



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 10

1200 Sixth Avenue, Suite 900
Seattle, WA 98101-3140

OFFICE OF
ENVIRONMENTAL CLEANUP

May 15, 2009

MEMORANDUM

SUBJECT: Action Memorandum for a Removal Action at the Double H Pesticide Burial Site

FROM: *for* Dan Heister, On-Scene Coordinator
Emergency Response Unit

Andrew M. Smith

THRU: Chris D. Field, Unit Manager
Emergency Response Unit

CD Field *ron CF*

TO: Daniel D. Opalski, Director
Office of Environmental Cleanup

I. Purpose

The purpose of this memorandum is to document the decision to initiate the emergency removal action described herein for the pesticide waste disposal site located in a rural vineyard (Site) at 1501 Bethany Road, Grandview, Yakima County, Washington, pursuant to the On-Scene Coordinator delegated authority under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) Section 104.

The scope of this action, which is limited to the vineyard referred to as Area A, was to evaluate whether the Site presents a threat to human health or the environment by, among other things, collecting and analyzing wastes and environmental media samples to determine whether hazardous substances are present at the Site and are migrating to the surrounding environment. Additionally, the response action provided for interim stabilization of many containers suspected to contain hazardous substances, thus potentially preventing an ongoing chronic release to the environment.

II. Site Information

A. Site Description

Site Name: Double H Pesticide Burial Site
Superfund Site ID: 10HA
NRC Case Number: N/A
CERCLIS Number: WAN001002790
Site Location: 1501 Bethany Road, Grandview, WA
County: Yakima County

Lat/Long: 46.2908/ -119.9269
Access: Granted by written agreement
NPL Status: The site is not listed nor has it been proposed for the NPL
Removal Start Date: 03/17/2009

B. Site Background

1. Removal Site Evaluation

On Friday, 13 March 2009, the Washington State Department of Agriculture (Agriculture) and the Department of Ecology (Ecology) requested the U.S. Environmental Protection Agency (EPA) assist with an assessment of a site where a reliable confidential informant alleged that drums of an "orange/yellow" pesticide had been buried in an illegal manner.

2. Physical location and Site characteristics

The Site is located in a vineyard at 1501 Bethany Road; Grandview, WA 98930, approximately 1 mile east of I-82 and 3 miles northwest of Grandview (46.2908 North Latitude, 119.9269 West Longitude). The nearest residence is about ¼-mile south of the Site.

The scope of this action is limited to the vineyard (Area A). There are five other potential sites located at the Bethany Road property (Areas B, C, D, E, F) which are not included as part of this Action Memorandum. See Figure 1, attached.

3. Release or threatened release into the environment of a hazardous substance, pollutant, or contaminant

Pesticides found at the Site, including carbaryl and dimethoate, are hazardous substances as defined by sections 101(14) and 101(33) of CERCLA, as amended, 42 U.S.C. §9601(14) and (33).

III. Threats to Public Health, Welfare, or the Environment

A. Nature of Actual or Threatened Release of Hazardous Substances, Pollutants or Contaminants:

Empty or partially-filled containers with carbaryl, dimethoate, or other hazardous substances may have been discarded into one or more burial pits and/or residual or unused pesticides or other hazardous substances may have also been discarded into the pits.

B. Applicable factors (from 40 CFR 300.415) which were considered in determining the appropriateness of a removal action:

The following factors were considered in determining the appropriateness of the emergency response action.

- X Actual or potential exposure to nearby human populations, animals or the food chain from hazardous substances or pollutants or contaminants [300.415(b)(2)(i)]

Agricultural workers or other persons may come into contact with carbaryl, dimethoate, other discarded agricultural pesticide products, and hazardous substances through ground-disturbing activities such as repair of water lines. Burrowing animals including squirrels and rabbits are also common in this area and may expose buried wastes, causing adverse impacts to local raptors and other predators within the food chain. Moreover, hazardous substances could be mobilized when in contact with groundwater.

- X Actual or potential contamination of drinking water supplies or sensitive ecosystems [300.415(b)(2)(ii)].

The water table is encountered 7 to 10 feet below the ground surface, and the depth to groundwater fluctuates with nearby operating irrigation ditches. Containers were discovered above and below the water table, and given the uncertainty associated with the structural integrity of the containers and whether the containers are full or partially full, there is potentially an ongoing chronic release of carbaryl, glyphosate, and dimethoate and other hazardous substances, pollutants, or contaminants to groundwater. However, it is unknown whether any existing drinking water supplies or sensitive ecosystems are actually contaminated by the Site, and there are no known restrictions prohibiting installation of an unregulated water supply well.

- X Hazardous substances or pollutants or contaminants in drums, barrels, tanks, or other bulk storage containers, that pose a threat of release [300.415(b)(2)(iii)].

Several suspected burial pits were identified at the Site, and many different sized containers were discovered within the pits. The historic agricultural use of the Site and excavated container label information, suggests carbaryl, dimethoate, glyphosate, and and other potentially hazardous substances, pollutants, or contaminants are found within the pits. Moreover, an unknown sheen was observed on the groundwater encountered in the burial pits and stained soils were observed in the pits. The structural integrity of containers is questionable given the lengthy period likely associated with burial and likely no care associated disposal of the containers. Thus, any container and residual quantity of material disposed within the pits is likely susceptible to a chronic threat of release.

- X The availability of other appropriate federal or state response mechanisms to respond to the release [300.415(b)(2)(vii)]

Neither the Washington State Department of Ecology nor any other known agency possessed the expertise or resources to conduct an assessment or emergency response action in a timely manner.

IV. Endangerment Determination under CERCLA Section 104: Pollutant or Contaminants

This section is not applicable because this emergency removal action was not driven by a need to respond to known pollutants or contaminants.

V. Selected Removal Action and Estimated Costs

A. Situation and Removal Activities to Date

1. Current Situation

Excavated soil and recovered containers are temporarily secured on-site within a polyethylene lined bermed area and beneath a polyethylene protective barrier. Samples collected from suspected visibly sustained soils, container contents, and groundwater were shipped to an off-site laboratory for analysis. The analytical results will be used to determine if the Site warrants further removal and enforcement actions.

2. Removal activities to date

There are no ongoing removal actions taken by government or private parties that are currently being performed.

3. Enforcement

See attached confidential enforcement addendum.

B. Removal Action

1. Action description

An emergency removal action was conducted from 17 March 2009 through 26 March 2009. EPA, along with its START and ERRS contractors and personnel from Agriculture and Ecology participated in the emergency removal action.

Assessment of suspected pesticide product container burial pits

A site reconnaissance was conducted within Area A. Three suspected waste burial pits were initially identified. A magnetometer and ground penetrating radar were used to screen for and delineate subsurface anomalies. Several soil stockpiles were moved from the suspected burial pits to enable use of these instruments.

Excavation and stabilizing/staging of containers and suspect contaminated soils

A tracked excavator was used to unearth materials buried in the waste pits. Generally, at approximately 2 to 4 feet below ground surface, agricultural and household debris and trash were encountered, and metal and polyethylene containers ranging in size from 1-gallon to 30-gallons, were encountered from 4 to 10 feet below ground surface. Additionally, many other items such as aerosol cans, automobile batteries, a backpack sprayer, and smaller quart containers were observed. Many of the smaller containers are suspected to contain waste oil. The structural integrity of many containers was compromised (e.g., crushed, rusted, etc.). Several containers were marked with the original product labels (Carbaryl, Epimek, Glyphosate, Gramoxone, Lime Sulphur, Prowl) and/or warning labels ("Caution," "Danger"). Groundwater water was encountered at 7 to 10 feet below ground surface in each pit. An unknown sheen was observed on groundwater in each pit.

Approximately 100 containers were identified, included 12 1-gallon containers, 31 5-gallon containers, and 49 30-gallon containers were excavated, along with many aerosol cans, automobile batteries, and quart oil containers. An estimated 400 cubic yards (yds³) of clean overburden soil and 150 yds³ of agricultural and household debris are stockpiled. Excavated soil and recovered containers are temporarily secured on-site within a polyethylene lined bermed area and beneath a polyethylene protective barrier. The slopes of the burial pits were graded and fencing was installed around the pits.

Collection of Soil and Surface Water Samples for Analysis

While several containers had labels, many more did not. Unknown containers were categorized into hazard classes and sampled, while other labeled containers were sampled. Samples were also collected from suspected visibly sustained soils, soil stockpiles, and groundwater. These samples were shipped to an off-site laboratory for analysis, and the analytical results will be used to determine whether the Site warrants further removal and enforcement actions.

2. Contribution to remedial performance

The emergency response action described herein will, to the extent practicable, contribute to the efficient performance of any future removal or remedial actions at the Site, and will likely not impede those actions based upon available information.

3. ARARs

Because of the limited scope of this emergency removal action, involving stabilization of the Site without disposal of removed wastes, no ARARs were identified as practicable for implementation.

4. Project Schedule



An emergency response action was conducted from March 17, 2009 through March 26, 2009.

C. Estimated Costs

Extramural – Regional Removal Allowance Costs – ERRS	\$ 65,000
Extramural – Non-Regional Removal Allowance Costs - START	\$105,000
Subtotal Extramural Cost	\$170,000
Extramural Costs Contingency (20%)	\$ 34,000
Total Removal Project Ceiling ¹	\$204,800

¹ EPA direct and indirect costs, although cost recoverable, do not count toward the Removal Ceiling for this removal action. Liable parties will be held financially liable for costs incurred by the EPA as set forth in Section 107 of CERCLA.

VI. Expected Change in the Situation Should Action Be Delayed or Not Taken

A delay in action or no action at this Site would increase the actual or potential threats to the public health and/or the environment.

VII. Outstanding Policy Issues

None

VIII. Approvals

This decision document represents the selected removal action for this Site, developed in accordance with CERCLA as amended, and not inconsistent with the National Contingency Plan (NCP). This decision is based on the administrative record for the Site.

Conditions at the site meet the NCP section 300.415(b) criteria for a removal action and through this document, I approved the removal action described herein. The total project ceiling is \$204,000. Of this amount, an estimated \$65,000 may be funded from the Regional removal allowance.



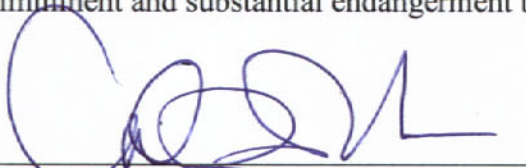
for Dan Heister
Federal On-Scene Coordinator

5/15/09

Date

IX. Endangerment Determination under CERCLA Section 106: Hazardous Substances

Actual or threatened releases of hazardous substances from this site, if not addressed by implementing the response action selected in this Action Memorandum, may present an imminent and substantial endangerment to public health, or welfare, or the environment.



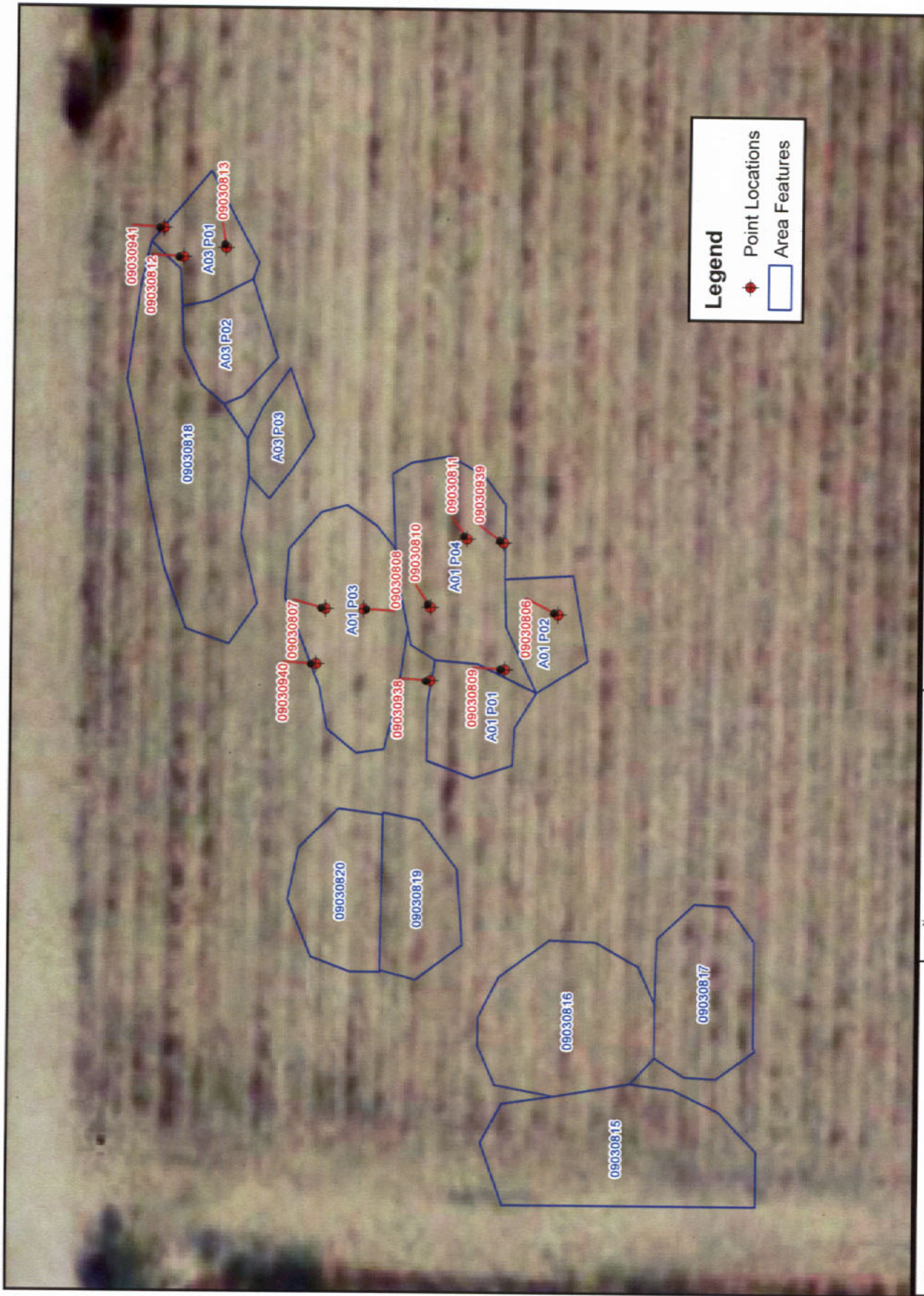
for Chris Field, Manager
Emergency Response Unit
Office of Environmental Cleanup

5/15/09

Date

X. Attachments/References

- 1) Map of burials sites on property



ecology and environment, inc.
International Specialists in the Environment
Seattle, Washington



Map Reference:
Tide Atlas, 2009

**DOUBLE H PESTICIDE BURIAL
REMOVAL ASSESSMENT**

Grandview, Washington

SITE MAP

Date:
4/9/2009

Drawn by:
lamm

Job Number: