



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 10

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OFFICE OF
ENVIRONMENTAL
CLEANUP

FEB 22 2013

Colonel Brian P. Duffy
Commander
Joint Base Elmendorf-Richardson (JBER)
673 ABW/CC
10471 20th Street, Suite 139
JBER, Alaska 99506-2200

Dear Colonel Duffy:

The U. S. Environmental Protection Agency Region 10 has reviewed the Third CERCLA Five-Year Review report for Superfund sites, specifically for Operable Units (OU) B, C, and E, associated with Fort Richardson on Joint Base Elmendorf-Richardson, Alaska. The conclusions in this letter are based on the unsigned final report which was received by the EPA on February 12, 2013. The EPA reviewed this report for technical adequacy, accuracy, and consistency with the National Contingency Plan and EPA guidance. The document provides a summary of the status and protectiveness for Operable Units for which Records of Decisions have been completed and are not determined as No Further Action. It also identifies actions to be taken that ensure protectiveness of the selected remedies and on-going remedial actions and documents a schedule for completion of the recommended actions.

The following are the EPA's protectiveness determinations for these Sites and the overall Site protectiveness that will be reported to Congress in the EPA's annual report. Also included are additional recommendations and follow-up actions necessary to address issues raised in the Five-Year Review that affect or could affect protectiveness. In general, the EPA concurs with the protectiveness determinations in this report. Each Operable Unit is discussed individually below.

OU B – Poleline Road Disposal Area (PRDA)

The EPA concurs that the remedy for OU B – PRDA is currently protective through implementation of Land Use Controls. Short term protectiveness is appropriate for this remedy where monitoring data indicate the remedy will not achieve the Remedial Action Objective goals for groundwater in the 150 year time frame, residential use of the site is not permitted, and access to groundwater is restricted. However, to be protective in the long term, additional monitoring is required to evaluate plume stability. The down gradient well AP-3747 monitoring data shows an increase in contaminant concentrations suggesting the plume stability cannot be evaluated and plume boundary is undefined. Additionally, the Record of Decision OU B Remedial Action Objectives for 1,1,2,2-tetrachloroethane at 0.1 mg/kg for soils and 0.052 mg/L for groundwater were adopted based on 10^{-4} risk-based concentrations and a residential exposure scenario. Changes to the toxicity factors for 1,1,2,2-tetrachloroethane result in unacceptable exposures under the residential exposure assumption. To ensure long term protectiveness of human health, the Remedial Action Objectives for Contaminants of Concern at OU B require updating.

OU C – Eagle River Flats (ERF)

The EPA concurs that the remedy for OU C - Eagle River Flats currently protects human health and the environment because pond draining to sublimate and oxidize white phosphorus has adequately addressed the wildlife exposure pathway that could result in unacceptable risk in this area. Eagle River Flats is an active military range which inherently poses some human health and ecological risk.

OU E – Armored Vehicle Maintenance Area (AVMA)

The EPA concurs with the deferred protectiveness determination for OU E- AMVA pending additional sampling to address the potential for vapor intrusion at buildings above the contaminated AVMA groundwater plume. The vapor intrusion evaluation is expected to be completed by 2014. An addendum to determine the protectiveness of OU E will be prepared by December 31, 2014. In addition, Land Use Controls for OUE-AVMA prohibit access to contaminated groundwater as a source of drinking water and the land use at this source area will remain industrial for the foreseeable future.

Sitewide – Fort Richardson

The remedial actions at OU B and OU C have been implemented and currently protect human health and the environment but require follow-up actions as documented in the report and this letter to ensure they remain protective into the future. The remedial action at OU E is deferred for protectiveness due to the potential for vapor intrusion at buildings above the groundwater plume. Overall the site is currently protective but the follow-up actions need to be performed to ensure they remain protective in the long term.

Consistent with EPA's August 1, 2011 memorandum "Program Priorities for Federal Facility Five-Year Reviews", the Five-Year Review Guidance Section 1.3.3 has been superseded and the future Five-Year Review dates will be based on the completion date for this review to assure that the due dates will not change if the reports are early or late. The due dates for the subsequent Five-Year Reviews are February 22, 2018 and February 22, 2023.

Finally, the August 1 Program policies memorandum also calls for a summary of the EPA Superfund Sitewide Environmental Indicator Status for Sites undergoing Five-Year Reviews. The Environmental Indicators for Fort Richardson are posted on the EPA website at Superfund Site Progress Profile Fort Richardson (USARMY).

The Superfund Sitewide Human Health Exposure Indicator status will be changed to "Insufficient data to determine human exposure control status." Due to uncertainty regarding exposures to vapor intrusion from OU E, the EPA cannot draw conclusions as to whether human exposures to tetrachloroethylene vapors are controlled in the manned facilities in the vicinity of the Armored Vehicle Maintenance Area site in OU E.

The Superfund Sitewide Contaminated Groundwater Migration indicator status will be changed to "Insufficient data to determine migration control status." As the down gradient well in OU B has recently increased in concentration, the EPA cannot draw conclusions as to whether the contaminated ground water plume has stabilized.

Thank you for the Army's hard work in completing the Third Five-Year Review. I want to commend your staff on addressing EPA comments on earlier drafts and the efforts your project team demonstrated

in finalizing the document. We feel the EPA and JBER project teams have an excellent working relationship and look forward to continuing this cooperative effort as the work moves forward.

If you have questions concerning this letter, please contact the site manager, Sandra Halstead, at (907) 271-1218 or by email to halstead.sandra@epa.gov.

Sincerely,

A handwritten signature in blue ink that reads "Cami Grandinetti". The signature is written in a cursive style.

Cami Grandinetti
Program Manager
Remedial Cleanup Program

Cc: Gary Fink, JBER
Louis Howard, ADEC