

INSTITUTIONAL CONTROL PREFORMANCE REPORT

For

PORT HEIDEN RADIO RELAY STATION PORT HEIDEN, ALASKA

Prepared By

United States Air Force
611TH Civil Engineer Squadron
Pacific Air Forces
Joint Base Elmendorf-Richardson, Alaska

FINAL

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LIST OF ACRONYMS

ADEC Alaska Department of Environmental Conservation

IC Institutional Control

ICPR Institutional Control Performance Report

Jacobs Ingineering

NVPH Native Village of Port Heiden

PCB Polychlorinated Biphenyls

ROD Record of Decision

RRS Radio Relay Station

TCE Trichloroethylene

USAF United States Air Force

Weston Weston Solutions

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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, reviews 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 are completed. 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). This report is the second annual review.

2.0 INSTITUTIONAL CONTROLS

2.1 INSTITUTIONAL CONTROLS FOR SOIL

Per the ROD (USAF, 2009), 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 2-1) 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 2 (2011) - SOIL

During the 2009 remedial activities approximately 9,200 cubic yards of polychlorinated biphenyl (PCB)-contaminated soil had been removed from the RRS. Dieldrin, originally identified in the Remedial Investigation (USAF, 2006) 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 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.

During the 2011 field season, three different entities (Weston Solutions (Weston), Jacobs Engineering (Jacobs), and the Native Village of Port Heiden (NVPH)) were involved in removing PCB-contaminated soil. A combined total of (approximately) 16,763 cubic yards of PCB-contaminated soil and PCB-contaminated debris was excavated from the site in accordance with the ROD and Explanation of Significant Differences and (approximately) 10,000 cubic yards of the excavated PCB-contaminated soil remain in Port Heiden pending final disposal.

Weston removed approximately 2,700 cubic yards of PCB-contaminated soil and debris from the Class III landfill. Weston partially backfilled the landfill with approximately 1,229 cubic yards of PCB-contaminated soil from the Soil Washing Area near the RRS. (The remainder of the landfill excavation was left open to be closed by the NVPH.) Additionally Weston shipped offsite (approximately) 396 cubic yards of PCB-contaminated soil and 16 cubic yards of PCB-contaminated debris from the Soil Washing Area near the RRS; 10 cubic yards of PCB-contaminated soil from the Tank Abandonment Area, 8 cubic yards of PCB-contaminated soil from Area 10 of the RRS. In addition to the soil and debris excavated, Weston removed several connexes, tanks, and a cement truck. These actions by Weston were corrective actions to the 2009 field season (USAF, 2011).

Jacobs excavated approximately 9,400 cubic yards of PCB-contaminated soil from the road running from the airport to the RRS. This soil was stockpiled to be shipped off-site by others. Approximately 900 of the 9,400 cubic yards were shipped off-site this year. The remainder is planned to be shipped in 2012.

The NVPH excavated (approximately) 1,500 cubic yards of PCB-contaminated soil was removed from the site in accordance with the ROD and Explanation of Significant Differences. An additional 1,500 cubic yards were excavated. Approximately half of this soil was inappropriately disposed of in the Class III Port Heiden landfill. The soil is currently being

removed from the landfill and placed in supersacks. These sacks will be taken to the barge landing area for storage over the winter. The other half of the 1,500 cubic yards are stockpiled at the RRS will be shipped to a permitted disposal facility in 2012. The Class III landfill will be closed using clean fill. No work was completed at the RRS Landfill where rainwater continues to naturally flow off the existing cap. Approximately 9,000 cubic yards of PCB-contaminated soil remain at the RRS to be removed. Additional work is planned to be completed in 2012.

It is noted that further characterization occurred along the access road. An additional 25,000 cubic yards of PCB-contaminated soil was identified at depth in the road and areas adjacent to the road. While this site is not covered in the ROD, the AF has made the community aware of the contamination and is monitoring access as if an IC was already in place. The goal is remediate to unrestricted use/unrestricted exposure (less than 1 ppm). The plan is to excavate all of this material in 2012.

Also not related to the ROD, an excavation took place at the RRS to remove POL-contaminated soil. Approximately 12,000 cubic yards was excavated and is actively being landfarmed.

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 continue to drive through the site to access the river. Since they did not disturb the soil, this is not a violation of ICs.

2.3 INSTITUTIONAL CONTROLS FOR WATER

Per the ROD, institutional groundwater controls will be implemented to 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.

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.

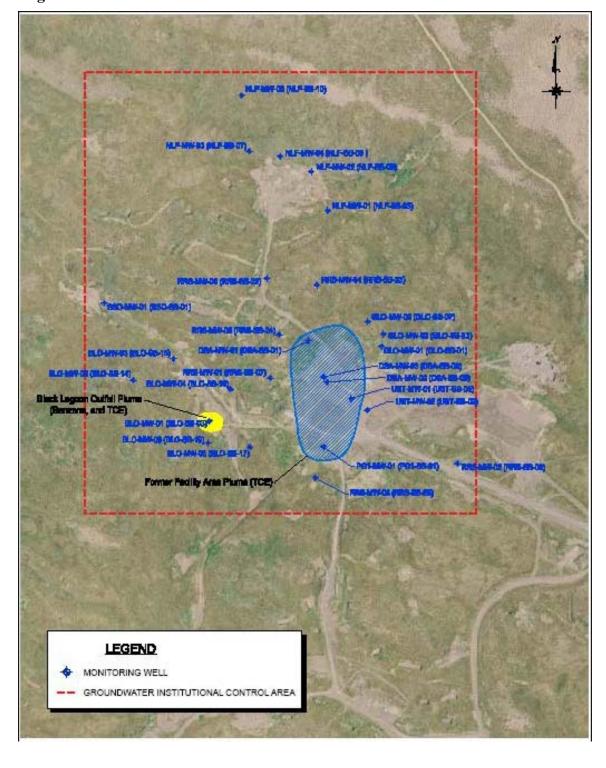


Figure 2-2 AREAS IMPACTED BY INSTITUTIONAL CONTROLS - WATER

2.4 INSTITUTIONAL CONTROLS EFFECTIVENESS FOR YEAR 2 (2011) – 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 contaminates, 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.

3.0 CONCLUSION

Since the ROD was signed, the site has been in an active remediation status. No violation of the required 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.
- USAF 2011. Draft Corrective Action Report Remedy Selection and Implementation, Demolition, and Debris Removal, Port Heiden Radio Relay Station, Port Heiden, Alaska. November 2011.