

# Soil Treatment Final Report Woods Industries Site Yakima, Washington

Volume I — Report and Appendices A Through D

August 7, 1996

Prepared for:

**BURLINGTON NORTHERN RAILROAD**  
Seattle, Washington

PHILIP ENVIRONMENTAL SERVICES CORPORATION  
210 West Sand Bank Road  
Post Office Box 230  
Columbia, Illinois 62236-0230

Project 12883088



APPENDIX A

Administrative Order on Consent (Number 1087-03-18-106)

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UNITED STATES  
ENVIRONMENTAL PROTECTION AGENCY  
REGION 10

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IN THE MATTER OF:

WOODS INDUSTRIES SITE

Burlington Northern Railroad,

Proceeding Under Sections  
106(a) and 122 of the  
Comprehensive Environmental  
Response, Compensation, and  
Liability Act, as amended, 42  
U.S.C. §§9606(a) and 9622

ADMINISTRATIVE ORDER ON  
CONSENT FOR REMOVAL RESPONSE  
ACTIVITIES

U.S. EPA Region 10  
CERCLA  
Docket No. 1087-03-18-106

I. JURISDICTION AND GENERAL PROVISIONS

1.1 This Order is issued pursuant to the authority vested in the President of the United States by sections 106(a) and 122 of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, 42 U.S.C. §§ 9606(a) and 9622, as amended ("CERCLA"), and delegated to the Administrator of the United States Environmental Protection Agency ("EPA") by Executive Order No. 12580, January 23, 1987, 52 Federal Register 2923, and further delegated to the EPA Regional Administrators and the EPA Assistant Administrator for Solid Waste and Emergency Response by EPA Delegation Nos. 14-14-A and 14-14-B. This authority is conferred on the EPA Region 10 Chief, Superfund Response and Investigations

1 Branch by Regional Redelelegation Order signed by the Regional  
2 Administrator.

3 1.2 This Administrative Order on Consent (Order) is entered  
4 into voluntarily by the EPA and, Respondent Burlington Northern  
5 Railroad Company ("BNR") and its receivers, trustees, successors  
6 and assigns. This Order provides for the performance of removal  
7 actions by Respondent and the reimbursement of response costs  
8 incurred by the United States in connection with the property  
9 located at 1 East King Street in Yakima, Washington, and known as  
10 the "Woods Industries Site". This Order requires the Respondent to  
11 conduct removal actions described herein to abate an imminent and  
12 substantial endangerment to the public health, welfare or the  
13 environment that may be presented by the actual or threatened  
14 release of hazardous substances at or from the Woods Industries  
15 Site.

16 1.3 EPA has notified the State of Washington of this action  
17 pursuant to section 106(a) of CERCLA, 42 U.S.C. § 9606(a).

18 1.4 Respondent's participation in this Order shall not  
19 constitute or be construed as an admission of liability or of EPA's  
20 findings or determinations contained in this Order except in a  
21 proceeding to enforce the terms of this Order. Respondent agrees  
22 to comply with and be bound by the terms of this Order. Respondent  
23 further agrees that it will not contest the basis or validity of  
24 this Order or its terms.

## II. PARTIES BOUND

2           2.1 This Order applies to and is binding upon EPA, and upon  
3 Respondent and its directors, officers, employees, agents,  
4 receivers, trustees, successors and assigns. Any change in  
5 ownership or corporate status of Respondent including, but not  
6 limited to, any transfer of assets or real or personal property  
7 shall in no way alter Respondent's responsibilities under this  
8 Order.

9           2.2 Respondent shall ensure that its contractors,  
10 subcontractors, and representatives receive a copy of this Order  
11 and comply with this Order. Respondent shall be responsible for  
12 any noncompliance by such persons.

## III. FINDINGS OF FACT

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15           3.1 The Woods Industries facility (hereinafter the "Woods  
16 site," "site" or "facility"), is a facility as defined in Section  
17 101(9) of CERCLA, 42 U.S.C. § 9109(9), and a former pesticide  
18 formulation and distribution operation located in the city of  
19 Yakima, Washington. The site is the areal extent of contamination  
20 that consists of approximately four (4) acres of land, located at  
21 1 East King Street in Yakima, Washington. The site is located  
22 within the city limits of Yakima, Washington, in a commercial and  
23 industrial area.

24           3.2 Burlington Northern Railroad Company is a Delaware  
25 corporation authorized to do business in the state of Washington.  
26 BNR's principal offices are located in Fort Worth, Texas. The  
27

1 mailing address of BNR for purposes of this order is:

2 Bruce Sheppard  
3 Manager, Environmental Engineering  
4 Burlington Northern Railroad Company  
5 2200 First Interstate Center  
6 999 Third Avenue  
7 Seattle, WA. 98104-1105

8 3.3 BNR is the land owner of the site. Several  
9 individuals and corporations used the site for pesticide  
10 formulation and related operations from at least 1945 until at  
11 least 1985 under leases from BNR and its predecessors. Site  
12 operators have included, among others, Crop King Co., Richey &  
13 Gilbert Co., Akland Irrigation Co., Inc. and their respective  
14 officers and directors. Between approximately 1980 and May 1985,  
15 Woods Industries, Incorporated (hereinafter "Woods") occupied the  
16 site and operated a pesticide business on property leased from BNR.

17 3.4 In May 1985, the lease between BNR and Woods expired  
18 and was not renewed. Woods no longer occupies the site. No  
19 current operation is present at the site. BNR now controls the  
20 site.

21 3.5 A wide variety of hazardous substances, including  
22 arsenic, aldrin, strychnine, lindane, carbamates, and DDT, were  
23 used in the pesticide formulation process on the site. Site  
24 inspections and assessments conducted by EPA in October and  
25 November of 1985, revealed that a number of drums and chemical  
26 containers were present on the site. The inspections and  
27 assessments revealed chemical contamination in the soils at the  
28 site.

1 3.6 Pursuant to an Administrative Order on Consent for  
2 Immediate Response and Stabilization Activities issued by EPA and  
3 dated December 6, 1985 (Order No. 1085-10-02-106), BNR was ordered  
4 to perform several actions, including: restricting access to the  
5 property, securing pools or solid spills within the buildings of  
6 the property, securing drums and bottled chemicals on the property  
7 to prevent release of their contents, and securing the entrances  
8 and lower windows of buildings on the property.

9 3.7 In addition to these actions, the order required BNR  
0 to: analyze the on-site groundwater well and provide to EPA  
1 information on the casing, screening and depth of that well;  
2 further investigate the extent of hazardous substance contamination  
3 of soils, groundwater, and surface waters at the facility; and  
4 investigate pathways for contamination migration.

5 3.8 The above-mentioned actions were undertaken with the  
6 knowledge that more extensive response actions would be required to  
7 address the significant and varied environmental hazards at this  
8 facility.

9 3.9 BNR contracted with Morrison-Knudsen Engineers,  
0 Incorporated (hereinafter "MKE") to implement the actions required  
1 by the December 6, 1985 Consent Order. MKE conducted site  
2 characterization studies from July through October 1987 covering  
3 air, surface water, soil, and shallow groundwater investigations.  
4 The findings and conclusions from those studies are contained in  
5 the following documents which have been reviewed and accepted by  
6 EPA: 1) a Preliminary Site Characterization Report prepared by MKE  
7 and dated March 1987; 2) a letter addressed to Jeff Webb of EPA,

1 dated March 28, 1988; 3) a letter addressed to Jeff Webb, EPA,  
2 dated July 6, 1987; and 4) quarterly groundwater monitoring data.

3 3.10 Pursuant to an Amended Order on Consent dated June 28,  
4 1990, for a Remedial Investigation and Feasibility Study, BNR  
5 completed a Remedial Investigation, which was approved by EPA on  
6 Sept. 16, 1992.

7 3.11 The Remedial Investigation found visible evidence of  
8 chemical contamination inside the Woods buildings including dry  
9 powder above ceiling panels in the basement and stained areas on  
0 the floors and walls. Bags containing asbestos material were  
1 located in one of the buildings. The buildings were generally in  
2 a dilapidated condition.

3 3.12 Pursuant to an Administrative Order on Consent for  
4 Removal Response Activities issued by EPA and dated January 4, 1993  
5 (Order No. 1087-03-18-106), BNR was ordered to demolish and dispose  
6 of buildings formerly used for pesticides formulation and to  
7 dispose of miscellaneous debris on the site. Building demolition  
8 and disposal was completed in February 1993.

9 3.13 The Remedial Investigation revealed extensive  
10 contamination of the surface and subsurface soils at the site. The  
11 hazardous substances of greatest concern in the soils are  
12 pesticides including DDT and Dieldrin, hexachlorobenzene, lead,  
13 mercury, and arsenic. The main sources of this contamination  
14 appears to be past waste disposal units including a sump, a  
15 washdown area, and a series of lagoons. Most of the contamination  
16 on site appears to be located in soils in and around these units.  
17 The contamination around these units extends from the surface to



1 the watertable. The maximum concentrations detected in soils  
2 within these units are: DDT-30,000 ppm; Dieldrin-200 ppm;  
3 hexachlorobenzene- 23,000 ppm; lead- 143,800 ppm; mercury-88.5 ppm;  
4 and arsenic-543 ppm. The Remedial Investigation indicates that  
5 concentrations of contaminants outside of these areas is much lower  
6 and the contamination doesn't extend lower than 2 to 3 feet below  
7 the surface.

8 3.14 The Remedial Investigation found that groundwater  
9 under the site is contaminated with many of the same chemicals  
10 found in the soils including DDT, Dieldrin, and hexachlorobenzene.  
11 The highest concentrations of chemicals found in groundwater on  
12 site are: DDT- 77 ppb; Dieldrin- 16 ppb; and hexachlorobenzene- 11  
13 ppb. Highest concentrations of contaminants were found in the  
14 upper portion of the aquifer in the area of greatest soil  
15 contamination. Concentrations of contaminants in the ground water  
16 decreases with depth.

17 3.15 The Remedial Investigation found that the depth to  
18 groundwater under the site varies seasonally by 5 to 8 feet in  
19 response to irrigation in the Yakima Valley. The groundwater table  
20 is lowest in late winter/early spring and rises rapidly with the  
21 onset of irrigation. The groundwater table reaches its maximum  
22 elevation in late summer/early fall. In late summer, the Remedial  
23 Investigation found high levels of contamination in soils just  
24 above the groundwater table, which represent the deepest soil  
25 samples taken to date. Soil contamination is suspected to be  
26 present below the seasonal high groundwater table. It is likely  
27 that groundwater is being contaminated each year as the groundwater

1 table rises into soils containing elevated concentrations of  
2 hazardous substances.

3 3.16 Conditions presently exist at the site that may  
4 present an imminent and substantial endangerment to public health  
5 or welfare or the environment.

6 3.17 The conditions at the site meet the criteria for a  
7 removal action as stated in the National Contingency Plan, 40  
8 C.F.R. Section 300.415 as follows:

9 A. High levels of hazardous substances or pollutants or  
10 contaminants in soil at or near the surface that may migrate -  
11 Surface soils sampled in the lagoon, sump, and washdown areas  
12 contain high concentrations of DDT, Dieldrin, Hexachlorobenzene,  
13 and other hazardous substances, which may migrate off-site  
14 through wind blown dusts and soils. The concentrations of some  
15 chemicals exceed the State of Washington cleanup standards for  
16 soils in industrial areas. For example the highest  
17 concentration of DDT in soil is 1,000 times the state cleanup  
18 standard. There are two businesses directly adjacent to the  
19 site.

20 B. Actual or potential exposure to nearby human  
21 population, animals, or the food chain from hazardous substances  
22 or pollutants or contaminants - Although the property is fenced  
23 and site access is restricted, there is a threat of trespassers  
24 coming into direct contact with contaminated soils. There is  
25 also a threat of contaminated soils migrating offsite through  
26 wind blown dust and soils. Many of the pesticides found on-site  
27 are known or suspected carcinogens and could pose a cancer risk.

2 Many of the pesticides found on-site are also known to cause  
nervous system disorders and liver diseases.

3 C. Actual or potential contamination of drinking water  
4 supplies or sensitive ecosystems - The pollutants overlie a  
5 local drinking water aquifer. Concentrations of Endrin in  
6 monitoring wells on-site are above the MCL. Concentrations of  
7 Hexachlorobenzene are above the proposed non-zero MCLG.  
8 Concentrations of pesticides which have no established MCL or  
9 MCLG such as DDT and Dieldrin exceeds state promulgated  
10 groundwater cleanup standards.

11 3.18 DDT is a chlorinated organic pesticide, which together  
12 with its metabolites DDD and DDE, is very persistent in the  
13 environment. DDT, DDD, and DDE are probable human carcinogens.  
14 Exposure to DDT can also result in adverse impacts to the central  
15 nervous system including excitability, tremors, and seizures.

16 3.19 Dieldrin is resistant to biodegradation and abiotic  
17 degradation and therefore can accumulate in the environment.  
18 Dieldrin is a probable human carcinogen. In high doses, Dieldrin  
19 is a neurotoxin that affects the central nervous system and can  
20 produce tremors, convulsions, coma, and even death. Short-term  
21 exposure can result in symptoms such as headaches, dizziness,  
22 irritability, loss of appetite, and convulsions.

23 3.20 Hexachlorobenzene is a probable carcinogen. Long-term  
24 exposure can result in hepatic toxicity, kidney effects, immune  
25 system abnormalities, and neurological effects.

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IV. CONCLUSIONS OF LAW AND DETERMINATIONS

4.1 Based on the Findings of Fact set forth above, and the Administrative Record supporting these removal actions, EPA determines that:

(A) The Woods Industries Site is a "facility" as defined by section 101(9) of CERCLA, 42 U.S.C. § 9601(9).

(B) Each substance identified in the Findings of Fact above is a "hazardous substance" as defined by section 101(14) of CERCLA, 42 U.S.C. § 9601(14).

(C) The Respondent is a "person" as defined by section 101(21) of CERCLA, 42 U.S.C. § 9601(21).

4.2 Respondent is liable under section 107(a) of CERCLA, 42 U.S.C. § 9607(a) as the "owner" of the facility, as defined by section 101(20) of CERCLA, 42 U.S.C. § 9601(20), and within the meaning of section 107(a)(1) of CERCLA, 42 U.S.C. § 9607(a)(1).

4.3 The conditions described in the Findings of Fact above constitute an actual or threatened "release" into the "environment" as defined by sections 101(8) and (22) of CERCLA, 42 U.S.C. §§ 9601(8) and (22).

4.4 The conditions present at the facility constitute a threat to public health, welfare, or the environment based upon the factors set forth in the National Oil and Hazardous substances Pollution Contingency Plan (NCP), 40 C.F.R. § 300.415(b)(2).

4.5 The actual or threatened release of hazardous substances from the Site may present an imminent and substantial endangerment to the public health, welfare, or the environment within the meaning of section 106(a) of CERCLA, 42 U.S.C. §

1 9606(a).

2 4.6 The removal actions required by this Order are  
3 necessary to protect the public health, welfare, or the  
4 environment, and are not inconsistent with the NCP and CERCLA.

5  
6 V. ORDER

7 5.1 Based upon the foregoing Findings of Fact, Conclusions  
8 of Law, Determinations, and the Administrative Record for this  
9 Site, it is hereby ordered and agreed that Respondent shall comply  
10 with the following provisions, including but not limited to all  
11 attachments, all documents incorporated by reference, and all  
12 schedules and deadlines attached to, or incorporated by reference  
13 into this Order, and perform the following actions:

14 5.2 Designation of Contractor, Project Coordinator, and On-  
15 Scene Coordinator. Respondent shall perform the work itself or  
16 retain a contractor(s) to implement this removal action.  
17 Respondent shall notify EPA of Respondent's qualifications or the  
18 name(s) and qualification(s) of such contractor(s) within five (5)  
19 days of the effective date of this Order. Respondent shall also  
20 notify EPA of the name(s) and qualification(s) of any other  
21 contractor(s) or subcontractor(s) retained to perform work under  
22 this Order at least five (5) days prior to commencement of such  
23 work. EPA retains the right to disapprove of any, or all, of the  
24 contractors and/or subcontractors retained by the Respondent. If  
25 EPA disapproves of a contractor selected by the Respondent,  
26 Respondent shall retain a different contractor within five (5) days  
27 following EPA's disapproval and shall notify EPA of that

1 contractor's name and qualifications within five (5) days of EPA's  
2 disapproval.

3           5.3 Within five (5) days after the effective date of this  
4 Order, the Respondent shall designate a Project Coordinator who  
5 shall be responsible for administration of all the Respondent's  
6 actions required by the Order. Respondent shall submit the  
7 designated coordinator's name, address, telephone number, and  
8 qualifications to EPA. To the greatest extent possible, the  
9 Project Coordinator shall be present on site or readily available  
10 during site work. EPA retains the right to disapprove of any  
11 Project Coordinator named by the Respondent. If EPA disapproves of  
12 a selected Project Coordinator, Respondent shall retain a different  
13 Project Coordinator and shall notify EPA of that person's name and  
14 qualifications within five (5) days following EPA's disapproval.

15 Receipt by Respondent's Project Coordinator of any notice or  
16 communication from EPA relating to this Order shall constitute  
17 receipt by Respondent.

18           5.4 The EPA has designated Bob Kievit of Region 10 as its  
19 On-Scene Coordinator (OSC). Respondent shall direct all  
20 submissions required by this Order to the OSC at:

21           United States Environmental Protection  
22           Agency, Region 10  
23           Washington Operations Office  
24           C/O Washington Department Of Ecology  
25           P.O. Box 47600  
26           Olympia, Washington 98604-7600

27 EPA and Respondent shall have the right to change their designated  
28 OSC or Project Coordinator. EPA shall notify the Respondent, and  
29 Respondent shall notify EPA, five (5) days before such a change is

made. The initial notification may be orally made but it shall be promptly followed by a written notice. (See Section VI - Authority of the EPA On-scene Coordinator).

5.5 Work to Be Performed. Pursuant to Section 106(a) of CERCLA, 42 U.S.C., Part 9606(a), as amended, Respondent shall conduct all removal activities in accordance with the requirements of this order. The removal action shall include the excavation and treatment of contaminated soils. Because of the immediate need to excavate soils prior to the next seasonal rise of the groundwater table (estimated to begin in early spring) and because of the long lead time needed to develop adequate work plans for soil treatment and to procure an appropriate soil treatment vendor, the removal will proceed in two phases. The first phase will include excavation and temporary storage of all soils on site that contain hazardous substances greater than the cleanup standards established for the site. The first phase shall be conducted in accordance with the Work Plan in Attachment A and in the Schedule of Deliverables in Attachment B, which are attached and incorporated in this Consent Order.

The second phase of the removal will include thermal treatment of all soils excavated in Phase I in accordance with the treatment standards established for the site. The second phase shall be conducted in accordance with the Schedule of Deliverables (Attachment B) and with the Scope of Work and the Work Plan that will be developed under and will be incorporated into this order when approved by EPA.

All such removal activities shall be conducted in accordance

1 with CERCLA, the NCP, and EPA guidance.

2           5.6 Work Plan and Implementation. The Respondent has  
3 submitted to EPA an approved Final Work Plan (Attachment A) for the  
4 excavation and temporary storage of contaminated soils. The Work  
5 Plan provides a description of, and an expeditious schedule for,  
6 the activities required by Phase 1 of this Order. Within thirty  
7 (30) days after the effective date of this Order, the Respondent  
8 shall submit to EPA for approval a draft Scope of Work for  
9 conducting thermal treatment on the soils excavated in Phase 1.  
10 The draft Scope of Work shall provide a description, and  
11 expeditious schedule for the activities required by Phase 2 of this  
12 Order.

13           5.7 EPA may approve, disapprove, require revisions to, or  
14 modify the draft Scope of Work or Work Plan submitted for Phase 2.  
15 If EPA requires revisions, respondent shall submit a revised draft  
16 Scope of Work or Work Plan which is responsive to EPA comments  
17 within thirty (30) days of receipt of EPA's notification of the  
18 required revisions. Failure to do so will be considered violation  
19 of this order. Respondent shall implement the Scope of Work for  
20 Phase 2 and Work Plans for Phase 1 and 2 as finally approved in  
21 writing by EPA in accordance with the schedule approved by EPA.  
22 The approved Work Plans and Schedule shall be fully enforceable  
23 under this Order. Respondent shall notify EPA in writing at least  
24 48 hours prior to performing any on-site work pursuant to an EPA-  
25 approved Work Plan. Respondent shall not commence or undertake any  
26 removal actions at the Site without prior EPA approval.

27



1           5.8 Health and Safety Plan. Ten (10) days before Respondent  
2 commences any removal action, or with the approval of the OSC if  
3 less than 10 days, the Respondent shall submit for EPA review and  
4 comment a plan that ensures the protection of the public health and  
5 safety during performance of on-site work under this Order. This  
6 plan shall be prepared in accordance with EPA's Standard Operating  
7 Safety Guide, dated November 1984, and updated July 1988. The plan  
8 shall comply with applicable Occupational Safety and Health  
9 Administration (OSHA) regulations found at 29 C.F.R. Part 1910,  
0 dated March 6, 1989. In addition, the plan shall also comply with  
1 all applicable Washington Industrial Safety and Health Act (WISHA)  
2 regulations found at WAC Chapter § 296-62. If EPA determines that  
3 it is appropriate, the plan shall also include contingency  
4 planning. Respondent shall incorporate all changes to the plan  
5 recommended by EPA, and implement the plan during the removal  
6 action.

7           5.9 Quality Assurance and Sampling. All sampling and  
8 analyses performed pursuant to this Order shall conform to EPA  
9 direction, approval, and guidance regarding sampling, quality  
0 assurance/quality control (QA/QC), data validation, and chain of  
1 custody procedures. Respondent shall ensure that the laboratory  
2 used to perform the analyses participates in a QA/QC program that  
3 complies with the appropriate EPA guidance. Respondent shall  
4 follow the following documents as appropriate as guidance for QA/QC  
5 and sampling: "Quality Assurance/Quality Control Guidance for  
6 Removal Activities: Sampling QA/QC Plan and Data Validation  
7 Procedures," OSWER Directive Number 9360.4-01; "Environmental

Response Team Standard Operating Procedures," OSWER Directive  
2 Numbers 9360.4-02 through 9360.4-08; and the representative  
3 Sampling Guidance for soil, air, ecology, waste, and water as this  
4 information becomes finalized and available.

5 5.10 Upon request by EPA, Respondent shall have the  
6 laboratory analyze samples submitted by EPA for quality-assurance  
7 monitoring. Respondent shall provide to EPA the quality  
8 assurance/quality control procedures followed by all sampling teams  
9 and laboratories performing data collection and/or analysis.

10 5.11 Upon request by EPA, Respondent shall allow EPA or its  
11 authorized representatives to take split and/or duplicate samples  
12 of any samples collected by Respondent while performing work under  
13 this Order. Respondent shall notify EPA not less than five (5)  
14 days in advance of any sample collection activity, or with the  
15 approval of the OSC if less than five (5) days. EPA shall have the  
16 right to take any additional samples that it deems necessary.

17 5.12 Respondent shall submit to EPA the results of all  
18 sampling or tests and all other data generated by Respondent or its  
19 contractor(s), or on the Respondent's behalf during implementation  
20 of this Order. This information shall be submitted to EPA, as it  
21 becomes available, in the written progress reports and shall be  
22 summarized in the final report submitted pursuant to paragraph  
23 5.16.

24 5.13 Post-Removal Site Control. To the extent practicable,  
25 Respondent shall provide for post-removal site control consistent  
26 with the NCP, 40 C.F.R. § 300.415(k) and OSWER Directive 9360.2-02.  
27 Respondent shall provide EPA with documentation indicating that

1 these post-removal site control arrangements have been made with  
2 the local/state governments.

3 5.14 Reporting. Respondent shall submit a written progress  
4 report to EPA concerning activities undertaken pursuant to this  
5 Order every seven (7) days after the date of receipt of EPA's  
6 approval of the Work Plan until termination of this Order, unless  
7 otherwise directed by the OSC. These reports shall describe all  
8 significant developments during the preceding period, including the  
9 work performed and any problems encountered, analytical data  
0 received during the reporting period, and the developments  
1 anticipated during the next reporting period, including a schedule  
2 of work to be performed, anticipated problems, and planned  
3 resolutions of past or anticipated problems.

4 5.15 Respondent and any Successor(s) in title shall, at least  
5 30 days prior to the conveyance of any interest in real property at  
6 the site, give written notice of this Order to the transferee and  
7 written notice to EPA and the State of the proposed conveyance,  
8 including the name and address of the transferee. The party  
9 conveying such an interest shall require that the transferee comply  
0 with Paragraph 5.17 - Access to Property and Information.

1 5.16 Final Report. Within thirty (30) days after completion  
2 of the removal action required under this Order, the Respondent  
3 shall submit for EPA review and approval a final report summarizing  
4 the actions taken to comply with this Order. The final report  
5 shall conform, at a minimum, with the requirements set forth in the  
6 NCP, 40 C.F.R. § 300.165 entitled "OSC Reports". The final report  
7 shall include a good faith estimate of total costs or statement of

1 actual costs incurred in complying with the Order, a listing of  
2 quantities and types of materials removed, a discussion of removal  
3 and disposal options considered for those materials, a listing of  
4 the ultimate destination of those materials, a presentation of the  
5 analytical results of all sampling and analyses performed, and  
6 accompanying appendices containing all available relevant  
7 documentation generated during the removal action (e.g., manifests,  
8 invoices, bills, contracts, and permits). All relevant  
9 documentation not available when the final report is submitted  
0 shall be submitted to EPA as soon as it becomes available. The  
1 final report shall also include the following certification signed  
2 by a person who supervised or directed the preparation of that  
3 report:

4 Under penalty of law, I certify that based on personal  
5 knowledge and appropriate inquiries of all relevant persons  
6 involved in the preparation of the report, the information  
7 submitted is true, accurate, and complete. I am aware that  
8 there are significant penalties for submitting false  
9 information, including the possibility of fine and  
0 imprisonment for knowing violations.

1 5.17 Access to Property and Information. Respondent shall  
2 provide and/or obtain access to the Site and appropriate off-site  
3 areas, and provide access to all records and documentation related  
4 to the conditions at the Site and the activities conducted pursuant  
5 to this Order. Such access shall be provided to EPA employees,  
6 contractors, agents, consultants, designees, representatives, and  
7 State of Washington representatives. These individuals shall be

1 permitted to move freely at the Site and appropriate off-site areas  
2 in order to conduct activities which EPA determines to be  
3 necessary. Respondent shall submit to EPA the results of all  
4 sampling or tests and all other data generated by Respondent or its  
5 contractor(s), or on the Respondent's behalf during implementation  
6 of this Order.

7 5.18 Where work under this Order is to be performed in areas  
8 owned by or in possession of someone other than Respondent,  
9 Respondent shall use its best efforts to obtain all necessary  
0 access agreements within thirty (30) days after the effective date  
1 of this Order, or as otherwise specified in writing by the OSC.  
2 Respondent shall immediately notify EPA if after using its best  
3 efforts it is unable to obtain such agreements. Respondent shall  
4 describe in writing its efforts to obtain access. EPA may then  
5 assist Respondent in gaining access, to the extent necessary to  
6 effectuate the response activities described herein, using such  
7 means as EPA deems appropriate.

8 5.19 Record Retention, Documentation, Availability of  
9 Information. Respondent shall preserve all documents and  
10 information relating to work performed under this Order, or  
11 relating to the hazardous substances found on or released from the  
12 Site, for at least ten years following completion of the removal  
13 actions required by this Order. At the end of this ten year period  
14 and 30 days before any document or information is destroyed,  
15 Respondent shall notify EPA that such documents and information are  
16 available to EPA for inspection, and upon request, shall provide  
17 the originals or copies of such documents and information to EPA.

1 In addition, Respondent shall provide documents and information  
2 retained under this section at any time before expiration of the  
3 ten year period at the written request of EPA.

4 5.20 Respondent may assert a business confidentiality claim  
5 pursuant to 40 C.F.R. § 2.203(b) with respect to part or all of any  
6 information submitted to EPA pursuant to this Order, provided such  
7 claim is allowed by section 104(e)(7) of CERCLA, 42 U.S.C.

8 § 9604(e)(7). Analytical and other data specified in section  
9 104(e)(7)(F) of CERCLA shall not be claimed as confidential by the  
10 Respondent. EPA shall only disclose information covered by a  
11 business confidentiality claim to the extent permitted by, and by  
12 means of the procedures set forth at, 40 C.F.R. Part 2, Subpart B.  
13 If no such claim accompanies the information when it is received by  
14 EPA, EPA may make it available to the public without further notice  
15 to Respondent.

16 5.21 Respondent shall maintain a running log of privileged  
17 documents on a document-by-document basis, containing the date,  
18 author(s), addressee(s), subject, the privilege or grounds claimed  
19 (e.g., attorney work product, attorney-client), and the factual  
20 basis for assertion of the privilege. Respondent shall keep the  
21 "privilege log" on file and available for inspection. EPA may at  
22 any time challenge claims of privilege through negotiations or  
23 otherwise as provided by law or the Federal Rules of Civil  
24 Procedure.

25

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1 5.22 Off-Site Shipments. All hazardous substances,  
2 pollutants or contaminants removed off-site pursuant to this Order  
3 for treatment, storage or disposal shall be treated, stored, or  
4 disposed of at a facility in compliance, as determined by EPA, with  
5 the EPA Revised "Off-Site Policy," OSWER Directive Number 9834.11,  
6 November 13, 1987. (see 42 U.S.C. § 9621(d)(3).)

7 5.23 Compliance With Other Laws. All actions required  
8 pursuant to this Order shall be performed in accordance with all  
9 applicable local, state, and federal laws and regulations except as  
10 provided in CERCLA section 121(e) and 40 C.F.R. section 300.415(i).  
11 In accordance with 40 C.F.R. section 300.415(i), all on-site  
12 actions required pursuant to this Order shall, to the extent  
13 practicable, as determined by EPA, considering the exigencies of  
14 the situation, attain applicable or relevant and appropriate  
15 requirements (ARARs) under federal environmental, state  
16 environmental, or facility siting laws ("The Superfund Removal  
17 Procedure for Consideration of ARARs for Removal Actions," OSWER  
18 Directive No. 9360.3-02, August 1991).

19 5.24 Emergency Response and Notification of Releases. If any  
20 incident, or change in site conditions, during the activities  
21 conducted pursuant to this Order causes or threatens to cause an  
22 additional release of hazardous substances from the Site or an  
23 endangerment to the public health, welfare, or the environment, the  
24 Respondent shall immediately take all appropriate action to  
25 prevent, abate or minimize such release, or endangerment caused or  
26 threatened by the release. Respondent shall also immediately  
27 notify the OSC at (206) 753-9014 or, in the event of his/her

1 unavailability, shall notify the Regional Duty Officer at (206)  
2 553-1263 of the incident or site conditions.

3 5.25 In addition, in the event of an actual release of a  
4 hazardous substance, Respondent shall immediately notify the  
5 National Response Center at telephone number (800) 424-8802.  
6 Respondent shall submit a written report to EPA within seven (7)  
7 days after each release, setting forth the events that occurred and  
8 the measures taken or to be taken to mitigate any release or  
9 endangerment caused or threatened by the release and to prevent the  
10 reoccurrence of such a release. This reporting requirement is in  
11 addition to, not in lieu of, reporting under CERCLA section 103(c)  
12 and section 304 of the Emergency Planning and Community Right-To-  
13 Know Act of 1986, 42 U.S.C. sections 11001 et seq.

15 VI. AUTHORITY OF THE EPA ON-SCENE COORDINATOR

16 6.1 The OSC shall be responsible for overseeing the proper  
17 and complete implementation of this Order. The OSC shall have the  
18 authority vested in an OSC by the NCP, including the authority to  
19 halt, conduct, or direct any work required by this Order, or to  
20 direct any other response action undertaken by EPA or Respondent at  
21 the Site. Absence of the OSC from the Site shall not be cause for  
22 stoppage of work unless specifically directed by the OSC.

23 EPA and Respondent shall have the right to change their designated  
24 OSC or Project Coordinator. EPA shall notify the Respondent, and  
25 Respondent shall notify EPA five (5) days before such a change is  
26 made. Notification may initially be made orally, but shall be  
27 followed promptly by written notice.



VII. REIMBURSEMENT OF COSTS

2 7.1 Respondent shall reimburse EPA for all past response  
3 costs and response costs incurred by the United States in  
4 overseeing Respondent's implementation of the requirements of this  
5 Order. After the end of each federal fiscal year in which  
6 Respondent performs work under the original Administrative Consent  
7 Order executed on October 11, 1988, the Amended Administrative  
8 Consent Order executed on June 28, 1990, the Administrative Order  
9 on Consent for Removal Response Activities executed on January 4,  
10 1993, and under this Order, EPA will submit to Respondent a  
11 detailed accounting of all costs, incurred by and/or billed to the  
12 United States after the effective date of the original Consent  
13 Order in connection with response, oversight, and community  
14 relations, costs and activities conducted by the United States  
15 government and its contractors and representatives with respect to  
16 the implementation of the original Administrative Consent Order,  
17 the Amended Administrative Consent Order, and this Order.

18 7.2 Respondent shall, within (60) days of receipt of the  
19 bill, remit a cashier's check, certified check, or corporate check  
20 for the amount of those costs made payable to the "Hazardous  
21 Substance Superfund" with a copy of such transaction sent to the  
22 EPA Project/On-Scene Coordinator. Remittances shall addressed to:

23 U.S. Environmental Protection Agency Region 10  
24 Superfund Accounting  
25 P.O. Box 360903M  
26 Pittsburgh, Pennsylvania 15251.

1 Respondent shall simultaneously transmit a copy of the check to  
2 EPA.

3 Regional Hearing Clerk  
4 Office of Regional Counsel  
5 U.S. E.P.A. Region 10, SO-125  
6 1200 Sixth Avenue  
7 Seattle, Washington 98101

8 Payments shall be designated as Oversight and/or Past Response  
9 Costs and shall reference the payor's name and address, the EPA  
10 site identification number (WAD027583525), and the docket number of  
11 this Order.

12 7.3 Interest at the rate established under section 107(a) of  
13 CERCLA, 42 U.S.C. § 9607(a), shall begin to accrue on the unpaid  
14 balance from the day after the expiration of the Sixty (60) day  
15 period, notwithstanding any dispute or an objection to any portion  
16 of the costs.

17 7.4 Respondent may dispute all or part of a bill submitted  
18 under this Order, if Respondent determines that EPA has made an  
19 accounting error, or if Respondent alleges that a cost item that is  
20 included represents costs that are inconsistent with the NCP.

21 7.5 If any dispute over costs is resolved before payment is  
22 due, the amount due will be adjusted as necessary. If the dispute  
23 is not resolved before payment is due, Respondent shall pay the  
24 full amount of the uncontested costs into the Hazardous Substances  
25 Trust Fund as specified above on or before the due date. Within  
26 the same time period, Respondent shall pay the full amount of the  
27 contested costs into a market rate interest-bearing escrow account.  
28 Respondent shall simultaneously transmit a copy of both checks to  
the EPA OSC. Respondent shall ensure that the prevailing party or

1 parties in the dispute shall receive the amount upon which they  
2 prevailed from the escrow funds plus interest within (30) days  
3 after the dispute is resolved.  
4

#### 5 VIII. DISPUTE RESOLUTION

6 8.1 The parties to this Order shall attempt to resolve,  
7 expeditiously and informally, any disagreements concerning this  
8 Order. If the Respondent objects to any EPA action taken pursuant  
9 to this Order, the Respondent shall notify EPA in writing of its  
0 objection(s) within fourteen (14) days of receipt of such  
1 notification or action, unless the objections have been informally  
2 resolved. EPA and the Respondent shall have seven (7) days from  
3 receipt of the notification of objection to reach agreement. If  
4 agreement is reached, it will be reduced to writing and will become  
5 a fully enforceable part of this Order. If agreement cannot be  
6 reached on any issue within this seven (7) day period, an EPA  
7 official will issue a written decision to the Respondent.  
8 Respondent's obligations under this Order shall not be tolled by  
9 submission of any objection for dispute resolution under this  
0 section.

1 8.2 Following resolution of the dispute, as provided by this  
2 section, Respondent shall fulfill the requirement that was the  
3 subject of the dispute in accordance with the agreement reached or  
4 with EPA's decision, whichever occurs. No EPA decision made  
5 pursuant to this section shall constitute a final agency action  
6 giving rise to judicial review.  
7

## IX. FORCE MAJEURE

9.1 Respondent agrees to perform all requirements under this Order within the time limits established under this Order, unless the performance is delayed by a force majeure. For purposes of this Order, a force majeure is defined as any event arising from causes beyond the control of Respondent or of any entity controlled by Respondent, including but not limited to their contractors and subcontractors, that delays or prevents performance of any obligation under this Order despite Respondent's best efforts to fulfill the obligation. Force majeure does not include financial inability to complete the work or increased cost of performance. Respondent shall notify EPA orally within forty eight (48) hours after the event, and in writing within seven (7) days, after Respondent become(s) or should have become aware of events that constitute a force majeure. Such notice shall: identify the event causing the delay or anticipated delay; estimate the anticipated length of delay, including necessary demobilization and re-mobilization; state the measures taken or to be taken to minimize the delay; and estimate the timetable for implementation of the measures. Respondent shall take all reasonable measures to avoid and minimize the delay. Failure to comply with the provisions of this section shall waive any claim of force majeure by the Respondent.

9.2 If EPA determines a delay is or was attributable to a force majeure, the time period for performance under this Order shall be extended as deemed necessary by EPA. Such an extension shall not alter Respondent's obligation to perform or complete

1 other tasks required by the Order that are not directly affected by  
2 the force majeure.

3  
4 X. STIPULATED PENALTIES

5 10.1 Stipulated penalties shall be paid by Respondent, upon  
6 notification by EPA to do so, into the Hazardous Substance Response  
7 Trust Fund according to the procedures described below. Stipulated  
8 penalties shall not apply to any act or omission that is the  
9 subject of ongoing dispute resolution under Section VIII of this  
0 Order unless EPA determines that the dispute resolution procedures  
1 were invoked by Respondent frivolously or in bad faith or for the  
2 purpose of delay. Stipulated penalties shall accrue commencing  
3 upon Respondent's receipt of an EPA written determination of  
4 disapproval, upon the failure of Respondent to meet the schedule  
5 specified in Attachment B of this Consent Order, or upon written  
6 notice from EPA to Respondent that a violation of this Order has  
7 occurred:

8 A. Failure to submit the following major deliverables  
9 and/or perform the following removal actions in compliance with the  
0 requirements of this Consent Order, and in accordance with the  
1 Schedules incorporated in the Work Plans and Schedule of  
2 Deliverables; in the amount up to \$500 per day for the first week  
3 of violation or delay, up to \$1,000 per day for the second week of  
4 violation or delay, and up to \$3,750 per day for the third week of  
5 violation or delay and each day thereafter.

- 6 1) Begin Mobilization for Phase 1 project (soil  
7 excavation and temporary storage)

- 1 2) Complete Phase 1 project
- 2 3) Submit draft Work Plan for Phase 2 project
- 3 4) Begin Mobilization for Phase 2 project (soil
- 4 treatment)
- 5 5) Complete Phase 2 project

6 10.2 Subject to paragraph 10.1, EPA may require that  
7 Respondent shall pay into the Hazardous Substances Superfund the  
8 sums set forth above as stipulated penalties with a copy of such  
9 transaction sent to EPA Project/OSC Coordinator. Certified checks  
10 or money orders shall be made out to the Hazardous Substances  
11 Superfund and specifically reference the identity of the Site and  
12 be addressed to:

13 U.S. Environmental Protection Agency Region 10  
14 Superfund Accounting  
15 P.O. Box 360903M  
16 Pittsburgh, Pennsylvania 15251.

17 Nothing herein shall prevent the simultaneous accrual of separate  
18 penalties for separate violations of this Order. Penalties are  
19 assessed per violation per day. Penalties shall accrue regardless  
20 of whether EPA has notified Respondent of a violation or act of  
21 noncompliance. Respondent must perform the work even if stipulated  
22 penalties are assessed.

23 **XI. RESERVATION OF RIGHTS**

24 11.1 Nothing herein shall limit the power and authority of  
25 EPA or the United States to take, direct, or order all actions  
26 necessary to protect public health, welfare, or the environment or  
27 to prevent, abate, or minimize an actual or threatened release of

1 hazardous substances, pollutants or contaminants, or hazardous or  
2 solid waste on, at, or from the Site. Further, nothing herein  
3 shall prevent EPA from seeking legal or equitable relief to enforce  
4 the terms of this Order, from taking other legal or equitable  
5 action as it deems appropriate and necessary, or from requiring the  
6 Respondent in the future to perform additional activities pursuant  
7 to CERCLA or any other applicable law.

8  
9 **XII. OTHER CLAIMS**

0 12.1 By issuance of this Order, the United States and EPA  
1 assume no liability for injuries or damages to persons or property  
2 resulting from any acts or omissions of Respondent. The United  
3 States or EPA shall not be deemed a party to any contract entered  
4 into by the Respondent or their directors, officers, employees,  
5 agents, successors, representatives, assigns, contractors, or  
6 consultants in carrying out activities pursuant to this Order.

7 12.2 *Except as expressly provided*, nothing in this Order  
8 constitutes a satisfaction of or release from any claim or cause of  
9 action against the Respondent or any person not a party to this  
0 Order, for any liability such person may have under CERCLA, other  
1 statutes, or the common law, including but not limited to any  
2 claims of the United States for costs, damages and interest under  
3 section 106(a) and 107(a) of CERCLA, 42 U.S.C. § 9606(a) and  
4 9607(a).

5 12.3 This Order does not constitute a preauthorization of  
6 funds under section 111(a)(2) of CERCLA, 42 U.S.C. § 9611(a)(2).  
7 The Respondent waive(s) any claim to payment under sections 106(b),

1 111, and 112 of CERCLA, 42 U.S.C. §§ 9606(b), 9611 and 9612,  
2 against the United States or the Hazardous Substances Superfund  
3 arising out of any activity performed under this Order.

4 12.4 No action or decision by EPA pursuant to this Order  
5 shall give rise to any right to judicial review except as set forth  
6 in section 113(h) of CERCLA, 42 U.S.C. § 9613(h).

7

8 XIII. CONTRIBUTION

9 13.1 With regard to claims for contribution against  
10 Respondent for matters addressed in this Order, the Parties hereto  
11 agree that the Respondent is entitled to such protection from  
12 contribution actions or claims to the extent provided by section  
13 113(f)(2) of CERCLA, 42 U.S.C. § 9613(f)(2).

14 13.2 Nothing in this Order precludes Respondent from  
15 asserting any claims, causes of action or demands against any  
16 persons not parties to this Order for indemnification,  
17 contribution, or cost recovery.

18

19 XIV. INDEMNIFICATION

20 14.1 Respondent agree(s) to indemnify, save and hold harmless  
21 the United States, its officials, agents, contractors, and  
22 employees from any and all claims or causes of action arising from,  
23 or on account of, acts or omissions of Respondent, its officers,  
24 directors, officers, employees, agents, contractors,  
25 subcontractors, receivers, trustees, successors or assigns, in  
26 carrying out activities pursuant to this Order.

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XV. INSURANCE

15.1 At least seven (7) days prior to commencing any on-site work under this Order, the Respondent shall secure, and shall maintain for the duration of this Order, comprehensive general liability insurance and automobile insurance with limits of at least one million dollars, combined single limit. Within the same time period, the Respondent shall provide EPA with certificates of such insurance and a copy of each insurance policy. If the Respondent demonstrates by evidence satisfactory to EPA that any contractor or subcontractor maintains insurance equivalent to that described above, or insurance covering the same risks but in a lesser amount, then the Respondent need provide only that portion of the insurance described above which is not maintained by such contractor or subcontractor.

XVI. MODIFICATIONS

16.1 Modifications to any plan or schedule shall be made in writing by the OSC. Minor field modifications to any plan or schedule may be made in writing by the OSC, or at the OSC's oral direction. If the OSC makes an oral modification, it will be memorialized in writing within seven (7) days; provided, however, that the effective date of the modification shall be the date of the OSC's oral direction. Any other requirements of the Order may be modified by mutual agreement of the parties and shall be in writing.

16.2 If Respondent seeks permission to deviate from any approved Work Plan or schedule, Respondent's Project Coordinator

1 shall submit a written request to EPA for approval outlining the  
2 proposed Work Plan modification and its basis.

3 16.3 No informal advice, guidance, suggestion, or comment by  
4 EPA regarding reports, plans, specifications, schedules, or any  
5 other writing submitted by the Respondent shall relieve the  
6 Respondent of obligations to obtain such formal approval as may be  
7 required by this Order, and to comply with all requirements of this  
8 Order unless it is formally modified.

9 16.4 If EPA determines that additional response actions not  
10 included in an approved plan are necessary to protect public  
11 health, welfare, or the environment, EPA will notify Respondent of  
12 that determination. Unless otherwise stated by EPA, within thirty  
13 days of receipt of notice from EPA that additional response  
14 activities are necessary to protect public health, welfare, or the  
15 environment, Respondent shall submit for approval by EPA a work  
16 plan for the additional response activities. The plan shall  
17 conform to the applicable requirements of this Order. Upon EPA  
18 approval of the plan, Respondent shall implement the plan for  
19 additional response activities in accordance with the provisions  
20 and schedule contained therein. This section does not alter or  
21 diminish the OSC's authority to make oral modifications to any plan  
22 or schedule.

XVII. NOTICE OF COMPLETION

17.1 When EPA determines, after EPA's review of the Final Report, that all work has been fully performed in accordance with this Order, with the exception of any continuing obligations required by this Order, EPA will provide notice to the Respondent. If EPA determines that any removal activities have not been completed in accordance with this Order, EPA will notify the Respondent, provide a list of the deficiencies, and require that Respondent submit to EPA a Work Plan to correct such deficiencies. The Respondent shall implement the new and approved Work Plan and shall submit a modified Final Report in accordance with the EPA notice. Failure by Respondent to implement this approved Work Plan shall be a violation of this Order.

XVIII. SEVERABILITY

18.1 If a court issues an order that invalidates any provision of this Order or finds that Respondent have sufficient cause not to comply with one or more provisions of this Order, Respondent shall remain bound to comply with all provisions of this Order not invalidated or determined to be subject to a sufficient cause defense by the court's order.

2 XIX. EFFECTIVE DATE

3 19.1 The effective date of this Consent Order is the date on  
4 which it is signed by the EPA Region 10 Chief, Superfund Response  
5 and Investigations Branch.

6 The undersigned representative of Respondent certifies that it  
7 is fully authorized to enter into the terms and conditions of this  
8 Order and to bind the parties it represents to this document.

9  
10 Agreed

11 By Bruce Sheppard

12  
13 Title Mgr. Environmental Projects

14  
15  
16 It is so ORDERED and Agreed this 30<sup>th</sup> day of March,  
17 1993.

18  
19  
20 BY: Randall J. Smith DATE: 3/30/93

21 For James M. Everts, Chief  
22 Superfund Response and Investigations Branch  
23 Region 10  
24 U.S. Environmental Protection Agency  
25  
26

ATTACHMENT B

Schedule of Deliverables

Activity	Deadline
1. Begin mobilization for Phase 1	March 29, 1993
2. Complete Phase 1	June 15, 1993
3. Submit draft completion report for Phase 1	July 15, 1993
4. Submit draft Scope for Work for Phase 2	Thirty days after effective date of order
5. Submit draft detailed Work Plan for soil treatment	June 1, 1993
6. Award contract for soil treatment	30 days after EPA approval of work plan
7. Begin mobilization for Phase 2	30 days after contract awarded
8. Complete demonstration test and submit report	45 days after mobilization
9. Complete Phase 2	1 year from effective date of order
10. Submit final report	30 days after completing Phase 2.

# Soil Treatment Final Report Woods Industries Site Yakima, Washington

Volume I — Report and Appendices A Through D

August 7, 1996

Prepared for:

**BURLINGTON NORTHERN RAILROAD**  
Seattle, Washington

PHILIP ENVIRONMENTAL SERVICES CORPORATION  
210 West Sand Bank Road  
Post Office Box 230  
Columbia, Illinois 62236-0230

Project 12883088



**APPENDIX B**

**BNRR, Philip, Williams Correspondence to and from USEPA**

November 5, 1993  
Project 12883088

Ms. Lynda Priddy  
U.S. Environmental Protection Agency  
Region X  
1200 Sixth Avenue  
Seattle, Washington 98101

Dear Ms. Priddy:

**Subject: Proposed Modification to Schedule for Soil Treatment and  
Attachment B (Schedule) of the Consent Order for  
Soil Removal and Treatment at the  
Woods Industries Site, Yakima, Washington**

Burlington Northern Railroad (BNRR), through Burlington Environmental Inc. (Burlington Environmental), is submitting this letter to request a modification to the schedule for soil treatment at the Woods Industries Site in Yakima, Washington. This request is made pursuant to Section XVI of the Administrative Order on Consent for Removal Response Activities, EPA Docket No. 1087-03-106. The bases for this schedule modification are set out below and include the following: the increase in soil volumes requiring treatment; the additional time required for soil removal due to increased volume; the two extensions to the schedule previously granted by the USEPA; changes in air pollution control technology necessary to satisfy USEPA comments on the draft work plan; and operational considerations relating to mobilizing the Low Temperature Thermal Desorption (LTTD) unit.

## **BACKGROUND**

On several occasions, BNRR and USEPA have discussed the schedule for this removal action and the consent order requirement that soil treatment be completed within one year of the effective date of the order. The effective date of the order is March 30, 1993.

Although there have been no delays associated with implementation of the consent order, conditions have changed considerably since the order was entered. It is now evident that, due to these changes, soil treatment will not be completed by March 30, 1994. Reasons for this are discussed below.



1. **Greater volume of soil removed.** At the time the consent order was signed, the expected volume of soil removal was 5,000 to 10,000 cubic yards (yd<sup>3</sup>) of contaminated material. The actual volume of soil removed is approximately 19,000 yd<sup>3</sup>. This is approximately 2-3 times the expected volume of soil.
2. **Longer duration for soil removal.** Due to this increased volume of soil, removal was not completed until the middle of September 1993. It was expected that soil removal would be completed on or before June 15, 1993, and the original schedule in the consent order reflected this expectation. USEPA granted two extensions to the schedule for soil removal to accommodate the increased soil volumes.
3. **Greater volume of soil to be treated.** The volume of soil to be treated is now 2-3 times the amount estimated at the time the consent order was signed. The additional soil requiring treatment will result in a longer treatment phase than anticipated when the original order was entered.
4. **USEPA comments required redesign and retrofitting of the treatment unit.** At the time the consent order was signed, the LTTD system was expected to include the use of activated carbon to capture vaporized contaminants. As design of the soil treatment system progressed, however, it became evident that thermal oxidation of the off-gasses would be necessary to satisfy concerns raised by USEPA in commenting on the draft work plan. This change required redesign and retrofitting of the contractor's LTTD system.

## CURRENT SITUATION

To address USEPA comments, BNRR is currently revising the work plan for on-site soil treatment and will issue the complete work plan to the USEPA on or before November 23, 1993. Based on conversations with the USEPA, BNRR believes the USEPA may issue a notice to proceed within a month after submittal of that plan. If notice to proceed is issued in mid to late December, mobilization and startup of the on-site treatment unit could be required in January and February 1994.

BNRR believes that mobilization and startup in January and February would harm our ability to effectively treat the soil based on the following:

- poor weather conditions;
- limited daylight;

- personnel exposure to cold;
- potential freezing of water lines (especially during periods of nonoperation, which may be frequent during startup);
- operating difficulties associated with increased water input into the system in the form of ice;
- additional energy requirements due to the cold weather;
- material handling difficulties if soil is frozen; and
- potential for fine-grain materials to freeze onto oversized material that may otherwise be below the cleanup goals.

#### PROPOSED SCHEDULE

BNRR and its contractors propose to modify the schedule to include a mobilization date of March 1, 1994. BNRR proposes this mobilization date to allow the startup, shakedown, and performance test of the LTTD system to occur in weather more favorable than that expected in January and February. BNRR and its contractors cannot currently predict a precise completion date because work plans have not been approved by the USEPA and soil treatment has not begun. However, based on the duration currently estimated for the treatment effort, soil treatment will be completed by September 30, 1994.

Accordingly, BNRR respectfully requests that the schedule of deliverables attached to the consent order be modified as follows (new text is underlined):

- |  |   |
|--|---|
| 7. Begin mobilization for Phase 2                | 30 days after EPA approval of work plan, <u>or March 1, 1993, whichever comes later</u> |
| 8. Complete demonstration test and submit report | 45 days after mobilization  |
| 9. Complete Phase 2                              | <del>1 year from effective date of order</del> <u>By September 30, 1994</u>             |
| 10. Submit final report                          | 30 days after completing Phase 2  |

Page 4  
Ms. Lynda Priddy  
November 5, 1993

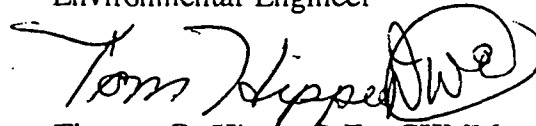
Please call me at (618) 281-7173 or Tom Hippe at (713) 442-1794 if you have any questions regarding these proposed revisions.

Sincerely yours,

BURLINGTON ENVIRONMENTAL INC.



David W. Eagleton  
Environmental Engineer



Thomas G. Hippe, P.E., CHMM  
General Manager  
Southwest Region

DWE/TMTSCHED.4

cc: Bruce Sheppard (BNRR)  
Tom Backer (Preston, Thorgrimson)  
Bob Kievit (USEPA Region X)  
Mark Fleri (Williams)

March 2, 1994  
Project 12883088

Ms. Lynda Priddy  
U.S. Environmental Protection Agency  
Region X  
1200 Sixth Avenue  
Seattle, Washington 98101

Dear Ms. Priddy:

**Subject: Renewed Request for Modifications to Schedule for Soil Treatment and Attachment B (Schedule) of the Administrative Order on Consent for Soil Removal and Treatment at the Woods Industries Site, Yakima, Washington**

Burlington Northern Railroad (BNRR), through Burlington Environmental Inc. (Burlington Environmental), writes to renew its request for a modification to the schedule for soil treatment at the Woods Industries Site.

#### **BACKGROUND**

By letter dated November 5, 1993, Burlington Environmental submitted a request for a modification to the schedule for soil treatment at the Woods Industries Site in Yakima, Washington. The request was made pursuant to Section XVI of the Administrative Order on Consent for Removal Response Activities, EPA Docket No. 1087-03-106. The bases for the schedule modification were set out in the letter (copy attached) and included the following: the increase in soil volumes requiring treatment; the additional time required for soil removal due to increased volume; the two extensions to the schedule for soil removal previously granted by USEPA; changes in air pollution control technology necessary to satisfy USEPA comments on the draft work plan; and operational considerations relating to mobilizing the Low-Temperature Thermal Desorption unit.

As you know, the original schedule called for soil treatment at the site to be completed within one year of the effective date of the order (March 30, 1993). Under the original schedule, soil treatment was to be completed by March 30, 1994. In our November 5th letter, we described a number of changed conditions that made it evident that soil treatment would not be completed by March 30, 1994.

Page 2  
Ms. Lynda Priddy  
March 2, 1994

Although we have discussed the need for modifying the schedule in a number of our conversations and at our February 2, 1994, meeting, BNRR has never received a written response to its November 5th request. Accordingly, BNRR renews its request for a modification to the schedule and asks for a response from USEPA on or before March 15, 1994.

### **CURRENT STATUS**

At our most recent meeting on February 2, 1994, we agreed that the schedule for soil treatment must be revised. The principal bases for modifying the schedule (changed circumstances) were set out in our earlier letter. Since that letter was submitted to USEPA, a number of additional changes have occurred, which support a modification to the schedule. The key change has been extensive USEPA comments on the draft soil treatment work plans submitted to USEPA.

As you know, BNRR and its contractors first submitted a detailed draft soil treatment work plan to USEPA on June 18, 1993. The work plan called for thermal desorption of soils coupled with carbon absorption for off-gases. The system described in the work plan was very similar to that which had been approved by the USEPA for the T.H. Agriculture and Nutrition (THAN) Site in Albany, Georgia. USEPA comments on the soil treatment work plan were received by BNRR at the end of July.

From August through September, all parties (BNRR, Burlington Environmental, Williams Environmental, and USEPA) worked to resolve issues raised by USEPA's comments on the draft work plan. During that time, BNRR, Williams, and USEPA personnel met at the THAN site to review its operation and to reach agreement on a number of outstanding issues. Based on discussion among the parties, agreement was reached that the work plan should be modified to provide the treatment of off-gases using thermal oxidation rather than carbon adsorption.

In October, BNRR (through Burlington Environmental and Williams) issued a comment/resolution letter that stated, item by item, how BNRR would address USEPA's comments. A conference call was conducted between all of the parties, and resolution of most of USEPA's comments was reached.

On November 23, 1993, a revised thermal desorption work plan was submitted to USEPA. At the end of December, 1993, USEPA again commented

Page 3  
Ms. Lynda Priddy  
March 2, 1994

extensively on the revised work plan, requiring substantial changes to the work plan and to the Ambient Air Quality Impact Report (AAQIR), as well as significant new modeling and analysis. As you know, we have been working with USEPA to resolve all of these comments as quickly as possible, and we are hopeful that the final revised soil treatment work plan and performance test plan can be submitted on or before March 14, 1994.

### PROPOSED SCHEDULE

We are optimistic that work plan approval could be received from USEPA on or before April 8, 1994. However, this depends on the timely resolution of all outstanding issues.

As discussed in our letter of November 5, 1993, BNRR and its contractors cannot currently predict a precise completion date for soil treatment, because work plans have not been approved by the USEPA and soil treatment has not begun. However, based on current estimates, we are confident that soil treatment can be completed within one year after USEPA approval of the final soil treatment work plan. As we discussed at our recent meeting, it is in everyone's interest to complete soil treatment as expeditiously as possible. In addition, due to the extra testing and review that the USEPA will now require during the performance test, the schedule for completing that work must also be extended.

Accordingly, BNRR respectfully renews its request that the schedule of deliverables attached to the consent order be modified as follows (new text is underlined):

- |     |   |  |
|-----|---|--|
| 6.  | Award contract for soil treatment             | 30 days after EPA approval of work plan  |
| 7.  | Begin mobilization for Phase 2                | 30 days after contract awarded   |
| 8.  | Complete demonstration test and submit report | <u>45</u> 120 days after mobilization  |
| 9.  | Complete Phase 2<br><u>treatment</u>          | 1 year from <u>USEPA approval of final soil</u><br><u>work planeffective date of order</u> |
| 10. | Submit final report                           | 30 days after completing Phase 2   |

Page 4  
Ms. Lynda Priddy  
March 2, 1994

Please call David Eagleton at (618) 281-7173 or Tom Hippe at (713) 442-1794 if you have any questions regarding these proposed revisions.

Sincerely yours,

BURLINGTON ENVIRONMENTAL INC.



David W. Eagleton  
Project Manager  
Environmental Engineer



Thomas G. Hippe, P.E., CHMM  
General Manager Southwest Region

DWE/TGH/jl/RENEW.LET

Attachments: 1. November 5, 1993, Request for a Modification to the  
Schedule for Soil Treatment

cc: Bruce Sheppard, BNRR  
Tom Backer, Preston Thorgrimson  
Mark Fleri, Williams Environmental  
Bob Hartman, Assistant Regional Counsel, USEPA  
Bill Glasser, USEPA Region X

ATTACHMENT 1

November 5, 1993, Request for a Modification to the  
Schedule for Soil Treatment





**BURLINGTON  
ENVIRONMENTAL**

November 5, 1993  
Project 12883088

Ms. Lynda Priddy  
U.S. Environmental Protection Agency  
Region X  
1200 Sixth Avenue  
Seattle, Washington 98101

Dear Ms. Priddy:

**Subject: Proposed Modification to Schedule for Soil Treatment and Attachment B (Schedule) of the Consent Order for Soil Removal and Treatment at the Woods Industries Site, Yakima, Washington**

Burlington Northern Railroad (BNRR), through Burlington Environmental Inc. (Burlington Environmental), is submitting this letter to request a modification to the schedule for soil treatment at the Woods Industries Site in Yakima, Washington. This request is made pursuant to Section XVI of the Administrative Order on Consent for Removal Response Activities, EPA Docket No. 1087-03-106. The bases for this schedule modification are set out below and include the following: the increase in soil volumes requiring treatment; the additional time required for soil removal due to increased volume; the two extensions to the schedule previously granted by the USEPA; changes in air pollution control technology necessary to satisfy USEPA comments on the draft work plan; and operational considerations relating to mobilizing the Low Temperature Thermal Desorption (LTTD) unit.


## **BACKGROUND**

On several occasions, BNRR and USEPA have discussed the schedule for this removal action and the consent order requirement that soil treatment be completed within one year of the effective date of the order. The effective date of the order is March 30, 1993.

Although there have been no delays associated with implementation of the consent order, conditions have changed considerably since the order was entered. It is now evident that, due to these changes, soil treatment will not be completed by March 30, 1994. Reasons for this are discussed below.

Burlington Environmental Inc.

P.O. Box 330 • 210 West Sand Bank Road • Columbia, IL 62236-0330  
Phone 618/281-7173 • 314/241-1785 • FAX 618/281-5120



Page 2

Ms. Lynda Priddy

November 5, 1993

1. **Greater volume of soil removed.** At the time the consent order was signed, the expected volume of soil removal was 5,000 to 10,000 cubic yards (yd<sup>3</sup>) of contaminated material. The actual volume of soil removed is approximately 19,000 yd<sup>3</sup>. This is approximately 2-3 times the expected volume of soil.
2. **Longer duration for soil removal.** Due to this increased volume of soil, removal was not completed until the middle of September 1993. It was expected that soil removal would be completed on or before June 15, 1993, and the original schedule in the consent order reflected this expectation. USEPA granted two extensions to the schedule for soil removal to accommodate the increased soil volumes.
3. **Greater volume of soil to be treated.** The volume of soil to be treated is now 2-3 times the amount estimated at the time the consent order was signed. The additional soil requiring treatment will result in a longer treatment phase than anticipated when the original order was entered.
4. **USEPA comments required redesign and retrofitting of the treatment unit.** At the time the consent order was signed, the LTTD system was expected to include the use of activated carbon to capture vaporized contaminants. As design of the soil treatment system progressed, however, it became evident that thermal oxidation of the off-gasses would be necessary to satisfy concerns raised by USEPA in commenting on the draft work plan. This change required redesign and retrofitting of the contractor's LTTD system.

## CURRENT SITUATION

To address USEPA comments, BNRR is currently revising the work plan for on-site soil treatment and will issue the complete work plan to the USEPA on or before November 23, 1993. Based on conversations with the USEPA, BNRR believes the USEPA may issue a notice to proceed within a month after submittal of that plan. If notice to proceed is issued in mid to late December, mobilization and startup of the on-site treatment unit could be required in January and February 1994.

BNRR believes that mobilization and startup in January and February would harm our ability to effectively treat the soil based on the following:

- poor weather conditions;
- limited daylight;

- personnel exposure to cold;
- potential freezing of water lines (especially during periods of nonoperation, which may be frequent during startup);
- operating difficulties associated with increased water input into the system in the form of ice;
- additional energy requirements due to the cold weather;
- material handling difficulties if soil is frozen; and
- potential for fine-grain materials to freeze onto oversized material that may otherwise be below the cleanup goals.

#### PROPOSED SCHEDULE

BNRR and its contractors propose to modify the schedule to include a mobilization date of March 1, 1994. BNRR proposes this mobilization date to allow the startup, shakedown, and performance test of the LTTD system to occur in weather more favorable than that expected in January and February. BNRR and its contractors cannot currently predict a precise completion date because work plans have not been approved by the USEPA and soil treatment has not begun. However, based on the duration currently estimated for the treatment effort, soil treatment will be completed by September 30, 1994.

Accordingly, BNRR respectfully requests that the schedule of deliverables attached to the consent order be modified as follows (new text is underlined):

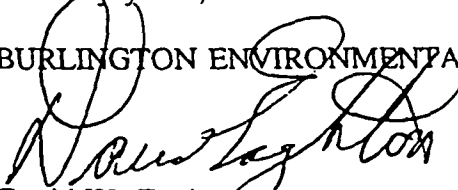
- |  |   |
|--|---|
| 7. Begin mobilization for Phase 2                | 30 days after EPA approval of work plan, <u>or March 1, 1994, whichever comes later</u> |
| 8. Complete demonstration test and submit report | 45 days after mobilization  |
| 9. Complete Phase 2                              | <del>1 year from effective date of order</del> <u>By September 30, 1994</u>             |
| 10. Submit final report                          | 30 days after completing Phase 2  |

Page 4  
Ms. Lynda Priddy  
November 5, 1993

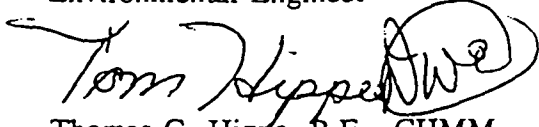
Please call me at (618) 281-7173 or Tom Hippe at (713) 442-1794 if you have any questions regarding these proposed revisions.

Sincerely yours,

BURLINGTON ENVIRONMENTAL INC.



David W. Eagleton  
Environmental Engineer



Thomas G. Hippe, P.E., CHMM  
General Manager  
Southwest Region

DWE/TMTSCHED.4

cc: Bruce Sheppard (BNRR)  
Tom Backer (Preston, Thorgrimson)  
Bob Kievit (USEPA Region X)  
Mark Fleri (Williams)



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION 10  
1200 Sixth Avenue  
Seattle, Washington 98101

April 1, 1994

Reply To  
Attn Of: EW-113

David W. Eagleton  
Burlington Environmental Inc.  
P.O. Box 230  
210 West Sand Bank Road  
Columbia, IL 62236-0230

Re: Modification of Schedule for Soil Treatment at the Wood  
Industries Site

Dear Mr. David Eagleton:

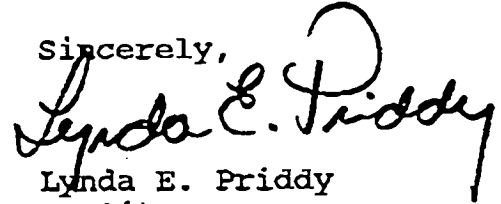
In April 1993, Burlington Northern Railroad (BNRR) and the U.S Environmental Protection Agency (EPA) entered into an Administrative Order on Consent for Removal Response Activities for the Wood Industries Site ("Site"). In the Consent Order the soil treatment for the Site was to be completed one year from the effective day of the Order. On March 2, 1994, BNRR requested a Modification of the schedule for soil treatment in order to revise the work plan for the on-site soil treatment.

EPA recognizes that BNRR has been working to resolve the issues concerning the soil treatment for the Site. In order to resolve those issues, EPA is willing to modify the schedule for soil treatment. By this letter and in accordance with Section XVI of the Consent Order, EPA is extending the schedule for the completion of the soil treatment at the Site until April 30 1994.

During this time EPA is prepared to meet with BNRR to discuss an additional extension of the schedule based EPA review of the revised workplan submitted by BNRR. EPA understands that BNRR will submit the remaining portions of the workplan, namely the Air Quality Impact Report, by April 8, 1994.

If you have any questions contact me at (206) 553-1987.

Sincerely,



Lynda E. Priddy  
On-Site  
Coordinator/Remedial  
Project Manager

cc: Tom Backer (Preston, Throgmson)  
Bruce Sheppard (BNRR)  
Tom Hippe (Burlington Environmental, Inc.)  
Bob Hartmen (ORC Region 10)



PRESTON GATES & ELLIS  
ATTORNEYS

April 29, 1994

Mr. Robert Hartman  
Assistant Regional Counsel  
U.S. E.P.A.  
1200 Sixth Avenue  
Seattle, WA 98101

Re: Response to EPA's Letter of April 20, 1994, and Request for Modification to  
Schedule for Soil Treatment at the Woods Industries Site

Dear Bob:

I write on behalf of Burlington Northern Railroad (BNRR) to respond to EPA's letter of April 20, 1994, and to suggest revisions to EPA's proposed schedule for soil treatment activities.

As you know, BNRR has been working closely with the EPA to develop a final Work Plan for soil treatment at the Woods Industries site. As EPA's April 20th letter notes, most of the "significant issues have been addressed" and most "major issues" have been resolved. Nonetheless, EPA is "unable at this time to give final approval of the Work Plan," in part because a number of other reports being prepared by BNRR still need to be reviewed by EPA.

BNRR understands EPA's need to complete its review of the various submittals and the responses to comments before granting its final approval. At the same time, BNRR shares EPA's desire to get the soil treatment process underway and to begin work at the site as soon as possible. In its letter, EPA states that "work at the site may proceed subject to three conditions." The first condition relates to a decision tree for dioxin sampling, which BNRR accepts as prepared by EPA. The second condition relates to the proposed schedule for implementing the soil treatment Work Plan, which BNRR requests be modified as set out below. The third condition limits the processing of contaminated soil prior to EPA approval, which BNRR accepts as written.

BNRR believes that the schedule proposed by EPA should be modified as follows. First, the new schedule should continue to include the milestones originally agreed to by EPA in the Administrative Order, although the timing of those milestones can be shortened. Rather than

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5000 COLUMBIA CENTER 701 FIFTH AVENUE SEATTLE, WASHINGTON 98104-7078 PHONE: (206) 623-7580 FACSIMILE: (206) 623-7022

requiring that BNRR "Begin Mobilization for Phase 2" on or before "May 1, 1994," the schedule should be modified to provide for the following sequences and milestones:

Award contract for soil treatment	3 <u>1</u> 0 days after EPA approval of work plan
Begin mobilization for Phase 2	3 <u>1</u> 0 days after contract awarded

The schedule currently proposed by EPA *requires* BNRR to begin mobilization activities on May 1, 1994, which will be *prior* to EPA's approval of the soil treatment Work Plan. While BNRR may be willing to give a notice to proceed to the soil treatment contractor prior to the final approval of the Work Plan (even though BNRR does so without knowing when the final approval will come and at the risk of potential changes that may require modification to the site work), it is *not* willing to agree to a schedule that will *require* it (under threat of stipulated penalties) to begin such mobilization activities.

BNRR's reasoning is straightforward: until the final soil treatment Work Plan is approved, BNRR does not know with certainty the scope of the work it will be required to undertake. Until that scope is finally established, it would be unreasonable for BNRR to agree to undertake that scope and to subject itself to penalties if--for reasons entirely beyond its control--the scope should later be changed.

Requiring BNRR to proceed prior to final approval of the Work Plan may also be inconsistent with the Administrative Order on Consent signed by the parties. Section 5.5 of the Order provides that

[t]he second phase shall be conducted in accordance with the Schedule of Deliverables (Attachment B) and with the Scope of Work and the Work Plan that will be developed under and will be incorporated into this order when approved by EPA.



Section 5.7 of the Order similarly provides that

Respondent [BNRR] shall implement the . . . [Phase 2] Work Plan . . . . as finally approved in writing by EPA in accordance with the schedule approved by EPA. The approved Work Plans and Schedule shall be fully enforceable under this Order. . . . Respondent shall not commence or undertake any removal actions at the Site without prior EPA approval.

Finally, the schedule proposed by EPA in its April 20, 1994 letter departs considerably from the schedule contained in the Order. That schedule provides for the following sequence of events *after* EPA approval of the work plan:

Day 0	EPA approval of work plan
Day 30	BNRR awards contract for soil treatment
Day 60	Mobilization for Phase 2 begins

EPA's proposed schedule eliminates the first 60 days of the existing schedule, without providing any sound rationale for doing so. For all of these reasons, BNRR believes that it is inappropriate to *require, under threat of penalties* mobilization at the site prior to EPA approval of the Work Plan.

The schedule proposed in EPA's April 20th letter should be further modified to eliminate proposed schedule items 2 and 3. Item 2 sets a 21-day time frame for completing the performance test; item 3 requires submittal of a performance test report within 28 days of the completion of the performance test. These time frames are already part of the Work Plan and the Performance Test Plan, which are both enforceable parts of the order. (*See, e.g.,* page 28 of the March 11, 1994 Work Plan). However, the Work Plan recognizes that a number of variables may affect the timing and duration of these activities. Those variables are not included in or recognized by the schedule proposed by EPA. For example, proposed schedule item no. 3 establishes a 28-day period for submitting the performance test report, without acknowledging that the Work Plan calls for the submission of a *draft* report within that time frame, recognizing that such a submission is "subject to the timely receipt of final analytical results."

BNRR and its contractors have no interest in seeking to delay either the completion of the performance test or the submission of test results. But many factors affect their ability to do this work according to the schedule proposed by EPA. To include all these factors as qualifiers to the schedule would be both cumbersome to implement and redundant to the terms of the Work Plan. Accordingly, BNRR proposes that these milestones not be included in the modified schedule.

To summarize, BNRR believes that Attachment B, the Schedule of Deliverables to the Administrative Order on Consent, should be modified as follows:

- |             |  |  |
|-------------|--|--|
| 6.          | Award contract for soil treatment                        | <u>310</u> days after EPA approval of work plan              |
| 7.          | Begin mobilization for Phase 2                           | <u>310</u> days after contract awarded                       |
| 8.          | <del>Complete demonstration test and submit report</del> | <del>45 days after mobilization</del>                        |
| <u>98.</u>  | Complete Phase 2   | 1 year from effective date of order <u>December 31, 1994</u> |
| <u>109.</u> | Submit final report                                      | 30 days after completing Phase 2                             |

Please let us know your thoughts on this proposed schedule as soon as possible. In the meantime, please call if you have questions or if I can be of further assistance.

Very truly yours,

PRESTON GATES & ELLIS

*Thomas Eli Backer*

By  
Thomas Eli Backer

TEB:reij

J:\TEB\16065-89.004\2QL17F.DOC



BURLINGTON NORTHERN RAILROAD  
Environmental Engineering

Suite 2000, 999 Third Avenue  
Seattle WA 98104-1105

May 11, 1994

Lynda E. Priddy  
Hazardous Waste Coordinator  
U.S. EPA Region X  
1200 Sixth Avenue  
Attn: HW-113  
Seattle, WA 98101

Re: Woods Industries Site / Notice of *Force Majeure*

Dear Lynda:

Today, Burlington Northern Railroad (BNRR) received notice from Williams Environmental Services, Inc. (Williams) that the TPU3 thermal desorption unit will not be available for use at the Woods Industries site until early 1995. Williams has committed the use of the TPU3 unit to another Superfund cleanup. As you know, the soil treatment Work Plan, performance test plan, Ambient Air Quality Impact Report (AAQIR), and Ambient Air Monitoring Plan for the Woods Industries site have all been prepared based on the assumption that the TPU3 treatment unit would be used by Williams.

I write to give you notice that Williams' action will likely delay BNRR's performance under the Administrative Order on Consent for Removal and Response Activities, U.S. EPA Region 10 Docket No. 1087-03-18-106 (the Administrative Order). BNRR believes that Williams' action constitutes a *force majeure* under Section IX of the Administrative Order. The order requires that BNRR provide U.S. EPA with oral notice of a *force majeure* within forty eight (48) hours after the event.

BNRR will shortly provide you with further written details of the *force majeure*, including an estimate of the anticipated length of the delay, a statement of the measures BNRR will take to minimize the delay, and an estimated timetable for implementing these measures.

Lynda E. Priddy  
May 11, 1994  
Page 2

We will keep you informed of our discussions as new information develops. In the meantime, please call if you have any questions.

Sincerely,

*Bruce A. Sheppard*

Bruce A. Sheppard  
Manager Environmental Projects

BSM:teb

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cc: David Bagleton, Burlington Environmental  
Tom Hippe, Burlington Environmental  
Mark Fleri, Williams Environmental  
Tom Backer, Preston Gates & Ellis  
Bob Hartman, U.S. EPA



**BURLINGTON NORTHERN RAILROAD**

Environmental Engineering

Suite 2000, 999 Third Avenue  
Seattle, WA 98104-1105

May 18, 1994

**By Facsimile**

Lynda E. Priddy  
Hazardous Waste Coordinator  
U.S. EPA Region X  
1200 Sixth Avenue  
Attn: HW-113  
Seattle, WA 98101

Re: Woods Industries Site / Details of *Force Majeure*

Dear Lynda:

As you are aware, Williams Environmental Services, Inc. (Williams) has advised Burlington Northern Railroad (BNRR) that the TPU3 unit will not be available to fulfill the schedule outlined in Section 5 of the March 14, 1993 Thermal Desorption Workplan. BNRR believes this action constitutes a *Force Majeure* under the Administrative Order on Consent (Docket No. 1087-03-18-106).

BNRR has researched alternatives to minimize the delay caused by this action. The first alternative would be to complete the soil treatment work plan and associated documentation as currently drafted, utilizing the TPU3 treatment unit. Following final approval of the work plan, BNRR would engage Williams to implement the work plan as soon as the TPU3 unit becomes available. Based on recent conversations with Williams, they anticipate that the TPU3 unit will be available for use at the Woods site after January 1, 1995. With mobilization of the TPU3 unit on January 3, 1995, soil treatment, per the schedule outlined in section 5, would be completed by mid-June. This option would delay the implementation of the work plan by 7 months. This schedule has sufficient latitude to insure completion by that date. We are currently working with

Williams to confirm the availability of the TPU3 unit for a January 3, 1995 mobilization date.

A second alternative would be to utilize Williams unit TPU4. This unit is configured somewhat differently than TPU3 (see attached Process Flow Diagram). This would require a significant revision of the Thermal Desorption Workplan and related documentation. With this alternative Williams believes they can achieve the following tentative schedule, assuming a notification start date of May 31, 1994.

- July 25 - Complete modification of equipment. (8 weeks)
- August 8 - Complete mobilization to site. (2 weeks)
- August 22 - Complete shakedown of equipment. (2 weeks)
- August 28 - Complete Performance Test. (1 week)
- November 28 - Complete thermal desorption production operations. (13 weeks)
- December 19 - Complete demobilization. (2 weeks)

As you can see, this is a very aggressive schedule which does not allow for any unforeseen delays. It also assumes that workplan modifications and EPA comments will be made in an expedited manner conjunction with field operations. BNRR believes there is a high probability that this schedule may slip due to contingencies. This schedule would delay mobilization to the site by approximately 3 months over the schedule set out in the current work plan, although soil treatment would be completed within the overall schedule we have discussed.

The third alternative is to issue a Request for Proposal to other contractors. Depending on equipment availability this RFP alternative would follow the tentative schedule below.

- May 31 - Issue RFP to vendors.
- June 13 - Deadline for receipt of proposals.
- June 27 - Award bid.
- September 12 - Submit modified Thermal Desorption Workplan. (11 weeks)
- October 10 - Receive EPA comments. (4 weeks)
- November 7 - Submit Final Workplan and mobilize to site. (2 weeks)
- December 5 - Complete shakedown. (2 weeks)
- December 12 - Complete performance test. (1 week)
- March 20, 1995 - Complete operation & demobilize. (15 weeks)

May 18, 1994  
Page 3 of 3

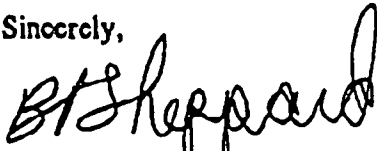
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MAY 24 1994

BNRR has been contacted by several vendors, and they have indicated that equipment availability is very good. This schedule would delay mobilization to the site by approximately 5 months. With EPA concurrence, the mobilization date could be earlier.

These are the alternatives BNRR has been exploring. On your return to the office, I would like to discuss further the advantages and disadvantages associated with these alternatives, and the measures U.S. EPA believes should be taken to avoid or minimize delay.

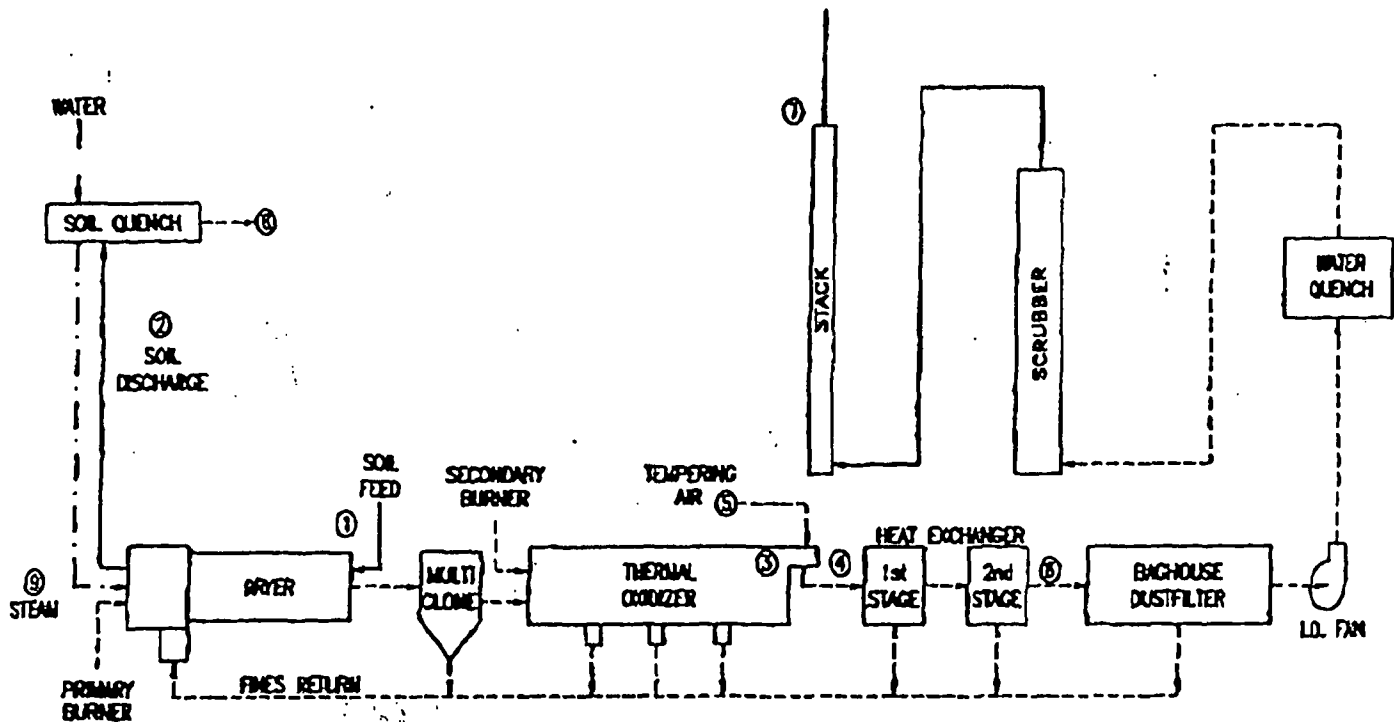
Sincerely,



Bruce A. Sheppard  
Manager Environmental Projects

attachment

cc: David Eagleton, Burlington Environmental  
Tom Hippe, Burlington Environmental  
Mark Fleri, Williams Environmental  
Tom Backer, Preston, Gates & Ellis  
Bob Hartman, U.S. EPA



TEMPERATURE	1	2	3	4	5	6	7	8	9	10
SOIL FEED	100	100	17,000	17,000	2,000	24,000	24,000	24,000	24,000	24,000
SOIL FEED	100	100	17,000	17,000	2,000	24,000	24,000	24,000	24,000	24,000

LEGEND  
 - - - - - DRY GAS  
 - - - - - WATER  
 - - - - - P.D.  
 - - - - - CLEAN GAS  
 - - - - - MATERIAL FLOW

Williams Environmental  
 2075 West Park Place  
 Stone Mountain, GA 30087  
 404-777-1100

TPU4

WESITPU4 for WOODS JOB  
 THERMAL PROCESSING UNIT  
 Process Flow Diagram

4PFD







PRESTON GATES & ELLIS  
ATTORNEYS

June 22, 1994

Mr. Robert Hartman  
Assistant Regional Counsel  
U.S. E.P.A.  
1200 Sixth Avenue  
Seattle, WA 98101

Re: Woods Industries / Deferral of Dispute Resolution

Dear Bob:

I write to confirm the agreement we reached at our meeting Monday June 20, 1994, regarding deferral of dispute resolution on the *force majeure* issue. As you know, Burlington Northern Railroad (BNRR) believes that the delay in availability of certain thermal desorption equipment constitutes a *force majeure* under section IX of the Administrative Order on Consent for the Woods Industries site (the Order). EPA disagrees with BNRR's position and has determined, based on the information currently available to the agency, that the *force majeure* provision of the Order does not apply. Under section VIII of the Order, BNRR is entitled to dispute resolution on the matter.

At our meeting, we agreed that we would defer any dispute resolution on this matter until after the Request for Proposal (RFP) process described in EPA's letter of June 15, 1994, is complete. The results of the RFP process should provide BNRR and EPA with the information we need for amending the schedule for soil treatment and for resolving the *force majeure* issue. Accordingly, we agreed that any dispute resolution on the *force majeure* issue would be deferred until September 1, 1994. If BNRR decides to pursue the issue at that time, BNRR would notify EPA of its objections within fourteen days (i.e., on or before September 15, 1994), according to the terms set out in section VIII of the Order.

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5000 COLUMBIA CENTER 701 FIFTH AVENUE SEATTLE, WASHINGTON 98104-7078 PHONE: (206) 623-7580 FACSIMILE: (206) 623-7022

Mr. Robert Hartman

June 22, 1994

Page 2

I hope that this is consistent with your understanding of our agreement. If I have not stated our agreement accurately, please let me know before the end of the month.

Very truly yours,

PRESTON GATES & ELLIS

*Thomas Eli Backer*

By

Thomas Eli Backer

TEB:rej

cc: Lynda Priddy, EPA  
Bruce Sheppard, BNRR  
David Eagleton, BEI

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
 REGION 10  
 1200 Sixth Avenue  
 Seattle, Washington 98101

Reply To  
 Attn Of: HW-113

Mr. Bruce A. Sheppard  
 Manager Environmental Projects  
 Burlington Northern Railroad  
 Environmental Engineering  
 Suite 2000, 999 Third Avenue  
 Seattle, WA. 98104-1105

Post-it™ Fax Note	7671	Date	6-20-94	# of pages	4
To	David Eagleton	From	B A Sheppard		
Co./Dept.	BET	Co.	BW		
Phone #	618-281-7173	Phone #	206-467-3382		
Fax #	618-281-5120	Fax #			

Dear Mr. Sheppard:

EPA received the Notice of Force Majeure from Burlington Northern Railroad (BNRR), on May 12, 1994. In the notice BNRR stated that their contractor, Williams Environmental Services, Inc. (Williams), notified BNRR that the TPU3 thermal desorption unit for soil treatment will not be available for use at the Woods Industries site until early 1995. BNRR believes that Williams action will likely result in a delay in BNRR's performance under the Administrative Order on Consent for Removal and Response Activities, (Order), and constitutes a Force Majeure. The notice further indicated that BNRR would provide written details of the Force Majeure as required by Section IX of the Order. The details would include an estimate of the anticipated length of the delay, a statement of the measures BNRR has or will take to minimize the delay, and an estimated timetable for the implementation of those measures.

On May 18, 1994, EPA received the letter detailing the Force Majeure event. The letter sets forth three alternatives that BNRR has researched to minimize the delay caused by the Force Majeure, and a tentative schedule for their implementation.

Before I address BNRR's request for a Force Majeure I would like to review events over the last year and address BNRR's letter of April 29, 1994 requesting another schedule modification. The last year's events may best be summarized below in bullet form as follows:

- \* March 30, 1993 -- Order for soil treatment was signed.
- \* June 18, 1993 -- EPA received BNRR's first draft of the Work Plan for soil treatment.

- \* July 20, 1993 -- EPA submitted comments to BNRR regarding the first draft Work Plan.
- \* August 10, 1993 -- EPA/BNRR conference call to discuss EPA comments.
- \* October 15, 1993 -- BNRR responses to EPA comments.
- \* November 22, 1993 -- BNRR submits second draft Work Plan.
- \* December 30, 1993 -- EPA submits comments on second Work Plan to BNRR and requests January 6th conference call to discuss EPA comments.
- \* February 2, 1994 -- EPA and BNRR meet to discuss Work Plan revisions.
- \* March 2, 1994 -- BNRR requests schedule modification.
- \* March 14, 1994 -- BNRR submits revised Work Plan minus Air Monitoring Plan and Air Quality Impact Report (AQIR).
- \* March 30, 1994 -- Under the order, soil treatment to be completed.
- \* April 1, 1994 -- EPA extends Order schedule for 30 days.
- \* April 7, 1994 -- BNRR notifies EPA a potential delay in mobilization due to potential equipment unavailability.
- \* April 14, 1994 -- EPA submits comments by FAX to BNRR regarding March 14, 1994 BNRR submission.
- \* April 14, 1994 -- BNRR submits revised Work Plan pages to EPA.
- \* April 20, 1994 -- EPA response letter to BNRR regarding schedule modification, equipment mobilization and EPA Work Plan comments.
- \* April 26, 1994 -- BNRR response to April 14, 1994 EPA comments.
- \* April 29, 1994 -- BNRR requests schedule modification.
- \* April 29, 1994 -- BNRR submits revised Air Monitoring Plan to EPA.
- \* May 2, 1994 -- BNRR submits revised AQIR to EPA.

- \* May 11, 1994 -- BNRR notifies EPA of January 1995 mobilization date and requests a Force Majeure.
- \* May 18, 1994 -- BNRR submits details of Force Majeure and options for completion of soil treatment.

First, I would like to respond to BNRR's April 29, 1994 request for another schedule extension. I am quit discouraged that BNRR is requesting another schedule extension. My impression was that significant issues regarding soil treatment had been resolved and that the Work Plan was near completion. But more specifically, I want to address an apparent misimpression by BNRR as illustrated in their letter of April 29, 1994. BNRR stated in their letter that EPA should not require BNRR to mobilize to the site before the Work Plan was approved. I want to state clearly that EPA was not requiring BNRR to mobilize to the site before Work Plan approval. EPA was instead giving BNRR the option of doing so given the conditions outlined in our letter April 20, 1994. Based on numerous telephone calls between EPA and BNRR, Lynda Priddy and Bruce Sheppard/David Eagleton agreed that mobilization to the site in early May was a goal supported by EPA and BNRR. In the April 20, 1994 letter, EPA was giving BNRR the option to begin mobilization, at BNRR's risk, before Work Plan approval because BNRR had as a goal mobilizing to the site in early May. Given that mobilization to the site was BNRR's option, the schedule milestones that EPA outlined in the April 20th letter were modified to account for the fact that BNRR may wish to mobilize to the site before Work Plan approval. EPA framed the April 20, 1994 letter as it was because BNRR had not submitted the required Air Monitoring Plan or AQIR and EPA could not approval the Work Plan without review of the Air Monitoring Plan and AQIR. Additionally, I would like to add that BNRR was to be and is out of compliance as of April 30, 1994 with the extended schedule in the Order. EPA, to date, has not imposed penalties because EPA believes that BNRR in the past has shown a good faith effort.

Secondly, I would like to address BNRR's request for a Force Majeure. On March 2, 1994, BNRR requested a Modification of the schedule for soil treatment in order to revise the Work Plan for the on-site soil treatment. EPA granted an extension of the schedule until April 30, 1994. The extension was granted to work out an additional extension of the schedule based on a revised Work Plan for TPU3. The revised Work Plan was to schedule completion of the soil treatment at the site by December 31, 1994. The Notice of Force Majeure by BNRR now indicates that the mobilization of TPU3 to the site will be delayed until early 1995.

Based on the information contained in the letter dated May 18 1994, EPA has determined that the unavailability of the thermal desorption unit does not constitute a Force Majeure. However, in accordance with Section XVI of the Order, EPA is willing to extent the schedule 30 days from the date of this

letter in order for BNRR to provide: a schedule for completion of the project by December 31, 1994; and either: (1) submission of a revised Work Plan which reflects the performance standards specified in the March 11, 1994 Work Plan and EPA comments on that March 1994 Work Plan or (2) a final Request for Proposal document for a thermal treatment unit to complete thermal treatment at the Woods site according to performance standards and operating requirements specified in the March 11, 1994 Work Plan (including relevant EPA comments to that Work Plan.) Please be aware that requirements may be modified based on the specifications associated with a unit other than TPU3.

If BNRR, is unable to provide the above information within 30 days, BNRR will be in violation of the Order and may be subject to an enforcement action. An enforcement action could include stipulated penalties pursuant to Section X of the Order, or a fine of \$25,000 per day for each day of violation, as provided by to CERCLA § 106(b), 42 U.S.C. § 9606(b). BNRR may also be liable to the United States for punitive damages in the amount at least equal to and no more than three times, the amount of any cost incurred by the Fund, pursuant to CERCLA § 107(c)(3), 42 U.S.C. § 9607(c)(3).

I recognize that BNRR has made good progress in remediation efforts at the Woods site, e.g., securing the site, building demolition, and other good faith efforts to address the remaining soil contamination at the Woods site. I also appreciate BNRR's willingness to work together, cooperatively, with the EPA Superfund Program to bring this project to completion. We are willing to meet to discuss details of this letter and any ideas BNRR may have to resolve the delay in the scheduled completion of the remediation at the Woods site. Please call Lynda Priddy at (206) 553-1987 if you have any questions.

Sincerely,



Carol Rushin, Branch Chief  
Superfund Branch  
Hazardous Waste Division

cc: Lynda Priddy, HWD  
Bob Hartman, ORC  
David Eagleton, BE  
Tom Hippe, BE  
Tom Backer, Preston, Gates & Ellis  
Administrative Record



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION 10  
1200 Sixth Avenue  
Seattle, Washington 98101

NOV - 4 1994

Reply To  
Attn Of: HW-113

David Eagleton  
Environmental Engineer  
Burlington Environmental, Incorporated  
210 West Sand Bank Road  
Columbia, IL 62236

Dear Mr. Eagleton:

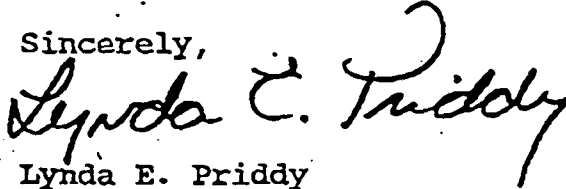
I have reviewed the analytical data from the crushed cobble samples. The cobbles shall be disposed of as followings:

The screened cobbles too large for treatment in TDU4 shall be backfilled on-site if:

- a. the cobbles are backfilled on clean or treated soil one foot above the seasonal high water level. For purposes of this approach we will assume the seasonal high water level is 6 feet below the final grade of the site (assuming the final grade is comparable to the grade of the site before excavation);
- b. the backfilled cobbles are capped with a foot of clean or treated soil;
- c. the cobbles are free of clumps of soil. For this approach, "free of clumps of soil" means the cobbles have been screened through a vibrating screen and are visually free of clumps of soil; and
- d. the site will be deed restricted for industrial use only.

If you have any questions you may contact me at (206) 553-1987.

Sincerely,



Lynda E. Priddy  
Environmental Protection  
Specialist  
Hazardous Waste Division

cc: Bruce Sheppard, B/N - Seattle  
Rick Roeder, Ecology - CRO  
Administrative Record for Soil Treatment Removal - HW-070  
John Gilbert, EPA - Cincinnati  
Cathy Massimino, EPA - HW-111  
Bill Ryan, EPA - ES-097





UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION 10  
1200 Sixth Avenue  
Seattle, Washington 98101

Reply To  
Attn Of: HW-113

JAN 31 1995

Mr. Bruce A. Sheppard  
Manager Environmental Projects  
Burlington Northern Railroad  
Environmental Engineering  
Suite 2000, 999 Third Avenue  
Seattle, Washington 98104-1105

Dear Mr. Sheppard:

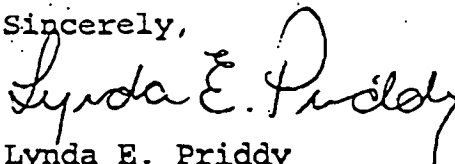
EPA has reviewed your submission of January 19, 1995, entitled "Responses to January 5, 1995, Draft USEPA Comments on November 18, 1994, AAQIR." EPA approves the Ambient Air Quality Impact Report (AAQIR), as amended by your January 19th submission and USEPA and Burlington Northern Railroad (BNRR) agree to the following:

- 1.) BNRR will provide the risk levels for the indicator chemicals for the worse year based on particulate surface area contaminate concentrations instead of mass weight. EPA will then compare the two approaches and decide which one should be used for the performance test risk assessment. Ms Ubinger already agreed to perform this task.
- 2.) Depending upon results from the performance test, BNRR may need to revise the upset scenario for the risk assessment to conform with EPA guidance. See EPA Comment 18, EPA Comments of on AAQIR issued January 5, 1995.

EPA reserves its rights to modify the Work Plan/AAQIR as needed to ensure that operation of the thermal desorption unit will protect public health and the environment and satisfy applicable and relevant requirements.

If you have any other questions please contact me at (206) 553-1987.

Sincerely,



Lynda E. Priddy  
Environmental Protection  
Specialist  
Hazardous Waste Division

enclosure

cc: David Eagleton, Burlington Environmental - Columbia  
Mark Fleri, Williams Environmental Services, Inc.  
Rick Roeder, Ecology - CRO  
Administrative Record for Soil Treatment Removal - HW-070  
Bill Glasser, EPA - HW-113  
John Gilbert, EPA - Cincinnati  
Cathy Massimino, EPA - HW-111  
Don Matheny, EPA - ES-095  
Bill Ryan, EPA - ES-097  
Paul Meeter, Weston - West Chester



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION 10  
1200 Sixth Avenue  
Seattle, Washington 98101

Reply To  
Attn Of: HW-113

FEB - 1 1995

Mr. Bruce A. Sheppard  
Manager Environmental Projects  
Burlington Northern Railroad  
Environmental Engineering  
Suite 2000, 999 Third Avenue  
Seattle, Washington 98104-1105

Dear Mr. Sheppard:

EPA has reviewed your submission of January 17, 1995, entitled "Data Validation of Treated Soil Sample Analytical Results, Soil Treatment Work Plan, Woods Industries Site, Yakima, Washington." EPA approves the Data Validation Plan contingent upon Burlington Northern Railroad's (BNRR) agreement to the following:

- 1.) No backfill decisions will be made based on "R" data.
- 2.) Provisions shall be made during the data validation process (or more importantly, during analysis) to initiate immediate corrective action (e.g., reanalysis) in the event that the data is rejected (qualified "R") in accordance with the "Functional Guidelines" validation criteria.
- 3.) Starting with shakedown with contaminated soil and including the performance test submit to EPA for EPA review and concurrence the sample chromatograms. EPA will review the chromatogram on the same business day the chromatogram is received. Once the laboratory is chosen, BNRR shall submit to EPA the standards data (initial and continuing) including the printout of retention times for the standards. EPA will review the chromatograms for at least 15 working days and then evaluate whether it is necessary for EPA to continue chromatogram review. BNRR has agreed to have Kathy Blaine of Burlington Environmental to concurrently review and issue an opinion on the chromatograms.
- 4.) Williams Plan, Page 2, last bullet: EPA or its representatives makes the decision to backfill, in consultation with Williams and BNRR, once EPA has received and reviewed the information necessary to make that decision.

5.) Submission for EPA approval the laboratory QAPP/SOPs once the laboratory for the soil analysis is chosen.

6.) Williams Plan, Page 2, fourth bullet, last sentence: add at the end of the last sentence "and explaining the reasons for the qualification."

7.) One complete CLP deliverable data package shall be submitted to EPA for a spot check. This data package shall be submitted as soon as a sample delivery group is available.

Note that the CLP documentation shall include rationale if QC standards are exceeded. If "J" data is used to support decisions for backfilling the "J" data documentation shall address if and what corrective action was taken.

Given the above comment number 1, EPA does not expect to see any "R" data in the data sets.

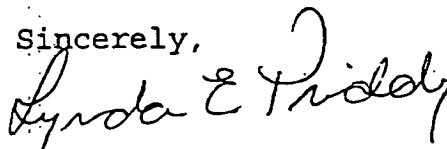
8.) The item: "reproducibility" covered under "Standard Level III QC items" does not refer to a specific quality control sample (e.g., blanks, surrogate spikes, etc.). This should be clarified or removed.

9.) BNRR will provide written confirmation of their agreement to the above.

EPA reserves its rights to modify the Work Plan including data validation plans as needed to ensure that operation of the thermal desorption unit will protect public health and the environment and to satisfy appropriate and relevant requirements.

If you would like to discuss any comments further please call me at (206) 553-1987.

Sincerely,



Lynda E. Priddy  
Environmental Protection  
Specialist  
Hazardous Waste Division

cc: David Eagleton, Burlington Environmental - Columbia  
Mark Fleri, Williams Environmental Services, Inc.  
Rick Roeder, Ecology - CRO  
Administrative Record for Soil Treatment Removal - HW-070  
Bill Glasser, EPA - HW-113

John Gilbert, EPA - Cincinnati  
Cathy Massimino, EPA - HW-111  
Bill Ryan, EPA - ES-097  
Don Matheny, EPA - ES-095  
Paul Meeter, Weston - West Chester



**BURLINGTON  
ENVIRONMENTAL**  
*A Philip Environmental Company*

February 7, 1995  
Project 12883088

Ms. Lynda Priddy  
On-Scene Coordinator/Remedial Project Manager  
U.S. Environmental Protection Agency  
Region X  
1200 Sixth Street  
Seattle, Washington 98101

Dear Ms. Priddy:

**Subject: Ambient Air Monitoring Plan, Woods Industries Site  
Yakima, Washington**

On behalf of Burlington Northern Railroad, Burlington Environmental Inc. is submitting the Ambient Air Monitoring Plan for On-Site Treatment Activities at the Woods Industries Site, Yakima, Washington. Included in Appendix B of the plan are Standard Operating Procedures for site operations, which describe procedures for sample collection and equipment maintenance.

With your approval, Burlington Environmental would like to begin collecting baseline data on February 8, 1995.

Please call either of us at 618-281-7173 if you have any questions.

Sincerely yours,

BURLINGTON ENVIRONMENTAL INC.

Kirk D. Meyer  
Air Group Leader

David W. Eagleton, P.E.  
Project Manager  
Environmental Engineer

KDM/DWE/bar/AAMP\_SOP.LET

Enclosure: Ambient Air Monitoring Plan  
SOP for Site Operations

cc: Bruce Sheppard (BNRR)

Burlington Environmental Inc.

P.O. Box 230 • 210 West Sand Bank Road • Columbia, IL 62236-0230  
Phone 618/281-7173 • 314/241-1785 • FAX 618/281-5120





**BURLINGTON  
ENVIRONMENTAL**  
*A Philip Environmental Company*

February 7, 1995  
Project 12883088

Ms. Lynda Priddy  
On-Scene Coordinator/Remedial Project Manager  
U.S. Environmental Protection Agency  
Region X  
1200 Sixth Street  
Seattle, Washington 98101

Dear Ms. Priddy:

**Subject: Ambient Air Monitoring Plan, Woods Industries Site  
Yakima, Washington**

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Please call either of us at 618-281-7173 if you have any questions.

Sincerely yours,

**BURLINGTON ENVIRONMENTAL INC.**

Kirk D. Meyer  
Air Group Leader

David W. Eagleton, P.E.  
Project Manager  
Environmental Engineer

KDM/DWE/bar/AAMP\_SOP.LET

Enclosure: Ambient Air Monitoring Plan  
SOP for Site Operations

cc: Bruce Sheppard (BNRR)

February 9, 1995

## Superfund Fact Sheet

# Woods Industries

## Yakima, Washington

*This fact sheet is the fourth in a series of updates about the treatment of excavated contaminated soil at the Woods Industries Site located at 1 East King Street in Yakima.*

### Treatment Unit To Arrive Soon

The U.S. Environmental Protection Agency (EPA) has selected a Thermal Treatment Unit for treatment of soil contaminated with pesticides at the Woods Industries Site. The site has been prepared for the arrival of the treatment unit, which is made up of interconnected parts. The unit and equipment necessary for assembly are expected to arrive on the site in mid-February. It will take approximately 12 truckloads to transport the unit to the site. Assembly of the unit should take approximately two weeks. Most of the unit will be mounted on the back of a number of semi-tractor trailers, which will be parked on a concrete pad near the center of the site.

The work will be conducted by Williams Environmental, Inc., contractor for Burlington Northern Railroad (BNRR), who is paying for the site cleanup, with oversight by EPA.

### How the Treatment Unit Works

Contaminated soil is placed in the primary chamber where pesticides are heated off the soil at low temperatures. The dust generated in the primary chamber is captured in the bag house, which is an air pollution control device. Vapors containing pesticides then pass into a second chamber where the vapors are further broken down at high temperatures. Remaining contaminated vapors or dust are captured or cleansed by other air pollution control equipment. The cleansed gases leave the unit through the stack as steam. After the soil has been heated, the soil is removed

### Background

From 1938 to 1985, Woods Industries (Crop King) operated as a pesticide formulation business. Burlington Northern Railroad (BNRR), who owns the property, cancelled the lease in 1985 due to concerns over chemical handling and disposal practices used by Crop King.

In 1986, under EPA supervision, BNRR conducted a preliminary cleanup action at the site. During this period, the site was fenced, the building entrances were secured, all remaining containers were analyzed and disposed of off site, five monitoring wells were installed on site, and highly contaminated soil was excavated and stored in a concrete vault on site.

In 1990, BNRR and EPA signed an agreement for BNRR to conduct a comprehensive investigation of the extent of contamination and a detailed study of options available to cleanup the site. The investigation found high levels of pesticides remaining on site. Of most concern was DDT, which has been found in concentrations of up to 30,000 part per million (ppm). Other pesticides which were detected in high concentrations include hexachlorobenzene and dieldrin.

BNRR contractors began cleaning and demolishing several buildings on-site in January 1993. On March 30, 1993 BNRR began excavating contaminated soil for future treatment at the site. Since that time, approximately 20,000 cubic yards of contaminated soil have been excavated and stored on site awaiting treatment. A Low Temperature Thermal Desorption Unit was selected by BNRR and EPA for treatment of the excavated soil.



from the first chamber and tested. If tests show that it has been properly treated, the soil will be put back in the ground at the Woods Site. If tests show the soil is still contaminated, it will be reheated in the treatment unit.

#### **Trial Tests Expected in March**

After assembly of the treatment unit is complete, a series of tests will be conducted to ensure that the unit will treat the contaminated soil in a way that is protective to people living in the area and the environment.

EPA will give BNRR permission to start treatment only after all safety tests have been successfully completed. EPA is expecting that treatment of the contaminated soil will be completed by June 30, 1995.

#### **Comments on the Selected Remedy for Treatment of Contaminated Soil**

EPA's selected approach for treatment of contaminated soil at the site is outlined in a document called an Engineering Evaluation and Cost Analysis (EE/CA) which was released in September 1994 for public comment. EPA received no comments.

#### **Future Updates and Community Involvement**

EPA will continue to put out fact sheets about the Woods Site as work at the site progresses. Interested persons may contact EPA anytime for additional information.

#### **For More Information:**

If you would like more information about the Woods Industries Site, please contact:

**Lynda Priddy**, EPA Project Manager, at  
**(206) 553-1987**;

**Ken Marcy**, EPA Community Relations Coordinator, at  
**(206) 553-6501**;

or call EPA's toll free number  
**1-800-424-4372**.

For those with impaired hearing or speech, please contact EPA's telecommunications device for the hearing impaired (TDD) at  
**(206) 553-1698**.

To ensure effective communication with everyone, additional services can be made available to persons with disabilities by contacting one of the numbers listed above.

To review documents concerning activities at the Woods Industries Site, you may visit the information repository located in the Yakima Valley Regional Library at 102 North 3rd Street in Yakima.

February 22, 1995

Ms. Lynda Priddy  
Environmental Protection Specialist  
Hazardous Waste Division  
U.S. EPA Region X  
1200 Sixth Avenue  
Seattle, WA 98101

Re: Woods Industries Site  
Yakima, Washington  
Transmittal No.: 0086  
Number of Pages: 1

Subject: Subcontractor Selection  
Williams Project No. 0365-001-110

Dear Lynda:

This letter is to inform you that Williams Environmental Services, Inc. (Williams) has selected Quanterra Environmental Services (Quanterra) to do the analyses of soil and water samples from the Woods Industries site in Yakima, Washington. Quanterra's West Sacramento laboratory will be utilized, with their facility in Denver serving as an alternate location. A copy of Quanterra's Statement of Qualifications package is attached for your review, as well as a copy of Quanterra's Quality Assurance Program Plan for the West Sacramento facility.

Additionally, Williams has selected York Services Corporation to perform the stack sampling during the performance test. A brief statement of York's experience has already been forwarded to you.

Should you have any questions, please contact me at (404) 879-4854 or David Eagleton at (618) 281-7173.

Sincerely,

**WILLIAMS ENVIRONMENTAL SERVICES, INC.**

Greg Whetstone  
Project Engineer  
GTW:pc

cc: Mark A. Fleri  
George Harbour  
Tom Schmittou  
David Eagleton (Burlington Environmental)  
Job File 0365



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION 10  
1200 Sixth Avenue  
Seattle, Washington 98101

3 May 1995

Reply To  
Attn Of: HW-113

Mr. Bruce A. Sheppard  
Manager Environmental Projects  
Burlington Northern Railroad  
Environmental Engineering  
Suite 2000, 999 Third Avenue  
Seattle, Washington 98104-1105

Dear Mr. Sheppard:

This letter is in response to our telephone conversation of April 28, 1995. In that conversation we discussed the need to modify the Performance Test Plan (Appendix A of the Work Plan) to better reflect actual operating conditions. The modification of the Work Plan includes changing one of the three performance test runs to include a "cold start" run.

During Work Plan development, EPA agreed to: (1) establish a 20 minute soil exit temperature time delay and (2) try to use the gas exit temperature as an indication of the soil exit temperature for the first 20 minutes of feed. EPA agreed to the above because Williams Environmental, Inc., explained that a reading of the soil exit temperature could not be obtained for 20 minutes because the soil took 20 minutes to exit the primary chamber. EPA also agreed that the instantaneous minimum soil exit temperature would be established based on performance test data and the rolling average minimum soil exit temperature would be verified during the performance test.

Once Williams started to process contaminated soil, EPA observed that: (1) the gas exit temperature could not be correlated to the soil exit temperature and (2) the temperature in the primary chamber would not reach 600 degrees F rolling average (ra) until approximately 54 to 60 minutes after the soil feed was started during startup of the unit. EPA became concerned that the soil being feed through the unit for approximately the first hour was being inadequately treated. Final Work Plan procedures were developed on the assumption that contaminated soil would be treated at a minimum of 600 degrees F.

EPA developed two options to address this deviation from the procedures specified in the Work Plan. Under Option One Williams would process clean soil through the unit until the clean soil reaches a soil exit temperature of 600 degrees F. Once the clean soil has reached 600 degrees F. then Williams could begin to process contaminated soil through the unit. This procedure of using clean soil would be required for all startup situations. Option Two would require Williams to separately collect the soil exiting the unit until the soil exit temperature reached 600 degrees F. Soil collected prior to the exit temperature reaching 600 degree F would either be sampled to determine compliance with cleanup numbers or retreated. Williams chose Option Two, to retreat the soil processed before the unit obtained the minimum soil exit temperature, because of logistical and operational problems associated with processing clean soil through the unit before the unit was ready to receive contaminated soil.

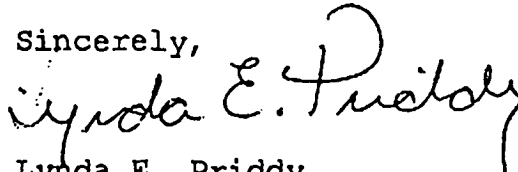
EPA has required a modification to the performance test to reflect the actual operating conditions of the unit. The modification would specify that one of the three performance test runs be modified to reflect a "cold start" during startup. A "cold start" performance test run is where the performance test starts as soon as the soil is feed into the unit. Normally, and as is the case with the other two test runs, the performance test runs start once the unit has obtained all operating parameters. All operating parameters will be obtained for the "cold start" also except for the minimum soil exit temperature. During a "cold start" run stack sampling would start as soon as the unit started processing contaminated soil. Clean soil would not be used to first get the unit up to the minimum soil exit temperature. Sampling of the treated soil for the "cold run" would start after the soil exit temperature had reached 600 degrees F. The other two performance test runs would start stack and treated soil sampling after all operating parameters including the contaminated soil being processed through the unit have obtained a soil exit temperature of 600 degrees F. The methodologies for stack and soil sampling remain the same as those previously specified in the Work Plan.

If the "cold start" run passed the criteria for a successful performance test run as previously specified in the Work Plan, then Williams could continue to startup with contaminated soil. Williams would still have to collect and retreat all soil processed through the unit prior to the soil exit temperature reaching 600 degrees F. If the "cold start" run failed to satisfy the Work Plan criteria for a successful performance test, then Williams would have to process clean soil through the unit until a soil exit temperature of 600 degrees F had been obtained. After the 600 degrees F had been obtained then contaminated soil could be processed through the unit. Data from the "cold start" run and the two other runs will satisfy the requirement for a performance test as outlined in the Work Plan.

An additional Work Plan modification is necessary to address the 54 to 60 minute delay in obtaining the soil exit temperature. As you know EPA established in the Work Plan a 20-minute automatic waste feed shutoff (AWFSO) for soil exit temperatures below 600 degrees F. The purpose of the AWFSO initially was to serve as an alert that the soil was not being properly treated. The AWFSO would automatically turn the unit off so that the cause of the alert could be determined and fixed. However, EPA has now determined that the unit is unable to treat soil at the minimum soil exit temperature of 600 degrees F until about one hour after the soil feed has started. Based on this new information, EPA has agreed to revise the minimum soil exit temperature given that the soil processed through the unit prior to the minimum soil exit temperature being obtained will be retreated. The minimum soil exit temperature has been revised from 20 minutes to 54.6 minutes. The 20 minute time delay for the minimum soil exit temperature is no longer useful. This particular AWFSO is causing the unit to momentarily stop operating, triggering other AWFSOs and is not serving to improve the operating safety of the unit to workers, public health or the environment.

If you have any further questions please call me at  
(206) 553-1987.

Sincerely,



Lynda E. Priddy  
Remedial Project Manager  
Hazardous Waste Division

enclosure

cc: David Eagleton, Burlington Environmental - Columbia  
Mark Fleri, Williams Environmental Services, Inc.  
Rick Roeder, Ecology - CRO  
Administrative Record for Soil Treatment Removal - HW-070  
Bill Glasser, EPA - HW-113  
John Gilbert, EPA - Cincinnati  
Cathy Massimino, EPA - HW-111  
Bill Ryan, EPA - ES-097  
Paul Meeter, Weston - West Chester



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION 10  
1200 Sixth Avenue  
Seattle, Washington 98101

10 May 1995

Reply To  
Attn Of: HW-113

Mr. Bruce A. Sheppard  
Manager Environmental Projects  
Burlington Northern Railroad  
Environmental Engineering  
Suite 2000, 999 Third Avenue  
Seattle, Washington 98104-1105

Dear Mr. Sheppard:

This letter is in response to your request regarding sampling protocol for determining whether the haul roads' surface soils at the Woods site meet clean up numbers. I understand that Philip Environmental (Philip) is preparing to sample the surface soils for the haul road between the north stockpile and the contaminated feedstock pad. Philip stated that this road will be used for backfilling after excavation of the north pile is completed.

The sampling protocol for determining whether a haul road or other similar previously excavated area is "clean" is as follows:

1. every 100 feet starting with zero feet take one composite sample. For example, for a 200 foot haul road take 3 composite samples, one at zero feet, the second one at 100 feet and the third one at 200 feet.
2. each composite should be composed of 3-4 grabs from the area around the sample point. These grabs may be taken randomly from around the sample point.
3. each composite shall be analyzed for the 18 substances listed in Table 7.1 of the Thermal Treatment Work Plan excluding dioxin.
4. data validation of the composite samples shall follow the data validation procedure, as applicable, outlined in our letter to you dated February 1, 1995.

If you have any further questions please call me at (206) 553-1987.

Sincerely,

*Lynda E. Priddy*

Lynda E. Priddy  
Remedial Project Manager  
Hazardous Waste Division

cc: David Eagleton, Burlington Environmental - Columbia  
Mark Fleri, Williams Environmental Services, Inc.  
Rick Roeder, Ecology - CRO  
Administrative Record for Soil Treatment Removal - HW-070  
Bill Glasser, EPA - HW-113  
John Gilbert, EPA - Cincinnati  
Cathy Massimino, EPA - HW-111  
Bill Ryan, EPA - ES-097  
Paul Meeter, Weston - West Chester

**PHILIP**  
**ENVIRONMENTAL**

May 15, 1995  
Project 12883088

Ms. Lynda Priddy  
On-Scene Coordinator/Remedial Project Manager  
U.S. Environmental Protection Agency, Region X  
1200 Sixth Avenue  
Seattle, Washington 98101

Dear Ms. Priddy:

**Subject: Haul Road Sampling Protocol  
Woods Industries Site  
Yakima, Washington**

On behalf of Burlington Northern Railroad (BNRR), Philip Environmental Services Corporation, (Philip) has prepared this letter to describe details in addition to the protocol described in USEPA's May 10 letter regarding haul road sampling. BNRR understands that USEPA has approved the use of Quanterra, the laboratory being used to analyze treated soil samples, to analyze the haul road samples. The sample results will be compared to the Industrial Soil Removal Cleanup levels established for the site. This comparison will be made to document the haul roads are clean prior placing backfill material over the roads.

If you have any questions please call me at (618) 281-7173.

Sincerely yours,

PHILIP ENVIRONMENTAL SERVICES CORPORATION



David W. Eagleton, P.E.  
Project Manager  
Environmental Engineer

DWE/dwc /HAULROAD.LET

cc: Bruce Sheppard (BNRR)  
Greg Koester and Mike Martin (Philip)  
Mark Fleri (Williams)  
Larry Mullen and Jim Geiger (URS)





**WILLIAMS ENVIRONMENTAL SERVICES, INC.****VIA FACSIMILE**

May 17, 1995

Ms. Lynda Priddy  
On-Scene Coordinator/Remedial Project Manager  
U.S.E.P.A., Region X  
1200 Sixth Avenue  
Seattle, WA 98101

Re: Woods Industries Site  
Yakima, Washington  
Transmittal No.: 0106  
Number of Pages: 2

Subject: Revisions to Thermal Desorption Work Plan  
Williams Project No.: 0365-001-110

Dear Lynda:

Williams Environmental Services, Inc. (Williams) has completed its repairs to the scrubber demisters at the Woods site and plans on resuming production operations on Thursday morning, May 18. However, because the remainder of the performance test cannot be rescheduled until May 25, Williams requests that the EPA grant some additional operating time to the 360 operating hours outlined in Section 5 of the work plan. Currently, Williams has processed contaminated soil for approximately 416 hours, including performance test operations. Approximately 60 hours of this time has been spent processing reburn material.

Williams respectfully requests that an additional 144 hours of operating time be allowed, inclusive of the remaining performance test runs. This time includes 8 days of operation between May 18 and May 26 at 75% operating efficiency, with one day of down-time prior to resumption of the performance testing. During this time, Williams will treat material from the north stockpile as well as any reburn material.

Approximately 350 cubic yards of treated material have been rejected since May 1, the beginning of the original performance test, and returned to the waste feed pad for re-treatment. Currently, there are approximately 580 cubic yards of material on the waste feed pad that are not reserved for the performance test. This includes the 350 cubic yards of reburn material and approximately 230 cubic yards of the regular "hot" material. In addition, there are approximately 170 cubic yards of the "hot-hot" material on the waste feed pad for processing during the remainder of the performance test.

Ms. Lynda Priddy  
May 17, 1995  
Page Two

In order to ensure that there is enough material remaining for the performance test, Williams will conduct all of Run 3 simultaneously. This will ensure that the primary contaminants of concern are measured while processing the most contaminated materials. Upon completion of Run 3, Williams plans to conduct the remaining run for particulate/HCl/Cl<sub>2</sub>/metals (Run 1B) and the blank trains. Williams believes this is the most appropriate manner in which to conduct the testing. Should all of the "hot-hot" material be processed before completion of Run 1B, Williams will continue with material from the stockpile. As shown in Table 7-3 of the work plan, the stockpiles and the roll-off boxes contain very similar concentrations of metals. Therefore, the stack testing results would not be affected.

Williams will resume the performance testing on Thursday, May 25. Williams requests that the start of the test be scheduled for approximately 6:00 a.m. so that all of the testing can be completed on the same day. This will help to minimize the amount of "hot-hot" material needed for the testing.

Please review this proposal carefully and respond accordingly. Should you have any questions, please contact me at (404) 879-4854 or Mark Fleri at the job site or through Philip Environmental.

Sincerely,

**WILLIAMS ENVIRONMENTAL SERVICES, INC.**



Greg Whetstone  
Project Engineer  
GTW:pc

cc: Z. Lowell Taylor  
Jim Sanders  
Mark A. Fleri  
David Eagleton  
Greg Koester



May 18, 1995

Mr. Mark Fleri  
Project Manager  
Williams Environmental Services, Inc.  
Woods Project Site  
2 East King Street  
Yakima, WA 98901

Re: Woods Industries Site  
Yakima, Washington  
Transmittal No.: 0106  
Number of Pages: 2

Subject: Amendment to Safety and Health Plan  
regarding levels of protection  
Williams Project No.: 0365-001-110

Dear Mark:

Upon review of the recent air monitoring data pertaining to levels of dust, metals, and pesticides in the different areas of the Woods Industries Site, it is concluded that changes in the levels of protection described in the initial safety and health plan is warranted.

All results pertaining to total dust, arsenic/lead, and pesticides were orders of magnitude below any OSHA PELs and/or ACGIH TLV's. These air sampling results are indicative of activities at the Excavation Site, FMU, Pugmill and Auger units. These results are in agreement with air sampling data that was generated during the initial excavation of the site which would tend to represent the worst case conditions. Since this data applies to airborne exposure, the changes in levels of protection, mainly apply to respiratory protection, and not dermal. I have listed the changes below:

**6.4 Task 4 - Treatment of Contaminated Soil with LTDD.**

**6.4.3 Health and Safety Mitigation Measures**

Workers in the excavation and soil mixing area will be in Level C due to the mixing of the soils in the roll-offs, and higher potential for dust generation during this process. Workers at the FMU and Pugmill will be in a Modified Level D as described in Section 9, with the employees at the

Mr. Mark Fleri  
May 18, 1995  
Page 2

Pugmill and FMU being required to also wear a face shield. All other areas outside of the exclusion zone will require Level D protection.

6.5 Task 5 - Personnel, Equipment, Drum, and Debris Decontamination.

6.5.3 Workers involved in these activities can be downgraded to a modified Level D, with an additional requirement of a face shield.

These above changes are consistent with the air monitoring data and also consistent with OSHA, concerning the issues of excessive personal protective equipment when monitoring data does not justify it.

The evaluation of personnel exposure will continue, and any changes in this data, will be reflected by changes to the health and safety plan.

Sincerely,

**WILLIAMS ENVIRONMENTAL SERVICES, INC.**



Ronald G. Huggins, Ph.D., CIH

RGH/bhh



**VIA FACSIMILE & U.S. MAIL**

**May 19, 1995**

**Ms. Lynda Priddy  
On-Scene Coordinator/Remedial Project Manager  
U.S.E.P.A., Region X  
1200 Sixth Avenue  
Seattle, WA 98101**

**Re: Woods Industries Site  
Yakima, Washington  
Transmittal No.: 0108  
Number of Pages: 1**

**Subject: Project Management  
Williams Project No.: 0365-001-110**

**This is to inform you that Mark Fleri is being replaced by B. J. Barteo at the Woods project. This will be effective Saturday, May 20, 1995.**

**Sincerely,**

**WILLIAMS ENVIRONMENTAL SERVICES, INC.**

**Mark A. Fleri  
Manager of Thermal Operations**

**MF:sj**

**cc: Z. Lowell Taylor  
Jim Sanders  
Greg Whetstone  
B. J. Barteo  
David Eagleton  
Greg Koester**

# **PHILIP**

## **ENVIRONMENTAL**

May 19, 1995  
Project 12883088

Ms. Lynda Priddy  
U.S. Environmental Protection Agency  
Region X  
1200 Sixth Avenue (HW-113)  
Seattle, WA 98101

Dear Ms. Priddy:

**Subject: 1995 Soil Removal Activities  
Woods Industries Site  
Yakima, Washington**

As you requested earlier today, on behalf of Burlington Northern Railroad (BNRR), Philip Environmental Services Corporation (Philip) is submitting this letter to describe the procedures for additional soil removal that will be performed concurrent with soil treatment activities at the Woods Industries Site.

As we have discussed, BNRR intends to follow the same plans that were approved by the USEPA for the soil removal activities performed in 1993 at the Woods Industries Site. BNRR will follow procedures described in the USEPA-approved Revised Soil Removal Work Plan dated March 17, 1993, and further documented in the Soil Removal Final Report which documents the soil removal activities conducted at the Woods Industries Site from March 29 through September 23, 1993.

As described in the soil treatment work plan, contaminated material remains in the ground beneath the two temporary on-site soil storage areas. BNRR will remove this contaminated soil using the procedures in the USEPA-approved soil removal work plan, which includes, if necessary, collecting "preliminary samples" to help guide the excavation. As described in Chapter 4 of the Soil Removal Work Plan, BNRR will document that these areas are clean by collecting verification samples after soil removal is complete in each area. Should a verification sample indicate additional soil has to be removed to achieve the cleanup criteria that are presented in the Revised Soil Removal Work Plan, additional verification samples will be collected after additional soil is removed from that area. Soil removal and verification sampling have already been completed for the areas remediated in 1993, as described in the Soil Removal Final Report.

One exception to the plan would be the use of Quanterra for verification sample analysis using the same data validation procedures used for treated soil sample



Page 2  
Ms. Lynda Priddy  
May 19, 1995

analyses, if acceptable to the USEPA. Please call me at (618) 281-7173 if you have any questions regarding this information.

Sincerely yours,

PHILIP ENVIRONMENTAL SERVICES CORPORATION



David W. Eagleton, P.E.  
Project Manager  
Environmental Engineer

DWE/dwe/soilrem.let

cc: Bruce Sheppard (BNRR)  
Tom Backer (Preston, Gates, & Ellis)  
Marla Stremcha (Olympus)  
Greg Koester and Mike Martin (Philip)

May 2, 1995  
Project 12883088

Ms. Lynda Priddy  
USEPA Region X  
1200 Sixth Avenue (HW-113)  
Seattle, WA 98101

Dear Ms. Priddy:

**Subject: Woods Site Ambient Air Monitoring Data and  
Proposed Reduced Sampling Frequency**

Through May 2, 1995, Philip Environmental Services Corporation (Philip) has monitored ambient air 42 consecutive days at the Woods site since Williams began treating contaminated soil. Through event R-26 (which was completed April 17) no action levels have been exceeded with the exception of PM<sub>10</sub> at station A-11. Station A-11 is located just east (predominantly downwind) of the soil treatment unit. The PM<sub>10</sub> action level was exceeded at this location four times, ignoring background levels (see attached tables). These four events were:

- event R-4 collected on March 24, 1995;
- event R-14 collected on April 4, 1995;
- event R-23 collected on April 13, 1995; and
- event R-24 collected on April 14, 1995.

Although the durations of soil treatment in TPU IV soil screening/handling operations have varied greatly during these events. Philip believes these data accurately represent the ambient air impacts of these soil treatment operations at this site. The treatment unit will continue to operate at a similar level until Williams receives USEPA approval to operate at 100 percent of capacity, which will not occur until after receipt of the performance test results. Once Williams receives permission to operate the unit at 100 percent capacity, daily ambient air monitoring could be resumed for a period of five days, if appropriate.



Page 2  
Ms. Lynda Priddy  
May 2, 1995

The real-time PM<sub>10</sub> monitor (DATARAM) is also located at station A-11. The DATARAM will continue to run continuously through the duration of soil treatment.

DDT and dieldrin have not been detected.

Hexachlorobenzene has been detected on numerous occasions, but always at concentrations well below the action level.

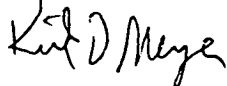
Mercury **particulate** has been detected in only one sample, at a concentration that is barely above the detection limit and greatly below the action level.

Mercury **vapor** sampling will continue on a daily basis.

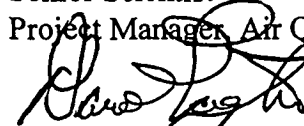
Based on this data, on behalf of Burlington Northern Railroad, Philip respectfully requests approval to discontinue monitoring for mercury particulate and to reduce the sampling frequency for PM<sub>10</sub>, DDT, dieldrin, and hexachlorobenzene from every day to every third day.

Sincerely yours,

PHILIP ENVIRONMENTAL SERVICES CORPORATION



Kirk D. Meyer  
Senior Scientist  
Project Manager, Air Quality Services



David W. Eagleton  
Project Manager

KDM/DWE/kdm/SAMPFREQ.LET

Attachment: Preliminary Report on Ambient Air Monitoring Results (through  
April 16, 1995)

ATTACHMENT

Preliminary Report on Ambient Air Monitoring Results  
(through April 16, 1995)

# Summary of Ambient Air Monitoring Data from Soil Treatment Operations

*Preliminary Report for Monitoring through April 16, 1995*

1995

**Woods Industries Site  
Yakima, Washington**

Monitoring Performed on behalf of:

**Burlington Northern Railroad, Inc.**

Seattle, Washington

by:

**Philip Environmental Services Corp.**

Columbia, Illinois



Monitoring Phase	Event Number	Sampling Start Date	Mercury Particulate Concentration ( $\mu\text{g}/\text{m}^3$ )								Collocated Sampler		Percent Relative Difference	Action Level = 0.3 $\mu\text{g}/\text{m}^3$								
			A11	A12	A13	A14	A15	A16	A21	A22	AS1	A11		Action Level Exceeded								
														A11	A12	A13	A14	A15	A16	A21	A22	
Baseline	1	2/14/95	< 0.00028	< 0.00025 F	< 0.00024 F	< 0.00028	NS	NS	< 0.00029	< 0.00027	< 0.00025 F	< 0.00028	12%	No	No	No	No	NS	NS	No	No	
	2	2/15/95	< 0.00031	< 0.00027 F	< 0.00027 F	< 0.00025 F	NS	NS	< 0.00029	< 0.00033	< 0.00026 F	< 0.00031	19%	No	No	No	No	NS	NS	No	No	
	3	2/18/95	< 0.00031	< 0.00028	< 0.00027 F	< 0.00031	NS	NS	< 0.00031	< 0.00029	< 0.00028 F	< 0.00031	11%	No	No	No	No	NS	NS	No	No	
	4	2/17/95	< 0.00031	< 0.00029	< 0.00027	< 0.00031	NS	NS	< 0.00030	< 0.00029	< 0.00028 F	< 0.00031	11%	No	No	No	No	NS	NS	No	No	
	5	2/18/95	< 0.00031	< 0.00029	< 0.00027	< 0.00030	NS	NS	< 0.00031	< 0.00029	< 0.00025 F	< 0.00031	24%	No	No	No	No	NS	NS	No	No	
	6	2/21/95	< 0.00029	< 0.00027 F	< 0.00026 F	< 0.00029	NS	NS	< 0.00027 F	< 0.00025 F	< 0.00029	< 0.00029	0%	No	No	No	No	NS	NS	No	No	
	7	3/7/95	< 0.00029	< 0.00028	< 0.00028	< 0.00028	NS	NS	< 0.00032	< 0.00033	< 0.00030	< 0.00029	3%	No	No	No	No	NS	NS	No	No	
	8	3/8/95	< 0.00026	< 0.00021	< 0.00023	< 0.00024	NS	NS	< 0.00028 DF	< 0.00028 F	NS	< 0.00028	NA	No	No	No	No	NS	NS	No	No	
	9	3/10/95	< 0.00028	< 0.00025	< 0.00026	< 0.00028	NS	NS	< 0.00035 F	< 0.00032	NS	< 0.00028	NA	No	No	No	No	NS	NS	No	No	
Remedial	R-01	3/18/95	< 0.00029	< 0.00031	< 0.00039 F	< 0.00029	NS	NS	< 0.00037 F	< 0.00034	< 0.00032	< 0.00029	9%	No	No	No	No	NS	NS	No	No	
	R-02	3/19/95	< 0.00033	< 0.00029	< 0.00029	< 0.00031	NS	NS	< 0.00036 F	< 0.00034	< 0.00032	< 0.00033	3%	No	No	No	No	NS	NS	No	No	
	R-03	3/23/95	< 0.00029	< 0.00027	< 0.00025 F	< 0.00027	NS	NS	< 0.00032 F	< 0.00033	< 0.00032	< 0.00029	9%	No	No	No	No	NS	NS	No	No	
	R-04	3/24/95	< 0.00029	< 0.00025	< 0.00026	< 0.00026	NS	NS	< 0.00031 FD	< 0.00030 D	< 0.00028	< 0.00029	4%	No	No	No	No	NS	NS	No	No	
	R-05	3/25/95	< 0.00033	< 0.00030	< 0.00032	< 0.00029	NS	NS	< 0.00038 FD	< 0.00039 FD	< 0.00033	< 0.00033	0%	No	No	No	No	NS	NS	No	No	
	R-06	3/27/95	< 0.00034	< 0.00030	< 0.00031	< 0.00030	NS	NS	< 0.00030 FD	< 0.00030 FD	< 0.00030	< 0.00034	13%	No	No	No	No	NS	NS	No	No	
	R-07	3/28/95	< 0.00032	< 0.00029	< 0.00027	< 0.00030	NS	NS	< 0.00038 F	< 0.00038 F	< 0.00030	< 0.00032	7%	No	No	No	No	NS	NS	No	No	
	R-08	3/29/95	< 0.00034 F	< 0.00032	< 0.00031	< 0.00032	NS	NS	< 0.00038 F	< 0.00040 F	< 0.00031	< 0.00034	10%	No	No	No	No	NS	NS	No	No	
	R-09	3/30/95					NS	NS	R	R	NA	NA	NA	NA	NA	NA	NA	NA	NS	NS	NA	NA
	R-10	3/31/95	< 0.00034	< 0.00030	< 0.00030	< 0.00030	NS	NS	< 0.00037	< 0.00034 F	< 0.00031	< 0.00034	10%	No	No	No	No	NS	NS	No	No	
	R-11	4/1/95					NS	NS	R	R	NA	NA	NA	NA	NA	NA	NA	NA	NS	NS	NA	NA
	R-12	4/2/95	< 0.00031	< 0.00032	< 0.00032	< 0.00033	NS	NS	< 0.00035	< 0.00037	< 0.00033	< 0.00031	6%	No	No	No	No	NS	NS	No	No	
	R-13	4/3/95	< 0.00028	< 0.00027	< 0.00028	< 0.00029	NS	NS	< 0.00027	< 0.00028	< 0.00029	< 0.00028	3%	No	No	No	No	NS	NS	No	No	
	R-14	4/4/95	< 0.00028	< 0.00027	< 0.00028	< 0.00029	NS	NS	< 0.00029	< 0.00029	< 0.00030	< 0.00028	7%	No	No	No	No	NS	NS	No	No	
	R-15	4/5/95	< 0.00029	< 0.00028	< 0.00027	< 0.00028	NS	NS	< 0.00028	< 0.00027	< 0.00031	< 0.00029	5%	No	No	No	No	NS	NS	No	No	
	R-16	4/6/95	NS	< 0.00029	< 0.00031	< 0.00030	NS	NS	NS P	< 0.00029	< 0.00029	NS	NA	NS	No	No	No	NS	NS	NS	No	
	R-17	4/7/95	0.00029	< 0.00030	< 0.00029	< 0.00030	NS	NS	< 0.00031	< 0.00028	NS	0.00029	NA	No	No	No	No	NS	NS	No	No	
	R-18	4/8/95	< 0.00028	< 0.00027	< 0.00028	< 0.00030	NS	NS	< 0.00031	< 0.00030	NS	< 0.00028	NA	No	No	No	No	NS	NS	No	No	
	R-19	4/9/95	< 0.00029	< 0.00028	< 0.00029	< 0.00029	NS	NS	< 0.00028	< 0.00028	NS	< 0.00029	NA	No	No	No	No	NS	NS	No	No	
	R-20	4/10/95	< 0.00030	NS	< 0.00032	NS	NS	NS	< 0.00029	< 0.00028	NS	< 0.00030	NA	No	NS	No	NS	NS	NS	No	No	
	R-21	4/11/95	NS	NS	< NS	NS	NS	NS	< NS	< NS	NS	NS	NA	NS	NS	NS	NS	NS	NS	NS	NS	
	R-22	4/12/95	< 0.00030	< 0.00028	< 0.00030	< 0.00014	NS	NS	< 0.00026	< 0.00029	NS	< 0.00030	NA	No	No	No	No	NS	NS	No	No	
	R-23	4/13/95	< 0.00030	< 0.00027	< 0.00030	< 0.00028	NS	NS	< 0.00029	< 0.00029	< 0.00030	< 0.00030	0%	No	No	No	No	NS	NS	No	No	
	R-24	4/14/95	< 0.00029	< 0.00028	< 0.00031	< 0.00029	NS	NS	< 0.00029	< 0.00029	NS	< 0.00029	NA	No	No	No	No	NS	NS	No	No	
	R-25	4/15/95	< 0.00028	< 0.00030	< 0.00030	< 0.00030	NS	NS	< 0.00030	< 0.00030	NS	< 0.00028	NA	No	No	No	No	NS	NS	No	No	
	R-26	4/16/95	< 0.00028	< 0.00028	< 0.00030	< 0.00028	NS	NS	< 0.00029	< 0.00029	NS	< 0.00028	NA	No	No	No	No	NS	NS	No	No	
	R-27	4/17/95									0	#DIV/0!	--	--	--	--	--	--	--	--	--	
	R-28	4/18/95									0	#DIV/0!	--	--	--	--	--	--	--	--	--	
	R-29										0	#DIV/0!	--	--	--	--	--	--	--	--	--	
	R-30										0	#DIV/0!	--	--	--	--	--	--	--	--	--	
	R-31										0	#DIV/0!	--	--	--	--	--	--	--	--	--	
	R-32										0	#DIV/0!	--	--	--	--	--	--	--	--	--	
	R-33										0	#DIV/0!	--	--	--	--	--	--	--	--	--	
	R-34										0	#DIV/0!	--	--	--	--	--	--	--	--	--	
	R-35										0	#DIV/0!	--	--	--	--	--	--	--	--	--	
	R-36										0	#DIV/0!	--	--	--	--	--	--	--	--	--	
	R-37										0	#DIV/0!	--	--	--	--	--	--	--	--	--	
	R-38										0	#DIV/0!	--	--	--	--	--	--	--	--	--	
	R-39										0	#DIV/0!	--	--	--	--	--	--	--	--	--	
	R-40										0	#DIV/0!	--	--	--	--	--	--	--	--	--	
	R-41										0	#DIV/0!	--	--	--	--	--	--	--	--	--	
	R-42										0	#DIV/0!	--	--	--	--	--	--	--	--	--	
	R-43										0	#DIV/0!	--	--	--	--	--	--	--	--	--	
	R-44										0	#DIV/0!	--	--	--	--	--	--	--	--	--	
	R-45										0	#DIV/0!	--	--	--	--	--	--	--	--	--	
	R-46										0	#DIV/0!	--	--	--	--	--	--	--	--	--	
	R-47										0	#DIV/0!	--	--	--	--	--	--	--	--	--	
	R-48										0	#DIV/0!	--	--	--	--	--	--	--	--	--	
x		1/0/00																				
Post-Rem.	P1	1/0/00											0	#DIV/0!	--	--	--	--	--	--		
	P2	1/0/00											0	#DIV/0!	--	--	--	--	--	--		
	P3	1/0/00											0	#DIV/0!	--	--	--	--	--	--		
	P4	1/0/00											0	#DIV/0!	--	--	--	--	--	--		
	P5	1/0/00											0	#DIV/0!	--	--	--	--	--	--		

Notes: F Indicates flow outside manufacturer's preferred range.  
D Indicates sample duration outside preferred limits.  
R Indicates lab data rejected because filters were wet upon receipt at laboratory.  
NS Indicates that no sample was collected or analyzed.  
NA Indicates not applicable

Monitoring Phase	Event Number	Sampling Start Date	DDT Concentration (ug/m <sup>3</sup> )								Collocated Sampler		Percent Relative Difference	Action Level = 3.25 ug/m <sup>3</sup> Action Level Exceeded																							
			A11	A12	A13	A14	A15	A16	A21	A22	A61	A11		A11	A12	A13	A14	A15	A16	A21	A22																
Baseline	1	2/14/95	NS	NS	< 0.032	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	2	2/15/95	< 0.029	< 0.028	< 0.034	< 0.043	NS	NS	< 0.030	< 0.030	< 0.031	< 0.029	6%	No	No	No	No	NS	NS	No	No	NA	NS	NS	No	No	NS	NS	NS	No	No	NS	NS	NS	No	No	
	3	2/16/95	< 0.029	< 0.029	< 0.032	< 0.029	NS	NS	< 0.030	< 0.026	< 0.030	< 0.029	3%	No	No	No	No	NS	NS	No	No	NA	NS	NS	No	No	NS	NS	NS	No	No	NS	NS	NS	No	No	
	4	2/17/95	< 0.030	< 0.030	< 0.032	< 0.029	NS	NS	< 0.028	< 0.030	< 0.030	< 0.030	0%	No	No	No	No	NS	NS	No	No	NA	NS	NS	No	No	NS	NS	NS	No	No	NS	NS	NS	No	No	
	5	2/18/95	< 0.030	< 0.030	< 0.032	< 0.031	NS	NS	< 0.030	< 0.029	< 0.030	< 0.030	0%	No	No	No	No	NS	NS	No	No	NA	NS	NS	No	No	NS	NS	NS	No	No	NS	NS	NS	No	No	
	6	2/21/95	< 0.032	< 0.030	< 0.032	< 0.030	NS	NS	< 0.031	< 0.031	< 0.033	< 0.032	3%	No	No	No	No	NS	NS	No	No	NA	NS	NS	No	No	NS	NS	NS	No	No	NS	NS	NS	No	No	
	7	3/7/95	< 0.028	< 0.029	< 0.029	< 0.028	NS	NS	< 0.029	< 0.029	NS	< 0.028	NA	No	No	No	No	NS	NS	No	No	NA	NS	NS	No	No	NS	NS	NS	No	No	NS	NS	NS	No	No	
	8	3/8/95	< 0.024	< 0.023	< 0.027	< 0.025	NS	NS	< 0.029	< 0.024	NS	< 0.024	NA	No	No	No	No	NS	NS	No	No	NA	NS	NS	No	No	NS	NS	NS	No	No	NS	NS	NS	No	No	
	9	3/10/95	< 0.031	< 0.038	< 0.031	< 0.031	NS	NS	< 0.038	< 0.034	NS	< 0.031	NA	No	No	No	No	NS	NS	No	No	NA	NS	NS	No	No	NS	NS	NS	No	No	NS	NS	NS	No	No	
Remedial	R-01	3/18/95	< 0.039	< 0.047	< 0.012	< 0.039	NS	NS	< 0.039	< 0.039	NS	< 0.039	NA	No	No	No	No	NS	NS	No	No	NA	NS	NS	No	No	NS	NS	NS	No	No	NS	NS	NS	No	No	
	R-02	3/19/95	< 0.041	< 0.041	< 0.044	< 0.041	NS	NS	< 0.048	< 0.041	NS	< 0.041	NA	No	No	No	No	NS	NS	No	No	NA	NS	NS	No	No	NS	NS	NS	No	No	NS	NS	NS	No	No	
	R-03	3/23/95	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA	NS	NS	NS	NS	NS	NS	NS	NS	NA	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	R-04	3/24/95	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA	NS	NS	NS	NS	NS	NS	NS	NS	NA	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	R-05	3/25/95	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA	NS	NS	NS	NS	NS	NS	NS	NS	NA	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	R-06	3/27/95	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA	NS	NS	NS	NS	NS	NS	NS	NS	NA	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	R-07	3/28/95	< 0.039	< 0.049	< 0.040	< 0.037	NS	NS	< 0.034	< 0.034	< 0.019	< 0.0387	104%	No	No	No	No	NS	NS	No	No	NA	NS	NS	No	No	NS	NS	NS	No	No	NS	NS	NS	No	No	
	R-08	3/29/95	< 0.041	< 0.053	< 0.039	< 0.040	NS	NS	< 0.042	< 0.042	< 0.040	< 0.041	3%	No	No	No	No	NS	NS	No	No	NA	NS	NS	No	No	NS	NS	NS	No	No	NS	NS	NS	No	No	
	R-09	3/30/95	< 0.039	< 0.048	< 0.038	< 0.045	NS	NS	< 0.045	< 0.045	< 0.022	< 0.039	77%	No	No	No	No	NS	NS	No	No	NA	NS	NS	No	No	NS	NS	NS	No	No	NS	NS	NS	No	No	
	R-10	3/31/95	< 0.041	< 0.048	< 0.041	< 0.045	NS	NS	< 0.040	< 0.040	< 0.024	< 0.041	71%	No	No	No	No	NS	NS	No	No	NA	NS	NS	No	No	NS	NS	NS	No	No	NS	NS	NS	No	No	
	R-11	4/1/95	< 0.034	< 0.040	< 0.034	< 0.031	NS	NS	< 0.030	< 0.030	< 0.018	< 0.034	89%	No	No	No	No	NS	NS	No	No	NA	NS	NS	No	No	NS	NS	NS	No	No	NS	NS	NS	No	No	
	R-12	4/2/95	< 0.030	< 0.038	< 0.031	< 0.032	NS	NS	< 0.038	< 0.038	< 0.019	< 0.03	58%	No	No	No	No	NS	NS	No	No	NA	NS	NS	No	No	NS	NS	NS	No	No	NS	NS	NS	No	No	
	R-13	4/3/95	< 0.026	< 0.033	< 0.028	< 0.028	NS	NS	< 0.028	< 0.028	< 0.017	< 0.026	53%	No	No	No	No	NS	NS	No	No	NA	NS	NS	No	No	NS	NS	NS	No	No	NS	NS	NS	No	No	
	R-14	4/4/95	< 0.027	< 0.032	< 0.027	< 0.025	NS	NS	< 0.026	< 0.026	< 0.017	< 0.027	59%	No	No	No	No	NS	NS	No	No	NA	NS	NS	No	No	NS	NS	NS	No	No	NS	NS	NS	No	No	
	R-15	4/5/95	< 0.028	< 0.030	< 0.028	< 0.025	NS	NS	< 0.028	< 0.028	< 0.018	< 0.028	56%	No	No	No	No	NS	NS	No	No	NA	NS	NS	No	No	NS	NS	NS	No	No	NS	NS	NS	No	No	
	R-16	4/6/95	NS	< 0.035	< 0.029	< 0.028	NS	NS	< 0.033	< 0.033	< 0.017	NS	NA	NS	No	No	No	NS	NS	No	No	NA	NS	NS	No	No	NS	NS	NS	No	No	NS	NS	NS	No	No	
	R-17	4/7/95	NS	< 0.028	< 0.027	< 0.028	NS	NS	< 0.034	< 0.034	< 0.018	NS	NA	NS	No	No	No	NS	NS	No	No	NA	NS	NS	No	No	NS	NS	NS	No	No	NS	NS	NS	No	No	
	R-18	4/8/95	< 0.018	< 0.033	< 0.026	< 0.031	NS	NS	< 0.032	< 0.032	NS	< 0.018	NA	No	No	No	No	NS	NS	No	No	NA	NS	NS	No	No	NS	NS	NS	No	No	NS	NS	NS	No	No	
	R-19	4/9/95	< 0.019	< 0.033	< 0.029	< 0.027	NS	NS	< 0.028	< 0.028	NS	< 0.019	NA	No	No	No	No	NS	NS	No	No	NA	NS	NS	No	No	NS	NS	NS	No	No	NS	NS	NS	No	No	
	R-20	4/10/95	< 0.019	NS	< 0.029	NS	NS	NS	< 0.027	NS	NS	< 0.019	NA	No	No	No	No	NS	NS	No	No	NA	NS	NS	No	No	NS	NS	NS	No	No	NS	NS	NS	No	No	
	R-21	4/11/95	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA	NS	NS	NS	NS	NS	NS	NS	NS	NA	NS	NS	No	No	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
	R-22	4/12/95	< 0.018	< 0.032	< 0.029	< 0.014	NS	NS	< 0.038	< 0.028	NS	< 0.018	NA	No	No	No	No	NS	NS	No	No	NA	NS	NS	No	No	NS	NS	NS	No	No	NS	NS	NS	No	No	
	R-23	4/13/95	< 0.019	< 0.026	< 0.028	< 0.028	NS	NS	< 0.029	< 0.029	< 0.019	< 0.019	0%	No	No	No	No	NS	NS	No	No	NA	NS	NS	No	No	NS	NS	NS	No	No	NS	NS	NS	No	No	
	R-24	4/14/95	< 0.019	< 0.020	< 0.029	< 0.028	NS	NS	< 0.029	< 0.029	NS	< 0.019	NA	No	No	No	No	NS	NS	No	No	NA	NS	NS	No	No	NS	NS	NS	No	No	NS	NS	NS	No	No	
	R-25	4/15/95	< 0.020	< 0.020	< 0.029	< 0.028	NS	NS	< 0.029	< 0.029	NS	< 0.02	NA	No	No	No	No	NS	NS	No	No	NA	NS	NS	No	No	NS	NS	NS	No	No	NS	NS	NS	No	No	
	R-26	4/16/95	< 0.020	< 0.023	< 0.029	< 0.028	NS	NS	< 0.029	< 0.029	NS	< 0.02	NA	No	No	No	No	NS	NS	No	No	NA	NS	NS	No	No	NS	NS	NS	No	No	NS	NS	NS	No	No	
	R-27	4/17/95									0	0	#DIV/0!																								
	R-28	4/18/95									0	0	#DIV/0!																								
	R-29										0	0	#DIV/0!																								
	R-30	4/20/95									0	0	#DIV/0!																								
	R-31	4/21/95									0	0	#DIV/0!																								
	R-32	1/0/00									0	0	#DIV/0!		</																						

Monitoring Phase	Event Number	Sampling Start Date	Dieldrin Concentration (µg/m³)								Percent Relative Difference	Action Level = 0.0691 µg/m³										
			A11	A12	A13	A14	A15	A16	A21	A22		Collocated Sampler		A11	A12	A13	A14	A15	A18	A21	A22	
				A81		A11																
Baseline	1	2/14/95	NS	NS	< 0.032	NS	NS	NS	NS	NS	NS	NS	NS	NA	NS	NS	No	NS	NS	NS	NS	NS
	2	2/15/95	< 0.029	< 0.028	< 0.034	< 0.043	NS	NS	< 0.030	< 0.030	< 0.031	< 0.029	6%	No	No	No	No	NS	NS	No	No	No
	3	2/16/95	< 0.029	< 0.029	< 0.032	< 0.029	NS	NS	< 0.030	< 0.028	< 0.030	< 0.029	3%	No	No	No	No	NS	NS	No	No	No
	4	2/17/95	< 0.030	< 0.030	< 0.032	< 0.029	NS	NS	< 0.030	< 0.030	< 0.030	< 0.030	0%	No	No	No	No	NS	NS	No	No	No
	5	2/18/95	< 0.030	< 0.030	< 0.032	< 0.031	NS	NS	< 0.030	< 0.029	< 0.030	< 0.030	0%	No	No	No	No	NS	NS	No	No	No
	6	2/21/95	< 0.032	< 0.030	< 0.032	< 0.030	NS	NS	< 0.031	< 0.031	< 0.033	< 0.032	3%	No	No	No	No	NS	NS	No	No	No
	7	3/7/95	< 0.028	< 0.029	< 0.029	< 0.028	NS	NS	< 0.029	< 0.029	NS	< 0.028	NA	No	No	No	No	NS	NS	No	No	No
	8	3/8/95	< 0.024	< 0.023	< 0.027	< 0.025	NS	NS	< 0.029	< 0.024	NS	< 0.024	NA	No	No	No	No	NS	NS	No	No	No
	9	3/10/95	< 0.031	< 0.038	< 0.031	< 0.031	NS	NS	< 0.038	< 0.034	NS	< 0.031	NA	No	No	No	No	NS	NS	No	No	No
Remedial	R-01	3/18/95	< 0.039	< 0.047	< 0.012	< 0.039	NS	NS	< 0.048	< 0.039	NS	< 0.039	NA	No	No	No	No	NS	NS	No	No	No
	R-02	3/19/95	< 0.041	< 0.044	< 0.041	< 0.043	NS	NS	< 0.048	< 0.041	NS	< 0.041	NA	No	No	No	No	NS	NS	No	No	No
	R-03	3/23/95	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA	NS	NS	NS	NS	NS	NS	NS	NS	NS
	R-04	3/24/95	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA	NS	NS	NS	NS	NS	NS	NS	NS	NS
	R-05	3/25/95	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA	NS	NS	NS	NS	NS	NS	NS	NS	NS
	R-06	3/27/95	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA	NS	NS	NS	NS	NS	NS	NS	NS	NS
	R-07	3/28/95	< 0.039	< 0.049	< 0.040	< 0.037	NS	NS	< 0.037	< 0.034	< 0.019	< 0.039	105%	No	No	No	No	NS	NS	No	No	No
	R-08	3/28/95	< 0.041	< 0.053	< 0.039	< 0.040	NS	NS	< 0.043	< 0.042	< 0.040	< 0.041	3%	No	No	No	No	NS	NS	No	No	No
	R-09	3/30/95	< 0.039	< 0.046	< 0.038	< 0.045	NS	NS	< 0.008	< 0.045	< 0.022	< 0.039	77%	No	No	No	No	NS	NS	No	No	No
	R-10	3/31/95	< 0.041	< 0.048	< 0.041	< 0.045	NS	NS	< 0.038	< 0.040	< 0.020	< 0.041	105%	No	No	No	No	NS	NS	No	No	No
	R-11	4/1/95	< 0.034	< 0.040	< 0.034	< 0.031	NS	NS	< 0.037	< 0.036	< 0.018	< 0.034	89%	No	No	No	No	NS	NS	No	No	No
	R-12	4/2/95	< 0.030	< 0.038	< 0.031	< 0.032	NS	NS	< 0.037	< 0.038	< 0.019	< 0.030	58%	No	No	No	No	NS	NS	No	No	No
	R-13	4/3/95	< 0.028	< 0.033	< 0.028	< 0.028	NS	NS	< 0.029	< 0.028	< 0.017	< 0.028	53%	No	No	No	No	NS	NS	No	No	No
	R-14	4/4/95	< 0.027	< 0.032	< 0.028	< 0.025	NS	NS	< 0.030	< 0.027	< 0.017	< 0.027	59%	No	No	No	No	NS	NS	No	No	No
	R-15	4/5/95	< 0.028	< 0.030	< 0.028	< 0.025	NS	NS	< 0.028	< 0.028	< 0.017	< 0.028	65%	No	No	No	No	NS	NS	No	No	No
	R-16	4/6/95	NS	< 0.035	< 0.029	< 0.028	NS	NS	< 0.033	< 0.033	< 0.017	NS	NA	NS	No	No	No	NS	NS	NS	No	No
	R-17	4/7/95	NS	< 0.028	< 0.027	< 0.028	NS	NS	< 0.034	< 0.034	< 0.018	NS	NA	NS	No	No	No	NS	NS	NS	No	No
	R-18	4/8/95	< 0.018	< 0.033	< 0.028	< 0.031	NS	NS	< 0.040	< 0.032	NS	< 0.018	NA	No	No	No	No	NS	NS	No	No	No
	R-19	4/9/95	< 0.019	< 0.033	< 0.029	< 0.027	NS	NS	< 0.029	< 0.028	NS	< 0.019	NA	No	No	No	No	NS	NS	No	No	No
	R-20	4/10/95	< 0.019	NS	< 0.029	NS	NS	NS	< 0.027	NS	NS	< 0.019	NA	No	NS	No	NS	NS	NS	No	No	NS
	R-21	4/11/95	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA	NS	NS	NS	NS	NS	NS	NS	NS	NS
	R-22	4/12/95	< 0.018	< 0.032	< 0.029	< 0.014	NS	NS	< 0.038	< 0.028	NS	< 0.018	NA	No	No	No	No	NS	NS	No	No	No
	R-23	4/13/95	< 0.019	< 0.028	< 0.028	< 0.028	NS	NS	< 0.041	< 0.029	< 0.019	< 0.019	0%	No	No	No	No	NS	NS	No	No	No
	R-24	4/14/95	< 0.019	< 0.020	< 0.028	< 0.028	NS	NS	< 0.043	< 0.029	NS	< 0.019	NA	No	No	No	No	NS	NS	No	No	No
	R-25	4/15/95	< 0.020	< 0.020	< 0.028	< 0.028	NS	NS	< 0.048	< 0.029	NS	< 0.020	NA	No	No	No	No	NS	NS	No	No	No
	R-26	4/18/95	< 0.020	< 0.023	< 0.028	< 0.028	NS	NS	< 0.046	< 0.029	NS	< 0.020	NA	No	No	No	No	NS	NS	No	No	No
	R-27	4/17/95											0	#DIV/0!	-	-	-	-	-	-	-	-
	R-28	4/18/95												#DIV/0!	-	-	-	-	-	-	-	-
	R-29													#DIV/0!	-	-	-	-	-	-	-	-
	R-30	4/20/95											0	#DIV/0!	-	-	-	-	-	-	-	-
	R-31	4/21/95											0	#DIV/0!	-	-	-	-	-	-	-	-
	R-32	1/0/00											0	#DIV/0!	-	-	-	-	-	-	-	-
	R-33	1/0/00											0	#DIV/0!	-	-	-	-	-	-	-	-
	R-34	1/0/00											0	#DIV/0!	-	-	-	-	-	-	-	-
	R-35	1/0/00											0	#DIV/0!	-	-	-	-	-	-	-	-
	R-36	1/0/00											0	#DIV/0!	-	-	-	-	-	-	-	-
	R-37	1/0/00											0	#DIV/0!	-	-	-	-	-	-	-	-
	R-38	1/0/00											0	#DIV/0!	-	-	-	-	-	-	-	-
	R-39	1/0/00											0	#DIV/0!	-	-	-	-	-	-	-	-
	R-40	1/0/00											0	#DIV/0!	-	-	-	-	-	-	-	-
	R-41	1/0/00											0	#DIV/0!	-	-	-	-	-	-	-	-
	R-42	1/0/00											0	#DIV/0!	-	-	-	-	-	-	-	-
	R-43	1/0/00											0	#DIV/0!	-	-	-	-	-	-	-	-
	R-44	1/0/00											0	#DIV/0!	-	-	-	-	-	-	-	-
	R-45	1/0/00											0	#DIV/0!	-	-	-	-	-	-	-	-
	R-46	1/0/00											0	#DIV/0!	-	-	-	-	-	-	-	-
	R-47	1/0/00											0	#DIV/0!	-	-	-	-	-	-	-	-
	R-48	1/0/00											0	#DIV/0!	-	-	-	-	-	-	-	-
	x	1/0/00											0	#DIV/0!	-	-	-	-	-	-	-	-
Post-Rem.	P1	1/0/00											0	#DIV/0!	-	-	-	-	-	-	-	-
	P2	1/0/00											0	#DIV/0!	-	-	-	-	-	-	-	-
	P3	1/0/00											0	#DIV/0!	-	-	-	-	-	-	-	-
	P4	1/0/00											0	#DIV/0!	-	-	-	-	-	-	-	-
	P5	1/0/00											0	#DIV/0!	-	-	-	-	-	-	-	-

Notes: NS indicates that no sample collected or analyzed.  
NA indicates not applicable  
P indicates a pump fault occurrence

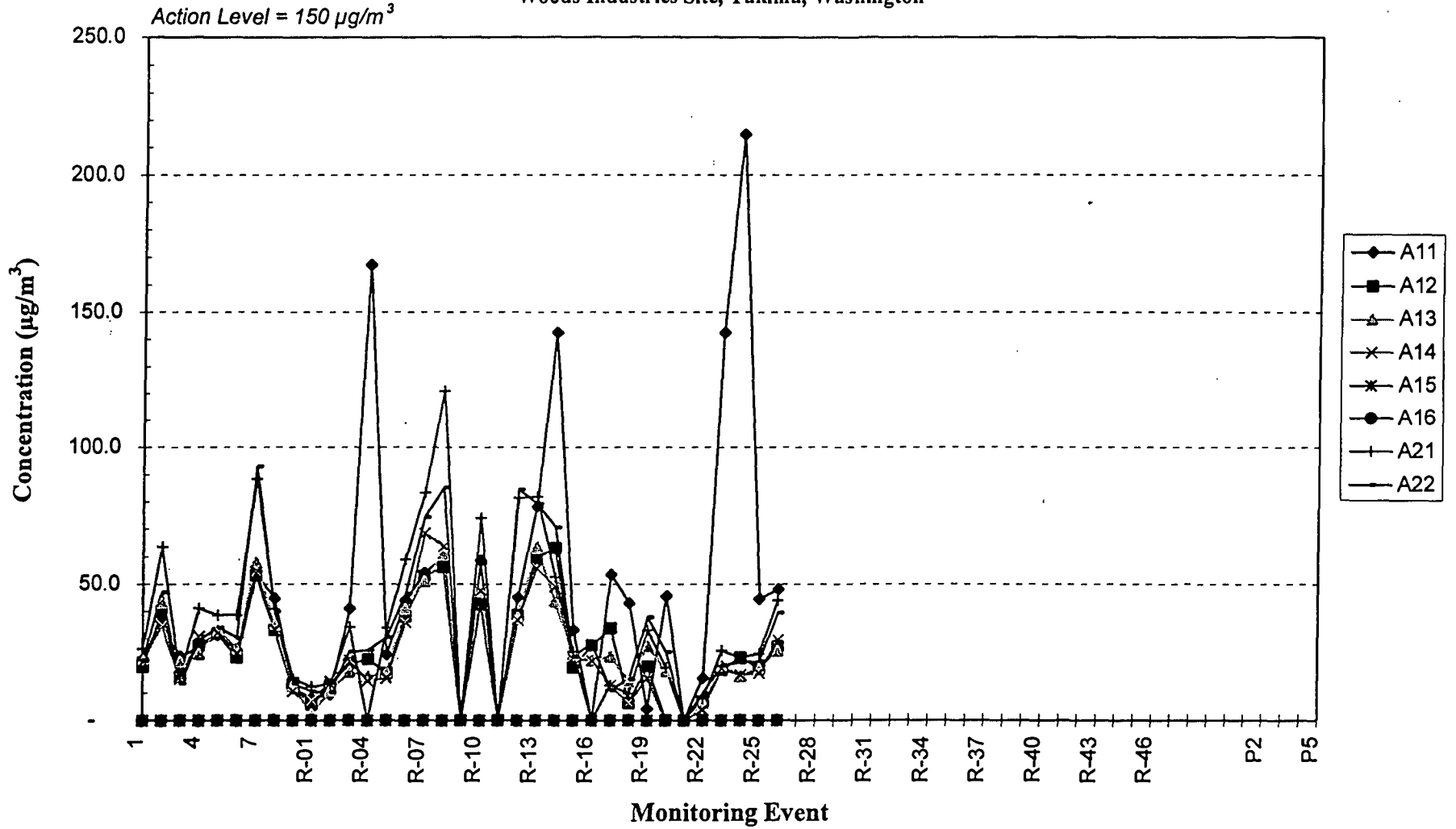




### PM<sub>10</sub> Concentration

Method 40 CFR 50, Appendix J

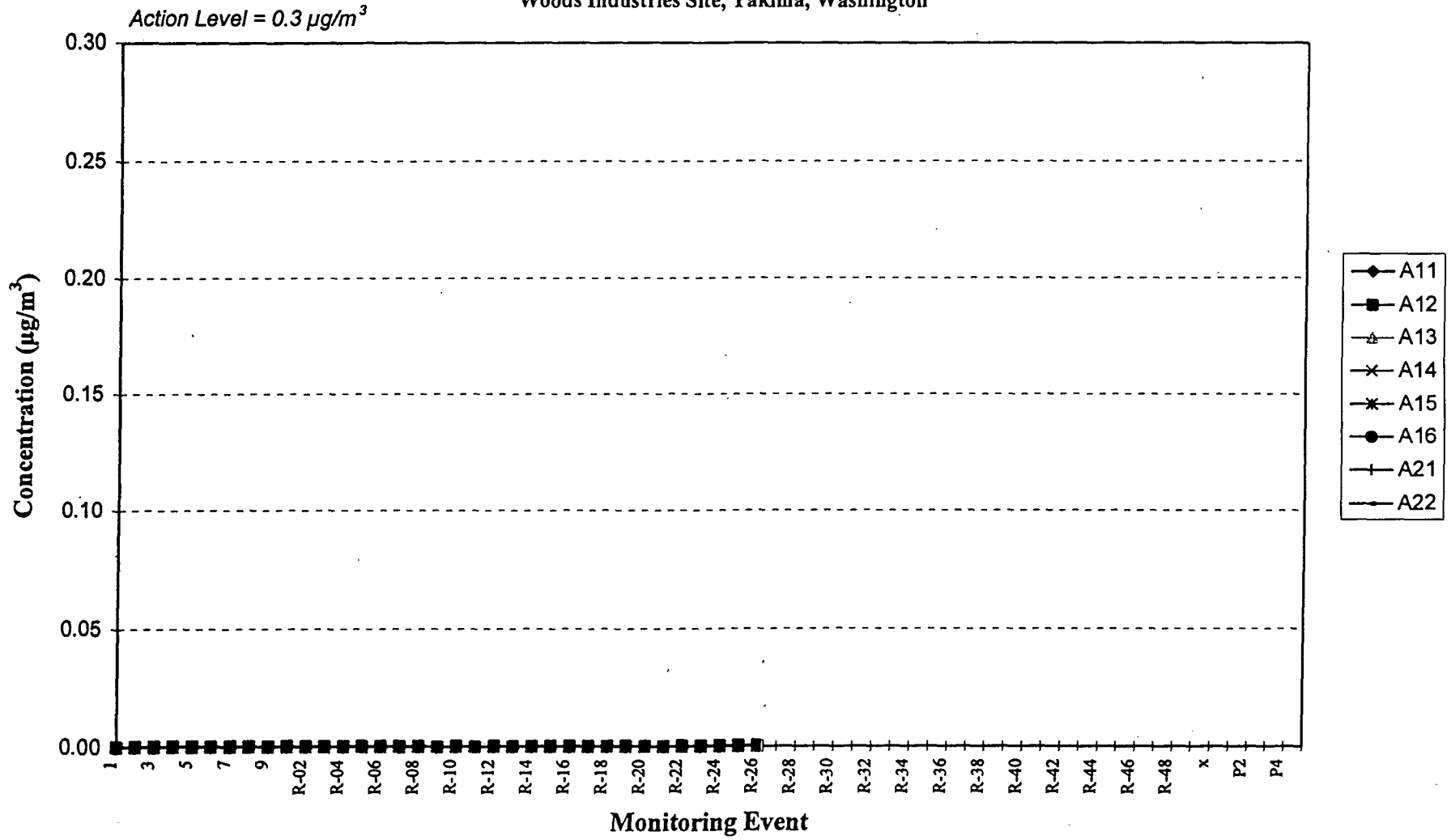
Woods Industries Site, Yakima, Washington



# Mercury Particulate Concentration

PM10 Filter Analysis

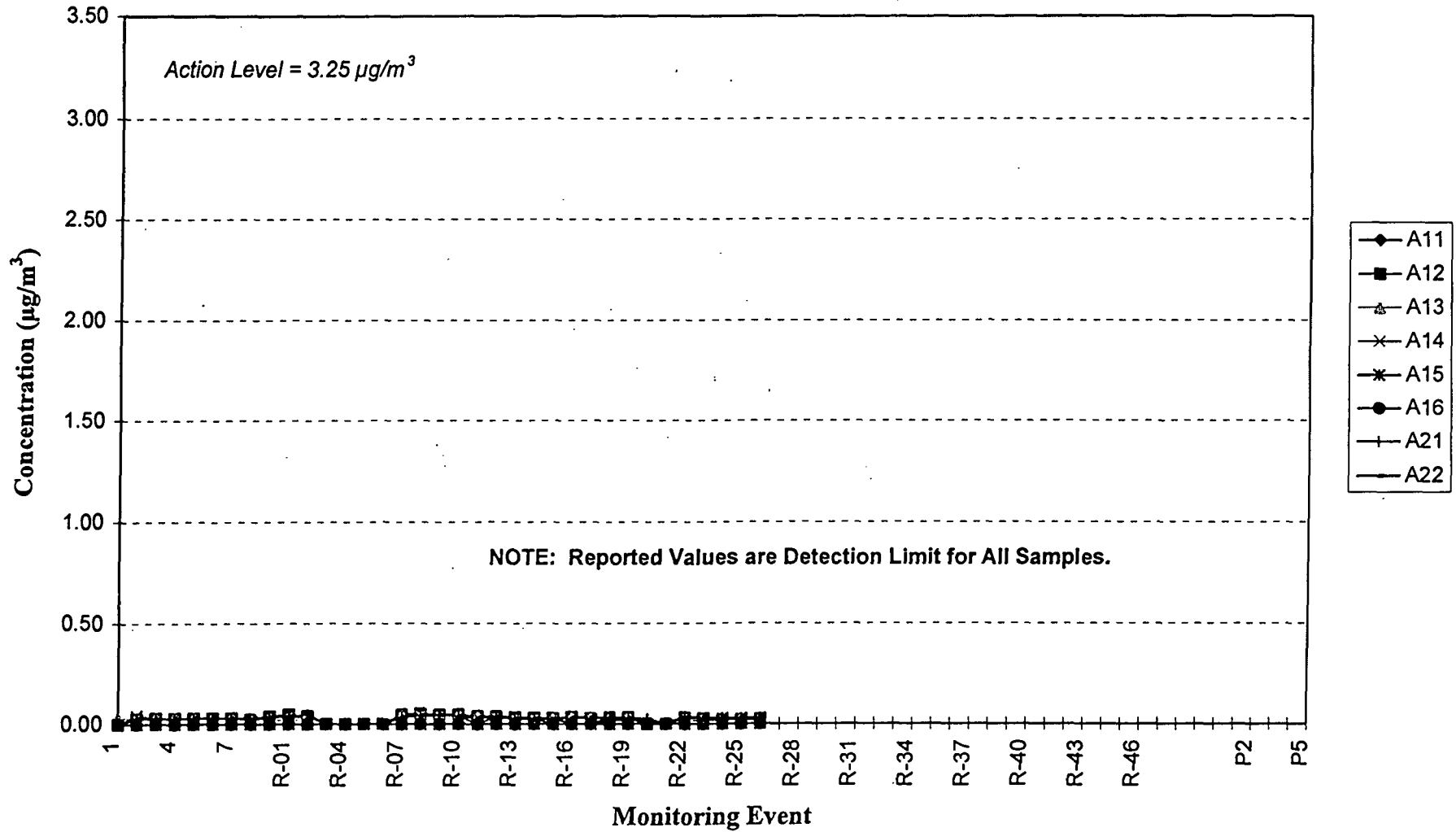
Woods Industries Site, Yakima, Washington



# DDT Concentration

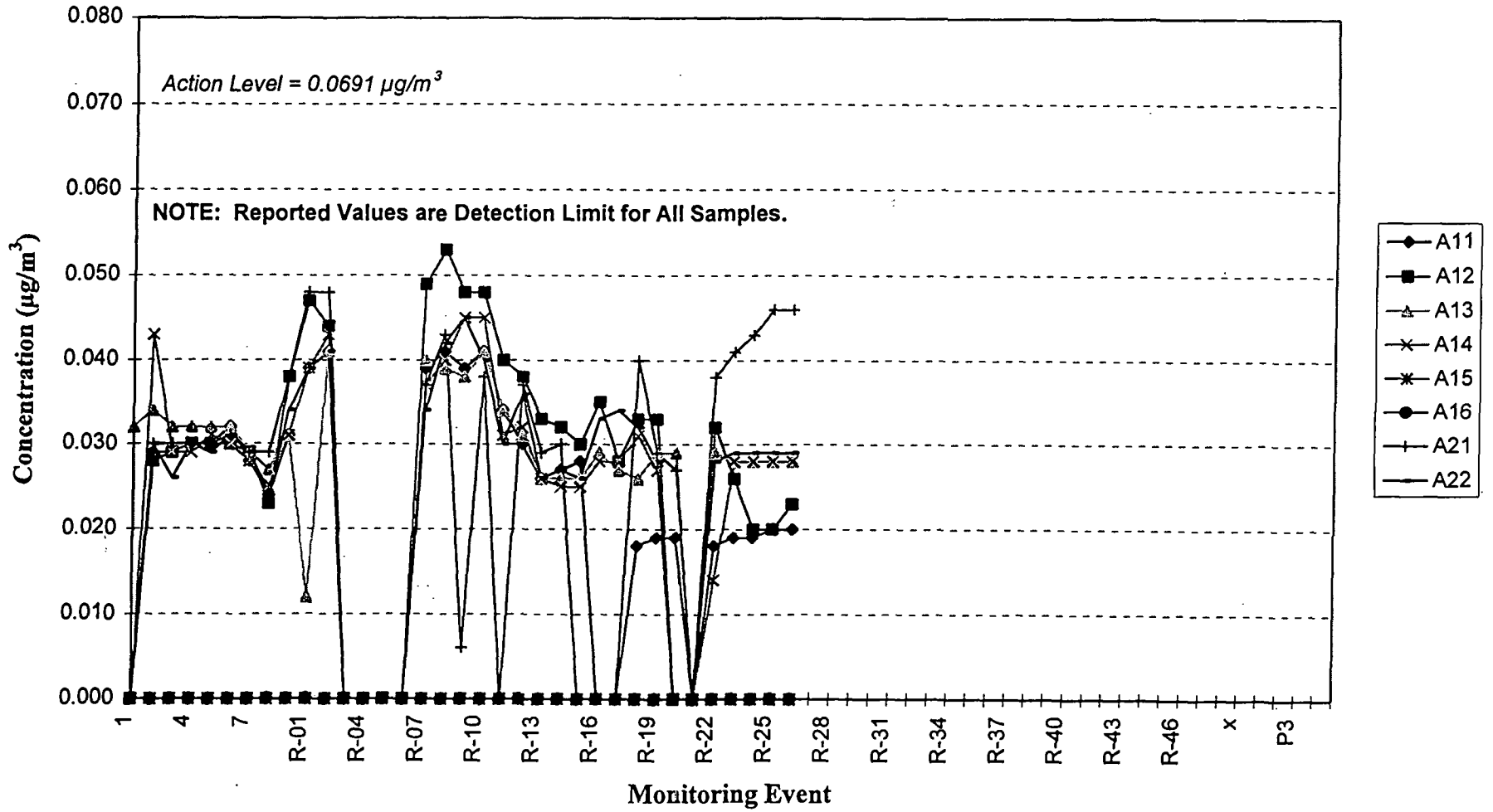
Method TO-10

Woods Industries Site, Yakima, Washington



# Dieldrin Concentration

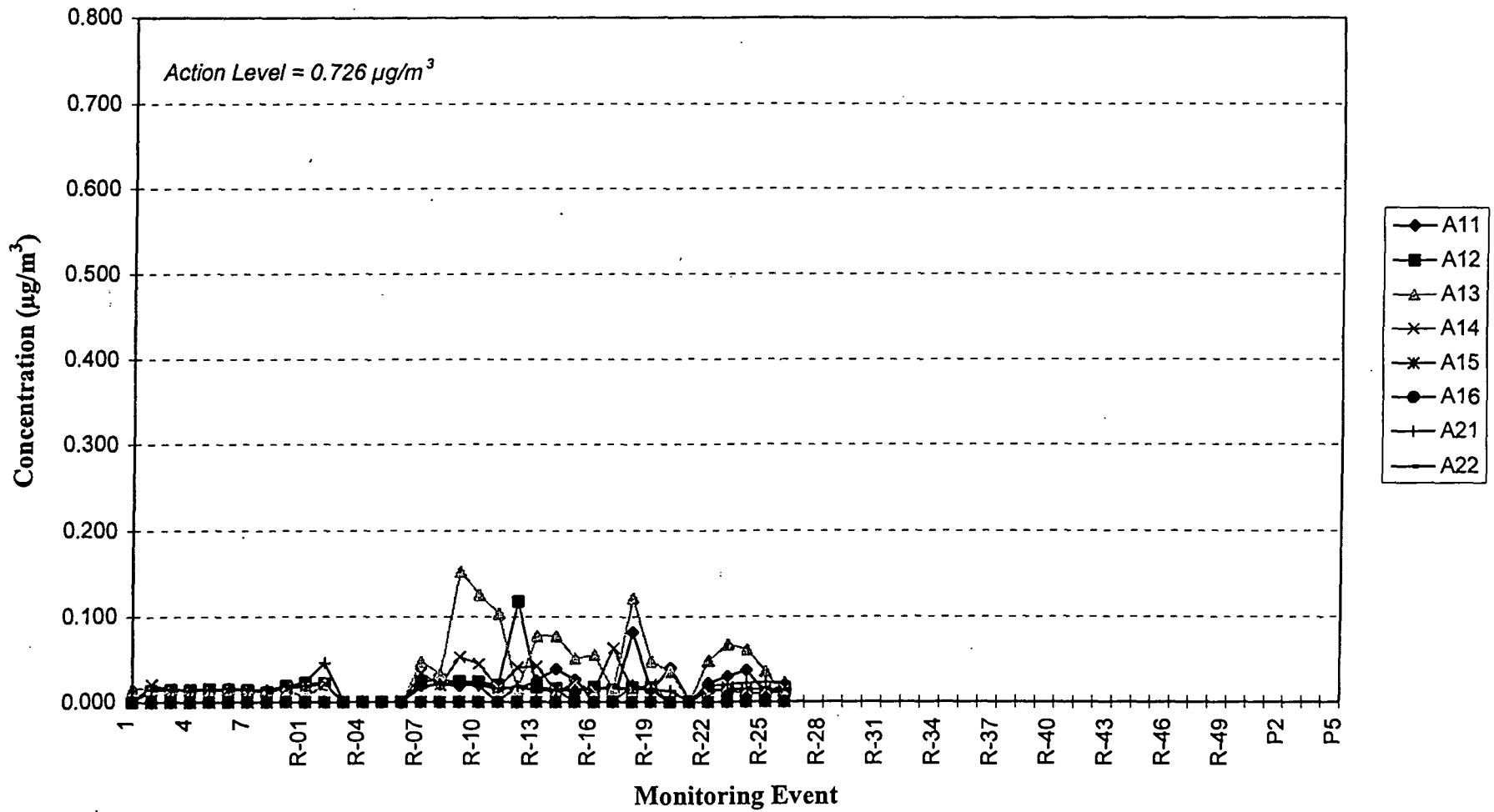
Method TO-10  
Woods Industries Site, Yakima, Washington



# Hexachlorobenzene Concentration

Method TO-10

Woods Industries Site, Yakima, Washington



**WILLIAMS ENVIRONMENTAL SERVICES, INC.**



VIA FACSIMILE

May 24, 1995

Ms. Lynda Priddy  
On-Scene Coordinator/Remedial Project Manager  
U.S.E.P.A., Region X  
1200 Sixth Avenue  
Seattle, WA 98101

Post-it* Fax Note	7671	Date	5/24/95	# of pages	1
To	David Eagleton	From	Greg Koester		
Co./Dept.		Co.			
Phone #		Phone #			
Fax #		Fax #			

Re: Woods Industries Site  
Yakima, Washington  
Transmittal No.: 0109  
Number of Pages: 1

Subject: Completion of Performance Test  
Williams Project No.: 0385-001-110

Dear Lynda:

Williams Environmental Services, Inc. (Williams) is scheduled to complete the remainder of its performance test at the Woods Industries site on May 25 and 26. To date, Williams has completed the following runs:

- Run 1A - Dioxins/Pesticides/VOST
- Run 2A - Dioxins/Pesticides (Cold start test)
- Run 2B - Metals/HCl/Cl<sub>2</sub>/Particulate/VOST (Cold start test).

On Thursday, May 25, Williams will complete Run 3 of the test, running all sampling trains simultaneously (dioxins, pesticides, VOST, metals, HCl, Cl<sub>2</sub>, and particulate). On Friday, May 26, Williams will complete Run 1B for metals, HCl, Cl<sub>2</sub>, and particulate, followed by another sampling run for the blank trains.

If you have any questions regarding this schedule, please contact me today at (404) 879-4854 or B.J. Bartee at the job site.

Sincerely,

**WILLIAMS ENVIRONMENTAL SERVICES, INC.**

Greg Whetstone  
Project Engineer  
GTW:pc

cc: Mark A. Fieri  
B.J. Bartee  
Greg Koester (Philip)  
Job File 0385



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION 10  
1200 Sixth Avenue  
Seattle, Washington 98101

Reply To  
Attn Of: HW-113

JUN - 2 1995

Mr. Bruce A. Sheppard  
Manager Environmental Projects  
Burlington Northern Railroad  
Environmental Engineering  
Suite 2000, 999 Third Avenue  
Seattle, Washington 98104-1105

Dear Mr. Sheppard:

EPA has reviewed your submission of June 1, 1995, entitled "Proposed Operating Limits for Woods Site." As discussed in our conference call with representatives from Focus, Philip Environmental and Williams Environmental, EPA approves your proposed operating parameters (see attached) with the following changes:

1. Change soil feed rate (60-min RA) (max) to 26.7 from 27.0:
2. Drop A-1 parameters: baghouse dust feed rate (60-min RA) and baghouse dust feed rate (instantaneous).
3. Add as a C Parameter: baghouse pulse setting used during the performance test.
4. Change soil exit temperature (instantaneous) (min) to 725 degrees F. from 700 degrees F.
5. Change ID fan current (inst) (max) to 100 amps from 110 amps.
6. Add the following as a footnote to soil exit temperature (20-min RA) and soil exit temperature (instantaneous):

Soil exit temperature AWFSOs not in effect during the first 54.6 minutes of start-up, soil not meeting soil exit temperature AWFSO limits must be retreated or sampled separately from subsequently treated soil to confirm soil cleanup standards have been met.

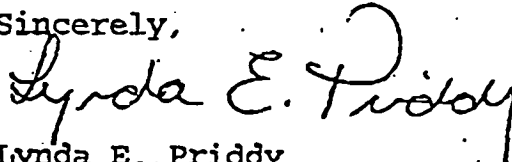
7. Revise Table 3-2 to reflect the above changes. Submit the revised table to me by June 7, 1995.

Additionally, Williams agreed to submit to EPA the total dissolved solids (TDS) and total suspended solids (TSS) data collected from the scrubber blowdown water during the performance test. EPA stated that the Agency will establish limits and a sampling frequency for TDS and TSS. These limits will be categorized as B Parameters. The TDS and TSS data shall be submitted to EPA by June 7, 1995.

The thermal treatment unit may be operated according to the terms and conditions identified in this letter except that the maximum soil feed rate (60 min RA) shall be 20.0 (75% of 26.7 tph). The unit may not be operated at more than 20.0 tph until authorization is received from EPA to increase the feed rate. Please refer to Page 38 of the Work Plan for details.

If you have any other questions please contact me at (206) 553-1987.

Sincerely,



Lynda E. Priddy  
Woods Site Manager  
Hazardous Waste Division

attachment

cc: David Eagleton, Burlington Environmental - Columbia  
B.J. Bartee, Williams Environmental Services, Inc.  
Rick Roeder, Ecology - CRO  
Administrative Record for Soil Treatment Removal - HW-070  
Bill Glasser, EPA - HW-113  
John Gilbert, EPA - Cincinnati  
Cathy Massimino, EPA - HW-111  
Don Matheny, EPA - ES-095  
Bill Ryan, EPA - ES-097  
Paul Meeter, Weston - West Chester  
David Tonkin - URS



Proposed Operating Limits for Woods Site				
A1 Parameters	Units	Limit Type	Limit	Notes
Soil feed rate (60-min RA)	tons/hr	Max	27	a ✓
Soil feed rate (instantaneous)	tons/hr	Max	31	b -
Baghouse dust feed rate (60-min RA)	tons/hr	Max	35	a -
Baghouse dust feed rate (instantaneous)	tons/hr	Max	51	b -
Soil exit temperature (20-min RA)	deg. F	Min	750	a -
Soil exit temperature (instantaneous)	deg. F	Min	700	g -
Thermal oxidizer exit temp (inst.)	deg. F	Min	1810	d -
Stack gas CO (60-min RA @7% O2)	ppm	Max	100	
APC recycle water flow rate (inst.)	gpm	Min	300	d -
Scrubber recycle water pH (20-min RA)	pH units	Min	7.25	f -
Scrubber recycle water pH (inst.)	pH units	Min	6.5	c, f -
APC purge rate (inst.)	gpm	Min	16.5	d -
ID fan current (inst.)	amps	Max	110	d, e ✓
<b>A2 Parameters</b>				
Thermal desorber pressure (inst.)	in. w.c.	Max	-0.01	
Thermal desorber exit temp (inst.)	deg. F	Max	450	
Thermal desorber exit temp (inst.)	deg. F	Min	250	
Thermal oxidizer exit temp (inst.)	deg. F	Max	2100	
Baghouse differential pressure (inst.)	in. w.c.	Min	0.5	
Quench exit temp (inst.)	deg. F	Max	250	
Stack gas oxygen concentration (inst.)	%	Min	3	
<b>C Parameters</b>				
APC water supply pressure	psig	Min	20	

- (a) Based on the average of the highest (lowest) RA values measured during each run.
- (b) Based on the average of the maximum hourly values from each hour of the test runs
- (c) Based on the average of the minimum hourly values from each hour of the test runs
- (d) Based on time weighted average
- (e) Limit of 110 amps based on current required for cold start-up
- (f) pH limits based on Runs 1B and 3 only since HCl was not measured during Run 1A
- (g) Limit based on data variability

**WILLIAMS ENVIRONMENTAL SERVICES, INC.**



VIA FACSIMILE

June 5, 1995

Ms. Lynda Priddy  
On-Scene Coordinator/Remedial Project Manager  
U.S.E.P.A., Region X  
1200 Sixth Avenue  
Seattle, WA 98101

Re: Woods Industries Site  
Yakima, Washington  
Transmittal No.: 0112  
Number of Pages: 1

Subject: Scrubber Blowdown Sample Analyses  
Williams Project No.: 0365-001-110

Dear Lynda:

Please find attached the analytical results for the scrubber blowdown water as agreed upon during our conference call of June 2, 1995. Compositated samples were analyzed from runs 1B, 2A, 2B, 3, and 4 (repeat of 2B), and one grab sample was analyzed from run 2A for total suspended solids (TSS) and total dissolved solids (TDS). Each of the results is attached for your review. Williams understands that upon review of the results, the EPA may establish limits and a sampling frequency for TSS and TDS. Any limits established will be categorized as Group B Parameters. These parameters do not require continuous monitoring and are not interlocked with the AWFSO system.

Should you have any further questions regarding the scrubber blowdown, please contact me at (404) 879-4854 or B.J. Bartee at (509) 452-4326.

Sincerely,

**WILLIAMS ENVIRONMENTAL SERVICES, INC.**

Greg Whetstone  
Project Engineer  
GTW:pc

Attachments

cc: Z. Lowell Taylor  
Jim Sanders  
B.J. Bartee  
David Eagleton (Philip)  
Greg Koester (Philip)  
Bruce Sheppard (BNRA)  
Job File 0365

GENERAL INORGANICS

(Water)

Client Name: Williams Environmental Services Inc.  
Client ID: RIB-SCB-PHY  
Lab ID: 082144-0004-SA  
Matrix: AQUEOUS  
Authorized: 26 MAY 95

Sampled: 25 MAY 95  
Prepared: See Below

Received: 26 MAY 95  
Analyzed: See Below

Parameter	Result	Units	Reporting Limit	Analytical Method	Prepared Date	Analyzed Date
Solids, Total Dissolved	9460	mg/L	200	160.1	NA	27 MAY 95 R

Note R : Raised reporting limit(s) due to high analyte level(s).

ND = Not detected  
NA = Not applicable

Reported By: Lori Ann Upton

Approved By: Josefina Jones

The cover letter is an integral part of this report.

Rev 230787

GENERAL INORGANICS

(Water)

Client Name: Williams Environmental Services Inc.  
Client ID: RIB-SCB-PHY  
Lab ID: 082144-0004-SA  
Matrix: AQUEOUS  
Authorized: 26 MAY 95

Sampled: 25 MAY 95  
Prepared: See Below

Received: 26 MAY 95  
Analyzed: See Below

Parameter	Result	Units	Reporting Limit	Analytical Method	Prepared Date	Analyz Date
Solids, Total Suspended	103	mg/L	5.0	160.2	NA	26 MAY

ND = Not detected  
NA = Not applicable

Reported By: Larry Tellers

Approved By: Josefina Jones

The cover letter is an integral part of this report.  
Rev 230787

GENERAL INORGANICS

(Water)

Client Name: Williams Environmental Services Inc.  
Client ID: RZA-SCB-PHY  
Lab ID: 081925-0005-SA  
Matrix: AQUEOUS  
Authorized: 12 MAY 95

Sampled: 10 MAY 95  
Prepared: See Below

Received: 12 MAY 95  
Analyzed: See Below

Parameter	Result	Units	Reporting Limit	Analytical Method	Prepared Date	Analyzed Date
Solids, Total Dissolved	5700	mg/L	200	160.1	NA	15 MAY 95 R
Solids, Total Suspended	690	mg/L	10.0	160.2	NA	15 MAY 95 R

Note R : Raised reporting limit(s) due to high analyte level(s).

ND = Not detected  
NA = Not applicable

Reported By: Larry Tellers

Approved By: Jeff Brenner

The cover letter is an integral part of this report.  
Rev 230787

GENERAL INORGANICS

(Water)

Client Name: Williams Environmental Services Inc.

Client ID: RZA-SCB-PHY

Lab ID: 081925-0005-0U

Matrix: AQUEOUS

Authorized: 12 MAY 95

Sampled: 10 MAY 95

Prepared: See Below

Received: 12 MAY 95

Analyzed: See Below

Parameter	Result	Units	Reporting Limit	Analytical Method	Prepared Date	Analyzed Date
Solids, Total Dissolved	5260	mg/L	200	160.1	NA	15 MAY 95 R
Solids, Total Suspended	664	mg/L	10.0	160.2	NA	15 MAY 95 R

Note R : Raised reporting limit(s) due to high analyte level(s).

ND = Not detected  
NA = Not applicable

Reported By: Larry Tellers

Approved By: Jeff Brenner

The cover letter is an integral part of this report.  
Rev 230787

GENERAL INORGANICS

(Water)

Client Name: Williams Environmental Services Inc.

Client ID: R2A-SCB-PHY-1715

Lab ID: 081925-0006-SA

Matrix: AQUEOUS

Authorized: 12 MAY 95

Sampled: 10 MAY 95

Prepared: See Below

Received: 12 MAY 95

Analyzed: See Below

Parameter	Result	Units	Reporting Limit	Analytical Method	Prepared Date	Analyzed Date
Solids,						
Total Dissolved	3420	mg/L	200	160.1	NA	15 MAY 95 R
Solids,						
Total Suspended	574	mg/L	10.0	160.2	NA	15 MAY 95 R

Note R : Raised reporting limit(s) due to high analyte level(s).

ND = Not detected

NA = Not applicable

Reported By: Larry Tellers

Approved By: Jeff Brenner

The cover letter is an integral part of this report.

Rev 230787

GENERAL INORGANICS

(Water)

Client Name: Williams Environmental Services Inc.  
Client ID: R2B-SCB-PHY  
Lab ID: 081961-0004-SA  
Matrix: AQUEOUS  
Authorized: 15 MAY 95

Sampled: 11 MAY 95  
Prepared: See Below

Received: 15 MAY 95  
Analyzed: See Below

Parameter	Result	Units	Reporting Limit	Analytical Method	Prepared Date	Analyz Date
Solids, Total Dissolved	10200	mg/L	200	160.1	NA	17 MAY
Solids, Total Suspended	440	mg/L	10.0	160.2	NA	19 MAY

Note R : Raised reporting limit(s) due to high analyte level(s).

ND = Not detected  
NA = Not applicable

Reported By: Larry Tellers

Approved By: Lori Ann Upton

The cover letter is an integral part of this report.  
Rev 230787



GENERAL INORGANICS  
(Water)

Client Name: Williams Environmental Services Inc.  
Client ID: R3-SCB-PHY  
Lab ID: Q82144-0015-SA  
Matrix: AQUEOUS  
Authorized: 26 MAY 95

Sampled: 25 MAY 95  
Prepared: See Below

Received: 26 MAY 95  
Analyzed: See Below

Parameter	Result	Units	Reporting Limit	Analytical Method	Prepared Data	Analyze Date
Solids, Total Suspended	148	mg/L	5.0	160.2	NA	26 MAY

ND - Not detected  
NA - Not applicable

Reported By: Larry Tellers

Approved By: Josefina Jones

The cover letter is an integral part of this report.  
Rev 230787

GENERAL INORGANICS

(Water)

Client Name: Williams Environmental Services Inc.  
Client ID: RS-SCB-PHY  
Lab ID: 082144-0015-SA  
Matrix: AQUEOUS  
Authorized: 26 MAY 95

Sampled: 25 MAY 95  
Prepared: See Below

Received: 26 MAY 95  
Analyzed: See Below

Parameter	Result	Units	Reporting Limit	Analytical Method	Prepared Date	Analyze Date
Solids, Total Dissolved	7980	mg/L	200	160.1	NA	27 MAY

Note R : Raised reporting limit(s) due to high analyte level(s).

ND = Not detected  
NA = Not applicable

Reported By: Lori Ann Upton

Approved By: Josefina Jones

The cover letter is an integral part of this report.  
Rev 230787

**DUPLICATE CONTROL SAMPLE REPORT**  
**Wet Chemistry Analysis and Preparation**  
**Project: 082144**

Category: TDS-A Total Dissolved Solids  
 Test: TDS-A  
 Matrix: AQUEOUS  
 QC Lot: 27 MAY 95-A  
 Concentration Units: mg/L

Analyte	Spiked	Concentration			Accuracy Average(%) DCS Limits	Precision (RPD) DCS Limit
		DCS1	DCS2	AVG		
Solids, Total Dissolved	500	494	498	496	99 80-120	0.81 20

Calculations are performed before rounding to avoid round-off errors in calculated results.

\*\* TOTAL PAGE 12 \*\*

METHOD BLANK REPORT  
Wet Chemistry Analysis and Preparation  
Project: 082144

Test: TDS-A                                    Total Dissolved Solids (TDS)  
Method: 160.1  
Matrix: AQUEOUS  
QC Lot: 27 MAY 95-A                        QC Run: 27 MAY 95-A

Analyte	Result	Units	Reporting Limit	Qualifi
Solids, Total Dissolved	ND	mg/L	10	

ND - Not Detected

GENERAL INORGANICS

(Water)

Client Name: Williams Environmental Services Inc.

Client ID: R4-SCB-PHY

Lab ID: 082160-0001-SA

Matrix: AQUEOUS

Authorized: 27 MAY 95

Sampled: 26 MAY 95

Prepared: See Below

Received: 27 MAY 95

Analyzed: See Below

Parameter	Result	Units	Reporting Limit	Analytical Method	Prepared Date	Analyzed Date
Solids, Total Dissolved	3950	mg/L	40.0	160.1	NA	27 MAY 95 R
Solids, Total Suspended	142	mg/L	5.0	160.2	NA	27 MAY 95

Note R : Raised reporting limit(s) due to high analyte level(s).

ND = Not detected

NA = Not applicable

Reported By: Lori Ann Upton

Approved By: Josefina Jones

The cover letter is an integral part of this report.

Rev 230787

**WILLIAMS ENVIRONMENTAL SERVICES, INC.**

June 7, 1995

Ms. Lynda Priddy  
On-Scene Coordinator/Remedial Project Manager  
U.S.E.P.A., Region X  
1200 Sixth Avenue  
Seattle, WA 98101

Re: Woods Industries Site  
Yakima, Washington  
Transmittal No.: 0113  
Number of Pages: 1

Subject: Performance Test Emissions Results and QA/QC  
Williams Project No.: 0365-001-110

Dear Lynda:

Please find enclosed the analytical results for emissions testing during the performance test at the Woods Industries site. Laboratory QA/QC results are included for a majority of the analyses, with the rest to follow when they are received. Finally, Focus Environmental has prepared summary tables of the results as they compare to the Washington State ASILs. With the exception of the particulate, all emissions are well within the guidelines.

In addition to the results enclosed with this package, Williams tentatively plans to issue the draft Performance Test Report, as outlined in the Performance Test Plan, later next week, dependent upon the turnaround time for the remaining QA/QC results. A final Performance Test Report will be issued within 60 days, as per the test plan.

If you have any questions regarding the results, please contact me at (404) 879-4854 or B.J. Barteo at (509) 452-4326.

Sincerely,

**WILLIAMS ENVIRONMENTAL SERVICES, INC.**

Greg Whetstone  
Project Engineer  
GTW:pc

Enclosures

cc: Z. Lowell Taylor  
Jim Sanders  
B.J. Barteo  
David Eagleton (Phillip, w/o attachments)  
Bruce Sheppard (BNRR, w/o attachments)



**WILLIAMS ENVIRONMENTAL SERVICES, INC.**

June 8, 1995

Ms. Lynda Priddy  
On-Scene Coordinator/Remedial Project Manager  
U.S.E.P.A., Region X  
1200 Sixth Avenue  
Seattle, WA 98101

Re: Woods Industries Site  
Yakima, Washington  
Transmittal No.: 0115  
Number of Pages: 1

Subject: Additional Laboratory QA/QC  
Revised Table 3-2  
Williams Project No.: 0365-001-110

Dear Lynda:

Please find enclosed the remaining QA/QC data for the particulate, metals, and VOST testing at the Woods Industries site. Also, B.J. Barteel will be sending you the remaining QA/QC data for the pesticides and HCl results. Once the remaining QA/QC data is received by Focus Environmental, they will be able to complete the draft Performance Test Report. Submission of the draft report is still tentatively scheduled for next week.

Also enclosed is a revised Table 3-2. The AWFSO for ID fan current has been returned to a limit of 100 amps. Additionally, all footnotes have been corrected as requested.

Should you have any questions regarding these items, please contact me at (404) 879-4854 or B.J. Barteel at (509) 452-4326.

Sincerely,

**WILLIAMS ENVIRONMENTAL SERVICES, INC.**

Greg Whetstone  
Project Engineer  
GTW:pc

Enclosures

cc: Z. Lowell Taylor  
Jim Sanders  
B.J. Barteel  
David Eagleton (Philip)  
Bruce Sheppard (BNRR)

Table 3-2. Automatic Waste Feed Shutoff Conditions To Be Complied With During All Phases of Contaminated Soil Processing

Control Parameters <sup>a</sup>	Instrument Number	Shutoff Condition	Value	Comments
Soil feed rate (ton/hr)	WQI-170	High	> 26.7	60-minute rolling average AWFSO
Soil feed rate (ton/hr)	WQI-170	High	> 31	Instantaneous AWFSO
Thermal desorber pressure (inches w.c.)	PI-330	High	> -0.01	Instantaneous AWFSO
Thermal desorber exit soil temperature (°F)	TI-112	Low	< 750(b)	20-minute rolling average AWFSO
Thermal desorber exit soil temperature (°F)	TI-112	Low	< 725(b)	Instantaneous AWFSO
Thermal desorber exit gas temperature (°F) as alternative measure of performance initial 20 minutes	TIC-310	Low	< 250	Instantaneous AWFSO
Thermal desorber exit gas temperature (°F)	TIC-310	High	> 450	Instantaneous AWFSO
Thermal desorber exit gas temperature (°F)	TIC-310	High-high	> 500	Instantaneous VO
Thermal desorber exit gas temperature (°F)	TIC-310	Low	< 250	Instantaneous AWFSO
Thermal oxidizer exit gas temperature (°F)	TIC-518	Low	< 1,810	Instantaneous AWFSO
Thermal oxidizer exit gas temperature (°F)	TIC-518	High	> 2,100	Instantaneous AWFSO
Quench exit gas temperature (°F)	TI-819	High	> 250	Instantaneous AWFSO
Slack gas carbon monoxide (ppmv)	AIC-851A	High	> 100 (c)	60-minute rolling average AWFSO
Slack gas oxygen (%)	AIC-851C	Low	< 3	Instantaneous AWFSO
ID Fan current (amp)	II-6622,6623	High	> 100(d) (g)	Instantaneous AWFSO
APC recycle water flow rate (gpm)	FT-700,701 FT-706,707	Low	< 300	Instantaneous AWFSO
APC purge rate (gpm)	FI-704	Low	< 16.5	Instantaneous AWFSO
Baghouse differential pressure (inches w.c.)	PDI-633	Low	< 0.5(g)	Instantaneous AWFSO
Packed bed scrubber recycled water pH	AIC-753	Low	< 7.25	20-minute rolling average AWFSO
Packed bed scrubber recycled water pH	AIC-753	Low	< 6.5	Instantaneous AWFSO
ID Fan failure	II-6622,6623	-	-	Instantaneous AWFSO
Burner system failure	NA	(e)	-	Instantaneous AWFSO
Power failure	NA	(f)	-	Instantaneous AWFSO

Notes:

- a See Figure 6-1 of the Thermal Desorption Work Plan for locations of major process instruments
- b Soil exit temperature AWFSOs not in effect during the first 54.6 minutes of start-up. Soil not meeting soil exit temperature AWFSO limits must be retreated or sampled separately from subsequently treated soil to confirm soil cleanup standards have been met.
- c Corrected to 7% oxygen
- d Limit to be evaluated during subsequent operations to determine if start-up can be performed with this limit in effect.
- e Burner management system flame out indication
- f Programmable logic controller power failure indication
- g AWFSOs occurring due to these parameters during the first 54.6 minutes of a start-up will not be counted toward the weekly AWFSO allowance



---

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**WOODS INDUSTRIES SITE PERFORMANCE  
TEST REPORT**

**SUBMITTED TO:**

**WILLIAMS ENVIRONMENTAL SERVICES, INC  
2075 WEST PARK PLACE  
STONE MOUNTAIN, GEORGIA 30087**

**DRAFT**

**June 14, 1995  
Focus Project No. 059312**

**PREPARED BY:**

**FOCUS ENVIRONMENTAL, INC.  
9050 EXECUTIVE PARK DRIVE  
SUITE A-202  
KNOXVILLE, TENNESSEE 37923**

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**B - Field Logs and Chain of Custody Forms**

**C - York Services Stack Sampling Report**

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WILKINS WOODS 005

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## 1.0 EXECUTIVE SUMMARY

A Low Temperature Thermal Desorption (LTTD) System Performance Test was conducted at the Woods Industries Site in Yakima, Washington on May 9, 10, 11, 25, and 26, 1995. The Performance Test was conducted using the Williams Environmental Services, Inc. (Williams) low temperature thermal desorption (LTTD) system. The objectives of the Performance Test were to establish the operating conditions of the LTTD system that would meet the soil treatment criteria and the stack gas emission requirements.

The LTTD equipment was operated by Williams during the Performance Test. Williams contracted Focus Environmental, Inc. (Focus) to develop the Performance Test Plan, summarize the test results, and produce this Performance Test Report. Stack sampling services were provided by York Services Corporation (York). Soil samples were collected by Williams personnel. Process samples were analyzed by Quanterra Environmental Services (Quanterra). Stack gas samples were analyzed by Alta Laboratories.

The Performance Test consisted of three full test runs and an additional run during which only a stack gas sample for particulate was taken. One of the full test runs was initiated from cold-start conditions. The other two full runs were initiated from steady state operating conditions. The additional run for particulate was initiated from cold start conditions, as well.

The Performance Test results demonstrated that the LTTD system can consistently achieve compliance with the following objectives established in the Performance Test Plan:

- The treated soil met the cleanup criteria for organochlorine (OCL) pesticides, indicator metals, and PCDD/PCDF.
- The modeled ground level concentrations of OCL pesticides resulting from stack gas emissions met the WAC maximum Acceptable Source Impact Levels (ASILs).
- The modeled ground level concentrations of Indicator metals (As, Hg, and Pb) resulting from stack gas emissions met the WAC maximum ASILs. In addition, the modeled ground level concentrations of all other metals of concern met the appropriate risk specific dose (RSD) (for carcinogens) or reference air concentrations (RAC) (for non-carcinogens) as specified by 40 CFR 266, Appendix IV and V.
- A 99.99 percent destruction and removal efficiency (DRE) of a principal organic hazardous constituent (POHC) per 40 CFR 264.343.
- The emission rate of hydrogen chloride acid (HCl) and chlorine (Cl<sub>2</sub>) in the stack gas met the ambient air Impact guidelines described in the Boilers and Industrial Furnaces (BIF) guidelines described in 40 CFR 266.107.

- The concentration of carbon monoxide (CO) in the stack exhaust gas was less than 100 ppm, based on a 60-minute rolling average

The only objective not consistently achieved by the LTTD system was that for stack gas particulate concentration. The measured particulate concentration exceeded the required 0.03 grains/dscf (corrected to 7% oxygen) during runs 1, 2, and 3. A fourth run demonstrated 0.0127 grains/dscf which met the requirement. The failure to meet the particulate limit has been attributed to a combination of malfunctioning stack demisters and salts present in the scrubber water carried up the stack. Williams has discussed this issue with USEPA Region X and has agreed to continue attempts to correct the situation.

In addition to assessing the LTTD system's compliance with the performance objectives listed above, the Performance Test was structured to provide additional data on emissions of volatile and semivolatile products of incomplete combustion (PICs), for input to a risk evaluation.

Tables 1-1 and 1-2 present a summary of the Performance Test soil and emissions results. Table 1-3 presents a summary of the operating limits established by the Performance Test.

## 2.0 PERFORMANCE TEST PROGRAM SUMMARY

As part of a Removal Action performed by Burlington Northern Railroad, on-site treatment of approximately 19,000 tons of soil will be conducted at the Woods Industries Site in Yakima, Washington. The project is using the Williams Environmental Services, Inc. (Williams) low temperature thermal desorption (LTTD) system.

A Performance Test was conducted according to the agreed-upon protocols presented in the January 27, 1995 Performance Test Plan prepared by Focus Environmental, Inc. The Performance Test Plan describes the test objectives, process equipment design features, process operating parameters, sampling procedures, analysis procedures, and monitoring procedures that were used during the performance test program. Attachment 1 to the Performance Test Plan, the Quality Assurance Project Plan (QAPP), describes quality assurance procedures that were followed during the performance test.

### 2.1 Soil Characterization and Target Analytes for Soil Analyses

The soils are contaminated with OCL pesticides, primarily p,p'-DDT, hexachlorobenzene, and dieldrin. Soils with the highest concentrations of these contaminants were stored in roll-off boxes and blended with other contaminated soil to form the approximately 600 tons of material used during the performance test. Blending was on a 1/10 basis for runs 1, 2, and 3. Highly contaminated material was no longer available for run 4. Samples of the feed soil were analyzed for OCL pesticides, total metals, moisture, chloride, ash, and heating value. Results of the process sample analyses are presented in Appendix A.

Table 1-1 lists the target OCL pesticides and metals that represent the analytes and contaminants of concern for this removal operation. Three metals (arsenic, lead, and mercury) were chosen as indicator metals. Cleanup levels for each of the OCL pesticides and indicator metals are also presented in this table.

The POHC chosen for the purpose of proving the system DRE is hexachlorobenzene.

### 2.2 LTTD System Description

The major mechanical components of the LTTD system consist of a soil feed system, a thermal desorber (rotary dryer-type), treated soil handling system, baghouse, induced draft (ID) fan, thermal oxidizer, quench, packed bed scrubber, stack, liquid-phase activated carbon units, auxiliary fuel supply system, and a process control, monitoring, and interlock system. A more detailed description of the LTTD system is given in the Performance Test Plan.

### **2.3 Shakedown and Pretest**

During the first few weeks of operation, following mobilization and erection of the LTTD system, the unit underwent a shakedown period to confirm proper operation of all mechanical, electrical, and instrument systems. The system was initially started up using clean soils until the proper operation of all system components were confirmed.

A pretest consisting of one run was conducted April 13, 14, 1995. The process operating conditions and sampling/analysis procedures for conducting the pretest run were the same as the procedures used during the performance test. Data from the pretest was made available for review by the agency. The total amount of contaminated soil treated during shakedown, pretest, and through the performance test was approximately 9,400 tons.

### **2.4 Performance Test Plan Summary**

Complete details of the Performance Test Program, including a description of the LTTD system, test protocol, detailed sampling and analysis procedures, and quality assurance/quality control measures are contained in the Performance Test Plan.

The Performance Test was designed to demonstrate the ability of the LTTD to reduce the concentrations of OCL pesticides in the soil and meet applicable emission control requirements. The Performance Test was to consist of three replicate sampling runs using feed soil which had been blended to achieve a representative "worst-case" composition. The feed soil analysis results are included in Appendix A.

The specific objectives of the Performance Test are listed below:

- Demonstrate that the treated soil met the cleanup criteria for organochlorine (OCL) pesticides and metals as specified in the Washington State Model Toxic Control Act, Residential Method B.
- Demonstrate that the concentration of 2,3,7,8-TCDD (TEQ) in the treated soil met the agreed upon limit.
- Demonstrate that the modeled ground level concentrations of OCL pesticides resulting from stack gas emissions met the WAC maximum Acceptable Source Impact Levels (ASILs). Ground level concentrations were calculated using dispersion factors from the Woods Site Ambient Air Quality Impact Report.
- Demonstrate that the modeled ground level concentrations of indicator metals (As, Hg, and Pb) resulting from stack gas emissions met the WAC maximum ASILs. In addition, demonstrate that the modeled ground level concentration of any remaining metal of concern met the appropriate risk specific dose (RSD) (for carcinogens) or reference air concentrations (RAC) (for non-carcinogens) as specified by 40 CFR 266, Appendix IV and V.



- Demonstrate a 99.99 percent destruction and removal efficiency (DRE) of a principal organic hazardous constituent (POHC) per 40 CFR 264.343 by measuring the concentration of hexachlorobenzene in the feed soil and stack gas.
- Demonstrate a stack gas particulate concentration less than 0.03 grains per dry standard cubic feet (gr/dscf), corrected to 7 percent oxygen.
- Demonstrate that the emission rate of hydrogen chloride acid (HCl) and chlorine (Cl<sub>2</sub>) in the stack gas met the ambient air impact guidelines described in the Boilers and Industrial Furnaces (BIF) guidelines described in 40 CFR 266.107. In addition, if the feedrate of total chlorine resulted in an emission rate of greater than 4 lbs/hr of HCl in the stack gas, 99% removal had to be demonstrated.
- Demonstrate that the concentration of carbon monoxide (CO) in the stack gas was less than 100 ppm<sub>v</sub>, based on a 60-minute rolling average
- Provide data on stack gas emissions, including products of incomplete combustion (PICs), for input to a risk evaluation. The risk evaluation was performed according to the methodology provided in the Ambient Air Quality Impact Report.

The following operating limitations were to be established from the Performance Test:

- Maximum soil feed rate
- Minimum thermal desorber exit soil temperature
- Minimum thermal oxidizer gas exit temperature
- Maximum ID fan amperage as an indicator of stack gas velocity
- Minimum APC system recycle water flow rate
- Minimum APC system purge rate
- Minimum packed bed scrubber recycle water pH
- Control limits for the LTTD and APC system operating parameters
- Minimum stack gas oxygen concentration

## 2.5 Sampling Plan Overview

A sampling plan was developed to obtain the analytical results necessary to evaluate the achievement of the test objectives discussed above. The sampling plan included the collection and analysis of samples of feed soil, treated soil, scrubber blowdown water, and stack gas. The sampling locations, sampling equipment and sampling procedures are discussed in detail in Section 3.0 of the Performance Test Plan.

Feed and treated soil samples were collected from their respective conveyors at 15 minute intervals during each test run. The scrubber blowdown water samples were collected from the blowdown discharge line at 30 minute intervals during each test run.

Stack sampling protocols for the Performance Test are summarized below:

- Particulate and HCl by EPA Method 5 (M0050)

- Semi-volatile organics (OCL pesticides and hexachlorobenzene) by EPA Modified Method 5 (M0010)
- Volatile organics by EPA Volatile Organics Sampling Train (VOST M0030)
- Metals by EPA Multiple Metals Train (EPA Draft Method 29)
- Dioxins/Furans by EPA Method 23 (M23)
- Continuous emissions monitoring (CEM) for CO (Method 10) and O<sub>2</sub> (Method 3A).

**2.6 Performance Test Implementation Summary**

The Performance Test was conducted on May 9, 10, 11, 25, and 26, 1995. The Performance Test was conducted under the overall direction of Mr. Mark Fleri, Mr. Greg Whetstone and Ms. B.J. Bartee of Williams Environmental Services. Williams personnel operated the LTTD system during the Performance Test and were responsible for maintaining the process operations within the desired range. Williams personnel were also responsible for collecting process data and process samples for use in determining Performance Test results. York Services Corporation, under the direction of Mr. Roger Kniskern, conducted all stack sampling during the testing period. Performance Test sample analysis was performed by Quanterra Incorporated and ALTA Laboratories.

The Performance Test was witnessed by Ms. Kathy Massimino and Ms. Linda Priddy of USEPA Region X, Mr. John Gilbert of USEPA Region V, Mr. Jim Geiger of URS (USEPA contractor) and Mr. Paul Meeter of Westin (USEPA contractor).

Although the test plan specified that all stack sampling would be conducted simultaneously during each run, it was determined that the configuration of the stack sampling ports would make simultaneous collection of all stack samples difficult to accomplish. Because of this difficulty, each sampling run was divided into two separate runs with the stack sampling split between the two. The Performance Test Plan also specified that the Performance Test would consist of three replicate sampling runs conducted under similar operating conditions. This was not accomplished because the EPA requested that one of the test runs be conducted from a cold-start condition. Run 2 was designated as the cold-start run.

Test run 1 was divided into two runs designated as 1A and 1B. Test run 1A was performed on May 9, 1995. Method 0010, Method 23 and Method 0030 sampling trains were used during run 1A to sample for OCL pesticides and semivolatile organics, PCDD/PCDF, and volatile organics. Run 1B was postponed, due to mechanical difficulties, until May 25, 1995. During run 1B the stack gas was sampled for particulate, HCl, Cl<sub>2</sub>, and metals.

Test run 2 was divided into two runs designated as 2A and 2B. Both of these runs were initiated from a cold start condition, per EPA request. Test run 2A was performed on May 10, 1995 with stack sampling

conducted for OCL pesticides, semivolatile organics, and PCDD/PCDF. Test run 2B was conducted May 11, 1995 with stack sampling conducted for particulate, HCl, Cl<sub>2</sub>, metals and volatile organics.

Test run 3 was performed on May 25, 1995. For this test run, the difficulties associated with simultaneous collection of all stack samples were overcome. Stack sampling was conducted for particulate, HCl, Cl<sub>2</sub>, metals, OCL pesticides, semivolatile organics, PCDD/PCDF, and volatile organics.

On May 26, 1995 a fourth test run was conducted for the purpose of collecting an EPA blank. Since results from test run 2B had shown particulate emissions in excess of 0.03 grains/dscf, an additional stack gas particulate sample was collected during this run. This fourth run was also initiated from a cold-start condition.

Testing was halted for the period of May 12 through May 24, 1995 due to the presence of excessive moisture in the stack gas. The excessive moisture was attributed to malfunctioning stack demisters. The LTTD system was shut down and demister repairs were implemented. Testing was resumed on May 25, 1995.

### 3.0 PERFORMANCE TEST RESULTS

This section presents the results of the monitoring, sampling, and analytical activities associated with the test program. Reduced analytical data for each test run as reported and used to calculate stack gas concentrations, emission rates, and maximum predicted ground-level concentrations are presented in Appendix A. All field-sampling data sheets for process samples are included in Appendix B.

The Performance Test demonstrated the LTTD system's ability to exceed all requirements specified for achieving soil treatment while meeting all stack gas emission requirements for OCL pesticides, metals, HCl, and CO. The LTTD system failed to achieve the stack gas emission requirement for particulate. A POHC destruction and removal efficiency exceeding 99.99% was demonstrated in all test runs. Operating parameters that correlate with these results are discussed in Section 5.0.

#### 3.1 POHC Destruction and Removal Efficiency

The average soil feed rates were used in conjunction with the measured POHC concentration in the feed soil to calculate the total POHC feed rate during each run as shown in Table 3-1 and the example calculations presented in Appendix H. The POHC stack emission rates are also shown in Table 3-1 along with the calculated DRE for each run. All DREs were greater than the required 99.99%. The stack gas samples were analyzed for the POHC, hexachlorobenzene, using both Method 8080 and Method 8270. The results of the Method 8270 analysis were significantly higher than those obtained from the Method 8080 analysis for runs 1 and 2. The results for run 3 were fairly consistent between the two methods with the Method 8270 results slightly higher than the Method 8080 results. In the interest of obtaining conservative results, the Method 8270 results were used for calculating DRE.

#### 3.2 Particulate Emissions

The measured particulate emissions were in excess of the requirement of 0.03 grains/dscf for all runs except run 4. Particulate concentrations were 0.035, 0.047, 0.040, and 0.013 grains/dscf (corrected to 7% O<sub>2</sub>) during runs 1, 2, 3, and 4, respectively. The particulate data is summarized in Table 3-2. The higher than specified particulate concentrations have been attributed to stack demister problems experienced during the Performance Test. It is believed that a quantity of scrubber water is passing through the demisters and the dissolved solids in the scrubber water are appearing as particulate in the sample. Particulate emissions are evaluated in the Risk Assessment Addendum prepared by Phillips Environmental which shows that \_\_\_\_\_.

Williams Environmental has discussed this issue with USEPA Region X and has agreed to continue with their attempts to correct this problem.

### 3.3 Hydrogen Chloride and Chlorine Emissions

HCl emissions were much less than the required maximum emission rate of 4 lb/hr during each run. The HCl emission rates were 0.121, 0.358, and 0.175 lb/hr for test runs 1, 2, and 3, respectively. Chlorine emissions were 0.0, 0.04, and 0.0 lb/hr for test runs 1, 2, and 3, respectively. HCl and chlorine data are summarized in Table 3-2. Example calculations are presented in Appendix H.

### 3.4 Stack Gas Oxygen and Carbon Monoxide

The stack gas oxygen concentration was above 3% by volume (dry basis) during each Performance Test run. Throughout the Performance Test, the stack gas carbon monoxide concentration was below 100 ppmv based on a 60-minute rolling average value, corrected to 7% oxygen, dry basis.

### 3.5 OCL Pesticide Emissions

Stack gases were sampled for OCL pesticides during test runs 1A, 2A, and 3. The samples were analyzed and a mass emission rate for each of the pesticides was calculated. This data was used with information from the Woods Site Ambient Air Quality Impact Report to calculate ground level concentrations for each pesticide. The calculated ground level concentrations were then compared to the Washington Administrative Code (WAC) Acceptable Source Impact Levels (ASILs) for pesticides. All of the ground level concentrations calculated for the pesticide emissions were below the WAC ASILs for each test run. The pesticide emission rates, ground level concentrations, and comparison to the ASILs for runs 1, 2, and 3 are presented in Tables 3-3 through 3-5. Example calculations are presented in Appendix H. The pesticide emissions were used in conducting a risk assessment for the LTTD system.

### 3.6 Metals Emissions

During test runs 1B, 2B, and 3 stack gases were sampled for the following metals: antimony, arsenic, barium, beryllium, cadmium, chromium, lead, mercury, nickel, selenium, silver, and thallium. The samples were analyzed to determine the mass emission rate of each metal. The mass emission rates were used to calculate a ground level concentration for each metal which were then compared against the more stringent of the following: 1) WAC ASILs for metals; 2) Reference Air Concentrations (RAC) from 40 CFR 266, Appendix IV for non-carcinogenic metals; or 3) Risk Specific Doses (RSD) from 40 CFR 266, Appendix IV for carcinogenic metals. The chromium emission was assumed to be 100% hexavalent chromium for purposes of comparison to the ASIL. The ground level concentrations of the metals were below the respective requirement for each sampling run. The metals emission rates, ground level concentrations, and comparisons to maximum allowed concentrations for runs 1, 2, and 3 are

presented in Tables 3-3 through 3-5. Example calculations are presented in Appendix H. The metal emissions were used in conducting a risk assessment for the LTTD system.

### 3.7 PCDD/PCDF Emissions

Stack gases were sampled for PCDD/PCDF emissions during runs 1A, 2A, and 3. The samples were analyzed to determine total mass of the tetra- through octa-chlorinated PCDD and PCDF congeners, as well as the mass of each individual 2,3,7,8-substituted PCDD and PCDF isomer. In order to evaluate the potential risk posed by emissions of a variety of PCDD/PCDF compounds, each isomer and/or congener group is assigned a "toxic equivalence factor" which is used to equate the toxicity of that compound to the toxicity of 2,3,7,8-TCDD. Emissions of the PCDD/PCDF compounds, expressed as 2,3,7,8-TCDD toxic equivalents (TEQ) are then added together to determine the total PCDD/PCDF emission rate as 2,3,7,8-TCDD TEQ. This emission rate was used to calculate a ground level concentration for 2,3,7,8-TCDD TEQ. The calculated ground level concentration was less than the WAC ASIL of  $3 \times 10^{-4}$   $\mu\text{g}/\text{m}^3$  for each test run. The PCDD/PCDF emissions, ground level concentrations, and comparison to the maximum allowed concentration for runs 1, 2, and 3 are presented in Tables 3-3 through 3-5. Example calculations are presented in Appendix H. The PCDD/PCDF emissions were used in conducting a risk assessment for the LTTD system.

### 3.8 Volatile and Semivolatile Organic Compound Emissions

Tables 3-6 and 3-7 present the emission rates for volatile and semivolatile organic compounds from the LTTD system during the performance test. These values were used in conducting a risk assessment for the LTTD system.

### 3.9 Soil Treatment

An objective of the Performance Test was to demonstrate that the treated soil exiting the LTTD system met the specified cleanup criteria for OCL pesticides, PCDD/PCDF (as 2,3,7,8-TCDD TEQ), and the indicator metals, arsenic, lead, and mercury. The treated soil was sampled during each run of the Performance Test (except Run 4).

The results of the treated soil sample analyses with a comparison to the soil treatment criteria are presented in Table 1-1. All soil treatment criteria were achieved for all test runs.

## 4.0 QA/QC SUMMARY

Quality Assurance/Quality Control (QA/QC) protocols were based on the recommended QA/QC procedures of the various sampling and analytical methods that were used for this Performance Test. This section presents pertinent QC data and outlines the types of QC measures employed during the program. The QA/QC Plan is presented as Attachment 1 to the Performance Test Plan.

Quality control refers to the continuing routine checks on quality within each segment of project activities such as sampling, field measurements, analysis, and data handling. The QA/QC Plan allows for the accuracy and precision of the test data to be evaluated for the purpose of validation. QA/QC objectives are explained in more detail in the QA/QC Plan presented as Attachment 1 to the Performance Test Plan. Tables 4-1, 5-1, 7-1, and 10-1 of the QA/QC Plan specifies the duplicates, blanks, surrogate spikes, and calibration checks for each analysis. The tasks associated with these activities are largely defined by the sampling and analytical procedures associated with each analysis as documented in EPA method protocols.

Target data quality criteria are presented in the QA/QC Plan for the following types of data:

- Sample collection
- Sample analysis
- Process instrument calibration
- Stack sampling equipment calibration
- Laboratory analytical instrument calibration.

Part of the overall QA/QC program is the coordination of process operations and sampling activities during the Performance Test. This coordination effort is intended to identify potential operating upsets or sampling problems in the field, and to institute corrective actions as required. These field actions include holding, stopping, and/or repeating test runs as needed to ensure the collection of adequate and representative test data.

### 4.1 Sample Collection

Sampling QA/QC objectives are considered to be met if sampling activities follow the standard methods described in the Performance Test Plan and QA/QC Plan. Table 5-1 of the QA/QC Plan presents the samples that were collected to achieve QA/QC objectives. During this Performance Test, all sampling activities followed the prescribed procedures. Sample collection activities were recorded on log sheets; samples were assigned numbers, were packaged, shipped to the analytical laboratories; and specific

analyses were requested for each sample. Copies of the sample collection logs, traceability records, analysis request forms, and an index of sample numbers and identification are included in Appendices B (for process samples) and C (for stack gas samples). A review of the sample collection log sheets indicates that samples were collected as required, all applicable data was recorded, and sampling equipment conditions and operating parameters (particularly applicable to stack sampling activities) were within the requirements of the applicable methods.

#### **4.1.1 Process Sample Collection**

The soil sampling procedure as outlined in the Performance Test and QA/QC Plans were followed while collecting the samples. Feed, treated soil, and blowdown water samples were collected and composited as described in Tables 3-5, 3-6, and 3-12A respectively, of the Performance Test Plan.

#### **4.1.2 Stack Gas Sample Collection**

York was responsible for ensuring that all QA/QC procedures associated with the construction and operation of the M0010, M0050, Method 23, VOST (M0030), and MMT (Method 29) sampling trains, as documented in EPA published method protocols, were implemented and followed.

##### **4.1.2.1 Equipment Calibration**

All stack gas sampling equipment associated with was calibrated at the frequencies and according to the methods listed in Table 7-2 of the QA/QC Plan prior to or during the Performance Test. Data that demonstrates calibration of the sampling equipment instruments to within the acceptance limits are included with the sampling report in Appendix C.

All dry gas meters, Pitot tubes and probe nozzles were calibrated in accordance with the procedures outlined in the EPA document entitled *Quality Assurance Handbook for Air Pollution Measurement Systems; Volume III - Stationary Source Specific Methods (EPA 600/4-77-027b)*, Section 2.3.1.1. Copies of all relevant calibration sheets are also included in Appendix C.

##### **4.1.2.2 Sample Container Preparation**

Sample containers and sampling train glassware required pre-cleaning to avoid contamination of the sample from the collection container or devices. Sample containers were purchased pre-cleaned to specified EPA standards. All caps to sample containers, with the exception of sample containers for metals analysis, were fitted with Teflon liners which were cleaned in the same manner as the containers themselves.



#### 4.1.2.3 Sample Media Preparation

The procedures for M0050, M0010, Method 23, and Method 29 sampling, as discussed in the *Methods Manual for Compliance with the BIF Regulations*, were followed by both York and the analytical laboratory in preparing the sample media to be used during the Performance Test. These methods discuss steps that must be taken to prepare the filters for sampling trains, the XAD resin for the M0010 train, and the preparation of the appropriate reagents and standards. Procedures outlined in EPA Method 0030 for preparing, storing, and analyzing the Tenax and Tenax/charcoal sorbent tubes were followed for the VOST.

All reagents were checked in accordance with York's existing QC program to minimize the probability of using contaminated solvents. This included the use of high purity solvents from the same lot and the collection and analysis of the appropriate blanks. All filters were desiccated and weighed to the nearest 0.5 mg constant weight. For the M0010 train, the filters and XAD resin were pre-cleaned by the laboratory. The XAD resin was packed in the laboratory and remained capped until just before use.

All test samples were collected while the LTTD system was operational. Sampling was discontinued during interruptions in operation. The tests were conducted so that a sufficient volume of stack gas was sampled for all trains. Leak checks were conducted on sampling trains following the recommended procedures in the respective methods. Blank samples were collected as specified in the QA/QC Plan to allow for identification of extraneous contamination. Isokinetic calculations were performed to ensure the sampling was within the acceptable range of 90 to 110% isokinetic.

#### 4.1.3 Sample Collection Documentation

Chain of custody forms were completed with copies filed by the analytical laboratories and the Williams Project Manager. Chain of custody forms and sample collection sheets for the Performance Test are included in Appendices B and C.

#### 4.2 Analytical QA/QC Activities

Analytical methods used to obtain the data for this Performance Test have associated quality control procedures that were used by the analytical labs. Table 3-14 of the Performance Demonstration Plan contains the methods that should be referenced for the appropriate analytical QC procedures.

Analytical data quality was determined through the analysis of blanks, duplicates, spiked samples, and reference materials, as described in Section 5.0, Table 5-1 of the QA/QC plan. Table 4-1 in the QA/QC Plan summarizes the analytical data quality objectives for the Performance Test.

The analytical laboratories followed the QA/QC plan using the following general guidelines:

- Use of approved analytical procedures and methods
- Properly operating and calibrated instrumentation
- Acceptable results from analyses of QC samples
- Achieving precision and accuracy comparable to that achieved in previous analytical programs and consistent with the objectives of the program as discussed in Sections 4 and 10 of the QA/QC Plan.

The analytical data met the applicable QA/QC objectives, as demonstrated by the laboratory analytical data packages included in Appendix G and the stack sampling report included in Appendix C, with the following exceptions:

- The duplicate analysis of the run 2B feed soil sample for metals yielded a relative percent difference (RPD) of 52% for lead. This is outside of the required range of less than 35% RPD. This was attributed to matrix interference.
- The matrix spike/matrix spike duplicate analysis for the run 2B feed soil sample for metals yielded recovery percents for antimony, lead, and mercury outside of the required range of 70-130%. The spike recovery percents were 50%, 65%, and 344% for antimony, lead, and mercury, respectively. This was attributed to matrix interference.
- The matrix spike/matrix spike duplicate analysis for the run 2B treated soil sample for metals yielded recovery percents for antimony, and lead outside of the required range of 70-130%. The spike recovery percents were 44% and 69% for antimony and lead, respectively. This was attributed to matrix interference.
- The surrogate recovery percent for 1,2,3,7,8-PeCDD for the run 3 treated soil sample for PCDD/PCDF slightly exceeded the required range of 40-135%. The measured surrogate recovery percent was 137%.
- The surrogate recovery percents for the feed soil samples for OCL pesticides were outside of the required range of 50-130%. Due to required sample dilution, the surrogate was a non-detect for each feed soil sample for OCL pesticides.
- **QA/QC results for the stack gas sampling and analysis are not yet available. Results from the stack sampling report will be incorporated upon receipt.**

#### 4.3 Process Instrumentation and CEMS

All process instruments associated with LTTD system operation were calibrated prior to the Performance Test. Data that demonstrates calibration of these instruments within the acceptance criteria listed in Table 7-1 of the QA/QC Plan are included in Appendix D.

Prior to the Performance Test, the stack gas CEMS was subjected to a performance test to determine the system's calibration drift, response time, calibration error, and relative accuracy. The CEMS passed all criteria of the performance test. Test results are presented in Appendix E.

Daily calibration of the stack gas continuous emissions monitoring system was conducted during the Performance Test. Each monitor met the calibration criteria during each day that trial burn runs were conducted. Calibration records for the CEM system are contained in Appendix E. York's CEM system calibration records are contained in Appendix C.

#### **4.4 Laboratory Analytical Instrumentation**

Initial and continuing calibration criteria and QA/QC objectives, as specified by the analytical methods used for sample analysis, were achieved for the trial burn program. Analytical instrument calibration records and all raw analytical data are archived in the project files of the participating analytical laboratories including Quanterra Environmental Services and ALTA Analytical Laboratories.

## 5.0 OPERATING RECOMMENDATIONS

The operating recommendations discussed below were developed based on the results of runs 1 and 3. This approach was taken because runs 1 and 3 were conducted at steady-state operating conditions while run 2 was conducted from a cold-start. Based on the Performance Test results, Williams recommends the conditions presented in the following sections be used for the continued operation of the LTTD. Table 5-1 presents a summary of the actual operating conditions recorded during the Performance Test. Table 5-2 presents the recommended operating limits conditions based on the Performance Test results. A full set of operating data is included in Appendix F.

### 5.1 Criteria for Establishing Operating Conditions

It is William's intent that a universal set of operating conditions be established from the Performance Test results and the design parameters of the LTTD, that will apply to the continuous soil treatment activities at the Woods site. Limits on specific parameters are established to ensure that the continued operation of the LTTD will result in performance similar to that demonstrated during the Performance Test, and to provide for equipment and personnel safety.

Process operating conditions are categorized into two groups (Group A and C) based on the manner in which the operating condition values are established, the requirements for continuous monitoring and recording, and for automatically stopping the waste feed. This categorization is patterned after the recommendations given in USEPA's Guidance on Setting Permit Conditions and Reporting Trial Burn Results, EPA/625/6-89/019, January 1989.

Group A parameters are continuously monitored and recorded, and are interlocked with the automatic soil feed shut off system. Group A-1 parameters are established based on trial burn operating data, and are used to ensure that LTTD system operating conditions are consistent with those demonstrated during the Performance Test. Group A-2 parameters are established based on operational safety and good operating practice considerations rather than on the Performance Test operating conditions.

Group C parameters are set independently of Performance Test conditions. These parameters are based on equipment manufacturers design and operating specifications and thus are considered good operating practice. Group C parameters do not require continuous monitoring and are not interlocked with the automatic soil feed shut off system.

#### 5.1.1 Monitoring, Recording, and Interlocking Basis

Group A parameters require continuous monitoring. Where values are continuously recorded, this is accomplished by computing and recording the average value from the continuous monitor at least once

every 60 seconds. Where the parameter to be monitored is represented by a discrete event rather than by a continuous process variable (e.g., ID fan failure) the data acquisition system makes a record if the event occurs.

Group A parameters trigger an automatic soil feed shut off if the process value for the parameter is outside the established limits. Because process values may fluctuate during normal operation, without impacting the overall performance of the LTTD system, several of the automatic soil feed shut off interlocks are based on rolling average values to avoid unnecessary interruption of system operation. Other Group A parameters, that are considered to be especially critical, trigger automatic soil feed shut offs immediately when the monitoring system's detector senses a value outside the established limits.

Where rolling averages are used, they are implemented on a 60-minute or 20-minute basis. The 60-minute (or 20-minute) rolling average is the arithmetic mean of the 60 (or 20) most recent one-minute values generated by the continuous monitor, thus the data acquisition system constantly accumulates and averages 60 (or 20) one-minute values. As each new one-minute value is generated by the monitoring system, the oldest one-minute value is discarded, and the 60-minute (or 20-minute) rolling average is updated using the new data point. The 60-minute (or 20-minute) rolling average is recorded each minute as the rolling average value is updated. Interlocks based on 60-minute (20-minute) rolling averages are triggered immediately when the 60-minute (20-minute) rolling average value is outside the established operating limits.

### **5.1.2 Establishing Operating Limits from Performance Test Results**

Williams proposes to establish operating limits from the performance test results for Group A parameters based on the agreed-upon methods presented in Section 3.8.2 of the Performance Test Plan. For parameters that have both a rolling average limit and an instantaneous limit, the rolling average limit is based upon the average over all test runs of the maximum or minimum rolling value for each test run, while the instantaneous limit is based on averaging the maximum or minimum hourly instantaneous value from each hour of the test run and then averaging these three test run averages. For parameters that have only an instantaneous limit the limit is based upon the time-weighted average over the test. The carbon monoxide limitation is based upon EPA guidance.

## **5.2 Operating Parameters**

Table 5-2 summarizes the proposed operating parameters and interlocks. Each parameter, and the basis for its proposed value and interlock (if needed) is discussed below. Performance test operating data used for calculating AWFSO limits are included in Appendix F.

### 5.2.1 Group A1 Parameters

**High Soil Feed Rate** - If the 60-minute rolling average of the soil feed rate exceeds 26.7 tons/hour, the soil feed will be automatically stopped. This limit is based on the average of the maximum 60-minute rolling average values from Runs 1 and 3 of the test. The maximum instantaneous soil feed rate limit will be 31 tons/hour based on the average of the hourly maximum instantaneous values over the entire test.

**Low Thermal Desorber Exit Soil Temperature** - The soil feed will be automatically stopped if the thermal desorber exit soil temperature falls below 750°F based on a 20-minute rolling average. This value was determined during testing from the average of the lowest 20-minute values from each test run. The minimum instantaneous exit soil temperature was determined to be 725°F. It was intended that this limit be based on the average of the lowest hourly instantaneous values recorded during each test run. However, this approach would have yielded an instantaneous limit approximately equal to the rolling average limit. The limit of 725°F is based on variability of the temperature data. The soil exit temperature AWFSOs will be deactivated during the first 54.6 minutes of system start-up. Any soil treated during this time period which did not reach the AWFSO temperature limit will have to be retreated or sampled separately from subsequently treated soil to confirm soil cleanup standards have been met.

**Low Thermal Oxidizer Exit Gas Temperature** - The soil feed will be automatically stopped if the thermal oxidizer exit gas temperature falls below 1,810°F based on an instantaneous reading. The minimum temperature recorded during the test was 1,771°F during test run 1. The operating limit is based upon the time-weighted average over the performance test.

**High Stack Gas Carbon Monoxide** - Soil feed will be immediately stopped if the stack gas carbon monoxide exceeds 100 ppm<sub>v</sub>, corrected to 7% oxygen and based on a 60-minute rolling average. This limit is based on good operating practice considerations. The maximum 60-minute rolling average value recorded during the test was 5.5 ppm<sub>v</sub>.

**Low APC Recycle Water Flow Rate** - The soil feed will be automatically stopped if the APC recycle water flow rate falls below 300 gpm. This value is based on the time-weighted average of the test data.

**Low Packed Bed Scrubber Recycle Water pH** - The soil feed will be automatically stopped if the 20-minute rolling average pH falls below 7.25 or the instantaneously recorded pH falls below 6.5. The 20-minute rolling average limit is based upon the average over the test of the minimum rolling value

from each test run. The instantaneous limit is based upon the average of the minimum instantaneous hourly value over the test.

**Low APC Purge Rate** - The minimum APC purge rate was established during the performance test as 16.5 gpm. This value was determined by calculating the time-weighted average over the test runs. The soil feed will be automatically stopped if the instantaneous APC purge rate falls below this value.

**High ID Fan Current** - Soil feed will be immediately stopped if the 20-minute rolling average ID fan current exceeds 101 amps. The limit is based upon the average of the 20-minute rolling average values recorded during test runs 1A, 1B, and 3. The maximum instantaneous limit was determined to be 103 amps based upon analysis of data variability. During system start-up (first 54.6 minutes of operation), the 20-minute rolling average limit will be 104 amps and the instantaneous limit will be 107 amps. These start-up limits are based upon data from runs 2A, 2B, and 4 of the Performance Test.

#### 5.2.2 Group A2 Parameters

**High Thermal Desorber Pressure** - The maximum thermal desorber pressure resulting in an instantaneous automatic soil feed shut off will be -0.01 inches w.c. This limit was not demonstrated during the Performance Test but is established based on good operating practice. The maximum thermal desorber pressure based on Performance Test results was -0.18 in. w.c.

**High Thermal Desorber Exit Gas Temperature** - The soil feed will be automatically stopped if the thermal desorber exit temperature exceeds 450°F based on an instantaneous reading. The maximum instantaneous thermal desorber exit gas temperature during the test was 344°F.

**Low Thermal Desorber Exit Gas Temperature** - An instantaneous AWFSO will be triggered if the offgas temperature falls below 250°F. This limit is based on previous experience indicating that a prolonged low offgas temperature can be indicative of a problem with the burner management system and is thus based on good operating practice. The pesticide removal efficiency of the LTTD is a function of the soil exit temperature and not the offgas temperature. The minimum LTTD offgas temperature recorded during testing was 305°F.

**High Thermal Oxidizer Exit Gas Temperature** - An instantaneous AWFSO will occur in the event that the thermal oxidizer exit gas temperature equals or exceeds 2100°F. This temperature is based on a manufacturer's recommendation and was not demonstrated during the Performance Test. The maximum thermal oxidizer exit gas temperature recorded during testing was 1,870°F.

**Low Baghouse Differential Pressure** - Soil feed will be automatically and instantaneously stopped if the baghouse differential pressure falls below 0.5 in. w.c. This was not demonstrated during the Performance Test. The minimum baghouse differential pressure recorded during the test was 0.85 in. w.c.

**High Quench Gas Exit Temperature** - Soil feed will be automatically stopped if the instantaneous quench gas exit temperature exceeds 250°F. This temperature is based on the equipment protection considerations. The maximum quench gas exit temperature recorded during the test was 185°F.

**Low Stack Gas Oxygen Concentration** - The minimum stack gas oxygen concentration was established at 3% by volume prior to the Performance Test. The Performance Test minimum was recorded at (3.2%) with an average of (4.7%) for runs 1 and 3. The soil feed will be automatically stopped if the instantaneous stack gas oxygen concentration falls below this value.

**Burner System Failure** - Failure of the burner system will result in an instantaneous AWFSO.

**ID Fan Failure** - Failure of the ID fan will result in an instantaneous AWFSO.

**Power Failure** - A power failure will result in an instantaneous AWFSO.

**5.2.3 Group C Parameters**

**Low APC System Water Supply Pressure** - The minimum APC water supply pressure was established prior to testing at 20 psig.

**Low Baghouse Pulse Rate** - The minimum baghouse pulse rate was established following testing at 12 pulses per minute.



United States  
Environmental Protection  
Agency

Region 10  
1200 Sixth Avenue  
Seattle WA 98101

Alaska  
Idaho  
Oregon  
Washington



Reply To  
Attn Of: HW-113

JUN 14 1995

Mr. Bruce A. Sheppard  
Manager Environmental Projects  
Burlington Northern Railroad  
Environmental Engineering  
Suite 2000, 999 Third Avenue  
Seattle, Washington 98104-1105

Dear Mr. Sheppard:

EPA has reviewed your submission of June 6, 1995, entitled "Northwest Haul Road Soil Sample Data, Woods Industries Site, Yakima, Washington." EPA approves backfilling the area specified in your submission with treated soil that meets cleanup standards.

The analytical results in Attachment 3 of the above submission alone are not acceptable because surrogate recovery was ND (non-detect). However, a review of the lab data package submitted in support of the analytical results demonstrates that the three soil samples taken from the northwest haul road are below cleanup numbers.

If you have any questions please call me at (206) 553-1987.

Sincerely,

A handwritten signature in cursive script that reads "Lynda E. Priddy".

Lynda E. Priddy  
Environmental Protection  
Specialist  
Hazardous Waste Division

cc: David Eagleton, Burlington Environmental - Columbia  
B.J. Barteo, Williams Environmental Services, Inc.  
Rick Roeder, Ecology - CRO  
Administrative Record for Soil Treatment Removal - HW-070  
Bill Glasser, EPA - HW-113  
Don Matheny, EPA - ES-095  
Larry Mullen/Jim Geiger, URS - Yakima



PRESTON GATES & ELLIS  
ATTORNEYS

June 29, 1995

BY FACSIMILE AND CERTIFIED MAIL

Lynda E. Priddy  
Remedial Project Manager  
U.S. EPA, Region X  
1200 Sixth Avenue  
Attn: HW-113  
Seattle, WA 98101

Mr. Robert Hartman  
Assistant Regional Counsel  
U.S. EPA, Region X  
1200 Sixth Avenue  
Seattle, WA 98101

Re: Request for Modification to Schedule for Soil Treatment at the Woods Industries Site

Dear Lynda and Bob:

As you know, Williams Environmental Services, Inc. (Williams) has had a number of significant operational problems with its TPU-IV soil treatment unit at the Woods Industries site in Yakima, Washington. These problems have been detailed in the weekly and monthly reports to U.S. EPA. Over the life of the project, Williams has been operating at less than 50% efficiency due to these problems. This in turn will prevent Williams from completing the soil treatment by June 30, 1995, even under optimal conditions. Williams has treated approximately 12,487 tons of soil as of June 25, 1995.

Burlington Northern Railroad (BNRR) has appreciated EPA's flexibility in working with Williams. Despite Williams' attempts to make its equipment function more efficiently and EPA's accommodations, BNRR will need additional time for Williams to complete soil treatment and submit the final report to EPA. (It is expected that equipment decontamination and demobilization will be completed within approximately 60 days after soil treatment is complete).

A PARTNERSHIP INCLUDING A PROFESSIONAL CORPORATION

ANCHORAGE • COEUR D'ALENE • LOS ANGELES • PORTLAND • SPOKANE • TACOMA • WASHINGTON, D.C.  
5000 COLUMBIA CENTER 701 FIFTH AVENUE SEATTLE, WASHINGTON 98104-7078 PHONE: (206) 623-7580 FACSIMILE: (206) 623-7022

June 29, 1995

Page 2

Pursuant to Section XIV of the Administration Order on Consent for Removal Response Activities at the Woods Site (Docket No. 1087-03-18-106), BNRR request that the schedule for soil treatment be modified. Specifically, BNRR requests that Attachment B (Schedule of Deliverables to the Administrative Order on Consent) be modified as follows (new text is underlined; deleted text is ~~struck through~~):

~~6. Project Complete/Final Report Submitted to EPA. June 30, 1995.~~

6. Soil Treatment Completed. August 31, 1995.

7. Final Soil Treatment Report Submitted to U.S. EPA. September 29, 1995.

This schedule is based on the most recent treatment history for the unit and projections by Philip Environmental, URS Consultants, and U.S. EPA personnel familiar with site operations. It assumes that U.S. EPA will approve an increase in soil treatment capacity from 75% (current) to 100% (as set out in the Work Plan) on or before June 30, 1995.

Please call if you have any questions.

Very truly yours,

PRESTON GATES & ELLIS

*Thomas Eli Backer*

By

Thomas Eli Backer

TEB:reij

cc: Bruce Sheppard, BNRR  
David Eagleton, Philip Environmental  
Lowell Taylor, Williams Environmental Services, Inc.

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United States  
Environmental Protection  
Agency

Region 10  
1200 Sixth Avenue  
Seattle WA 98101

Alaska  
Idaho  
Oregon  
Washington



Reply To  
Attn Of: HW-113

JUN 30 1995

Mr. Bruce A. Sheppard  
Manager Environmental Projects  
Burlington Northern Railroad  
Environmental Engineering  
Suite 2000, 999 Third Avenue  
Seattle, Washington 98104-1105

Dear Mr. Sheppard:

EPA has reviewed your submissions of: (1) June 14, 1995, entitled "York Services, Stack Sampling Report", three volumes; (2) June 21, 1995, entitled "Woods Industries Site, Performance Test Report" and "Addendum to Ambient Air Quality Impact Report for a Temporary Low-Temperature Desorption Unit"; and (3) June 23, 1995, entitled "TSS and TDS vs Scrubber Blowdown." EPA has also received from York and reviewed the VOST and dioxin/furan audit results. EPA has the following comments:

**A. Performance Test Report, dated June 21, 1995.**

1. Pages 1-2 and 2-3, revise to correctly include the requirements for passing the risk assessment as part of the objectives of the test as specified on page 1-3 of the Performance Test Plan.
2. Table 1-2, include as "NA" the determination of averages for the DRE, particulate, HCl, and CO.
3. Tables 1-3 and 5-2, revise as follows:
  - (a) Set APC purge rate at 22 gpm, justified based on increase to offset elevated particulate emission rate
  - (b) Eliminate footnote "i" for ID fan current.
  - (c) Add to footnotes "h" and "i" that these start-up procedures also in effect for soil exit temperature when restarting soil feed after all AWFSOs, except for soil exit temperature.

(d) revise footnote "f" to exclude run 2B.

(e) Add Total Dissolved Solids (TDS) to the table as a Group B parameter, requiring sampling hourly and composited daily. Set the limit at 4000 mg/l, which if exceeded the APC purge rate will be increased in 1 gpm increments. Analytical results for TDS must be obtained and evaluated against the limit by BNRR daily. State basis for limit as TDS level which particulate limit was acceptable.

4. Page 5-4, third paragraph, eliminate reference to run 2B.

**B. Addendum To Ambient Air Quality Impact Report For a Temporary Low-Temperature Desorption Unit, dated June 1995.**

1. Page 9, first complete paragraph, revise second line to read: ".015 gr/dscf (34 mg/dscm, corrected to 7 percent oxygen[O<sup>2</sup>]). This project's standard was set at .03 gr/dscf, corrected to 7% O<sub>2</sub>."

2. Tables 5-4, 6-6 and 6-7 provide clarification of how the 4% frequency of increased emissions of 10% is factored into these tables consistently for both the cold and normal operation. It appears that the 10% increased emission was applied to the normal operation, but a different factor was applied to the cold. It does not appear that the 4% frequency factor has been applied.

3. Section 7.1.1: When calculating an annual average for ambient air PM10 samples an arithmetic average should be used. For total suspended particulate (TSP) annual averages, a geometric average should be calculated.

4. Section 8.2.1: The last sentence in this section needs to be clarified with respect to "calculated concentrations." It is unclear whether the calculated concentrations refer to FDM modeled PM10 or to the individual contaminants.

5. Section 5.2.2: The use of a standard deviation and 95% upper confidence limit for a two sample data set (RUN 1 and 3) is not statistically meaningful.

6. Attachment B - Chemical Information: It is not clear how the o,p1-DDE+p,p1-DDE COMPDEP and ISCST2 model values were calculated. Note that these model values are presented separately on Table 6.6. Also the modeled deposition and annual air concentration values for DEHP and hexachlorobenzene are the same. Is this a typographical error? They do not correlate with Table 6-6.

7. Table 6-7: Under cold start operating conditions the ISCST2 dispersion coefficient is different from the normal operating conditions dispersion coefficient. The difference needs to be explained in terms of revised physical stack characteristics.

8. Table 8-9: How do the concentrations shown in Table 8-9 affect any risk calculations, ASIL or TIER III limits?

9. Table 5-3: Several of the contaminant emission rates for RUN2 appear to be non-detect. Which RUN 2 emission rates are non-detect?

10. Page 14, 2nd paragraph: The cancer risk values and hazard indices stated do not match the values given in Table 8-12 (residents and subsistence farmers).

11. Page 14, last paragraph: A clarification statement needs to be added concerning the toxicity criterion of o.p-DDE.

Burlington Northern Railroad (BNRR) has conditional approval to resume full scale operations (100% feedrate is 26.7 TPH) of the low-temperature thermal treatment unit (LTTU) at the Woods Site based on the following:

1. Immediate implementation of comment numbers A.3(a)-(d) above. Implementation of comment number A.3.(e) by July 10, 1995.

2. Revision of Table 6.2 in the Work Plan to reflect the above comments. Also change the heading of that Table to read as follows: "Automatic Waste Feed Shutoff Conditions To Be Complied With During All Phases of Contaminated Soil Processing." Submit the revised Table by July 7, 1995.

3. Resolution of all comments above by July 14, 1995. EPA will require five business days to review your responses to the above comments. BNRR responses may be submitted as revised pages.

4. Submission of outstanding audit information to EPA by July 7, 1995. The outstanding information is as follows:

- o the correct EPA dioxin audit sample numbers.
- o for the VOST audit -- the identity of other compounds identified by York but not previously reported.

5. That the final QA/QC review of the stack data from the performance test is satisfactory. If the final review indicates problems with the QA/QC of the stack data then further Work Plan revisions may be required.

6. Successful resolution of additional comments. EPA has not completed its review of the above documents. EPA's final review is expected to be completed by July 6, 1995. EPA will submit additional comments to BNRR by July 7, 1995. BNRR shall submit responses to these comments by July 14, 1995. Based on EPA's current review the Agency expects any additional comments to be minor.

7. The "Addendum to Ambient Air Quality Impact Report...Unit" needs to be reviewed for consistency. Several comments above indicate that the text and Tables are at times inconsistent. Overall, reviewers found the "Addendum" to be hard to follow. The text did not explain how the assessment was developed. The "Addendum" text needs to be improved so that readers (e.g., EPA staff not working on the project or individuals from the public) can understand how the assessment was developed. The "Addendum" should meet the format standards of a scientific document (e.g., Executive Summary). The "Addendum" should be a stand alone document that entitled something similar to "Final AAQIR Based on Performance Test Results". A revised "Final AAQIR" reflecting these comments shall be submitted to EPA by July 14, 1995.

EPA has made similar comments in the past regarding the AAQIR and the AMP. Previously, EPA had stated that the AMP SOPs were incomplete and should be improved. The SOPs need to be improved so that it is clear how the monitoring was conducted at the site. EPA had cited the Sand Creek SOPs as a good example to follow. Previously, BNRR indicated that they would follow the Sand Creek example. This issue is still unaddressed. BNRR shall present a plan to successfully resolve this issue with EPA by July 7, 1995.

EPA reserves its rights to modify the Work Plan/AAQIR as needed to ensure that operation of the thermal desorption unit will protect public health and the environment and satisfy applicable and relevant requirements.

If you have any other questions please contact me at (206) 553-1987.

Sincerely,

*Lynda E. Priddy*

Lynda E. Priddy  
Environmental Protection  
Specialist  
Hazardous Waste Division

enclosure

cc: David Eagleton, Burlington Environmental - Columbia  
Mark Fleri, Williams Environmental Services, Inc.  
Rick Roeder, Ecology - CRO  
Administrative Record for Soil Treatment Removal - HW-070  
Bill Glasser, EPA - HW-113  
John Gilbert, EPA - Cincinnati  
Cathy Massimino, EPA - HW-111  
Don Matheny, EPA - ES-095  
Bill Ryan, EPA - ES-097  
Paul Meeter, Weston - West Chester  
Jim Geiger, URS - Yakima





VIA HAND DELIVERY

July 5, 1995  
Project 12883088

Ms. Lynda Priddy  
Environmental Protection Specialist  
U.S. Environmental Protection Agency, Region X  
1200 Sixth Avenue  
Seattle, Washington 98101

Dear Ms. Priddy:

**Subject: Mercury Vapor Assessment  
Woods Industries Site  
Yakima, Washington**

On behalf of Burlington Northern Railroad (BNRR), Philip Environmental Services Corporation (Philip) hereby submits the mercury vapor assessment. The Ambient Air Monitoring Plan states that mercury vapor will be monitored using gold-coil dosimeters at stations A11 and A21 during the first week of monitoring to assess whether airborne mercury is present as vapor.

On April 6, Philip provided the USEPA with a letter which described that the mercury vapor data collected prior to April 5 on this project was invalid and that URS and Philip agreed to continue to use the Jerome Mercury Vapor Analyzer for a few more days and then reassess the applicability of the instrument to this project, as prescribed in the Work Plan.

Since this April 6 letter, Philip's on-site air manager has performed several experiments regarding mercury vapor analysis using the Jerome Vapor Analyzer to no success. We have concluded that results obtained to date are unreliable, if not completely invalid. We have also concluded that further attempts to implement this method would also lead to questionable results.

This is based on the following:

- blanks are sometimes higher than samples collected in the field;
- the final dosimeter in series is sometimes higher than the first; and



Page 2  
Ms. Lynda Priddy  
July 5, 1995

- Arizona Instruments (the manufacturer of the Jerome) does not agree with the application.

Because results from this application are unreliable we have discontinued mercury vapor analysis. We are proposing to discontinue mercury vapor sampling entirely unless the USEPA can identify a suitable method for monitoring the low concentrations over the 24-hour period required for this program.

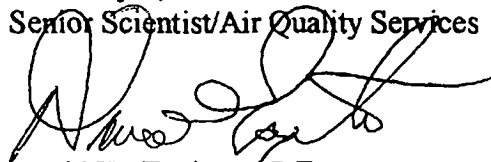
If you have any questions regarding this information, do not hesitate to contact me at the site (509) 575-7953 or Kirk Meyer at (618) 281-7173.

Sincerely yours,

PHILIP ENVIRONMENTAL SERVICES CORPORATION



Kirk Meyer,  
Senior Scientist/Air Quality Services



David W. Eagleton, P.E.  
Project Manager  
Environmental Engineer

DWE/dwe //IGASSMT.DOC

cc: Bruce Sheppard (BNRR)  
Greg Koester (Philip)  
Larry Mullen and Jim Geiger (URS)



VIA HAND DELIVERY

July 5, 1995  
Project 12883088

Ms. Lynda Priddy  
Environmental Protection Specialist  
U.S. Environmental Protection Agency, Region X  
1200 Sixth Avenue  
Seattle, Washington 98101

Dear Ms. Priddy:

**Subject: Standard Operating Procedures for Ambient Air Monitoring  
Woods Industries Site  
Yakima, Washington**

On behalf of Burlington Northern Railroad (BNRR), Philip Environmental Services Corporation (Philip) is writing this letter responding to the statements regarding Standard Operating Procedures (SOPs) for Ambient Air Monitoring in your June 30 letter. Your June 30 letter requests a response from BNRR on this issue by July 7.

Based on the following, we respectfully request USEPA approval to implement the Work Plan that was approved by the USEPA:

- the Ambient Air Monitoring Plan has been approved by the USEPA;
- the work plan contains Philip's SOPs, we have already prepared SOP's for USEPA review and approval, they are signed off on and dated with January and February 1995 dates, (they can be found in appendix B of the Work Plan);
- third party performance audits required by the Work Plan have been performed and passed;
- Philip does not believe that its SOPs are deficient;
- Philip believes that to develop a different set of operating procedures to be reviewed at this late stage in the project (the project is nearly over) is awkward, cumbersome, and an unnecessary exercise;



Page 2  
Ms. Lynda Priddy  
July 5, 1995

- neither BNRR or Philip were informed by the USEPA to provide the USEPA with more detailed SOPs, Philip agreed to review URS's TSOPs;
- Philip received URS's TSOPs and found them to not be significantly different than those in our plan;
- to date we have performed over 90 Remedial Action Phase air monitoring events; and
- soil treatment will be complete as early as July 31 and at the latest August 31.

If you have any questions regarding this information, do not hesitate to contact me at the site (509) 575-7953 or Kirk Meyer at (618) 281-7173.

Sincerely yours,

PHILIP ENVIRONMENTAL SERVICES CORPORATION



Kirk Meyer,  
Senior Scientist/Air Quality Services



David W. Eagleton, P.E.  
Project Manager  
Environmental Engineer

DWE/dwe /SOP.DOC

cc: Bruce Sheppard (BNRR)  
Greg Koester (Philip)  
Larry Mullen and Jim Geiger (URS)



York Services Corporation

One Research Drive  
Stamford, CT 06906  
(203)325-1371

### Fax Transmittal Cover Sheet

This transmittal is being sent to:

Name

GREG WHETSTONE

Company/Location

WESI

Fax Number

404-879-4831

This transmittal is being sent from:

Name

ROGER KNISKERN

Location & Fax Number

STAMFORD, CT

203-357-0166

Date & Time

7/5/95

2 PM-

Project Number

5013-04

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If you do not receive all pages, please notify the sender as soon as possible at the main number:  
(203)325-1371

# YORK

ANALYTICAL LABORATORIES, INC.

## MEMORANDUM

To: R. Kniskern, A. Kurtz/York Services  
 From: R. Bradley/York Analytical Laboratories  
 Date: June 29, 1995  
 Subject: Additional Compounds for Williams Audits

At your request, we have reviewed the audit data and have determined that the following additional compounds which we calibrated for have been found in EPA Audit tubes identified as Audit 1A and 2A. Data and their concentrations are listed in Table 1.0 below.

Table 1.0 - Additional EPA Audit Compounds, all results in nanograms  
*(ppb results in parentheses)*

Compound	Audit 1A	Audit 2A
1,1,2,2-Tetrachlorethane	414 (6.72)	1510 (26.48)
Styrene	37 (0.97)	110 (3.12)

We also identified five other constituents which we did not calibrate for. These constituents are 1-bromo-2-chloroethane, hexanal, hexane, dimethoxymethane and methyl acetate.

If you like these can be reported as Tentatively Identified Compounds with an estimated concentration. Please advise as to how you would like to treat these TICs.

RQB/gbo



**VIA FACSIMILE**

July 6, 1995

Mr. David Eagleton  
Project Manager  
Philip Environmental  
210 West Sand Bank Road  
Columbia, Illinois 62236

Re: Woods Industries Site  
Yakima, Washington  
Number of Pages: 1  
Transmittal No.: 0129

Subject: Performance Test Report Revisions  
Williams Project No.: 0365-001-110

Dear David:

Attached please find the revisions to the Performance Test Report and Work Plan requested by the EPA. Included are revisions to the test report as outlined in Section A of the EPA's June 30th letter, a revised Table 6.2 from the Work Plan, and the outstanding VOST and dioxin audit information. Please review this information and submit it to the EPA as required.

Should you have any questions regarding the information provided, please call me at (404) 879-4854.

Sincerely,

**WILLIAMS ENVIRONMENTAL SERVICES, INC.**

Greg Whetstone  
Project Engineer  
GTW:pc

cc: Mark Fleri  
Jim Sanders  
Job File 0365

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**WOODS INDUSTRIES SITE PERFORMANCE  
TEST REPORT**

**SUBMITTED TO:**

**WILLIAMS ENVIRONMENTAL SERVICES, INC  
2075 WEST PARK PLACE  
STONE MOUNTAIN, GEORGIA 30087**

**Revision 1  
July 5, 1995  
Focus Project No. 059312**

**PREPARED BY:**

**FOCUS ENVIRONMENTAL, INC.  
9050 EXECUTIVE PARK DRIVE  
SUITE A-202  
KNOXVILLE, TENNESSEE 37923**

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- The concentration of carbon monoxide (CO) in the stack exhaust gas was less than 100 ppm, (corrected to 7% oxygen, dry), based on a 60-minute rolling average.
- Risk evaluation results related to stack gas emissions, including products of incomplete combustion, show risk within or below the range of acceptable risk.

The only objective not consistently achieved by the LTTD system was that for stack gas particulate concentration. The measured particulate concentration exceeded the required 0.03 grains/dscf (corrected to 7% oxygen) during runs 1, 2, and 3. A fourth run demonstrated 0.0127 grains/dscf which met the requirement. The failure to meet the particulate limit has been attributed to a combination of malfunctioning stack demisters and salts present in the scrubber water carried up the stack. Williams has discussed this issue with USEPA Region X and has agreed to continue attempts to correct the situation.

In addition to assessing the LTTD system's compliance with the performance objectives listed above, the Performance Test was structured to provide additional data on emissions of volatile and semivolatile products of incomplete combustion (PICs), for input to a risk assessment.

Tables 1-1 and 1-2 present a summary of the Performance Test soil and emissions results. Table 1-3 presents a summary of the operating limits established by the Performance Test.

Table 1-2. Emissions Performance Summary

Parameter *	Objective	Run 1	Run 2	Run 3	Average
DRE (%)	≥ 99.99	99.9971	99.9970	99.9977	NA
Particulate (gr/dscf)	≤ 0.03	0.041	0.039	0.04	NA
HCl (lb/hr)	≤ 4.0	0.121	0.358	0.175	NA
Cl <sub>2</sub> (lb/hr)	—	1.7E-03	0.039	2.3E-03	0.014
CO (ppmv)	≤ 100	1.7	0	0.3	NA
O <sub>2</sub> (%)	≥ 3.0	4.9	5.5	4.6	5.0
Modeled Ground Level Concentrations					
Compound	ASIL (a) (ug/m <sup>3</sup> )	Ground Level Conc (ug/m <sup>3</sup> )	Ground Level Conc (ug/m <sup>3</sup> )	Ground Level Conc (ug/m <sup>3</sup> )	Ground Level Conc (ug/m <sup>3</sup> )
Aldnn	2.00E+00 (b)	1.08E-06	1.61E-06	1.71E-06	1.47E-06
Alpha BHC	1.60E+00 (c)	6.48E-06	9.68E-06	1.03E-05	8.81E-06
Beta BHC	1.60E+00 (c)	6.48E-06	9.68E-06	1.03E-05	8.81E-06
Gamma BHC	1.60E+00 (c)	6.31E-05	7.10E-05	1.03E-05	4.81E-05
Chlordane	2.70E-03 (b)	1.08E-06	1.61E-06	1.71E-06	1.47E-06
p,p'-DDD	NA (e)	1.08E-06	1.61E-06	1.51E-05	5.94E-06
p,p'-DDE	1.00E-01 (b)	1.08E-06	1.61E-06	9.43E-05	3.23E-05
p,p'-DDT	1.00E-02 (b)	2.97E-05	5.11E-05	3.43E-05	3.83E-05
Dieldrin	2.00E-04 (b)	5.66E-05	9.94E-05	1.71E-06	5.26E-05
Endrin	3.00E-01 (c)	2.10E-05	6.13E-05	1.03E-05	3.09E-05
Heptachlor	7.70E-04 (b)	1.08E-06	1.61E-06	1.71E-06	1.47E-06
Heptachlor epoxide	3.84E-04 (b)	1.08E-06	1.61E-06	1.71E-06	1.47E-06
Hexachlorobenzene	2.00E-03 (b)	6.47E-05	5.91E-05	4.28E-05	5.56E-05
Methoxychlor	3.33E+01 (c)	6.48E-06	9.68E-06	1.03E-05	8.81E-06
Toxaphene	3.00E-03 (b)	1.08E-04	1.61E-04	1.71E-04	1.47E-04
Antimony	3.00E-01 (b,d)	2.92E-05	2.54E-06	3.03E-05	2.07E-05
Arsenic	2.30E-04 (b)	1.46E-05	8.13E-06	1.51E-05	1.26E-05
Barium	5.00E+01 (b,d)	8.76E-05	5.99E-05	9.08E-05	7.95E-05
Beryllium	4.20E-04 (b)	2.92E-06	2.54E-06	3.03E-06	2.83E-06
Cadmium	5.60E-04 (b)	9.25E-06	1.27E-05	8.07E-06	1.00E-05
Chromium	8.30E-05 (b)	4.48E-05	7.01E-05	4.99E-05	5.49E-05
Lead	9.00E-02 (b,d)	1.29E-04	1.67E-04	1.20E-04	1.38E-04
Mercury	3.00E-01 (b)	5.47E-03	1.62E-02	8.07E-03	9.91E-03
Nickel	3.30E+00 (c)	2.89E-04	6.62E-04	3.69E-04	4.40E-04
Selenium	7.00E-01 (c)	1.84E-04	7.10E-04	1.97E-04	3.64E-04
Silver	3.00E-01 (c)	8.77E-05	1.52E-05	3.63E-05	4.64E-05
Thallium	5.00E-01 (b,d)	2.92E-05	2.54E-06	3.03E-05	2.07E-05
2,3,7,8-TCDD TEQ	3.00E-08 (b)	8.04E-11	1.03E-10	4.31E-11	7.53E-11

\* Particulate measurements corrected to 7% O<sub>2</sub>. CO measurements are 60-min rolling averages corrected to 7% O<sub>2</sub>. CO and O<sub>2</sub> values are the average values recorded during each run.

(a) WAC Chapter 173-460, Controls for New Sources of Toxic Air Pollutants

(b) Annual average

(c) 24-hour average

(d) Reference Air Concentration (RAC) from 40 CFR 266, Appendix IV

(e) By-product of DDT; unit risk factors needed to calculate regulatory limits were not available. Annual average values are shown in the table.

Note 1: Ground level concentrations calculated using dispersion factors provided by Phillips Environmental.

Note 2: Run 4 particulate result was 0.012 grains/dscf corrected to 7% oxygen.

## 5.0 OPERATING RECOMMENDATIONS

The operating recommendations discussed below were developed based on the results of runs 1 and 3. This approach was taken because runs 1 and 3 were conducted at steady-state operating conditions while run 2 was conducted from a cold-start. Based on the Performance Test results, Williams recommends the conditions presented in the following sections be used for the continued operation of the LTTD. Table 5-1 presents a summary of the actual operating conditions recorded during the Performance Test. Table 5-2 presents the recommended operating limits conditions based on the Performance Test results. A full set of operating data is included in Appendix F.

### 5.1 Criteria for Establishing Operating Conditions

It is William's intent that a universal set of operating conditions be established from the Performance Test results and the design parameters of the LTTD, that will apply to the continuous soil treatment activities at the Woods site. Limits on specific parameters are established to ensure that the continued operation of the LTTD will result in performance similar to that demonstrated during the Performance Test, and to provide for equipment and personnel safety.

Process operating conditions are categorized into two groups (Group A and C) based on the manner in which the operating condition values are established, the requirements for continuous monitoring and recording, and for automatically stopping the waste feed. This categorization is patterned after the recommendations given in USEPA's Guidance on Setting Permit Conditions and Reporting Trial Burn Results, EPA/625/6-89/019, January 1989.

Group A parameters are continuously monitored and recorded, and are interlocked with the automatic soil feed shut off system. Group A-1 parameters are established based on Performance Test operating data, and are used to ensure that LTTD system operating conditions are consistent with those demonstrated during the Performance Test. Group A-2 parameters are established based on operational safety and good operating practice considerations rather than on the Performance Test operating conditions.

Group B parameters do not require continuous monitoring and are not interlocked with the waste feed shutoff system. Operating records are required to ensure that these parameters are not exceeded. The Group B parameter limits are established based on Performance Test operating data.

Group C parameters are set independently of Performance Test conditions. These parameters are based on equipment manufacturers design and operating specifications and thus are considered good

Table 1-3. Woods Industries Site Proposed Operating Limits

A1 Parameters	Units	Limit Type	Limit	Notes
Soil feed rate (60-min RA)	tons/hr	Max	26.7	a
Soil feed rate (instantaneous)	tons/hr	Max	31	b
Soil exit temperature (20-min RA)	deg. F	Min	750	a,h
Soil exit temperature (instantaneous)	deg. F	Min	725	h
Thermal oxidizer exit temp (inst.)	deg. F	Min	1810	d
Stack gas CO (60-min RA @7% O2)	ppm	Max	100	
APC recycle water flow rate (inst.)	gpm	Min	300	d
Scrubber recycle water pH (20-min RA)	pH units	Min	7.25	g
Scrubber recycle water pH (inst.)	pH units	Min	6.5	c,g
APC purge rate (inst.)	gpm	Min	22	d, j
ID fan current (20-min RA)	amps	Max	101	e
ID fan current (inst.)	amps	Max	103	e
ID fan current (20-min RA)	amps	Max	104	f
ID fan current (inst.)	amps	Max	107	f
<b>A2 Parameters</b>				
Thermal desorber pressure (inst.)	in. w.c.	Max	-0.01	
Thermal desorber exit temp (inst.)	deg. F	Max	450	
Thermal desorber exit temp (inst.)	deg. F	Min	250	
Thermal oxidizer exit temp (inst.)	deg. F	Max	2100	
Baghouse differential pressure (inst.)	in. w.c.	Min	0.5	i
Quench exit temp (inst.)	deg. F	Max	250	
Stack gas oxygen concentration (inst.)	%	Min	3	
<b>B Parameters</b>				
Total dissolved solids (TDS)	mg/l	Max	4000	k
<b>C Parameters</b>				
Baghouse pulse rate	pulse/min	Min	12	
APC water supply pressure	psig	Min	20	

- (a) Based on the average of the highest (lowest) RA values measured during each run
- (b) Based on the average of the maximum hourly values from each hour of the test runs
- (c) Based on the average of the minimum hourly values from each hour of the test runs
- (d) Based on time weighted average
- (e) Limits in effect during normal operation. Rolling average limit based on average of the maximum 20-min RA values during runs 1A, 1B, and 3. Instantaneous limit based on data variability.
- (f) Limits in effect during cold start-up. Limits are based on data from runs 2A and 4.
- (g) pH limits based on Runs 1B and 3 only since HCl was not measured during Run 1A
- (h) Soil exit temperature AWFSOs not in effect during the first 54.6 minutes of start-up. Soil not meeting soil exit temperature AWFSO limits must be retreated or sampled separately from subsequently treated soil to confirm soil cleanup standards have been met. This criteria also appli when restarting feed following an AWFSO.
- (i) AWFSOs occurring due to these parameters during the first 54.6 minutes of a start-up will not be counted toward the weekly AWFSO allowance. This criteria also applies when restarting feed following an AWFSO.
- (j) APC purge rate set at 22 gpm to offset elevated particulate emission rate.
- (k) Based on scrubber water TDS concentration for which particulate emissions were acceptable.

- Demonstrate a 99.99 percent destruction and removal efficiency (DRE) of a principal organic hazardous constituent (POHC) per 40 CFR 264.343 by measuring the concentration of hexachlorobenzene in the feed soil and stack gas.
- Demonstrate a stack gas particulate concentration less than 0.03 grains per dry standard cubic feet (gr/dscf), corrected to 7 percent oxygen.
- Demonstrate that the emission rate of hydrogen chloride acid (HCl) and chlorine (Cl<sub>2</sub>) in the stack gas met the ambient air impact guidelines described in the Boilers and Industrial Furnaces (BIF) guidelines described in 40 CFR 266.107. In addition, if the feedrate of total chlorine resulted in an emission rate of greater than 4 lbs/hr of HCl in the stack gas, 99% removal had to be demonstrated.
- Demonstrate that the concentration of carbon monoxide (CO) in the stack gas was less than 100 ppm<sub>v</sub>, based on a 60-minute rolling average
- Demonstrate, through the performance of a risk evaluation, that the risks associated with stack gas emissions, including products of incomplete combustion, are within or below the range of acceptable risk.

The following operating limitations were to be established from the Performance Test:

- Maximum soil feed rate
- Minimum thermal desorber exit soil temperature
- Minimum thermal oxidizer gas exit temperature
- Maximum ID fan amperage as an indicator of stack gas velocity
- Minimum APC system recycle water flow rate
- Minimum APC system purge rate
- Minimum packed bed scrubber recycle water pH
- Control limits for the LTTD and APC system operating parameters
- Minimum stack gas oxygen concentration

## 2.5 Sampling Plan Overview

A sampling plan was developed to obtain the analytical results necessary to evaluate the achievement of the test objectives discussed above. The sampling plan included the collection and analysis of samples of feed soil, treated soil, scrubber blowdown water, and stack gas. The sampling locations, sampling equipment and sampling procedures are discussed in detail in Section 3.0 of the Performance Test Plan.

Feed and treated soil samples were collected from their respective conveyors at 15 minute intervals during each test run. The scrubber blowdown water samples were collected from the blowdown discharge line at 30 minute intervals during each test run.

Stack sampling protocols for the Performance Test are summarized below:

- Particulate and HCl by EPA Method 5 (M0050)

operating practice. Group C parameters do not require continuous monitoring and are not interlocked with the automatic soil feed shut off system.

#### **5.1.1 Monitoring, Recording, and Interlocking Basis**

Group A parameters require continuous monitoring. Where values are continuously recorded, this is accomplished by computing and recording the average value from the continuous monitor at least once every 60 seconds. Where the parameter to be monitored is represented by a discrete event rather than by a continuous process variable (e.g., ID fan failure) the data acquisition system makes a record if the event occurs.

Group A parameters trigger an automatic soil feed shut off if the process value for the parameter is outside the established limits. Because process values may fluctuate during normal operation, without impacting the overall performance of the LTTD system, several of the automatic soil feed shut off interlocks are based on rolling average values to avoid unnecessary interruption of system operation. Other Group A parameters, that are considered to be especially critical, trigger automatic soil feed shut offs immediately when the monitoring system's detector senses a value outside the established limits.

Where rolling averages are used, they are implemented on a 60-minute or 20-minute basis. The 60-minute (or 20-minute) rolling average is the arithmetic mean of the 60 (or 20) most recent one-minute values generated by the continuous monitor, thus the data acquisition system constantly accumulates and averages 60 (or 20) one-minute values. As each new one-minute value is generated by the monitoring system, the oldest one-minute value is discarded, and the 60-minute (or 20-minute) rolling average is updated using the new data point. The 60-minute (or 20-minute) rolling average is recorded each minute as the rolling average value is updated. Interlocks based on 60-minute (20-minute) rolling averages are triggered immediately when the 60-minute (20-minute) rolling average value is outside the established operating limits.

#### **5.1.2 Establishing Operating Limits from Performance Test Results**

Williams proposes to establish operating limits from the performance test results for Group A parameters based on the agreed-upon methods presented in Section 3.8.2 of the Performance Test Plan. For parameters that have both a rolling average limit and an instantaneous limit, the rolling average limit is based upon the average over all test runs of the maximum or minimum rolling value for each test run, while the instantaneous limit is based on averaging the maximum or minimum hourly instantaneous value from each hour of the test run and then averaging these three test run averages. For parameters that have only an instantaneous limit the limit is based upon the time-weighted average over the test. The carbon monoxide limitation is based upon EPA guidance.

## 5.2 Operating Parameters

Table 5-2 summarizes the proposed operating parameters and interlocks. Each parameter, and the basis for its proposed value and interlock (if needed) is discussed below. Performance test operating data used for calculating AWFSO limits are included in Appendix F.

### 5.2.1 Group A1 Parameters

**High Soil Feed Rate** - If the 60-minute rolling average of the soil feed rate exceeds 26.7 tons/hour, the soil feed will be automatically stopped. This limit is based on the average of the maximum 60-minute rolling average values from Runs 1 and 3 of the test. The maximum instantaneous soil feed rate limit will be 31 tons/hour based on the average of the hourly maximum instantaneous values over the entire test.

**Low Thermal Desorber Exit Soil Temperature** - The soil feed will be automatically stopped if the thermal desorber exit soil temperature falls below 750°F based on a 20-minute rolling average. This value was determined during testing from the average of the lowest 20-minute values from each test run. The minimum instantaneous exit soil temperature was determined to be 725°F. It was intended that this limit be based on the average of the lowest hourly instantaneous values recorded during each test run. However, this approach would have yielded an instantaneous limit approximately equal to the rolling average limit. The limit of 725°F is based on variability of the temperature data. The soil exit temperature AWFSOs will be deactivated during the first 54.6 minutes of system start-up. Any soil treated during this time period which did not reach the AWFSO temperature limit will have to be retreated or sampled separately from subsequently treated soil to confirm soil cleanup standards have been met.

**Low Thermal Oxidizer Exit Gas Temperature** - The soil feed will be automatically stopped if the thermal oxidizer exit gas temperature falls below 1,810°F based on an instantaneous reading. The minimum temperature recorded during the test was 1,771°F during test run 1. The operating limit is based upon the time-weighted average over the performance test.

**High Stack Gas Carbon Monoxide** - Soil feed will be immediately stopped if the stack gas carbon monoxide exceeds 100 ppm<sub>v</sub>, corrected to 7% oxygen and based on a 60-minute rolling average. This limit is based on good operating practice considerations. The maximum 60-minute rolling average value recorded during the test was 5.5 ppm<sub>v</sub>.

**Low APC Recycle Water Flow Rate** - The soil feed will be automatically stopped if the APC recycle water flow rate falls below 300 gpm. This value is based on the time-weighted average of the test data.

Low Packed Bed Scrubber Recycle Water pH - The soil feed will be automatically stopped if the 20-minute rolling average pH falls below 7.25 or the instantaneously recorded pH falls below 6.5. The 20-minute rolling average limit is based upon the average over the test of the minimum rolling value from each test run. The instantaneous limit is based upon the average of the minimum instantaneous hourly value over the test.

Low APC Purge Rate - The minimum APC purge rate was established during the performance test as 22 gpm. This value was established to offset the elevated particulate emission rate. The soil feed will be automatically stopped if the instantaneous APC purge rate falls below this value.

High ID Fan Current - Soil feed will be immediately stopped if the 20-minute rolling average ID fan current exceeds 101 amps. The limit is based upon the average of the 20-minute rolling average values recorded during test runs 1A, 1B, and 3. The maximum instantaneous limit was determined to be 103 amps based upon analysis of data variability. During system start-up (first 54.6 minutes of operation), the 20-minute rolling average limit will be 104 amps and the instantaneous limit will be 107 amps. These start-up limits are based upon data from runs 2A and 4 of the Performance Test.

#### 5.2.2 Group A2 Parameters

High Thermal Desorber Pressure - The maximum thermal desorber pressure resulting in an instantaneous automatic soil feed shut off will be -0.01 inches w.c. This limit was not demonstrated during the Performance Test but is established based on good operating practice. The maximum thermal desorber pressure based on Performance Test results was -0.18 in. w.c.

High Thermal Desorber Exit Gas Temperature - The soil feed will be automatically stopped if the thermal desorber exit temperature exceeds 450°F based on an instantaneous reading. The maximum instantaneous thermal desorber exit gas temperature during the test was 344°F.

Low Thermal Desorber Exit Gas Temperature - An instantaneous AWFSO will be triggered if the offgas temperature falls below 250°F. This limit is based on previous experience indicating that a prolonged low offgas temperature can be indicative of a problem with the burner management system and is thus based on good operating practice. The pesticide removal efficiency of the LTTD is a function of the soil exit temperature and not the offgas temperature. The minimum LTTD offgas temperature recorded during testing was 305°F.



High Thermal Oxidizer Exit Gas Temperature - An instantaneous AWFSO will occur in the event that the thermal oxidizer exit gas temperature equals or exceeds 2100°F. This temperature is based on a manufacturer's recommendation and was not demonstrated during the Performance Test. The maximum thermal oxidizer exit gas temperature recorded during testing was 1,870°F

Low Baghouse Differential Pressure - Soil feed will be automatically and instantaneously stopped if the baghouse differential pressure falls below 0.5 in. w.c. This was not demonstrated during the Performance Test. The minimum baghouse differential pressure recorded during the test was 0.85 in. w.c.

High Quench Gas Exit Temperature - Soil feed will be automatically stopped if the instantaneous quench gas exit temperature exceeds 250°F. This temperature is based on the equipment protection considerations. The maximum quench gas exit temperature recorded during the test was 185°F.

Low Stack Gas Oxygen Concentration - The minimum stack gas oxygen concentration was established at 3% by volume prior to the Performance Test. The Performance Test minimum was recorded at (3.2%) with an average of (4.7%) for runs 1 and 3. The soil feed will be automatically stopped if the instantaneous stack gas oxygen concentration falls below this value.

Burner System Failure - Failure of the burner system will result in an instantaneous AWFSO.

ID Fan Failure - Failure of the ID fan will result in an instantaneous AWFSO.

Power Failure - A power failure will result in an instantaneous AWFSO.

### 5.2.3 Group B Parameters

High Total Dissolved Solids (TDS) - The maximum APC system scrubber water total dissolved solids concentration limit was established based on the TDS level for which particulate emissions are acceptable. Scrubber water samples must be taken hourly and composited daily for TDS analysis. If the TDS limit is exceeded, the APC purge rate will be increased in one gallon/minute increments until the TDS concentration drops below the limit. Analytical results for TDS must be obtained and evaluated against the limit by Burlington Northern Railroad daily.

### 5.2.4 Group C Parameters

Low APC System Water Supply Pressure - The minimum APC water supply pressure was established prior to testing at 20 psig.

Low Baghouse Pulse Rate - The minimum baghouse pulse rate was established following testing at 12 pulses per minute.

Table 5-2. Woods Industries Site Proposed Operating Limits

A1 Parameters	Units	Limit Type	Limit	Notes
Soil feed rate (60-min RA)	tons/hr	Max	26.7	a
Soil feed rate (instantaneous)	tons/hr	Max	31	b
Soil exit temperature (20-min RA)	deg. F	Min	750	a,h
Soil exit temperature (instantaneous)	deg. F	Min	725	h
Thermal oxidizer exit temp (inst.)	deg. F	Min	1810	d
Stack gas CO (60-min RA @7% O2)	ppm	Max	100	
APC recycle water flow rate (inst.)	gpm	Min	300	d
Scrubber recycle water pH (20-min RA)	pH units	Min	7.25	g
Scrubber recycle water pH (inst.)	pH units	Min	6.5	c,g
APC purge rate (inst.)	gpm	Min	22	d, j
ID fan current (20-min RA)	amps	Max	101	e
ID fan current (inst.)	amps	Max	103	e
ID fan current (20-min RA)	amps	Max	104	f
ID fan current (inst.)	amps	Max	107	f
<b>A2 Parameters</b>				
Thermal desorber pressure (inst.)	in. w.c.	Max	-0.01	
Thermal desorber exit temp (inst.)	deg. F	Max	450	
Thermal desorber exit temp (inst.)	deg. F	Min	250	
Thermal oxidizer exit temp (inst.)	deg. F	Max	2100	
Baghouse differential pressure (inst.)	in. w.c.	Min	0.5	i
Quench exit temp (inst.)	deg. F	Max	250	
Stack gas oxygen concentration (inst.)	%	Min	3	
<b>B Parameters</b>				
Total dissolved solids (TDS)	mg/l	Max	4000	k
<b>C Parameters</b>				
Baghouse pulse rate	pulse/min	Min	12	
APC water supply pressure	psig	Min	20	

- (a) Based on the average of the highest (lowest) RA values measured during each run
- (b) Based on the average of the maximum hourly values from each hour of the test runs
- (c) Based on the average of the minimum hourly values from each hour of the test runs
- (d) Based on time weighted average
- (e) Limits in effect during normal operation. Rolling average limit based on average of the maximum 20-min RA values during runs 1A, 1B, and 3. Instantaneous limit based on data variability.
- (f) Limits in effect during cold start-up. Limits are based on data from runs 2A and 4.
- (g) pH limits based on Runs 1B and 3 only since HCl was not measured during Run 1A
- (h) Soil exit temperature AWFSOs not in effect during the first 54.6 minutes of start-up. Soil not meeting soil exit temperature AWFSO limits must be retreated or sampled separately from subsequently treated soil to confirm soil cleanup standards have been met. This criteria also apply when restarting feed following an AWFSO.
- (i) AWFSOs occurring due to these parameters during the first 54.6 minutes of a start-up will not be counted toward the weekly AWFSO allowance. This criteria also applies when restarting feed following an AWFSO.
- (j) APC purge rate set at 22 gpm to offset elevated particulate emission rate.
- (k) Based on scrubber water TDS concentration for which particulate emissions were acceptable.

Table 6-2. Automatic Waste Feed Shutoff Conditions To Be Complied With During All Phases of Contaminated Soil Processing

Control Parameters (a)	Instrument a Number	Cutoff Conditions	Value	Comments
Soil feed rate (ton/hr)	WQI-170	High	> 26.7	60-minute rolling average AWFSO
Soil feed rate (ton/hr)	WQI-170	High	> 31	Instantaneous AWFSO
Thermal desorber pressure (inches w.c.)	PI-330	High	> -0.01	Instantaneous AWFSO
Thermal desorber exit soil temperature (°F)	TI-112	Low	< 750 (b)	20-minute rolling average AWSFO
Thermal desorber exit soil temperature (°F)	TI-112	Low	< 725 (b)	Instantaneous AWFSO
Thermal desorber exit gas temperature (°F) as Alternative measure of performance initial 20 minutes	TIC-310	Low	< 250	Instantaneous AWFSO
Thermal desorber exit gas temperature (°F)	TIC-310	High	> 450	Instantaneous AWFSO
Thermal desorber exit gas temperature (°F)	TIC-310	High-high	> 500	Instantaneous VO
Thermal desorber exit gas temperature (°F)	TIC-310	Low	< 250	Instantaneous AWFSO
Thermal oxidizer exit gas temperature (°F)	TIC-518	Low	< 1,810	Instantaneous AWFSO
Thermal oxidizer exit gas temperature (°F)	TIC-518	High	> 2,100	Instantaneous AWFSO
Quench exit gas temperature (°F)	TI-819	High	> 250	Instantaneous AWFSO
Stack gas carbon monoxide (ppmv)	AIC-851A	High	> 100 (c)	60-minute rolling average AWFSO
Stack gas oxygen (%)	AIC-851C	Low	< 3	Instantaneous AWFSO
ID Fan current (amp)	II-6622, 6623	High	> 101 (g)	20-minute rolling average AWFSO
ID Fan current (amp)	II-6622, 6623	High	> 103 (g)	Instantaneous AWFSO
ID Fan current (amp)	II-6622, 6623	High	> 104 (h)	20-minute rolling average AWFSO
ID Fan current (amp)	II-6622, 6623	High	> 107 (h)	Instantaneous AWFSO
APC recycle water flow rate	FT-700,701 FT-706,707	Low	< 300	Instantaneous AWFSO
APC purge rate (gpm)	FI-704	Low	< 22 (f)	Instantaneous AWFSO
Baghouse differential pressure (inches w.c.)	PDI-633	Low	< 0.5 (i)	Instantaneous AWFSO
Packed bed scrubber recycled water pH	AIC-753	Low	< 7.25	20-minute rolling average AWFSO
Packed bed scrubber recycled water pH	AIC-753	Low	< 6.5	Instantaneous AWFSO
ID Fan failure	II-6622,6623	-	-	Instantaneous AWFSO
Burner system failure	NA	(d)	-	Instantaneous AWFSO
Power failure	NA	(e)	-	Instantaneous AWFSO
Total dissolved solids (mg/l)	NA	High	> 4000	Group B parameter
Baghouse pulse rate (pulse/min)	NA	Low	< 12	Group C parameter
APC water supply pressure (psig)	NA	Low	< 20	Group C parameter

Notes:

- (a) See Figure 6-1 of the Thermal Desorption Work Plan for locations of major process instruments
- (b) Limits not in effect during first 54.6 minutes of operation
- (c) Corrected to 7% oxygen
- (d) Burner management system flame out indication
- (e) Programmable logic controller power failure indication
- (f) APC purge rate set at 22 gpm to offset elevated particulate emissions at a feed rate of 26.7 tph.
- (g) Limits in effect during normal operation.
- (h) Limits in effect during cold startup.
- (i) AWFSOs occurring during the first 54.6 minutes of a start-up will not be counted toward the weekly AWFSO allowance. This criteria also applies when restarting feed following an AWFSO.

July 6, 1995  
Project 12883088

Ms. Lynda Priddy  
Environmental Protection Specialist  
U.S. Environmental Protection Agency, Region X  
1200 Sixth Avenue  
Seattle, Washington 98101

Dear Ms. Priddy:

**Subject: Air Monitoring Results - Events R61 - R83**

On behalf of Burlington Northern Railroad (BNRR), Philip Environmental Services Corporation (Philip) is writing this letter responding to your June 30, 1995 request during a telephone conversation with David Eagleton (Philip). In the June 30 conversation, you requested that Philip provide additional details or rationale as to why action levels were exceeded on the ambient air monitoring events listed in Jim Geiger's memorandum dated June 30, 1995 (attached). Dieldrin and particulate material less than 10 microns in diameter (PM-10) are the two parameters which exceeded the action level during these events and are described in the following sections.

The following discussion only describes air monitoring from Event R61 (May 26) through Event R83 (June 24).

**Dieldrin**

From May 25 through June 24, dieldrin exceeded the action level for two events (Events R61 and R62). The Ambient Air Monitoring Event Record for Event R61 indicates that Williams Environmental was handling the "hot-hot" material for the performance test. Sample results from the "hot-hot" indicate a dieldrin concentration of 29 mg/kg (approximately three times higher than the average concentration in the Remedial Investigation Report). Philip does not have any explanation for dieldrin exceeding the action level for Event R62.

All events for which analytical data has been received since Event R62 (approximately 20 events), dieldrin has not exceeded the action level. No additional "hot-hot" material is expected to be handled in the future.



### PM-10

From May 25 through June 24, PM-10 exceeded the action level for the following events listed below. Current conditions which may have attributed to the exceedences are described. These descriptions can also be obtained from the ambient air event records which continue to be submitted to URS.

- R64 - Stations A61 and A15: Winds averaged above 10 miles per hour (mph). For events prior to Event R64, wind speeds typically averaged approximately 5 mph. PM-10 concentrations are directly proportional to wind speed. Sample duration was outside required limits due to a power failure; therefore, data will be flagged on final event record. Due to required maintenance, dataram data is not available for this event to determine the time of day which PM-10 concentrations were the highest.
- R67 - Station A16: Williams started screening soils from south stockpile. Hansen Fruit and Cold Storage (Hansen) located immediately east of the site was performing site grading. Hourly PM-10 data from the dataram located at station A11 in conjunction with hourly wind direction data indicate relatively higher PM-10 concentrations when the wind direction was from the northeast (downwind of Hansen).
- R74 - Station A61: Dataram data indicate significantly higher PM-10 concentrations during the overnight hours in comparison to daytime hours. Dust control measures for areas outside the soil treatment pad are limited to the daytime hours when soil screening and backfilling exist. Williams were screening contaminated soils and backfilling treated soils on the south portion of the site.
- R79 - Stations A11 and A15: Winds averaged above 13 mph. For one hour, winds averaged above 46 mph. PM-10 concentrations are directly proportional to wind speed.
- R80 - Station A61: Wind direction was predominantly from the east during Hansen's construction activities and traffic on King Street. Dataram data indicate significantly higher PM-10 concentrations during the early morning hours in comparison to daytime hours. Dust control measures for areas outside the soil treatment pad are limited to the daytime hours when soil screening and backfilling exist.

Overall, increased PM-10 concentrations from May 26 through June 24 may have resulted from increased wind speeds, construction activities adjacent to the site, decreased dust control measures during the overnight hours, and Williams screening operations at the south stockpile, and from soil being handled more frequently as a result of Williams' increased soil treatment efficiency.

Per a telephone conversation with David Eagleton, Williams have implemented additional dust control measures near the south stockpile since Event R80, Also, to prevent future exceedences

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Ms. Lynda Priddy  
July 6, 1995

in action levels, Philip will discuss what dust control measures are being performed during the overnight hours to make sure that dust control measures are being implemented 24 hours per day. From on-site observations, Hansen's construction activities are complete.

Philip will continue to submit monitoring data to URS. In the event that an action level is exceeded, Philip will provide details to describe the cause and measures to prevent future occurrences.

If you have any questions regarding this information, do not hesitate to contact me at (618) 281-7173 or David Eagleton at (509) 575-7953.

Sincerely yours,  
PHILIP ENVIRONMENTAL SERVICES CORPORATION



Greg A. Koester  
Environmental Engineer

GAK/gak/12883088/airlett.doc

Attachment: 1. URS Memorandum Dated June 30, 1995

cc: David Eagleton (Philip)  
Kirk Meyer (Philip)  
Bruce Sheppard (BNRR)  
Jim Geiger (URS)  
Chris Drescher (Williams)



ATTACHMENT 1

URS Memorandum Dated June 30, 1995

FAX TRANSMISSION

June 30, 1995

To: LYNDA PRIDDY, WAM - USEPA

From: Jim Geiger, Yakima

Subject: Air Monitoring Results - Events R61 through R83 (May 26 - June 24)

A review of PM-10 Preliminary Results was made this week with the following exceedences noted:

June 5 - R64 - station A15 - 197.0 ug/cu.m.  
June 5 - R64 - station A61 - 224.3 ug/ cu.m.  
  
June 8 - R67 - station A16 - 220.8 ug/cu.m.  
  
June 15 - R74 - station A61 - 262.6 ug/cu.m.  
  
June 20 - R79 - station A11 - 213.0 ug/cu.m.  
June 20 - R79 - station A15 - 192.0 ug/cu.m.  
  
June 21 - R80 - station A61 - 190.0 ug/cu.m.

Events R79 and R80 are back-to-back. Philip Environmental have determined that the wind on R80 was primarily from the east and that considerable traffic, including construction, was being carried out on King Street and the nearby Hansen facility.

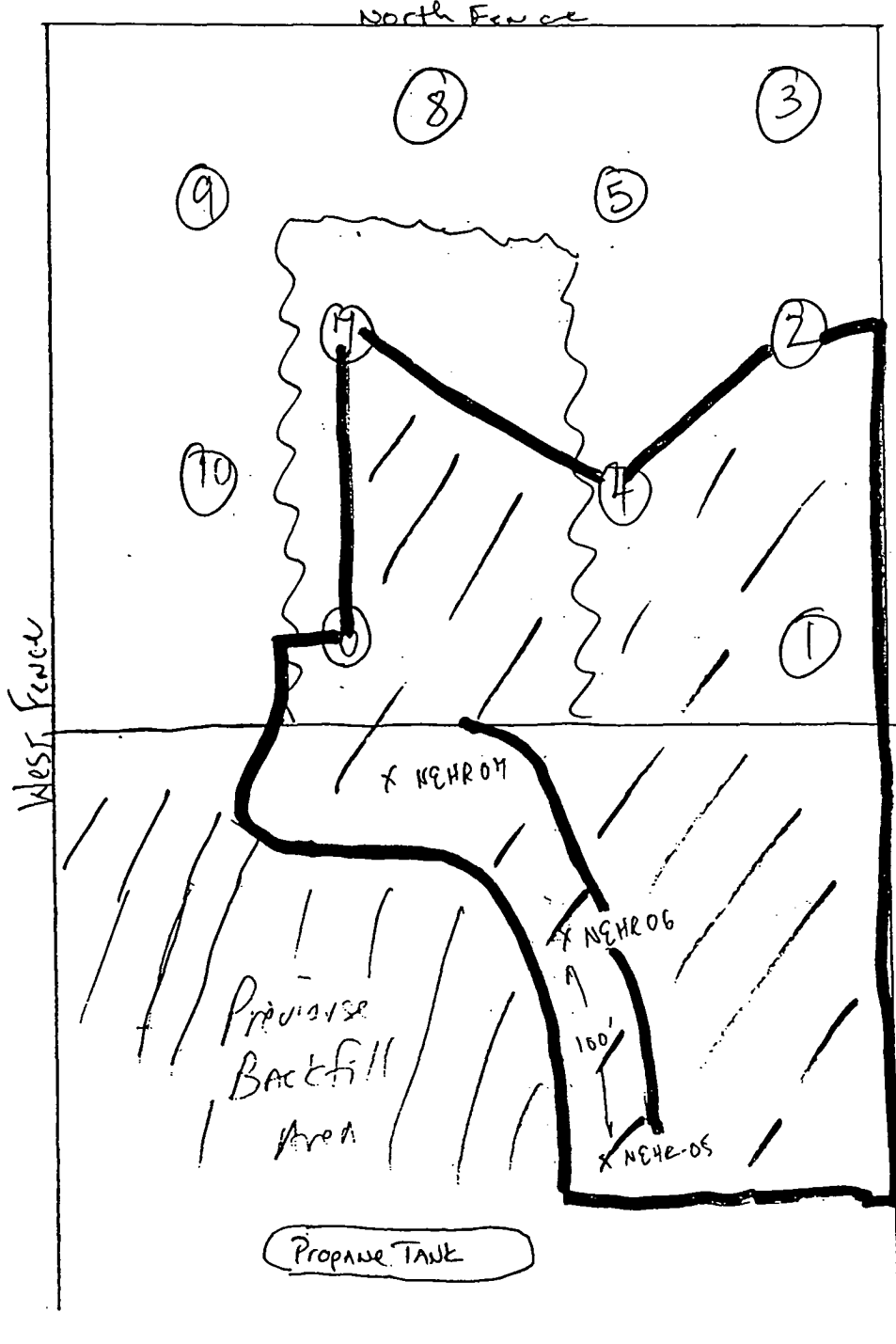
In addition, exceedences of Dieldrin were noted as:

May 26 - R61 - station A11 - 0.137 ug/cu.m.  
  
June 4 - R62 - station A11 - 0.104 ug/cu.m.

copy: Philip Environmental  
David Tonkin

Sketch of Proposed Area to Backfill (With EPA Approval)

EPA Approval rec'd  
7/18 @ 2:10 Central Time



**BACKFILL AREA**

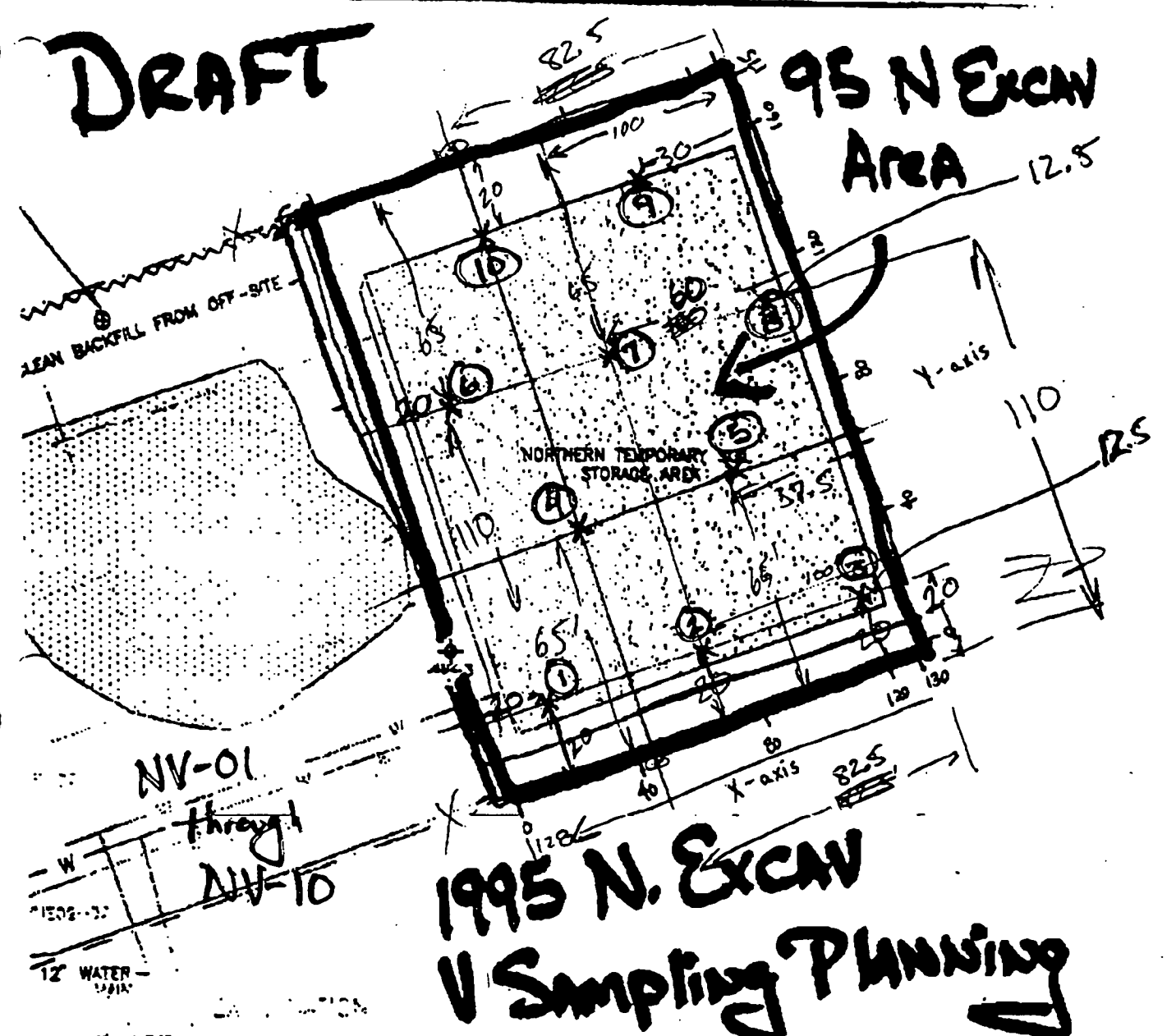
① - Approximate location of NV-01

Note: locations 10, 5, 3  
Need further excavation + sampling

**Not to Scale**

# DRAFT

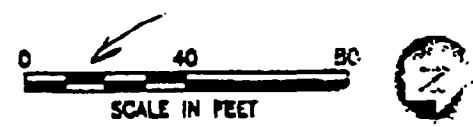
## 95 N EXCAV AREA



# 1995 N. EXCAV V Sampling Planning

7/6  
Collect  
1, 2, 3, 4  
C 17 JSL

- CHAIN-LINK FENCE
- SHALLOW GROUNDWATER MONITORING WELL AND NUMBER
- DEEP GROUNDWATER MONITORING WELL AND NUMBER
- GROUNDWATER CONTOUR ON 3/25/93
- TEMPORARY STORAGE AREA
- VERIFICATION SAMPLE LOCATION AND NUMBER (SAMPLE 01 @ 1 FOOT DEPTH)
- VOLATILE ORGANIC ANALYSIS SAMPLE LOCATION AND NUMBER



Burlington Environmental	
VERIFICATION SAMPLE LOCATION MAP FOR NORTH EXCAVATION	
WOODS INDUSTRIES SITE YAKIMA, WASHINGTON 12883088	FIGURE :

WIS-10



**WILLIAMS ENVIRONMENTAL SERVICES, INC.**

**VIA HAND DELIVERY**

18 July, 1995

Mr. Larry Mullen  
Oversite Inspector  
URS  
2 East King Street  
Yakima, WA 98901

Re: Woods Industries Site

Subject: AWFSO Limit Exceedance Corrective Action

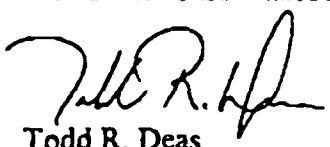
Dear Mr. Mullen:

On July 17, 1995, at 22:15, a thermocouple wire on the discharge auger came loose causing a Low soil temp AWFSO's (One Event) which exceeded the 7 AWFSO weekly limit. The wire was reattached and the unit resumed operation at 22:19, for a total downtime of four minutes.

If you have any questions, please do not hesitate to contact me at (509) 452-4326.

Sincerely,

**WILLIAMS ENVIRONMENTAL SERVICES, INC.**

  
Todd R. Deas

cc: Jim Sanders (WESI)  
Mark Fleri (WESI)  
Greg Koester (Philip)  
Lynda Priddy (USEPA)  
Project File

**WILLIAMS ENVIRONMENTAL SERVICES, INC.****VIA HAND DELIVERY**

20 July, 1995

Mr. Larry Mullen  
Oversite Inspector  
URS  
2 East King Street  
Yakima, WA 98901

Re: Woods Industries Site

Subject: AWFSO Limit Exceedance Corrective Action

Dear Mr. Mullen:

On July 19, 1995, Williams Environmental experienced three AWFSO's as follows:  
At 07:52, a false low ph reading occurred. Total downtime was four seconds. At 12:46 a Low scrubber flow reading caused by a broken paddle wheel. The broken paddle wheel was replaced and the unit resumed operation at 13:36. At 18:35 a Low O2 reading occurred as the result of wet soil, downtime was one minute.

If you have any questions, please do not hesitate to contact me at (509) 452-4326.

Sincerely,

**WILLIAMS ENVIRONMENTAL SERVICES, INC.**

Todd R. Deas

cc: Jim Sanders (WESI)  
Mark Fleri (WESI)  
Greg Koester (Philip)  
Lynda Priddy (USEPA)  
Project File



**VIA FACSIMILE**

20 July 1995

Mr. David W. Eagleton  
Project Manager/Environmental Engineer  
Philip Environmental Services Corporation  
210 West Sand Bank Road  
P.O. Box 230  
Columbia, IL 62236-0230

Re: Woods Industries Site  
Yakima, Washington  
Transmittal No.: 0140  
Number of Pages: 2

Subject: Project Schedule Update  
Williams Project No. 0365-001-110

Dear Mr. Eagleton:

In reviewing the potential quantity of remaining raw feed to process, Williams' current estimate to complete processing is Friday, July 28, 1995. We think this is a conservative estimate, however, there is a chance that the completion date might be reached sooner than the 28th depending upon the rock quantity in the remaining south raw feed pile.

Once Williams' completes processing, the unit will be shut down and the night shift will be discontinued. The day shift will immediately start gross decontamination of the equipment. Williams will submit the last of the soil samples for analysis the same day the unit is shut down. Until the results of the final soil samples are received, the unit will remain intact in case reprocessing might be required. If the final soil samples pass, then the unit will start to be disassembled and removed from the site. Williams will work one shift per day until completely demobilized.

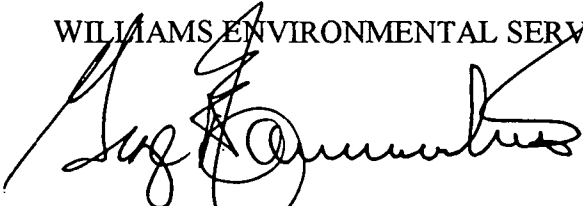
If there is additional materials that Burlington desires to be processed through the unit, then they must be brought to the screening area as soon as possible.

In the meantime, if you should have any questions, please contact us.

Mr. David W. Eagleton  
July 20, 1995  
Page 2

Yours very truly,

WILLIAMS ENVIRONMENTAL SERVICES INC.

A handwritten signature in black ink, appearing to read "George A. Harbour III". The signature is written in a cursive style with a large, prominent initial "G".

George A. Harbour III  
Senior Project Manager

cc: Greg Koester (Philip)  
Bruce Sheppard (Burlington)  
Z. L. Taylor  
Jim Sanders  
File



July 31, 1995  
Project 12883088

Ms. Lynda Priddy  
U.S. Environmental Protection Agency  
Region X  
1200 Sixth Avenue (HW-113)  
Seattle, Washington 98101

Dear Ms. Priddy:

**Subject: Post-Remedial-Phase Ambient Air Monitoring  
Woods Industries Site  
Yakima, Washington**

Due to the extended duration of soil treatment at the Woods Industries Site, by the time soil treatment is complete, Philip Environmental Services Corporation (Philip) estimates that approximately 125 remedial-action-phase ambient air monitoring events will be completed. This is much greater than the approximately 45 remedial-action-phase events anticipated during preparation of the Ambient Air Monitoring Work Plan. Although these results show that, on occasion, action levels have been exceeded at a limited number of locations, Philip believes that post-remedial-phase ambient air monitoring is no longer necessary.

The purpose of the planned post-remedial-phase ambient air monitoring, as stated in the work plan, is "to establish that baseline conditions are restored in the vicinity of the site." Based on the data collected to date, ambient air quality appears to have remained at baseline conditions throughout soil treatment, except during isolated occasions when unit operations, meteorological conditions, or nearby off-site activities caused higher concentrations. As described in the addendum to the Ambient Air Quality Impact Report, the long-term exposure levels to the monitored parameters have stayed well below risk levels throughout the remedial-action phase. Based on results to date, the concentrations that would be measured during post-remedial-phase monitoring are expected to be similar to, or more likely below, the concentrations that have been measured during remedial-action-phase air monitoring.



Page 2  
Ms. Lynda Priddy  
July 31, 1995

For these reasons, on behalf of Burlington Northern Railroad, Philip respectfully requests a modification of the Ambient Air Monitoring Plan to no longer require post-remedial-phase ambient air monitoring.

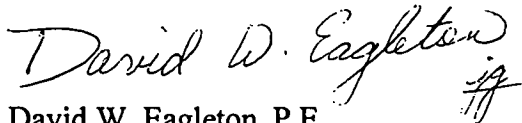
Please call either of us at (618) 281-7173.

Sincerely yours,

PHILIP ENVIRONMENTAL SERVICES CORPORATION



Kirk D. Meyer  
Senior Scientist/Project Manager  
Air Quality Services



David W. Eagleton, P.E.  
Project Manager  
Environmental Engineer

KDM/DWE/jg/POSTREM.LET

TO: Lynda Priddy  
 cc: David Eagleton  
 Bruce Sheppard

FROM: Greg A. Koester *GAK*  
 DATE: August 2, 1995

8/8/95

On July 12, 1995, Philip Environmental Services Corporation (Philip) collected a sample to characterize water contained in a 55-gallon drum from 1993 soil removal activities. The following table compares the analytical results from the drummed water (attached) to on-site groundwater cleanup levels and discharge limits per the City of Yakima for the site indicator chemicals.

Parameter	Units	Results	Woods Site Cleanup Levels	Discharge Limits
Acetone	µg/L	< 2.0	1,760	N/A
Aldrin	µg/L	< 0.01	0.05	< 5
alpha-BHC	µg/L	< 0.01	0.14	90
beta-BHC	µg/L	0.03	0.5	90
gamma-BHC	µg/L	< 0.01	0.2	400
p,p'-DDD	µg/L	0.86	4.0	< 5
p,p'-DDE	µg/L	0.1	3.0	< 5
p,p'-DDT	µg/L	0.07	5.0	< 5
Dieldrin	µg/L	< 0.01	0.038	< 5
Endrin	µg/L	< 0.04	0.04	20
Hexachlorobenzene	µg/L	< 2.0	0.5	130
Tetrachloroethylene**	µg/L	< 1.0	5.0	700
Arsenic	µg/L	< 20	5	5,000
Chromium	µg/L	< 1	50	5,000
Lead	µg/L	10	5*	1,500
Mercury	µg/L	< 0.2	2	200

\*Background lead concentrations in upgradient monitoring wells near the Woods site has been as high as 21.1 µg/l (micrograms per liter).

\*\*Not a site related chemical.

Concentration of these indicator parameters in the drummed water were below cleanup levels, with the exception of lead and possibly arsenic. Arsenic was not detected; however, the detection limit for arsenic was above the cleanup level. Lead was detected in upgradient off-site wells at 21.1 µg/L during 1990 groundwater monitoring. As a result,

PAGE: 2

MEMO FROM: Greg A. Koester

DATE: August 8, 1995

---

Philip proposes blending the drum contents (approximately 20 gallons of water and approximately 10 gallons of soil) with soils located on the waste feed pad prior to the completion of soil treatment. Another option would be to discharge this water to City sewer and treat the soil. If you have any questions, please contact David Eagleton or me at your earliest convenience.



## Testing Laboratories, Inc.

940 South Harney St., Seattle, WA 98108 (206) 767-5060 FAX (206) 767-5063

Chemistry, Microbiology, and Technical Services

CLIENT: Philip Environmental Services  
 210 West Sand Bank Road  
 P.O. Box 230  
 Columbia, IL 62236-0230  
 ATTN : Dave Egleton

### Certificate of Analysis

Work Order# : 95-07-371  
 DATE RECEIVED : 07/13/95  
 DATE OF REPORT: 07/28/95  
 CLIENT JOB ID : 12883088 9007.77

Work ID : Woods Industries  
 Taken By : Client  
 Transported by: UPS  
 Type : Water

#### SAMPLE IDENTIFICATION:

	Sample Description	Collection Date
01	93-Drum	07/12/95 11:30

cc: Mike Martin  
 Philip Environmental  
 2 East King St.  
 Yakima, WA 98901

#### ATTACHMENTS:

Following presentation of sample results, the following appendices are attached to this report:

- Appendix A: Method Blanks & Surrogate Recoveries Reports
- Appendix B: Matrix Spike/Matrix Spike Duplicate Report
- Appendix C: Chain-of-Custody





# Testing Laboratories, Inc.

940 South Harney St., Seattle, WA 98108 (206) 767-5060 FAX (206) 767-5063

Chemistry, Microbiology, and Technical Services

CLIENT : Philip Environmental Services

## Certificate of Analysis

Work Order# : 95-07-371

Unless otherwise instructed all samples will be discarded on 09/06/95

Respectfully submitted,  
Laucks Testing Laboratories, Inc.

J. M. Owens





## Testing Laboratories, Inc.

940 South Harney St., Seattle, WA 98108 (206) 767-5060 FAX (206) 767-5063

Chemistry, Microbiology, and Technical Services

### USING OUR REPORTS

Laucks uses an electronic Laboratory Information Management System that produces both our reports and invoices. The following information and definitions will help you understand our reports, and we encourage you to call us if your questions are not answered here.

**SAMPLE IDENTIFICATION** - Sample IDs are recorded as they appear on your sample containers or chain-of-custody documents.

**TEST RESULTS** - Analyses that result in a single data point are shown in alphabetical order in the body of the report. Tests that yield multiple results are generally reported on separate pages, on a sample-by-sample basis.

**MEASUREMENT UNITS** - The reporting units are shown to the right of the analyte name. In the event that a different unit was more appropriate to a specific sample, that exception is shown immediately beneath the test result. Units commonly employed are mg/kg (solids) or mg/L (liquids), comparable to parts per million; ug/kg (solids) or ug/L (liquids), comparable to parts per billion; and percent (%).

**METHODS OF ANALYSIS** - The EPA or Standard Methods method number is shown in parentheses after the analyte name when field size allows; or, for analyses that yield multiple data points, in the header information on the individual report page.

**ABBREVIATIONS** - Several abbreviations can appear in our reports. The most commonly employed abbreviations are:

- U** : The analyte of interest was not detected, to the limit of detection indicated.
- B** : The analyte of interest was detected in the method blank associated with the sample, as well as in the sample itself. The B flag is applied without regard to the relative concentrations detected in the blank and sample.
- J** : The analyte of interest was detected below the routine reporting limit. This value should be regarded as an estimate.
- T** : The flagged values represent the SUM of two co-eluting compounds. The SUM of these two values is shown as though it were a result for each of them. The two figures should not be added together.



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Chemistry, Microbiology, and Technical Services

- E** : The flagged value was reported from an analysis which exceeded the linear range of the instrument. See additional comments for further discussion of the circumstances. Values so flagged should be considered estimates.
- D** : The value reported derives from analysis of a diluted sample or sample extract.
- P** : When a dual column GC technique is employed, this flag indicates that test results from the two columns differ by more than 25%. Generally, we report the lower value.
- C** : The flagged analyte has been confirmed by GC/MS analysis. The value reported may be derived from either the initial or confirmatory (GC/MS) analysis. See specific report comments for details.
- SDL** : Sample Detection Limit. The SDL can vary from sample to sample, depending on sample size, matrix interferences, moisture content and other sample-specific conditions.
- PQL** : Practical Quantitation Limit. This limit is drawn from the test method and usually represents the SDL multiplied by a matrix-specific factor.
- CRQL** : Client Requested Quantitation Limit, usually the limit of detection specified at your request. Might also be referred to as Contract Required Quantitation Limit.
- DB** ; Dry Basis. The value reported has been back-calculated to normalize for the moisture content of the sample.
- AR** : As-Received. The value has NOT been normalized for moisture.

Other abbreviations, used in special applications, are defined where they appear.

**DISPOSAL DATE** - Our reports now include the date on which we will dispose of your samples. (In limited instances, we may require that the samples be returned to your custody.) If you wish to have the samples back, or would like to have them stored for a longer period, please notify us before the disposal date.







# Testing Laboratories, Inc.

940 South Harney St., Seattle, WA 98108 (206) 767-5060 FAX (206) 767-5063

Chemistry, Microbiology, and Technical Services

CLIENT : Philip Environmental Services

## Certificate of Analysis

Work Order # 95-07-371

### TESTS PERFORMED AND RESULTS:

Analyte	Units	<u>01</u>
Arsenic (Method 6010)	ug/L	20. U
Chromium (Method 6010)	ug/L	1. U
Lead (Method 6010)	ug/L	10.
Mercury (Method 7470)	ug/L	0.2 U



# Laucks

## Testing Laboratories, Inc.

940 South Harney St., Seattle, WA 98108 (206) 767-5060 FAX (206) 767-5063

Chemistry, Microbiology, and Technical Services

REPORT ON SAMPLE: 9507371-01A

Client Sample ID: 93-Drum

Collection Date : 07/12/95

Date Received : 07/13/95

Date Extracted : 07/13/95

Date Analyzed : 07/17/95

Date Confirmed : 07/17/95

Test Code : 8080\_W

Test Method : SV 8080

Extraction Method : SU 3510

Analyte	Result (ug/L)	SDL (ug/L)	Analyte	Result (ug/L)	SDL (ug/L)
Alpha-BHC .....	0.01 U	0.01	Endosulfan Sulfate .....	0.01 U	0.01
Beta-BHC .....	0.03	0.01	4,4'-DDT .....	0.07 P	0.01
Delta-BHC .....	0.01 U	0.01	Methoxychlor .....	0.10 U	0.10
Gamma-BHC .....	0.01 U	0.01	Endrin Aldehyde .....	0.01 U	0.01
Heptachlor .....	0.01 U	0.01	Chlordane .....	0.05 U	0.05
Aldrin .....	0.01 U	0.01	Toxaphene .....	2.0 U	2.0
Heptachlor Epoxide .....	0.01 U	0.01	Aroclor-1016 .....	0.50 U	0.50
Endosulfan I .....	0.01 U	0.01	Aroclor-1221 .....	0.50 U	0.50
Dieldrin .....	0.01 U	0.01	Aroclor-1232 .....	0.50 U	0.50
4,4'-DDE .....	0.10	0.01	Aroclor-1242 .....	0.50 U	0.50
Endrin .....	0.04 U	0.04	Aroclor-1248 .....	0.50 U	0.50
Endosulfan II .....	0.01 U	0.01	Aroclor-1254 .....	0.50 U	0.50
4,4'-DDD .....	0.86	0.01	Aroclor-1260 .....	0.50 U	0.50

Surrogate recovery report for sample 9507371-01A

Surrogate	Percent Recovery	Limits:	
		Min.	Max.
Isodrin .....	67	39	145
Tetrachloro-m-xylene .....	64	25	139
Decachlorobiphenyl .....	94	30	160

\* = Indicates that recovery is outside control limits



# Laucks

## Testing Laboratories, Inc.

940 South Harney St., Seattle, WA 98108 (206) 767-5060 FAX (206) 767-5063

Chemistry, Microbiology, and Technical Services

REPORT ON SAMPLE: 9507371-01A

Client Sample ID: 93-Drum

Collection Date : 07/12/95  
 Date Received : 07/13/95  
 Date Analyzed : 07/19/95  
 Date Confirmed : 07/26/95

Test Code : 8240\_U  
 Test Method : SW 8240  
 Report Units : ug/L

Analyte	Result	SDL	Analyte	Result	SDL
Dichlorodifluoromethane ...	1 U	1	Benzene .....	1 U	1
Chloromethane .....	1 U	1	1,2-Dichloroethane.....	1 U	1
Vinyl chloride .....	1 U	1	Trichloroethene .....	1 U	1
Bromomethane .....	1 U	1	1,2-Dichloropropane .....	1 U	1
Chloroethane .....	1 U	1	Bromodichloromethane .....	1 U	1
Trichlorofluoromethane ....	1 U	1	2-Chloroethyl vinyl ether.	1 U	1
Acrolein .....	3 U	3	cis-1,3-Dichloropropene ..	1 U	1
1,1-Dichloroethene .....	1 U	1	4-Methyl-2-pentanone .....	2 U	2
Acetone .....	2 U	2	Toluene .....	1 U	1
Carbon disulfide .....	1 U	1	trans-1,3-Dichloropropene.	1 U	1
Methylene chloride .....	1 U	1	1,1,2-Trichloroethane ....	1 U	1
Acrylonitrile .....	2 U	2	Tetrachloroethene .....	1 U	1
trans-1,2-Dichloroethene .	1 U	1	2-Hexanone .....	2 U	2
1,1-Dichloroethane .....	1 U	1	Dibromochloromethane .....	1 U	1
Vinyl acetate .....	1 U	1	Chlorobenzene .....	1 U	1
cis-1,2-Dichloroethene ...	1 U	1	Ethylbenzene .....	1 U	1
2-Butanone .....	1 U	1	m,p-Xylenes .....	1 U	1
Chloroform .....	1 U	1	o-Xylene .....	1 U	1
1,1,1-Trichloroethane ....	1 U	1	Styrene .....	1 U	1
Carbon tetrachloride .....	1 U	1	Bromoform .....	1 U	1
			1,1,2,2-Tetrachloroethane.	1 U	1





# Testing Laboratories, Inc.

940 South Harney St., Seattle, WA 98108 (206) 767-5060 FAX (206) 767-5063

Chemistry, Microbiology, and Technical Services

### Surrogate recovery report for sample 9507371-01A

Surrogate	Percent Recovery	Limits:	
		Min.	Max.
d4-1,2-Dichloroethane .....	98	78	118
d8-Toluene .....	101	83	117
p-Bromofluorobenzene .....	89	81	115

\* = Indicates that recovery is outside control limits



# Laucks <sup>Since</sup> 1908

## Testing Laboratories, Inc.

940 South Harney St., Seattle, WA 98108 (206) 767-5060 FAX (206) 767-5063

Chemistry, Microbiology, and Technical Services

REPORT ON SAMPLE: 9507371-01A

Client Sample ID: 93-Drum

Collection Date : 07/12/95

Date Received : 07/13/95

Date Extracted : 07/13/95

Date Analyzed : 07/13/95

Test Code : LXTCSW

Test Method : SW 8270

Extraction Method : SW 3520

Analyte	Result (ug/L)	SDL (ug/L)	Analyte	Result (ug/L)	SDL (ug/L)
Phenol .....	1 U	1	3-Nitroaniline .....	5 U	5
Aniline .....	5 U	5	Acenaphthene .....	1 U	1
Bis(2-chloroethyl)ether :...	1 U	1	2,4-Dinitrophenol .....	10 U	10
2-Chlorophenol .....	1 U	1	4-Nitrophenol .....	10 U	10
1,3-Dichlorobenzene .....	1 U	1	Dibenzofuran .....	1 U	1
1,4-Dichlorobenzene .....	1 U	1	2,4-Dinitrotoluene .....	2 U	2
Benzyl alcohol .....	1 U	1	Diethyl phthalate .....	1 U	1
1,2-Dichlorobenzene .....	1 U	1	4-Chlorophenyl phenylether .	1 U	1
2-Methylphenol .....	1 U	1	Fluorene .....	1 U	1
Bis(2-chloroisopropyl)ether	1 U	1	4-Nitroaniline .....	2 U	2
4-Methylphenol .....	1 U	1	4,6-Dinitro-2-methylphenol .	10 U	10
N-Nitroso-di-n-propylamine .	1 U	1	N-Nitrosodiphenylamine .....	1 U	1
Hexachloroethane .....	2 U	2	1,2-Diphenylhydrazine .....	2 U	2
Nitrobenzene .....	1 U	1	4-Bromophenyl phenylether ..	2 U	2
Isophorone .....	1	1	Hexachlorobenzene .....	2 U	2
2-Nitrophenol .....	2 U	2	Pentachlorophenol .....	10 U	10
2,4-Dimethylphenol .....	1 U	1	Phenanthrene .....	1 U	1
Benzoic acid .....	4 J	25	Anthracene .....	1 U	1
Bis(2-chloroethoxy)methane .	1 U	1	Carbazole .....	1 U	1
2,4-Dichlorophenol .....	2 U	2	Di-n-butyl phthalate .....	1	1
1,2,4-Trichlorobenzene .....	1 U	1	Fluoranthene .....	1 U	1
Naphthalene .....	1	1	Pyrene .....	1	1
4-Chloroaniline .....	1 U	1	Benzidine .....	25 U	25
Hexachlorobutadiene .....	1 U	1	Butylbenzylphthalate .....	1 U	1
4-Chloro-3-methylphenol ....	2 U	2	3,3'-Dichlorobenzidine .....	10 U	10
2-Methylnaphthalene .....	1 U	1	Benzo(a)anthracene .....	1 U	1
Hexachlorocyclopentadiene ..	2 U	2	Chrysene .....	1 U	1
2,4,6-Trichlorophenol .....	2 U	2	Bis(2-ethylhexyl)phthalate .	36 B	1
2,4,5-Trichlorophenol .....	2 U	2	Di-n-octyl phthalate .....	1 U	1
2-Chloronaphthalene .....	1 U	1	Benzo(b)fluoranthene .....	1 U	1
2-Nitroaniline .....	2 U	2	Benzo(k)fluoranthene .....	1 U	1
Dimethyl phthalate .....	1 U	1	Benzo(a)pyrene .....	1 U	1
Acenaphthylene .....	1 U	1	Indeno(1,2,3-cd)pyrene .....	1 U	1
2,6-Dinitrotoluene .....	2 U	2	Dibenzo(a,h)anthracene .....	1 U	1
			Benzo(g,h,i)perylene .....	1 U	1



# Laucks <sup>Since</sup> 1908

## Testing Laboratories, Inc.

940 South Harney St., Seattle, WA 98108 (206) 767-5060 FAX (206) 767-5063

Chemistry, Microbiology, and Technical Services

### GC/MS ABM surrogate recovery report for sample 9507371-01A

Surrogate	Percent Recovery	Limits:	
		Min.	Max.
Nitrobenzene-d5 .....	85	38	123
2-Fluorobiphenyl .....	81	44	115
Terphenyl-d14 .....	45	20	151
Phenol-d5 .....	82	10	135
2-Fluorophenol .....	85	10	128
2,4,6-Tribromophenol .	94	31	139
1,2-Dichlorobenzene-d4	69	47	103
2-Chlorophenol-d4 ....	90	22	127

\* = Indicates that surrogate recovery is outside of control limits.



# Laucks <sup>Since</sup> 1908

## Testing Laboratories, Inc.

940 South Harney St., Seattle, WA 98108 (206) 767-5060 FAX (206) 767-5063

Chemistry, Microbiology, and Technical Services

GC/MS ABH surrogate recovery report for sample 9507371-01A

Surrogate	Percent Recovery	Limits:	
		Min.	Max.
Nitrobenzene-d5 .....	85	38	123
2-Fluorobiphenyl .....	81	44	115
Terphenyl-d14 .....	45	20	151
Phenol-d5 .....	82	10	135
2-Fluorophenol .....	85	10	128
2,4,6-Tribromophenol .	94	31	139
1,2-Dichlorobenzene-d4	69	47	103
2-Chlorophenol-d4 ....	90	22	127

\* = Indicates that surrogate recovery is outside of control limits.



**WILLIAMS ENVIRONMENTAL SERVICES, INC.**



**FACSIMILE TRANSMITTAL COVER SHEET**

DATE: 8/4

\*\*\*\*\*  
PLEASE DELIVER THE FOLLOWING PAGES

TO: GEORGE

COMPANY/LOCATION: WOODS

FAX NUMBER: \_\_\_\_\_

TOTAL NUMBER OF PAGES 5 INCLUDING COVER SHEET

FROM: GTW  
WILLIAMS ENVIRONMENTAL SERVICES, INC.  
2075 WEST PARK PLACE  
STONE MOUNTAIN, GEORGIA 30087  
PHONE (404) 879-4107  
FAX (404) 879-4831

IF PROBLEMS OCCUR DURING TRANSMISSION,  
CALL SYLVIA JONES AT (404) 879-4107.

COMMENTS RESPONSE TO EPA COMMENT LETTER.  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
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\_\_\_\_\_  
\_\_\_\_\_



**WILLIAMS ENVIRONMENTAL SERVICES, INC.****VIA FACSIMILE****August 4, 1995****Ms. Lynda Priddy  
Remedial Project Manager  
On-Scene Coordinator  
USEPA Region X  
1200 Sixth Avenue  
Seattle, WA 98101****Re: Woods Industries Site  
Yakima, Washington  
Number of Pages: 4  
Transmittal No.: 0150****Subject: Response to EPA Comments on Decon  
Williams Project No.: 0365-001-110****Dear Lynda:**

**Williams Environmental Services, Inc. (Williams) has reviewed the EPA's comments of August 2, 1995, regarding decontamination and demobilization of TPU #4 from the Woods Industries Site. Williams' responses are listed below.**

**Comment 1: The work plan requires that organic materials be removed from the rotary dryer by heating the unit at 800°F for one hour. Soil will have to be processed through the unit to get the unit up to temperature and then once 800°F is reached soil will have to be processed through the unit for one hour. Clean soil or soil that has been shown to only contain contaminants below residential cleanup numbers can be used for this process.**

**Response 1: Williams concurs with this comment. Soil which has already been shown to meet the clean up goals will be used for this purpose.**

**Comment 2: Note that decon should proceed in such a way as to include Williams' response to EPA work plan comments. Williams' responses are included in the Appendices to the Work Plan, specifically but not limited to Appendix T, pages 11-13, responses 17, 19-22 and Appendix U, page 4, response 8.**

**Response 2: Williams concurs with this comment. Decon of the equipment will proceed in accordance with the responses listed in Appendices T and U of the Work Plan.**

Ms. Lynda Priddy  
August 4, 1995  
Page Two

**Comment 3:** What is going to happen to internal packing, e.g., in the scrubber? If contaminated, where will they be deposited?

**Response 3:** Williams contends that the packing in the scrubber is not contaminated. Williams demonstrated this during the Performance Test. Composite samples of the scrubber blowdown were analyzed for the site contaminants. Analytical results showed that the contaminants were well below the cleanup goals. This is the only method by which the scrubber packing could become contaminated; therefore, the packing is considered clean since it is virtually impermeable.

**Comment 4:** How long is it going to take to decon the unit. What is a projected start date?

**Response 4:** Williams anticipates a total of two weeks for decon activities. This includes processing sump and frac tank sludge through the desorber, processing clean soil through the desorber, pulsing the baghouse for an additional 30 minutes after all soil has been processed, cleaning all equipment, and placing all residual sludges into drums for disposal.

Another week is anticipated for preparing and loading the equipment for trucking.

The projected start date for decon and demob is Saturday, August 5, 1995, or when the material on the waste feed pad has been completely processed.

**Comment 5:** What are the manifest codes that will be used for the sediments in the drums containing Aklard sump material and the spent carbon from the water treatment system.

**Response 5:** Williams has prepared manifests for both the PPE and the spent carbon on site. The manifest codes used are the same as those Burlington provided for the manifests relating to the debris being disposed of by Olympus. The waste codes are U061 and U129. Burlington has agreed to sign the manifest as generator for the PPE but so far has refused to sign as generator on the spent carbon manifest.

**Comment 6:** What will happen to residual material if it is not all treated in the unit? To sludge-type material collected from the sump? If the sludge material cannot be treated in the unit, where will it be disposed of?

**Response 6:** Williams will drain frac tanks 1 and 2, remove all sludge possible, and process it through the unit. Sumps will be cleaned prior to decontamination

Ms. Lynda Priddy  
August 4, 1995  
Page Three

**and sludge processing. Any residual sludge remaining and resulting from the decontamination activities will be placed in drums for disposal.**

**Comment 7: How will it be determined that the baghouse is clean? That the bags have been pulsed sufficiently?**

**Response 7: Williams will pulse the baghouse for thirty (30) minutes after the one hour clean run has been completed.**

**Comment 8: What is going to be the disposition of site debris, e.g. plastic liners, scrap metal, used disposable protective gear?**

**Response 8: Williams has made arrangements for the disposal of their PPE. Burlington is responsible for the disposal of liners, scrap metal, etc.**

**Comment 9: When are the haul roads and screen area going to be scraped and sampled? How does this coordinate with the rest of Williams' and Philip's activities?**

**Response 9: Williams has already scraped the screen area and plans to begin the haul road on Friday, August 4. Philip is responsible for sampling the haul roads as per EPA's comment 17 in Appendix T of the Work Plan.**

**Comment 10: How is Williams going to decon and demob from the site given the limited amount of storage space on-site. Is Williams going to move pieces of equipment from the site as they are deconned?**

**Response 10: Yes, Williams plans to remove equipment from the site as it is deconned.**

**Comment 11: Debris still needs to be cleaned out of the cobble piles.**

**Response 11: This item is not part of Williams' scope of work with Philip. Removal of debris from the cobble piles needs to be addressed by Philip.**

**Additional Decon Comments:**

**Comment 1: The blowdown water remaining after decon must be treated before it can be disposed of on-site or sampled to show it is below cleanup numbers. An alternative is to get a discharge permit from the City of Yakima.**

**Response 1: Williams will treat all blowdown water. This water will be sampled to assure it is below cleanup levels prior to disposal on-site.**

Ms. Lynda Priddy  
August 4, 1995  
Page Four

**Comment 2:** Visual inspection of the baghouse is also a pre-requisite for determining that the baghouse has been cleaned.

**Response 2:** Williams will visually inspect the baghouse after pulsing is complete to ensure that the bags are free of dust.

Should you have any further questions regarding completion of the job, please contact me at (404) 879-4107.

Sincerely,

**WILLIAMS ENVIRONMENTAL SERVICES, INC.**

George A. Harbour  
Project Manager  
GAH:gw

cc: Z. Lowell Taylor  
James E. Sanders  
B.J. Bartee  
David Eagleton (Philp)

MEMORANDUM

DATE: August 21, 1995

TO: David Eagleton

cc: Greg Koester  
Jeff Kaestner

FROM: Jeff Christman

SUBJECT: Results of Statistical Analysis of Southern Temporary Storage Area Verification Samples at the Woods Industries Site, Project Number 12883088.9009.77

This memorandum discusses the results of the statistical analysis of the 12 verification samples collected in from the Southern Temporary Storage area of the Woods Industries site. The results of this analysis indicate that the Southern Temporary Storage area is clean.

This analysis consisted of statistically comparing the concentrations of 18 parameters to their cleanup levels. Three statistical criteria were used to compare the Southern Temporary Storage area verification samples to their respective cleanup levels. These criteria are specified in MTCA 173-340-740(7)(e)(i through iii) and include:

1. Perform a one-tailed test of the null hypothesis that the true mean soil concentration exceeds the cleanup level. To satisfy the requirement of this test, the upper confidence limit of a 95-percent one-sided confidence interval for the mean soil concentration shall be less than the cleanup level.
2. No single sample concentration shall be greater than two times the soil cleanup level.
3. At most 10 percent of the sample concentrations shall exceed the soil cleanup level.

One concentration of 4,4'-DDT was greater than its cleanup level, but was not greater than two times its cleanup level. The maximum concentration of each remaining parameter was less than its respective cleanup level, therefore, criteria 2 and 3 were satisfied.

Criteria 1 was satisfied because the upper confidence limit of a one-sided 95-percent confidence interval for the mean soil concentration was less than the cleanup level for each parameter. USEPA guidance (1989) was used to evaluate Criteria 1. USEPA guidance (1989) was used because it is consistent with the underlying intent of

Page 2

Subject: Results of Statistical Analysis of Southern Temporary Storage Area...

Memo From: Jeff Christman

August 21, 1995

performing a one-tailed test of hypothesis concerning a mean concentration. Furthermore, use of USEPA guidance (1989) should have prevented the calculation of unusual and unreliable upper confidence interval concentrations. See my August 21, 1995 memorandum on the results of the statistical analysis of 1995 Northern Excavation Verification area samples for a more detailed discussion.

Please call me if you have any questions regarding this analysis.

References:

U.S. Environmental Protection Agency (USEPA). 1989. Methods for Evaluating the Attainment of Cleanup Standards Volume 1: Soils and Solid Media. Office of Policy, Planning, and Evaluation. Statistical Policy Branch (PM-223). 401 M Street, S.W., Washington, DC 20460. February.



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY**  
**REGION 10**  
 1200 Sixth Avenue  
 Seattle, Washington 98101

Reply To  
 Attn Of: HW-113

Mr. Bruce A. Sheppard  
 Manager Environmental Projects  
 Burlington Northern Railroad  
 Environmental Engineering  
 Suite 2000, 999 Third Avenue  
 Seattle, Washington 98104-1105

OPTIONAL FORM 99 (7-90)

**FAX TRANSMITTAL**

# of pages **2**

To <i>Lynda Priddy</i>	From <i>Lynda Priddy</i>
Date/Agency <i>8</i>	Phone # <i>(206) 553-1987</i>
Fax # <i>(618) 281-5120</i>	Fax # <i>(206) 553-0124</i>

NSN 7540-01-317-7368

5099-101

GENERAL SERVICES ADMINISTRATION

Dear Mr. Sheppard:

On August 15, 1995 I met with representatives from Philip Environmental and Williams Environmental to discuss the decontamination/demobilization process planned for the Woods Site. In that meeting we discussed several procedures for handling the potentially contaminated soil that remained on the pad and the deposition of the baghouse dust.

The Williams Work Plan specified that "all soils and sediment collected from the work pad would be processed through the unit." On August 15th when I visited the site I observed that there was potentially contaminated soil remaining on the pad and the thermal treatment unit was in the process of being disassembled. Consequently, decontamination at the Woods Site has deviated from the procedures specified in the Work Plan. In order to address EPA concerns about potentially contaminated soil remaining on the pad and disposal options for that potentially contaminated soil, I proposed the following as an alternative:

1. the pad shall cleaned and subject to a visual inspection.
2. soil collected from the east side of the pad curb (treated soil side) should be sampled separately from soil collected from the west side of the curb (contaminated soil side).
3. if soil sample results are above clean up numbers, then the soil will need to be treated to clean up numbers or disposed of off-site. If the soil sample results are below clean up numbers, then the soil will need to be disposed of on-site.

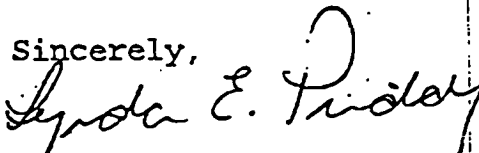
Also. the Williams Work Plan specified that the decontamination sequence would be as follows: "(o)perate unit at 800 degrees F for one hour to treat and remove all remaining soil residue. Any remaining baghouse dust is fed into the Dobson

Collar for further treatment prior to discharge. All soils existing the unit are removed to the interim storage area for subsequent analysis." Also on August 15, I observed baghouse dust remaining in the floor of the baghouse and I observed baghouse dust that had been disposed of on a treated soil pile in Bin 3. Baghouse dust remaining in the baghouse untreated and disposal of untested baghouse dust onto a treated pile is not consistent with the procedures outlined in the Work Plan. Therefore, I proposed the following to address EPA's concerns regarding the potential contamination of the baghouse dust:

1. sample the baghouse dust in the bottom of the baghouse. If the results are above clean up numbers then the baghouse dust will need to be treated to clean up numbers or disposed of off-site.
2. sample the baghouse dust that was disposed of on the treated soil pile in Bin 3. If the results are above clean up numbers then the baghouse dust will need to be treated to clean up numbers or disposed of off-site.

If you have any other questions please contact me at (206) 553-1987.

Sincerely,



Lynda E. Priddy  
Environmental Protection  
Specialist  
Hazardous Waste Division

cc: David Eagleton, Burlington Environmental - Columbia  
Mark Fleri, Williams Environmental Services, Inc  
Administrative Record for Soil Treatment Removal - HW-070  
Cathy Massimino, EPA - HW-111  
Fritz Heneman, URS - Vertac



**WILLIAMS ENVIRONMENTAL SERVICES, INC.**



VIA FACSIMILE ONLY

24 August 1995

Ms Lynda E. Priddy  
Remedial Project Manager  
Hazardous Waste Division  
USEPA, Region 10  
1200 Sixth Avenue  
Seattle, WA 98101

Post-it® Fax Note	7671	Date	8/24/95	# of pages	1
To	David Eagleton	From	B.J. Bartee		
Co./Dept	Philip	Co.	WEST		
Phone #		Phone #			
Fax #	618/281-5120	Fax #			

Re: Woods Industries Site, Yakima, Washington  
Transmittal No.: 154

Subject: Baghouse Residual Soils

Dear Lynda:

In response to your letter dated August 23, 1995, Williams Environmental Services, Inc. (Williams) submits the following plan for removal and disposal of baghouse dust:

Baghouse Dust Already Removed:

- This soil will be shoveled into 55 gallon drums and disposed of off-site, probably with Chemical Waste Management.

Baghouse Dust

- The baghouse will be flushed with water to remove the residual dust.
- The dust will be collected on the pad and shoveled into 55 gallon drums.
- This dust will be disposed of off-site, probably with Chemical Waste Management.

Your expeditious review and approval is requested so that decontamination efforts can be continued uninterrupted. If you have any questions please call me at (404) 879-4060.

Sincerely,

**WILLIAMS ENVIRONMENTAL SERVICES, INC.**

B.J. Bartee  
Project Manager

BJB:pc

cc: David Eagleton  
Jack Lane  
Jim Sanders

- DRAFT -

August 25, 1995  
Project 12883088

Ms. Lynda Priddy  
On-Scene Coordinator/Remedial Project Manager  
U.S. Environmental Protection Agency  
1200 Sixth Avenue  
Seattle, Washington 98101

Dear Ms. Priddy:

**Subject: Summary of Excavation Activities for Sample NV-10  
Woods Industries Site, Yakima, Washington**

On behalf of Burlington Northern Railroad (BNRR), Philip Environmental Services Corporation (Philip) is writing this letter to provide the information you requested August 23, 1995, during a phone conversation with Jeff Kaestner, Philip's site supervisor. In that conversation, you requested that Philip provide additional information regarding the excavation and sampling activities performed for the area around Verification Sample NV-10.

#### **Sequence of Events**

After soil from the northern temporary soil storage area was screened and moved to the waste feed pad earlier this year, Philip began characterizing soils beneath the northern temporary soil storage area. Approximately 82 preliminary samples were collected below or around the area to guide continued excavation and prepare for verification sampling. The sampling grid for this area was approved by USEPA before sampling began.

On July 7, 1995, Philip collected Verification Sample NV-10 at the location shown (along with other samples collected that day) on the sampling grid in Attachment 1.

On July 14, Philip received analytical data that indicated the dieldrin concentration in sample NV-10 was 1.6 milligrams per kilogram (mg/kg). This concentration exceeds the dieldrin cleanup level of 0.63 mg/kg.

- DRAFT -

On July 20, Lynda Priddy and Greg Koester (Philip) discussed, during a meeting at the site, measures to further delineate the extent of contamination for the area surrounding Verification Sample NV-10. Lynda Priddy suggested that further excavation of Area NV-10 should extend to the nearest 'clean' sample location to prevent any 'gaps.' An agreement was reached that four preliminary samples would be collected around Sample Location NV-10. These samples would be used to guide future excavation to the nearest clean sample locations surrounding NV-10.

On July 21, Philip collected four preliminary samples (NE-82 through NE-85) surrounding Sample Location NV-10 to implement the approach agreed upon with Lynda Priddy during the July 20 site visit. A sketch of these sampling locations is also provided in Attachment 1.

On July 23, before analytical data was received for NE-82, NE-83, NE-84, and NE-85, Olympus Environmental excavated Area NV-10. The extent of the excavation (shown on the sample location sketch in Attachment 1) was within the area bounded by these four samples.

On July 24, Preliminary Samples NE-98 and NE-99 were collected from the base of this area excavated on July 23, as shown on the sample location sketch in Attachment 1.

On July 26, analytical results for Samples NE-82 through NE-85 were received. The concentration of all indicator parameters, including dieldrin, in the southern two samples (NE-82 and NE-84) were below cleanup levels. Based upon these results, the extent of contamination near Area NV-10 does not extend south of Samples NE-82 and NE-84 and no further excavating was required toward the south. The north samples (NE-83 and NE-85) exceeded cleanup levels, requiring additional excavation in that direction.

On July 27, Greg Koester and Lynda Priddy agreed, during a meeting at the site, that one composite verification sample should be collected from each of the three recent excavations in the north part of the site, pending results of preliminary samples. Lynda Priddy observed the locations of recent preliminary samples and excavations.

On July 28, Philip received analytical results for the two preliminary samples collected within the excavation (NE-98 and NE-99). Indicator parameter concentrations, including dieldrin, were less than cleanup levels. This indicates that the depth of contamination had been defined and that excavation would not have to extend deeper within that area.

On July 31, Olympus excavated the area surrounding Preliminary Samples NE-83 and NE-85. Philip collected Preliminary Samples NE-104 through NE-107 from the base of this new

- DRAFT -

excavation. The extent of the excavation and the preliminary sample locations are shown on the sample location sketch included in Attachment 1.

On August 1, David Lawrence (Philip) and Ray Wilson (Olympus) showed Lynda Priddy preliminary sample locations in and around Area NV-10 and available sampling data for this area.

On August 2, Philip received analytical data for Samples NE-104 through NE-107. Two of the four samples collected (NE-108 and NE-104) along the west edge of the excavation were above cleanup levels for dieldrin. The dieldrin concentrations were 0.89 mg/kg and 2.6 mg/kg, respectively, in these two samples. After receipt of this analytical data, David Eagleton faxed Lynda Priddy the sample location sketch for Area NV-10 and discussed the sample results in a telephone conversation with her. David Eagleton and Lynda Priddy agreed upon the following the following course of action: additional excavation would be performed around the 'hot' samples recently received; preliminary samples would be collected from the base of the excavation after these excavation activities; and two additional preliminary samples would be collected on the haul road south of Area NV-10. Following this conversation, Olympus excavated the area around samples NE-108 and NE-104. Philip then collected four additional preliminary samples (NE-108 through NE-111) from within the excavation, as shown in the sample location sketch (Attachment 1).

On August 3, Philip collected two additional preliminary samples (NE-112 and NE-113) on the haul road south of Area NV-10, as shown on sample location sketch included in Attachment 1.

On August 4, Philip received analytical data for Preliminary Samples NE-108 through NE-111. Results were below cleanup levels for all indicator parameters except for dieldrin, which ranged from 0.8 mg/kg to 1.8 mg/kg. In a telephone conversation later that day, David Eagleton informed Lynda Priddy of the recent analytical results and discussed the feasibility of raising the dieldrin cleanup level based upon the overall risk level. In another telephone conversation that same day, David Eagleton and Lynda Priddy agreed to excavate additional soil around Area NV-10 and to collect one composite verification sample, rather than collecting additional preliminary samples. David Eagleton and Lynda Priddy also agreed that, depending on the results of that verification sample, it may be possible to pursue the feasibility of raising the dieldrin cleanup level. Following these conversations, Olympus excavated additional soil from the area around NV-10 and Philip collected one composite verification sample (NV-10).

On August 7, Philip received analytical results for Preliminary Samples NE-112 and NE-113 collected from the haul road south of NV-10. All indicator parameters were below cleanup levels

Page 4  
Ms. Lynda Priddy  
August 25, 1995

- DRAFT -

in these samples. These preliminary sample results and recent activities for Area NV-10 were discussed in a telephone conversation between Lynda Priddy and David Eagleton.

On August 17, Philip received analytical results from the Verification Sample NV-10 collected on August 4. In this sample, the dieldrin concentration was 1.3 mg/kg, which is twice the cleanup level of 0.63 mg/kg. All other indicator parameters were below their cleanup levels. The Model Toxics Control Act allows 10 percent of verification samples to exceed the cleanup level, but not more than twice the cleanup level. This is described in the Soil Removal Work Plan for the site.

On August 18, Philip faxed these analytical results to Lynda Priddy.

On August 21, Philip submitted the statistical analysis for verification samples collected for the north and south parts of the site for USEPA approval to backfill over this area.

Page 5  
Ms. Lynda Priddy  
August 25, 1995

- DRAFT -

**Closing**

On behalf of BNRR, Philip is requesting your approval that the northern and southern areas of the site have been remediated. Backfilling of treated soil and cobbles is a critical step for completion of the soil treatment phase of the project. Therefore, your expedited review of the documentation provided by BNRR that these areas are clean would be greatly appreciated. If you have any questions regarding soil removal, do not hesitate to contact me at your earliest convenience.

Sincerely yours,

PHILIP ENVIRONMENTAL SERVICES CORPORATION

**DRAFT**

David W. Eagleton, P.E.  
Project Manager  
Environmental Engineer

GAK/kdm/NV10.DOC

Attachment: 1. Sample Location Sketches and Data

cc: Bruce Sheppard (BNRR)  
Jeff Kaestner (Philip)

ATTACHMENT 1

Sample Location Sketches and Data

# Soil Treatment Final Report Woods Industries Site Yakima, Washington

Volume I — Report and Appendices A Through D

August 7, 1996

Prepared for:

**BURLINGTON NORTHERN RAILROAD**  
Seattle, Washington

PHILIP ENVIRONMENTAL SERVICES CORPORATION  
210 West Sand Bank Road  
Post Office Box 230  
Columbia, Illinois 62236-0230

Project 12883088





**APPENDIX C**

**Revised Notification to the Yakima County Clean Air Authority**

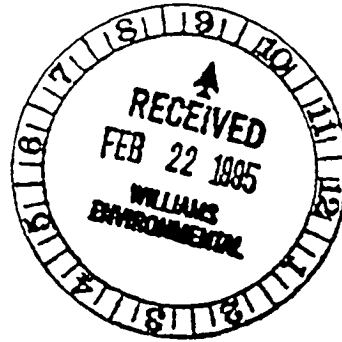
Yakima County

# Clean Air Authority

County Courthouse, Yakima, WA 98901  
(509) 575-4116

February 17, 1995

Williams Environmental Services, Inc.  
Attn: Greg Whetstone, Project Engineer  
2076 West Park Place  
Stone Mountain, GA 30087



Re: Revision of Notification of Intent to Install a Temporary Source (NCT-05-93),  
Using a Thermal Desorption Process for a Soil Remediation Site at 2 East King  
Street, Yakima.

Dear Mr. Whetstone,

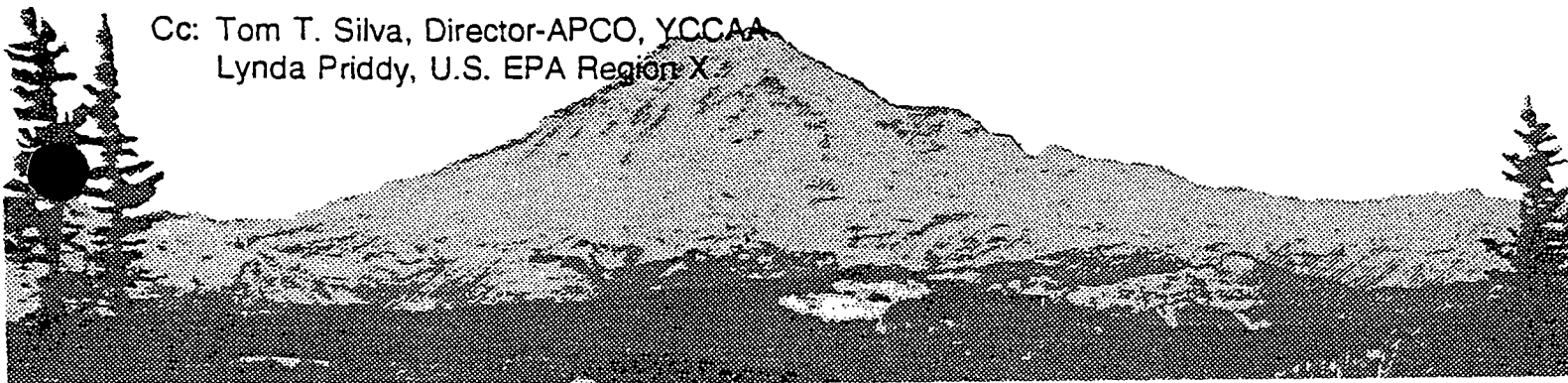
The above referenced notification is revised per your Work Plan dated 11/18/94 and operation extension request dated 1/5/95, clarified as follows: Due to the project's approximate one year delay in implementation, you have requested a corresponding revision in the above referenced notice. Permission to operate is therefore extended until August 31, 1995, still contingent upon a test burn to demonstrate compliance as outlined in your Work Plan. Please note that all other provisions as outlined in our letter to Williams Environmental, Inc. dated 12/14/93, remain *en force*.

Sincerely,

A handwritten signature in black ink, appearing to read "Chris E. Svendsen".

Chris E. Svendsen  
Assistant Director  
(509)575-4116

Cc: Tom T. Silva, Director-APCO, YCCAA  
Lynda Priddy, U.S. EPA Region X



# Soil Treatment Final Report Woods Industries Site Yakima, Washington

Volume I — Report and Appendices A Through D

August 7, 1996

Prepared for:

**BURLINGTON NORTHERN RAILROAD**  
Seattle, Washington

PHILIP ENVIRONMENTAL SERVICES CORPORATION  
210 West Sand Bank Road  
Post Office Box 230  
Columbia, Illinois 62236-0230

Project 12883088



APPENDIX D

Weekly Project Status Reports



**BURLINGTON  
ENVIRONMENTAL**  
*A Philip Environmental Company*

February 28, 1995  
Project 12883088

Ms. Lynda Priddy  
On-Scene Coordinator/Remedial Project Manager  
U.S. Environmental Protection Agency, Region X  
1200 Sixth Avenue  
Seattle, Washington 98101

Dear Ms. Priddy:

**Subject: Weekly Status Report  
February 21 to February 27, 1995  
Woods Industries Site  
Yakima, Washington**

On behalf of Burlington Northern Railroad (BNRR), Burlington Environmental Inc. (Burlington Environmental) hereby submits the weekly status report for soil treatment activities at the Woods Industries Site during the above period. This report is submitted in compliance with Administrative Order Number 1087-03-18-106.

The USEPA approved the Soil Treatment Work Plan, the Ambient Air Monitoring Plan, and the Ambient Air Quality Impact Report for soil treatment activities on January 31, 1995. With this approval Williams Environmental Services, Inc. (Williams) began mobilizing equipment to the Woods site from a site in Franklin, New Jersey called the Metaltec site.

As agreed, the weekly reporting requirements for the soil treatment implementation phase were initially fulfilled through numerous telephone calls between Lynda Priddy of the USEPA and David Eagleton of Burlington Environmental in which the status of soil treatment was discussed. This is the first of the written weekly site status reports to be provided to the USEPA for soil treatment activities.

## **PROJECT ACTIVITIES**

---

### **February 21**

Burlington Environmental began the sixth day of background air monitoring.

Page 2  
Ms. Lynda Priddy  
February 28, 1995

Williams Environmental (Williams) received quencher/pump skid, organized Akland Building storage area, and continued with equipment assembly.

---

**February 22**

Burlington Environmental collected sixth and final day of background air monitoring and prepared for air monitoring during performance testing.

Williams received the oxidizer and the baghouse and continued with equipment assembly.

Lynda Priddy conducted a site walk.

---

**February 23**

On behalf of Burlington Environmental, Gary Wentz conducted a third-party audit on the air monitoring program.

Williams received and placed scrubber, began installing platform on stack, set scrubber pump skid and LPG pump skid, and set quencher.

---

**February 24**

Burlington Environmental performed air monitoring equipment maintenance and recalibrated PM<sub>10</sub> samplers. Other air monitoring equipment was secured until startup/shakedown activities began. Mercury vapor samples were collected and analyzed on-site to establish background.

---

**February 25**

Williams received and placed dryer, placed control trailer, and welded brackets on scrubber.

---

**February 26**

On behalf of Burlington Environmental, Gary Wentz performed an audit on PM<sub>10</sub> samplers.

Williams placed feed metering unit and pugmil, positioned lifting and stacking conveyors, and placed decon trailer immediately west of Akland Building.

---

**February 27**

Williams received one of three frac tanks, began installing LPG line to burners, installed water line to decon trailer, connected power to control trailer, poured

Page 3  
Ms. Lynda Priddy  
February 28, 1995

concrete pad for NaOH tank, began installing duct work from ID fan and oxidizer, set up control computer, and began connecting power to several components.

### **PROBLEMS ENCOUNTERED**

No problems or difficulties encountered.

### **ANALYTICAL DATA**

Air monitoring analytical data was received during this reporting period.

### **UPCOMING ACTIVITIES FOR NEXT REPORTING PERIOD**

The arrival of all the remaining components and continued assembly of TPU-IV.

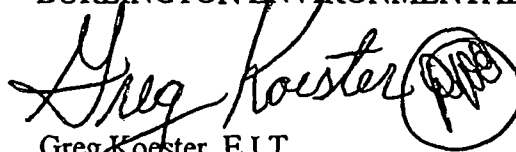
One or two test pits may be excavated off site approximately 10 feet east of the area where TPH contaminated soil was excavated from the Woods site to evaluate whether TPH contamination extends off site.

### **CLOSING**

If you have any questions regarding this weekly status report, do not hesitate to contact me at (509) 575-7953 or David Eagleton at (618) 281-7173.

Sincerely yours,

**BURLINGTON ENVIRONMENTAL INC.**

A handwritten signature in cursive script that reads "Greg Koester". To the right of the signature is a circular stamp containing the initials "EWS".

Greg Koester, E.I.T.  
Environmental Engineer  
On-Site Supervisor

GAK/gak/WEEK0228.DOC

cc: Bruce Sheppard (BNRR)  
David Eagleton (Burlington Environmental)  
Tom Backer (Preston, Gates, & Ellis)  
Mark Fleri (Williams)



**BURLINGTON  
ENVIRONMENTAL**

March 7, 1995  
Project 12883088

Ms. Lynda Priddy  
On-Scene Coordinator/Remedial Project Manager  
U.S. Environmental Protection Agency, Region X  
1200 Sixth Avenue  
Seattle, Washington 98101

Dear Ms. Priddy:

**Subject: Weekly Status Report  
February 28 to March 6, 1995  
Woods Industries Site  
Yakima, Washington**

On behalf of Burlington Northern Railroad (BNRR), Burlington Environmental Inc. (Burlington Environmental) hereby submits the weekly status report for soil treatment activities at the Woods Industries Site during the above period. This report is submitted in compliance with Administrative Order Number 1087-03-18-106.

**PROJECT ACTIVITIES**

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**February 28**

Williams continued assembly of the TPU-IV soil treatment unit.

---

**March 1**

Williams continued assembly of the TPU-IV soil treatment unit.

---

**March 2**

Williams continued assembly of the TPU-IV soil treatment unit.

---

**March 3**

Williams continued assembly of the TPU-IV soil treatment unit.

---

**March 4**

Williams continued assembly of the TPU-IV soil treatment unit. One test pit was excavated on Hansen Fruit Company property approximately 15 feet east of the former TPH excavation and two samples were collected to be analyzed for TPH.



Page 2  
Ms. Lynda Priddy  
March 7, 1995

---

**March 5**

Williams continued assembly of the TPU-IV soil treatment unit. Williams' project manager, Mark Fleri, and Burlington Environmental's project manager, David Eagleton, arrived on-site.

---

**March 6**

Williams continued assembly of the TPU-IV soil treatment process

**PROBLEMS ENCOUNTERED**

No problems or difficulties encountered.

**ANALYTICAL DATA**

Air monitoring analytical data was received during this reporting period.

**UPCOMING ACTIVITIES FOR NEXT REPORTING PERIOD**

Continued assembly of TPU-IV and startup/shakedown with clean soil. Shakedown with contaminated soil, along with remedial action phase air monitoring, may begin. On March 13, an on-site meeting will be conducted between representatives from the USEPA, Williams, BNR, and Burlington Environmental. Lynda Priddy of the USEPA plans to be on-site on March 8, 10, and 13th.

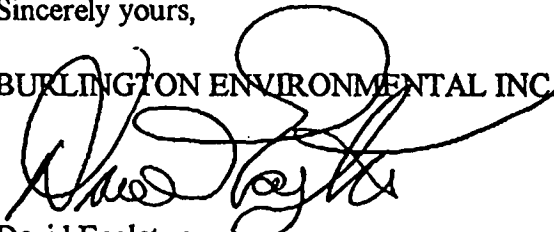
Page 3  
Ms. Lynda Priddy  
March 7, 1995

**CLOSING**

If you have any questions regarding this weekly status report, do not hesitate to contact me at (509) 575-7953.

Sincerely yours,

BURLINGTON ENVIRONMENTAL INC.



David Eagleton  
Environmental Engineer  
On-Site Supervisor

DWE/dwe/WEEK0306.DOC

cc: Bruce Sheppard (BNRR)  
Greg Koester (Burlington Environmental)  
Tom Backer (Preston, Gates, & Ellis)  
Mark Fleri (Williams)  
*Elizabeth Hill (BNRR)*

March 10, 1995  
Project 12883088

Ms. Lynda Priddy  
Environmental Protection Specialist  
U.S. Environmental Protection Agency, Region X  
1200 Sixth Avenue  
Seattle, Washington 98101

Dear Ms. Priddy:

**Subject: February 1995 Monthly Status Report  
Woods Industries Site, Yakima, Washington**

On behalf of Burlington Northern Railroad (BNRR), Burlington Environmental Inc. (Burlington Environmental) hereby submits the February 1995 monthly status report on the above-referenced site in compliance with Administrative Order Number 1087-03-18-106, as amended.

For additional information regarding on-site activities, Burlington Environmental began submitting weekly status reports on February 28, 1995.

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## **I. ACTIVITIES DURING FEBRUARY 1995**

### **February 1**

Lynda Priddy of the U.S. Environmental Protection Agency, Region X (USEPA), issued a letter via fax approving the January 17, 1995, treated soil sample data validation approach.

David Eagleton of Burlington Environmental and Lynda Priddy discussed the following project-related topics:

- confirmation of receipt by Burlington Environmental and Williams Environmental Services, Inc., (Williams) of USEPA letters dated January 31, 1995, that Lynda Priddy issued via fax on January 31, approving the Ambient Air Monitoring Plan (AAMP), Soil Treatment Work Plan (Work Plan), and Ambient Air Quality Impact Report (AAQIR);
- confirmation of Burlington Environmental's and Williams' receipt of the USEPA letter dated February 1, 1995, issued by Lynda Priddy, approving the January 17, 1995, treated soil sample data validation approach; and

Page 2  
Ms. Lynda Priddy  
March 10, 1995

- conference call set up to discuss Roy F. Weston, Inc., (Weston) questions regarding action levels in the AAMP.

Williams submitted revised Work Plan pages to the USEPA.

---

#### **February 2**

Elizabeth (Nicki) Ubinger, Kirk Meyer, and David Eagleton of Burlington Environmental, and Lynda Priddy discussed the action levels in the AAMP with Bob Warwic and Peter Virag of Weston.

Nicki Ubinger sent Lynda Priddy a hard copy of revised Table 8-2 and revisions to Appendix E of the AAQIR.

In a separate telephone conversation, David Eagleton and Lynda Priddy discussed data validation and project schedule. David Eagleton informed Lynda Priddy that background air monitoring will start as early as Tuesday, February 7, 1995.

---

#### **February 7**

Burlington Environmental issued three copies of the final AAMP to the USEPA.

Greg Koester of Burlington Environmental and Lynda Priddy discussed the following topics:

- arrangements for on-site USEPA oversight trailer;
  - background air monitoring;
  - submitting the first weekly report to USEPA for soil treatment activities;
  - representatives from URS Consultants (URS) performing USEPA oversight during normal operations;
  - firm dates for field activities to allow Lynda Priddy to schedule oversight; and
  - Lynda Priddy planning a site visit.
-

Page 3  
Ms. Lynda Priddy  
March 10, 1995

### **February 8**

David Eagleton received a voicemail message from Lynda Priddy regarding tentative schedule for beginning the performance test.

David Eagleton received a voicemail message from Lynda Priddy informing David that she had received the AAMPs and forwarded a copy to Don Metheny of the USEPA for his review of the standard operating procedures.

Greg Koester and Lynda Priddy discussed the following topics:

- Don Metheny's final review of AAMP;
- continuing with background air monitoring;
- weekly reports;
- USEPA oversight trailer; and
- Williams' most recent schedule for mobilization and equipment assembly.

David Eagleton faxed Lynda Priddy Williams' most recent mobilization, assembly, and soil treatment schedule.

In a telephone conversation, David Eagleton and Lynda Priddy discussed the following project-related topics:

- schedule for clean soil startup/shakedown;
- arrival of TPU-IV equipment at the Woods site to begin February 13; and
- anticipated project completion date.

---

### **February 9**

Williams faxed Lynda Priddy the written response requested in USEPA's letter of February 1, 1995, approving the approach to data validation of treated soil samples.

---

Page 4  
Ms. Lynda Priddy  
March 10, 1995

#### **February 10**

The January 1994 monthly status report was issued to the USEPA.

David Eagleton and Lynda Priddy discussed the following topics:

- Lynda Priddy's receipt of the AAMP, revised pages to the Work Plan, and Williams letter regarding data validation; and
- scheduling on-site meeting with USEPA based upon Williams most recent schedule for startup/shakedown with contaminated soils.

Lynda Priddy left David Eagleton a voicemail message requesting the model number of PM-10 monitors being used at the Woods site.

---

#### **February 13**

Burlington Environmental received the Superfund Fact Sheet for Woods Industries dated February 9, 1995.

David Eagleton faxed Lynda Priddy details on the PM-10 monitors currently used at the Woods Industries Site.

Williams started receiving equipment on site.

---

#### **February 15**

Burlington Environmental issued three copies of the AAQIR to the USEPA.

David Eagleton faxed Lynda Priddy a letter from Williams describing weather-related delays in transporting equipment to Yakima, Washington.

David Eagleton and Lynda Priddy discussed the following project-related activities:

- USEPA intends to collect three split samples of treated soil during performance test;
  - Lynda Priddy's receipt of an interview request from a local radio station; and
  - delays in equipment transportation due to poor weather.
-

Page 5  
Ms. Lynda Priddy  
March 10, 1995

### **February 16**

Burlington Environmental issued two additional copies of AAQIR and the AAMP to the USEPA.

---

### **February 17**

In a telephone conversation, Lynda Priddy informed David Eagleton of her plans to visit the site on February 21 or 22, 1995.

In a voicemail message to David Eagleton, Lynda Priddy requested the extraction methods Williams laboratory will use for pesticides and metals analyses to assure that the same extraction methods are used for analysis of USEPA's split samples.

In a separate telephone conversation, David Eagleton informed Lynda Priddy that Greg Whetstone of Williams will be faxing her information on the qualifications of York Services Corporation (York).

In a telephone conversation with Lynda Priddy, Mike Martin of Burlington Environmental requested to change the method for analyzing mercury from USEPA Method XRF to USEPA Method 7471.

David Eagleton and Lynda Priddy discussed the following topics:

- expected turnaround time for treated soil samples;
- Lynda Priddy's upcoming site visit; and
- changes in analytical methods for mercury.

David Eagleton faxed Lynda Priddy Ross Analytical's standard operating procedures for Method 7471 for USEPA review and approval.

---

### **February 20**

Williams started equipment assembly.

---

### **February 21**

In a telephone conversation, Greg Koester of Burlington Environmental and Lynda Priddy discussed the following topics:

- Lynda Priddy's upcoming site visit;

Page 6  
Ms. Lynda Priddy  
March 10, 1995

- submittal date for first weekly status report; and
- USEPA oversight trailer.

Lynda Priddy left David Eagleton a voicemail message to discuss the following:

- turnaround time for dioxin analysis; and
- USEPA's split samples during performance test;

---

**February 22**

Williams submitted six copies of the Final Work Plan to USEPA.

Williams submitted to USEPA a letter selecting Quanterra as the soil treatment laboratory and a copy of Quanterra's Quality Assurance/Quality Control Plan.

Lynda Priddy performed a site walk to inspect site conditions and status of project. Jack Lane of Williams gave Lynda Priddy the most recent equipment mobilization/assembly schedule.

---

**February 23**

David Eagleton received a note via fax from Lynda Priddy requesting tentative dates for startup/shakedown with clean soil, shakedown with contaminated soil, and performance test.

David Eagleton and Lynda Priddy discussed the following topics:

- generating a window of time when performance test runs may be performed in order to schedule Cathy Massimino's time;
- March 10th meeting on-site with USEPA;
- Lynda Priddy's February 22 site visit;
- extraction methodologies for pesticides and metals; and
- turnaround time for high-resolution dioxin analysis.

David Eagleton received a voicemail message from Lynda Priddy to discuss analytical protocols and turnaround time for dioxin results.



**February 24**

David Eagleton faxed Lynda Priddy Williams' letter describing laboratory extraction methods for pesticides and metals.

---

**February 27**

In a telephone conversation, Lynda Priddy informed David Eagleton that she received the fax describing extraction methodologies.

Details regarding dioxin analysis was discussed in a conference call between David Eagleton, Greg Whetstone, and Lynda Priddy.

In a telephone conversation between Greg Koester and Lynda Priddy, the following topics were discussed:

- USEPA on-site meeting on March 10th;
  - two USEPA oversight persons should arrive on-site March 8 or March 9; and
  - weekly status report for soil treatment activities to be submitted February 28.
- 

**February 28**

David Eagleton faxed Lynda Priddy a revised Williams' project schedule with tentative dates she requested on February 23, 1995.

Burlington Environmental submitted the first Weekly Status Report for soil treatment covering the period February 21 through February 28, 1995.

---

**II. UPCOMING ACTIVITIES NEXT MONTH**

Upcoming soil treatment activities with their respective *tentative* dates include the following:

- March 12, 13, 14 – Startup/shakedown with clean soils.
- March 13 – USEPA on-site meeting.
- March 14, 15, 16 – shakedown operations with contaminated soils.

Page 8  
Ms. Lynda Priddy  
March 10, 1995

March 28 – Certification of continuous emission monitoring.

March 31 – Start of three performance test runs.

---

### **III. PROBLEMS OR DIFFICULTIES/STEPS TAKEN**

No problems or difficulties were encountered, other than the delays described in previous monthly reports.

Please call me at (618) 281-7173 if you have any questions regarding this status report.

Sincerely yours,

**BURLINGTON ENVIRONMENTAL INC.**

David W. Eagleton, P.E.  
Project Manager  
Environmental Engineer

DWE/bar/FEB95MON.LET

cc: Bruce Sheppard (BNRR)  
Elizabeth Hill (BNRR)  
Bob Kievit (USEPA)  
Bob Hartman (USEPA)  
Bill Glasser (USEPA)  
Mark Fleri (Williams)  
Tom Backer (Preston Gates & Ellis)  
Tom Hippe, Paul Miller, and Elizabeth Ubinger (Burlington Environmental)



**BURLINGTON  
ENVIRONMENTAL**

March 14, 1995  
Project 12883088

Ms. Lynda Priddy  
On-Scene Coordinator/Remedial Project Manager  
U.S. Environmental Protection Agency, Region X  
1200 Sixth Avenue  
Seattle, Washington 98101

Dear Ms. Priddy:

**Subject: Weekly Status Report  
March 7 to March 13, 1995  
Woods Industries Site  
Yakima, Washington**

On behalf of Burlington Northern Railroad (BNRR), Burlington Environmental Inc. (Burlington Environmental) hereby submits the weekly status report for soil treatment activities at the Woods Industries Site during the above period. This report is submitted in compliance with Administrative Order Number 1087-03-18-106.

## **PROJECT ACTIVITIES**

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### **March 7**

Williams continued assembly of the TPU-IV soil treatment unit. Burlington Environmental began background air monitoring event number 7. Burlington Environmental issued the weekly status report for soil treatment activities conducted from February 28 through March 6, 1995.

---

### **March 8**

Williams continued assembly of the TPU-IV soil treatment unit. Burlington Environmental collected samples for background air monitoring event number 7 and began background air monitoring event number 8. Lynda Priddy of the USEPA was on-site with two USEPA public relations specialists. Lynda Priddy was interviewed on-site by television stations KNDO, KAPP, and KIMA. All three stations aired video interviews on the local news that evening. Lynda Priddy and Mark Fleri of Williams met on-site with two representatives from the Yakima Health District. Rick Roeder of the Washington State Department of Ecology (WDOE) visited the site. Two representatives from the Washington State Department of Labor were on-site and informed Williams that the electrical work

Page 2  
Ms. Lynda Priddy  
March 14, 1995

being done to setup TPU-IV must pass an inspection to be performed by Department of Labor. The inspection was scheduled for Monday March 13.

---

#### **March 9**

Williams continued assembly of the TPU-IV soil treatment unit. Burlington Environmental collected samples for background air monitoring event number 8. An article on the Woods cleanup was in the Yakima Herald-Republic newspaper.

---

#### **March 10**

Williams continued assembly of the TPU-IV soil treatment unit. Burlington Environmental began background air monitoring event number 9. Larry Mullen with URS arrived on site. Bruce Sheppard of BNRR and Lynda Priddy were on-site and meetings were conducted on-site between Lynda Priddy, Bruce Sheppard, Mark Fleri, and David Eagleton. Larry Mullen of URS also sat in on these meetings. A conference call was conducted between Mark Fleri and Greg Whetstone of Williams, David Eagleton, and Lynda Priddy and Cathy Massimino of the USEPA to discuss some additional comments Cathy Massimino had on the Williams work plan and performance test plan. Larry Mullen of URS also sat in on this conference call. Lynda Priddy walked Rick Roeder and Tony Grover of the WDOE around on-site. Rain in the afternoon slowed TPU-IV assembly activities.

---

#### **March 11**

Williams continued assembly of the TPU-IV soil treatment unit. Burlington Environmental collected samples for background air monitoring event number 9.

---

#### **March 12**

Williams continued assembly of the TPU-IV soil treatment unit.

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#### **March 13**

Williams continued assembly of the TPU-IV soil treatment unit. The Washington State Department of Labor informed Williams that they could not do the inspection scheduled for the 13th until Thursday the 16th.

#### **PROBLEMS OR DIFFICULTIES/STEPS TAKEN**

On March 8, two representatives from the Washington State Department of Labor were on-site and informed Williams that the electrical work being done to setup

Page 3  
Ms. Lynda Priddy  
March 14, 1995

TPU-IV must pass an inspection to be performed by Department of Labor. The inspection was scheduled for Monday March 13. On Monday March 13th, the Department of Labor informed Williams that they could not perform the inspection until Thursday the 16th. This could delay startup/shutdown of TPU-IV.

Occasional rain events slowed TPU-IV assembly activities during the period.

#### **ANALYTICAL DATA**

Air monitoring analytical data and results from the two TPH samples collected from the one test pit excavated on Hansen Fruit Company property approximately 15 feet east of the former TPH excavation was received during this reporting period.

#### **UPCOMING ACTIVITIES FOR NEXT REPORTING PERIOD**

Continued assembly of TPU-IV. The Department of Labor is scheduled to inspect Williams electrical installations on Thursday March 16th. Startup/shutdown with clean soil will begin following Department of Labor approval of electrical installations. An on-site meeting or conference call will be conducted between representatives from the USEPA, Williams, URS, BNRR, and Burlington Environmental following shutdown with clean soil. Shutdown with contaminated soil, along with remedial action phase air monitoring, may begin.

Page 4  
Ms. Lynda Priddy  
March 14, 1995

**CLOSING**

If you have any questions regarding this weekly status report, do not hesitate to contact me at (509) 575-7953.

Sincerely yours,

BURLINGTON ENVIRONMENTAL INC.



David Eagleton, P.E.

Project Manager

On-Site Supervisor

DWE/dwe/WEEK0313.DOC

cc: Bruce Sheppard (BNRR)  
Elizabeth Hill (BNRR)  
Greg Koester (Burlington Environmental)  
Tom Backer (Preston, Gates, & Ellis)  
Mark Fleri (Williams)



**BURLINGTON  
ENVIRONMENTAL**

March 21, 1995  
Project 12883088

Ms. Lynda Priddy  
On-Scene Coordinator/Remedial Project Manager  
U.S. Environmental Protection Agency, Region X  
1200 Sixth Avenue  
Seattle, Washington 98101

Dear Ms. Priddy:

**Subject: Weekly Status Report  
March 14 to March 20, 1995  
Woods Industries Site  
Yakima, Washington**

On behalf of Burlington Northern Railroad (BNRR), Burlington Environmental Inc. (Burlington Environmental) hereby submits the weekly status report for soil treatment activities at the Woods Industries Site during the above period. This report is submitted in compliance with Administrative Order Number 1087-03-18-106.

### **PROJECT ACTIVITIES**

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#### **March 14**

Williams continued assembly of the TPU-IV soil treatment unit (TPU-IV). Burlington Environmental issued the weekly status report for soil treatment activities conducted from March 7 to March 13, 1995.

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#### **March 15**

Williams continued assembly of the TPU-IV soil treatment unit.

---

#### **March 16**

Williams continued assembly of the TPU-IV soil treatment unit. Two representatives from the Washington State Department of Labor performed an electrical inspection of TPU-IV. Williams was not "red tagged" (shut down); however, several items not in compliance were noted for Williams to address. After inspection, Williams initiated startup/shutdown by lighting pilots for the rotary dryer and thermal oxidizer.

Page 2  
Ms. Lynda Priddy  
March 21, 1995

---

**March 17**

Williams continued assembly of the TPU-IV soil treatment unit. Several TPU-IV components were started up to prepare for shakedown with clean soils.

---

**March 18**

Williams continued assembly of the TPU-IV soil treatment unit. Burlington Environmental began remedial action air monitoring event number R1.

---

**March 19**

Williams continued startup/shakedown of TPU-IV, processing approximately 40 tons of clean soil. Calibration of the conveyor scale was performed. Burlington Environmental collected samples for air monitoring event R1 and began remedial action air monitoring event number R2.

---

**March 20**

Williams spent all day troubleshooting problems identified during clean shakedown operations on March 19. No clean soils were processed.

An on-site meeting with the USEPA was attended by Lynda Priddy and Cathy Massimino of USEPA, Bruce Sheppard of BNRR, Mark Fleri of Williams, Larry Mullen and David Tonkin of URS Consultants, and Greg Koester and Mike Martin of Burlington Environmental.

Burlington Environmental collected samples for remedial action air monitoring event number R2.

**PROBLEMS OR DIFFICULTIES/STEPS TAKEN**

Occasional rain events slowed TPU-IV assembly activities during this period (see enclosed letter from Williams).

An electrical inspection was performed by the Washington Department of Labor on Thursday the 16th (originally scheduled for March 13th, but the Department of Labor rescheduled the inspection date). TPU-IV had to pass an inspection performed by Department of Labor prior to operating the unit. Since Williams had to wait for an inspection prior to starting up unit, Williams estimated that startup/shakedown of TPU-IV was delayed approximately 36 hours.



Page 3  
Ms. Lynda Priddy  
March 21, 1995

#### **ANALYTICAL DATA**

No analytical data was received for this reporting period.

#### **UPCOMING ACTIVITIES FOR NEXT REPORTING PERIOD**

Continued shakedown of TPU-IV. Start to remove soils from the northern temporary soil storage area. Soils will be screened adjacent to stockpile prior to being placed on waste feed pad. After a thorough shakedown of TPU-IV with clean soils, including its control systems and demonstration of the proposed AWFSOs, the unit will begin shakedown with contaminated soils to ready the unit and crew for the upcoming performance test.

Remedial action phase air monitoring will continue.

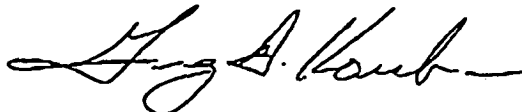
TPH-impacted soils is expected to be excavated along the east site boundary on the north portion of the site.

#### **CLOSING**

If you have any questions regarding this weekly status report, do not hesitate to contact me at (509) 575-7953.

Sincerely yours,

**BURLINGTON ENVIRONMENTAL INC.**



Greg Koester, E.I.T.  
On-Site Supervisor

GAK/gak/WEEK0320.DOC

Enclosed: Williams letter dated March 21, 1995

cc: Bruce Sheppard and Elizabeth Hill (BNRR)  
David Eagleton (Burlington Environmental)  
Tom Backer (Preston, Gates, & Ellis)  
Mark Fleri (Williams)

**WILLIAMS ENVIRONMENTAL SERVICES, INC.**



VIA FACSIMILE

March 21, 1995

Mr. David Eagleton  
Burlington Environmental  
210 West Sand Bank Road  
Columbia, Illinois 62236

Re: Woods Industries Site  
Yakima, Washington  
Transmittal No.: 0095  
Number of Pages: 1

Subject: Weather  
Williams Project No. 0365-001-110

Dear David:

As you are aware, Yakima, Washington has received an inordinate amount of rain over the past month. So much so, that the rainfall for this year is 5.16 inches, which is almost double the average of 2.36 inches of rain from January through March.

To date, Williams has recorded seven (7) rain events occurring on March 8, 9, 10, 13, 14, 17, and 20. The rain has slowed the metal fabrication and steel erection process due to the electrical hazards associated with welding on wet surfaces. Williams will endeavor to make up this lost time, however, Williams is notifying Burlington of this condition.

Sincerely,

**WILLIAMS ENVIRONMENTAL SERVICES, INC.**

Mark A. Fleri  
Manager of Thermal Operations  
MAF:js

cc: Z. Lowell Taylor  
Joe Parks  
George Harbour  
Greg Whetstone  
Chris Drescher

**BURLINGTON  
ENVIRONMENTAL**

March 28, 1995  
Project 12883088

Ms. Lynda Priddy  
On-Scene Coordinator/Remedial Project Manager  
U.S. Environmental Protection Agency, Region X  
1200 Sixth Avenue  
Seattle, Washington 98101

Dear Ms. Priddy:

**Subject: Weekly Status Report  
March 21 to March 27, 1995  
Woods Industries Site  
Yakima, Washington**

On behalf of Burlington Northern Railroad (BNRR), Burlington Environmental Inc. (Burlington Environmental) hereby submits the weekly status report for soil treatment activities at the Woods Industries Site during the above period. This report is submitted in compliance with Administrative Order Number 1087-03-18-106.

## PROJECT ACTIVITIES

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### March 21

Williams continued startup/shakedown of the TPU-IV soil treatment unit (TPU-IV) processing approximately 48 tons of clean soil. Burlington Environmental issued the weekly status report for soil treatment activities conducted from March 14 to March 20, 1995.

---

### March 22

Williams continued startup/shakedown of TPU-IV processing approximately 80 tons of clean soil.

---


### March 23

Williams continued startup/shakedown of TPU-IV processing approximately 25 tons of clean soil. Burlington Environmental began remedial action air monitoring event R3.

Burlington Environmental Inc.

P.O. Box 330 • 210 West Sand Bank Road • Columbia, IL 62236-0330

Phone 618/281-7173 • 314/241-1785 • FAX 618/281-5170



Page 2  
Ms. Lynda Priddy  
March 28, 1995

---

**March 24**

Williams continued startup/shakedown of TPU-IV processing approximately 88 tons of clean soil. Burlington Environmental collected samples for air monitoring event R3 and began air monitoring event R4.

---

**March 25**

Williams continued startup/shakedown of TPU-IV. No soil was processed. Burlington Environmental collected samples for air monitoring event R4 and began remedial action air monitoring event number R5. Approximately 75 tons of TPH impacted soil was excavated/screened and placed in the feed soil storage area to be processed during shakedown with contaminated soil. Samples were collected from the excavation. A conference call was scheduled with the USEPA for March 27, 1995, to discuss setting TPU-IV operating parameters to be used during shakedown with contaminated soils.

---

**March 26**

Williams continued startup/shakedown of TPU-IV. No soil was processed. Burlington Environmental collected samples for air monitoring event R5. Williams faxed Cathy Massimino of the USEPA TPU-IV clean soil shakedown operating data in preparation for a conference call to set operating parameters to be used during shakedown with contaminated soil.

---

**March 27**

Williams continued startup/shakedown of TPU-IV, processing approximately 92 tons of clean soil.

A conference call with the USEPA was conducted by Lynda Priddy and Cathy Massimino of USEPA, Bruce Sheppard of BNRR, Mark Fleri of Williams, Larry Mullen of URS Consultants, and Greg Koester and Mike Martin of Burlington Environmental.

Burlington Environmental began remedial action air monitoring event number R6.

**PROBLEMS OR DIFFICULTIES/STEPS TAKEN**

None

Page 3  
Ms. Lynda Priddy  
March 28, 1995

### **ANALYTICAL DATA**

Burlington Environmental received analytical data for background air monitoring events 8 and 9.

### **UPCOMING ACTIVITIES FOR NEXT REPORTING PERIOD**

Continued shakedown of TPU-IV. Start to remove soils from the northern temporary soil storage area. Soils will be screened adjacent to stockpile prior to being placed on waste feed pad. After a thorough shakedown of TPU-IV with clean soils, including its control systems and demonstration of the proposed AWFSOs, with USEPA approval, the unit will begin shakedown with contaminated soils to ready the unit and crew for the upcoming performance test.

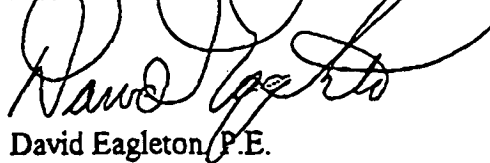
Remedial action phase air monitoring will continue.

### **CLOSING**

If you have any questions regarding this weekly status report, do not hesitate to contact me at (509) 575-7953.

Sincerely yours,

**BURLINGTON ENVIRONMENTAL INC.**



David Eagleton, P.E.  
On-Site Supervisor

DWE/dwe/WEEK0327.DOC

cc: Bruce Sheppard and Elizabeth Hill (BNRR)  
Greg Koester (Burlington Environmental)  
Tom Backer (Preston, Gates, & Ellis)  
Mark Fleri (Williams)  
Larry Mullen (URS)



April 4, 1995  
Project 12883088

Ms. Lynda Priddy  
On-Scene Coordinator/Remedial Project Manager  
U.S. Environmental Protection Agency, Region X  
1200 Sixth Avenue  
Seattle, Washington 98101

Dear Ms. Priddy:

**Subject: Weekly Status Report  
March 28 to April 3, 1995  
Woods Industries Site  
Yakima, Washington**

On behalf of Burlington Northern Railroad (BNRR), Philip Environmental Services Corporation (Philip) hereby submits the weekly status report for soil treatment activities at the Woods Industries Site during the above period. This report is submitted in compliance with Administrative Order Number 1087-03-18-106.

## PROJECT ACTIVITIES

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### March 28

Williams completed startup/shakedown (with clean soils) of the TPU-IV soil treatment unit (TPU-IV) processing approximately 19 tons of clean soil. BNRR received a letter from Lynda Priddy of the USEPA granting BNRR approval to start screening contaminated soils and to start processing contaminated soils through TPU-IV. Williams began screening soils from the north stockpile and placing them on the soil treatment operations pad. Philip collected samples for air monitoring event R6 and began air monitoring event R7. Philip issued the weekly status report for soil treatment activities conducted from March 21 through March 27, 1995.

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### March 29

Williams did not treat any soil as they repaired the burner on the thermal oxidizer of TPU-IV. Williams continued screening soils from the northern temporary soil storage area and placing them on the soil treatment operations pad. Philip collected samples for air monitoring event R7 and began air monitoring event R8.

**March 30**

Williams did not treat any soil as they repaired the burner on the thermal oxidizer of TPU-IV. Williams continued screening soils from the northern temporary soil storage area and placing them on the soil treatment operations pad. USEPA representatives Lynda Priddy, Cathy Massimino, Don Matheny and Gina Grepo Grove were on-site. Philip collected samples for air monitoring event R8 and began air monitoring event R9. Philip handed Lynda Priddy "preliminary" air monitoring event summaries for background air monitoring events one through six.

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**March 31**

Williams did not treat any soil through TPU-IV as they repaired the burner on the thermal oxidizer of TPU-IV. Williams continued screening soils from the northern temporary soil storage area and placing them on the soil treatment operations pad. Philip collected samples for air monitoring event R9 and began air monitoring event R10.

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**April 1**

Williams did not treat any soil. Williams completed repairs on the thermal oxidizer of TPU-IV. Williams continued screening soils from the northern temporary soil storage area and placing them on the soil treatment operations pad. Philip collected samples for air monitoring event R10 and began air monitoring event R11.

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**April 2**

Williams began processing contaminated soil through TPU-IV processing 41.2 tons of petroleum impacted soils and 64.3 tons of pesticide impacted soils. No soil screening was performed. Philip collected samples for air monitoring event R11 and began air monitoring event R12.

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**April 3**

Williams continued processing contaminated soil through TPU-IV processing 80.83 tons of pesticide impacted soils. Philip collected samples for air monitoring event R12 and began air monitoring event 13.

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**PROBLEMS OR DIFFICULTIES/STEPS TAKEN**

None

**ANALYTICAL DATA**

Philip received analytical data for air monitoring events R1, R2, R3, R4, and R5.

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Ms. Lynda Priddy  
April 4, 1995

**UPCOMING ACTIVITIES FOR NEXT REPORTING PERIOD**

Williams will continue treating pesticide contaminated soils with TPU-IV and ready the unit and crew for the upcoming performance test. Williams will continue screening soils from the northern temporary soil storage area. Soils will be screened adjacent to stockpile prior to being placed on waste feed pad.

Remedial action phase air monitoring will continue.

**CLOSING**

If you have any questions regarding this weekly status report, do not hesitate to contact me at (509) 575-7953.

Sincerely yours,

**PHILIP ENVIRONMENTAL SERVICES  
CORPORATION**



David Eagleton, P.E.  
On-Site Supervisor

DWE/dwe/WEEK0403.DOC

cc: Bruce Sheppard and Elizabeth Hill (BNRR)  
Greg Koester (Philip)  
Tom Backer (Preston, Gates, & Ellis)  
Mark Fleri (Williams)  
Larry Mullen and Jim Geiger (URS)





April 11, 1995  
Project 12883088

Ms. Lynda Priddy  
On-Scene Coordinator/Remedial Project Manager  
U.S. Environmental Protection Agency, Region X  
1200 Sixth Avenue  
Seattle, Washington 98101

Dear Ms. Priddy:

**Subject: Weekly Status**  
**April 4 to April 10, 1995**  
**Woods Industries Site**  
**Yakima, Washington**

On behalf of Burlington Northern Railroad (BNRR), Philip Environmental Services Corporation (Philip) hereby submits the weekly status report for soil treatment activities at the Woods Industries Site during the above period. This report is submitted in compliance with Administrative Order Number 1087-03-18-106.

## PROJECT ACTIVITIES

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### April 4

Williams processed approximately 222 tons of pesticide-impacted soils. Philip collected samples for air monitoring event R13 and began air monitoring event R14. Philip issued the weekly status report for soil treatment activities conducted from March 28 through April 3, 1995.

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### April 5

Williams processed approximately 206 tons of pesticide-impacted soils. Philip collected samples for air monitoring event R14 and began air monitoring event R15.

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### April 6

Williams processed approximately 297 tons of pesticide-impacted soils. Philip collected samples for air monitoring event R15 and began air monitoring event R16. Approximately 40 tons of treated TPH-impacted soils were backfilled after analytical data below cleanup levels were received. Lynda Priddy and Cathy Massimino of the USEPA were on site. Mike Martin and David Eagleton met with Larry Durbin and Jay Hetzel with URS regarding the Ambient air Monitoring

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Ms. Lynda Priddy  
April 11, 1995

Program. David Eagleton gave Lynda Priddy a letter regarding Mercury Vapor Sampling Procedures.

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**April 7**

Williams processed approximately 428 tons of pesticide impacted soils. Philip collected samples for air monitoring event R16 and began air monitoring event R17.

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**April 8**

Williams processed approximately 371 tons of pesticide-impacted soils. Philip collected samples for air monitoring event R17 and began air monitoring event R18.

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**April 9**

Williams did not process any soils. Down time was attributed to fixing Kaye Recorder. Philip collected samples for air monitoring event R18 and began air monitoring event R19.

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**April 10**

Williams processed approximately 32 tons of pesticide-impacted soils. Downtime was attributed to fixing Kaye Recorder. Mike Martin gave Jay Hetzel preliminary Air Monitoring Event Summaries Event R7 through Event R9. Philip collected samples for air monitoring event R19 and began air monitoring event R20.

**PROBLEMS OR DIFFICULTIES/STEPS TAKEN**

None.

**ANALYTICAL DATA**

Williams received pesticide analytical data for soils treated April 2 though April 4 and metals analytical data for soils treated April 2 through April 7. Pesticide data received on all soil treated April 2-4 exceeded cleanup levels for 4,4'-DDE. All metals data are below cleanup levels. Analytical data for the TPH-impacted soils treated on April 2 was below cleanup levels.

Philip received analytical data for air monitoring events R6 through R12.

Page 3  
Ms. Lynda Priddy  
April 11, 1995

#### UPCOMING ACTIVITIES FOR NEXT REPORTING PERIOD

Williams will continue treating pesticide-impacted soils with TPU-IV and ready the unit and crew for the upcoming performance test. Williams plans to perform the pretest on April 13. Williams will continue screening soils from the northern temporary soil storage area.

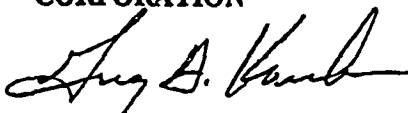
Remedial action phase air monitoring will continue.

#### CLOSING

If you have any questions regarding this weekly status report, do not hesitate to contact me at (509) 575-7953.

Sincerely yours,

**PHILIP ENVIRONMENTAL SERVICES  
CORPORATION**



Greg Koester  
On-Site Supervisor

OAK/gak/WEEK0410.DOC

cc: Bruce Sheppard and Elizabeth Hill (BNRR)  
David Eagleton (Philip)  
Tom Backer (Preston, Gates, & Ellis)  
Mark Fleri (Williams)  
Larry Mullen and Jim Geiger (URS)

# **PHILIP**

## **ENVIRONMENTAL**

April 18, 1995  
Project 12883088

Ms. Lynda Priddy  
On-Scene Coordinator/Remedial Project Manager  
U.S. Environmental Protection Agency, Region X  
1200 Sixth Avenue  
Seattle, Washington 98101

Dear Ms. Priddy:

**Subject: Weekly Status Report  
April 11 to April 17, 1995  
Woods Industries Site  
Yakima, Washington**

On behalf of Burlington Northern Railroad (BNRR), Philip Environmental Services Corporation (Philip) hereby submits the weekly status report for soil treatment activities at the Woods Industries Site during the above period. This report is submitted in compliance with Administrative Order Number 1087-03-18-106.

### **PROJECT ACTIVITIES**

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#### **April 11**

Williams processed approximately 71 tons of pesticide-impacted soils which does not include approximately 6 tons processed during cold startup which will require treatment at proper temperatures. Analytical data received for soils processed on April 2 through April 4, 1995 indicated soil still exceeded cleanup goals; as a result, Jim Geiger of URS signed rejection forms for each day indicating the soil must be retreated.

Philip collected samples for Air Monitoring Event R20 and began sampling for Event R21.

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Page 2  
Ms. Lynda Priddy  
April 18, 1995

#### **April 12**

Williams began the pre-performance test (pre-test) by processing approximately 27 tons of pesticide-impacted soils not including approximately 8 tons processed during cold startup which will require treatment at proper temperatures.

Philip collected samples for Air Monitoring Event R21 and began sampling for Event R22.

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#### **April 13**

Williams continued the pre-test processing approximately 141 tons of pesticide-impacted soils not including approximately 8 tons processed during cold startup which will require treatment at proper temperatures. Williams received analytical data for soil processed April 6 through April 8 which indicated the soil was below cleanup goals. With USEPA approval, Williams backfilled this soil (approximately 1,000 cubic yards) in the former south excavation. Analytical data received for soils processed on April 5, 1995 indicated soil still exceeded cleanup goals; as a result, Jim Geiger of URS signed the rejection form indicating the soil must be retreated.

In an on-site meeting, Lynda Priddy and John Gilbert of the USEPA, Paul Meeter of Roy F. Weston, Jim Geiger of URS, Mark Fleri of Williams, and Greg Koester of Philip discussed the upcoming performance test and other project-related activities.

Philip collected samples for Air Monitoring Event R22 and began sampling for Event R23.

---

#### **April 14**

Williams continued the pre-test processing approximately 61 tons of pesticide-impacted soils not including approximately 48 tons processed during cold startup which will require treatment at proper temperatures.

Philip collected samples for Air Monitoring Event R23 and began sampling for Event R24.

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Ms. Lynda Priddy  
April 18, 1995

April 15

Williams completed the pre-test processing approximately 40.5 tons of pesticide-impacted soils not including approximately 6 tons processed during cold startup which will require treatment at proper temperatures. 16 143.75

Williams informed URS and Philip that pre-test stack testing will be incomplete (excluding VOST sample train) due to York Testing Services' schedule.

Philip collected samples for Air Monitoring Event R24 and began sampling for Event R25.

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April 16

Williams processed a total of approximately 40 tons of pesticide-impacted soils not including retreating approximately 6 tons processed during cold startup which will require treatment at proper temperatures.

Philip collected samples for Air Monitoring Event R25 and began sampling for Event R26.

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April 17

Williams processed approximately 437 tons of pesticide-impacted soils.

Philip collected samples for Air Monitoring Event R26 and began sampling for Event R27.

#### **PROBLEMS OR DIFFICULTIES**

None

#### **ANALYTICAL DATA**

Williams received analytical data for soil processed April 5 through April 8, 1995.

Philip received analytical data for air monitoring events R13 through R16.

Page 4  
Ms. Lynda Priddy  
April 18, 1995

#### UPCOMING ACTIVITIES FOR NEXT REPORTING PERIOD

Williams will continue treating pesticide-impacted soils with TPU-IV and ready the unit and crew for the upcoming performance test tentatively scheduled for May 1, 1995. Williams will continue to screen soils near the northern temporary soil storage area.

Remedial action phase air monitoring will continue.

#### CLOSING

If you have any questions regarding this weekly status report, do not hesitate to contact me or David Eagleton at (618) 281-7173.

Sincerely yours,  
PHILIP ENVIRONMENTAL SERVICES  
CORPORATION



Greg A. Koester  
Project Engineer

GAK/gak/WEEK0417.DOC

cc: Bruce Sheppard and Elizabeth Hill (BNRR)  
David Eagleton and Mike Martin (Philip)  
Tom Backer (Preston, Gates, and Ellis)  
Mark Fleri (Williams)  
Larry Mullen and Jim Geiger (URS)

# **PHILIP**

## **ENVIRONMENTAL**

April 25, 1995  
Project 12883088

Ms. Lynda Priddy  
On-Scene Coordinator/Remedial Project Manager  
U.S. Environmental Protection Agency, Region X  
1200 Sixth Avenue  
Seattle, Washington 98101

Dear Ms. Priddy:

**Subject: Weekly Status Report  
April 18 to April 24, 1995  
Woods Industries Site  
Yakima, Washington**

On behalf of Burlington Northern Railroad (BNRR), Philip Environmental Services Corporation (Philip) hereby submits the weekly status report for soil treatment activities at the Woods Industries Site during the above period. This report is submitted in compliance with Administrative Order Number 1087-03-18-106.

### **PROJECT ACTIVITIES**

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#### **April 18**

Williams processed 26.8 tons of pesticide-impacted soils. This amount does not include the 6 tons processed during cold startup, which will require treatment at proper temperatures. This 26.8 tons, and samples collected from it, were held to be combined with soils processed on April 19. The majority of the TPU-IV down time was due to propane valve problems.

Williams received USEPA approval to backfill approximately 141 tons of soil that was treated on April 13.

Philip collected samples for Air Monitoring Event R27 and began sampling for Event R28.

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Ms. Lynda Priddy  
April 25, 1995

#### **April 19**

Williams processed 83.73 tons of pesticide-impacted soils. This amount does not include approximately 24 tons processed during cold startup, which will require treatment at proper temperatures. The majority of the TPU-IV down time was again due to propane valve problems.

Philip collected samples for Air Monitoring Event R28 and began sampling for Event R29.

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#### **April 20**

Williams processed 124.3 tons of pesticide-impacted soils. This amount does not include approximately 36 tons processed during cold startup, which will require treatment at proper temperatures.

Analytical data received for soil processed on April 14 indicated the soil exceeded cleanup goals; as a result, Larry Mullen of URS signed a rejection form indicating the soil must be retreated. Williams received USEPA permission to backfill 127.75 tons of soil processed on April 15, and 437.3 tons processed on April 17.

Lynda Priddy was on site and a meeting was conducted between Lynda Priddy of the USEPA, Mike Martin of Philip, and Gary Pruitt of the Yakima County Clean Air Authority (YCCAA) to discuss operations at the Woods site and apparent concerns of some of the F&W Construction Company workers working on Hansen Fruit Company property next to the Woods site. Gary Pruitt reviewed the Woods Ambient Air Monitoring Program being implemented by Philip, Continuous Emission Monitoring and OSHA air monitoring being conducted by Williams, and pretest and performance test air monitoring procedures.

Philip collected samples for Air Monitoring Event R29 and began sampling for Event R30.

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#### **April 21**

Williams processed 330.63 tons of pesticide-impacted soils. This amount does not include approximately 34 tons processed during cold startup, which will require treatment at proper temperatures.

Page 3  
Ms. Lynda Priddy  
April 25, 1995

Williams inadvertently backfilled soil processed on April 18 and 19, consisting of 110.53 tons of soil for which analytical data had not yet been received. Williams was directed to discontinue all backfill activities until analytical results of this material are received, reviewed, and a course of action is decided.

Philip collected samples for Air Monitoring Event R30 and began sampling for Event R31.

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#### **April 22**

Williams processed 92.62 tons of pesticide-impacted soils (not including approximately 40 tons processed during cold startup, which will require treatment at proper temperatures).

Williams received USEPA approval to raise the AWFSO (automatic waste feed shutoff setting) for high baghouse dust feed rate (15 minute rolling average) from 15 tons per hour (TPH) to 17 TPH.

Philip collected samples for Air Monitoring Event R31 and began sampling for Event R32.

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#### **April 23**

Williams processed 56 tons of pesticide-impacted soils (not including approximately 14 tons processed during cold startup, which will require treatment at proper temperatures).

Philip collected samples for Air Monitoring Event R32 and began sampling for Event R33.

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#### **April 24**

Williams processed 146.25 tons of pesticide-impacted soils (not including approximately 28 tons processed during cold startup, which will require treatment at proper temperatures).

Lynda Priddy was on site and a meeting was conducted between Lynda Priddy and Gene O' Dell of the USEPA, Mike Martin of Philip, Gary Pruitt of the YCCAA, two representatives from the Yakima Health District, and two representatives from F&W Construction Company to discuss operations at the Woods site and apparent

Page 4  
Ms. Lynda Priddy  
April 25, 1995

concerns of some of the workers of F&W Construction Company working on Hansen Fruit Company property next to the Woods site.

Another meeting was conducted between Lynda Priddy and Gene O' Dell of the USEPA, Mike Martin of Philip, Gary Pruitt and two representatives from the Yakima Health District and several employees of McGuire Lumber Company to discuss operations at the Woods site and concerns of some McGuire Lumber Company workers.

Philip collected samples for Air Monitoring Event R33 and began sampling for Event R34.

#### **PROBLEMS OR DIFFICULTIES**

None.

#### **ANALYTICAL DATA**

Williams received analytical data for soil processed April 14 through April 17, 1995.

Philip received analytical data for air monitoring events R17 through R28.

#### **UPCOMING ACTIVITIES FOR NEXT REPORTING PERIOD**

Williams will continue treating pesticide-impacted soils with TPU-IV and ready the unit and crew for the upcoming performance test tentatively scheduled for May 1, 1995. Williams will continue to screen soils near the northern temporary soil storage area.

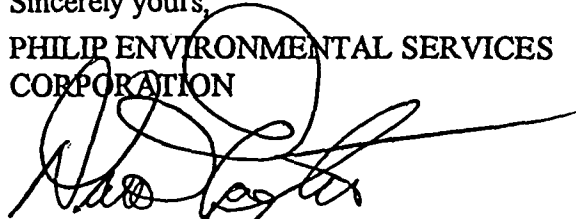
Remedial action phase air monitoring will continue.

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Ms. Lynda Priddy  
April 25, 1995

**CLOSING**

I you have any questions regarding this weekly status report, do not hesitate to contact me at (618) 281-7173.

Sincerely yours,  
PHILIP ENVIRONMENTAL SERVICES  
CORPORATION



David W. Eagleton, P.E.  
Project Manager

GAK/gak/WEEK0424.DOC

cc: Bruce Sheppard and Elizabeth Hill (BNRR)  
Greg Koester and Mike Martin (Philip)  
Tom Backer (Preston, Gates, and Ellis)  
Mark Fleri (Williams)  
Larry Mullen and Jim Geiger (URS)

**PHILIP**

**ENVIRONMENTAL**

May 2, 1995  
Project 12883088

Ms. Lynda Priddy  
On-Scene Coordinator/Remedial Project Manager  
U.S. Environmental Protection Agency, Region X  
1200 Sixth Avenue  
Seattle, Washington 98101

Dear Ms. Priddy:

**Subject: Weekly Status Report  
April 25 to May 1, 1995  
Woods Industries Site  
Yakima, Washington**

On behalf of Burlington Northern Railroad (BNRR), Philip Environmental Services Corporation. (Philip) hereby submits the weekly status report for soil treatment activities at the Woods Industries Site during the above period. This report is submitted in compliance with Administrative Order Number 1087-03-18-106.

## **PROJECT ACTIVITIES**

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### **April 25**

Williams processed 397.7 tons of pesticide-impacted soils. This amount does not reflect the 12 tons processed during cold startup, which will require treatment at proper temperatures.

Philip collected samples for Air Monitoring Event R34 and began sampling for event R35.

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### **April 26**

Williams processed 179.8 tons of pesticide-impacted soils. This amount does not reflect the 10 tons processed during cold startup, which will require treatment at proper temperatures.

In preparation for the performance test, Williams screened oversized material from the five rolloff boxes containing highly concentrated pesticide impacted soils.

Page 2  
Ms. Lynda Priddy  
May 2, 1995

Philip collected samples for Air Monitoring Event R35 and began sampling for event R36.

---

**April 27**

Williams processed 316.56 tons of pesticide-impacted soils. This amount does not reflect the 12 tons processed during cold startup, which will require treatment at proper temperatures.

USEPA representatives Lynda Priddy and Cathy Massimino were on-site. An on-site meeting was conducted between Lynda Priddy and Cathy Massimino of the USEPA, Mike Martin of Philip, Mark Fleri of Williams, and Larry Mullen of URS to discuss the upcoming performance test scheduled to begin May 1, 1995.

In a separate meeting, Mike Martin, Lynda Priddy, and Larry Mullen discussed the ambient air monitoring program results and possibly reducing the sampling frequency from every day to every third day.

Philip collected samples for Air Monitoring Event R36 and began sampling for event R37.

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**April 28**

Williams processed 149.45 tons of pesticide-impacted soils. This amount does not reflect the 30 tons processed during cold startup, which will require treatment at proper temperatures.

Philip collected samples for Air Monitoring Event R37 and began sampling for event R38.

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**April 29**

Williams processed 384.52 tons of pesticide-impacted soils. This amount does not reflect the 24 tons processed during cold startup, which will require treatment at proper temperatures.

Philip collected samples for Air Monitoring Event R38 and began sampling for event R39.

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**April 30**

Williams processed 294.4 tons of pesticide-impacted soils. This amount does not reflect the 10 tons processed during cold startup, which will require treatment at proper temperatures.

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Ms. Lynda Priddy  
May 2, 1995

Philip collected samples for Air Monitoring Event R39 and began sampling for event R40.

An on-site meeting was conducted between representatives from the USEPA, Williams, Roy F. Weston, URS, Focus Environmental, York Testing Services, and Philip to discuss the upcoming performance test

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May 1

The first run of the performance test began.

Williams processed 374.7 tons of pesticide-impacted soils. This amount does not reflect the 26 tons processed during cold startup, which will require treatment at proper temperatures.

Philip collected samples for Air Monitoring Event R40 and began sampling for event R41.

#### **PROBLEMS ENCOUNTERED**

None.

#### **ANALYTICAL DATA**

Williams received analytical data for soil processed April 20 through April 26, 1995.

Philip received analytical data for air monitoring events R27 through R33.

Page 4  
Ms. Lynda Priddy  
May 2, 1995

**UPCOMING ACTIVITIES FOR NEXT REPORTING PERIOD**

The performance test will be completed.

Williams will continue treating pesticide-impacted soil with TPU-IV. Williams will continue to screen soils near the north temporary soil storage area.

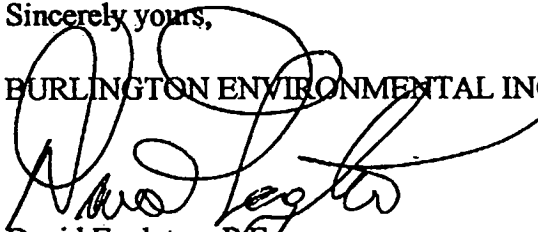
Remedial action phase air monitoring will continue.

**CLOSING**

If you have any questions regarding this weekly status report, do not hesitate to contact me at (509) 575-7953.

Sincerely yours,

BURLINGTON ENVIRONMENTAL INC.



David Eagleton, P.E.  
Project Manager  
Environmental Engineer

DWE/dwe/WEEK0501.DOC

cc: Bruce Sheppard (BNRR)  
Elizabeth Hill (BNRR)  
Greg Koester (Burlington Environmental)  
Tom Backer (Preston, Gates, & Ellis)  
Mark Fleri (Williams)



# **PHILIP**

## **ENVIRONMENTAL**

May 9, 1995  
Project 12883088

Ms. Lynda Priddy  
On-Scene Coordinator/Remedial Project Manager  
U.S. Environmental Protection Agency, Region X  
1200 Sixth Avenue  
Seattle, Washington 98101

Dear Ms. Priddy:

**Subject: Weekly Status Report  
May 2 to May 8, 1995  
Woods Industries Site  
Yakima, Washington**

On behalf of Burlington Northern Railroad (BNRR), Philip Environmental Services Corporation (Philip) hereby submits the weekly status report for soil treatment activities at the Woods Industries Site during the above period. This report is submitted in compliance with Administrative Order Number 1087-03-18-106.

### **PROJECT ACTIVITIES**

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#### **May 2**

York Testing Services, Lynda Priddy, Cathy Massimino, and John Gilbert of the USEPA, Paul Meeter of Roy F. Weston (Weston), and Jim Geiger of URS were on site and the performance test continued. The second run of the performance test (Run #2A) began from a cold start. Although the initial sampling runs (#2A) were completed, the testing was discontinued due to TPU-IV visible dust excursions around the pugmill.

Williams processed 125.5 tons of pesticide-impacted soils. This amount does not include the 18 tons processed during cold startup, which will require treatment at proper temperatures.

Williams received USEPA approval to backfill approximately 316.56 tons of soil that was treated on April 27, 1995.



Page 2  
Ms. Lynda Priddy  
May 9, 1995

Philip collected samples for Air Monitoring Event R41 and began sampling for Event R42.

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### May 3

York Testing Services, Lynda Priddy, Cathy Massimino, and John Gilbert of the USEPA, Paul Meeter of Weston, and Jim Geiger (URS) were on site. At approximately 9:00 a.m., the USEPA stopped the performance test due to visible dust excursions. The performance test is to be completed at a date to be set later.

The USEPA ordered Williams to fix the problems that are creating the dust excursions.

Williams processed 95.75 tons of pesticide-impacted soils prior to shutting down. This amount does not include approximately 8 tons processed during cold startup, which will require treatment at proper temperatures. The majority of the TPU-IV down time was due to retrofitting the pugmill to alleviate the dust problems.

Williams received USEPA approval to backfill approximately 149.45 tons of soil that was treated on April 28, 1995.

USEPA approved a reduced ambient air monitoring frequency from every day to every third day at all stations except A11, which will continue to be sampled every day. Philip collected samples for Air Monitoring Event R42 and began sampling for Event R43.

---

### May 4

Williams did not process pesticide-impacted soils. The majority of the TPU-IV down time was due to retrofitting the pugmill to alleviate the dust problems.

An on site meeting between representatives from USEPA, York Testing Services, Weston, and Philip was conducted and the following agreements were made:

Page 3  
Ms. Lynda Priddy  
May 9, 1995

- completion of the performance test was tentatively scheduled to begin May 8
- additional volume of soil and hours of soil processing over the 360 hours specified in Section 5 of the work plan are allowed.

Williams received USEPA approval to backfill approximately 384.52 tons of soil that was treated on April 29, and 291.4 tons treated on April 30, 1995.

Philip collected samples for Air Monitoring Event R43 and began sampling for Event R44.

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#### May 5

Williams processed 40.4 tons of pesticide-impacted soils. This amount does not include approximately 12 tons processed during cold startup, which will require treatment at proper temperatures.

Analytical data received for soil processed on May 1 and May 2 indicated the soil exceeded cleanup goals; as a result, URS signed rejection forms indicating the soil (374.7 tons and 125.5 tons, respectively) must be retreated.

Philip collected samples for Air Monitoring Event R44 and began sampling for Event R45.

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#### May 6

Williams processed 137.4 tons of pesticide-impacted soils (not including 12 tons processed during cold startup, which will require treatment at proper temperatures).

Philip collected samples for Air Monitoring Event R45 and began sampling for Event R46.

---

Page 4  
Ms. Lynda Priddy  
May 9, 1995

**May 7**

Williams processed 37.6 tons of pesticide-impacted soils (not including 22 tons processed during cold startup, which will require treatment at proper temperatures).

Philip collected samples for Air Monitoring Event R46 and began sampling for Event R47.

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**May 8**

Williams processed 580.1 tons of pesticide-impacted soils (not including 4 tons processed during cold startup, which will require treatment at proper temperatures).

Completion of the performance test was rescheduled to begin May 9.

As directed by the USEPA, Williams excavated the soil processed on April 18 and 19 that had inadvertently been backfilled on April 21 without analytical data. The soil was placed on the waste feed storage pad for retreatment.

Philip collected samples for Air Monitoring Event R47 and began sampling for Event R48.

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**PROBLEMS OR DIFFICULTIES**

Williams continues to experience operational difficulties with the TPU-IV unit, including visible dust excursions. These operational problems may make it difficult to achieve the June 30, 1995, completion date. TPU-IV operational problems are also documented in Williams' daily reports. USEPA stopped the performance test to be completed at a date to be set later due to continued visible dust excursion problems. Completion of the performance test is tentatively scheduled for May 9 and 10th.

Page 5  
Ms. Lynda Priddy  
May 9, 1995

#### **ANALYTICAL DATA**

Williams received analytical data for soil processed April 27 through May 2, 1995.

Philip received analytical data for air monitoring events R34 through R40.

#### **UPCOMING ACTIVITIES FOR NEXT REPORTING PERIOD**

Williams will continue treating pesticide-impacted soils with TPU-IV. The performance test will be completed. Williams will continue to screen soils near the northern temporary soil storage area.

Remedial action phase air monitoring will continue in a reduced sampling mode.

#### **CLOSING**

If you have any questions regarding this weekly status report, do not hesitate to contact me at (618) 281-7173.

Sincerely yours,

PHDIP ENVIRONMENTAL SERVICES CORPORATION



David W. Eagleton, P.E.  
Project Manager  
Environmental Engineer

DWE/dwc /WEEK0508.DOC

cc: Bruce Sheppard and Elizabeth Hill (BNRR)  
Greg Koester and Mike Martin (Philip)  
Tom Backer (Preston, Gates, and Ellis)  
Mark Fleri (Williams)  
Larry Mullen and Jim Geiger (URS)

# **PHILIP**

## **ENVIRONMENTAL**

May 16, 1995  
Project 12883088

Ms. Lynda Priddy  
On-Scene Coordinator/Remedial Project Manager  
U.S. Environmental Protection Agency, Region X  
1200 Sixth Avenue  
Seattle, Washington 98101

Dear Ms. Priddy:

**Subject: Weekly Status Report  
May 9 to May 15, 1995  
Woods Industries Site  
Yakima, Washington**

On behalf of Burlington Northern Railroad (BNRR), Philip Environmental Services Corporation (Philip) hereby submits the weekly status report for soil treatment activities at the Woods Industries Site during the above period. This report is submitted in compliance with Administrative Order Number 1087-03-18-106.

### **PROJECT ACTIVITIES**

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#### **May 9**

York Testing Services; Lynda Priddy, Cathy Massimino, and John Gilbert of the USEPA; Paul Clarke of Roy F. Weston (Weston); and Jim Geiger of URS were on site. A pre-performance test meeting was conducted, the performance test was restarted. Prior test runs were voided because the treated soil failed to meet the cleanup criteria.

The performance testing was started but was discontinued, at USEPA's direction, for 3 hours and 41 minutes in the middle of the initial sampling runs (#1A) due to TPU-IV visible dust excursions around the seal between the discharge auger and the pugmill. The seal was repaired and sampling runs #1A and #1B were completed later that day.

Page 2  
Ms. Lynda Priddy  
May 16, 1995

USEPA issued a letter documenting that on May 3, USEPA approved a reduced ambient air monitoring frequency.

Williams processed 333.8 tons of pesticide-impacted soils. This amount does not include the 28 tons processed during cold startup, which will require treatment at proper temperatures.

Philip collected samples for Air Monitoring Event R48 and prepared sampling event R49 to begin at midnight.

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#### May 10

York Testing Services; Lynda Priddy, Cathy Massimino, and John Gilbert of the USEPA; Paul Clarke of Weston; and Jim Geiger of URS were on site. Performance testing continued and Run #2A was completed. Soil treatment operations were discontinued due to an apparent problem with the demisters resulting unwanted emissions from the stack. Williams offered free car washes for cars and trucks affected by these emissions.

Williams processed 287.30 tons of pesticide-impacted soils. This amount does not include approximately 10 tons processed during cold startup, which will require treatment at proper temperatures.

Analytical data received for soil processed on May 3 and 5 indicated the soil exceeded cleanup goals; as a result, URS signed rejection forms indicating the 136.15 tons of soil must be retreated. (Note, there was no soil processed on May 4.)

Philip collected samples for Air Monitoring Event R49 and began Event R50.

The USEPA issued a letter to BNRR describing the protocol for haul road soil sampling.

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Page 3  
Ms. Lynda Priddy  
May 16, 1995

### May 11

York Testing Services; Lynda Priddy, Cathy Massimino, and John Gilbert of the USEPA; Paul Clarke of Weston; and Jim Geiger of URS were on site. Although an attempt was made to continue performance testing after repairs to TPU-IV, no performance testing was conducted due to the continuing problem with the demisters. Williams offered free car washes for cars and trucks affected by unwanted stack emissions.

Williams processed 117.7 tons of pesticide-impacted soils (not including 4 tons processed during cold startup, which will require treatment at proper temperatures). The majority of the TPU-IV down time was due to repairs on the demisters.

Analytical data received for soil processed on May 6 indicated the soil exceeded cleanup goals; as a result, URS signed rejection forms indicating the 137.4 tons of soil must be retreated.

Williams received USEPA approval to backfill the 37.6 tons of soil treated May 7, and 580.1 tons of soil that was treated on May 8.

Philip collected samples from Air Monitoring Event R50 and began Event R51.

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### May 12

York Testing Services; Lynda Priddy, Cathy Massimino, and John Gilbert of the USEPA; Paul Clarke of Weston; and Jim Geiger of URS were on site. Although an attempt was made to continue performance testing after additional repairs to TPU-IV, no performance testing was conducted due to continued problems with the demisters. The performance test was discontinued, due to these problems, to be completed at a date to be set later. Williams offered free car washes for cars and trucks affected by unwanted emissions.

Williams processed 143.5 tons of pesticide-impacted soils prior to shutting down due to the demister problems. This amount does not include approximately 14 tons processed during cold startup, which will require treatment at proper temperatures.



Page 5  
Ms. Lynda Priddy  
May 16, 1995

### **PROBLEMS OR DIFFICULTIES**

Williams continues to experience operational difficulties with the TPU-IV unit, including problems with the stack demisters. These operational problems may make it difficult to achieve the June 30, 1995, completion date. Operational problems have also prevented completion of the performance test. TPU-IV operational problems are also documented in Williams' daily reports. The second attempt to complete the performance test was discontinued, to be completed at a date to be set later, due to problems with the demisters.

### **ANALYTICAL DATA**

Williams received analytical data for soil processed May 3 through May 9, 1995.

Philip received analytical data for air monitoring events R38 through R46.

### **UPCOMING ACTIVITIES FOR NEXT REPORTING PERIOD**

Williams will repair TPU-IV demisters to alleviate the problem resulting in unwanted emissions from the stack. Upon completion of these repairs and with USEPA approval, Williams will continue treating pesticide-impacted soils with TPU-IV. Completion of the performance test will be scheduled.

Olympus will begin removal of the northern building foundation and excavation of impacted soil below portions of the foundation.

Once TPU-IV resumes operation and space becomes available on the soil storage pad, Williams will begin to screen soils near the southern temporary soil storage area. When this occurs, Philip will begin ambient air monitoring at stations A15 and A16.

Remedial action phase air monitoring will continue in a reduced sampling mode.

Page 4  
Ms. Lynda Priddy  
May 16, 1995

A quarterly audit of the on-site meteorological station was conducted. Philip collected samples for Air Monitoring Event R51 and began Event R52.

Philip collected 3 soil samples of the northwest haul road.

---

**May 13**

No soil was processed due to the problems with demisters experienced the previous day. TPU-IV is not operating until additional repairs on the demisters are completed. No air monitoring was performed.

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**May 14**

No soil was processed due to the problems described above for May 13. No air monitoring was performed.

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**May 15**

No soil was processed due to the problems described above for May 13. No air monitoring was performed.

Williams received USEPA approval to backfill the 333.8 tons of soil treated on May 9.

Maintenance of air monitoring equipment was performed.

Representatives from Olympus Environmental, Inc. arrived on site to begin removal of the northern building foundation and excavation of impacted soil below the foundation.

Philip issued a letter to Lynda Priddy regarding haul road soil sampling protocol.

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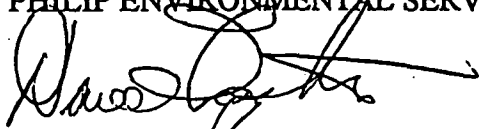
Page 6  
Ms. Lynda Priddy  
May 16, 1995

**CLOSING**

I you have any questions regarding this weekly status report, do not hesitate to contact me at (618) 281-7173.

Sincerely yours,

**PHILIP ENVIRONMENTAL SERVICES CORPORATION**



David W. Eagleton, P.E.  
Project Manager  
Environmental Engineer

DWE/dwc /WEEK0515.DOC

cc: Bruce Sheppard and Elizabeth Hill (BNRR)  
Greg Koester and Mike Martin (Philip)  
Tom Backer (Preston, Gates, and Ellis)  
Mark Fleri (Williams)  
Larry Mullen and Jim Geiger (URS)

**PHILIP**  
**ENVIRONMENTAL**

May 23, 1995  
Project 12883088

Ms. Lynda Priddy  
On-Scene Coordinator/ Remedial Project Manager  
U.S. Environmental Protection Agency  
1200 Sixth Avenue  
Seattle, Washington 98101

Dear Ms. Priddy:

**Subject: Weekly Status Report**  
**May 16 to May 22, 1995**

On behalf of Burlington Northern Railroad (BNRR), Philip Environmental Services Corporation (Philip) hereby submits the weekly status report for soil treatment activities at the Woods Industries Site during the above period. This report is submitted in compliance with Administrative Order Number 1087-03-19-106.

**PROJECT ACTIVITIES**

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**May 16**

Williams did not process any soils while waiting to replace scrubber demisters. No air monitoring was performed.

Williams received URS approval to backfill 143.5 tons of soil treated on May 12.

Olympus Environmental, Inc. (Olympus) began removal of the northern building foundation and excavation activities below the north stockpile.

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**May 17**

Williams did not process any soils while waiting to replace scrubber demisters. No air monitoring was performed.

Williams issued a letter to the USEPA regarding the schedule for completion of the performance test and requested additional operating time as a modification to Section 5 of the Work Plan.

Page 2  
Ms. Lynda Priddy  
May 23, 1995

Olympus removed foundation debris below former north stockpile. Approximately 155 tons of foundation debris and seven tons of Williams' personal protection equipment was transported to Chemical Waste Management's RCRA-permitted landfill in Arlington, Oregon for disposal.

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**May 18**

Williams did not process any soils while replacing scrubber demisters on TPU-IV. Philip performed ambient air monitoring for Event R53.

In a telephone conversation, USEPA granted Williams approval to operate 40 additional hours prior to completion of the performance test. USEPA approval was required for Williams to operate prior to the upcoming performance test scheduled for May 25 and May 26 because, according to the Work Plan, Williams had used up the number of allowable operating hours prior to completing the performance test. Williams was restricted to operating 12 hours a day and USEPA oversight personnel was must be on site.

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**May 19**

Williams did not process soils due to general maintenance of TPU-IV. Philip collected samples for Air Monitoring Event R54; however, with URS approval, the samples were discarded because Williams did not process any soils during the monitoring event.

Philip collected preliminary soil samples from three test pits excavated beneath the former foundation below the north stockpile. Olympus demobilized from the site until Williams completes removing soils from the north stockpile to allow for further excavation beneath the north stockpile.

Williams issued a letter to the USEPA notifying them that Mark Fleri is being replaced by B.J. Bartee as Williams' On-Site Operations Manager.

On behalf of BNRR, Philip issued a letter to USEPA describing 1995 Soil Removal Activities.

Page 3  
Ms. Lynda Priddy  
May 23, 1995

#### May 20

Williams processed 188 tons of pesticide-impacted soils. Williams did not operate for the entire 12 hour window due to equipment failure. This amount does not include approximately 12 tons processed during cold startup, which will require treatment at proper temperatures. Philip performed Air Monitoring Event R55.

---

#### May 21

Williams processed 38 tons of pesticide-impacted soils. This amount does not include approximately 8 tons processed during cold startup, which will require treatment at the proper temperatures. The majority of Williams' down time was attributed to a locked up feed belt and shutdown of the burner on the thermal oxidizer. Philip performed Air Monitoring Event R56.

B.J. Bartee replaced Mark Fleri as Williams' On-site Operations Manager.

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#### May 22

Williams processed 101.17 tons of pesticide-impacted soils. This amount does not include approximately 10 tons processed during cold startup, which will require treatment at the proper temperatures. The majority of Williams' down time was attributed to waiting for the arrival of a replacement part for the burner on the thermal oxidizer. Philip performed Air Monitoring Event R57.

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### PROBLEMS OR DIFFICULTIES

Williams continues to experience operational difficulties with the TPU-IV unit, including problems with the stack demisters and the burner on the thermal oxidizer. These operational problems will make it difficult to achieve the June 30, 1995 completion date. TPU-IV operational problems are also described in Williams' daily reports.

### ANALYTICAL DATA

Williams received analytical data for soil processed on May 12.

Philip received analytical for air monitoring events R46 through R51.

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Ms. Lynda Priddy  
May 23, 1995

#### UPCOMING ACTIVITIES FOR NEXT REPORTING PERIOD

Williams plans to provide USEPA performance test results from the performance test runs completed on May 9 and May 10, and proposes that operating restrictions prior to the performance test be lifted.

Williams' third attempt to complete the performance test is schedule for May 25 and May 26.

Philip should receive analytical results from soil samples collected from the haul road located along the west site boundary on the north portion of the site. If results are below soil removal cleanup levels established for the site, Philip will request USEPA approval to backfill over the haul road with treated soil.

Excavation beneath the north stockpile may continue.

Remedial Action Phase Air Monitoring will continue in a reduced sampling mode until the performance test, at which time monitoring will be performed again on a daily basis.

#### CLOSING

If you have any questions regarding this weekly status report, do not hesitate to contact me at (509) 575-77953.

Sincerely yours,  
PHILIP ENVIRONMENTAL SERVICES CORPORATION



Greg A. Koester  
On-Site Supervisor

cc: Bruce Sheppard and Elizabeth Hill (BNRR)  
David Eagleton and Mike Martin (Philip)  
Tom Backer (Preston, Gates, and Ellis)  
B.J. Bartee (Williams)



May 30, 1995  
Project 12883088

Ms. Lynda Priddy  
On-Scene Coordinator/Remedial Project Manager  
U.S. Environmental Protection Agency, Region X  
1200 Sixth Avenue  
Seattle, Washington 98101

Dear Ms. Priddy:

**Subject: Weekly Status Report  
May 23 through May 29, 1995  
Woods Industries Site  
Yakima, Washington**

On behalf of Burlington Northern Railroad (BNRR), Philip Environmental Services Corporation (Philip) hereby submits the weekly status report for soil treatment activities at the Woods Industries Site during the above period. This report is submitted in compliance with Administrative Order Number 1087-03-18-106.

## **PROJECT ACTIVITIES**

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### **May 23**

On behalf of BNRR, Philip issued the weekly status report for soil treatment activities conducted from May 16 through May 22.

Representatives from York Testing Services mobilized to the site to prepare for the upcoming performance testing.

Philip received analytical results from Quanterra, for three soil samples collected from the northwest haul road. Results of all three samples were below soil removal cleanup levels established for the site.





Page 2  
Ms. Lynda Priddy  
May 30, 1995

Williams processed 271.6 tons of pesticide-impacted soils. This amount does not include the 16 tons processed during cold startup, which will require treatment at proper temperatures.

Philip performed Ambient Air Monitoring Event R58.

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#### May 24

Williams provided USEPA with data from performance test runs conducted May 9 and 10. Based on this data, USEPA lifted the preperformance test operating hour restrictions.

Williams issued a letter to USEPA describing the performance testing scheduled to be conducted May 25 and 26.

Williams processed 288.2 tons of pesticide-impacted soils. This amount does not include approximately 12 tons processed during cold startup, which will require treatment at proper temperatures.

Lynda Priddy was on site.

Philip received results from the preliminary samples collected from the three test pits excavated below the former northern building foundation.

Philip performed Ambient Air Monitoring Event R59.

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#### May 25

York Testing Services; Lynda Priddy, Cathy Massimino, and John Gilbert of the USEPA; Paul Meeter of Weston; Bruce Sheppard of BNRR, and Larry Mullen of URS were on site. A pre-performance test meeting was conducted and the performance test was restarted.

Runs 3 and 1B of the performance test were completed.

Page 3  
Ms. Lynda Priddy  
May 30, 1995

Williams informed USEPA, BNRR, URS, and Philip that, although the USEPA will allow Williams to operate TPU IV at 50% capacity, according to the Work Plan, following the performance test, Williams has decided to discontinue treatment operations until preliminary performance test data (raw lab data) has been submitted to the USEPA and the unit is allowed to operate at 75% capacity. USEPA indicated that they would allow Williams to operate at 75% capacity based on the preliminary data, provided Williams will provide USEPA final data within 7 days following the raw data submittal.

In a site walk, Greg Koester and Lynda Priddy reviewed the status of building foundation removal, debris segregation, and the results of the test pits that had been excavated below the now-removed portions of the building foundation.

Williams processed 321.1 tons of pesticide-impacted soils. This amount does not include approximately 9 tons processed during cold startup, which will require treatment at proper temperatures.

Philip performed Air Monitoring Event R60.

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May 26

York Testing Services; Lynda Priddy, Cathy Massimino, and John Gilbert of the USEPA; Paul Meeter of Weston; and Larry Mullen of URS were on site. Williams conducted run 2B particulate testing from a cold startup of the performance test and also the blanks. Although the performance testing was interrupted due to mechanical problems, the performance test was completed.

Williams processed 107 tons of pesticide-impacted soils. This amount does not include approximately 8 tons processed during cold startup, which will require treatment at proper temperatures.

Philip performed Air Monitoring Event R61.

Greg Koester hand delivered a memo to Lynda Priddy regarding resuming ambient air monitoring once Williams begins to process soils again. Mr. Koester also gave Lynda Priddy a copy of the preliminary sample results from the three test pits excavated below the former northern building foundation.

**May 27**

No soil was processed. TPU-IV is not operating due to a Williams voluntary shut down. Although the USEPA will allow Williams to operate TPU IV at 50% capacity, according to the Work Plan, following the performance test, Williams decided to discontinue treatment operations following the performance test until the unit will be allowed to operate at 75% capacity.

No air monitoring was performed.

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**May 28**

No soil was processed for reasons described above. No air monitoring was performed.

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**May 29**

No soil was processed for reasons described above. No air monitoring was performed.

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**PROBLEMS OR DIFFICULTIES**

Williams has experienced many operational difficulties with the TPU-IV unit. It appears that due to these operational problems, the June 30, 1995, completion date is no longer achievable. BNRR will provide a revised completion date.

Operational problems had also prevented completion of the performance test on two previous occasions. These operational problems are also documented in Williams' daily reports. Remaining performance testing was conducted May 25 and 26. Analytical results from these tests are pending.

In addition, on May 27, although the USEPA will allow, and the Work Plan calls for, Williams to operate TPU IV at 50 % capacity for a period of time following

Page 5  
Ms. Lynda Priddy  
May 30, 1995

the performance test, Williams decided to discontinue treatment operations following the performance test until performance test data has been submitted to the USEPA and USEPA will allow the unit to operate at 75% capacity.

#### **ANALYTICAL DATA**

Williams received analytical data for soil processed May 20 through May 22, 1995.

Philip received analytical data for air monitoring events R52 through R53.

#### **UPCOMING ACTIVITIES FOR NEXT REPORTING PERIOD**

Once performance test data is received, and Williams resumes treatment operations, Williams will complete screening soils from the northern temporary soil storage area and begin to screen soils near the southern temporary soil storage area. Removal of the remaining portions of the northern building foundation will be conducted once Williams completes screening soils from the northern temporary soil storage area. When Williams begins screening soils near the southern temporary soil storage area, Philip will begin ambient air monitoring at stations A15 and A16.

Once Williams resumes treatment operations, Remedial action phase air monitoring will continue in a reduced sampling mode.


Page 6  
Ms. Lynda Priddy  
May 30, 1995

**CLOSING**

I you have any questions regarding this weekly status report, do not hesitate to contact me at (618) 281-7173.

Sincerely yours,

**PHILIP ENVIRONMENTAL SERVICES CORPORATION**



David W. Eagleton, P.E.  
Project Manager  
Environmental Engineer

DWE/dwe /WEEK0529.DOC

cc: Bruce Sheppard and Elizabeth Hill (BNRR)  
Greg Koester and Mike Martin (Philip)  
Tom Backer (Preston, Gates, and Ellis)  
B.J. Bartee (Williams)  
Larry Mullen and Jim Geiger (URS)

June 6, 1995  
Project 12883088

Ms. Lynda Priddy  
On-Scene Coordinator/Remedial Project Manager  
U.S. Environmental Protection Agency, Region X  
1200 Sixth Avenue  
Seattle, Washington 98101

Dear Ms. Priddy:

**Subject: Weekly Status Report  
May 30 through June 5, 1995  
Woods Industries Site  
Yakima, Washington**

On behalf of Burlington Northern Railroad (BNRR), Philip Environmental Services Corporation (Philip) hereby submits the weekly status report for soil treatment activities at the Woods Industries Site during the above period. This report is submitted in compliance with Administrative Order Number 1087-03-18-106.

## **PROJECT ACTIVITIES**

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### **May 30**

On behalf of BNRR, Philip issued the weekly status report for soil treatment activities conducted from May 23 through May 29.

No soil was processed. TPU IV is not operating due to a Williams decision to shut down. Although the USEPA will allow Williams to operate TPU IV at 50% capacity, according to the Work Plan following the performance test, Williams decided to discontinue treatment operations following the performance test until the unit will be allowed to operate at 75% capacity.

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**May 31**

No soil was processed for reasons described above. No air monitoring was performed.

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**June 1**

No soil was processed for reasons described above. No air monitoring was performed.

Williams provided USEPA with preliminary particulate and HCL data from performance test runs conducted May 25 and 26, along with pretest information and proposed TPU IV operating parameters.

A conference call was scheduled for June 2 to discuss performance test data and Williams' proposed TPU IV operating parameters.

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**June 2**

A conference call was conducted between; Cathy Massimino and Lynda Priddy of the USEPA; Dr. Lowell Taylor, Jim Sanders, Greg Whetstone, and Chris Drescher of Williams; Ron Bastien of Focus; and Greg Koester and Mike Martin of Philip, to discuss performance test data and Williams' proposed TPU IV operating parameters. At the conclusion of this conference call, USEPA approved TPU IV operations of 20 tons per hour, which is 75% of the capacity demonstrated during the performance test.

Williams received USEPA approval to backfill:

- 131.39 tons of soil treated on May 21 and 22;
- 271.6 tons of soil treated on May 23;
- 288.2 tons of soil treated on May 24;
- the 321.1 tons of soil treated on May 25; and
- 107 tons of soil treated on May 26, 1995.

Page 3  
Ms. Lynda Priddy  
June 6, 1995

USEPA issued a letter approving TPU IV operations at 75% of the capacity demonstrated during the performance test.

As requested by Lynda Priddy, Mike Martin gave Lynda Priddy PM10 results for the offsite ambient air monitoring locations for May 9, 10, and 11.

---

### June 3

Operating at 75% capacity, Williams processed 229.1 tons of pesticide-impacted soils. This amount does not include the 8 tons processed during cold startup, which will require treatment at proper temperatures. TPU IV on-line operating efficiency was 85.9%; that is, TPU IV operated for 20.62 hours of a 24-hour work day.

Philip performed Ambient Air Monitoring Event R62.

---

### June 4

Operating at 75% capacity, Williams processed 195.3 tons of pesticide-impacted soils. This amount does not include the 4 tons processed during cold startup, which will require treatment at proper temperatures. TPU IV on-line operating efficiency was 44.1%.

Philip performed Ambient Air Monitoring Event R63.

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### June 5

Operating at 75% capacity, Williams processed 432.9 tons of pesticide-impacted soils. This amount does not include the 8 tons processed during cold startup, which will require treatment at proper temperatures. TPU IV on-line operating efficiency was 97.6%.



Page 4  
Ms. Lynda Priddy  
June 6, 1995

Williams completed screening soils located in the northern temporary soil storage area and relocated the screen near the southern temporary soil storage area.

Williams issued a letter to the USEPA containing a revised table 3-2 of the Soil Treatment Work Plan for USEPA review.

Williams issued a letter to the USEPA containing analytical results for the scrubber blowdown water as agreed in the June 2 conference call.

Philip collected 19 preliminary samples in areas below and east of the former northern building foundation and performed Ambient Air Monitoring Event R64.

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#### **PROBLEMS OR DIFFICULTIES**

Williams has experienced many operational difficulties with the TPU IV unit. These operational problems are documented in Williams' daily reports. It appears that due to these operational problems and Williams' decision not to process soils during the period from May 27 through June 2, that the June 30, 1995, completion date is no longer achievable. BNRR will provide a proposed modification to the schedule as soon as a realistic completion date is available, based on recent operating performance.

#### **ANALYTICAL DATA**

Williams received analytical data for soil processed May 21 through May 26, 1995.

Philip received analytical data for air monitoring events R55 through R60.

#### **UPCOMING ACTIVITIES FOR NEXT REPORTING PERIOD**

Williams will begin to screen soils near the southern temporary soil storage area. Removal of the remaining portions of the northern building foundation may be conducted. When Williams begins screening soils near the southern temporary soil storage area, Philip will begin ambient air monitoring at stations A15 and A16.

Page 5  
Ms. Lynda Priddy  
June 6, 1995

**CLOSING**

I you have any questions regarding this weekly status report, do not hesitate to contact me at (618) 281-7173.

Sincerely yours,

**PHILIP ENVIRONMENTAL SERVICES CORPORATION**



David W. Eagleton, P.E.  
Project Manager  
Environmental Engineer

DWE/dwe /WEEK0605.DOC

cc: Bruce Sheppard and Elizabeth Hill (BNRR)  
Greg Koester and Mike Martin (Philip)  
Tom Backer (Preston, Gates, and Ellis)  
B.J. Bartee (Williams)  
Larry Mullen and Jim Geiger (URS)



June 13, 1995  
Project 12883088

Ms. Lynda Priddy  
On-Scene Coordinator/Remedial Project Manager  
U.S. Environmental Protection Agency, Region X  
1200 Sixth Avenue  
Seattle, Washington 98101

Dear Ms. Priddy:

**Subject: Weekly Status Report  
June 6 through June 12, 1995  
Woods Industries Site  
Yakima, Washington**

On behalf of Burlington Northern Railroad (BNRR), Philip Environmental Services Corporation (Philip) hereby submits the weekly status report for soil treatment activities at the Woods Industries Site during the above period. This report is submitted in compliance with Administrative Order Number 1087-03-18-106.

## PROJECT ACTIVITIES

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### June 6

On behalf of BNRR, Philip issued the weekly status report for soil treatment activities conducted from May 30 through June 5.

Mike Martin hand delivered a letter to Lynda Priddy containing the analytical results of samples collected from the northwest haul road. This letter also contained a request for permission to backfill treated soil over this area.

Limited to operating at 75 percent of maximum capacity, Williams processed 247.0 tons of pesticide-impacted soils. This amount does not include the 4 tons processed during cold startup, which will require treatment at proper temperatures. TPU IV on-line operating efficiency was 56.3 percent; that is, TPU IV operated

Page 2  
Ms. Lynda Priddy  
June 13, 1995

for 13.5 hours of a 24-hour work day. TPU IV shut down due to CEM system problems.

An on-site meeting was conducted between Lynda Priddy and Cathy Massimino of the USEPA; Jim Geiger of URS; B.J. Bartee of Williams; and Mike Martin of Philip. TPU IV operating parameters were discussed.

In a site walk, Mike Martin showed Lynda Priddy where Philip was proposing to collect two additional haul road samples around where the screen and loading areas were located near the northern temporary soil storage area. With USEPA approval, Philip collected two samples from this area and shipped them to Quanterra.

Philip performed Ambient Air Monitoring event R65.

---

June 7

No soil was processed. TPU IV did not operate due to CEM system problems.

Philip performed Ambient Air Monitoring Event R66.

Under a cover letter from Greg Whetstone to Lynda Priddy, Williams issued performance test analytical results. This included laboratory QA/QC results for a majority of the analyses, with the rest to follow when they are received. This submittal also contained summary tables of the results as they compare to Washington State ASILs. This letter also informed the USEPA of a tentative schedule for issuing the draft and final performance test report.

Under a separate cover letter from Greg Whetstone to Lynda Priddy, Williams issued the data validation reports for run 2 of the performance test, fulfilling USEPA's requirement that one complete CLP deliverable data package be submitted to the USEPA for a spot check.

---

June 8

Williams began screening soils near the southern temporary soil storage area.

Page 3  
Ms. Lynda Priddy  
June 13, 1995

Limited to operating at 75 percent of maximum capacity, Williams processed 129.88 tons of pesticide-impacted soils. This amount does not include the 4 tons processed during cold startup, which will require treatment at proper temperatures. TPU IV on-line operating efficiency was 30.3 percent. TPU IV down time was due to CEM system repairs and replacing a gearbox on the baghouse cross auger.

Williams received USEPA approval to backfill 229.1 tons of soil that was treated on June 3, and the 195.3 tons treated on June 4, 1995.

Philip performed Ambient Air Monitoring Event R67.

Under a cover letter from Greg Whetstone to Lynda Priddy, Williams issued performance test QA/QC data for particulate, metals, and VOST testing and a revised Table 3-2 of the Work Plan. This letter also informed the USEPA that a draft performance test report is tentatively scheduled to be issued to the USEPA the following week, pending timely receipt of remaining QA/QC data by Focus Environmental.

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#### June 9

Limited to operating at 75 percent of maximum capacity, Williams processed 245.69 tons of pesticide-impacted soils. This amount does not include the 34 tons processed during cold startup, which will require treatment at proper temperatures. TPU IV on-line operating efficiency was 64.5 percent.

Williams received USEPA approval to backfill 432.9 tons of soil that was treated on June 5, and the 247.0 tons treated on June 6, 1995.

Philip received analytical data from the 19 preliminary samples collected June 5 in areas below and east of the former northern building foundation.

Philip performed Ambient Air Monitoring Event R68.

---

#### June 10

Limited to operating at 75 percent of maximum capacity, Williams processed 294.36 tons of pesticide-impacted soils. This amount does not include the 38 tons

Page 4  
Ms. Lynda Priddy  
June 13, 1995

processed during cold startup, which will require treatment at proper temperatures. TPU IV on-line operating efficiency was 75 percent.

Philip performed Ambient Air Monitoring Event R69.

---

#### **June 11**

Limited to operating at 75 percent of maximum capacity, Williams processed 404.16 tons of pesticide-impacted soils. This amount does not include the 12 tons processed during cold startup, which will require treatment at proper temperatures. TPU IV on-line operating efficiency was 60.62 percent.

Philip performed Ambient Air Monitoring Event R70.

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#### **June 12**

Limited to operating at 75 percent of maximum capacity, Williams processed 418.77 tons of pesticide-impacted soils. This amount does not include the 4 tons processed during cold startup, which will require treatment at proper temperatures. TPU IV on-line operating efficiency was 95.2 percent.

Philip performed Ambient Air Monitoring Event R71.

---

#### **PROBLEMS OR DIFFICULTIES**

Williams has experienced many operational difficulties with the TPU IV unit, although recent performance has improved. These operational problems are documented in Williams' daily reports. It appears that due to these operational problems and Williams' decision not to process soils during the period from May 27 through June 2, that the June 30, 1995, completion date is no longer achievable. BNRR will provide a proposed modification to the schedule as soon as a realistic completion date is available, based on recent operating performance and a revised schedule from Williams.

Page 5  
Ms. Lynda Priddy  
June 13, 1995

#### **ANALYTICAL DATA**

Williams received analytical data for soil processed June 3 through June 6, 1995.

Philip received analytical data for air monitoring events R60 through R64.

#### **UPCOMING ACTIVITIES FOR NEXT REPORTING PERIOD**

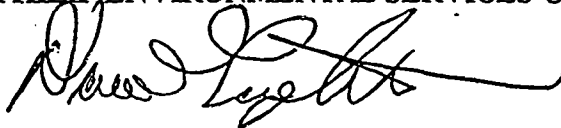
Removal of the northern building foundation will resume. Williams will continue soil treatment operations and screening soils near the southern temporary soil storage area. Ambient Air Monitoring will continue.

#### **CLOSING**

I you have any questions regarding this weekly status report, do not hesitate to contact me at (618) 281-7173.

Sincerely yours,

**PHILIP ENVIRONMENTAL SERVICES CORPORATION**



David W. Eagleton, P.E.  
Project Manager  
Environmental Engineer

DWE/dwe /WEEK0612.DOC

cc: Bruce Sheppard and Elizabeth Hill (BNRR)  
Greg Koester and Mike Martin (Philip)  
Tom Backer (Preston, Gates, and Ellis)  
B.J. Bartee (Williams)  
Larry Mullen and Jim Geiger (URS)

June 20, 1995  
Project 12883088

Ms. Lynda Priddy  
On-Scene Coordinator/Remedial Project Manager  
U.S. Environmental Protection Agency, Region X  
1200 Sixth Avenue  
Seattle, Washington 98101

Dear Ms. Priddy:

**Subject: Weekly Status Report**  
**June 13 through June 19, 1995**  
**Woods Industries Site**  
**Yakima, Washington**

On behalf of Burlington Northern Railroad (BNRR), Philip Environmental Services Corporation (Philip) hereby submits the weekly status report for soil treatment activities at the Woods Industries Site during the above period. This report is submitted in compliance with Administrative Order Number 1087-03-18-106.

## **PROJECT ACTIVITIES**

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### **June 13**

On behalf of BNRR, Philip issued the weekly status report for soil treatment activities conducted from June 6 through June 12.

Limited to operating at 75 percent of maximum capacity, Williams processed 340.47 tons of pesticide-impacted soils. This amount does not include the 4 tons processed during cold startup, which will require treatment at proper temperatures. TPU IV on-line operating efficiency was 77.4 percent; that is, TPU IV operated for 18 hours and 35 minutes of a 24-hour work day.

Williams received USEPA approval to backfill 129.88 tons of soil that was treated on June 8, and the 245.69 tons treated on June 9, 1995.

Philip performed Ambient Air Monitoring event R72.



Page 2  
Ms. Lynda Priddy  
June 20, 1995

A conference call was conducted between Lynda Priddy and Cathy Massimino of the USEPA; Dan Hollins and Bob Warwick of Weston; and Elizabeth Ubinger, Charlie Child, and David Eagleton of Philip, to discuss details regarding incorporating performance test results into the Ambient Air Quality Impact Report as an Addendum.

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#### June 14

Limited to operating at 75 percent of maximum capacity, Williams processed 148.2 tons of pesticide-impacted soils. This amount does not include the 10 tons processed during cold startup, which will require treatment at proper temperatures. TPU IV on-line operating efficiency was 37.4 percent. Major down time was due to replacing thrust roller bearings on the rotary dryer and general maintenance.

Williams received USEPA approval to backfill 294.36 tons of soil that was treated on June 10, and the 404.16 tons treated on June 11, 1995.

Philip performed Ambient Air Monitoring event R73.

A conference call was conducted between Lynda Priddy of the USEPA; B.J. Bartee of Williams; and Elizabeth Ubinger and David Eagleton of Philip, to discuss details regarding incorporating performance test results into the Ambient Air Quality Impact Report as an Addendum.

In a telephone conversation, David Eagleton and Lynda Priddy discussed upcoming building foundation removal activities, preliminary sample results, and plans for additional soil removal.

USEPA issued a letter approving the backfill over the "northwest haul road" based on the analytical data package submitted to the USEPA on June 5.

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#### June 15

Under a cover letter from B.J. Bartee to Paul Meeter of Weston, Williams issued performance test analytical QA/QC results to Weston for data validation.

○

Page 3  
Ms. Lynda Priddy  
June 20, 1995

Limited to operating at 75 percent of maximum capacity, Williams processed 232.96 tons of pesticide-impacted soils. This amount does not include the 7 tons processed during cold startup, which will require treatment at proper temperatures. TPU IV on-line operating efficiency was 53.7 percent.

Williams received USEPA approval to backfill 418.77 tons of soil that was treated on June 12, 1995.

Philip performed Ambient Air Monitoring Event R74.

In a telephone conversation, David Eagleton and Lynda Priddy discussed estimated dates for completion of soil treatment under different assumed scenarios; upcoming building foundation removal activities; and plans for additional soil removal.

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#### June 16

No soil was processed due to problems with the burner system on the rotary dryer.

Philip performed Ambient Air Monitoring Event R75.

Cathy Massimino of USEPA was on-site. In an on-site meeting, Cathy Massimino, B.J. Barte (Williams), and Mike Martin (Philip), discussed the nature of some of the recently occurring repetitive AWFSOs, and Cathy Massimino directed Williams to have the problems that are causing the AWFSOs fixed.

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#### June 17

No soil was processed due to problems with the burner system on the rotary dryer.

Williams received USEPA approval to backfill 340.47 tons of soil that was treated on June 13, 1995.

Philip performed Ambient Air Monitoring Event R76.

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Page 4  
Ms. Lynda Priddy  
June 20, 1995

**June 18**

No soil was processed due to problems with the burner system on the rotary dryer. Philip performed Ambient Air Monitoring Event R77; however, this event will not be analyzed because no soil was processed.

---

**June 19**

DWE  
271.1 Limited to operating at 75 percent of maximum capacity, Williams processed 275.10 tons of pesticide-impacted soils. This amount does not include the 4 tons processed during cold startup, which will require treatment at proper temperatures. TPU IV on-line operating efficiency was 62.5 percent.

Olympus Environmental, Inc., mobilized to the site to resume removal of the northern building foundation and contaminated soil below it.

Williams received USEPA approval to backfill 148.2 tons of soil that was treated on June 14, 1995.

Philip performed Ambient Air Monitoring Event R78.

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**PROBLEMS OR DIFFICULTIES**

Williams has experienced many operational difficulties with TPU IV, including recent problems with the burner system on the rotary dryer. These operational problems are documented in Williams' daily reports. It appears that due to these operational problems and Williams' decision not to process soils during the period from May 27 through June 2, that the June 30, 1995, completion date is no longer achievable. BNRR will provide a proposed modification to the schedule as soon as a realistic completion date is available, based on recent operating performance and a revised schedule from Williams.

Page 5  
Ms. Lynda Priddy  
June 20, 1995

#### **ANALYTICAL DATA**

Williams received analytical data for soil processed June 8 through June 14, 1995.

Philip received analytical data for air monitoring events R58 through R67.

#### **UPCOMING ACTIVITIES FOR NEXT REPORTING PERIOD**

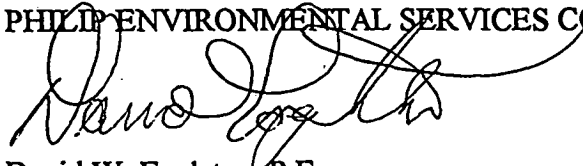
Removal of the northern building foundation and contaminated soil below the foundation will continue. Williams will continue soil treatment operations and screening soils near the southern temporary soil storage area. Ambient Air Monitoring will continue.

#### **CLOSING**

I you have any questions regarding this weekly status report, do not hesitate to contact me at (618) 281-7173.

Sincerely yours,

PHILIP ENVIRONMENTAL SERVICES CORPORATION



David W. Eagleton, P.E.  
Project Manager  
Environmental Engineer

DWE/dwe /WEEK0619.DOC

cc: Bruce Sheppard and Elizabeth Hill (BNRR)  
Greg Koester and Mike Martin (Philip)  
Tom Backer (Preston, Gates, and Ellis)  
B.J. Bartee (Williams)  
Larry Mullen and Jim Geiger (URS)

June 27, 1995  
Project 12883088

Ms. Lynda Priddy  
On-Scene Coordinator/Remedial Project Manager  
U.S. Environmental Protection Agency, Region X  
1200 Sixth Avenue  
Seattle, Washington 98101

Dear Ms. Priddy:

**Subject: Weekly Status Report  
June 20 through June 26, 1995  
Woods Industries Site  
Yakima, Washington**

On behalf of Burlington Northern Railroad (BNRR), Philip Environmental Services Corporation (Philip) hereby submits the weekly status report for soil treatment activities at the Woods Industries Site during the above period. This report is submitted in compliance with Administrative Order Number 1087-03-18-106.

## **PROJECT ACTIVITIES**

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### **June 20**

On behalf of BNRR, Philip issued the weekly status report for soil treatment activities conducted from June 13 through June 19.

Limited to operating at 75 percent of maximum capacity, Williams processed 401.17 tons of pesticide-impacted soils. This amount does not include the 12 tons processed during cold startup, which will require treatment at proper temperatures. TPU IV on-line operating efficiency was 93.5 percent; that is, TPU IV operated for 22 hours and 26 minutes of a 24-hour work day.

Williams received USEPA approval to backfill 232.96 tons of soil that was treated on June 15, 1995.

Philip conducted Ambient Air Monitoring event R79.

Page 2  
Ms. Lynda Priddy  
June 27, 1995

Approximately 145 tons of building foundation debris was transported to Chemical Waste Management Inc.'s (CWM's) RCRA-permitted landfill in Arlington, Oregon, for disposal.

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#### June 21

Limited to operating at 75 percent of maximum capacity, Williams processed 443.9 tons of pesticide-impacted soils. TPU IV on-line operating efficiency was approximately 100 percent.

Philip performed Ambient Air Monitoring event R80.

Approximately 66 tons of building foundation debris was transported to CWM's facility in Arlington, Oregon, for disposal.

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#### June 22

Philip issued the Addendum to the Ambient Air Quality Impact Report to the USEPA.

Williams issued the Performance Test Report to the USEPA.

Lynda Priddy and Cathy Massimino of the USEPA were on site.

Limited to operating at 75 percent of maximum capacity, Williams processed 442.4 tons of pesticide-impacted soils. TPU IV on-line operating efficiency was approximately 100 percent.

Williams received USEPA approval to backfill 271.1 tons of soil that was treated on June 19, 1995.

Philip performed Ambient Air Monitoring Event R81.

Page 3  
Ms. Lynda Priddy  
June 27, 1995

Approximately 89 tons of building foundation debris was transported to CWM's facility in Arlington, Oregon for disposal. Olympus Environmental, Inc. (Olympus) resumed removal of pesticide-impacted soil from below the former northern building foundation and transported this soil to the south stockpile for screening.

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### **June 23**

Limited to operating at 75 percent of maximum capacity, Williams processed 109.24 tons of pesticide-impacted soils. This amount does not include the 12 tons processed during cold startup, which will require treatment at proper temperatures. TPU IV on-line operating efficiency was 27.1 percent. The majority of Williams' down time (approximately 17.5 hours) was attributed to replacing kiln bolts and replacing the gearbox on the outer auger.

Williams received USEPA approval to backfill 401.7 tons of soil that was treated on June 20, 1995.

Philip performed Ambient Air Monitoring Event R82.

Olympus continued removal of pesticide-impacted soil from below the former northern building foundation and transported this soil to the south stockpile for screening.

---

### **June 24**

Limited to operating at 75 percent of maximum capacity, Williams processed 133.0 tons of pesticide-impacted soils. This amount does not include the 20 tons processed during cold startup, which will require treatment at proper temperatures. TPU IV on-line operating efficiency was 35.6 percent. The majority of Williams' down time (approximately 15 hours) was attributed to replacing nuts on kiln bolts and maintenance to primary burner pressure switch.

Philip performed Ambient Air Monitoring Event R83.

Page 4  
Ms. Lynda Priddy  
June 27, 1995

Olympus continued removal of pesticide-impacted soil from below the former northern building foundation and transported this soil to the south stockpile for screening.

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**June 25**

Limited to operating at 75 percent of maximum capacity, Williams processed 448.5 tons of pesticide-impacted soils. TPU IV on-line operating efficiency was 100 percent.

Philip performed Ambient Air Monitoring Event R84.

Olympus continued removal of pesticide-impacted soil from below the former northern building foundation and transported this soil to the south stockpile for screening.

---

**June 26**

Limited to operating at 75 percent of maximum capacity, Williams processed 449.3 tons of pesticide-impacted soils. TPU IV on-line operating efficiency was 100 percent.

Williams received USEPA approval to backfill 443.9 tons of soil that was treated on June 21, 1995.

Philip performed Ambient Air Monitoring Event R85.

Olympus continued removal of pesticide-impacted soil from below the former northern building foundation and transported this soil to the south stockpile for screening.

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Page 5  
Ms. Lynda Priddy  
June 27, 1995

#### **PROBLEMS OR DIFFICULTIES**

Williams has experienced many operational difficulties with TPU IV, although recent performance has improved. These operational problems are documented in Williams' daily reports. It appears that due to these operational problems and Williams' decision not to process soils during the period from May 27 through June 2, that the June 30, 1995, completion date is no longer achievable. BNRR will provide a proposed modification to the schedule as soon as a realistic completion date is available, based on recent operating performance and a revised schedule from Williams.

#### **ANALYTICAL DATA**

Williams received analytical data for soil processed June 15 through June 21, 1995.

Philip received analytical data for air monitoring events R68 through R73.

#### **UPCOMING ACTIVITIES FOR NEXT REPORTING PERIOD**

Removal of the northern building foundation and contaminated soil below the foundation will continue. Williams will continue soil treatment operations and screening soils near the southern temporary soil storage area. Ambient Air Monitoring will continue.

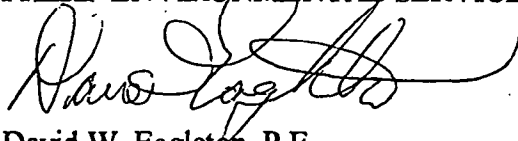
Page 6  
Ms. Lynda Priddy  
June 27, 1995

**CLOSING**

I you have any questions regarding this weekly status report, do not hesitate to contact me at (618) 281-7173.

Sincerely yours,

**PHILIP ENVIRONMENTAL SERVICES CORPORATION**



David W. Eagleton, P.E.  
Project Manager  
Environmental Engineer

DWE/dwc /WEEK0626.DOC

cc: Bruce Sheppard and Elizabeth Hill (BNRR)  
Greg Koester and Mike Martin (Philip)  
Tom Backer (Preston, Gates, and Ellis)  
B.J. Bartee (Williams)  
Larry Mullen and Jim Geiger (URS)



July 5, 1995  
Project 12883088

Post-It™ brand fax transmittal memo 7671		# of pages ▶
To	Greg K	From
Co.		Co.
Dept.		Phone #
Fax #		Fax #

Ms. Lynda Priddy  
On-Scene Coordinator/Remedial Project Manager  
U.S. Environmental Protection Agency, Region X  
1200 Sixth Avenue  
Seattle, Washington 98101

Dear Ms. Priddy:

**Subject: Weekly Status Report  
June 27 through July 3, 1995  
Woods Industries Site  
Yakima, Washington**

On behalf of Burlington Northern Railroad (BNRR), Philip Environmental Services Corporation (Philip) hereby submits the weekly status report for soil treatment activities at the Woods Industries Site during the above period. This report is submitted in compliance with Administrative Order Number 1087-03-18-106.

## PROJECT ACTIVITIES

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### June 27

On behalf of BNRR, Philip issued the weekly status report for soil treatment activities conducted from June 20 through June 26:

Limited to operating at 75 percent of maximum capacity, Williams processed 426.6 tons of pesticide-impacted soils. This amount does not include the 10 tons processed during cold startup, which will require treatment at proper temperatures. TPU IV on-line operating efficiency was 95.5 percent; that is, TPU IV operated for 22 hours and 55 minutes of a 24-hour work day.

Williams received USEPA approval to backfill 442.4 tons of soil that was treated on June 22, 1995.

Philip conducted Ambient Air Monitoring event R87.

Page 2  
Ms. Lynda Priddy  
July 5, 1995

Olympus continued removal of pesticide-impacted soil from below the former northern building foundation and transported this soil to the south stockpile for screening.

---

#### June 28

Limited to operating at 75 percent of maximum capacity, Williams processed 452.6 tons of pesticide-impacted soils. TPU IV on-line operating efficiency was 99.9 percent.

Williams received USEPA approval to backfill 109.24, 133, and 448 tons of soil that was treated on June 23, 24, and 25, 1995.

Philip performed Ambient Air Monitoring event R87.

Olympus continued removal of pesticide-impacted soil from below the former northern building foundation and transported this soil to the south stockpile for screening.

Tires used to hold covers on the temporary soil storage areas were shipped to the Terrace Heights Landfill tire recycling facility.

Approximately 35 tons of building foundation debris was transported to Chemical Waste Management Inc.'s (CWM's) RCRA-permitted landfill in Arlington, Oregon, for disposal.

---

#### June 29

Limited to operating at 75 percent of maximum capacity, Williams processed 452.1 tons of pesticide-impacted soils. TPU IV on-line operating efficiency was approximately 99.7 percent.

Williams received USEPA approval to backfill 449.3 tons of soil that was treated on June 26, 1995.

Page 3

Ms. Lynda Priddy

July 5, 1995

Philip performed Ambient Air Monitoring Event R88.

Olympus continued removal of pesticide-impacted soil from below the former northern building foundation and transported this soil to the south stockpile for screening.

BNRR issued a letter to USEPA requesting an extension to the date for completion of soil treatment.

---

#### June 30

Limited to operating at 75 percent of maximum capacity, Williams processed 360.3 tons of pesticide-impacted soils. This amount does not include the 12 tons processed during cold startup, which will require treatment at proper temperatures. TPU IV on-line operating efficiency was 82.8 percent.

Williams received USEPA approval to backfill 426.6 tons of soil that was treated on June 27, 1995.

Philip performed Ambient Air Monitoring Event R89.

USEPA issued a letter granting BNRR conditional approval for Williams to operate TPU-IV at 100 percent feed capacity which is 26.7 tons per hour. This letter also contained comments on (1) June 14, 1995, York Services, Stack Sampling Report, three volumes; (2) Performance Test Report; (3) Ambient Air Quality Impact Report Addendum; (4) June 23 letter from Williams to the USEPA entitled "TSS and TDS vs Scrubber Blowdown"; and, (5) the Ambient Air Monitoring Plan.

---

#### July 1

Although the USEPA's June 30 letter granted BNRR conditional approval for Williams to operate TPU IV at 100 percent (26.7 tons per hour), Williams continued operating at 75 percent because of operation problems which would arise if they met the USEPA's conditions required to operate at 100%. Operating

Page 4  
Ms. Lynda Priddy  
July 5, 1995

at 75 percent of maximum capacity, Williams processed 391 tons of pesticide-impacted soils. This amount does not include the 8 tons processed during cold startup, which will require treatment at proper temperatures. TPU IV on-line operating efficiency was 88.3 percent.

Philip performed Ambient Air Monitoring Event R90.

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### July 2

Although the USEPA's June 30 letter granted BNRR conditional approval for Williams to operate TPU IV at 100 percent (26.7 tons per hour), Williams continued operating at 75 percent because of operation problems which would arise if they met the USEPA's conditions required to operate at 100%. Operating at 75 percent of maximum capacity, Williams processed 420.5 tons of pesticide-impacted soils. TPU IV on-line operating efficiency was 92.5 percent.

Philip performed Ambient Air Monitoring Event R91.

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### July 3

No soil was processed and no air monitoring conducted. TPU IV was shut down for scheduled maintenance.

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## PROBLEMS OR DIFFICULTIES

Williams has experienced many operational difficulties with TPU IV, although recent performance has improved. These operational problems are documented in Williams' daily reports. It appears that the June 30, 1995, completion date was not achievable due to these operational problems and Williams' decision not to process soils during the period from May 27 through June 2. On June 29, BNRR proposed a modification to the schedule.

Page 5  
Ms. Lynda Priddy  
July 5, 1995

### **ANALYTICAL DATA**

Williams received analytical data for soil processed June 22 through June 27, 1995.

Philip received analytical data for air monitoring events R77 through R83.

### **UPCOMING ACTIVITIES FOR NEXT REPORTING PERIOD**

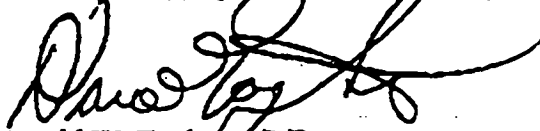
Removal of contaminated soil from below northern building foundation will continue. Williams will continue soil treatment operations and screening soils near the southern temporary soil storage area. Ambient Air Monitoring will continue.

### **CLOSING**

I you have any questions regarding this weekly status report, do not hesitate to contact me at (618) 281-7173.

Sincerely yours,

**PHILIP ENVIRONMENTAL SERVICES CORPORATION**



David W. Eagleton, P.E.  
Project Manager  
Environmental Engineer

DWB/dww /WEEK6704.DOC

cc: Bruce Sheppard and Elizabeth Hill (BNRR)  
Greg Koester (Philip)  
Tom Backer (Preston, Gates, and Ellis)  
Chris Drescher (Williams)  
Larry Mullen and Jim Geiger (URS)

DWE



July 11, 1995  
Project 12883088

Ms. Lynda Priddy  
On-Scene Coordinator/Remedial Project Manager  
U.S. Environmental Protection Agency, Region X  
1200 Sixth Avenue  
Seattle, Washington 98101

Dear Ms. Priddy:

**Subject: Weekly Status Report  
July 4 through July 10, 1995  
Woods Industries Site  
Yakima, Washington**

On behalf of Burlington Northern Railroad (BNRR), Philip Environmental Services Corporation (Philip) hereby submits the weekly status report for soil treatment activities at the Woods Industries Site during the above period. This report is submitted in compliance with Administrative Order Number 1087-03-18-106.

**PROJECT ACTIVITIES**

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**July 4**

No soil was processed and no air monitoring conducted. TPU IV was shut down for the holiday.

---

**July 5**

On behalf of BNRR, Philip issued the weekly status report for soil treatment activities conducted from June 27 through July 3.

Although the USEPA's June 30 letter granted conditional approval for Williams to operate TPU IV at 100 percent (26.7 tons per hour), Williams continued





Page 2  
Ms. Lynda Priddy  
July 11, 1995

operating at 75 percent because of operation considerations (USEPA's required scrubber blowdown rate and Quanterra's analytical turn around time). Operating at 75 percent of maximum capacity, Williams processed 330.9 tons of pesticide-impacted soils. This amount does not include the 10 tons processed during cold startup, which will require treatment at proper temperatures. TPU IV on-line operating efficiency was 75.6 percent; that is, TPU IV operated for 18 hours and 8 minutes of a 24-hour work day.

Williams received USEPA approval to backfill 452.6 and 452.1 tons of soil that was treated on June 28 and 29, 1995.

Philip collected soil sample NEHR-07 along the northeast haul road and shipped it to Quanterra for analysis.

Philip began Ambient Air Monitoring event R94, but the circuit breaker stopped the event at 6:00 PM, invalidating the event due to off-specification duration.

Philip laid out locations in the field (placed stakes in the ground) for verification sampling of the northern excavation.

Olympus continued removal of pesticide-impacted soil from below the former northern building foundation and transported this soil to the south stockpile for screening.

On behalf of BNR, Philip issued two letters to the USEPA, one was a letter regarding the mercury vapor assessment and the other was a response required by the USEPA's June 30 letter regarding standard operating procedures (SOPs) for ambient air monitoring.

An on-site meeting was conducted between Cathy Massimino and Lynda Priddy (USEPA), Jim Geiger (URS), Chris Drescher (Williams), and David Eagleton (Philip). Topics of this meeting included:

- EPA's review of the performance test VOST audit sample results;

Page 3  
Ms. Lynda Priddy  
July 11, 1995

- Lynda Priddy said the Performance Test Data validation turned out OK;
- David Eagleton gave Lynda Priddy the performance test dioxin audit sample laboratory identification numbers that correspond to USEPA identification numbers;
- status of Williams increasing the scrubber blowdown to 22 gallons per minute and operating TPU IV at 100 percent of maximum capacity;
- Williams' June 29 letter to the USEPA regarding AWFSOs during a controlled shutdown;
- by Wednesday July 12, Williams is to have evaluated whether opening the vent during a controlled shutdown could prevent the occurrence of an AWFSO for high PCC temperature;
- Cathy Massimino will determine whether AWFSOs that occur during a controlled shutdown should be counted on a case-by-case basis, but baghouse pressure differential excursions will always count because Cathy Massimino says they can be prevented;
- status of the northern excavation and that Olympus is expected to finish on July 6;
- preliminary sample results from the northern excavation and David Eagleton gave Lynda Priddy a copy this data;
- proposed verification sampling of the northern excavation, David Eagleton gave Lynda Priddy a copy of the proposed verification sample location sketch;
- debris from the 1993 decon pad is being stored south of the southern temporary soil storage area;
- USEPA's June 30 comments on the AAQIR Addendum;

Page 4  
Ms. Lynda Priddy  
July 11, 1995

- Philip's letter regarding mercury vapor analytical results;
  - status of treatment option evaluation for liquid contained in 3 drums (2 drums from cleanout of the "Akland Sump" characterized by samples from the RI and one drum of water that has yet to be characterized);
  - Philip's letter regarding ambient air monitoring SOPs; and
  - rolloff boxes containing oversized material from the "hot-hot" pesticide-contaminated soil previously stored in the rolloffs.
- 

#### July 6

Operating TPU IV at 75 percent of maximum capacity, Williams processed 333.7 tons of pesticide-impacted soils. TPU IV on-line operating efficiency was approximately 77 percent.

Williams received USEPA approval to backfill 360.3 tons of soil that was treated on June 30, 1995.

Philip issued a memorandum to Jim Geiger (URS) regarding Ambient Air Monitoring Event R94. Philip had Knoble Electric evaluate the electrical circuit for the perimeter air monitoring stations. Knoble replaced the 30-amp GFI breaker with a standard 30-amp breaker.

Philip began Ambient Air Monitoring event R95 at approximately 8:00 AM. R95 was stopped at approximately 12:05 AM on July 7, (short of the specified minimum duration) by a tripped circuit breaker at perimeter locations when R96 was programmed to start.

Olympus completed removal of pesticide-impacted soil from below the former northern building foundation and transported this soil to the south stockpile for screening.

Page 5  
Ms. Lynda Priddy  
July 11, 1995

In a telephone conversation, Lynda Priddy and David Eagleton discussed verification sampling for the northern excavation. Lynda Priddy approved the use of Quanterra for analysis of verification samples. As requested, David Eagleton faxed Lynda Priddy a sketch of the northern excavation verification sample locations and a note indicating which ones would be collected that day, and which ones were at the deepest parts of the excavation near groundwater.

Philip collected verification samples of the northern excavation (NV-01, 02, 03, 06, and 07) and shipped them to Quanterra for analysis.

Williams issued a letter to the USEPA containing revisions to the performance test report as outlined in section A of the USEPA's June 30 letter, a revised Table 6.2 from the Soil treatment Work Plan, and the outstanding VOST and dioxin information.

On behalf of BNRR, Philip issued a letter regarding air monitoring results for ambient air monitoring events R61 through R83.

---

#### July 7

Operating TPU IV at 75 percent of maximum capacity, Williams processed 452.2 tons of pesticide-impacted soils. TPU IV on-line operating efficiency was 99 percent.

Williams received USEPA approval to backfill 391 and 420.5 tons of soil that was treated on July 1 and 2, 1995.

Ambient Air Monitoring Event R95 was stopped at approximately 12:05 AM on July 7, (short of the specified minimum duration) by a tripped circuit breaker at perimeter locations when R96 was programmed to start. A memorandum was issued to Jim Geiger of URS explaining the situation. Knoble Electric was called to further assess the situation and said they would put ground faults at each station on Monday July 10, which should prevent the entire circuit from blowing. In a phone conversation, David Eagleton discussed the situation with Lynda Priddy and Lynda Priddy approved of the approach being implemented.

Philip began Ambient Air Monitoring Event R97 at approximately 9AM.

Page 6  
Ms. Lynda Priddy  
July 11, 1995

Olympus completed removal of pesticide-impacted soil from below the former northern building foundation and transported this soil to the south stockpile for screening.

In a telephone conversation, David Eagleton and Lynda Priddy discussed the following topics:

- the 10 verification samples of the northern excavation have now been collected and Philip should have all the results back by Friday the 14;
- Philip has received results from haul road verification samples NEHR-05 and NEHR-06, which indicate the road is clean pending USEPA's review of the data;
- based on the Remedial Investigation, the quantity of soil that will need removed from below the southern stockpile is minimal and is explained in the Soil Removal Work Plan;
- Philip collected remaining additional verification samples of the northern excavation (NV-04, 05, 08, 09, and 10) and shipped them to Quanterra for analysis.

On behalf of BNRR, Philip issued a comment response letter in response to comments in the USEPA's June 30 letter regarding the AAQIR Addendum. Philip's letter also requested that the "Final AAQIR" be submitted to the USEPA on or before July 28. Lynda Priddy and Elizabeth (Nicki) Ubinger discussed this letter and Lynda Priddy approved of the requested July 28 submittal date.

---

#### July 8

Operating at 75 percent of maximum capacity, Williams processed 456.7 tons of pesticide-impacted soils. TPU IV on-line operating efficiency was 100 percent.

Philip collected samples from Ambient Air Monitoring Event R97 and began event R98 at approximately 8:00 AM.

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Page 7  
Ms. Lynda Priddy  
July 11, 1995

### **July 9**

Operating TPU IV at 75 percent of maximum capacity, Williams processed tons of pesticide-impacted soils. TPU IV on-line operating efficiency was percent.

Philip collected samples for Ambient Air Monitoring Event R98 and began event R99 at approximately 8:00 AM.

---

### **July 10**

Operating at 75 percent of maximum capacity, Williams processed 407.6 tons of pesticide-impacted soils. TPU IV on-line operating efficiency was 91 percent.

Knoble Electric installed ground faults at each perimeter ambient air monitoring station, which should prevent the entire circuit from blowing.

Philip collected samples for Ambient Air Monitoring Event R98 and began event R99 at approximately 8:00 AM.

---

## **PROBLEMS OR DIFFICULTIES**

Williams has experienced many operational difficulties with TPU IV, although recent performance has improved. These operational problems are documented in Williams' daily reports. The June 30, 1995, completion date was not achievable due, in part, to these operational problems. On June 29, BNRR proposed a modification to the schedule.

## **ANALYTICAL DATA**

Williams received analytical data for soil processed June 28 through July 5, 1995.

Philip received analytical data for air monitoring events R84 through R91.

Page 8  
Ms. Lynda Priddy  
July 11, 1995

#### UPCOMING ACTIVITIES FOR NEXT REPORTING PERIOD

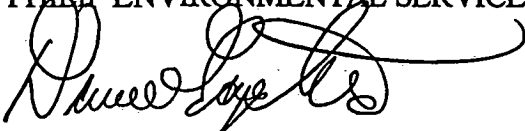
Williams will continue soil treatment operations and screening soils near the southern temporary soil storage area. Ambient Air Monitoring will continue. Analytical results for the verification samples collected of the northern excavation should be received by July 14.

#### CLOSING

If you have any questions regarding this weekly status report, do not hesitate to contact me at (618) 281-7173.

Sincerely yours,

PHILIP ENVIRONMENTAL SERVICES CORPORATION



David W. Eagleton, P.E.  
Project Manager  
Environmental Engineer

DWE/dwe /WEEK0710.DOC

cc: Bruce Sheppard and Elizabeth Hill (BNRR)  
Greg Koester (Philip)  
Tom Backer (Preston, Gates, and Ellis)  
Mark Fleri & Chris Drescher (Williams)  
Larry Mullen and Jim Geiger (URS)

**PHILIP**

**ENVIRONMENTAL**

July 18, 1995  
Project 12883088

Ms. Lynda Priddy  
On-Scene Coordinator/Remedial Project Manager  
U.S. Environmental Protection Agency, Region X  
1200 Sixth Avenue  
Seattle, Washington 98101

Dear Ms. Priddy:

**Subject: Weekly Status Report  
July 11 through July 17, 1995  
Woods Industries Site  
Yakima, Washington**

On behalf of Burlington Northern Railroad (BNRR), Philip Environmental Services Corporation (Philip) hereby submits the weekly status report for soil treatment activities at the Woods Industries Site during the above period. This report is submitted in compliance with Administrative Order Number 1087-03-18-106.

## **PROJECT ACTIVITIES**

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### **July 11**

Operating TPU IV at 75 percent of maximum capacity, Williams processed 170.3 tons of pesticide-impacted soils. This amount does not include the 10 tons processed during cold startup, which will require treatment at proper temperatures. TPU IV on-line operating efficiency was 40 percent. The majority of Williams down time was attributed to working on the discharge auger.

Williams received USEPA approval to backfill 333.7 and 452.2 tons of soil treated on July 6 and 7, 1995.

Philip collected samples from Ambient Air Monitoring Event R100 and began event R101.





Page 2  
Ms. Lynda Priddy  
July 18, 1995

Philip collected a composite sample of the former equipment decontamination pad material that was used during soil removal activities.

---

### July 12

Operating TPU IV at 75 percent of maximum capacity, Williams processed 322.38 tons of pesticide-impacted soils. This amount does not include the 7 tons processed during cold startup, which will require treatment at proper temperatures. TPU IV on-line operating efficiency was 74 percent. The majority of Williams down time was attributed to repair of discharge auger.

Williams received USEPA approval to backfill 456.7 tons of soil treated on July 8, 1995.

On behalf of BNRR, Philip issued the weekly status report for soil treatment activities conducted from July 4 through July 10.

Philip collected samples from Ambient Air Monitoring Event R101 and began event R102.

Philip collected a liquid sample to characterize contents of a 55-gallon drum, approximately one-third full, generated during soil removal activities.

Philip received verification sample results from the northern excavation (NV-01, 02, 03, 06, and 7).

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### July 13

Williams performed maintenance the entire day, replacing the discharge auger and dryer flighting. No soil was treated.

Philip collected samples from Ambient Air Monitoring Event R102 and began Event R103.

Page 3  
Ms. Lynda Priddy  
July 18, 1995

Williams received USEPA approval to backfill 391.6 and 407.6 tons of soil that was treated on July 9 and 10, 1995.

In a telephone conversation, Lynda Priddy and David Eagleton discussed status of soil treatment, dust control, and north verification sample results.

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#### July 14

Operating TPU IV at 75 percent of maximum capacity, Williams processed 314.7 tons of pesticide-impacted soils. This amount does not include the 9 tons processed during cold startup, which will require treatment at proper temperatures. TPU IV on-line operating efficiency was 72 percent. The majority of Williams down time was attributed to repairs to the dryer.

Williams received USEPA approval to backfill 190.3 and 322.38 tons of soil that was treated on July 11 and 12, 1995.

Philip collected samples from Ambient Air Monitoring Event R103 and began Event R104.

Philip received verification sample results from the North excavation (NV-04, -05, -08, -09, and -10).

In a telephone conversation, Lynda Priddy and David Eagleton discussed dust control, and status of validation of northeast haul road samples.

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#### July 15

Operating TPU IV at 75 percent of maximum capacity, Williams processed 408.2 tons of pesticide-impacted soils. This amount does not include the 8 tons processed during cold startup, which will require treatment at proper temperatures. TPU IV on-line operating efficiency was 93 percent.

Page 4  
Ms. Lynda Priddy  
July 18, 1995

Philip collected samples for Ambient Air Monitoring Event R104 and began event R105.

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### **July 16**

Operating at 75 percent of maximum capacity, Williams processed 436 tons of pesticide-impacted soils. This amount does not include the 4 tons processed during cold startup, which will require treatment at proper temperatures. TPU IV on-line operating efficiency was 94 percent.

Philip collected samples for Ambient Air Monitoring Event R105 and began Event R106.

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### **July 17**

Operating at 75 percent of maximum capacity, Williams processed 446.8 tons of pesticide-impacted soils. This amount does not include the 2 tons processed during cold startup, which will require treatment at proper temperatures. TPU IV on-line operating efficiency was 93.7 percent.

Philip collected samples for Ambient Air Monitoring Event R106 and began Event R107.

In a telephone conversation, Greg Koester of Philip informed Lynda Priddy of recent Ambient Air Monitoring data (Events R97 through R99).

In another telephone conversation, David Eagleton and Lynda Priddy discussed north excavation verifications sample results.

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### **PROBLEMS OR DIFFICULTIES**

No problems or difficulties were encountered during this period, although TPU-IV was down for minor repairs as documented in Williams daily reports.

Page 5  
Ms. Lynda Priddy  
July 18, 1995

#### **ANALYTICAL DATA**

Williams received analytical data for soil processed July 6 through July 12, 1995.

Philip received analytical data for air monitoring events R97 through R100 and results from North excavation verification samples.


#### **UPCOMING ACTIVITIES FOR NEXT REPORTING PERIOD**

Williams will continue soil treatment operations and screening soils near the southern temporary soil storage area. Ambient Air Monitoring will continue. Further excavation will be performed in areas where verification samples exceeded cleanup levels in north excavation. Philip will begin collecting samples around areas of the remaining south stockpile to guide further excavation and to prepare for collecting verification samples.

#### **CLOSING**

I you have any questions regarding this weekly status report, do not hesitate to contact me at (509) 575-5973.

Sincerely yours,  
PHILIP ENVIRONMENTAL SERVICES CORPORATION



Greg Koester  
Project Engineer

GAK/gak /WEEK0718.DOC

cc: Bruce Sheppard and Elizabeth Hill (BNRR)  
David Eagleton (Philip)  
Tom Backer (Preston, Gates, and Ellis)  
George Harbour (Williams)  
Larry Mullen and Jim Geiger (URS)

**PHILIP**  
**ENVIRONMENTAL**

July 25, 1995  
Project 12883088

Post-It™ brand fax transmittal memo 7671		# of pages
To	David Eagleton	From
Co.		Co.
Dept.		Phone #
Fax #		Fax #

Ms. Lynda Priddy  
On-Scene Coordinator/Remedial Project Manager  
U.S. Environmental Protection Agency, Region X  
1200 Sixth Avenue  
Seattle, Washington 98101

Dear Ms. Priddy:

**Subject: Weekly Status Report**  
**July 18 through July 24, 1995**  
**Woods Industries Site**  
**Yakima, Washington**

On behalf of Burlington Northern Railroad (BNRR), Philip Environmental Services Corporation (Philip) hereby submits the weekly status report for soil treatment activities at the Woods Industries Site during the above period. This report is submitted in compliance with Administrative Order Number 1087-03-18-106.

## PROJECT ACTIVITIES

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### July 18

Operating TPU IV at 75 percent of maximum capacity, Williams processed 289 tons of pesticide-impacted soils. This amount does not include the 6 tons processed during cold startup, which will require treatment at proper temperatures. TPU IV on-line operating efficiency was 66 percent. Williams replaced the slinger belt and performed general maintenance during down time.

Williams received USEPA approval to backfill 314.7 of soil treated on July 14, 1995.

Todd Deas of Williams issued a memorandum to Larry Mullen (URS) regarding AWFSO limit exceedance corrective action.

Page 2  
Ms. Lynda Priddy  
July 25, 1995

On behalf of BNRR, Philip issued the weekly status report for soil treatment activities conducted from July 11 through July 17.

Philip collected samples from Ambient Air Monitoring event R107 and began event R108.

Philip received analytical data for Ambient Air Monitoring events R100 and R101 and submitted preliminary event records to URS.

In a telephone conversation between Lynda Priddy and David Eagleton, BNRR received approval from the USEPA to backfill the northeast haul road and a portion of north excavation.

In a conference call, Lynda Priddy and David Eagleton discussed dust control with Jim Sanders and B.J. Bartee of Williams.

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#### July 19

Operating TPU IV at 75 percent of maximum capacity, Williams processed 430 tons of pesticide-impacted soils. This amount does not include the 10 tons processed during cold startup, which will require treatment at proper temperatures. TPU IV on-line operating efficiency was 96 percent

Philip collected samples from Ambient Air Monitoring event R108 and began event R109.

Philip collected preliminary soil samples from recently exposed areas beneath southern temporary soil storage area for characterization.

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#### July 20

Operating TPU IV at 75 percent of maximum capacity, Williams processed 383.4 tons of pesticide-impacted soils. This amount does not include the 8 tons processed during cold startup, which will require treatment at proper temperatures. TPU IV on-line operating efficiency was 86 percent.

Page 3

Ms. Lynda Priddy

July 25, 1995

Williams received USEPA approval to backfill 408.2 tons of soil that was treated on July 15, 1995. Analytical data received for 448.8 tons of soil processed on July 17, 1995, indicated the soil still exceeded cleanup goals; as a result, Larry Mullen of URS signed a rejection form for that day indicating the soil must be retreated.

Todd Deas issued a memorandum to Larry Mullen regarding AWFSO limit exceedance corrective action.

Philip collected samples from Ambient Air Monitoring event R109 and began event R110 and submitted preliminary event records to URS.

Philip collected preliminary soil samples from an area beneath the southern temporary soil storage area which Williams had exposed on July 22, 1995.

Philip received analytical data for air monitoring event R102.

The following topics were discussed in on-site meeting between Lynda Priddy, Larry Mullen (URS), and Greg Koester:

- small dust leak observed near connection between rotary dryer and dobson collar;
- sampling strategies for characterizing north and south ends of site;
- concern that Williams does not have enough staff to complete project;
- prepare schedule for the sequence of events through project completion;
- separating debris from cobbles prior to backfilling
- PM-10 results for event R102;
- Williams' continuing attention to better dust control; and
- Philip proposing a reduced level of effort required for Post-Remedial Action Air Monitoring based upon analytical collected to date.

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July 21

Operating TPU IV at 75 percent of maximum capacity, Williams processed 432.84 tons of pesticide-impacted soils. TPU IV on-line operating efficiency was 96 percent.

Page 4  
Ms. Lynda Priddy  
July 25, 1995

Williams received USEPA approval to backfill 289 and 430 tons of soil that was treated on July 18 and 19, respectively.

Philip collected samples from Ambient Air Monitoring event R110 and began event R111.

Philip collected preliminary soil samples from an area beneath the southern temporary storage area which Williams had exposed on July 21, 1995, and from around previously collected north excavation verification sample locations that exceeded the soil removal clean criteria. A verification sample was also collected from equipment decontamination pad materials used during soil removal.

Philip received analytical data for Ambient Air Monitoring events R103 through R106 and submitted preliminary events to URS. An independent, third party, audit was performed on the flow rates of PM-10 samplers.

David Eagleton faxed Lynda Priddy a copy of a letter dated July 20, 1995, from Williams to Philip regarding project schedule.

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#### July 22

Operating TPU IV at 75 percent of maximum capacity, Williams processed 301.3 tons of pesticide-impacted soils. This amount does not include the 1 ton processed during cold startup, which will require treatment at proper temperatures. TPU IV on-line operating efficiency was 66 percent. The majority of Williams' down time was attributed to replacing the gear box on the outer auger.

Philip collected samples for Ambient Air Monitoring event R111 and began event R112.

Philip collected preliminary soil samples from areas beneath southern temporary soil storage area.

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Page 5

Ms. Lynda Priddy

July 25, 1995

### July 23

Operating at 75 percent of maximum capacity, Williams processed 22.1 tons of pesticide-impacted soils. TPU IV on-line operating efficiency was 4.8 percent. Williams downtime was attributed to failed I.D. fan.

Philip collected samples for Ambient Air Monitoring event R112 and began event R113.

Olympus Environmental (Olympus) excavated areas in north excavation where three verification samples were above cleanup levels.

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### July 24

Williams did not operate while repairing the I.D. fan.

Philip collected samples for Ambient Air Monitoring event R113 and began event R114. Event R114 samples were discarded with USEPA approval since Williams did not operate.

Olympus excavated beneath former south stockpile where preliminary sample results exceeded cleanup levels. Olympus also transported debris stockpiled near south stockpile to Chemical Waste Management, Inc.'s Arlington, Oregon facility for disposal.

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## PROBLEMS OR DIFFICULTIES

No problems or difficulties were encountered during this period, except TPU-IV on line efficiency was down due to operational difficulties documented in Williams daily reports. Analytical data for soil processed on July 17, 1995, indicated concentrations above treatment levels; therefore, soil will be retreated.

## ANALYTICAL DATA

Williams received analytical data for soil processed July 14 through July 19, 1995.

Philip received analytical data for air monitoring events R100 through R106 and preliminary soil samples collected in south stockpile area.

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Ms. Lynda Priddy  
July 25, 1995

#### UPCOMING ACTIVITIES FOR NEXT REPORTING PERIOD

Williams will continue soil treatment operations. Depending upon preliminary soil sample results and Williams operating efficiency, Williams may complete screening soils near the southern temporary soil storage area. After soil screening operations are complete, Williams will remove a small lift from around screen and on the southern haul road and haul road samples will be collected. Ambient Air Monitoring will continue. In both the north excavation and beneath former south stockpile, preliminary soil sample results will be received to evaluate whether additional excavation is necessary or if verification samples can be collected.

#### CLOSING

If you have any questions regarding this weekly status report, do not hesitate to contact me at (509) 575-5973.

Sincerely yours,

PHILIP ENVIRONMENTAL SERVICES CORPORATION



Greg Koester  
Project Engineer

GAK/gak /WK0724B.DOC

cc: Bruce Sheppard and Elizabeth Hill (BNRR)  
David Eagleton (Philip)  
Tom Backer (Preston, Gates, and Ellis)  
George Harbour (Williams)  
Larry Mullen and Jim Geiger (URS)



August 1, 1995  
Project 12883088

Ms. Lynda Priddy  
On-Scene Coordinator/Remedial Project Manager  
U.S. Environmental Protection Agency, Region X  
1200 Sixth Avenue  
Seattle, Washington 98101

Dear Ms. Priddy:

**Subject: Weekly Status Report  
July 25 through July 31, 1995  
Woods Industries Site  
Yakima, Washington**

On behalf of Burlington Northern Railroad (BNRR), Philip Environmental Services Corporation (Philip) hereby submits the weekly status report for soil treatment activities at the Woods Industries Site during the above period. This report is submitted in compliance with Administrative Order Number 1087-03-18-106.

## PROJECT ACTIVITIES

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### July 25

Operating TPU-IV at 75 percent of maximum capacity, Williams processed 19.2 tons of pesticide-impacted soils. This amount does not include the 14 tons processed during cold startup, which will require treatment at proper temperatures. TPU IV on-line operating efficiency was 7.8 percent. TPU-IV downtime was attributed to repairing the rotary dryer.

Williams received USEPA approval to backfill 483.4 and 432.8 tons of soil treated on July 20 and 21, 1995, respectively.

On behalf of BNRR, Philip issued the weekly status report for soil treatment activities conducted from July 18 through July 24.

Philip began Ambient Air Monitoring Event R115.

Page 2  
Ms. Lynda Priddy  
July 25, 1995

Philip received analytical data for Ambient Air Monitoring Events R107 and R108 and submitted preliminary event records to URS.

Philip collected preliminary soil samples from recently exposed areas beneath southern temporary soil storage area for characterization.

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#### July 26

Operating TPU-IV at 75 percent of maximum capacity, Williams processed 369.5 tons of pesticide-impacted soils. This amount does not include the 1 ton processed during cold startup, which will require treatment at proper temperatures. TPU IV on-line operating efficiency was 81.3 percent.

Williams received USEPA approval to backfill 300.3 tons of soil treated on July 22, 1995.

Philip collected samples from Ambient Air Monitoring Event R115 and began Event R116.

Philip collected preliminary soil samples from recently exposed areas beneath the southern temporary soil storage area for characterization.

Analytical results were received for the verification sample collected July 21 from former equipment decontamination pad materials used during soil removal. Concentrations were below cleanup levels.

Williams installed a water spray to control emissions observed near the seal between dobson collar and rotary dryer.

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#### July 27

Operating TPU-IV at 75 percent of maximum capacity, Williams processed 458.1 tons of pesticide-impacted soils. TPU IV on-line operating efficiency was 100 percent.

Page 3  
Ms. Lynda Priddy  
July 25, 1995

Philip collected samples from Ambient Air Monitoring Event R116 and began Event R117.

Philip collected preliminary soil samples from recently exposed areas beneath the southern temporary soil storage area for characterization.

In an on-site meeting between Lynda Priddy, Cathy Massimino, John Gilbert (USEPA), Jim Geiger (URS), George Harbour (Williams) and Greg Koester discussed the following topics:

- controlling emissions observed near seal between the rotary dryer and dobson collar;
  - additional oversight requirements;
  - small leak from rotary dryer to the discharge auger;
  - verification sampling north and south portions of the site;
  - approving backfill of former equipment decontamination pad material used during soil removal;
  - reducing/eliminating post remedial action air monitoring based upon data received to date;
  - sequence of activities through project completion; and
  - Williams checking compliance status of Westates carbon prior to shipping off-site.
- 

July 28

Operating TPU-IV at 75 percent of maximum capacity, Williams processed 459.5 tons of pesticide-impacted soils. TPU IV on-line operating efficiency was 100 percent.

Philip collected samples from Ambient Air Monitoring Event R117 and began Event R118.

Philip received analytical data for air monitoring Event R110 and R111 and submitted preliminary event records to URS.

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Ms. Lynda Priddy  
July 25, 1995

Philip received preliminary soil sample results from areas beneath southern temporary soil storage area.

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#### July 29

Operating TPU-IV at 75 percent of maximum capacity, Williams processed 402.3 tons of pesticide-impacted soils. This amount does not include the 4 tons processed during cold startup, which will require treatment at proper temperatures. TPU IV on-line operating efficiency was 88 percent.

Philip collected samples for Ambient Air Monitoring Event R118 and began Event R119.

Philip received preliminary soil sample results from areas beneath the southern temporary soil storage area.

Olympus Environmental (Olympus) excavated areas below the southern temporary storage area and Philip collected preliminary soil samples.

Williams attempted to place a cover around the seal between the dobson collar and rotary dryer to help control dust emissions

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#### July 30

Operating at 75 percent of maximum capacity, Williams processed 272.2 tons of pesticide-impacted soils. This amount does not include the 18 tons processed during cold startup, which will require treatment at proper temperatures. TPU IV on-line operating efficiency was 64.3 percent. The majority of downtime was attributed to the discharge auger jamming.

Philip collected samples for Ambient Air Monitoring Event R119 and began Event R120.

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Page 5  
Ms. Lynda Priddy  
July 25, 1995

### July 31

Operating at 75 percent of maximum capacity, Williams processed 321 tons of pesticide-impacted soils. This amount does not include the 8 tons processed during cold startup, which will require treatment at proper temperatures. TPU IV on-line operating efficiency was 71.9 percent. The downtime was attributed to repairs to BH inner auger.

Williams received USEPA approval to backfill 369.5 tons of soil treated on July 26, 1995.

Philip collected samples for Ambient Air Monitoring Event R120 and began Event R121.

Philip received analytical data for Ambient Air Monitoring events R109, R112 and R113 and submitted preliminary event records to URS.

Olympus excavated two areas in the north excavation area and Philip collected preliminary soil samples.

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### PROBLEMS OR DIFFICULTIES

TPU-IV operational difficulties as documented in Williams daily reports.

### ANALYTICAL DATA

Williams received analytical data for soil processed from July 20 through July 26, 1995.

Philip received analytical data for air monitoring events R107 through R113 and preliminary soil samples collected in south stockpile area.

### UPCOMING ACTIVITIES FOR NEXT REPORTING PERIOD

Williams will continue soil treatment operations. Depending upon preliminary soil sample results and Williams operating efficiency, Williams may complete screening soils from the southern temporary soil storage area. In both the north excavation and beneath former south stockpile, preliminary soil sample results will be received

Page 6  
Ms. Lynda Priddy  
July 25, 1995


to evaluate whether additional excavation is necessary or if verification samples can be collected. Ambient Air Monitoring will continue.

**CLOSING**

If you have any questions regarding this weekly status report, do not hesitate to contact me at (509) 575-5973.

Sincerely yours,

PHILIP ENVIRONMENTAL SERVICES CORPORATION



David W. Eagleton, P.E.  
Project Manager  
Environmental Engineer

GAK/pk/wk0751.DOC

cc: Bruce Sheppard and Elizabeth Hill (BNRR)  
Greg Koester (Philip)  
Tom Backer (Preston, Gates, and Ellis)  
George Harbour (Williams)  
Larry Mullen and Jim Geiger (URS)



**PHILIP**  
**ENVIRONMENTAL**

August 8, 1995  
Project 12883088

Ms. Lynda Priddy  
On-Scene Coordinator/Remedial Project Manager  
U.S. Environmental Protection Agency, Region X  
1200 Sixth Avenue  
Seattle, Washington 98101

Dear Ms. Priddy:

**Subject: Weekly Status Report**  
**August 1 through August 7, 1995**  
**Woods Industries Site**  
**Yakima, Washington**

On behalf of Burlington Northern Railroad (BNRR), Philip Environmental Services Corporation (Philip) hereby submits the weekly status report for soil treatment activities at the Woods Industries Site during the above period. This report is submitted in compliance with Administrative Order Number 1087-03-18-106.

## PROJECT ACTIVITIES

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### August 1

Operating TPU IV at 75 percent of maximum capacity, Williams processed 455.60 tons of pesticide-impacted soils. TPU IV on-line operating efficiency was 100 percent.

Williams received USEPA approval to backfill 450.1, 450.6, 400.0, and 270.0 tons of soil treated on July 27, 28, 29, and 30, 1995, respectively.

On behalf of BNRR, Philip issued the weekly-status report for soil treatment activities conducted from July 25 through July 31.

Philip collected Ambient Air Monitoring Event R121 and began Event 122.

Philip received analytical data for Ambient Air Monitoring Event R115 and delivered the preliminary event record to URS.



Page 2  
Ms. Lynda Priddy  
August 8, 1995

Philip collected preliminary soil samples from recently exposed areas beneath the southern temporary soil storage area for characterization.

David Eagleton handed Lynda Priddy a copy of the "Akland Sump" cleanout water discharge permit from the Yakima Waste Water Treatment Plant and attached analytical data. David Eagleton also gave Lynda Priddy a copy of the draft verification sampling grid for the area below the former southern temporary soil storage area.

In an on-site meeting between Lynda Priddy (USEPA), Jim Geiger (URS), George Williams (URS) and David Eagleton (URS) the following topics were discussed:

- soil treatment schedule for the next few days;
- condition of the rotary dryer and dust observations around the bolts; and
- upcoming decontamination procedures;

In a separate on-site meeting, Lynda Priddy and David Eagleton discussed the following topics:

- the Administrative Order of Consent - BNRR's role and responsibilities;
- former 1993 decontamination pad verification sample results documenting the material is below cleanup levels;
- water discharge permit;
- Williams' proposed hazardous codes for carbon canisters used to treat TPU IV process water;
- status of backfilling the site;
- haul road preliminary sampling at the south end of the site;
- disposal of additional debris at Chemical Waste Management's (CWM's) facility in Arlington, Oregon; and
- preliminary sampling and verification sampling.

Page 3  
Ms. Lynda Priddy  
August 8, 1995

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### August 2

Operating TPU IV at 75 percent of maximum capacity, Williams processed 456.3 tons of pesticide-impacted soils. TPU IV on-line operating efficiency was 100 percent.

Williams received USEPA approval to backfill 22.1 and 19.2 tons of soil treated on July 23 and 25, respectively.

Philip collected samples from Ambient Air Monitoring Event R122 and began Event R123.

Approximately 6.1 tons of debris was transported to CWM's Arlington, Oregon facility.

David Eagleton faxed Lynda Priddy a sketch of the remaining northern verification sample areas (NV03, NV05, and NV10). David Lawrence (Philip) and Lynda Priddy discussed this fax and procedures for collecting these samples.

Olympus Environmental (Olympus) removed approximately 5 additional cubic yards of soil around "area 10" on the northwestern part of the site.

Philip collected verification samples NV03 and NV05 and collected preliminary samples of the recently excavated area on the north western part of the site.

In a telephone conversation, Lynda Priddy informed David Eagleton that she was preparing a list of questions regarding soil treatment equipment decontamination procedures. Lynda Priddy also informed David Eagleton that it was OK to discharge the water from cleanout of the former "Akland Sump" to the sewer as approved by the City of Yakima discharge permit. Lynda Priddy and David Eagleton also discussed collecting a few additional preliminary samples around "Area 10" on the northwestern part of the site.

Lynda Priddy faxed David Eagleton a list of comments or questions the USEPA has regarding decontamination of soil treatment equipment.

Page 4  
Ms. Lynda Priddy  
August 8, 1995

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### August 3

Operating TPU IV at 75 percent of maximum capacity, Williams processed 182.7 tons of pesticide-impacted soils. This amount does not include the 4 tons processed during cold startup, which will require treatment at proper temperatures. TPU IV on-line operating efficiency was 39.6 percent.

Williams completed screening soils from the southern temporary soil storage area and moved the power screen from its location near the former southern temporary soil storage area to the waste feed pad for decontamination.

Williams removed approximately 49 tons of soil from below and around the former power screen location and along the southwest haul road for treatment. Philip collected preliminary samples of these areas.

Olympus removed approximately 38 additional cubic yards of soil from below the southern temporary soil storage area and Philip collected preliminary samples of this area.

At approximately 4:30 PM Williams initiated a controlled shut down of TPU IV to clean up areas of the pad and bring soil to the pad area for processing.

Williams received USEPA approval to backfill 321 tons of soil treated on July 31, 1995.

Philip collected preliminary soil samples of all haul roads that have yet to be verified as clean.

Philip collected samples from Ambient Air Monitoring Event R123 and began Event R124.

Philip received analytical data for Ambient Air Monitoring Event R116, and PM-10 results for Events R117 and R118 and hand delivered preliminary event records to URS.

Page 5  
Ms. Lynda Priddy  
August 8, 1995

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#### August 4

Operating TPU IV at 75 percent of maximum capacity, Williams processed 397.7 tons of pesticide-impacted soils. This amount does not include the 2 tons processed during cold startup, which will require treatment at proper temperatures. TPU IV on-line operating efficiency was 92.3 percent.

Williams received USEPA approval to backfill 455.6 tons of soil treated on August 1, 1995.

Williams issued a comment response letter in response to the USEPA's August 2 questions regarding decontamination of soil treatment equipment.

The power screen was demobilized from the site. Williams intends to remove oversized material that may be in the remaining soil to be treated by the larger screen on the feed metering unit and by hand.

Philip collected samples from Ambient Air Monitoring Event R123 and began Event R124.

Philip received TO-10 analytical data for Ambient Air Monitoring Events R117 and R118 and hand delivered preliminary event records to URS.

In a telephone conversation, David Eagleton and Lynda Priddy discussed verification sampling below the former southern temporary soil storage area.

Philip collected ten verification samples (SV01 through SV10) from below the former southern temporary soil storage area, and a verification sample (SV-11) from area E-3 which is also below the former southern temporary soil storage.

After Olympus removed approximately 15 additional cubic yards of soil from "area 10" on the northwestern part of the site, Philip collected a verification sample of the area.

Olympus discharged the 3 drums of water from cleanout of the "Akland Sump" to the sewer according to a discharge permit from the Yakima Waste Water Treatment Plant.

Page 6  
Ms. Lynda Priddy  
August 8, 1995

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#### August 5

Operating TPU IV at 75 percent of maximum capacity, Williams processed 331.47 tons of pesticide-impacted soils. This amount does not include the 4 tons processed during a controlled shutdown, which will require treatment at proper temperatures. TPU IV on-line operating efficiency was 76.3 percent.

Philip collected samples for Ambient Air Monitoring Event R126 and began Event R126.

Olympus consolidated the "Akland Sump" sediment and cleaned two of the drums.

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#### August 6

Philip collected samples for Ambient Air Monitoring Event R126, which ended at approximately 8:00 AM. No air monitoring was performed because Williams was not going to operate TPU IV.

Philip received preliminary soil sample result from areas beneath the former southern temporary soil storage area.

Olympus removed approximately 97 additional cubic yards of soil from below the former southern temporary soil storage area and collected preliminary samples in and around the excavation.

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#### August 7

No soil treatment operations conducted. Williams received USEPA approval to backfill 456.3 tons of soil treated on August 2, 1995.

Page 7  
Ms. Lynda Priddy  
August 8, 1995

Philip began Ambient Air Monitoring Event R127.

Philip collected verification samples SV01 through SV11 and SWHR01, 02, and 03 and shipped them to Quanterra. Philip received analytical data for Ambient Air Monitoring events R119 and R120 and submitted preliminary event records to URS.

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#### **PROBLEMS OR DIFFICULTIES**

TPU IV operational difficulties as documented in Williams daily reports.

#### **ANALYTICAL DATA**

Williams received analytical data for soil processed from July 23 through August 2, 1995.

Philip received analytical data for air monitoring events R115 through R120 and preliminary soil samples.

#### **UPCOMING ACTIVITIES FOR NEXT REPORTING PERIOD**

TPU IV will remain operational until verification samples results indicating the site is clean and all the contaminated soil has been treated to below the cleanup goals. Williams will continue decontamination and may conduct limited treatment operations to treat soil generated through additional soil removal activities and decontamination. Williams may also begin backfilling treated soil and cobbles. Ambient Air Monitoring will be conducted on days when TPU IV operates or when backfilling is being conducted.

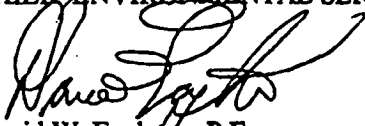
Page 8  
Ms. Lynda Priddy  
August 8, 1995

**CLOSING**

If you have any questions regarding this weekly status report, do not hesitate to contact me at (618) 281-7173.

Sincerely yours,

PHILIP ENVIRONMENTAL SERVICES CORPORATION



David W. Eagleton, P.E.  
Project Manager  
Environmental Engineer

DWE/dwc /WK0807.DOC

cc: Bruce Sheppard and Elizabeth Hill (DNRR)  
Tom Backer (Preston, Gates, and Ellis)  
Greg Koester (Philip)  
George Harbour (Williams)  
Larry Mullen and Jim Geiger (URS)





August 15, 1995  
Project 12883088

Post-It™ brand fax transmittal memo 7671		# of pages ▶ 5
To David Engleton	From Jeffrey Kaestner	
Co.	Co.	
Dept.	Phone #	
Fax #	Fax #	

Ms. Lynda Priddy  
On-Scene Coordinator/Remedial Project Manager  
U.S. Environmental Protection Agency, Region X  
1200 Sixth Avenue  
Seattle, Washington 98101

Dear Ms. Priddy:

**Subject: Weekly Status Report  
August 8 through August 14, 1995  
Woods Industries Site  
Yakima, Washington**

On behalf of Burlington Northern Railroad (BNRR), Philip Environmental Services Corporation (Philip) hereby submits the weekly status report for soil treatment activities at the Woods Industries Site during the above period. This report is submitted in compliance with Administrative Order Number 1087-03-18-106.

## PROJECT ACTIVITIES

---

### August 8

Operating TPU IV at 75 percent of maximum capacity, Williams processed 49.73 tons of pesticide-impacted soils. This amount does not include the 20 tons processed during cold startup, which will require treatment at proper temperatures. TPU IV on-line operating efficiency was 13 percent. TPU IV downtime was attributed to repair of the discharge auger.

Williams received USEPA approval to backfill 178.7 and 397.7 tons of soil treated on August 3 and 4, 1995, respectively.

On behalf of BNRR, Philip issued the weekly status report for soil treatment activities conducted from August 1 through August 7, 1995.

Philip collected samples from Ambient Air Monitoring Event R127 and began Event R128.

Page 2  
Ms. Lynda Priddy  
August 15, 1995

Philip received TO-10 analytical data for Ambient Air Monitoring Events R121 and R122.

Philip received verification sample results for soil samples NV-03 and NV-05 and faxed a copy of these results to Lynda Priddy.

---

#### August 9

Operating TPU IV at 75 percent of maximum capacity, Williams processed 133.0 tons of pesticide-impacted soils. This amount does not include the 2 tons processed during cold startup, which will require treatment at proper temperatures. TPU IV on-line operating efficiency was 50.6 percent (based on 12 hour day).

Williams completed treatment of soil stored on the waste feed pad and processed clean soil through the unit for one hour at temperatures >800°F.

Philip collected samples from Ambient Air Monitoring Event R128 and began Event R129.

Philip received PM-10 analytical data for Ambient Air Monitoring Events R121 and R122. Philip delivered the preliminary event records to URS.

---

#### August 10

Williams ceased soil treatment activities while waiting for verification sample results that demonstrate the site is clean. Williams began treatment pad cleanup activities. Williams did not submit a daily report.

Williams received USEPA approval to backfill 327.47 tons of soil treated on August 5, 1995.

Philip collected samples from Ambient Air Monitoring Event R129 and began Event R130.

Page 3

Ms. Lynda Priddy

August 15, 1995

Greg Koester of Philip discussed with Lynda Priddy the level of Ambient Air Monitoring to be conducted during decontamination and backfilling activities.

Philip received PM-10 analytical data for Ambient Air Monitoring Event R123 and hand delivered preliminary event records to URS.

Philip collected a soil sample from below the concrete treatment pad under the discharge end of the stacking conveyor.

---

#### August 11

Williams continued treatment pad clean up activities. Williams began submitting Job Status Summary Reports for Woods demobilization.

Williams received USEPA approval to backfill 44.7 tons of soil treated on August 8, 1995.

Jack Lane (Williams), supervisor of demobilization activities, arrived on site.

Philip collected samples from Ambient Air Monitoring Event R130 and began Event R131.

Philip received TO-10 analytical data for Ambient Air Monitoring Events R123, complete results for R124 and R125, and PM-10 analytical data for event R126. Philip hand delivered preliminary event records to URS.

---

#### August 12

Williams submitted a demobilization status report.

Williams began dismantling equipment for visual inspection and cleaning.

Williams continued demobilization activities by cleaning out the pugmill; removing interior pad curbs; inspecting interior of the rotary dryer; cleaned stacking

Page 4  
Ms. Lynda Priddy  
August 15, 1995

conveyor; cleaned FMU; cleaned sludge from scrubber and began cleaning the lift conveyor.

Philip collected samples for Ambient Air Monitoring Event R131, began Event R132, and set up Event R133.

Philip performed final calibration and disassembled off-site air monitoring stations A21 and A22.

---

#### August 13

No activities.

---

#### August 14

Williams continued decontamination of equipment on the treatment pad and demobilization activities.

Philip collected samples for Ambient Air Monitoring Event R132 and began Event R134. Ambient Air Monitoring Event R133 was not collected because there were no site activities that day. Philip disassembled platforms at offsite air monitoring stations A-21 and A-22.

At Jack Lane's (Williams) request Jeff Kaestner (Philip) observed the sample collection of baghouse dust from the treated soil pile.

After decontamination, Williams removed the stacking conveyor from the pad and returned a front end loader and track hoe.

---

#### PROBLEMS OR DIFFICULTIES

TPU IV operational difficulties as documented in Williams daily reports. Williams has initiated decontamination and demobilization activities prior to receipt of analytical results documenting the site is clean and that treated soils meet treatment standards. This will create problems should additional soil treatment be necessary.

Page 5  
Ms. Lynda Priddy  
August 15, 1995

**ANALYTICAL DATA**

Williams received analytical data for soil processed from August 3 through August 8, 1995.

Philip received analytical data for Ambient Air Monitoring Events R121 through R126, preliminary soil sample results, and verification soil sample results.

**UPCOMING ACTIVITIES FOR NEXT REPORTING PERIOD**

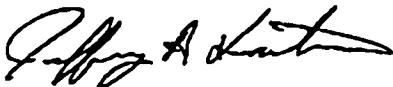
Williams will continue demobilization activities.

**CLOSING**

If you have any questions regarding this weekly status report, do not hesitate to contact me at (618) 281-7173.

Sincerely yours,

**PHILIP ENVIRONMENTAL SERVICES CORPORATION**



Jeffrey A. Kaestner, E.I.T.  
Site Supervisor  
Environmental Engineer

DWE/daw /WK0814.DOC

cc: Bruce Sheppard and Elizabeth Hill (BNRR)  
Tom Backer (Preston Gates and Ellis)  
David Eagleton (Philip)  
Jack Lane (Williams)  
Jim Geiger (URS)



August 22, 1995  
Project 12883088

Ms. Lynda Priddy  
On-Scene Coordinator/Remedial Project Manager  
U.S. Environmental Protection Agency, Region X  
1200 Sixth Avenue  
Seattle, Washington 98101

Dear Ms. Priddy:

**Subject: Weekly Status Report  
August 15 through August 21, 1995  
Woods Industries Site  
Yakima, Washington**

On behalf of Burlington Northern Railroad (BNRR), Philip Environmental Services Corporation (Philip) hereby submits the weekly status report for soil treatment activities at the Woods Industries Site during the above period. This report is submitted in compliance with Administrative Order Number 1087-03-18-106.

## **PROJECT ACTIVITIES**

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### **August 15**

Williams submitted a demobilization status report.

Williams continued demobilization activities, pressure washed material feed hopper on waste feed pad, disconnected electricity to TPU IV, moved stacking conveyor, moved auger from baghouse, began to empty LPG tank.

On behalf of BNRR, Philip issued the weekly status report for soil treatment activities conducted from August 8 through August 14, 1995.

Philip collected samples from Ambient Air Monitoring Event R134 and began Event R135.



Page 2  
Ms. Lynda Priddy  
August 22, 1995

Philip received TO-10 analytical data for Ambient Air Monitoring Events R126 and R128, as well as results for Event R127. Philip delivered the preliminary event records to URS.

In an on-site meeting between Lynda Priddy (EPA), Jim Geiger (URS), Jack Lane (Williams) and Jeff Kaestner, the following topics were discussed:

- EPA to be given one day notice of schedule to have pad washed to observe surface conditions;
  - EPA requested Williams to prepare letter identifying procedure for removal and sampling/disposal of soil removed from the treated soil and waste feed sides of the pad;
  - Williams should submit reported results of water sample from tank 3 to EPA for discharge approval;
  - EPA requested Williams remove baghouse dust placed on treated soil in bin 3, have sampled, and stage on pad until analytical results are reviewed;
  - Williams will sample dust remaining in baghouse;
  - waste material, plastic, and wood should be removed from cobbles to be backfilled; and
  - PM-10 sampling will continue at perimeter stations A11/A61 and north and other locations only when backfill activities are scheduled.
- 

#### August 16

Williams submitted a demobilization status report.

Williams continued demobilization activities pressure washing cable trays on the waste feed pad, removed pugmill and auger from kiln, and emptied, disconnected, and removed LPG tank.

Page 3  
Ms. Lynda Priddy  
August 22, 1995

Philip collected samples from Ambient Air Monitoring Event R135 and began Event R136.

Philip received verification sample results for north and south haul road and faxed data to Lynda Priddy.

Jeff Kaestner spoke with Jack Lane concerning schedule of events, cleaning pad, backfill of excavation area, moving ecology blocks, and cobble & soil backfill activities. Backfill activities will be performed by subcontractor to Williams.

In a telephone conversation, David Eagleton and Lynda Priddy discussed decontamination/demobilization activities and verification sample results of the north and south haul roads.

Decision was made by Williams to remove baghouse dust piled on treated soil in bin 3 and stage on pad until analytical results are reviewed.

---

#### **August 17**

Williams submitted a demobilization status report.

Williams continued demobilization activities by moving the thermal treatment unit to an off-site location, removed scrubber and control skid, pressure washed kiln and trailer. Williams placed broken curb sections of the pad in their on-site dumpster.

Williams removed baghouse dust from treated soil pile in bin 3; treated soil was moved to north pile.

Philip collected samples from Ambient Air Monitoring Event R136 and began Event R137.

Philip received analytical data for Ambient Air Monitoring Event R128 and R129. Results were faxed to Lynda Priddy.

Philip received analytical data from Quanterra for verification samples collected on the North and South portions of the site.



**August 18**

Williams submitted a demobilization status report.

Williams stages baghouse along west side of feed soil pad, sample of baghouse dust has been collected and submitted for analysis by Williams.

Philip collected Ambient Air Monitoring Event R137 and began Event R138.

Philip received analytical results for Ambient Air Monitoring Events R130, R131, and R132.

Philip faxed analytical data of the North and South verification samples to Lynda Priddy.

---

**August 19**

Williams has dismantled the stack. The majority of Williams' equipment and supplies have been loaded in trailers or moved off-site.

Philip collected Ambient Air Monitoring Event R138 and set up Event R139.

Philip received results of reported analytical results from sample VISC-01 collected from base material under discharge from stacking conveyor.

---

**August 20**

No decontamination/demobilization activities were conducted.

Philip photo documented status of decontamination activities on the treatment pad.

Philip collected Ambient Air Monitoring Event R139 and set up Event R140.

---

Page 5  
Ms. Lynda Priddy  
August 22, 1995

### **August 21**

Williams submitted a demobilization status report.

Williams removed control trailer and began pressure washing treatment pad. Soil from the pad was placed in 55 gallon drums. Williams washed floor in storage/tool shed.

Williams having trouble getting sample results from Laucks for baghouse and soil. They re-sampled baghouse dust from augers and the soil/baghouse dust removed from treated soil in bin 3. Samples were sent to Quanterra for analysis.

Philip received analytical results for Ambient Air Monitoring Events R131 and R132.

In a telephone conversation between Jeff Kaestner and Lynda Priddy the following topics were discussed:

- EPA will review the verification sample results and the statistical analysis;
- EPA approved discontinuing the use of data ram for continuous dust monitoring. PM-10 sampling will continue; and
- status of demobilization.

Philip submitted statistical analysis of verification sample results to EPA for review.

---

### **PROBLEMS OR DIFFICULTIES**

Sample results from Laucks for baghouse dust and soil/dust removed from treated soil in bin 3.

### **ANALYTICAL DATA**

Philip received analytical data for Ambient Air Monitoring Events R126 through R132, preliminary soil sample results, and verification soil sample results.

### **UPCOMING ACTIVITIES FOR NEXT REPORTING PERIOD**

Williams will continue demobilization activities, including pressure washing the treatment pad and ecology blocks. Backfilling activities may begin.

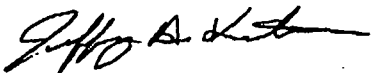
Page 6  
Ms. Lynda Priddy  
August 22, 1995

**CLOSING**

If you have any questions regarding this weekly status report, do not hesitate to contact me at (618) 281-7173.

Sincerely yours,

**PHILIP ENVIRONMENTAL SERVICES CORPORATION**



**Jeffrey A. Kaestner, E.I.T.**  
Site Supervisor  
Environmental Engineer

DWE/dwe /WK0821.DOC

cc: **Bruce Sheppard and Elizabeth Hill (BNRR)**  
**Tom Backer (Preston Gates and Ellis)**  
**David Eagleton (Philip)**  
**Jack Lane (Williams)**

# **PHILIP**

## **ENVIRONMENTAL**

August 29, 1995  
Project 12883088

Ms. Lynda Priddy  
On-Scene Coordinator/Remedial Project Manager  
U.S. Environmental Protection Agency, Region X  
1200 Sixth Avenue  
Seattle, Washington 98101

Dear Ms. Priddy:

**Subject: Weekly Status Report  
August 22 through August 28, 1995  
Woods Industries Site  
Yakima, Washington**

On behalf of Burlington Northern Railroad (BNRR), Philip Environmental Services Corporation (Philip) hereby submits the weekly status report for soil treatment activities at the Woods Industries Site during the above period. This report is submitted in compliance with Administrative Order Number 1087-03-18-106.

### **PROJECT ACTIVITIES**

---

#### **August 22**

Williams submitted a demobilization status report.

Williams continued decontamination of the treatment pad. Soil generated through cleaning of the waste feed side was being drummed and staged near the south entrance to the waste feed pad. Soil from the treated soil side of the pad was placed on plastic near the south entrance to the treated soil side of pad.

On behalf of BNRR, Philip issued the weekly status report for soil treatment activities conducted from August 15 through August 21, 1995.

As requested, Philip submitted preliminary sample location sketches and data for the additional excavation areas to Lynda Priddy (EPA).

Page 2  
Ms. Lynda Priddy  
August 29, 1995

Lynda Priddy issued a letter to BNRR summarizing issues discussed with representatives from Philip and Williams on August 15, 1995.

Philip collected samples from Ambient Air Monitoring Event R141 and began Event R142.

---

### **August 23**

Williams submitted a demobilization status report.

Williams continued decontamination procedures by pressure washing ecology blocks on the treated soil side of the pad. They received EPA approval to discharge treated water from tank 3 onto soil.

Philip collected samples from Ambient Air Monitoring Event R142 and began Event R143.

Philip received analytical data for Ambient Air Monitoring Event R134, R135, and R136. Results for monitoring events R-130 through R-136 were faxed to Lynda Priddy.

In telephone conversations between Lynda Priddy and Jeff Kaestner the following topics were discussed:

- EPA schedule for reviewing verification sample data;
  - location and results of preliminary samples;
  - EPA review of analysis of soil and water samples submitted by Williams;
  - scheduled EPA site visit on Monday, 8/28/95;
  - approval to discharge water in treated tank 3; and
  - soil/baghouse dust not approved by EPA for on-site disposal.
-

Page 3  
Ms. Lynda Priddy  
August 29, 1995

**August 24**

Williams submitted a demobilization status report.

Williams continued decontamination procedures by pressure washing pad and ecology blocks on both treated soil and waste feed sides. Williams also removed baghouse dust from augers. Williams began to remove bags to wash baghouse.

Williams issued a letter describing the plan for removal and disposal of baghouse dust to the EPA.

Philip collected samples from Ambient Air Monitoring Event R143 and began Event R144.

---

**August 25**

Williams submitted demobilization status report.

Williams prepared baghouse for removal of bags by opening top access doors and tube sheet rings.

Philip collected Ambient Air Monitoring Event R144 and began Event R145.

Philip received analytical data for Ambient Air Monitoring Event R137, R138, R139, and R140.

Philip issued a draft letter to Lynda Priddy providing the information she requested on August 23, 1995, regarding soil sampling in the NV10 area.

---

**August 26**

Williams submitted demobilization status report.

Page 4  
Ms. Lynda Priddy  
August 29, 1995

Williams removed bags and pressure washed baghouse, placing soil/baghouse dust from bin #3 into drums. Williams also collected a treated water sample from tank #3 and sent to Laucks.

Philip collected Ambient Air Monitoring Event R145 and set up Event R146. Results of analytical data for Ambient Air Monitoring R137, R138, R139, and R140 were faxed to Lynda Priddy.

---

#### **August 27**

Williams checked on dust control measures and wet the area around the baghouse. No other site activities.

Ambient Air Monitoring Event R147 is blank because there were no scheduled site activities.

---

#### **August 28**

Williams submitted demobilization status report.

Williams continued decontamination procedures by washing the treatment pad.

Philip collected Ambient Air Monitoring Event R146.

Lynda Priddy and Jeff Kaestner met on-site and discussed the following topics:

- Philip/BNRR still waiting for Williams to obtain requested information from Weststate for carbon profile;
- reviewed sampling approach and walked the site;
- Air Monitoring (PM-10) will be performed every third day at perimeter locations during scheduled backfill activities;
- EPA wishes to talk to Philip's sample technician about collection of verification samples SV12 and NV10;
- EPA discussion with Williams concerning pad decontamination activities; and

Page 5  
Ms. Lynda Priddy  
August 29, 1995

- EPA not requiring Ambient Air Monitoring after backfill activities are complete.
- 

### **PROBLEMS OR DIFFICULTIES**

None

### **ANALYTICAL DATA**

Philip received analytical data for Ambient Air Monitoring Events R130 through R140.

### **UPCOMING ACTIVITIES FOR NEXT REPORTING PERIOD**

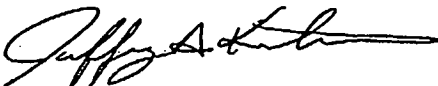
Williams will continue demobilization activities. Backfilling may begin.

### **CLOSING**

If you have any questions regarding this weekly status report, do not hesitate to contact me at (618) 281-7173.

Sincerely yours,

**PHILIP ENVIRONMENTAL SERVICES CORPORATION**



Jeffrey A. Kaestner, E.I.T.  
Site Supervisor  
Environmental Engineer

DWE/dwe /WK0828.DOC

cc: Bruce Sheppard and Elizabeth Hill (BNRR)  
Tom Backer (Preston Gates and Ellis)  
David Eagleton (Philip)  
Todd Deas (Williams)



# **PHILIP**

## **ENVIRONMENTAL**

September 5, 1995  
Project 12883088

Ms. Lynda Priddy  
On-Scene Coordinator/Remedial Project Manager  
U.S. Environmental Protection Agency, Region X  
1200 Sixth Avenue  
Seattle, Washington 98101

Dear Ms. Priddy:

**Subject: Weekly Status Report  
August 29 through September 4, 1995  
Woods Industries Site  
Yakima, Washington**

On behalf of Burlington Northern Railroad (BNRR), Philip Environmental Services Corporation (Philip) hereby submits the weekly status report for soil treatment activities at the Woods Industries Site during the above period. This report is submitted in compliance with Administrative Order Number 1087-03-18-106.

### **PROJECT ACTIVITIES**

---

#### **August 29**

Williams submitted a demobilization status report.

Williams continued decontamination procedures on the treatment pad and pressure washed ecology blocks.

On behalf of BNRR, Philip issued the weekly status report for soil treatment activities conducted from August 22 through August 28, 1995.

Philip collected samples from Ambient Air Monitoring Event R148 and began Event R149.

---



Page 2  
Ms. Lynda Priddy  
September 5, 1995

**August 30**

Williams submitted a demobilization status report.

Williams continued decontamination procedures on the treatment pad and completed pressure washing the ecology blocks.

Philip collected samples from Ambient Air Monitoring Event R149 and began Event R150.

---

**August 31**

Williams submitted a demobilization status report.

Philip collected samples from Ambient Air Monitoring Event R150 and began Event R151.

Philip received analytical data for Ambient Air Monitoring Event R141, R142, R143, and R144.

Williams spent the majority of the day loading trucks with demobilized thermal treatment equipment at an off site location. Williams began removal of baghouse bags from their cages. Williams cleaned the sump on the treated soil side of pad and also the area around the sump near where the primary treatment unit had been located.

In a telephone conversation with Lynda Priddy, David Eagleton (Philip) received verbal USEPA approval that based on verification sample results, soil removal was complete on the entire north and south areas of the site, excluding the isolated haul road area adjacent to the northwest portion of the waste feed pad.

In a telephone conversation, Jeff Kaestner and Lynda Priddy (EPA) discussed the following:

- Williams cleaning the pad sump areas;
- decontamination close to completion on the treated soil holding pad;

Page 3  
Ms. Lynda Priddy  
September 5, 1995

- dust control and removal of debris during backfill operations (scheduled to begin Tuesday, September 5th); and
  - backfilling schedule.
- 

### **September 1**

Williams submitted a demobilization status report.

Williams continued removing baghouse bags from cages.

Philip collected Ambient Air Monitoring Event R151.

Results for monitoring events R-141 through R-144 were faxed to Lynda Priddy.

---

### **September 2-4**

No site activities.

### **PROBLEMS OR DIFFICULTIES**

Progress of treatment pad decontamination and demobilization slowed because of limited Williams crew.

### **ANALYTICAL DATA**

Philip received analytical data for Ambient Air Monitoring Events R141 through R144.

Page 4  
Ms. Lynda Priddy  
September 5, 1995

**UPCOMING ACTIVITIES FOR NEXT REPORTING PERIOD**

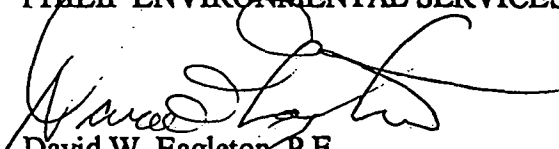
Backfill operations may begin.

**CLOSING**

If you have any questions regarding this weekly status report, do not hesitate to contact me at (618) 281-7173.

Sincerely yours,

**PHILIP ENVIRONMENTAL SERVICES CORPORATION**



David W. Eagleton, P.E.  
Project Manager  
Environmental Engineer

DWE/dwe /WK0905.DOC

cc: Bruce Sheppard and Elizabeth Hill (BNRR)  
Tom Backer (Preston Gates and Ellis)  
Greg Koester (Philip)  
Jack Lane (Williams)

September 12, 1995  
Project 12883088

Ms. Lynda Priddy  
On-Scene Coordinator/Remedial Project Manager  
U.S. Environmental Protection Agency, Region X  
1200 Sixth Avenue  
Seattle, Washington 98101

Dear Ms. Priddy:

**Subject: Weekly Status Report**  
**September 5 through September 11, 1995**  
**Woods Industries Site**  
**Yakima, Washington**

On behalf of Burlington Northern Railroad (BNRR), Philip Environmental Services Corporation (Philip) hereby submits the weekly status report for soil treatment activities at the Woods Industries Site during the above period. This report is submitted in compliance with Administrative Order Number 1087-03-18-106.

## **PROJECT ACTIVITIES**

---

### **September 5**

Williams continued decontamination procedures on the treatment pad.

On behalf of BNRR, Philip issued the weekly status report for soil treatment activities conducted from August 29 through September 4, 1995.

Philip began Ambient Air Monitoring Event R152.

Philip began groundwater monitoring.

---

Page 2  
Ms. Lynda Priddy  
September 12, 1995

### September 6

Ken Leingang Excavating, Inc., (Leingang), subcontracted by Williams, began backfilling.

Philip collected samples from Ambient Air Monitoring Event R152 and began Event R153.

Philip continued groundwater monitoring.

B.J. Barte (Williams) faxed Lynda Priddy and Greg Koester (Philip) a copy of the analytical data for the treated water sample collected from Frac Tank #3.

In a telephone conversation, Lynda Priddy and Greg Koester discussed the analytical data for the treated water sample collected from Frac Tank #3.

---

### September 7

Leingang continued backfilling operations.

Philip collected samples from Ambient Air Monitoring Event R153.

Philip completed groundwater monitoring.

Greg Koester and Lynda Priddy discussed the following project related topics:

- Williams' limited number of on-site personnel and the slow progress of pad cleanup activities;
- groundwater monitoring;
- Lynda Priddy requested a draft outline of the Soil Treatment Final Report;
- USEPA recently issued a new Woods Industries Fact Sheet; and
- Frac Tank water results which Williams had faxed to Lynda Priddy.

**September 8**

Leingang continued backfilling operations.

---

**September 9-10**

No site activities.

---

**September 11**

Leingang continued backfilling operations.

Williams continued pad cleanup activities. Williams placed dust removed from the baghouse in 55-gallon drums.

Williams faxed a letter to the City of Yakima Wastewater Treatment Division requesting authorization to discharge approximately 18,000 gallons of treated water in Frac Tank #3 to the sewer.

On behalf of BNRR, Philip faxed Lynda Priddy a draft outline of the Soil Treatment Final Report.

Philip began Ambient Air Monitoring Event R154.

---

Page 4  
Ms. Lynda Priddy  
September 12, 1995

#### **PROBLEMS OR DIFFICULTIES**

Progress of treatment pad decontamination slowed because of small number of personnel in Williams' crew at the site.

#### **ANALYTICAL DATA**

Williams received analytical data for the treated water sample collected from Frac Tank #3.

Philip received analytical data for Ambient Air Monitoring Events R145 through R150.

#### **UPCOMING ACTIVITIES FOR NEXT REPORTING PERIOD**

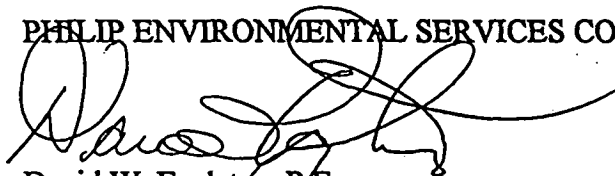
Continue backfilling, air monitoring, and pad cleanup activities.

#### **CLOSING**

If you have any questions regarding this weekly status report, do not hesitate to contact me at (618) 281-7173.

Sincerely yours,

**PHILIP ENVIRONMENTAL SERVICES CORPORATION**



David W. Eagleton, P.E.  
Project Manager  
Environmental Engineer

DWE/dwe /WEEK0912.DOC

cc: Bruce Sheppard and Elizabeth Hill (BNRR)  
Tom Backer (Preston Gates & Ellis)  
Greg Koester (Philip)  
Jack Lane (Williams)





September 19, 1995  
Project 12883088

Ms. Lynda Priddy  
On-Scene Coordinator/Remedial Project Manager  
U.S. Environmental Protection Agency, Region X  
1200 Sixth Avenue  
Seattle, Washington 98101

Dear Ms. Priddy:

**Subject: Weekly Status Report  
September 12 through September 18, 1995  
Woods Industries Site  
Yakima, Washington**

On behalf of Burlington Northern Railroad (BNRR), Philip Environmental Services Corporation (Philip) hereby submits the weekly status report for soil treatment activities at the Woods Industries Site during the above period. This report is submitted in compliance with Administrative Order Number 1087-03-18-106.

## **PROJECT ACTIVITIES**

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### **September 12**

Williams continued decontamination procedures on the treatment pad. Treated water from Frac Tank #3 was discharged to the sanitary sewer in accordance with the permit from the local sewer district.

Ken Leingang Excavating, Inc., (Leingang), subcontracted by Williams, continued backfilling activities.

On behalf of BNRR, Philip issued the weekly status report for soil treatment activities conducted from September 5 through September 11, 1995.

Philip collected samples for Ambient Air Monitoring Event R154.

---



Page 2  
Ms. Lynda Priddy  
September 19, 1995

### **September 13**

Williams continued decontamination procedures on the treatment pad.

Leingang continued backfilling treated soil. All cobbles have been backfilled on site. Debris removed from cobbles were staged on plastic and covered awaiting final off-site disposal.

---

### **September 14**

Williams continued decontamination procedures on the treatment pad. Williams also excavated the 'hot' spot on the north haul road located immediately north of the waste feed side of the pad. The excavated soil was staged in a rolloff box to determine treatment and/or disposal options. Philip subsequently collected one composite preliminary sample from the excavation and one preliminary sample on the haul road just north of the excavation.

Leingang continued backfilling treated soil.

Philip began Ambient Air Monitoring Event R155.

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### **September 15**

Williams continued decontamination procedures on the treatment pad.

Leingang continued backfilling operations.

Philip collected samples for Ambient Air Monitoring Event R155.

In a telephone conversation, Dave Lawrence (Philip) and Lynda Priddy agreed that sufficient ambient air monitoring has been collected; therefore, ambient air monitoring is no longer required.

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Ms. Lynda Priddy  
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**September 16 and 17**

No site activities.

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**September 18**

Leingang continued backfilling operations.

Williams continued decontamination procedures on the treatment pad.

Philip received preliminary sample results for samples collected from the recent excavation for the north haul road. Analytical data indicates concentrations below cleanup levels. As a result, Philip collected one composite verification sample from the excavation. Williams subsequently backfilled the excavation to allow for demobilization of the baghouse.

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**PROBLEMS OR DIFFICULTIES**

No problems or difficulties were encountered.

**ANALYTICAL DATA**

Williams received analytical data for the treated water sample collected from Frac Tank #3.

Philip received preliminary sample results for samples collected from the recent excavation for the north haul road. Philip received analytical data for Ambient Air Monitoring Events R152 and R153.

**UPCOMING ACTIVITIES FOR NEXT REPORTING PERIOD**

Complete backfilling and continue pad cleanup activities.

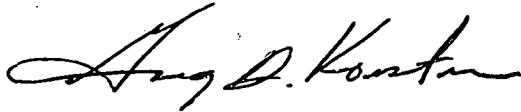
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**CLOSING**

If you have any questions regarding this weekly status report, do not hesitate to contact me at (618) 281-7173.

Sincerely yours,

**PHILIP ENVIRONMENTAL SERVICES CORPORATION**



Greg A. Koester  
Project Engineer

GAK/dwe /WEEK0919.DOC

cc: Bruce Sheppard and Elizabeth Hill (BNRR)  
Tom Backer (Preston Gates & Ellis)  
David W. Eagleton (Philip)  
Jack Lane (Williams)