



**INSTITUTIONAL CONTROL  
PERFORMANCE REPORT**

*For*

**PORT HEIDEN RADIO RELAY STATION**

**PORT HEIDEN, ALASKA**

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**FINAL**

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## LIST OF ACRONYMS

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ADEC	Alaska Department of Environmental Conservation
IC	Institutional Control
ICPR	Institutional Control Performance Report
PCB	Polychlorinated Biphenyls
ROD	Record of Decision
RRS	Radio Relay Station
TCE	Trichloroethylene
USAF	United States Air Force

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## **1.0 INTRODUCTION**

### **1.1 PURPOSE**

The purpose of this report, the Institutional Control Performance Report (ICPR), is to document reviews of the remedial actions selected in the 2009 Record of Decision (ROD) for the remediation of sites at the Port Heiden Radio Relay Station (RRS) and to determine whether these actions are protective of human health and the environment, and are functioning as designed. To achieve this purpose, this is the first review which evaluates the status of implementation of the selected remedies, identifies any significant variances from the ROD, and makes recommendations for reconciling variances and/or improving performance of remedial actions. In addition, the review identifies any new information that becomes evident, documents that no new contaminant sources or exposure pathways were discovered, confirms that no new sites were established, and verifies that no additional work was performed that was not identified in the ROD. This report shall include any information pertaining to any breaches of institutional Controls (ICs), corrective action taken, and any property transfers.

The US Air Force (USAF) will complete an ICPR annually for five years as required by the ROD. The frequency of the ICPR will be evaluated with the five-year review under 42 USC 9621(c).

## **2.0 INSTITUTIONAL CONTROLS**

### **2.1 INSTITUTIONAL CONTROLS FOR SOIL**

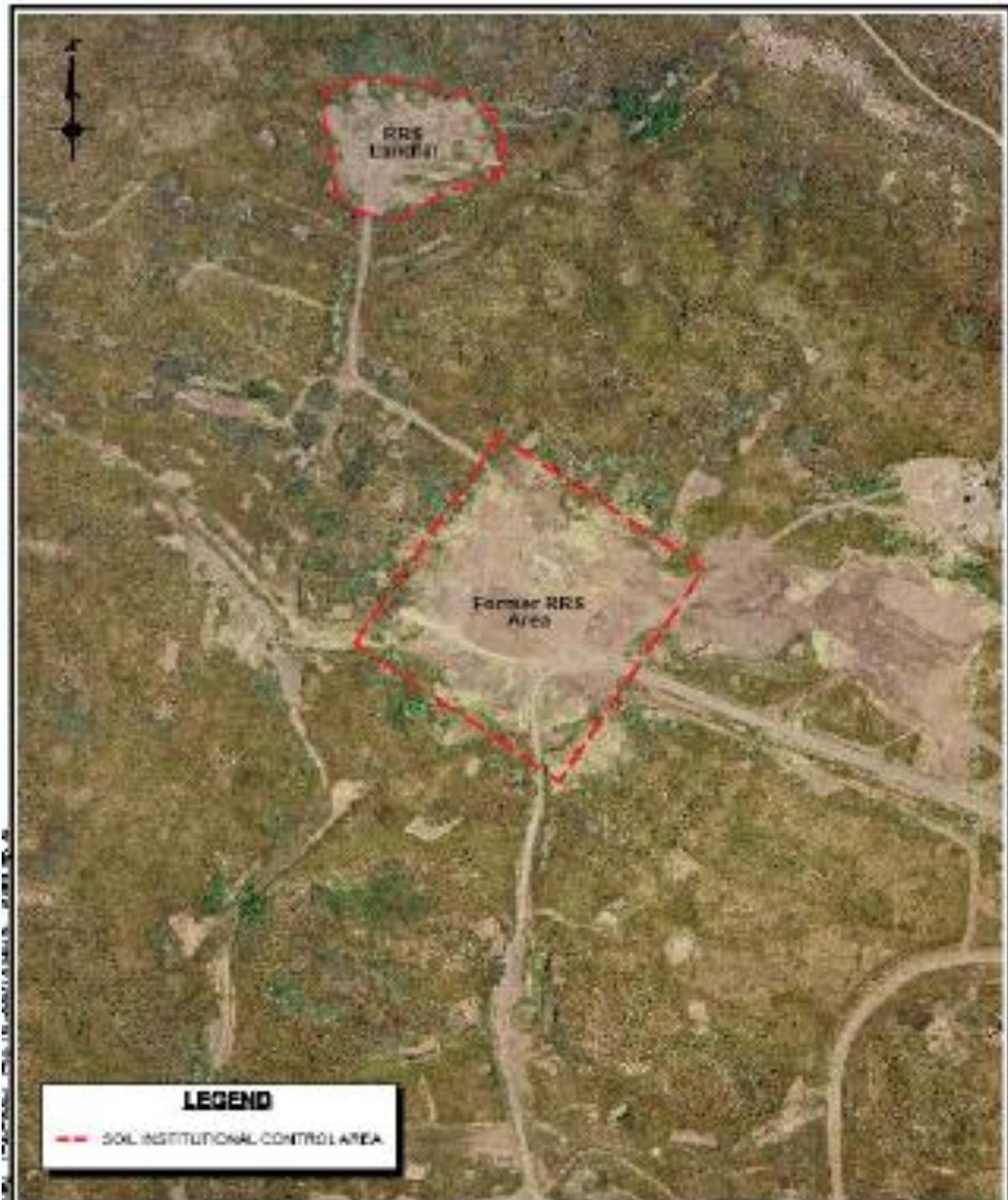
Per the ROD, a notice type of institutional control (IC) will be implemented (with the land owners consent) to control the use of soil containing residual concentrations of dieldrin above 0.0076 mg/kg. The location of the institutional control area is depicted on Figure 2-1. This notice will make the Land Owner aware that the Alaska Department of Environmental Conservation (ADEC) approval is required for any disturbance of soil (the goal of this institutional control is to prevent the constant contact of this media with water which could impact groundwater or surface water quality).

At the RRS landfill, ICs will be established to provide notice that the remaining buried wastes may contain contaminants of concern, that the cover should be maintained, and excavation into or development over the Port Heiden RRS Landfill should be restricted to maintain the integrity of cap and to prevent migration of contaminants.

If future property use includes disturbance of the institutional control area (see Figure 1-1) such that the remaining pesticide contaminated soil comes in constant contact with water, or other information becomes available which indicates that the site may pose an unacceptable risk to human health, safety, welfare or the environment, the land owner and/or operator are required under 18 AAC 75.300 to notify ADEC and evaluate the environmental status of the contamination in accordance with applicable laws and regulations. Further site characterizations and cleanup may be necessary under 18 AAC 75.325-.390.

In the future, if soil is removed from the site it must be characterized and managed following regulations applicable at that time. Pursuant to 18 AAC 75.325(i)(1) and (2), ADEC approval is required prior to moving or disposing of soil that is, or has been, subject to the cleanup rules found at 18 AAC 75.325-.370.

**Figure 2-1 AREAS IMPACTED BY INSTITUTIONAL CONTROLS - SOIL**



## **2.2 INSTITUTIONAL CONTROLS EFFECTIVENESS FOR YEAR 1 (2010) - SOIL**

Roughly 9,200 cubic yards of polychlorinated biphenyl (PCB)-contaminated soil had been removed from the RRS during the 2009 remedial activities. Dieldrin, originally identified in the Remedial Investigation was not found at the RRS during the 2009 field season. It is noted no work took place at the RRS Landfill and dieldrin may still be present at that site.

As approved by ADEC, the excavations were backfilled to within two feet of the original surface. Edges were contoured to eliminate a sharp drop. Rainwater would from time to time pool in these depressions. As dieldrin was not present, no further steps were taken to eliminate the temporary ponding of water. The Air Force plans to submit a modification to the ROD to eliminate the need for an IC related to dieldrin at the RRS.

During the 2010 field season, another (approximately) 3,000 cubic yards of PCB-contaminated soil was removed from the site in accordance with the ROD and Explanation of Significant Differences. During a heavy-rain event, a substantial amount of water was pooling at site. A trench was dug thereby allowing the water to drain from the site. Again, no work was completed at the RRS Landfill where rainwater continues to naturally flow off the existing cap.

No other soil disturbances took place. The landowner has not accessed the site for any activities beyond a routine site visit. In spite of fencing and warning signs, it appears some residents have driven through the site. Since they did not disturb the soil, this is not a violation of the ICs. Regardless, additional fencing and signs were posted. This topic was discussed at the public meeting conducted in September, 2010.

Additional quantities of PCB-contaminated soil were identified during the 2010 field season however dieldrin was not identified at the existing sites. As such, no new sites were established. No new source was identified and this area was likely contaminated at the same time and from the same source as the rest of the RRS. No new exposure pathways were identified. There has been no change of property ownership; no land transfers, sales, or leases. The AF did renew the Right of Entry from the Alaska State Department of Transportation to allow for continued access. There remaining approximately 12,000 cubic yards of PCB-contaminated to be removed. This work is planned for 2011 and 2012. Appropriate ICs will be placed on any residual contamination.

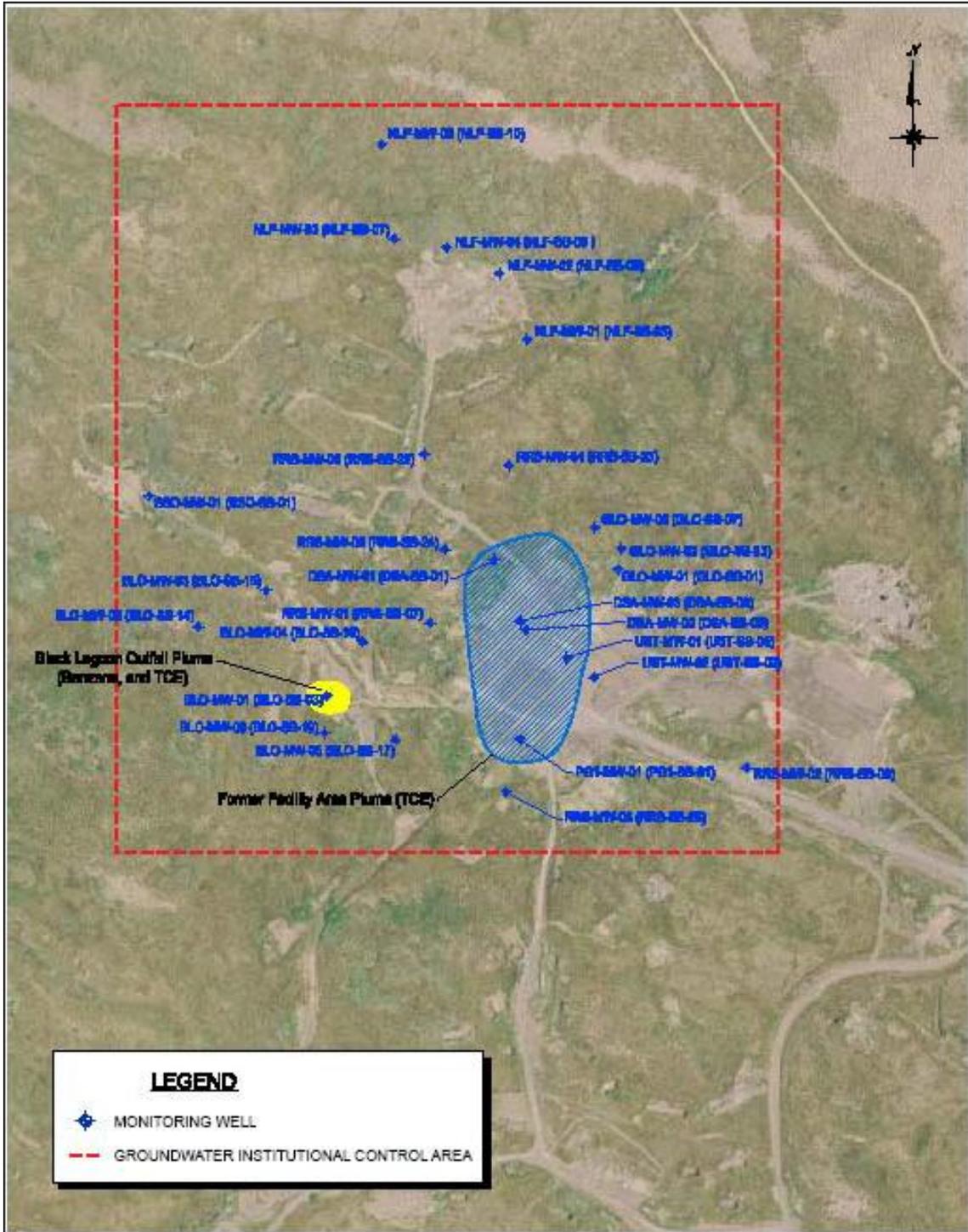
## **2.3 INSTITUTIONAL CONTROLS FOR WATER**

Per the ROD, institutional groundwater controls shall include limitations on groundwater use as approved by ADEC, and notices to the land owner and Village Council of site status. The location of the groundwater institutional control area is depicted on Figure 2-2. These ICs will remain in place until groundwater cleanup levels are achieved through natural attenuation. The objectives of the groundwater ICs are to prevent the drinking of trichloroethylene (TCE) and benzene contaminated water and to prevent its extraction and surface use without treatment.

Any planned use of groundwater at the site must be approved by ADEC. In the event information becomes available which indicates that the site groundwater may pose an unacceptable risk to human health, safety, welfare or the environment, the land owner and/or operator are required

under 18 AAC 75.300 to notify ADEC and evaluate the environmental status of the contamination in accordance with applicable laws and regulations.

**Figure 2-2 AREAS IMPACTED BY INSTITUTIONAL CONTROLS - WATER**



Further site characterizations and cleanup may be necessary under 18 AAC 75.325-.390. Any contaminated groundwater that is encountered must be managed in accordance with applicable regulations, for example any dewatering must be done following ADEC approved plans that include any necessary treatment to meet discharge standards.

In the future, if groundwater is removed from the site it must be characterized and managed following regulations applicable at that time. Pursuant to 18 AAC 75.325(i)(1) and (2), ADEC approval is required *prior* to moving or disposing of groundwater that is, or has been, subject to the cleanup rules found at 18 AAC 75.325-.370.

## **2.4 INSTITUTIONAL CONTROLS EFFECTIVENESS FOR YEAR 1 (2010) – WATER**

Other than for sampling purposes, no groundwater was used at the site. The landowner has not accessed the site for any activities beyond a routine site visit. The landowner made no attempt to access/use groundwater. There is no evidence that any other visitor to the site attempted to use groundwater. Sample results will be presented in a separate report.

No additional groundwater contamination was identified. No new contaminants, no new sites, and no new sources were identified. No new exposure pathways were identified. There has been no change of property ownership; no land transfers, sales, or leases. The AF did renew the Right of Entry from the Alaska State Department of Transportation to allow for continued access.

## **3.0 CONCLUSION**

Since the ROD was signed, the site has been in an active remediation status. No violation of the ICs has been noticed. Once all activities on site are complete, if the ROD requires amending, it will be completed at that time as will formal notice to the landowner on any IC remaining in place.

## **4.0 REFERENCES**

USAF 2006. Final Remedial Investigation/Feasibility Study, Port Heiden Radio Relay Station, Port Heiden, Alaska. April 2006.

USAF 2009. Record of Decision for Port Heiden Radio Relay Station, Port Heiden, Alaska. February 2009.

USAF 2010. Explanation of Significant Differences for Port Heiden Radio Relay Station, Port Heiden, Alaska. May 2010.