs to go back and conduct more cleanup and repeat the process.

**Comment:** Does the Air Force do its own laboratory work? There is a concern about turnaround time, and if it takes a long time for the results, it may be too late to address a potential problem. The example is fuel quality testing of fuel that is delivered to Sterling Landing. When it takes several months to receive the data, by that time the fuel has already been used.

**Response:** Laboratory work is generally conducted by contractors hired by the Air Force. If the sampling for the fuel quality is taking too long, the laboratories can be requested to complete a faster turnaround for results. It should not take so long to complete the fuel quality analyses, and the Air Force will look further into this issue.

**Comment:** In response to Air Force interest in local hire, hiring local people is great and I hope that the Air Force will follow through on this. Many people in Takotna and McGrath have taken the required OSHA training so they can work at the Air Force sites that require the training.

**Response:** The Air Force would like to hire locally and encourages local community members to be involved in the work available at sites.

**Comment:** Why weren't source areas WAA No. 2 and LF-010 cleaned up right away?

**Response:** The Air Force did not have the information regarding potential contamination and work practices that contribute to contamination when these sites were active many years ago. Now, the Air Force realizes that common work practices that were done in the past caused contamination. Therefore, the sites are being investigated and cleaned up.

**Comment:** In response to the Air Force question regarding the best ways to keep the community informed about IRP activities at Tatalina LRRS, a Regional Advisory Board (RAB) would be the best method. Until a RAB is established, locally involved organizations could be contacted when information is available from the Air Force, and when new information needs to be sent out.

**Response:** The Air Force is currently working on establishing a RAB for the Tatalina LRRS. It has not been determined when the RAB will be established. The Air Force is interested in the most efficient ways to distribute information to community members, so everyone is informed about what the Air Force is planning to do at Tatalina LRRS and the results of investigations and cleanups that may be performed.

**Comment:** An additional contaminated site that was not investigated during the 1997 RI may exist at Upper Camp. This is an area near DP-005, north of the MK Debris site and Northeast Landfill. While working at the facility, I recall the facility personnel gave instructions to discard drums over the steep slope, into the ravine below. Some time later on, facility workers were instructed to collect the drums, crush them, and dispose of the drums in an onsite landfill. If the drums were not empty, fire axes were used to release the contents so the drums could be hauled to DP-005 for disposal. Drums are still visible at this site.

**Response:** The Air Force and ADEC are planning to conduct additional investigation of this new site in the future. Additional input from community members who have knowledge about past operations at this site will be solicited at that time.

#### **Written Comments**

No written comments were received during the public comment period.

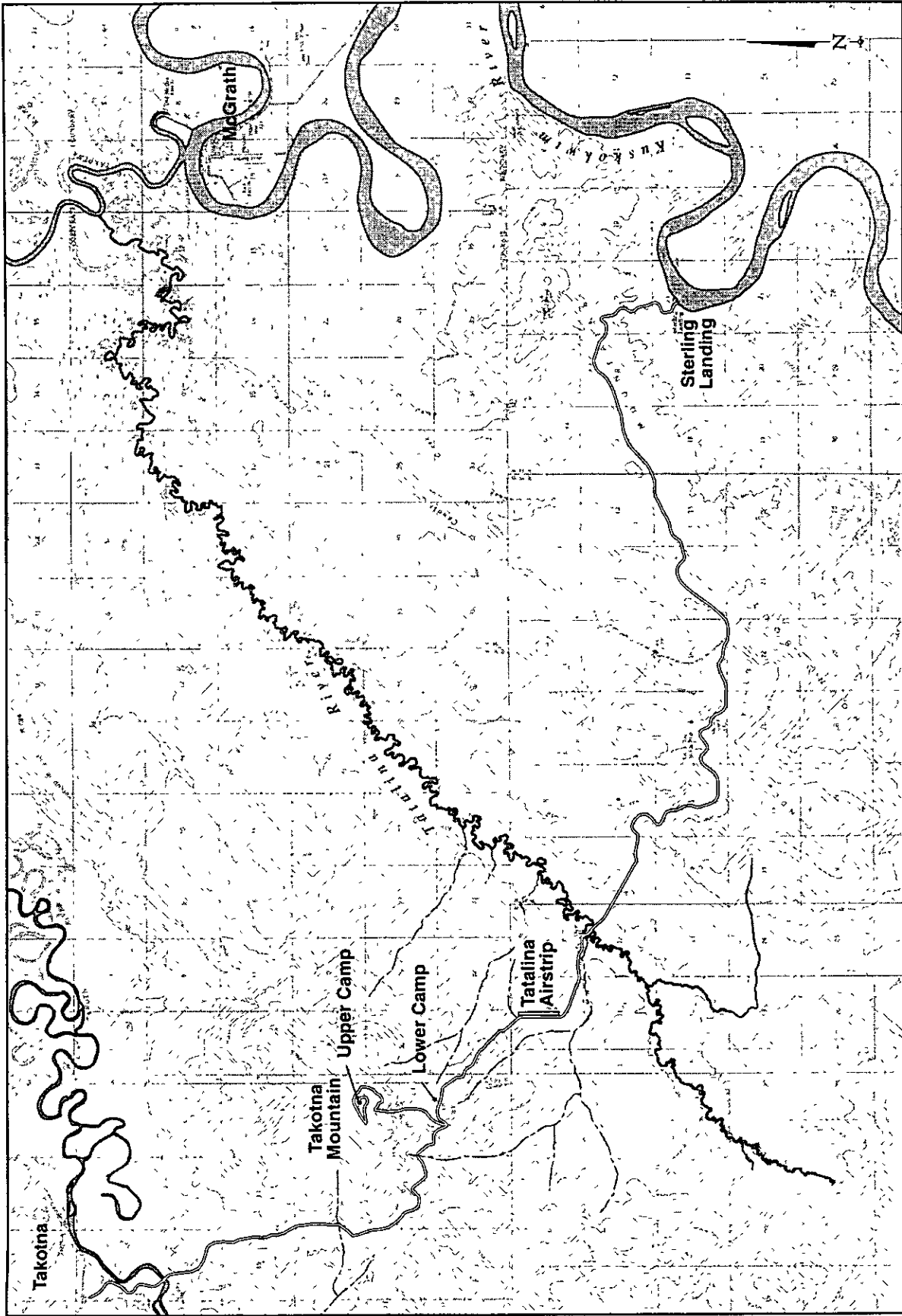
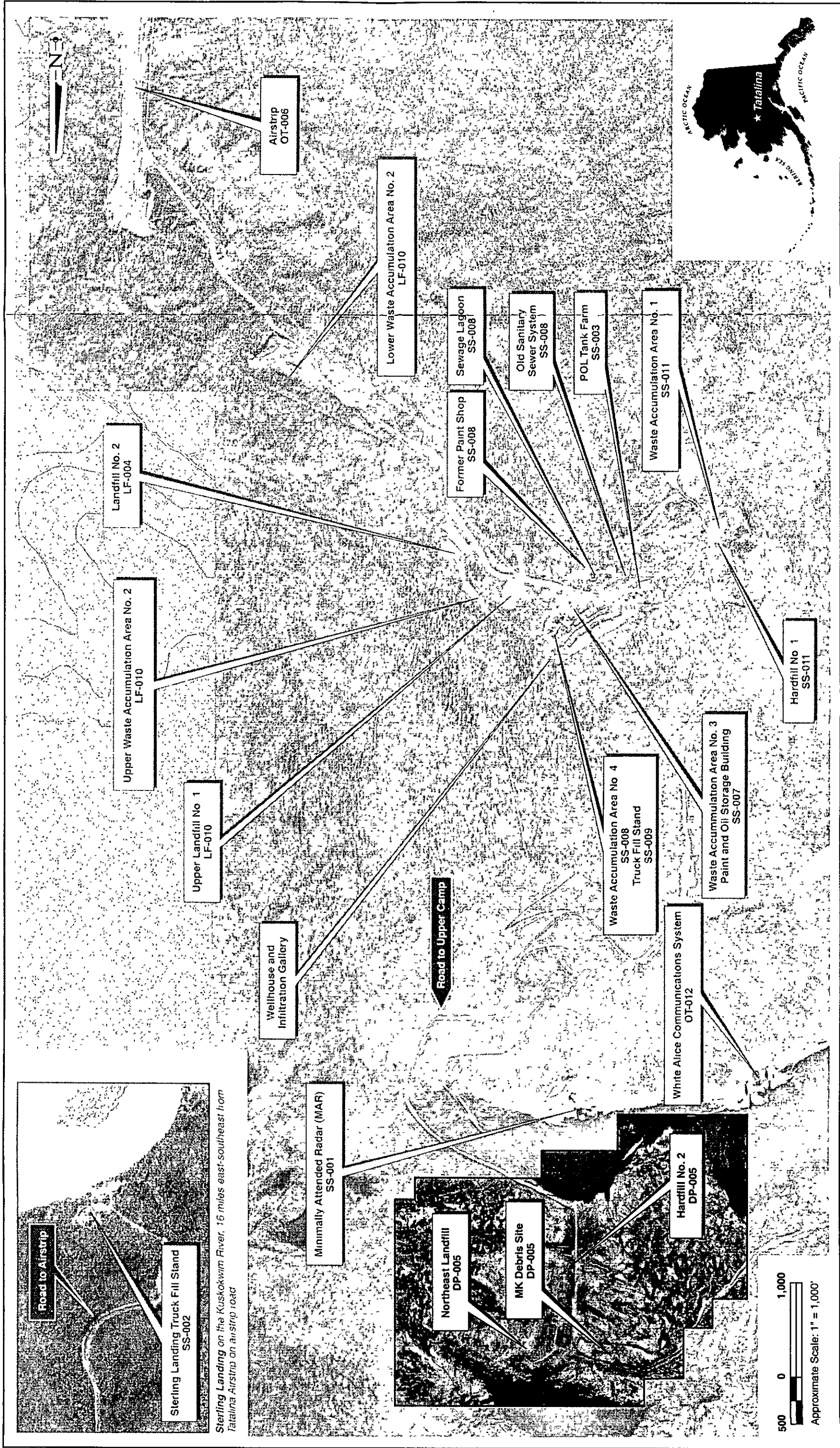


Figure 1. Location Map for Tatalina LRRS and Surrounding Area

From U S Geological Survey maps Iditarod (D-1) and McGrath (D-6), Alaska

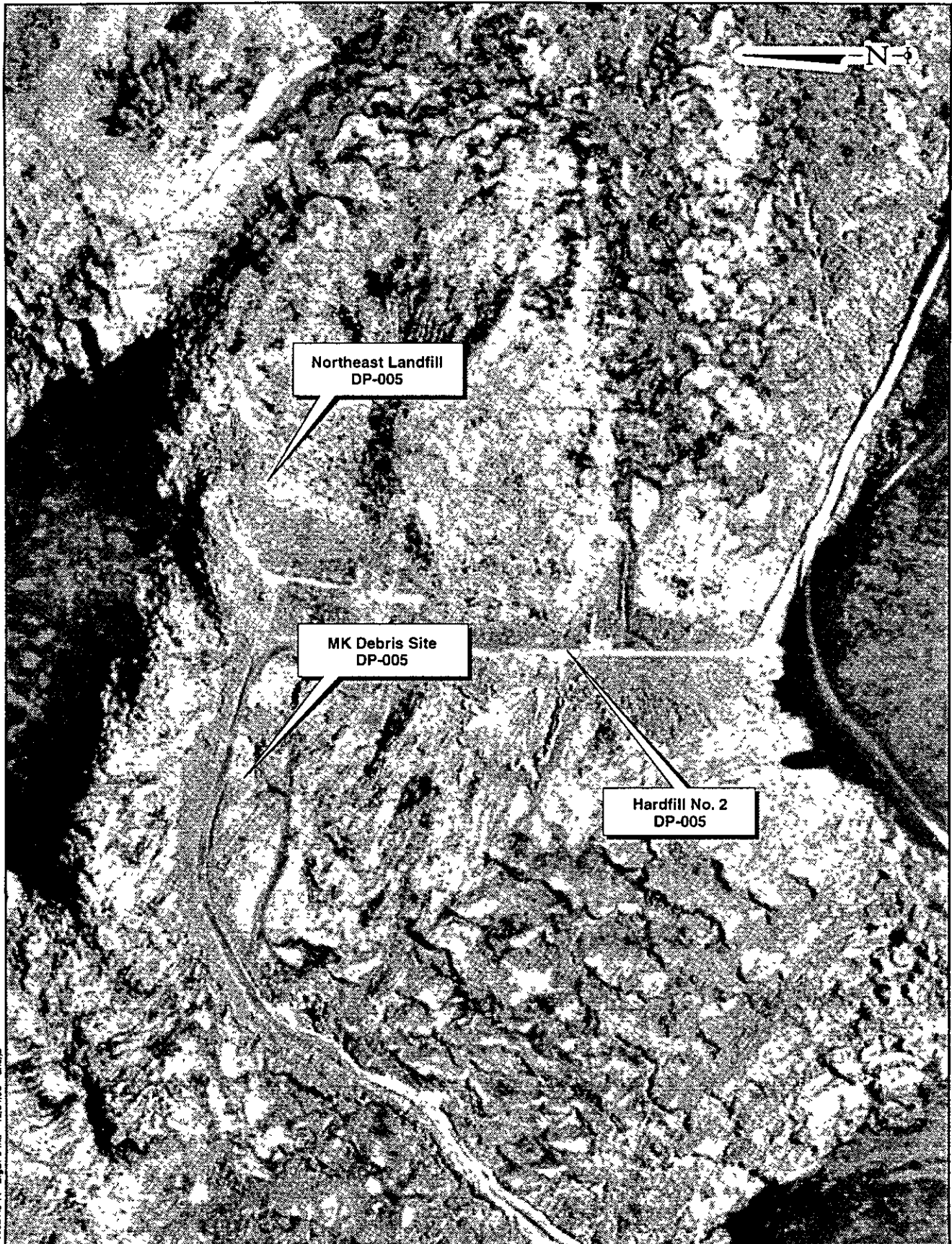
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From Project Tatalina, 9/30/76, and Project McGrath 8/27/84, AeroMap U.S., Inc., and U.S. Geological Survey map, McGrath (D-6), Alaska

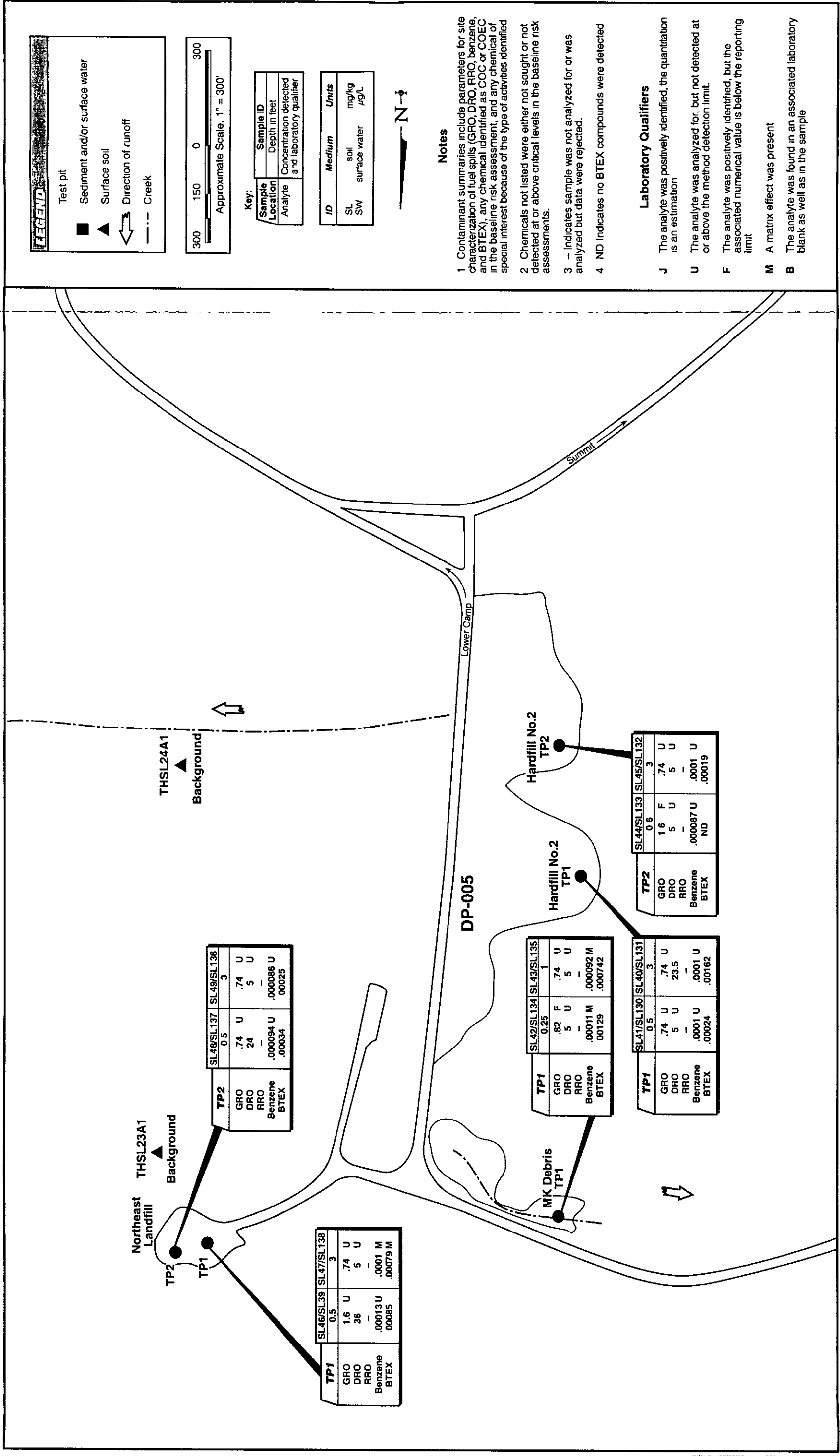
Figure 2  
Aerial Photograph of Tatalina LRRS Site Locations



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From Project Tatalina, 9/30/76, and Project McGrath 8/27/84, ©AeroMap U S , Inc

**Figure 3**  
**Aerial Photograph of DP-005**



From Project: Tatalina, AeroMap U.S., Inc., 9/30/76

Figure 4  
Contaminant Summary for DP-005,  
Upper Camp

## APPENDIX A

TATALINA LRRS ADMINISTRATIVE RECORD INDEX

The following list includes U.S. Air Force Installation Restoration Program plans and reports completed to date for the Tatalina LRRS. A comprehensive Administrative Record for the Tatalina LRRS is currently in progress and will be available to the public when completed.

U.S. Air Force. *Tatalina Long Range Radar Station Takotna Public Meeting Regarding "Proposed Plan for No Further Response Action Planned" Meeting Minutes*. February 18, 1999.

U.S. Air Force. *Proposed Plan for No Further Response Action Planned: IRP Sites DP-005, OT-012, SS-001, SS-009, LF-010, OT-006, United States Air Force Installation Restoration Program, Tatalina LRRS, Alaska*. February 1999.

U.S. Air Force. *Remedial Investigation Report, Tatalina LRRS, Alaska*. October 1998.

U.S. Air Force. *Interim Remedial Action Report (Draft), Tatalina LRRS*. March 1998.

U.S. Air Force. *Analytical Data Informal Technical Information Report, Tatalina LRRS*. February 1998.

U.S. Air Force. *Community Relations Plan, Tatalina Long Range Radar Station, Alaska*. June 1997.

U.S. Air Force. *Remedial Investigation/Feasibility Study Sampling and Analysis Plan, Tatalina LRRS, Alaska*. June 1997.

U.S. Air Force. *Remedial Investigation/Feasibility Study Work Plan, Tatalina LRRS, Alaska*. June 1997.

U.S. Air Force. *Sterling Landing Fuel Tanks Site Environmental Baseline Survey*. 1997.

U.S. Air Force. *Draft Management Action Plan (Update), Tatalina Long Range Radar Station, Alaska*. August 1996.

U.S. Air Force. *Management Action Plan, Tatalina LRRS, Alaska*. Environmental Restoration Program. September 1995.

U.S. Air Force. *Site Investigation Report, Tatalina LRRS, Alaska*. July 1993.

U.S. Air Force. *Preliminary Assessment for Tatalina Long Range Radar Site*. 1991.

U.S. Air Force. *Installation Restoration Program Technical Support Document for Record of Decision, Tatalina Air Force Station LRRS Site*. February 29, 1988.

U.S. Air Force. *Installation Restoration Program Technical Support Document for Record of No Further Action, Tatalina Air Force Station LRRS Site*. 1988.

U.S. Air Force. *Phase I: Records Search, AAC-Southern Region*. September 1985.

**APPENDIX B**  
**ACRONYM LIST**

AAC	<i>Alaska Administrative Code</i>
ADEC	Alaska Department of Environmental Conservation
ARAR	applicable or relevant and appropriate requirement
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
DD	Decision Document
DRO	diesel-range organic
EPA	U.S. Environmental Protection Agency
GRO	gasoline-range organic
IRP	Installation Restoration Program
LRRS	Long Range Radar Station
MAR	Minimally Attended Radar
mg/kg	milligrams per kilogram
µg/L	micrograms per liter
MK	Morrison-Knudsen
PCB	polychlorinated biphenyl
RAO	remedial action objective
RI	remedial investigation
TBC	to-be-considered
USAF	U.S. Air Force
USC	<i>U.S. Code</i>
VOC	volatile organic compound
WACS	White Alice Communications System

**FINAL PAGE**

**ADMINISTRATIVE RECORD**

**FINAL PAGE**