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1	WHC-SD-DD-AP-017		0	Asbestos Removal Plan for the 622-1 Dump Site	4	1		

16. KEY		
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1	1	Cog. Mgr. M. A. Mihalic	<i>M. A. Mihalic</i>	3.9.93	R2-77						
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1	1	D. G. Kachele	<i>D. G. Kachele</i>	3/9/93	S4-67						

18. Signature of EDT Originator <i>D. L. Smith</i> Date: 3/9/93	19. Authorized Representative Date for Receiving Organization	20. Cognizant/Project Engineer's Manager <i>M. A. Mihalic</i> Date: 3.9.93	21. DOE APPROVAL (if required) Ltr. No. <input type="checkbox"/> Approved <input type="checkbox"/> Approved w/comments <input type="checkbox"/> Disapproved w/comments
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SUPPORTING DOCUMENT

1. Total Pages 9

2. Title

Asbestos Removal Plan for the 622-1 Dump Site

3. Number

WHC-SD-DD-AP-017

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0

5. Key Words

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6. Author

Name: D. L. Smith

*D. L. Smith* 3/9/93  
Signature

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7. Abstract

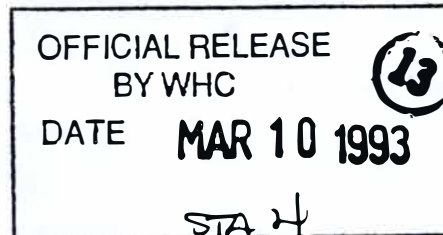
This plan describes the general steps required to remove asbestos, asbestos contaminated debris, and nonasbestos contaminated debris from the 622-1 dump site.

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10. RELEASE STAMP



9. Impact Level 4

ASBESTOS REMOVAL PLAN FOR THE 622-1 DUMP SITE

D. L. Smith

March 1993

Westinghouse Hanford Company  
P. O. Box 1970  
Richland, Washington

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## ASBESTOS REMOVAL PLAN FOR THE 622-1 DUMP SITE

### 1. PURPOSE

This document describes the corrective action necessary to remove asbestos, asbestos contaminated debris, and nonasbestos contaminated debris from the 622-1 dump site. Corrective action was requested in 1990 after the site was officially identified by the Tiger Team. As a result, the site was entered into the Waste Information Data System (WIDS) database, and initial project documentation was initiated which would allow cleanup of the site.

Because there is more than one pound of friable asbestos at the site, site cleanup falls under the provisions of the Code of Federal Regulations 1910.120, "Hazardous Waste Operations and Emergency Response." All work will be done in accordance with these regulations.

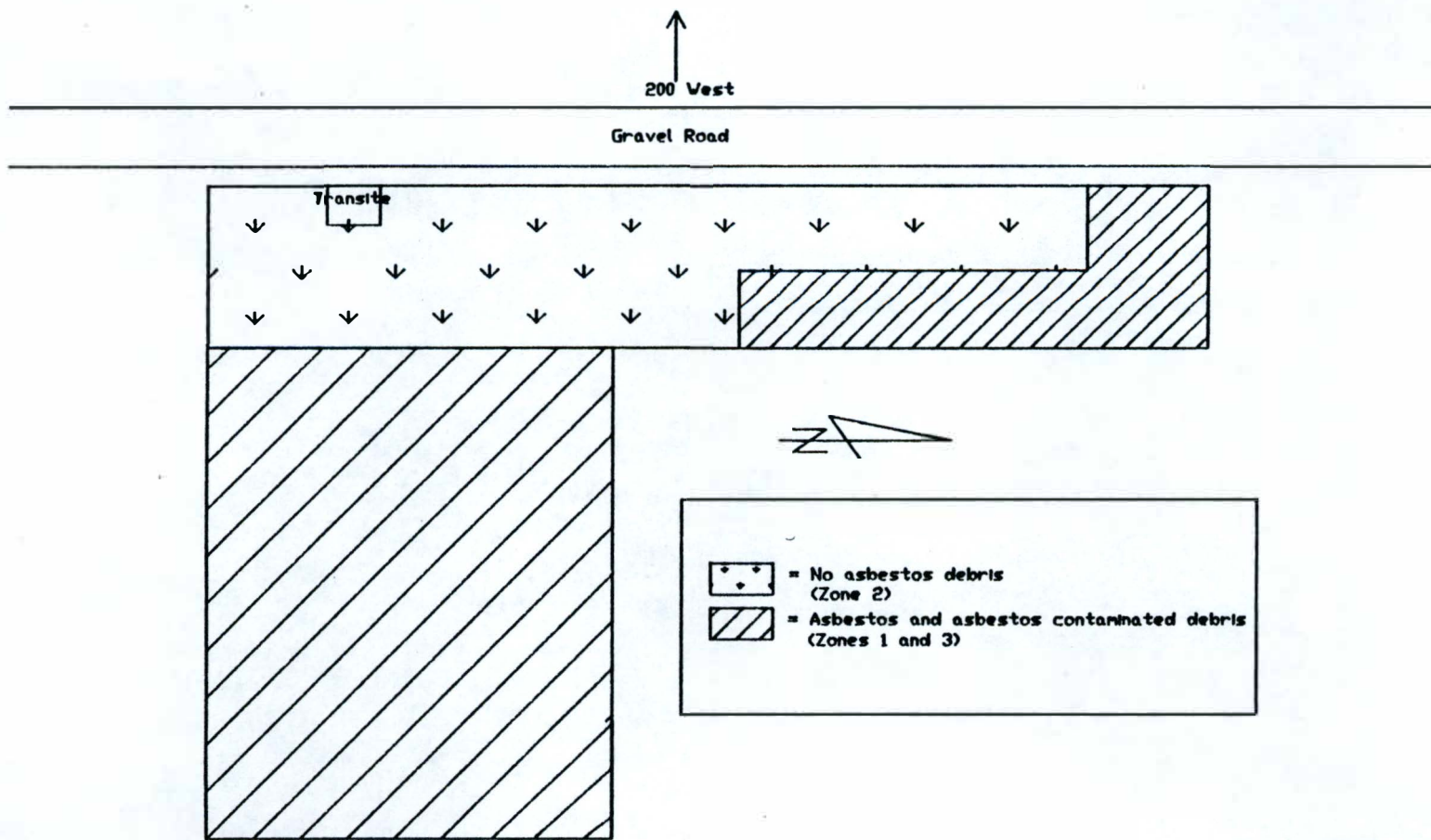
### 2. SITE DESCRIPTION

The 622-1 dump site is located adjacent to the east perimeter of the 200 West Area, south of the main entrance. The site contains construction and demolition debris with evidence of asbestos and other potentially hazardous material, and covers approximately 83,000 ft<sup>2</sup>. There are no official records of the site. The topography and vegetation is typical of the surrounding desert with little relief and a sagebrush cheatgrass dominated plant community. The site is readily accessible via a well maintained road.

Some initial characterization work has been completed at the site. During 1986, the site was investigated for hazardous materials other than asbestos. Some of the drums were removed, and suspect material in some of the buckets sampled. Nothing significant was noted, and the debris was crushed and sent to Central Landfill. Recently, the site was investigated for asbestos contamination. Asbestos was noted in 21 out of 28 samples. During these investigations, radiologic and organic vapor surveys occurred. No radioactive or organic vapor contamination was noted.

Debris is scattered haphazardly around the site, with much of the asbestos and asbestos contaminated material located in discrete individual heaps. It appears to have been simply dumped on the ground, with no excavation taking place. The debris consists of concrete rubble, wood, paint buckets, 5-gallon buckets, and 55-gallon drums. The material is typically what you would expect to result from building demolition activities. The debris is heavily weathered. In all appearances, the site has been there for a long time. Asbestos bearing debris is partially segregated from other debris which is generally located in the southeast portion of the site, with the central section being relatively free of debris. Refer to Figure 1 for a site map.

Figure 1. Site Map of the 622-1 Dump Site.



### 3. OBJECTIVES

The primary objective of this work is to remove asbestos from the site, thereby meeting the requirement of WHC-CM-7-5, Environmental Compliance, Section Y, "Asbestos and Polychlorinated Biphenyls." As a result of meeting this objective, the site status will be updated in the WIDS database.

### 4. PREPARATORY ACTIVITIES

#### 4.1. WORK PROCEDURE PREPARATION

A written work plan which provides field personnel with the instructions to safely and efficiently perform debris removals will be prepared. The procedure will be part of a Job Control System work package.

#### 4.2. COMPLIANCE WITH 40 CFR 1910.120

A Hazardous Waste Operations Permit or equivalent will be prepared for this work. This document will identify hazards, levels of personnel protective equipment, emergency response activities, and general operating procedures during site cleanup.

#### 4.3. SAMPLING

Due to the presence of breached drums, and buckets containing suspect material, one sample will be taken and analyzed for hazardous material. Soil in the vicinity of the breached drums will be sampled in several areas, composited, and analyzed. The Westinghouse Hanford Company mobile sampling labs will perform this sampling. A second sample may be required from the suspect debris and any material contained therein.

#### 4.4. ENDANGERED PLANT AND ANIMAL SURVEYS

If excavation with heavy equipment is required, the site will be investigated for plant or animal species of concern. No species listed as Threatened or Endangered are known to inhabit the site.

#### 4.5. CIVIL SURVEYS

The perimeter fence will be surveyed to record the location of the dump site. Other surveys may be required as conditions dictate.

#### 4.6. PHOTOGRAPHS

Photographs will be taken before, during, and after site cleanup activities.

### 5. CLEANUP ACTIVITIES

Cleanup activities at the site can be broken into three phases. Each phase is described below.

#### 5.1. DEBRIS SEGREGATION

Debris that has the potential for containing hazardous material will be removed and segregated. This likely will include the majority of the 55-gallon drums and some of the buckets. This suspect material can then be evaluated and possibly sampled separately from the asbestos removal operations. There is not a tremendous amount of material that will be segregated. If the material is determined to be nonhazardous, it will be disposed of as asbestos waste.

Based on field conditions and recommendations from the Asbestos Supervisor, some debris may be removed from the site. At no time during the debris separation activities will material associated with asbestos be segregated. Only material that is clearly isolated from the asbestos will be segregated.

#### 5.2. ASBESTOS REMOVAL ACTIVITIES

Prior to disturbing asbestos or asbestos contaminated debris, the area will be thoroughly wetted with water. All visible asbestos and some asbestos contaminated debris will be removed using hand labor. Asbestos contaminated debris may be removed with a front loader. This mainly includes concrete rubble and small amounts of wood and metal. A constant spray of water will accompany removal actions of this type. Waste will be placed in a plastic lined burial box or lined dump truck. A water truck outfitted with a 1.5-inch fire hose and portable hand sprayers will be used to provide water. Some soil will be removed from the areas overlain with asbestos.

If burial boxes are used, they will be labeled on all four sides and the top as containing asbestos. The source of the waste (622-1 dump site) will be printed in indelible ink on the top of the box as well.

After all visible asbestos or asbestos contaminated debris has been removed, the area may be sampled for asbestos contamination. Samples may be taken from the areas where debris was removed and where the individual portions of asbestos were removed. In addition, a series of random samples may be specified for the remainder of the site. The samples will be taken



from surface soil (surface to 4 inches deep) and analyzed for asbestos contamination. If no asbestos contamination is detected, the area will be considered clean. The asbestos posting will then be removed.

If one or more of the samples from the former location of the debris piles is contaminated, that area will have more soil removed and then be resampled. If one of the random samples is contaminated, the vicinity around that sample point will have the soil removed and be resampled. If there are numerous random samples that are contaminated, large scale soil removal operations may be required. Heavy equipment would be used to remove the top layers of soil. Large amounts of water would be used for dust control. Soil removal depths could be expected to be 3 to 6 inches deep. This soil would be handled as asbestos contaminated. After the initial soil removal operations occurred, the area would be resampled. The same scenario will occur until the area is determined to be free of asbestos contamination.

### 5.3. NONASBESTOS DEBRIS REMOVAL

After the asbestos and asbestos contaminated material has been removed, and if no asbestos contamination is found in the soil samples, the asbestos posting will be removed. The remaining construction debris will then be removed with heavy equipment and dump trucks. The debris consists mainly of concrete block, asphalt, and/or a mixture of both. The heaps look as if they were dumped from a truck. There is no asbestos associated with these heaps and no indication that the heaps are not homogenous. The heaps will be wetted down and excavated. A spotter will be located upwind to observe the debris removal. If material is observed that is significantly different from what was observed on the surface of the heap, excavation will cease and the operation reevaluated. Also, as debris removal proceeds, an individual will be stationed upwind with a fire hose attached to a water truck. As excavation progresses, the material will be continually sprayed with water. Excavation of the heaps will continue until the heap is removed.

## 6. POST CLEANUP OPERATIONS

After the site has been successfully decontaminated, the site status will be updated in the WIDS database. The operable unit manager will be notified, and a final report prepared describing the cleanup activities. A project file will be prepared and stored in the Decommissioning Engineering files. Asbestos records will be stored as directed by WHC-CM-4-40, Industrial Hygiene Manual, Section 2.3, "Asbestos Control Program."

All areas disturbed by earth moving will be revegetated. A high nitrogen fertilizer will be drilled with a perennial grass. After seeding, the area will be mulched with straw or hay, or covered with an excelsior blanket. The site posts and chain boundaries will be removed.

**7. MONITORING REQUIREMENTS**

Personnel will be monitored continuously during excavation activities or as directed by Health and Safety Officer. Area monitoring will occur as directed by the Health and Safety Officer. Asbestos monitoring will also occur during removal of the nonasbestos contaminated debris.

Complete for all Types of Release

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Title **Asbestos Removal Plan for the 622-1 Dump Site** Unclassified Category **UC-** Impact Level **4**

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