



United States Department of the Interior

NATIONAL PARK SERVICE

Olympic National Park
600 East Park Avenue

Port Angeles, Washington 98362-6798

IN REPLY REFER TO:

DATE : June 1, 2011

Memorandum

TO: Christine S. Lehnertz, NPS, Pacific West Regional Director

FROM: Michael Sorenson, ESH Program Manager, Olympic National Park

THROUGH: Stephen J. Mitchell, PE, NPS/PWR/FM, Operations/Environmental Program Lead *sm*

THROUGH: Karen Gustin, Superintendent, Olympic National Park *KG*

Subject: EE/CA Approval Memorandum for Proposed Non-Critical Removal Action at Former Kalaloch Firing Range, Olympic National Park.

The purpose of this memorandum is to:

1. Request approval to proceed with an Engineering Evaluation/Cost Analysis (EE/CA) for a non-time-critical removal of lead impacted soils at the former Kalaloch Firing Range (Site).
2. Document the situation meets the National Oil and Hazardous Substances Pollution Contingency Plan (NCP) criteria for initiating a removal action and that the required removal action is non-time-critical; and
3. Provide a finding of an actual or threatened release from the site and, if present, a finding of an imminent and substantial endangerment, or refer to a document establishing such a determination.

I. Site Background

The Site is owned by the National Park Service (NPS) and is located in Olympic National Park, approximately 0.25 miles east of Highway 101 in Jefferson County, Washington. The elevation of the Site is approximately 50 feet above mean sea level (Baker, 2007). The site was used by NPS Law Enforcement Rangers from 1975 until 2001.

Site Investigation Results

One previous Site Investigation was conducted and is documented in the Technical Review Report (Baker, 2007). The Site Investigation (Baker, 2007) collected seven soil samples and determined a range

of 12 to 5,200 parts per million (PPM) lead. The concentrations were compared to USEPA Action level of 400 ppm for lead in residential settings (Baker, 2007). Four of the samples exceed the USEPA Action level for residential settings. In addition, the data was also compared to USEPA Ecological Soil Screening Levels (Eco-SSIs, USEPA OSWER Directive #9285.7-70, 2005). Eco-SSIs are concentrations of contaminants in soil that are protective of ecological receptors that commonly come into contact with soil or ingest biota that live on or in soil. Total lead concentrations were compared to Eco-SSIs for birds and mammals, of which several of the samples exceed the screening criteria for the following species:

- Avian Herbivore, Dove (46 ppm)
- Avian Ground Insectivore, Woodcock (11 ppm)
- Avian Carnivore, Hawk (510 ppm)
- Mammalian Herbivore, Vole (1,200 ppm)
- Mammalian Ground Insectivore, Shrew (56 ppm)
- Mammalian Carnivore, Weasel (460 ppm).

Three samples were analyzed to determine if they would be characterized as "hazardous waste" if disposed off-Site using the Toxicity Characteristic Leaching Procedure (TCLP). Two of the three samples had TCLP lead concentrations above the regulatory level of 5 ppm.

II. Threat to Public Health, Welfare, or the Environment

Lead present at the Site presents a risk to human health and the environment. Based on the results presented above for human and ecological receptors, sufficient evidence exists to justify proceeding with the preparation of an EE/CA to address lead contamination at the Site.

III. Imminent and Substantial Endangerment (Statutory Basis for Action)

Section 300.415(b)(2) of the National Contingency Plan (NCP) provides factors for determining the appropriateness of a removal action. The factors applicable to current conditions at the Site include actual or potential exposures to nearby human populations, animals, or the food chain from hazardous substances or pollutants (lead).

In accordance with 300.415(b)(4) of the NCP, the NPS has determined that a planning period of at least six months exists before on-site activities must be initiated; therefore, an EE/CA must be conducted for a Non-Time Critical Removal Action.

IV. Enforcement Actions

There are currently no Enforcement Actions occurring for the Site.

Public Involvement

NPS expects to issue an EE/CA for public comment in 2011.

V. Proposed Project Oversight and Cost

The EE/CA will be conducted by a contractor working for the NPS. The cost of that contract is \$26,354. The NPS will be conducting project oversight. The cost of the Removal Action will be assessed during the EE/CA.

VI. Approval/Disapproval

The conditions at the former Kalaloch Firing Range Site meet the NCP criteria for a Removal Action. Therefore, I am requesting approval to proceed with an EE/CA. Your approval or disapproval should be indicated below:

Approve: Greg A. Tull Date: 5/21/11

Disapprove: _____ Date: _____

References

Michel Baker Jr. Inc, (Baker), 2007, Final Technical Report, Kalaloch Firing Range, ECL Site No. 1475, Olympic National Park, Port Angeles, Washington

