



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION 10

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OFFICE OF  
ENVIRONMENTAL CLEANUP

May 15, 2009

**MEMORANDUM**

**SUBJECT:** First Amendment to the Action Memorandum for a Removal Action at the Double H Pesticide Burial Site

**FROM:** Andy Smith, On-Scene Coordinator *Andy M. Smith*  
Emergency Response Unit

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

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

**I. Purpose**

The purposes of this amendment to the original Action Memorandum are threefold:

- to document the decision to continue removal actions for the pesticides and other hazardous substances and soils temporarily stabilized at Area A; and
- to document the decision to evaluate whether contaminated media in Area A present a possible source of contamination to surrounding areas; and
- to document the decision to evaluate whether hazardous substances may have been released at Area B and if appropriate, to conduct cleanup actions.

The proposed removal actions are expected to be carried out or funded by potentially responsible parties (PRPs) in accordance with the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) with oversight by the U.S. Environmental Protection Agency (EPA).

**II. Site Information**

**A. Site Description**

Refer to the original Action Memorandum.

## **B. Site Background**

### **1. Removal Site Evaluation**

Refer to the original Action Memorandum.

### **2. Physical location and Site characteristics**

Areas A and B are located at 1501 and about 55 Bethany Road, Grandview, Yakima County, Washington, respectively.

The scope of this action includes Area A along with Area B.

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

Pesticides found at elevated levels in the groundwater at the Site include carbaryl, dimethoate, and glyphosate among other substances, are hazardous substances as defined by sections 101(14) and 101(33) of CERCLA, as amended, 42 U.S.C. §9601(14) and (33). Hazardous substances released within Areas A and B may also include metals such as lead from car batteries.

## **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, glyphosate, 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. EPA's initial investigation of Area A identified the disposal of a car battery within a pit, likely containing lead. EPA has also received information indicating that other auto parts or even whole cars have been buried at Area B, furthering the likelihood of additional releases of hazardous substances such as lead at Area B.

### **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 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 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 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 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**

Analytical data for Area A demonstrate that carbaryl, dimethoate and glyphosate are present at the Site at elevated levels and that other hazardous substances are also present there. Hazardous substances are also likely present in Area B based on informant reports and property ownership and usage in common with Area A.

#### **2. Removal activities to date**

Refer to the original Action Memorandum.

#### **3. Enforcement**

Refer to the original Action Memorandum.

### **B. Planned Removal Action**

#### **1. Proposed action description**

***Area A*** – Reclamation of burial pits; and packaging, labeling, transportation, and disposal of hazardous substances and contaminated soil

The staged uncontaminated overburden soil excavated from the burial pits will be placed back into the pits, and the pits will be regarded and contoured to control for surface water run-on and run-off.

The staged carbaryl, glyphosate dimethoate, and other discarded agricultural pesticide products, and hazardous substances will be packaged, labeled, transported, and disposed in accordance with applicable rules and regulations. Dimethoate was found in groundwater and soil but not in any products in containers.

***Area B*** – Inspection of suspected buried hazardous substances; collection of source, soil, and groundwater and surface water samples; and, if warranted, packaging, labeling, transportation, and disposal of hazardous substances and contaminated soil

A site inspection will be conducted within Area B to identify potentially buried agricultural pesticide containers and products and other potentially hazardous substances. During this inspection, a magnetometer and ground penetrating radar will be used to screen for and delineate subsurface anomalies. Buried anomalies will be exposed, and source samples of suspected hazardous substances and media samples of suspected contaminated soil, groundwater, and surface water will be collected and submitted to an analytical laboratory to determine



whether hazardous substances are present, and if present, whether further CERCLA or other response actions are warranted. If hazardous substances are present at actionable concentrations in containers and soil, such contamination will be removed, packaged, labeled, transported, and disposed in accordance with applicable rules and regulations.

## 2. Contribution to remedial performance

The removal 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

ARARs are defined in CERCLA Section 121 and the NCP [40 CFR Part 300]. "Applicable" requirements are those cleanup standards and other environmental protection requirements promulgated under federal or state law that specifically address a hazardous substance, pollutant, contaminant, location, response action, or other circumstance at a site. While not applicable to a particular circumstance at a CERCLA site, "relevant and appropriate" requirements address problems or situations sufficiently similar to those encountered at a site that their use is well suited to the site. ARARs fall into three broad categories, based on the manner in which they are applied: chemical-, action-, and location-specific. In general, only the substantive requirements of an ARAR must be implemented at site.

### *State Regulations*

Under CERCLA, State of Washington cleanup standards, standards of control, and other substantive environmental protection requirements, criteria, or limitations promulgated by the State of Washington are potential ARARs. Determination of whether these State of Washington standards, requirements, criteria, and limitations become ARARs is conducted using the eligibility criteria set forth in Section 121 of CERCLA (i.e., the requirements are promulgated, legally enforceable, generally applicable, more stringent than federal requirements, and identified in a timely manner). MTCA sets forth various ways to determine the numeric values for ARARs (i.e., cleanup levels) for surface water, groundwater, and soil. This includes using tables with cleanup standards for individual contaminants [WAC 173-340-704] and methods for addressing multiple contaminants and pathways [WAC 173-340-705, -706, and -708].

### *Potential Chemical-Specific ARARs*

Chemical-specific ARARs may generally include Maximum Concentration Levels (MCLs) promulgated under the Safe Drinking Water Act and incorporated into state standards. However, the scope of the proposed removal action described herein does not include treatment of contaminated groundwater. See NCP at 40 CFR 300.415(j)(2) (in determining whether compliance with ARARs is practicable, lead agency may consider scope of the removal action). As such, established federal and state standards for drinking water and groundwater will not be considered ARARs for purposes of this removal action.



**Washington State Model Toxics Control Act [RCW 70.105D; WAC 173-340].**

MTCA, including WAC 173-340-740 (unrestricted land use soil cleanup standards), -745 (industrial cleanup standards), and -7490 through -7494 (terrestrial ecological evaluation), is a potential ARAR under CERCLA and is applicable to soils across the Site under state law.

***Potential Action-Specific ARARs***

**Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) [7 USC § 136q, Sec 19]  
Storage, Disposal, and Transportation and Recall.**

At the federal level, FIFRA governs the sale, distribution, and use of pesticides in the U.S. Pesticides are regulated under FIFRA until they are disposed, after which they are regulated under RCRA. Some, but not all, pesticides, including carbaryl (U279) and dimethoate (P044), are regulated as RCRA hazardous waste when disposed. Federal hazardous waste regulations specify hazardous waste identification, management, and disposal requirements.

**Resource Conservation and Recovery Act [42 USC § 6901], Subtitle C - Hazardous Waste Management [40 CFR Parts 260 to 279].**

Federal hazardous waste regulations specify hazardous waste identification, management, and disposal requirements. Applicable or relevant and appropriate requirements of RCRA Subtitle C (or the state equivalent) may be satisfied by off-site disposal, consistent with the Off-Site Rule, 40 CFR 300.440. RCRA Subtitle C also provides treatment standards for debris contaminated with hazardous waste ("hazardous debris"). Where Washington has an authorized state hazardous waste program (RCW 70.105; Chapter 173-303 WAC), it applies in lieu of the federal program.

**Resource Conservation and Recovery Act [42 USC § 6901], Subtitle D - Managing Municipal and Solid Waste [40 CFR Parts 257 and 258].**

Subtitle D of RCRA establishes a framework for controlling the management of non-hazardous solid waste. Subtitle D is potentially applicable to solid waste generation and management at the Site.

**Washington State Hazardous Waste Management Act and Dangerous Waste Regulations [RCW 70.105; Chapter 173-303 WAC].**

Washington State Dangerous Waste regulations govern the handling and disposition of dangerous waste, including identification, accumulation, storage, transport, treatment, and disposal. The Dangerous Waste regulations are potentially applicable to generating, handling, and managing dangerous waste at the Site, and would be potentially relevant and appropriate even if dangerous wastes are not managed during remediation.

## **Washington State Solid Waste Handling Standards [RCW 70.95; Chapter 173-350 WAC].**

Washington State Solid Waste Handling Standards apply to facilities and activities that manage solid waste. The regulations set minimum functional performance standards for proper handling and disposal of solid waste; describe responsibilities of various entities; and stipulate requirements for solid waste handling facility location, design, construction, operation, and closure. This regulation is potentially applicable or relevant and appropriate for management of excavated soil or debris that will be generated during the Site cleanup.

## **Washington Clean Air Act and Implementing Regulations [WAC 173-400-040(8)].**

This regulation is potentially relevant and appropriate to response actions at the Site. It requires the owner or operator of a source of fugitive dust to take reasonable precautions to prevent fugitive dust from becoming airborne and to maintain and operate the source to minimize emissions.

## **General Regulations for Air Pollution Sources - Washington State [RCW 70.94; Chapter 173-400 WAC].**

The purpose of these regulations is to establish technically feasible and reasonably attainable standards, and to establish rules generally applicable to the control and/or prevention of the emission of air contaminants. Depending on the response action selected, these regulations are potentially applicable to the Site (e.g., generation of fugitive dust during remediation of soil and tailings, or emissions from equipment).

### **4. Project Schedule**

The scheduled will be determined by any settlement agreement. However, from project start to finish, an estimated 30 days will be required to complete the removal actions.

### **5. Post Removal Site Control**

Due to oil exclusion in CERCLA, any oil products or contamination that are not threatening waters of the US will be referred to Washington State Department of Ecology for response.

Any new burial sites reported to the EPA will be referred, as appropriate, to state or local agencies for investigation and response.

Groundwater contamination will not be addressed under this action and will be referred to Ecology or to EPA remedial program



### **C. Estimated Costs**

Costs for conducting the removal actions described herein are expected to be paid or reimbursed by the Respondents. Assuming 30 days, estimated EPA costs for conducting the removal actions are shown below.

Extramural – Regional Removal Allowance Costs – ERRS	\$101,000
Extramural – Non-Regional Removal Allowance Costs - START	\$105,000
Subtotal Extramural Cost	\$206,000
Extramural Costs Contingency (20%)	\$ 41,200
Total Removal Project Ceiling <sup>1</sup>	\$247,200

<sup>1</sup> 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**

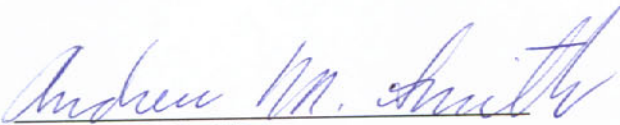
None



### **VIII. Approvals**

This decision document represents the selected removal actions 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 am approving the proposed removal actions. Costs for conducting the removal action are expected to be paid or reimbursed by the Respondents.



Andrew M. Smith  
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) Referral letter from Washington Department of Ecology; March 27, 2009