

APPENDIX I

**INVESTIGATION-DERIVED WASTE
CHARACTERIZATION AND DISPOSAL REPORT**



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380-980813.005

August 14, 1998

Mr. Kevin Jasper
U.S. Army Corps of Engineers, Louisville District
Attn: CEORL-DL-B (Jasper)
P. O. Box 59
Louisville, Kentucky 40201-0059

SUBJECT: Contract No. DACA62-94-D-0029, Delivery Order No. 0060: Phase II Remedial Investigation of Winklepeck Burning Grounds at the Ravenna Army Ammunition Plant, Ravenna, Ohio

RE: Deliverable – Investigation-Derived Waste Characterization and Disposal Report

Dear Mr. Jasper:

Investigative activities conducted (April through May 1998) during the Phase II RI of Winklepeck Burning Grounds (WBG) and Facility-Wide Background Investigation at Ravenna Army Ammunition Plant (RVAAP), Ravenna, Ohio, resulted in the generation of investigation-derived waste (IDW) consisting of soil, water, laboratory wastes, and spent personal protective equipment (PPE). The IDW was generated in the course of drilling, sampling, field lab analyses, and equipment decontamination activities. The purpose of this letter report is to characterize and classify the IDW for future disposal. The report includes a summary of the IDW generated and its origin (Table 1), classification of the IDW and recommendations for disposal (Table 2), and a review of the analytical results used for waste characterization (Attachment 1). This document follows guidance established by project work plans (USACE 1996 and USACE 1998) and the Ohio EPA (November 1997) regarding IDW disposition at RVAAP.

Per Section 7 of the Facility-Wide Sampling and Analysis Plan (SAP) (USACE 1996), the analytical results from environmental samples collected during the Phase II RI are used, where possible, to characterize IDW for each sampling medium. For example, analytical results from the sampling of shallow soil borings are used to characterize the drums containing correlative soil IDW for waste characterization. Saturated soils and purge/development groundwater from monitoring wells are characterized based on the analyses of groundwater samples collected from each well. Where correlative samples do not exist (e.g., for laboratory wastes or decontamination pad fluids), waste characterization samples were collected and the analyses used to characterize these wastes. Only environmental samples with analytical results above method detection limits are used to characterize waste containers and are shown on Attachment 1.

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Attachment 1 presents the frequency of detects, minimum detected concentration, maximum detected concentration, and average concentration for each analyte. Note that the average value is calculated from all reported values, either the detected concentration or, if not detected, the quantitation limit for that sample. For analyses that include non-detects, the average represents an upper bound on the true average. Because quantitation limits vary between samples, the calculated average may exceed the maximum detect in cases where non-detects are included. Because surface soil drums contain IDW from several boring locations within WBG, minimum, maximum, and mean concentrations from all samples contained in each drum are presented for the characterization of wastes in each container.

For the characterization of wastes as hazardous or non-hazardous, the Resource Conservation and Recovery Act (RCRA) regulatory limits are compared to the mean contaminant levels as presented in Attachment 1. Table 7-1 of the Facility-Wide SAP shows the maximum concentration of contaminants for the toxicity characteristic for hazardous wastes per 40 CFR 261.24. Analytical results for the correlative IDW are compared with these criteria to determine whether any wastes are potentially hazardous. Although the analyses conducted on the materials constitute total concentrations, the Toxicity Characteristic Leaching Procedure (TCLP) methodology is used for waste classification, by applying a 20-fold dilution factor to total results for comparison to TCLP. If a given analyte is found to exceed 20 times the regulatory limit, it is considered to be an RCRA-hazardous waste. All containers of soil IDW that are determined to be potentially RCRA-hazardous, based on the 20-times rule, are recommended for additional sampling and TCLP analysis prior to disposal. For liquid IDW, the environmental sample analytical results will be compared directly to the regulatory limits to determine a waste characterization.

Non-hazardous wastes are further characterized as contaminated or non-contaminated based on evaluation of detected contamination. Containers with detected levels of organic and/or explosive contamination and/or elevated concentrations of inorganic constituents are classified as non-hazardous contaminated wastes. Containers with no detected levels of organic and/or explosive contamination and/or no elevated levels of inorganic constituents are classified as non-hazardous and non-contaminated wastes. Concentrations of inorganic constituents observed in IDW from background sampling are not considered contamination as these are, by definition as background, naturally occurring levels.

Four containers (WBGSUB01, WBGSUB02, WBGSURF01, and WBGSURF02) are characterized as potentially hazardous. The two subsurface soil containers (WBGSUB01 and WBGSUB02) are potentially hazardous due to a concentration of lead and are potentially classified RCRA D008 wastes. One surface soil container (WBGSURF01) failed the hazardous waste tests for barium, cadmium, chromium, and lead, and is potentially classified as RCRA D005, D006, D007, and D008 waste. The other surface soil container (WBGSURF02) failed for both barium and lead, and is potentially an RCRA D005 and D008 waste. In addition, the laboratory waste drums (ACETONE-

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CAUS and ACETONE-SOIL) are classified as hazardous because acetone-saturated laboratory wastes are stored in these containers. These containers are classified as RCRA D001 waste. It is recommended that all potentially hazardous wastes, with the exception of the acetone laboratory wastes, be additionally sampled and analyzed for TCLP and other appropriate waste constituents (e.g. explosives, organic, or inorganic) prior to disposal. Following additional characterization, these wastes are recommended for off-site disposal at a licensed facility.

Thirty-six containers are classified as non-hazardous contaminated and are comprised of monitoring well development and purge water from monitoring wells at WBG, decontamination rinse water, decontamination sludge and PPE, and soil from a hydraulic oil spill due to a drilling equipment mechanical failure. These containers are recommended for off-site disposal at a licensed disposal facility. Thirty-four containers are classified as non-hazardous and non-contaminated. One container classified as non-hazardous and non-contaminated (BKGmw-004) contains low levels of organic (methylene chloride and chloroform) constituents believed to be laboratory artifacts and not site-related contamination. These containers are recommended for on-site disposal by spreading, seeding, and mulching.

Please provide your concurrence or direction concerning the enclosed waste characterization and disposal recommendations. Following your direction and approval, we will proceed with the appropriate waste disposal.

If you have any questions or require additional information, please do not hesitate to contact me at 423-481-8761.

Sincerely,

SCIENCE APPLICATIONS INTERNATIONAL CORPORATION



Stephen B. Selecman
Project Manager

cc: Eileen Mohr, Ohio EPA
Mark Patterson, RVAAP
John Jent, USACE
Kathy Dominic, SAIC
Project File

Table 1. Summary of Phase II RI Winklepeck Burning Grounds IDW

| Drum Number | Drum Type and Size | Contents, Approx. Vol. | Waste Source |
|--------------|--------------------|---------------------------------|------------------------------------|
| ACETONE-CAUS | closed-top 55 gal | 1/2 full, acetone and KOH | liquid acetone and KOH -field lab |
| ACETONE-SOIL | open-top 55 gal | <1/3 full, soil mixed w/acetone | colorimetric extracts with acetone |
| BKGmw-004 | closed-top 55 gal | 1/2 full, devel/purge water | monitoring well BKGmw-004 |
| BKGmw-005-1w | closed-top 55 gal | full, devel/purge water | monitoring well BKGmw-005 |
| BKGmw-005-2w | closed-top 55 gal | full, devel/purge water | monitoring well BKGmw-005 |
| BKGmw-005-3w | closed-top 55 gal | full, devel/purge water | monitoring well BKGmw-005 |
| BKGmw-006 | open top 55 gal | 3/4 full, devel/purge water | monitoing well BKGmw-006 |
| BKGmw-006-1w | closed-top 55 gal | full, devel/purge water | monitoring well BKGmw-006 |
| BKGmw-006-2w | closed-top 55 gal | 1/2 full, devel/purge water | monitoring well BKGmw-006 |
| BKGmw-008 | closed-top 55 gal | >1/2full, devel/purge water | monitoring well BKGmw-008 |
| BKGmw-010 | closed-top 55 gal | full | devel/purge water BKGmw-010 |
| BKGmw-012 | open-top 55 gal | 1/3 full | monitoring well BKGmw-012 |
| BKGmw-012-1w | closed-top 55 gal | full, devel/purge water | monitoring well BKGmw-012 |
| BKGmw-012-2w | closed-top 55 gal | full, devel/purge water | monitoring well BKGmw-012 |
| BKGmw-013 | closed-top 55 gal | 1/2 full, devel/purge water | monitoring well BKGmw-013 |
| BKGmw-015 | closed-top 55 gal | 2/3 full | devel/purge water BKGmw-015 |
| BKGmw-016 | open-top 55 gal | 1/3 full, devel/purge water | monitoring well BKGmw-016 |
| BKGmw-016-1 | closed-top 55 gal | 1/2 full, devel/purge water | monitoring well BKGmw-016 |
| BKGmw-016-2w | closed-top 55 gal | 1/2 full, devel/purge water | monitoring well BKGmw-016 |
| BKGmw-017-1w | open-top 55 gal | full, devel/purge water | monitoring well BKGmw-017 |
| BKGmw-017-2w | closed-top 55 gal | full, devel. water | monitoring well BKGmw-017 |
| BKGmw-017-3w | closed-top 55 gal | full, devel/purge water | monitoring well BKGmw-017 |
| BKGmw-017-4w | closed-top 55 gal | 1/3full, devel/purge water | monitoring well BKGmw-017 |
| BKGmw-018 | open-top | 2/3 full, devel/purge water | monitoring well BKGmw-018 |
| BKGmw-018-1w | closed-top 55 gal | full, devel/purge water | monitoring well BKGmw-018 |
| BKGmw-018-2w | closed-top 55 gal | full, devel/purge water | monitoring well BKGmw-018 |
| BKGmw-018-3w | closed-top 55 gal | full, devel/purge water | monitoring well BKGmw-018 |
| BKGmw-018-4w | closed-top 55 gal | 1/3 full, devel/purge water | monitoring well BKGmw-018 |
| BKGmw-019 | open-top 55 gal | 1/3 full, devel/purge water | monitoring well BKGmw-019 |
| BKGmw-019-1w | closed-top 55 gal | full, devel/purge water | monitoring well BKGmw-019 |
| BKGmw-019-2w | closed-top 55 gal | full, devel/purge water | monitoring well BKGmw-019 |
| BKGmw-019-3w | closed-top 55 gal | full, devel/purge water | monitoring well BKGmw-019 |
| BKGmw-020 | closed-top 55 gal | full, devel/purge water | monitoring well BKGmw-020 |
| BKGmw-020 | open-top 55 gal | 1/2 full, devel/purge water | monitoring well BKGmw-020 |
| BKGmw-021 | closed-top 55 gal | full, devel/purge water | monitoring well BKGmw-021 |
| BKGmw-021 | open-top 55 gal | 1/3 full, devel/purge water | monitoring well BKGmw-021 |
| DECON-HCl | closed-top 55 gal | 1/4 full | HCl rinse (1%) from decon |
| DECON-PPE | open-top 55 gal | 1/2 full | PPE from sample equpt. decon. |
| DECON-Wash | open-top 55 gal | full | potable wash/rinse from decon. |
| DECON-Wash 2 | open-top 55 gal | full, rinse water | rinse water from equipment decon. |
| DECON-Wash 3 | open-top 55 gal | rinse water | rinse water from equipment decon |
| EXCESS-1 | open-top 55 gal | 1/3 full, dry soil cuttings | excess dry soil from jars |
| OBGmw-001 | closed-top 55 gal | 1/3 full, devel/purge water | monitoring well OBG-1 |
| OBGmw-002 | open-top 55 gal | 1/2 full, devel/purge water | monitoring well OBG-2 |
| OBGmw-003 | open-top 55 gal | 2/3 full, devel/purge water | monitoring well OBG-3 |
| OBGmw-004 | open-top 55 gal | 1/3 full, devel/purge water | monitoring well OBG-4 |
| SLUDGE -1 | open-top 55 gal | full, decon pad sludge | drilling equipment decon |
| SLUDGE-2 | open-top 55 gal | full, decon pad sludge | drilling equipment decon |

Table 1. Summary of Phase II RI Winklepeck Burning Grounds IDW

| | | | |
|--------------|--------------------|------------------------------|--------------------------------------|
| SPILL-013 | open-top 55 gal | 1/3 full, dry soil | transmission-fluid leak at BKGmw-013 |
| WBGmw-005 | open-top 55 gal | 3/4 full, sat. soil | WBGmw-005 monitoring well boring |
| WBGmw-005 | open-top 55 gal | 1/2 full, devel/purge water | WBGmw-005 monitoring well |
| WBGmw-005-3w | closed-top 55gal | 2/3 full, devel/purge water | monitoring well WBGmw-005 |
| WBgmw-006 | closed-top 55 gal | 1/2 full,devel/purge water | monitoring well WBGmw-006 |
| WBGmw-006-1 | open-top 55 gal | 1/5 full, dry soil | WBGmw-006 monitoring well boring |
| WBGmw-006-2 | open-top 55 gal | 2/3 full, sat. soils | WBGmw-006 monitoring well boring |
| WBGmw-007 | closed-top 55gal | full, devel. water | monitoring well WBGmw-007 |
| WBGmw-007 | open-top 55 gal | 1/3 full, devel/purge water | monitoring well WBGmw-007 |
| WBGmw-007 | closed-top 55 gal | full, devel/purge water | monitoring well WBGmw-007 |
| WBGmw-007-1 | open-top 55 gal | 1/2 full; dry soil | WBGmw-007 monitoring well boring |
| WBGmw-007-2 | open-top 55 gal | 1/3 full, sat, soil | WBGmw-007 monitoring well boring |
| WBGmw-008 | closed-top 55 gal | 1/2 full, devel purge water | monitoring well WBGmw-008 |
| WBGmw-008 | open-top 55 gal | 1/3 full devel/purge water | monitoring well WBGmw-008 |
| WBGmw-008-1 | open-top 55 gal | 1/8 full, dry soil | WBGmw-008 monitoring well boring |
| WBGmw-008-2 | open-top 55 gal | 1/3 full, sat. soil | WBGmw-008 monitoring well boring |
| WBGmw-009 | closed-top 55 gal | full, development water | monitoring well WBGmw-009 |
| WBGmw-009 | closed-top 55 gal | full, devel/purge water | monitoring well WBGmw-009 |
| WBGmw-009 | open-top 55 gal | 1/3 full devel/purge water | monitoring well WBGmw-009 |
| WBGmw-009-1 | open-top 55 gal | 3/4 full, dry soil | WBGmw-009 monitoring well boring |
| WBGmw-009-2 | open-top 55 gal | 1/3 full, dry soil | WBGmw-009 monitoring well boring |
| WBGmw-009-3 | open-top 55 gal | full, dry soil | WBGmw-009 monitoring well boring |
| WBGSUB01 | open-top 55 gal | full, subsurf. soil from WBG | excess soil from pad sampling |
| WBGSUB02 | open-top 55 gal | full, subsurf. soil from WBG | excess soil from pad sampling |
| WBGSurf01 | open-top 55 gal | full, surf. soil from WBG | excess surface soil from WBG |
| WBGSURF02 | open-top 55 gal | full, surf. soil from WBG | excess surf. soil from pad sampling |
| 69710705 | 1500-gal poly tank | full, decon pad water | wash and rinse water from rig decon |
| 20314-100 | 1500-gal poly tank | full, decon pad water | wash and rinse water from rig decon |

Final

Table 2. Summary of Waste Classification and Recommended Disposal Options

| RCRA Hazardous Waste | | | |
|-----------------------------|----------------|--------------------------|--------------------------------|
| Container Number | Media | Waste Criteria | Disposal Recommendation |
| ACETONE-CAUS | Liquid | D001 | Permitted Facility |
| ACETONE-SOIL | Saturated Soil | D001 | Permitted Facility |
| WBGSUB01 | Soil | D008 Explosives & metals | Permitted Facility |
| WBGSUB02 | Soil | D008 Explosives & metals | Permitted Facility |
| WBGSURF01 | Soil | D005, D006, D007, D008 | Permitted Facility |
| WBGSURF02 | Soil | D005, D008 | Permitted Facility |

| Non Hazardous Contaminated Waste | | | |
|---|--------------|---|--|
| Container Number | Media | Waste Criteria | Disposal Recommendation |
| DECON-HCI | Liquid | Metals | Permitted Facility |
| DECON-Wash | Water | Explosives | Permitted Facility |
| DECON-Wash 2 | Water | Explosives | Permitted Facility |
| DECON-Wash 3 | Water | Explosives | Permitted Facility |
| WBGmw-005 | Soil | Explosives & Organics | Permitted Facility |
| WBGmw-005 | Water | Explosives & Organics | Permitted Facility |
| WBGmw-005-3w | Water | Explosives & Organics | Permitted Facility |
| SPILL-013 | Soil | Hydraulic Oil | Permitted Facility |
| OBGmw-001 | Water | Explosives | Permitted Facility |
| OBGmw-002 | Water | Explosives | Permitted Facility |
| OBGmw-003 | Water | No detected contamination Trace Metals | On-site at point of origin Permitted Facility |

Move to Non hazardous, non-contaminated

per John Tent
8/31/98
55 I-9

Table 2. cont'd

| Container Number | Media | Waste Criteria | Disposal Recommendation |
|------------------|--------|---|---|
| OBGmw-004 | Water | Explosives | Permitted Facility |
| WBgmw-006 | Water | Explosives & Organics | Permitted Facility |
| WBGmw-006-1 | Soil | Explosives & Organics | Permitted Facility |
| WBGmw-006-2 | Soil | Explosives & Organics | Permitted Facility |
| WBGmw-007 | Water | Explosives | Permitted Facility |
| WBGmw-007 | Water | Explosives | Permitted Facility |
| WBGmw-007 | Water | Explosives | Permitted Facility |
| WBGmw-007-1 | Soil | Explosives | Permitted Facility |
| WBGmw-007-2 | Soil | Explosives | Permitted Facility |
| WBGmw-008 | Water | No detected contamination Trace Metals | Permitted Facility One-life cut point at 10% at 10% |
| WBGmw-008 | Water | Trace Metals ² | Permitted Facility ² |
| WBGmw-008-1 | Soil | Trace Metals ² | Permitted Facility ² |
| WBGmw-008-2 | Soil | Trace Metals ² ↓ | Permitted Facility ² ↓ |
| WBGmw-009 | Water | Explosives | Permitted Facility |
| WBGmw-009 | Water | Explosives | Permitted Facility |
| WBGmw-009 | Water | Explosives | Permitted Facility |
| WBGmw-009-1 | Soil | Explosives | Permitted Facility |
| WBGmw-009-2 | Soil | Explosives | Permitted Facility |
| WBGmw-009-3 | Soil | Explosives | Permitted Facility |
| DECON-PPE | PPE | Explosives | Permitted Facility |
| EXCESS-1 | Soil | Explosives & Organics | Permitted Facility |
| SLUDGE-1 | SLUDGE | Explosives | Permitted Facility |
| SLUDGE-2 | SLUDGE | Explosives | Permitted Facility |
| 69710705 | Water | Explosives | Permitted Facility |
| 20314-100 | Water | Explosives | Permitted Facility |

17 - Poly Tank
soil

17 - drums offsite disposal
? - Phase I drums (Soil Only)

18 - water drums for offsite
2 - TCLP Tests

Table 2. cont'd

| Non-Hazardous and Non-Contaminated Waste | | | |
|--|-------|--------------------------|----------------------------|
| Container Number | Media | Waste Criteria | Disposal Recommendation |
| BKGmw-004 | Water | No detected contaminants | On-site at point of origin |
| BKGmw-006 | Water | No detected contaminants | On-site at point of origin |
| BKGmw-006-1w | Water | No detected contaminants | On-site at point of origin |
| BKGmw-006-2w | Water | No detected contaminants | On-site at point of origin |
| BKGmw-018 | Water | No detected contaminants | On-site at point of origin |
| BKGmw-018-1w | Water | No detected contaminants | On-site at point of origin |
| BKGmw-018-2w | Water | No detected contaminants | On-site at point of origin |
| BKGmw-018-3w | Water | No detected contaminants | On-site at point of origin |
| BKGmw-018-4w | Water | No detected contaminants | On-site at point of origin |
| BKGmw-005-1w | Water | No detected contaminants | On-site at point of origin |
| BKGmw-005-2w | Water | No detected contaminants | On-site at point of origin |
| BKGmw-005-3w | Water | No detected contaminants | On-site at point of origin |
| BKGmw-008 | Water | No detected contaminants | On-site at point of origin |
| BKGmw-010 | Water | No detected contaminants | On-site at point of origin |
| BKGmw-012 | Water | No detected contaminants | On-site at point of origin |
| BKGmw-012-1w | Water | No detected contaminants | On-site at point of origin |
| BKGmw-012-2w | Water | No detected contaminants | On-site at point of origin |
| BKGmw-013 | Water | No detected contaminants | On-site at point of origin |
| BKGmw-015 | Water | No detected contaminants | On-site at point of origin |
| BKGmw-016 | Water | No detected contaminants | On-site at point of origin |
| BKGmw-016-1 | Water | No detected contaminants | On-site at point of origin |
| BKGmw-016-2w | Water | No detected contaminants | On-site at point of origin |
| BKGmw-017-1w | Water | No detected contaminants | On-site at point of origin |
| BKGmw-017-2w | Water | No detected contaminants | On-site at point of origin |
| BKGmw-017-3w | Water | No detected contaminants | On-site at point of origin |
| BKGmw-017-4w | Water | No detected contaminants | On-site at point of origin |
| BKGmw-019 | Water | No detected contaminants | On-site at point of origin |
| BKGmw-019-1w | Water | No detected contaminants | On-site at point of origin |
| BKGmw-019-2w | Water | No detected contaminants | On-site at point of origin |

Table 2. cont'd

| Container Number | Media | Waste Criteria | Disposal Recommendation |
|-------------------------|--------------|--------------------------|--------------------------------|
| BKGmw-019-3w | Water | No detected contaminants | On-site at point of origin |
| BKGmw-20 | Water | No detected contaminants | On-site at point of origin |
| BKGmw-020 | Water | No detected contaminants | On-site at point of origin |
| BKGmw-021 | Water | No detected contaminants | On-site at point of origin |
| BKGmw-021 | Water | No detected contaminants | On-site at point of origin |

Ravenna Winklepeck Burning Ground Investigation Derived Waste
Summary of Analytes Detected Compared to TCLP Criteria

04:15 Friday, July 24, 1998 1

-- Drum ID=20314-100 --

| Chemical (units) | ID of Max Concentration | Mean | Max Detect | Mean Adj. for TCLP (mg/L) | Max Detect Adj. for TCLP (mg/L) | TCLP Criteria (mg/L) | Max > TCLP |
|---------------------------|-------------------------|---------|------------|---------------------------|---------------------------------|----------------------|------------|
| 1,3-Dinitrobenzene (MG/L) | WBGqc-002-0957 | 0.0007 | 0.0009 | | | | |
| 2,4-Dinitrotoluene (MG/L) | WBGqc-002-0957 | 0.00112 | 0.00044 | 0.00112 | 0.00044 | 0.13 | N |
| Arsenic (MG/L) | WBGqc-002-0956 | 0.024 | 0.026 | 0.024 | 0.026 | 5 | N |
| Barium (MG/L) | WBGqc-002-0956 | 0.054 | 0.067 | 0.054 | 0.067 | 100 | N |

-- Drum ID=69710705 --

| Chemical (units) | ID of Max Concentration | Mean | Max Detect | Mean Adj. for TCLP (mg/L) | Max Detect Adj. for TCLP (mg/L) | TCLP Criteria (mg/L) | Max > TCLP |
|---------------------------|-------------------------|---------|------------|---------------------------|---------------------------------|----------------------|------------|
| 1,3-Dinitrobenzene (MG/L) | WBGqc-002-0957 | 0.0007 | 0.0009 | | | | |
| 2,4-Dinitrotoluene (MG/L) | WBGqc-002-0957 | 0.00112 | 0.00044 | 0.00112 | 0.00044 | 0.13 | N |
| Arsenic (MG/L) | WBGqc-002-0956 | 0.024 | 0.026 | 0.024 | 0.026 | 5 | N |
| Barium (MG/L) | WBGqc-002-0956 | 0.054 | 0.067 | 0.054 | 0.067 | 100 | N |

-- Drum ID=BKGmW-004 --

| Chemical (units) | ID of Max Concentration | Mean | Max Detect | Mean Adj. for TCLP (mg/L) | Max Detect Adj. for TCLP (mg/L) | TCLP Criteria (mg/L) | Max > TCLP |
|---------------------------|-------------------------|---------|------------|---------------------------|---------------------------------|----------------------|------------|
| Aluminum (MG/L) | BKGmW-004(u)-0946-FD | 53.9 | 59.7 | | | | |
| Antimony (MG/L) | BKGmW-004(r)-0839-GW | 0.00455 | 0.0043 | | | | |
| Arsenic (MG/L) | BKGmW-004(u)-0946-FD | 0.115 | 0.233 | 0.115 | 0.233 | 5 | N |
| Barium (MG/L) | BKGmW-004(u)-0946-FD | 0.126 | 0.252 | 0.126 | 0.252 | 100 | N |
| Calcium (MG/L) | BKGmW-004(u)-0946-FD | 16.5 | 18.5 | | | | |
| Chloroform (MG/L) | BKGmW-004(r)-0839-GW | 0.00072 | 0.00074 | 0.00072 | 0.00074 | 6 | N |
| Chromium (MG/L) | BKGmW-004(u)-0946-FD | 0.0518 | 0.102 | 0.0518 | 0.102 | 5 | N |
| Cobalt (MG/L) | BKGmW-004(u)-0946-FD | 0.0491 | 0.05 | | | | |
| Copper (MG/L) | BKGmW-004(u)-0946-FD | 0.165 | 0.321 | | | | |
| Iron (MG/L) | BKGmW-004(u)-0946-FD | 103 | 217 | | | | |
| Lead (MG/L) | BKGmW-004(u)-0946-FD | 0.0985 | 0.205 | 0.0985 | 0.205 | 5 | N |
| Magnesium (MG/L) | BKGmW-004(u)-0946-FD | 9.98 | 16.1 | | | | |
| Manganese (MG/L) | BKGmW-004(u)-0946-FD | 1.99 | 3.02 | | | | |
| Mercury (MG/L) | BKGmW-004(u)-0946-FD | 0.00023 | 0.00027 | 0.00023 | 0.00027 | 0.2 | N |
| Methylene Chloride (MG/L) | BKGmW-004(r)-0839-GW | 0.00267 | 0.00033 | | | | |

Concentrations were adjusted for comparison to TCLP criteria. Total soil concentrations are divided by the TCLP extraction dilution factor of 20. Program idwsrun04 run on 24JUL98 at 04:15 using data set wbgdrum2.

Ravenna Winklepeck Burning Ground Investigation Derived Waste
Summary of Analytes Detected Compared to TCLP Criteria

04:15 Friday, July 24, 1998 2

Drum ID=BKGmW-004
(cont. inued)

| Chemical (units) | ID of Max Concentration | Mean | Max Detect | Mean Adj. for TCLP (mg/L) | TCLP Criteria (mg/L) | Max > TCLP |
|------------------|-------------------------|---------|------------|---------------------------|----------------------|------------|
| Nickel (MG/L) | BKGmW-004 (U)-0946-FD | 0.0823 | 0.132 | - | - | - |
| Potassium (MG/L) | BKGmW-004 (U)-0946-FD | 4.66 | 9.3 | - | - | - |
| Selenium (MG/L) | BKGmW-004 (U)-0839-GW | 0.00508 | 0.0057 | 0.00508 | 0.0057 | 1 |
| Sodium (MG/L) | BKGmW-004 (U)-0946-FD | 20.6 | 21.9 | - | - | N |
| Thallium (MG/L) | BKGmW-004 (U)-0839-GW | 0.0021 | 0.0024 | - | - | - |
| Vanadium (MG/L) | BKGmW-004 (U)-0946-FD | 0.0795 | 0.12 | - | - | - |
| Zinc (MG/L) | BKGmW-004 (U)-0946-FD | 0.49 | 0.986 | - | - | - |

Drum ID=BKGmW-005-14

| Chemical (units) | ID of Max Concentration | Mean | Max Detect | Mean Adj. for TCLP (mg/L) | TCLP Criteria (mg/L) | Max > TCLP |
|------------------|-------------------------|---------|------------|---------------------------|----------------------|------------|
| Aluminum (MG/L) | BKGmW-005 (U)-0840-GW | 8.57 | 8.57 | - | - | - |
| Arsenic (MG/L) | BKGmW-005 (U)-0840-GW | 0.00955 | 0.0141 | 0.00955 | 0.0141 | 5 |
| Barium (MG/L) | BKGmW-005 (U)-0840-GW | 0.0367 | 0.0596 | 0.0367 | 0.0596 | N |
| Calcium (MG/L) | BKGmW-005 (U)-0840-GW | 103 | 115 | - | - | N |
| Chromium (MG/L) | BKGmW-005 (U)-0840-GW | 0.0114 | 0.0155 | 0.0114 | 0.0155 | 100 |
| Copper (MG/L) | BKGmW-005 (U)-0840-GW | 0.0314 | 0.0377 | - | - | N |
| Iron (MG/L) | BKGmW-005 (U)-0840-GW | 13.9 | 27.5 | - | - | N |
| Lead (MG/L) | BKGmW-005 (U)-0840-GW | 0.0103 | 0.0176 | 0.0103 | 0.0176 | 5 |
| Magnesium (MG/L) | BKGmW-005 (U)-0840-GW | 22 | 22.6 | - | - | N |
| Manganese (MG/L) | BKGmW-005 (U)-0840-GW | 0.652 | 0.876 | - | - | - |
| Mercury (MG/L) | BKGmW-005 (U)-0840-GW | 0.00014 | 0.00008 | 0.00014 | 0.00008 | 5 |
| Nickel (MG/L) | BKGmW-005 (U)-0840-GW | 0.0336 | 0.0271 | - | - | N |
| Potassium (MG/L) | BKGmW-005 (U)-0840-GW | 2.39 | 3.29 | - | - | - |
| Sodium (MG/L) | BKGmW-005 (U)-0840-GW | 6.63 | 6.82 | - | - | - |
| Vanadium (MG/L) | BKGmW-005 (U)-0840-GW | 0.0336 | 0.0171 | - | - | - |
| Zinc (MG/L) | BKGmW-005 (U)-0840-GW | 0.096 | 0.131 | - | - | - |

Concentrations were adjusted for comparison to TCLP criteria. Total soil concentrations are divided by the TCLP extraction dilution factor of 20.
Program idsum04 run on 24JUL98 at 04:15 using data set wbgdrum2.

Ravenne Winklepeck Burning Ground Investigation Derived Waste
Summary of Analytes Detected Compared to TCLP Criteria

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Drum ID=BKGmW-005-2w

| Chemical (units) | ID of Max Concentration | Mean | Max Detect | Mean Adj. for TCLP (mg/L) | TCLP Criteria (mg/L) | Max > TCLP |
|------------------|-------------------------|---------|------------|---------------------------|----------------------|------------|
| Aluminum (MG/L) | BKGmW-005 (w)-0840-GW | 8.57 | 8.57 | 0.00955 | 0.0141 | - |
| Arsenic (MG/L) | BKGmW-005 (w)-0840-GW | 0.00955 | 0.0141 | 0.00955 | 0.0141 | 5 |
| Barium (MG/L) | BKGmW-005 (w)-0840-GW | 0.0367 | 0.0596 | 0.0367 | 0.0596 | 100 |
| Calcium (MG/L) | BKGmW-005 (w)-0840-GW | 103 | 115 | - | - | - |
| Chromium (MG/L) | BKGmW-005 (w)-0840-GW | 0.0114 | 0.0155 | 0.0114 | 0.0155 | 5 |
| Copper (MG/L) | BKGmW-005 (w)-0840-GW | 0.0314 | 0.0377 | - | - | - |
| Iron (MG/L) | BKGmW-005 (w)-0840-GW | 13.9 | 27.5 | - | - | - |
| Lead (MG/L) | BKGmW-005 (w)-0840-GW | 0.0103 | 0.0176 | 0.0103 | 0.0176 | 5 |
| Magnesium (MG/L) | BKGmW-005 (w)-0840-GW | 22 | 22.6 | - | - | - |
| Manganese (MG/L) | BKGmW-005 (w)-0840-GW | 0.652 | 0.876 | - | - | - |
| Mercury (MG/L) | BKGmW-005 (w)-0840-GW | 0.00014 | 0.00008 | 0.00014 | 0.00008 | 0.2 |
| Nickel (MG/L) | BKGmW-005 (w)-0840-GW | 0.0336 | 0.0271 | - | - | - |
| Potassium (MG/L) | BKGmW-005 (w)-0840-GW | 2.39 | 3.29 | - | - | - |
| Sodium (MG/L) | BKGmW-005 (w)-0840-GW | 6.63 | 6.82 | - | - | - |
| Vanadium (MG/L) | BKGmW-005 (w)-0840-GW | 0.0336 | 0.0171 | - | - | - |
| Zinc (MG/L) | BKGmW-005 (w)-0840-GW | 0.096 | 0.131 | - | - | - |

Drum ID=BKGmW-005-3w

| Chemical (units) | ID of Max Concentration | Mean | Max Detect | Mean Adj. for TCLP (mg/L) | TCLP Criteria (mg/L) | Max > TCLP |
|------------------|-------------------------|---------|------------|---------------------------|----------------------|------------|
| Aluminum (MG/L) | BKGmW-005 (w)-0840-GW | 8.57 | 8.57 | 0.00955 | 0.0141 | - |
| Arsenic (MG/L) | BKGmW-005 (w)-0840-GW | 0.0141 | 0.00955 | 0.0141 | 0.0141 | 5 |
| Barium (MG/L) | BKGmW-005 (w)-0840-GW | 0.0367 | 0.0596 | 0.0367 | 0.0596 | 100 |
| Calcium (MG/L) | BKGmW-005 (w)-0840-GW | 103 | 115 | - | - | - |
| Chromium (MG/L) | BKGmW-005 (w)-0840-GW | 0.0114 | 0.0155 | 0.0114 | 0.0155 | 5 |
| Copper (MG/L) | BKGmW-005 (w)-0840-GW | 0.0314 | 0.0377 | - | - | - |
| Iron (MG/L) | BKGmW-005 (w)-0840-GW | 13.9 | 27.5 | - | - | - |
| Lead (MG/L) | BKGmW-005 (w)-0840-GW | 0.0103 | 0.0176 | 0.0103 | 0.0176 | 5 |
| Magnesium (MG/L) | BKGmW-005 (w)-0840-GW | 22 | 22.6 | - | - | - |
| Manganese (MG/L) | BKGmW-005 (w)-0840-GW | 0.652 | 0.876 | - | - | - |
| Mercury (MG/L) | BKGmW-005 (w)-0840-GW | 0.00014 | 0.00008 | 0.00014 | 0.00008 | 0.2 |
| Nickel (MG/L) | BKGmW-005 (w)-0840-GW | 0.0336 | 0.0271 | - | - | - |
| Potassium (MG/L) | BKGmW-005 (w)-0840-GW | 2.39 | 3.29 | - | - | - |
| Sodium (MG/L) | BKGmW-005 (w)-0840-GW | 6.63 | 6.82 | - | - | - |
| Vanadium (MG/L) | BKGmW-005 (w)-0840-GW | 0.0336 | 0.0171 | - | - | - |

Concentrations were adjusted for comparison to TCLP criteria. Total soil concentrations are divided by the TCLP extraction dilution factor of 20.
Program idhsund04 run on 24.JUL.98 at 04:15 using data set wbgdrun2.

Ravenna Winklepeck Burning Ground Investigation Derived Waste
Summary of Analytes Detected Compared to TCLP Criteria

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Drum ID=BKGmw-005-3W
(continued)

| Chemical (units) | ID of Max Concentration | Mean | Max Detect | Mean Adj. for TCLP (mg/L) | Max Detect Adj. for TCLP (mg/L) | TCLP Criteria (mg/L) | Max > TCLP |
|------------------|-------------------------|-------|------------|---------------------------|---------------------------------|----------------------|------------|
| Zinc (MG/L) | BKGmw-005(u)-0840-GW | 0.096 | 0.131 | - | - | - | - |

Drum ID=BKGmw-006

| Chemical (units) | ID of Max Concentration | Mean | Max Detect | Mean Adj. for TCLP (mg/L) | Max Detect Adj. for TCLP (mg/L) | TCLP Criteria (mg/L) | Max > TCLP |
|------------------|-------------------------|--------|------------|---------------------------|---------------------------------|----------------------|------------|
| Aluminum (MG/L) | BKGmw-006(r)-0841-GW | 1.1 | 1.1 | - | - | - | - |
| Calcium (MG/L) | BKGmw-006(r)-0841-GW | 50.7 | 53.1 | - | - | - | - |
| Copper (MG/L) | BKGmw-006(r)-0841-GW | 0.0075 | 0.0075 | - | - | - | - |
| Iron (MG/L) | BKGmw-006(r)-0841-GW | 1.36 | 2.62 | - | - | - | - |
| Magnesium (MG/L) | BKGmw-006(r)-0841-GW | 14.4 | 15 | - | - | - | - |
| Manganese (MG/L) | BKGmw-006(r)-0841-GW | 0.11 | 0.121 | - | - | - | - |
| Potassium (MG/L) | BKGmw-006(r)-0841-GW | 1.16 | 1.23 | - | - | - | - |
| Sodium (MG/L) | BKGmw-006(r)-0841-GW | 17.9 | 18.2 | - | - | - | - |

Drum ID=BKGmw-006-1W

| Chemical (units) | ID of Max Concentration | Mean | Max Detect | Mean Adj. for TCLP (mg/L) | Max Detect Adj. for TCLP (mg/L) | TCLP Criteria (mg/L) | Max > TCLP |
|------------------|-------------------------|--------|------------|---------------------------|---------------------------------|----------------------|------------|
| Aluminum (MG/L) | BKGmw-006(r)-0841-GW | 1.1 | 1.1 | - | - | - | - |
| Calcium (MG/L) | BKGmw-006(r)-0841-GW | 50.7 | 53.1 | - | - | - | - |
| Copper (MG/L) | BKGmw-006(r)-0841-GW | 0.0075 | 0.0075 | - | - | - | - |
| Iron (MG/L) | BKGmw-006(r)-0841-GW | 1.36 | 2.62 | - | - | - | - |
| Magnesium (MG/L) | BKGmw-006(r)-0841-GW | 14.4 | 15 | - | - | - | - |
| Manganese (MG/L) | BKGmw-006(r)-0841-GW | 0.11 | 0.121 | - | - | - | - |
| Potassium (MG/L) | BKGmw-006(r)-0841-GW | 1.16 | 1.23 | - | - | - | - |
| Sodium (MG/L) | BKGmw-006(r)-0841-GW | 17.9 | 18.2 | - | - | - | - |

I-16

Concentrations were adjusted for comparison to TCLP criteria. Total soil concentrations are divided by the TCLP extraction dilution factor of 20.
Program idasum04 run on 24JUL98 at 04:15 using data set wogdrum2.

Pavenna Winklespeck Burning Ground Investigation Derived Waste
Summary of Analytes Detected Compared to TCLP Criteria

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Drum ID=BKGmw-006-2W

| Chemical (units) | ID of Max Concentration | Mean | Max Detect | Mean Adj. for TCLP (mg/L) | Max Detect Adj. for TCLP (mg/L) | TCLP Criteria (mg/L) | Max > TCLP |
|------------------|-------------------------|--------|------------|---------------------------|---------------------------------|----------------------|------------|
| Aluminum (MG/L) | BKGmw-006(r)-0841-GW | 1.1 | 1.1 | - | - | - | - |
| Calcium (MG/L) | BKGmw-006(r)-0841-GW | 50.7 | 53.1 | - | - | - | - |
| Copper (MG/L) | BKGmw-006(r)-0841-GW | 0.0075 | 0.0075 | - | - | - | - |
| Iron (MG/L) | BKGmw-006(r)-0841-GW | 1.36 | 2.62 | - | - | - | - |
| Magnesium (MG/L) | BKGmw-006(r)-0841-GW | 14.4 | 15 | - | - | - | - |
| Manganese (MG/L) | BKGmw-006(r)-0841-GW | 0.11 | 0.121 | - | - | - | - |
| Potassium (MG/L) | BKGmw-006(r)-0841-GW | 1.16 | 1.23 | - | - | - | - |
| Sodium (MG/L) | BKGmw-006(r)-0841-GW | 17.9 | 18.2 | - | - | - | - |

Drum ID=BKGmw-008

| Chemical (units) | ID of Max Concentration | Mean | Max Detect | Mean Adj. for TCLP (mg/L) | Max Detect Adj. for TCLP (mg/L) | TCLP Criteria (mg/L) | Max > TCLP |
|------------------|-------------------------|--------|------------|---------------------------|---------------------------------|----------------------|------------|
| Aluminum (MG/L) | BKGmw-008(r)-0843-GW | 9.41 | 9.41 | - | - | - | - |
| Arsenic (MG/L) | BKGmw-008(r)-0843-GW | 0.0121 | 0.0121 | 0.0191 | 0.0191 | 5 | N |
| Barium (MG/L) | BKGmw-008(r)-0843-GW | 0.0261 | 0.0463 | 0.0261 | 0.0463 | 100 | N |
| Calcium (MG/L) | BKGmw-008(r)-0843-GW | 29.2 | 29.9 | - | - | - | - |
| Chromium (MG/L) | BKGmw-008(r)-0843-GW | 0.0148 | 0.0195 | 0.0148 | 0.0195 | 5 | N |
| Copper (MG/L) | BKGmw-008(r)-0843-GW | 0.0206 | 0.0162 | - | - | - | - |
| Iron (MG/L) | BKGmw-008(r)-0843-GW | 10.8 | 21.5 | - | - | - | - |
| Lead (MG/L) | BKGmw-008(r)-0843-GW | 0.013 | 0.013 | 0.013 | 0.013 | 5 | N |
| Magnesium (MG/L) | BKGmw-008(r)-0843-GW | 12.3 | 12.7 | - | - | - | - |
| Manganese (MG/L) | BKGmw-008(r)-0843-GW | 0.201 | 0.38 | - | - | - | - |
| Nickel (MG/L) | BKGmw-008(r)-0843-GW | 0.0318 | 0.0235 | - | - | - | - |
| Potassium (MG/L) | BKGmw-008(r)-0843-GW | 1.91 | 3.21 | - | - | - | - |
| Sodium (MG/L) | BKGmw-008(r)-0843-GW | 11.9 | 12.2 | - | - | - | - |
| Vanadium (MG/L) | BKGmw-008(r)-0843-GW | 0.0328 | 0.0155 | - | - | - | - |
| Zinc (MG/L) | BKGmw-008(r)-0843-GW | 0.12 | 0.193 | - | - | - | - |

Concentrations were adjusted for comparison to TCLP criteria. Total soil concentrations are divided by the TCLP extraction dilution factor of 20.
Program idwsim4 run on 24JUL98 at 04:15 using data set wbgdrum2.

Ravenna Winklepeck Burning Ground Investigation Derived Waste
Summary of Analytes Detected Compared to TCLP Criteria

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Drum ID=BKGmW-010

| Chemical (units) | ID of Max Concentration | Mean | Max Detect | Mean Adj. for TCLP (mg/L) | TCLP Criteria (mg/L) | Max > TCLP |
|------------------|-------------------------|---------|------------|---------------------------|----------------------|------------|
| Aluminum (MG/L) | BKGmW-010(r)-0845-GW | 2.79 | 2.79 | 0.0351 | 0.0351 | |
| Barium (MG/L) | BKGmW-010(r)-0845-GW | 0.0275 | 0.0275 | | 100 | N |
| Calcium (MG/L) | BKGmW-010(r)-0845-GW | 12.7 | 12.7 | | | |
| Chromium (MG/L) | BKGmW-010(r)-0845-GW | 0.00895 | 0.00895 | 0.0079 | 5 | N |
| Iron (MG/L) | BKGmW-010(r)-0845-GW | 2.1 | 4.1 | | | |
| Magnesium (MG/L) | BKGmW-010(r)-0845-GW | 13.9 | 14.2 | | | |
| Manganese (MG/L) | BKGmW-010(r)-0845-GW | 1.3 | 1.34 | | | |
| Nickel (MG/L) | BKGmW-010(r)-0845-GW | 0.0844 | 0.0853 | | | |
| Potassium (MG/L) | BKGmW-010(r)-0845-GW | 1.87 | 2.19 | | | |
| Sodium (MG/L) | BKGmW-010(r)-0845-GW | 4.67 | 4.85 | | | |

Drum ID=BKGmW-012

| Chemical (units) | ID of Max Concentration | Mean | Max Detect | Mean Adj. for TCLP (mg/L) | TCLP Criteria (mg/L) | Max > TCLP |
|------------------|-------------------------|--------|------------|---------------------------|----------------------|------------|
| Aluminum (MG/L) | BKGmW-012(r)-0847-GW | 1.69 | 1.69 | 0.192 | 0.192 | |
| Barium (MG/L) | BKGmW-012(r)-0847-GW | 0.183 | 0.183 | | 100 | N |
| Calcium (MG/L) | BKGmW-012(r)-0847-GW | 19.7 | 19.9 | | | |
| Iron (MG/L) | BKGmW-012(r)-0847-GW | 1.13 | 2.15 | | | |
| Magnesium (MG/L) | BKGmW-012(r)-0847-GW | 6.81 | 6.95 | | | |
| Manganese (MG/L) | BKGmW-012(r)-0847-GW | 0.0995 | 0.121 | | | |
| Nickel (MG/L) | BKGmW-012(r)-0847-GW | 4.1 | 4.28 | | | |
| Potassium (MG/L) | BKGmW-012(r)-0847-GW | 50.6 | 51.4 | | | |

Drum ID=BKGmW-012-1W

| Chemical (units) | ID of Max Concentration | Mean | Max Detect | Mean Adj. for TCLP (mg/L) | TCLP Criteria (mg/L) | Max > TCLP |
|------------------|-------------------------|-------|------------|---------------------------|----------------------|------------|
| Aluminum (MG/L) | BKGmW-012(r)-0847-GW | 1.69 | 1.69 | 0.192 | 0.192 | |
| Barium (MG/L) | BKGmW-012(r)-0847-GW | 0.183 | 0.183 | 0.192 | 100 | N |
| Calcium (MG/L) | BKGmW-012(r)-0847-GW | 19.7 | 19.9 | | | |
| Iron (MG/L) | BKGmW-012(r)-0847-GW | 1.13 | 2.15 | | | |
| Magnesium (MG/L) | BKGmW-012(r)-0847-GW | 6.81 | 6.95 | | | |

I-18

Concentrations were adjusted for comparison to TCLP criteria. Total soil concentrations are divided by the TCLP extraction dilution factor of 20.
Program idsum04 run on 24Jul98 at 04:15 using data set wbgdrum2.

Ravenna Winklepeck Burning Ground Investigation Derived Waste
Summary of Analytes Detected Compared to TCLP Criteria

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Drum ID=BKGmW-012-1W
(cont'dued)

| Chemical (units) | ID of Max Concentration | Mean | Max Detect | Mean Adj. for TCLP (mg/L) | TCLP Criteria (mg/L) | Max > TCLP |
|------------------|-------------------------|--------|------------|---------------------------|----------------------|------------|
| Manganese (MG/L) | BKGmW-012(r)-0847-GW | 0.0995 | 0.121 | - | - | - |
| Potassium (MG/L) | BKGmW-012(r)-0847-GW | 4.1 | 4.28 | - | - | - |
| Sodium (MG/L) | BKGmW-012(r)-0847-GW | 50.6 | 51.4 | - | - | - |

Drum ID=BKGmW-012-2W

| Chemical (units) | ID of Max Concentration | Mean | Max Detect | Mean Adj. for TCLP (mg/L) | TCLP Criteria (mg/L) | Max > TCLP |
|------------------|-------------------------|--------|------------|---------------------------|----------------------|------------|
| Aluminum (MG/L) | BKGmW-012(r)-0847-GW | 1.69 | 1.69 | - | - | - |
| Barium (MG/L) | BKGmW-012(r)-0847-GW | 0.183 | 0.192 | - | - | - |
| Calcium (MG/L) | BKGmW-012(r)-0847-GW | 19.7 | 19.9 | - | - | - |
| Iron (MG/L) | BKGmW-012(r)-0847-GW | 1.13 | 2.15 | - | - | - |
| Magnesium (MG/L) | BKGmW-012(r)-0847-GW | 6.81 | 6.95 | - | - | - |
| Manganese (MG/L) | BKGmW-012(r)-0847-GW | 0.0995 | 0.121 | - | - | - |
| Potassium (MG/L) | BKGmW-012(r)-0847-GW | 4.1 | 4.28 | - | - | - |
| Sodium (MG/L) | BKGmW-012(r)-0847-GW | 50.6 | 51.4 | - | - | - |

Drum ID=BKGmW-013

| Chemical (units) | ID of Max Concentration | Mean | Max Detect | Mean Adj. for TCLP (mg/L) | TCLP Criteria (mg/L) | Max > TCLP |
|------------------|-------------------------|---------|------------|---------------------------|----------------------|------------|
| Aluminum (MG/L) | BKGmW-013(u)-0848-GW | 14.3 | 14.3 | - | - | - |
| Arsenic (MG/L) | BKGmW-013(u)-0848-GW | 0.0145 | 0.0197 | 0.0197 | - | - |
| Barium (MG/L) | BKGmW-013(u)-0848-GW | 0.106 | 0.159 | 0.106 | 0.159 | 5 |
| Calcium (MG/L) | BKGmW-013(u)-0848-GW | 83.2 | 100 | - | - | - |
| Chromium (MG/L) | BKGmW-013(u)-0848-GW | 0.0139 | 0.0217 | 0.0139 | 0.0217 | 5 |
| Iron (MG/L) | BKGmW-013(u)-0848-GW | 7.34 | 21.6 | - | - | - |
| Lead (MG/L) | BKGmW-013(u)-0848-GW | 0.00537 | 0.0101 | 0.00537 | 0.0101 | 5 |
| Magnesium (MG/L) | BKGmW-013(u)-0848-GW | 26.1 | 30.9 | - | - | - |
| Manganese (MG/L) | BKGmW-013(u)-0848-GW | 0.541 | 0.809 | - | - | - |
| Nickel (MG/L) | BKGmW-013(u)-0848-GW | 0.0348 | 0.0244 | - | - | - |
| Potassium (MG/L) | BKGmW-013(u)-0848-GW | 3.45 | 6.47 | - | - | - |

Concentrations were adjusted for comparison to TCLP criteria. Total soil concentrations are divided by the TCLP extraction dilution factor of 20.
Program idsum02 run on 24JUL98 at 04:15 using data set wbgdrum2.

Ravenna Winklepeck Burning Ground Investigation Derived Waste
Summary of Analytes Detected Compared to TCLP Criteria

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Drum ID=BKGmW-013
(continued)

| Chemical (units) | ID of Max Concentration | Mean | Max Detect | Mean Adj. for TCLP (mg/L) | Max Detect Adj. for TCLP (mg/L) | TCLP Criteria (mg/L) | Max > TCLP |
|------------------|-------------------------|--------|------------|---------------------------|---------------------------------|----------------------|------------|
| Sodium (MG/L) | BKGmW-013(u)-0842-GW | 11.3 | 11.9 | - | - | - | - |
| Vanadium (MG/L) | BKGmW-013(u)-0842-FD | 0.0414 | 0.0243 | - | - | - | - |

Drum ID=BKGmW-016

| Chemical (units) | ID of Max Concentration | Mean | Max Detect | Mean Adj. for TCLP (mg/L) | Max Detect Adj. for TCLP (mg/L) | TCLP Criteria (mg/L) | Max > TCLP |
|------------------|-------------------------|---------|------------|---------------------------|---------------------------------|----------------------|------------|
| Aluminum (MG/L) | BKGmW-007(u)-0842-GW | 31.5 | 31.5 | - | - | - | - |
| Arsenic (MG/L) | BKGmW-007(u)-0842-GW | 0.0257 | 0.0464 | 0.0257 | 0.0464 | - | - |
| Barium (MG/L) | BKGmW-007(u)-0842-GW | 0.101 | 0.177 | 0.101 | 0.177 | 5 | N |
| Calcium (MG/L) | BKGmW-007(u)-0842-GW | 41.7 | 52.9 | - | - | 100 | N |
| Chromium (MG/L) | BKGmW-007(u)-0842-GW | 0.029 | 0.0479 | 0.029 | 0.0479 | - | - |
| Cobalt (MG/L) | BKGmW-007(u)-0842-GW | 0.0414 | 0.0328 | - | - | 5 | N |
| Copper (MG/L) | BKGmW-007(u)-0842-GW | 0.0675 | 0.11 | - | - | - | - |
| Iron (MG/L) | BKGmW-007(u)-0842-GW | 4.0 | 79.9 | - | - | - | - |
| Lead (MG/L) | BKGmW-007(u)-0842-GW | 0.0293 | 0.0556 | 0.0293 | 0.0556 | - | - |
| Magnesium (MG/L) | BKGmW-007(u)-0842-GW | 14.2 | 22.2 | - | - | 5 | N |
| Manganese (MG/L) | BKGmW-007(u)-0842-GW | 0.856 | 1.41 | - | - | - | - |
| Mercury (MG/L) | BKGmW-007(u)-0842-GW | 0.00016 | 0.00011 | 0.00016 | 0.00011 | 0.2 | N |
| Nickel (MG/L) | BKGmW-007(u)-0842-GW | 0.0618 | 0.0836 | - | - | - | - |
| Potassium (MG/L) | BKGmW-007(u)-0842-GW | 4.1 | 7.48 | - | - | - | - |
| Sodium (MG/L) | BKGmW-007(u)-0842-GW | 3.62 | 4.71 | - | - | - | - |
| Vanadium (MG/L) | BKGmW-007(u)-0842-GW | 0.0536 | 0.0571 | - | - | - | - |
| Zinc (MG/L) | BKGmW-007(u)-0842-GW | 0.161 | 0.282 | - | - | - | - |

Drum ID=BKGmW-016-1

| Chemical (units) | ID of Max Concentration | Mean | Max Detect | Mean Adj. for TCLP (mg/L) | Max Detect Adj. for TCLP (mg/L) | TCLP Criteria (mg/L) | Max > TCLP |
|------------------|-------------------------|--------|------------|---------------------------|---------------------------------|----------------------|------------|
| Aluminum (MG/L) | BKGmW-007(u)-0842-GW | 31.5 | 31.5 | - | - | - | - |
| Arsenic (MG/L) | BKGmW-007(u)-0842-GW | 0.0257 | 0.0464 | 0.0257 | 0.0464 | 5 | N |
| Barium (MG/L) | BKGmW-007(u)-0842-GW | 0.101 | 0.177 | 0.101 | 0.177 | 100 | N |

Concentrations were adjusted for comparison to TCLP criteria. Total soil concentrations are divided by the TCLP extraction dilution factor of 20.
Program idsum04 run on 24.JUL98 at 04:15 using data set wbsdrum2.

Ravenna Winklepeck Burning Ground Investigation Derived Waste
Summary of Analytes Detected Compared to TCLP Criteria

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Drum ID=BKGmW-016-1
(continued)

| Chemical (units) | ID of Max Concentration | Mean | Max Detect | Mean Adj. for TCLP (mg/L) | Max Detect Adj. for TCLP (mg/L) | TCLP Criteria (mg/L) | Max > TCLP |
|------------------|-------------------------|---------|------------|---------------------------|---------------------------------|----------------------|------------|
| Calcium (MG/L) | BKGmW-007(u)-0842-GW | 41.7 | 52.9 | 0.029 | 0.0479 | 5 | N |
| Chromium (MG/L) | BKGmW-007(u)-0842-GW | 0.029 | 0.0479 | - | - | - | - |
| Cobalt (MG/L) | BKGmW-007(u)-0842-GW | 0.0414 | 0.0328 | - | - | - | - |
| Copper (MG/L) | BKGmW-007(u)-0842-GW | 0.0675 | 0.11 | - | - | - | - |
| Iron (MG/L) | BKGmW-007(u)-0842-GW | 4.0 | 79.9 | - | - | - | - |
| Lead (MG/L) | BKGmW-007(u)-0842-GW | 0.0293 | 0.0556 | 0.0293 | 0.0556 | 5 | N |
| Magnesium (MG/L) | BKGmW-007(u)-0842-GW | 14.2 | 22.2 | - | - | - | - |
| Manganese (MG/L) | BKGmW-007(u)-0842-GW | 0.856 | 1.41 | - | - | - | - |
| Mercury (MG/L) | BKGmW-007(u)-0842-GW | 0.00016 | 0.00011 | 0.00016 | 0.00011 | 0.2 | N |
| Nickel (MG/L) | BKGmW-007(u)-0842-GW | 0.0618 | 0.0836 | - | - | - | - |
| Potassium (MG/L) | BKGmW-007(u)-0842-GW | 4.1 | 7.48 | - | - | - | - |
| Sodium (MG/L) | BKGmW-007(u)-0842-GW | 3.62 | 4.71 | - | - | - | - |
| Vanadium (MG/L) | BKGmW-007(u)-0842-GW | 0.0536 | 0.0571 | - | - | - | - |
| Zinc (MG/L) | BKGmW-007(u)-0842-GW | 0.161 | 0.282 | - | - | - | - |

Drum ID=BKGmW-016-2*

| Chemical (units) | ID of Max Concentration | Mean | Max Detect | Mean Adj. for TCLP (mg/L) | Max Detect Adj. for TCLP (mg/L) | TCLP Criteria (mg/L) | Max > TCLP |
|------------------|-------------------------|---------|------------|---------------------------|---------------------------------|----------------------|------------|
| Aluminum (MG/L) | BKGmW-007(u)-0842-GW | 31.5 | 31.5 | 0.0257 | 0.0464 | 5 | N |
| Arsenic (MG/L) | BKGmW-007(u)-0842-GW | 0.0257 | 0.0464 | 0.0257 | 0.0464 | 5 | N |
| Barium (MG/L) | BKGmW-007(u)-0842-GW | 0.101 | 0.177 | 0.101 | 0.177 | 100 | N |
| Calcium (MG/L) | BKGmW-007(u)-0842-GW | 41.7 | 52.9 | - | - | - | - |
| Chromium (MG/L) | BKGmW-007(u)-0842-GW | 0.029 | 0.0479 | 0.029 | 0.0479 | 5 | N |
| Cobalt (MG/L) | BKGmW-007(u)-0842-GW | 0.0414 | 0.0328 | - | - | - | - |
| Copper (MG/L) | BKGmW-007(u)-0842-GW | 0.0675 | 0.11 | - | - | - | - |
| Iron (MG/L) | BKGmW-007(u)-0842-GW | 4.0 | 79.9 | - | - | - | - |
| Lead (MG/L) | BKGmW-007(u)-0842-GW | 0.0293 | 0.0556 | 0.0293 | 0.0556 | 5 | N |
| Magnesium (MG/L) | BKGmW-007(u)-0842-GW | 14.2 | 22.2 | - | - | - | - |
| Manganese (MG/L) | BKGmW-007(u)-0842-GW | 0.856 | 1.41 | - | - | - | - |
| Mercury (MG/L) | BKGmW-007(u)-0842-GW | 0.00016 | 0.00011 | 0.00016 | 0.00011 | 0.2 | N |
| Nickel (MG/L) | BKGmW-007(u)-0842-GW | 0.0618 | 0.0836 | - | - | - | - |
| Potassium (MG/L) | BKGmW-007(u)-0842-GW | 4.1 | 7.48 | - | - | - | - |
| Sodium (MG/L) | BKGmW-007(u)-0842-GW | 3.62 | 4.71 | - | - | - | - |
| Zinc (MG/L) | BKGmW-007(u)-0842-GW | 0.0536 | 0.0571 | - | - | - | - |

Concentrations were adjusted for comparison to TCLP criteria. Total soil concentrations are divided by the TCLP extraction dilution factor of 20.
Program idsum04 run on 24.JUL.98 at 04:15 using data set wogdrun2.

Ravenna Winklepeck Burning Ground Investigation Derived Waste
Summary of Analytes Detected Compared to TCLP Criteria

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Drum ID=BKGmW-016-2w
(continued)

| Chemical (units) | ID of Max Concentration | Mean | Max Detect | Mean Adj. for TCLP (mg/L) | Max Detect Adj. for TCLP (mg/L) | TCLP Criteria (mg/L) | Max > TCLP |
|------------------|-------------------------|-------|------------|---------------------------|---------------------------------|----------------------|------------|
| Zinc (MG/L) | BKGmW-007(u)-0842-GW | 0.161 | 0.282 | - | - | - | - |

Drum ID=BKGmW-017-1w

| Chemical (units) | ID of Max Concentration | Mean | Max Detect | Mean Adj. for TCLP (mg/L) | Max Detect Adj. for TCLP (mg/L) | TCLP Criteria (mg/L) | Max > TCLP |
|------------------|-------------------------|--------|------------|---------------------------|---------------------------------|----------------------|------------|
| Aluminum (MG/L) | BKGmW-017(u)-0846-GW | 22.8 | 22.8 | 0.0493 | 0.0493 | 5 | N |
| Arsenic (MG/L) | BKGmW-017(u)-0846-GW | 0.0305 | 0.0305 | 0.135 | 0.135 | 100 | N |
| Barium (MG/L) | BKGmW-017(u)-0846-GW | 0.0857 | 0.0857 | - | - | - | - |
| Calcium (MG/L) | BKGmW-017(u)-0846-GW | 0.130 | 0.148 | - | - | - | - |
| Chromium (MG/L) | BKGmW-017(u)-0846-GW | 0.0227 | 0.0353 | 0.0227 | 0.0353 | 5 | N |
| Cobalt (MG/L) | BKGmW-017(u)-0846-GW | 0.0373 | 0.0246 | - | - | - | - |
| Copper (MG/L) | BKGmW-017(u)-0846-GW | 0.058 | 0.058 | - | - | - | - |
| Iron (MG/L) | BKGmW-017(u)-0846-GW | 30.2 | 60.1 | - | - | - | - |
| Lead (MG/L) | BKGmW-017(u)-0846-GW | 0.0162 | 0.0294 | 0.0162 | 0.0294 | 5 | N |
| Magnesium (MG/L) | BKGmW-017(u)-0846-GW | 50.7 | 58.1 | - | - | - | - |
| Manganese (MG/L) | BKGmW-017(u)-0846-GW | 0.742 | 1.21 | - | - | - | - |
| Nickel (MG/L) | BKGmW-017(u)-0846-GW | 0.0492 | 0.0584 | - | - | - | - |
| Potassium (MG/L) | BKGmW-017(u)-0846-GW | 5.18 | 7.46 | - | - | - | - |
| Sodium (MG/L) | BKGmW-017(u)-0846-GW | 25.8 | 26.9 | - | - | - | - |
| Vanadium (MG/L) | BKGmW-017(u)-0846-GW | 0.0444 | 0.0387 | - | - | - | - |
| Zinc (MG/L) | BKGmW-017(u)-0846-GW | 0.11 | 0.204 | - | - | - | - |

Drum ID=BKGmW-017-2w

| Chemical (units) | ID of Max Concentration | Mean | Max Detect | Mean Adj. for TCLP (mg/L) | Max Detect Adj. for TCLP (mg/L) | TCLP Criteria (mg/L) | Max > TCLP |
|------------------|-------------------------|--------|------------|---------------------------|---------------------------------|----------------------|------------|
| Aluminum (MG/L) | BKGmW-017(u)-0846-GW | 22.8 | 22.8 | 0.0493 | 0.0493 | 5 | N |
| Arsenic (MG/L) | BKGmW-017(u)-0846-GW | 0.0305 | 0.0305 | 0.135 | 0.135 | 100 | N |
| Barium (MG/L) | BKGmW-017(u)-0846-GW | 0.0857 | 0.0857 | - | - | - | - |
| Calcium (MG/L) | BKGmW-017(u)-0846-GW | 0.130 | 0.148 | - | - | - | - |
| Chromium (MG/L) | BKGmW-017(u)-0846-GW | 0.0227 | 0.0353 | 0.0227 | 0.0353 | 5 | N |

Concentrations were adjusted for comparison to TCLP criteria. Total soil concentrations are divided by the TCLP extraction dilution factor of 20.
Program idwsun04 run on 24.JUL98 at 04:15 using data set wbgdrum2.

Ravenna Winklepeck Burning Ground Investigation Derived Waste
Summary of Analytes Detected Compared to TCLP Criteria

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Drum ID=BKGmW-017-24
(continued)

| Chemical (units) | ID of Max Concentration | Mean | Max Detect for TCLP (mg/L) | Mean Adj. for TCLP (mg/L) | TCLP Criteria (mg/L) | Max > TCLP |
|------------------|-------------------------|--------|----------------------------|---------------------------|----------------------|------------|
| Cobalt (MG/L) | BKGmW-017(u)-0846-GW | 0.0373 | 0.0246 | - | - | - |
| Copper (MG/L) | BKGmW-017(u)-0846-GW | 0.058 | 0.058 | - | - | - |
| Iron (MG/L) | BKGmW-017(u)-0846-GW | 30.2 | 60.1 | - | - | - |
| Lead (MG/L) | BKGmW-017(u)-0846-GW | 0.0162 | 0.0294 | 0.0162 | 0.0294 | 5 N |
| Magnesium (MG/L) | BKGmW-017(u)-0846-GW | 50.7 | 58.1 | - | - | - |
| Manganese (MG/L) | BKGmW-017(u)-0846-GW | 0.742 | 1.21 | - | - | - |
| Nickel (MG/L) | BKGmW-017(u)-0846-GW | 0.0492 | 0.0584 | - | - | - |
| Potassium (MG/L) | BKGmW-017(u)-0846-GW | 5.18 | 7.46 | - | - | - |
| Sodium (MG/L) | BKGmW-017(u)-0846-GW | 25.8 | 26.9 | - | - | - |
| Vanadium (MG/L) | BKGmW-017(u)-0846-GW | 0.0444 | 0.0387 | - | - | - |
| Zinc (MG/L) | BKGmW-017(u)-0846-GW | 0.11 | 0.204 | - | - | - |

Drum ID=BKGmW-017-34

| Chemical (units) | ID of Max Concentration | Mean | Max Detect for TCLP (mg/L) | Mean Adj. for TCLP (mg/L) | TCLP Criteria (mg/L) | Max > TCLP |
|------------------|-------------------------|--------|----------------------------|---------------------------|----------------------|------------|
| Aluminum (MG/L) | BKGmW-017(u)-0846-GW | 22.8 | 22.8 | - | - | - |
| Arsenic (MG/L) | BKGmW-017(u)-0846-GW | 0.0305 | 0.0493 | 0.0305 | 0.0493 | 5 N |
| Barium (MG/L) | BKGmW-017(u)-0846-GW | 0.0857 | 0.135 | 0.0857 | 0.135 | 100 N |
| Calcium (MG/L) | BKGmW-017(u)-0846-GW | 130 | 148 | - | - | - |
| Chromium (MG/L) | BKGmW-017(u)-0846-GW | 0.0227 | 0.0353 | 0.0227 | 0.0353 | 5 N |
| Cobalt (MG/L) | BKGmW-017(u)-0846-GW | 0.0373 | 0.0246 | - | - | - |
| Copper (MG/L) | BKGmW-017(u)-0846-GW | 0.058 | 0.058 | - | - | - |
| Iron (MG/L) | BKGmW-017(u)-0846-GW | 30.2 | 60.1 | - | - | - |
| Lead (MG/L) | BKGmW-017(u)-0846-GW | 0.0162 | 0.0294 | 0.0162 | 0.0294 | 5 N |
| Magnesium (MG/L) | BKGmW-017(u)-0846-GW | 50.7 | 58.1 | - | - | - |
| Manganese (MG/L) | BKGmW-017(u)-0846-GW | 0.742 | 1.21 | - | - | - |
| Nickel (MG/L) | BKGmW-017(u)-0846-GW | 0.0492 | 0.0584 | - | - | - |
| Potassium (MG/L) | BKGmW-017(u)-0846-GW | 5.18 | 7.46 | - | - | - |
| Sodium (MG/L) | BKGmW-017(u)-0846-GW | 25.8 | 26.9 | - | - | - |
| Vanadium (MG/L) | BKGmW-017(u)-0846-GW | 0.0444 | 0.0387 | - | - | - |
| Zinc (MG/L) | BKGmW-017(u)-0846-GW | 0.11 | 0.204 | - | - | - |

Concentrations were adjusted for comparison to TCLP criteria. Total soil concentrations are divided by the TCLP extraction dilution factor of 20.
Program id=wsum04 run on 24JUL98 at 04:15 using data set wbgdrun2.

Ravenna Winklepeck Burning Ground Investigation Derived Waste
Summary of Analytes Detected Compared to TCLP Criteria

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Drum ID=BKGmW-017-44

| Chemical (units) | ID of Max Concentration | Mean | Max Detect | Mean Adj. for TCLP (mg/L) | Max Detect Adj. for TCLP (mg/L) | TCLP Criteria (mg/L) | Max > TCLP |
|------------------|-------------------------|--------|------------|---------------------------|---------------------------------|----------------------|------------|
| Aluminum (MG/L) | BKGmW-017(u)-0846-GW | 22.8 | 22.8 | - | - | - | - |
| Arsenic (MG/L) | BKGmW-017(u)-0846-GW | 0.0305 | 0.0493 | 0.0305 | 0.0493 | 5 | N |
| Barium (MG/L) | BKGmW-017(u)-0846-GW | 0.0857 | 0.135 | 0.0857 | 0.135 | 100 | N |
| Calcium (MG/L) | BKGmW-017(u)-0846-GW | 130 | 148 | - | - | - | - |
| Chromium (MG/L) | BKGmW-017(u)-0846-GW | 0.0227 | 0.0353 | 0.0227 | 0.0353 | 5 | N |
| Cobalt (MG/L) | BKGmW-017(u)-0846-GW | 0.0373 | 0.046 | - | - | - | - |
| Copper (MG/L) | BKGmW-017(u)-0846-GW | 0.058 | 0.058 | 0.058 | - | - | - |
| Iron (MG/L) | BKGmW-017(u)-0846-GW | 30.2 | 60.1 | - | - | - | - |
| Lead (MG/L) | BKGmW-017(u)-0846-GW | 0.0162 | 0.0294 | 0.0162 | 0.0294 | 5 | N |
| Magnesium (MG/L) | BKGmW-017(u)-0846-GW | 50.7 | 58.1 | - | - | - | - |
| Manganese (MG/L) | BKGmW-017(u)-0846-GW | 0.742 | 1.21 | - | - | - | - |
| Nickel (MG/L) | BKGmW-017(u)-0846-GW | 0.0492 | 0.0584 | - | - | - | - |
| Potassium (MG/L) | BKGmW-017(u)-0846-GW | 5.18 | 7.46 | - | - | - | - |
| Sodium (MG/L) | BKGmW-017(u)-0846-GW | 25.8 | 26.9 | - | - | - | - |
| Vanadium (MG/L) | BKGmW-017(u)-0846-GW | 0.0444 | 0.0387 | - | - | - | - |
| Zinc (MG/L) | BKGmW-017(u)-0846-GW | 0.11 | 0.204 | - | - | - | - |

Drum ID=BKGmW-018

| Chemical (units) | ID of Max Concentration | Mean | Max Detect | Mean Adj. for TCLP (mg/L) | Max Detect Adj. for TCLP (mg/L) | TCLP Criteria (mg/L) | Max > TCLP |
|------------------|-------------------------|---------|------------|---------------------------|---------------------------------|----------------------|------------|
| Aluminum (MG/L) | BKGmW-018(r)-0836-GW | 3.96 | 3.96 | - | - | - | - |
| Calcium (MG/L) | BKGmW-018(r)-0836-GW | 39.6 | 39.6 | - | - | - | - |
| Copper (MG/L) | BKGmW-018(r)-0836-GW | 0.017 | 0.017 | - | - | - | - |
| Iron (MG/L) | BKGmW-018(r)-0836-GW | 3.13 | 6.17 | - | - | - | - |
| Lead (MG/L) | BKGmW-018(r)-0836-GW | 0.00525 | 0.0075 | 0.00525 | 0.0075 | 5 | N |
| Magnesium (MG/L) | BKGmW-018(r)-0836-GW | 3.78 | 3.93 | - | - | - | - |
| Manganese (MG/L) | BKGmW-018(r)-0836-GW | 0.0298 | 0.051 | - | - | - | - |
| Potassium (MG/L) | BKGmW-018(r)-0836-GW | 0.99 | 1.28 | - | - | - | - |
| Vanadium (MG/L) | BKGmW-018(r)-0836-GW | 0.0289 | 0.0077 | - | - | - | - |

Concentrations were adjusted for comparison to TCLP criteria. Total soil concentrations are divided by the TCLP extraction dilution factor of 20.
Program idnum04, run on 24Jul98 at 04:15 using data set whgdrum2.

Ravenna Winklepeck Burning Ground Investigation Derived Waste
Summary of Analytes Detected Compared to TCLP Criteria

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Drum ID=BKGmW-018-1W

| Chemical (units) | ID of Max Concentration | Mean | Max Detect | Mean Adj. for TCLP (mg/L) | Max Detect Adj. for TCLP (mg/L) | TCLP Criteria (mg/L) | Max > TCLP |
|------------------|-------------------------|---------|------------|---------------------------|---------------------------------|----------------------|------------|
| Aluminum (MG/L) | BKGmW-018(r)-0836-GW | 3.96 | 3.96 | - | - | - | - |
| Calcium (MG/L) | BKGmW-018(r)-0836-GW | 39.6 | 39.6 | - | - | - | - |
| Copper (MG/L) | BKGmW-018(r)-0836-GW | 0.017 | 0.017 | - | - | - | - |
| Iron (MG/L) | BKGmW-018(r)-0836-GW | 3.13 | 6.17 | - | - | - | - |
| Lead (MG/L) | BKGmW-018(r)-0836-GW | 0.00525 | 0.0075 | 0.00525 | 0.0075 | 5 | N |
| Magnesium (MG/L) | BKGmW-018(r)-0836-GW | 3.78 | 3.93 | - | - | - | - |
| Manganese (MG/L) | BKGmW-018(r)-0836-GW | 0.0298 | 0.051 | - | - | - | - |
| Potassium (MG/L) | BKGmW-018(r)-0836-GW | 0.99 | 1.28 | - | - | - | - |
| Vanadium (MG/L) | BKGmW-018(r)-0836-GW | 0.0289 | 0.0077 | - | - | - | - |

Drum ID=BKGmW-018-2W

| Chemical (units) | ID of Max Concentration | Mean | Max Detect | Mean Adj. for TCLP (mg/L) | Max Detect Adj. for TCLP (mg/L) | TCLP Criteria (mg/L) | Max > TCLP |
|------------------|-------------------------|---------|------------|---------------------------|---------------------------------|----------------------|------------|
| Aluminum (MG/L) | BKGmW-018(r)-0836-GW | 3.96 | 3.96 | - | - | - | - |
| Calcium (MG/L) | BKGmW-018(r)-0836-GW | 39.6 | 39.6 | - | - | - | - |
| Copper (MG/L) | BKGmW-018(r)-0836-GW | 0.017 | 0.017 | - | - | - | - |
| Iron (MG/L) | BKGmW-018(r)-0836-GW | 3.13 | 6.17 | - | - | - | - |
| Lead (MG/L) | BKGmW-018(r)-0836-GW | 0.00525 | 0.0075 | 0.00525 | 0.0075 | 5 | N |
| Magnesium (MG/L) | BKGmW-018(r)-0836-GW | 3.78 | 3.93 | - | - | - | - |
| Manganese (MG/L) | BKGmW-018(r)-0836-GW | 0.0298 | 0.051 | - | - | - | - |
| Potassium (MG/L) | BKGmW-018(r)-0836-GW | 0.99 | 1.28 | - | - | - | - |
| Vanadium (MG/L) | BKGmW-018(r)-0836-GW | 0.0289 | 0.0077 | - | - | - | - |

Drum ID=BKGmW-018-3W

| Chemical (units) | ID of Max Concentration | Mean | Max Detect | Mean Adj. for TCLP (mg/L) | Max Detect Adj. for TCLP (mg/L) | TCLP Criteria (mg/L) | Max > TCLP |
|------------------|-------------------------|---------|------------|---------------------------|---------------------------------|----------------------|------------|
| Aluminum (MG/L) | BKGmW-018(r)-0836-GW | 3.96 | 3.96 | - | - | - | - |
| Calcium (MG/L) | BKGmW-018(r)-0836-GW | 39.6 | 39.6 | - | - | - | - |
| Copper (MG/L) | BKGmW-018(r)-0836-GW | 0.017 | 0.017 | - | - | - | - |
| Iron (MG/L) | BKGmW-018(r)-0836-GW | 3.13 | 6.17 | - | - | - | - |
| Lead (MG/L) | BKGmW-018(r)-0836-GW | 0.00525 | 0.0075 | 0.00525 | 0.0075 | 5 | N |

Concentrations were adjusted for comparison to TCLP criteria. Total soil concentrations are divided by the TCLP extraction dilution factor of 20.
Program idsum04 run on 24JUL98 at 04:15 using data set mbgdrum2.

Ravenna Winklepeck Burning Ground Investigation Derived Waste
Summary of Analytes Detected Compared to TCLP Criteria

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Drum ID=BKGmW-018-3W
(continued)

| Chemical (units) | ID of Max Concentration | Mean | Max Detect | Mean Adj. for TCLP (mg/L) | TCLP Criteria (mg/L) | Max > TCLP |
|------------------|-------------------------|--------|------------|---------------------------|----------------------|------------|
| Magnesium (MG/L) | BKGmW-018(r)-0836-GW | 3.78 | 3.93 | - | - | - |
| Manganese (MG/L) | BKGmW-018(r)-0836-GW | 0.0298 | 0.051 | - | - | - |
| Potassium (MG/L) | BKGmW-018(r)-0836-GW | 0.99 | 1.28 | - | - | - |
| Vanadium (MG/L) | BKGmW-018(r)-0836-GW | 0.0289 | 0.0077 | - | - | - |

Drum ID=BKGmW-018-4W

| Chemical (units) | ID of Max Concentration | Mean | Max Detect | Mean Adj. for TCLP (mg/L) | TCLP Criteria (mg/L) | Max > TCLP |
|------------------|-------------------------|---------|------------|---------------------------|----------------------|------------|
| Aluminum (MG/L) | BKGmW-018(r)-0836-GW | 3.96 | 3.96 | - | - | - |
| Calcium (MG/L) | BKGmW-018(r)-0836-GW | 39.6 | 39.6 | - | - | - |
| Copper (MG/L) | BKGmW-018(r)-0836-GW | 0.017 | 0.017 | - | - | - |
| Iron (MG/L) | BKGmW-018(r)-0836-GW | 3.13 | 6.17 | - | - | - |
| Lead (MG/L) | BKGmW-018(r)-0836-GW | 0.00525 | 0.0075 | - | - | - |
| Magnesium (MG/L) | BKGmW-018(r)-0836-GW | 3.78 | 3.93 | - | - | - |
| Manganese (MG/L) | BKGmW-018(r)-0836-GW | 0.0298 | 0.051 | - | - | - |
| Potassium (MG/L) | BKGmW-018(r)-0836-GW | 0.99 | 1.28 | - | - | - |
| Vanadium (MG/L) | BKGmW-018(r)-0836-GW | 0.0289 | 0.0077 | - | - | - |

Drum ID=BKGmW-019

| Chemical (units) | ID of Max Concentration | Mean | Max Detect | Mean Adj. for TCLP (mg/L) | TCLP Criteria (mg/L) | Max > TCLP |
|------------------|-------------------------|--------|------------|---------------------------|----------------------|------------|
| Aluminum (MG/L) | BKGmW-019(u)-0837-GW | 31.2 | 31.2 | - | - | - |
| Arsenic (MG/L) | BKGmW-019(u)-0837-GW | 0.0476 | 0.0902 | 0.0476 | 0.0902 | - |
| Barium (MG/L) | BKGmW-019(u)-0837-GW | 0.178 | 0.327 | 0.178 | 0.327 | - |
| Chromium (MG/L) | BKGmW-019(u)-0837-GW | 149 | 194 | - | - | - |
| Cobalt (MG/L) | BKGmW-019(u)-0837-GW | 0.0319 | 0.0537 | 0.0319 | 0.0537 | - |
| Copper (MG/L) | BKGmW-019(u)-0837-GW | 0.0454 | 0.0408 | - | - | - |
| Iron (MG/L) | BKGmW-019(u)-0837-GW | 0.138 | 0.138 | - | - | - |
| Lead (MG/L) | BKGmW-019(u)-0837-GW | 60.5 | 121 | - | - | - |
| | | 0.0379 | 0.0728 | 0.0379 | 0.0728 | 5 |

Concentrations were adjusted for comparison to TCLP criteria. Total soil concentrations are divided by the TCLP extraction dilution factor of 20.
Program idsum04 run on 24JUL98 at 04:15 using data set wbgdrun2.

Ravenna Minklepeck Burning Ground Investigation Derived Waste
Summary of Analytes Detected Compared to TCLP Criteria

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Drum ID=BKGmW-019
(continued)

| Chemical (units) | ID of Max Concentration | Mean | Max Detect | Mean Adj.-for TCLP (mg/L) | Max Detect-Adj. for TCLP (mg/L) | TCLP Criteria (mg/L) | Max > TCLP |
|------------------|-------------------------|---------|------------|---------------------------|---------------------------------|----------------------|------------|
| Magnesium (MG/L) | BKGmW-019(u)-0837-GW | 44 | 58.4 | - | - | - | - |
| Manganese (MG/L) | BKGmW-019(u)-0837-GW | 1.44 | 2.43 | - | - | - | - |
| Mercury (MG/L) | BKGmW-019(u)-0837-GW | 0.00015 | 0.00009 | - | - | - | - |
| Nickel (MG/L) | BKGmW-019(u)-0837-GW | 0.0683 | 0.0936 | - | - | - | - |
| Potassium (MG/L) | BKGmW-019(u)-0837-GW | 4.57 | 7.17 | - | - | - | - |
| Sodium (MG/L) | BKGmW-019(u)-0837-GW | 9.93 | 11.1 | - | - | - | - |
| Vanadium (MG/L) | BKGmW-019(u)-0837-GW | 0.0567 | 0.0633 | - | - | - | - |
| Zinc (MG/L) | BKGmW-019(u)-0837-GW | 0.279 | 0.536 | - | - | - | - |

Drum ID=BKGmW-019-1w

| Chemical (units) | ID of Max Concentration | Mean | Max Detect | Mean Adj.-for TCLP (mg/L) | Max Detect-Adj. for TCLP (mg/L) | TCLP Criteria (mg/L) | Max > TCLP |
|------------------|-------------------------|---------|------------|---------------------------|---------------------------------|----------------------|------------|
| Aluminum (MG/L) | BKGmW-019(u)-0837-GW | 31.2 | 31.2 | 0.0902 | 0.0902 | - | - |
| Arsenic (MG/L) | BKGmW-019(u)-0837-GW | 0.0676 | 0.076 | 0.0476 | 0.0476 | - | - |
| Barium (MG/L) | BKGmW-019(u)-0837-GW | 0.178 | 0.327 | 0.178 | 0.327 | - | - |
| Calcium (MG/L) | BKGmW-019(u)-0837-GW | 149 | 194 | - | - | - | - |
| Chromium (MG/L) | BKGmW-019(u)-0837-GW | 0.0319 | 0.0537 | 0.0319 | 0.0319 | - | - |
| Cobalt (MG/L) | BKGmW-019(u)-0837-GW | 0.0454 | 0.0408 | - | - | - | - |
| Copper (MG/L) | BKGmW-019(u)-0837-GW | 0.138 | 0.138 | - | - | - | - |
| Iron (MG/L) | BKGmW-019(u)-0837-GW | 60.5 | 121 | - | - | - | - |
| Lead (MG/L) | BKGmW-019(u)-0837-GW | 0.0379 | 0.0728 | 0.0379 | 0.0379 | - | - |
| Magnesium (MG/L) | BKGmW-019(u)-0837-GW | 44 | 58.4 | - | - | - | - |
| Manganese (MG/L) | BKGmW-019(u)-0837-GW | 1.44 | 2.43 | - | - | - | - |
| Mercury (MG/L) | BKGmW-019(u)-0837-GW | 0.00015 | 0.00009 | 0.00015 | 0.00015 | - | - |
| Nickel (MG/L) | BKGmW-019(u)-0837-GW | 0.0668 | 0.0936 | - | - | - | - |
| Potassium (MG/L) | BKGmW-019(u)-0837-GW | 4.57 | 7.17 | - | - | - | - |
| Sodium (MG/L) | BKGmW-019(u)-0837-GW | 9.93 | 11.1 | - | - | - | - |
| Vanadium (MG/L) | BKGmW-019(u)-0837-GW | 0.0567 | 0.0633 | - | - | - | - |
| Zinc (MG/L) | BKGmW-019(u)-0837-GW | 0.279 | 0.536 | - | - | - | - |

Concentrations were adjusted for comparison to TCLP criteria. Total soil concentrations are divided by the TCLP extraction dilution factor of 20.
Program idsum4 run on 24JUL98 at 04:15 using data set wbgdrum2.

Ravenna Winklepeck Burning Ground Investigation Derived Waste
Summary of Analytes Detected Compared to TCLP Criteria

04:15 Friday, July 24, 1998 19

| Drum ID=DECON-Wash | | | | | |
|---------------------------|-------------------------|---------|------------|---------------------------------|----------------------|
| Chemical (units) | ID of Max Concentration | Mean | Max Detect | Max Detect Adj. for TCLP (mg/L) | TCLP Criteria (mg/L) |
| 1,3-Dinitrobenzene (MG/L) | WBGqc-002-0957 | 0.0007 | 0.0009 | 0.00044 | 0.00044 |
| 2,4-Dinitrotoluene (MG/L) | WBGqc-002-0957 | 0.00112 | 0.00044 | 0.00112 | 0.13 |
| Arsenic (MG/L) | WBGqc-002-0956 | 0.024 | 0.026 | 0.024 | 5 |
| Barium (MG/L) | WBGqc-002-0956 | 0.054 | 0.067 | 0.054 | 100 |

| Drum ID=DECON-Wash 2 | | | | | |
|---------------------------|-------------------------|---------|------------|---------------------------------|----------------------|
| Chemical (units) | ID of Max Concentration | Mean | Max Detect | Max Detect Adj. for TCLP (mg/L) | TCLP Criteria (mg/L) |
| 1,3-Dinitrobenzene (NG/L) | WBGqc-002-0957 | 0.0007 | 0.0009 | 0.00044 | 0.00044 |
| 2,4-Dinitrotoluene (NG/L) | WBGqc-002-0957 | 0.00112 | 0.00044 | 0.00112 | 0.13 |
| Arsenic (NG/L) | WBGqc-002-0956 | 0.024 | 0.026 | 0.024 | 5 |
| Barium (NG/L) | WBGqc-002-0956 | 0.054 | 0.067 | 0.054 | 100 |

| Drum ID=DECON-Wash 3 | | | | | |
|---------------------------|-------------------------|---------|------------|---------------------------------|----------------------|
| Chemical (units) | ID of Max Concentration | Mean | Max Detect | Max Detect Adj. for TCLP (mg/L) | TCLP Criteria (mg/L) |
| 1,3-Dinitrobenzene (MG/L) | WBGqc-002-0957 | 0.0007 | 0.0009 | 0.00044 | 0.00044 |
| 2,4-Dinitrotoluene (MG/L) | WBGqc-002-0957 | 0.00112 | 0.00044 | 0.00112 | 0.13 |
| Arsenic (MG/L) | WBGqc-002-0956 | 0.024 | 0.026 | 0.024 | 5 |
| Barium (MG/L) | WBGqc-002-0956 | 0.054 | 0.067 | 0.054 | 100 |

| Drum ID=08GMW-001 | | | | | |
|---------------------------|-------------------------|---------|------------|---------------------------------|----------------------|
| Chemical (units) | ID of Max Concentration | Mean | Max Detect | Max Detect Adj. for TCLP (mg/L) | TCLP Criteria (mg/L) |
| 2,4-Dinitrotoluene (MG/L) | WBGMW-164(U)-0779-GM | 0.00502 | 0.0004 | 0.00502 | 0.0004 |
| Aluminum (MG/L) | WBGMW-164(U)-0779-GM | 2.33 | 6.46 | 0.00665 | 0.0063 |
| Arsenic (MG/L) | WBGMW-164(U)-0779-GM | 0.0665 | 0.0083 | 0.067 | 5 |

Concentrations were adjusted for comparison to TCLP criteria. Total soil concentrations are divided by the TCLP extraction dilution factor of 20. Program idus04 run on 24JUL98 at 04:15 using date set wbgdrum2.

Pavenna Winklepeck Burning Ground Investigation Derived Waste
Summary of Analytes Detected Compared to TCLP Criteria

04:15 Friday, July 24, 1998 20

Drum ID=08Gm^a-001

(continued)

| Chemical (units) | ID of Max Concentration | Mean | Max Detect for TCLP (mg/L) | Mean Adj. for TCLP (mg/L) | TCLP Criteria (mg/L) | Max > TCLP |
|------------------|------------------------------------|--------|----------------------------|---------------------------|----------------------|------------|
| Barium (MG/L) | WBGm ^a -164 (u)-0779-GW | 0.0118 | 0.0284 | 0.0118 | 0.0284 | 100 |
| Calcium (MG/L) | WBGm ^a -164 (u)-0779-GW | 53.6 | 54 | - | - | N |
| Copper (MG/L) | WBGm ^a -164 (u)-0779-GW | 0.0192 | 0.0134 | - | - | - |
| Iron (MG/L) | WBGm ^a -164 (u)-0779-GW | 4.63 | 9.16 | - | - | - |
| Lead (MG/L) | WBGm ^a -164 (u)-0779-GW | 0.0034 | 0.0038 | 0.0034 | 0.0038 | - |
| Magnesium (MG/L) | WBGm ^a -164 (u)-0779-GW | 16.8 | 17 | - | - | N |
| Manganese (MG/L) | WBGm ^a -164 (u)-0779-GW | 0.0547 | 0.0944 | - | - | - |
| Potassium (MG/L) | WBGm ^a -164 (u)-0779-GW | 1.41 | 2.05 | - | - | - |
| Sodium (MG/L) | WBGm ^a -164 (u)-0779-GW | 5.7 | 6.34 | - | - | - |
| Vanadium (MG/L) | WBGm ^a -164 (u)-0779-GW | 0.0286 | 0.0072 | - | - | - |
| Zinc (MG/L) | WBGm ^a -164 (u)-0779-GW | 0.0546 | 0.0629 | - | - | - |

Drum ID=08Gm^a-002

| Chemical (units) | ID of Max Concentration | Mean | Max Detect for TCLP (mg/L) | Mean Adj. for TCLP (mg/L) | TCLP Criteria (mg/L) | Max > TCLP |
|---------------------------|------------------------------------|---------|----------------------------|---------------------------|----------------------|------------|
| 1,3-Dinitrobenzene (MG/L) | WBGm ^a -165 (u)-0780-GW | 0.00003 | 0.00003 | - | - | - |
| Aluminum (MG/L) | WBGm ^a -165 (u)-0780-GW | 8.5 | 16.8 | - | - | - |
| Arsenic (MG/L) | WBGm ^a -165 (u)-0780-GW | 0.0188 | 0.0326 | 0.0188 | 0.0326 | - |
| Barium (MG/L) | WBGm ^a -165 (u)-0780-GW | 0.0807 | 0.12 | 0.0807 | 0.12 | 5 |
| Beryllium (MG/L) | WBGm ^a -165 (u)-0780-GW | 0.00243 | 0.00086 | - | - | N |
| Calcium (MG/L) | WBGm ^a -165 (u)-0780-GW | 80.4 | 88.2 | - | - | - |
| Chromium (MG/L) | WBGm ^a -165 (u)-0780-GW | 0.0175 | 0.025 | 0.0175 | 0.025 | - |
| Copper (MG/L) | WBGm ^a -165 (u)-0780-GW | 0.0322 | 0.0393 | - | - | - |
| Iron (MG/L) | WBGm ^a -165 (u)-0780-GW | 21.3 | 42.5 | - | - | - |
| Lead (MG/L) | WBGm ^a -165 (u)-0780-GW | 0.0118 | 0.0205 | 0.0118 | 0.0205 | - |
| Magnesium (MG/L) | WBGm ^a -165 (u)-0780-GW | 24.9 | 29.3 | - | - | - |
| Manganese (MG/L) | WBGm ^a -165 (u)-0780-GW | 0.497 | 0.821 | - | - | - |
| Nickel (MG/L) | WBGm ^a -165 (u)-0780-GW | 0.0422 | 0.0444 | - | - | - |
| Potassium (MG/L) | WBGm ^a -165 (u)-0780-GW | 3.24 | 5.2 | - | - | - |
| Sodium (MG/L) | WBGm ^a -165 (u)-0780-GW | 9.38 | 10.7 | - | - | - |
| Thallium (MG/L) | WBGm ^a -165 (u)-0780-GW | 0.0016 | 0.0012 | - | - | - |
| Vanadium (MG/L) | WBGm ^a -165 (u)-0780-GW | 0.0383 | 0.0266 | - | - | - |
| Zinc (MG/L) | WBGm ^a -165 (u)-0780-GW | 0.31 | 0.563 | - | - | - |

Concentrations were adjusted for comparison to TCLP criteria. Total soil concentrations are divided by the TCLP extraction dilution factor of 20.
Program idsum04 run on 24Jul98 at 04:15 using data set wb9drum2.

Ravenna Winklepeck Burning Ground Investigation Derived Waste
Summary of Analytes Detected Compared to TCLP Criteria

04:15 Friday, July 24, 1998 21

Drum ID=08Gm-003

| Chemical (units) | ID of Max Concentration | Mean | Max Detect | Mean Adj. for TCLP (mg/L) | TCLP Criteria (mg/L) | Max > TCLP |
|------------------|-------------------------|---------|------------|---------------------------|----------------------|------------|
| Aluminum (MG/L) | WBGm-166(u)-0781-GW | 1.47 | 2.85 | 0.0115 | 0.0178 | 5 |
| Arsenic (MG/L) | WBGm-166(u)-0781-GW | 0.0115 | 0.0178 | 0.11 | 0.121 | 100 |
| Barium (MG/L) | WBGm-166(u)-0781-GW | 0.11 | 0.121 | - | - | N |
| Calcium (MG/L) | WBGm-166(u)-0781-GW | 60.7 | 61.8 | - | - | - |
| Copper (MG/L) | WBGm-166(u)-0781-GW | 0.0165 | 0.0079 | - | - | - |
| Iron (MG/L) | WBGm-166(u)-0781-GW | 3.4 | 6.62 | - | - | - |
| Lead (MG/L) | WBGm-166(u)-0781-GW | 0.00325 | 0.0035 | - | - | - |
| Magnesium (MG/L) | WBGm-166(u)-0781-GW | 16.7 | 17.3 | - | - | - |
| Manganese (MG/L) | WBGm-166(u)-0781-GW | 0.145 | 0.178 | - | - | N |
| Potassium (MG/L) | WBGm-166(u)-0781-GW | 1.42 | 1.89 | - | - | - |
| Sodium (MG/L) | WBGm-166(u)-0781-GW | 7.45 | 8.09 | - | - | - |
| Zinc (MG/L) | WBGm-166(u)-0781-GW | 0.0588 | 0.0754 | - | - | - |

Drum ID=08Gm-004

| Chemical (units) | ID of Max Concentration | Mean | Max Detect | Mean Adj. for TCLP (mg/L) | TCLP Criteria (mg/L) | Max > TCLP |
|---------------------------|-------------------------|---------|------------|---------------------------|----------------------|------------|
| 2,4-Dinitrotoluene (MG/L) | WBGm-167(u)-0782-GW | 0.00502 | 0.00004 | 0.00502 | 0.00004 | 0.13 |
| Aluminum (MG/L) | WBGm-167(u)-0782-GW | 2.06 | 3.92 | - | - | N |
| Arsenic (MG/L) | WBGm-167(u)-0782-GW | 0.0164 | 0.0274 | 0.0164 | 0.0274 | 5 |
| Barium (MG/L) | WBGm-167(u)-0782-GW | 0.0613 | 0.0725 | 0.0613 | 0.0725 | 100 |
| Calcium (MG/L) | WBGm-167(u)-0782-GW | 118 | 121 | - | - | N |
| Chromium (MG/L) | WBGm-167(u)-0782-GW | 0.0093 | 0.0086 | 0.0093 | 0.0086 | 5 |
| Copper (MG/L) | WBGm-167(u)-0782-GW | 0.0209 | 0.0167 | - | - | N |
| Iron (MG/L) | WBGm-167(u)-0782-GW | 6.33 | 12.6 | - | - | - |
| Lead (MG/L) | WBGm-167(u)-0782-GW | 0.00455 | 0.0061 | 0.00455 | 0.0061 | 5 |
| Magnesium (MG/L) | WBGm-167(u)-0782-GW | 35.7 | 37.1 | - | - | - |
| Manganese (MG/L) | WBGm-167(u)-0782-GW | 0.652 | 0.952 | - | - | - |
| Mercury (MG/L) | WBGm-167(u)-0782-GW | 0.00014 | 0.00008 | 0.00014 | 0.00008 | 0.2 |
| Potassium (MG/L) | WBGm-167(u)-0782-GW | 2.49 | 2.83 | - | - | - |
| Sodium (MG/L) | WBGm-167(u)-0782-GW | 16 | 16.2 | - | - | - |
| Zinc (MG/L) | WBGm-167(u)-0782-GW | 0.0862 | 0.135 | - | - | - |

Concentrations were adjusted for comparison to TCLP criteria. Total soil concentrations are divided by the TCLP extraction dilution factor of 20.
Program idwstn4 run on 24JUL98 at 04:15 using date set **Wogdrum2**.

Ravenna Winklepeck Burning Ground Investigation Derived Waste
Summary of Analytes Detected Compared to TCLP Criteria

04:15 Friday, July 24, 1998 22

Drum ID=SLUDGE -1

| Chemical (units) | ID of Max Concentration | Mean | Max Detect | Mean Adj. for TCLP (mg/L) | Max Detect Adj. for TCLP (mg/L) | TCLP Criteria (mg/L) | Max > TCLP |
|-------------------------------|-------------------------|--------|------------|---------------------------|---------------------------------|----------------------|------------|
| 1,3,5-Trinitrobenzene (MG/KG) | WBGqc-001-0955 | 0.11 | 0.11 | 0.68 | 0.68 | 0.68 | |
| Barium (MG/L) | WBGqc-001-0955 | 0.68 | 0.68 | 0.007 | 0.007 | 0.007 | |
| Cadmium (MG/L) | WBGqc-001-0955 | 0.007 | 0.007 | 0.0076 | 0.0076 | 0.0076 | |
| Chromium (MG/L) | WBGqc-001-0955 | 0.0076 | 0.0076 | | | 100 | N |

Drum ID=SLUDGE-2

| Chemical (units) | ID of Max Concentration | Mean | Max Detect | Mean Adj. for TCLP (mg/L) | Max Detect Adj. for TCLP (mg/L) | TCLP Criteria (mg/L) | Max > TCLP |
|-------------------------------|-------------------------|--------|------------|---------------------------|---------------------------------|----------------------|------------|
| 1,3,5-Trinitrobenzene (MG/KG) | WBGqc-001-0955 | 0.11 | 0.11 | 0.68 | 0.68 | 0.68 | |
| Barium (MG/L) | WBGqc-001-0955 | 0.68 | 0.68 | 0.007 | 0.007 | 0.007 | |
| Cadmium (MG/L) | WBGqc-001-0955 | 0.007 | 0.007 | 0.0076 | 0.0076 | 0.0076 | |
| Chromium (MG/L) | WBGqc-001-0955 | 0.0076 | 0.0076 | | | 100 | N |

Drum ID=NBGSUB01

| Chemical (units) | ID of Max Concentration | Mean | Max Detect | Mean Adj. for TCLP (mg/L) | Max Detect Adj. for TCLP (mg/L) | TCLP Criteria (mg/L) | Max > TCLP |
|-------------------------------|-------------------------|-------|------------|---------------------------|---------------------------------|----------------------|------------|
| 1,3,5-Trinitrobenzene (MG/KG) | WBGso-069-0750-S0 | 0.436 | 0.27 | | | | |
| 2,4,6-Trinitrotoluene (MG/KG) | WBGso-069-0750-S0 | 1.23 | 12 | | | | |
| 2,4-Dinitrotoluene (MG/KG) | WBGso-069-0754-S0 | 0.209 | 0.12 | 0.0104 | 0.0006 | 0.13 | N |
| 2,6-Dinitrotoluene (MG/KG) | WBGso-069-0754-S0 | 0.253 | 0.2 | | | | |
| 2-Methylnaphthalene (MG/KG) | WBGso-073-0752-S0 | 0.226 | 0.062 | | | | |
| 2-Nitrotoluene (MG/KG) | WBGso-069-0750-S0 | 0.507 | 0.082 | | | | |
| 3-Nitrotoluene (MG/KG) | WBGso-069-0750-S0 | 0.49 | 0.12 | | | | |
| 4-Nitrotoluene (MG/KG) | WBGso-069-0750-S0 | 0.492 | 0.15 | | | | |
| Aluminum (MG/KG) | WBGso-037-0761-S0 | 13100 | 17500 | | | | |
| Antimony (MG/KG) | WBGso-057-0756-S0 | 0.701 | 2.4 | | | | |
| Arsenic (MG/KG) | WBGso-070-0877-FD | 14 | 20.6 | 0.701 | 1.03 | 5 | N |
| Barium (MG/KG) | WBGso-069-0750-S0 | 89.4 | 243 | 4.47 | 12.2 | 100 | N |
| Beryllium (MG/KG) | WBGso-062-0758-S0 | 0.608 | 1.3 | | | | |
| Cadmium (MG/KG) | WBGso-057-0756-S0 | 0.951 | 4.6 | 0.0476 | 0.23 | 1 | N |
| Calcium (MG/KG) | WBGso-070-0749-S0 | 4500 | 20500 | | | | |

Concentrations were adjusted for comparison to TCLP criteria. Total soil concentrations are divided by the TCLP extraction dilution factor of 20.
Program idwsrm4 run on 24JUL98 at 04:15 using data set wbgdrum2.

Ravenna Winklepeck Burning Ground Investigation Derived Waste
Summary of Analytes Detected Compared to TCLP Criteria

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Drum ID=WBGSUB01

(continued)

| Chemical (units) | ID of Max Concentration | Mean | Max Detect for TCLP (mg/L) | Mean Adj. for TCLP (mg/L) | Max Detect for TCLP (mg/L) | TCLP Criteria (mg/L) | Max > TCLP |
|-----------------------|-------------------------|-------|----------------------------|---------------------------|----------------------------|----------------------|------------|
| Chromium (MG/KG) | WBGSO-037-0761-S0 | 17.3 | 23.3 | 0.865 | 1.17 | 5 | N |
| Cobalt (MG/KG) | WBGSO-062-0758-S0 | 11.1 | 25.4 | - | - | - | - |
| Copper (MG/KG) | WBGSO-057-0756-S0 | 20.9 | 46.9 | - | - | - | - |
| Iron (MG/KG) | WBGSO-069-0750-S0 | 1 | 1.4 | - | - | - | - |
| Lead (MG/KG) | WBGSO-037-0761-S0 | 25200 | 37100 | - | - | - | - |
| Magnesium (MG/KG) | WBGSO-057-0756-S0 | 20.3 | 105 | 1.02 | 5.25 | 5 | Y |
| Manganese (MG/KG) | WBGSO-062-0758-S0 | 3410 | 6520 | - | - | - | - |
| Nickel (MG/KG) | WBGSO-069-0751-S0 | 616 | 3470 | - | - | - | - |
| Nitrobenzene (MG/KG) | WBGSO-069-0750-S0 | 22.5 | 31.6 | - | - | - | - |
| Nitroglycerin (MG/KG) | WBGSO-057-0756-S0 | 0.484 | 0.078 | 0.0242 | 0.0039 | 2 | N |
| Phenanthrene (MG/KG) | WBGSO-073-0752-S0 | 2.79 | 7.4 | - | - | - | - |
| Potassium (MG/KG) | WBGSO-057-0757-S0 | 0.242 | 0.093 | - | - | - | - |
| RDX (MG/KG) | WBGSO-069-0750-S0 | 1610 | 3490 | - | - | - | - |
| Silver (MG/KG) | WBGSO-057-0756-S0 | 1.53 | 7 | - | - | - | - |
| Sodium (MG/KG) | WBGSO-057-0756-S0 | 1.23 | 1.5 | 0.0616 | 0.075 | 5 | N |
| Tetryl (MG/KG) | WBGSO-069-0750-S0 | 110 | 227 | - | - | - | - |
| Vanadium (MG/KG) | WBGSO-062-0758-S0 | 1.19 | 0.24 | - | - | - | - |
| Zinc (MG/KG) | WBGSO-057-0756-S0 | 22.5 | 40.5 | - | - | - | - |
| | | 71.4 | 184 | - | - | - | - |

Drum ID=WBGSUB02

| Chemical (units) | 10 of Max Concentration | Mean | Max Detect for TCLP (mg/L) | Mean Adj. for TCLP (mg/L) | Max Detect for TCLP (mg/L) | TCLP Criteria (mg/L) | Max > TCLP |
|-------------------------------|-------------------------|-------|----------------------------|---------------------------|----------------------------|----------------------|------------|
| 1,3,5-Trinitrobenzene (MG/KG) | WBGSO-168-0768-S0 | 1.72 | 28 | - | - | - | - |
| 1,3-Dinitrobenzene (MG/KG) | WBGSO-168-0766-S0 | 3.2 | 0.26 | - | - | - | - |
| 2,4,6-Trinitrotoluene (MG/KG) | WBGSO-168-0768-S0 | 22.4 | 480 | - | - | - | - |
| 2,4-Dinitrotoluene (MG/KG) | WBGSO-191-0921-S0 | 0.268 | 0.051 | 0.0134 | 0.00255 | 0.13 | N |
| 2-Nitrotoluene (MG/KG) | WBGSO-168-0768-S0 | 3 | 4.8 | - | - | - | - |
| 3-Nitrotoluene (MG/KG) | WBGSO-168-0768-S0 | 1.64 | 21 | - | - | - | - |
| 4-Nitrotoluene (MG/KG) | WBGSO-168-0768-S0 | 3.27 | 0.15 | - | - | - | - |
| Acetone (MG/KG) | WBGSO-192-0922-S0 | 0.02 | 0.052 | - | - | - | - |
| Aluminum (MG/KG) | WBGSO-037-0761-S0 | 11700 | 17500 | - | - | - | - |
| Anthracene (MG/KG) | WBGSO-191-0921-S0 | 0.357 | 0.098 | - | - | - | - |
| Antimony (ME/KG) | WBGSO-168-0768-S0 | 1.04 | 11.2 | - | - | - | - |

Concentrations were adjusted for comparison to TCLP criteria. Total soil concentrations are divided by the TCLP extraction dilution factor of 20.
Program idwsam04 run on 24JUL98 at 04:15 using data set wbgsam2.

Ravenna Winklepeck Burning Ground Investigation Derived Waste
Summary of Analytes Detected Compared to TCLP Criteria

04:15 Friday, July 24, 1998 24

Drum ID=WBGSUB02
(continued)

| Chemical (units) | ID of Max Concentration | Mean | Max Detect Adj. for TCLP (mg/L) | Max Detect Adj. for TCLP (mg/L) | TCLP Criteria (mg/L) | Max > TCLP |
|--------------------------------|-------------------------|---------|---------------------------------|---------------------------------|----------------------|------------|
| Arsenic (MG/KG) | WBGSo-037-0761-S0 | 13.5 | 20.5 | 0.677 | 1.03 | 5 |
| Barium (MG/KG) | WBGSo-168-0768-S0 | 140 | 698 | 6.99 | 34.9 | 100 |
| Benz(a)anthracene (MG/KG) | WBGSo-190-0920-S0 | 0.36 | 0.48 | - | - | N |
| Benz(a)pyrene (MG/KG) | WBGSo-190-0920-S0 | 0.364 | 0.5 | - | - | N |
| Benz(b)fluoranthene (MG/KG) | WBGSo-190-0920-S0 | 0.391 | 0.7 | - | - | - |
| Benz(g,h,i)perylene (MG/KG) | WBGSo-191-0921-S0 | 0.384 | 0.31 | - | - | - |
| Benz(k)fluoranthene (MG/KG) | WBGSo-191-0921-S0 | 0.381 | 0.29 | - | - | - |
| Beryllium (MG/KG) | WBGSo-062-0758-S0 | 0.496 | 1.3 | - | - | - |
| Cadmium (MG/KG) | WBGSs-196-0943-S0 | 1.19 | 11.9 | 0.0595 | 0.595 | 1 |
| Calcium (MG/KG) | WBGSo-168-0768-S0 | 2610 | 12100 | - | - | - |
| Carbazole (MG/KG) | WBGSo-191-0921-S0 | 0.356 | 0.086 | - | - | - |
| Chromium (MG/KG) | WBGSo-168-0768-S0 | 16 | 26.6 | 0.8 | 1.33 | 5 |
| Chrysene (MG/KG) | WBGSo-190-0920-S0 | 0.372 | 0.56 | - | - | N |
| Cobalt (MG/KG) | WBGSo-062-0758-S0 | 10.2 | 25.4 | - | - | - |
| Copper (MG/KG) | WBGSo-168-0768-S0 | 95.4 | 1920 | - | - | - |
| Cyanide (MG/KG) | WBGSo-168-0768-S0 | 0.621 | 0.78 | - | - | - |
| Dibenz(a,h)anthracene (MG/KG) | WBGSo-191-0921-S0 | 0.355 | 0.076 | - | - | - |
| Fluoranthene (MG/KG) | WBGSo-190-0920-S0 | 0.458 | 1.2 | - | - | - |
| HMX (MG/KG) | WBGSo-168-0768-S0 | 2.57 | 40 | - | - | - |
| Indeno(1,2,3-cd)pyrene (MG/KG) | WBGSo-191-0921-S0 | 0.391 | 0.37 | - | - | - |
| Iron (MG/KG) | WBGSo-037-0761-S0 | 24000 | 37100 | - | - | - |
| Lead (MG/KG) | WBGSo-168-0768-S0 | 56.9 | 1010 | 2.84 | 50.5 | 5 |
| Magnesium (MG/KG) | WBGSo-059-0760-S0 | 2680 | 4250 | - | - | - |
| Manganese (MG/KG) | WBGSo-062-0758-S0 | 623 | 3670 | - | - | - |
| Mercury (MG/KG) | WBGSs-196-0943-S0 | 0.0719 | 0.065 | 0.0036 | 0.00325 | 0.2 |
| Nickel (MG/KG) | WBGSo-186-0927-S0 | 20.6 | 46.8 | - | - | N |
| Nitrobenzene (MG/KG) | WBGSo-168-0768-S0 | 2.52 | 0.36 | 0.126 | 0.018 | 2 |
| Nitrocellulose as N (MG/KG) | WBGSo-186-0770-S0 | 26.5 | 88.4 | - | - | N |
| Phenanthrene (MG/KG) | WBGSo-190-0920-S0 | 0.411 | 0.53 | - | - | - |
| Potassium (MG/KG) | WBGSo-122-0767-S0 | 1290 | 2910 | - | - | - |
| Pyrene (MG/KG) | WBGSo-190-0920-S0 | 0.418 | 0.91 | - | - | - |
| RDX (MG/KG) | WBGSo-186-0770-S0 | 7.89 | 82 | - | - | - |
| Selenium (MG/KG) | WBGSo-187-0940-S0 | 0.639 | 0.98 | 0.032 | 0.049 | 1 |
| Silver (MG/KG) | WBGSo-168-0768-S0 | 1.26 | 1.8 | 0.0628 | 0.09 | 5 |
| Sodium (MG/KG) | WBGSo-168-0768-S0 | 81.1 | 187 | - | - | - |
| Tetryl (MG/KG) | WBGSs-196-0943-S0 | 8.45 | 0.15 | - | - | - |
| Thallium (MG/KG) | WBGSo-192-0929-S0 | 0.647 | 1.1 | - | - | - |
| Toluene (MG/KG) | WBGSo-192-0929-S0 | 0.00257 | 0.0027 | - | - | - |

Concentrations were adjusted for comparison to TCLP criteria. Total soil concentrations are divided by the TCLP extraction dilution factor of 20.
Program idsum04 run on 24JUL98 at 04:15 using data set wbgsdr-un2.

Ravenna Winklepeck Burning Ground Investigation Derived Waste
Summary of Analytes Detected Compared to TCLP Criteria

04:15 Friday, July 24, 1998 25

- Drum ID=WBGSSURF02
(continued)

| Chemical (units) | ID of Max Concentration | Mean | Max Detect | Mean Adj. for TCLP (mg/L) | TCLP Criteria (mg/L) | Max > TCLP |
|------------------|-------------------------|------|------------|---------------------------|----------------------|------------|
| Vanadium (MG/KG) | WBGSS-062-0758-S0 | 21 | 40.5 | - | - | - |
| Zinc (MG/KG) | WBGSS-168-0768-S0 | 93.9 | 690 | - | - | - |

- Drum ID=WBGSSURF02

| Chemical (units) | ID of Max Concentration | Mean | Max Detect | Mean Adj. for TCLP (mg/L) | TCLP Criteria (mg/L) | Max > TCLP |
|---------------------------------|-------------------------|-------|------------|---------------------------|----------------------|------------|
| 1,3,5-Trinitrobenzene (MG/KG) | WBGSS-187-0912-S0 | 0.173 | 0.12 | - | - | - |
| 2,4,6-Trinitrotoluene (MG/KG) | WBGSS-187-0912-S0 | 1.05 | 1.9 | - | - | - |
| 2,4-Dinitrotoluene (MG/KG) | WBGSS-191-0916-S0 | 0.296 | 0.14 | 0.0148 | 0.007 | 0.13 |
| 2-Methylnaphthalene (MG/KG) | WBGSS-190-0915-S0 | 0.272 | 0.047 | - | - | N |
| Acenaphthene (MG/KG) | WBGSS-190-0915-S0 | 0.307 | 0.15 | - | - | - |
| Aluminum (MG/KG) | WBGSS-173-0885-S0 | 14.00 | 50100 | - | - | - |
| Anthracene (MG/KG) | WBGSS-191-0916-S0 | 0.417 | 0.48 | - | - | - |
| Antimony (MG/KG) | WBGSS-170-0881-S0 | 3.52 | 12.9 | - | - | - |
| Arsenic (MG/KG) | WBGSS-170-0881-S0 | 13.3 | 23.5 | 0.665 | 1.18 | S |
| Barium (MG/KG) | WBGSS-177-0889-S0 | 619 | 4660 | 30.9 | 233 | 100 |
| Benzo(a)anthracene (MG/KG) | WBGSS-191-0916-S0 | 0.51 | 1 | - | - | Y |
| Benzo(a)pyrene (MG/KG) | WBGSS-191-0916-S0 | 0.443 | 0.8 | - | - | - |
| Benzo(b)fluoranthene (MG/KG) | WBGSS-191-0916-S0 | 0.567 | 1.1 | - | - | - |
| Benzo(g,h,i)perylene (MG/KG) | WBGSS-191-0916-S0 | 0.29 | 0.39 | - | - | - |
| Benzo(k)fluoranthene (MG/KG) | WBGSS-189-0923-FD | 0.32 | 0.5 | - | - | - |
| Beryllium (MG/KG) | WBGSS-170-0881-S0 | 0.393 | 0.71 | - | - | - |
| Cadmium (MG/KG) | WBGSS-188-0923-FD | 2.72 | 14 | 0.136 | 0.7 | I |
| Calcium (MG/KG) | WBGSS-188-0923-FD | 5690 | 22500 | - | - | - |
| Carbazole (MG/KG) | WBGSS-190-0915-S0 | 0.347 | 0.27 | - | - | - |
| Chromium (MG/KG) | WBGSS-170-0881-S0 | 20.7 | 46.4 | 1.04 | 2.32 | S |
| Chrysene (MG/KG) | WBGSS-191-0916-S0 | 0.517 | 1 | - | - | N |
| Cobalt (MG/KG) | WBGSS-178-0890-S0 | 8.35 | 11.1 | - | - | - |
| Copper (MG/KG) | WBGSS-170-0881-S0 | 98.4 | 653 | - | - | - |
| Dibenzof[a,h]anthracene (MG/KG) | WBGSS-190-0915-S0 | 0.293 | 0.11 | - | - | - |
| Dibenzofuran (MG/KG) | WBGSS-190-0915-S0 | 0.31 | 0.16 | - | - | - |
| Fluoranthene (MG/KG) | WBGSS-191-0916-S0 | 1.15 | 2.7 | - | - | - |
| Fluorene (MG/KG) | WBGSS-190-0915-S0 | 0.337 | 0.24 | - | - | - |
| HMX (MG/KG) | WBGSS-187-0912-S0 | 0.298 | 0.61 | - | - | - |

Concentrations were adjusted for comparison to TCLP criteria. Total soil concentrations are divided by the TCLP extraction dilution factor of 20.
Program idwsun04 run on 24Jul98 at 04:15 using data set wbgdrum2.

- Drum ID=WBGSURF02

(continued)

| Chemical (units) | ID of Max Concentration | Mean | Max Detect for TCLP (mg/L) | Mean Adj. for TCLP (mg/L) | TCLP Criteria (mg/L) | Max > TCLP |
|---------------------------------|-------------------------|--------|----------------------------|---------------------------|----------------------|------------|
| Indeno(1,2,3-c)dipyrene (MG/KG) | WBGSs-191-0916-S0 | 0.327 | 0.48 | - | - | - |
| Iron (MG/KG) | WBGSs-179-0891-S0 | 23200 | 32200 | 90.5 | 5 | Y |
| Lead (MG/KG) | WBGSs-174-0886-S0 | 181 | 1810 | - | - | - |
| Magnesium (MG/KG) | WBGSs-188-0923-S0 | 2800 | 5870 | - | - | - |
| Manganese (MG/KG) | WBGSs-179-0891-S0 | 572 | 1070 | - | - | - |
| Mercury (MG/KG) | WBGSs-170-0881-S0 | 0.143 | 1.1 | 0.00714 | 0.055 | 0.2 |
| Nickel (MG/KG) | WBGSs-170-0881-S0 | 18.9 | 25.4 | - | - | N |
| Nitrobenzene (MG/KG) | WBGSs-191-0916-S0 | 0.281 | 0.035 | 0.014 | 0.00175 | 2 |
| Nitrocitolose as N (MG/KG) | WBGSs-187-0912-S0 | 80.4 | 315 | - | - | N |
| Nitroglycerin (MG/KG) | WBGSs-187-0912-S0 | 4.88 | 12 | - | - | - |
| Phenanthrene (MG/KG) | WBGSs-191-0916-S0 | 0.98 | 2.4 | - | - | - |
| Potassium (MG/KG) | WBGSs-174-0886-S0 | 1270 | 3050 | - | - | - |
| Pyrene (MG/KG) | WBGSs-191-0916-S0 | 0.923 | 2.1 | - | - | - |
| RDX (MG/KG) | WBGSs-187-0912-S0 | 0.91 | 2.4 | - | - | - |
| Selenium (MG/KG) | WBGSs-196-0937-S0 | 0.749 | 1.3 | 0.0375 | 0.065 | 1 |
| Silver (MG/KG) | WBGSs-170-0881-S0 | 1.52 | 5.8 | 0.0758 | 0.29 | 5 |
| Sodium (MG/KG) | WBGSs-174-0886-S0 | 148 | 1080 | - | - | N |
| Tetryl (MG/KG) | WBGSs-187-0912-S0 | 0.37 | 0.093 | - | - | - |
| Toluene (MG/KG) | WBGSs-190-0915-S0 | 0.0014 | 0.0018 | - | - | - |
| Vanadium (MG/KG) | WBGSs-174-0886-S0 | 22.8 | 34 | - | - | - |
| Zinc (MG/KG) | WBGSs-170-0881-S0 | 294 | 863 | - | - | - |

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- Drum ID=WBGSURF01

| Chemical (units) | ID of Max Concentration | Mean | Max Detect for TCLP (mg/L) | Mean Adj. for TCLP (mg/L) | TCLP Criteria (mg/L) | Max > TCLP |
|-------------------------------|-------------------------|-------|----------------------------|---------------------------|----------------------|------------|
| 1,3,5-Trinitrobenzene (MG/KG) | WBGSs-140-0729-S0 | 1.86 | 0.62 | - | - | - |
| 1,3-Dinitrobenzene (MG/KG) | WBGSs-140-0729-S0 | 1.91 | 0.084 | - | - | - |
| 2,4,6-Trinitrotoluene (MG/KG) | WBGSs-140-0729-S0 | 5.9 | 75 | - | - | - |
| 2,4-Dinitrotoluene (MG/KG) | WBGSs-122-0711-S0 | 0.273 | 0.3 | 0.0137 | 0.015 | 0.13 |
| 2,6-Dinitrotoluene (MG/KG) | WBGSs-122-0711-S0 | 0.282 | 0.087 | - | - | N |
| 2-Methylnaphthalene (MG/KG) | WBGSs-131-0720-S0 | 0.29 | 0.16 | - | - | - |
| 2-Nitrotoluene (MG/KG) | WBGSs-140-0729-S0 | 1.9 | 0.17 | - | - | - |
| 3-Nitrotoluene (MG/KG) | WBGSs-140-0729-S0 | 1.9 | 0.12 | - | - | - |
| 4-Nitrotoluene (MG/KG) | WBGSs-140-0729-S0 | 1.91 | 0.19 | - | - | - |

Concentrations were adjusted for comparison to TCLP criteria. Total soil concentrations are divided by the TCLP extraction dilution factor of 20.
Program idsum04 run on 24Jul98 at 04:15 using data set wbgsdrum2.

Ravenna Winklepeck Burning Ground Investigation Derived Waste
Summary of Analytes Detected Compared to TCLP Criteria

04:15 Friday, July 24, 1998 27

- Drum ID=WBGSurf01
(continued)

| Chemical (units) | ID of Max Concentration | Mean | Max Detect | Max Adj. for TCLP (mg/L) | TCLP Criteria (mg/L) | Max > TCLP |
|---------------------------------|-------------------------|--------|----------------------|--------------------------|----------------------|------------|
| | | Mean | Adj. for TCLP (mg/L) | for TCLP (mg/L) | | |
| Aceraphthene (MG/KG) | WBGSs-122-0711-S0 | 0.334 | 0.15 | - | - | - |
| Aluminum (MG/KG) | WBGSs-173-0885-S0 | 14,000 | 50,100 | - | - | - |
| Anthracene (MG/KG) | WBGSs-191-0916-S0 | 0.413 | 0.48 | - | - | - |
| Antimony (MG/KG) | WBGSs-118-0707-S0 | 3.59 | 27.9 | - | - | - |
| Arsenic (MG/KG) | WBGSs-112-0701-S0 | 12.7 | 35.8 | 0.635 | 1.79 | 5 |
| Barium (MG/KG) | WBGSs-142-0731-S0 | 535 | 10,400 | 26.7 | 520 | 100 |
| Benz(a)anthracene (MG/KG) | WBGSs-191-0916-S0 | 0.38 | 1 | - | - | - |
| Benz(a)pyrene (MG/KG) | WBGSs-191-0916-S0 | 0.389 | 0.8 | - | - | - |
| Benz(b)fluoranthene (MG/KG) | WBGSs-191-0916-S0 | 0.417 | 1.1 | - | - | - |
| Benz(g,h,i)perylene (MG/KG) | WBGSs-122-0711-S0 | 0.331 | 0.39 | - | - | - |
| Benzo(k)fluoranthene (MG/KG) | WBGSs-191-0916-S0 | 0.365 | 0.5 | - | - | - |
| Beryllium (MG/KG) | WBGSs-154-0743-S0 | 0.793 | 10.9 | - | - | - |
| Cadmium (MG/KG) | WBGSs-146-0735-S0 | 7.7 | 234 | 0.385 | 11.7 | 1 |
| Calcium (MG/KG) | WBGSs-154-0743-S0 | 15,900 | 24,700 | - | - | - |
| Carbazole (MG/KG) | WBGSs-122-0711-S0 | 0.356 | 0.27 | - | - | - |
| Chromium (MG/KG) | WBGSs-114-0703-S0 | 25.2 | 189 | 1.16 | 9.45 | 5 |
| Chrysene (MG/KG) | WBGSs-191-0916-S0 | 0.385 | 1 | - | - | - |
| Cobalt (MG/KG) | WBGSs-142-0731-S0 | 8.14 | 12.7 | - | - | - |
| Copper (MG/KG) | WBGSs-146-0735-S0 | 400 | 16,800 | - | - | - |
| Cyanide (MG/KG) | WBGSs-141-0730-S0 | 0.63 | 1.2 | - | - | - |
| Dibenzof(a,h)anthracene (MG/KG) | WBGSs-122-0711-S0 | 0.318 | 0.11 | - | - | - |
| Dibenzofuran (MG/KG) | WBGSs-122-0711-S0 | 0.331 | 0.16 | - | - | - |
| Fluoranthene (MG/KG) | WBGSs-191-0916-S0 | 0.801 | 2.7 | - | - | - |
| Fluorene (MG/KG) | WBGSs-122-0711-S0 | 0.35 | 0.24 | - | - | - |
| HMX (MG/KG) | WBGSs-140-0729-S0 | 3.7 | 1.2 | - | - | - |
| Indeno(1,2,3-cd)pyrene (MG/KG) | WBGSs-191-0916-S0 | 0.35 | 0.48 | - | - | - |
| Iron (MG/KG) | WBGSs-122-0711-S0 | 22,200 | 39,000 | - | - | - |
| Lead (MG/KG) | WBGSs-146-0735-S0 | 238 | 2200 | 11.9 | 110 | 5 |
| Magnesium (MG/KG) | WBGSs-153-0742-S0 | 4,530 | 53,700 | - | - | - |
| Manganese (MG/KG) | WBGSs-153-0742-S0 | 653 | 4,270 | - | - | - |
| Mercury (MG/KG) | WBGSs-142-0731-S0 | 0.127 | 1.2 | 0.00636 | 0.06 | 0.2 |
| Nickel (MG/KG) | WBGSs-126-0715-S0 | 21.1 | 133 | - | - | - |
| Nitrobenzene (MG/KG) | WBGSs-140-0729-S0 | 1.5 | 0.054 | 0.0749 | 0.0027 | 2 |
| Nitrocellulose as N (MG/KG) | WBGSs-187-0912-S0 | 26.3 | 315 | - | - | - |
| Nitroglycerin (MG/KG) | WBGSs-187-0912-S0 | 3.41 | 12 | - | - | - |
| Phenanthrene (MG/KG) | WBGSs-191-0916-S0 | 0.673 | 2.4 | - | - | - |
| Potassium (MG/KG) | WBGSs-153-0742-S0 | 1290 | 3710 | - | - | - |
| Pyrene (MG/KG) | WBGSs-191-0916-S0 | 0.638 | 2.1 | - | - | - |

Concentrations were adjusted for comparison to TCLP criteria. Total soil concentrations are divided by the TCLP extraction dilution factor of 20.
Program idwsrun04 run on 24JUL98 at 04:15 using data set wbgdrun2.

Ravenna Winklepeck Burning Ground Investigation Derived Waste
Summary of Analytes Detected Compared to TCLP Criteria

04:15 Friday, July 24, 1998 2B

Drum ID=WBGSurf01
(continued)

| Chemical (units) | ID of Max Concentration | Mean | Max Detect | Mean Adj. for TCLP (mg/L) | Max Detect Adj. for TCLP (mg/L) | TCLP Criteria (mg/L) | Max > TCLP |
|-------------------------|-------------------------|--------|------------|---------------------------|---------------------------------|----------------------|------------|
| RDX (MG/KG) | WBGss-140-0729-S0 | 3.93 | 2.4 | 0.0473 | 0.155 | 1 | N |
| Selenium (MG/KG) | WBGss-126-0715-S0 | 0.947 | 3.1 | 0.0983 | 1.66 | 5 | N |
| Silver (MG/KG) | WBGss-146-0735-S0 | 1.97 | 33.2 | - | - | - | - |
| Sodium (MG/KG) | WBGss-153-0742-S0 | 183 | 2320 | - | - | - | - |
| Tetraethyl Lead (MG/KG) | WBGss-140-0729-S0 | 4.87 | 0.48 | - | - | - | - |
| Toluene (MG/KG) | WBGss-190-0915-S0 | 0.0014 | 0.0018 | - | - | - | - |
| Vanadium (MG/KG) | WBGss-174-0886-S0 | 21.4 | 34 | - | - | - | - |
| Zinc (MG/KG) | WBGss-146-0735-S0 | 720 | 24900 | - | - | - | - |

Drum ID=WBGMw-005

| Chemical (units) | ID of Max Concentration | Mean | Max Detect | Mean Adj. for TCLP (mg/L) | Max Detect Adj. for TCLP (mg/L) | TCLP Criteria (mg/L) | Max > TCLP |
|-----------------------|-------------------------|---------|------------|---------------------------|---------------------------------|----------------------|------------|
| 3-Nitrotoluene (MG/L) | WBGMw-159(u)-0774-GW | 0.00008 | 0.00008 | - | - | - | - |
| Aluminum (MG/L) | WBGMw-159(u)-0774-GW | 0.463 | 0.463 | - | - | - | - |
| Arsenic (MG/L) | WBGMw-159(u)-0774-GW | 0.00455 | 0.0041 | 0.00455 | 0.0041 | 5 | N |
| Barium (MG/L) | WBGMw-159(u)-0774-GW | 0.0836 | 0.086 | 0.0836 | 0.086 | 100 | N |
| Calcium (MG/L) | WBGMw-159(u)-0774-GW | 114 | 118 | - | - | - | - |
| Chloroform (MG/L) | WBGMw-159(u)-0774-GW | 0.0017 | 0.0017 | 0.0017 | 0.0017 | 6 | N |
| Copper (MG/L) | WBGMw-159(u)-0774-GW | 0.00865 | 0.0098 | - | - | - | - |
| Iron (MG/L) | WBGMw-159(u)-0774-GW | 0.703 | 1.25 | - | - | - | - |
| Magnesium (MG/L) | WBGMw-159(u)-0774-GW | 26.3 | 27.8 | - | - | - | - |
| Manganese (MG/L) | WBGMw-159(u)-0774-GW | 0.984 | 1.12 | - | - | - | - |
| Potassium (MG/L) | WBGMw-159(u)-0774-GW | 3.59 | 3.93 | - | - | - | - |
| Sodium (MG/L) | WBGMw-159(u)-0774-GW | 41.7 | 47.5 | - | - | - | - |

Drum ID=WBGMw-005-3w

| Chemical (units) | ID of Max Concentration | Mean | Max Detect | Mean Adj. for TCLP (mg/L) | Max Detect Adj. for TCLP (mg/L) | TCLP Criteria (mg/L) | Max > TCLP |
|-----------------------|-------------------------|---------|------------|---------------------------|---------------------------------|----------------------|------------|
| 3-Nitrotoluene (MG/L) | WBGMw-159(u)-0774-GW | 0.00008 | 0.00008 | - | - | - | - |
| Aluminum (MG/L) | WBGMw-159(u)-0774-GW | 0.463 | 0.463 | - | - | - | - |

Concentrations were adjusted for comparison to TCLP criteria. Total soil concentrations are divided by the TCLP extraction dilution factor of 20.
Program idwsim04 run on 24JUL98 at 04:15 using data set wbgsdrum2.

Ravenna Winklepeck Burning Ground Investigation Derived Waste
Summary of Analytes Detected Compared to TCLP Criteria

04:15 Friday, July 24, 1998 29

Drum ID=WBGMW-005-3w
(continued)

| Chemical (units) | ID of Max Concentration | Mean | Max Detect | Mean Adj. for TCLP (mg/L) | Max Detect Adj. for TCLP (mg/L) | TCLP Criteria (mg/L) | Max > TCLP |
|-------------------|-------------------------|---------|------------|---------------------------|---------------------------------|----------------------|------------|
| Arsenic (MG/L) | WBGMW-159(u)-0774-GW | 0.00455 | 0.0041 | 0.00455 | 0.0041 | 5 | N |
| Barium (MG/L) | WBGMW-159(u)-0774-GW | 0.0836 | 0.086 | 0.0836 | 0.086 | 100 | N |
| Calcium (MG/L) | WBGMW-159(u)-0774-GW | 114 | 118 | 0.0017 | 0.0017 | - | N |
| Chloroform (MG/L) | WBGMW-159(u)-0774-GW | 0.0017 | 0.0017 | 0.0017 | 0.0017 | - | N |
| Copper (MG/L) | WBGMW-159(u)-0774-GW | 0.00865 | 0.0098 | - | - | - | - |
| Iron (MG/L) | WBGMW-159(u)-0774-GW | 0.703 | 1.25 | - | - | - | - |
| Magnesium (MG/L) | WBGMW-159(u)-0774-GW | 26.3 | 27.8 | - | - | - | - |
| Manganese (MG/L) | WBGMW-159(u)-0774-GW | 0.984 | 1.12 | - | - | - | - |
| Potassium (MG/L) | WBGMW-159(u)-0774-GW | 3.59 | 3.93 | - | - | - | - |
| Sodium (MG/L) | WBGMW-159(u)-0774-GW | 41.7 | 47.5 | - | - | - | - |

Drum ID=WBGMW-006

| Chemical (units) | ID of Max Concentration | Mean | Max Detect | Mean Adj. for TCLP (mg/L) | Max Detect Adj. for TCLP (mg/L) | TCLP Criteria (mg/L) | Max > TCLP |
|-----------------------------------|-------------------------|---------|------------|---------------------------|---------------------------------|----------------------|------------|
| Aluminum (MG/L) | WBGMW-160(u)-0775-GW | 3.02 | 3.02 | 0.0099 | 0.0099 | 5 | N |
| Arsenic (MG/L) | WBGMW-160(u)-0775-GW | 0.00745 | 0.00745 | 0.00745 | 0.00745 | - | - |
| Bis(2-ethylhexyl)phthalate (MG/L) | WBGMW-160(u)-0775-GW | 0.0045 | 0.0045 | 0.0045 | 0.0045 | - | - |
| Calcium (MG/L) | WBGMW-160(u)-0775-GW | 61.3 | 63.5 | - | - | - | - |
| Copper (MG/L) | WBGMW-160(u)-0775-GW | 0.0156 | 0.0156 | - | - | - | - |
| HMX (MG/L) | WBGMW-160(u)-0775-GW | 0.008 | 0.008 | - | - | - | - |
| Iron (MG/L) | WBGMW-160(u)-0775-GW | 4.24 | 8.38 | - | - | - | - |
| Lead (MG/L) | WBGMW-160(u)-0775-GW | 0.0044 | 0.0058 | 0.0044 | 0.0058 | 5 | N |
| Magnesium (MG/L) | WBGMW-160(u)-0775-GW | 20 | 20.5 | - | - | - | - |
| Manganese (MG/L) | WBGMW-160(u)-0775-GW | 0.0895 | 0.121 | - | - | - | - |
| Potassium (MG/L) | WBGMW-160(u)-0775-GW | 1.42 | 1.81 | - | - | - | - |
| RDX (MG/L) | WBGMW-160(u)-0775-GW | 0.032 | 0.032 | - | - | - | - |
| Sodium (MG/L) | WBGMW-160(u)-0775-GW | 7.01 | 7.44 | - | - | - | - |

Concentrations were adjusted for comparison to TCLP criteria. Total soil concentrations are divided by the TCLP extraction dilution factor of 20.
Program idbsum4 run on 24JUL98 at 04:15 using data set wbgdrum2.

Ravenna Winklepeck Burning Ground Investigation Derived Waste
Summary of Analytes Detected Compared to TCLP Criteria

04:15 Friday, July 24, 1998 30

Drum ID=WBGMW-006-1

| Chemical (units) | ID of Max Concentration | Mean | Max Detect for TCLP (mg/L) | Mean Adj. for TCLP (mg/L) | TCLP Criteria (mg/L) | Max > TCLP |
|-----------------------------------|-------------------------|---------|----------------------------|---------------------------|----------------------|------------|
| Aluminum (MG/L) | WBGMW-160(u)-0775-GW | 3.02 | 3.02 | 0.0099 | 0.00745 | 5 |
| Arsenic (MG/L) | WBGMW-160(u)-0775-GW | 0.00745 | 0.0045 | 0.0045 | - | 5 |
| Bis(2-ethylhexyl)phthalate (MG/L) | WBGMW-160(u)-0775-GW | 61.3 | 63.5 | 0.0156 | - | - |
| Calcium (MG/L) | WBGMW-160(u)-0775-GW | 0.0156 | 0.008 | 0.008 | - | - |
| Copper (MG/L) | WBGMW-160(u)-0775-GW | 4.24 | 8.38 | 0.0044 | 0.0058 | 5 |
| HMX (MG/L) | WBGMW-160(u)-0775-GW | 20 | 20.5 | 0.0044 | 0.0044 | 5 |
| Iron (MG/L) | WBGMW-160(u)-0775-GW | 0.0895 | 0.121 | - | - | - |
| Lead (MG/L) | WBGMW-160(u)-0775-GW | 1.42 | 1.81 | 0.032 | 0.032 | - |
| Magnesium (MG/L) | WBGMW-160(u)-0775-GW | 7.01 | 7.44 | - | - | - |
| Manganese (MG/L) | WBGMW-160(u)-0775-GW | - | - | - | - | - |
| Potassium (MG/L) | WBGMW-160(u)-0775-GW | - | - | - | - | - |
| RDX (MG/L) | WBGMW-160(u)-0775-GW | - | - | - | - | - |
| Sodium (MG/L) | WBGMW-160(u)-0775-GW | - | - | - | - | - |

Drum ID=WBGMW-006-2

| Chemical (units) | ID of Max Concentration | Mean | Max Detect for TCLP (mg/L) | Mean Adj. for TCLP (mg/L) | TCLP Criteria (mg/L) | Max > TCLP |
|-----------------------------------|-------------------------|---------|----------------------------|---------------------------|----------------------|------------|
| Aluminum (MG/L) | WBGMW-160(u)-0775-GW | 3.02 | 3.02 | 0.0099 | 0.00745 | 5 |
| Arsenic (MG/L) | WBGMW-160(u)-0775-GW | 0.00745 | 0.0045 | 0.0045 | - | 5 |
| Bis(2-ethylhexyl)phthalate (MG/L) | WBGMW-160(u)-0775-GW | 61.3 | 63.5 | 0.0156 | - | - |
| Calcium (MG/L) | WBGMW-160(u)-0775-GW | 0.0156 | 0.008 | 0.008 | - | - |
| Copper (MG/L) | WBGMW-160(u)-0775-GW | 4.24 | 8.38 | 0.0044 | 0.0058 | 5 |
| HMX (MG/L) | WBGMW-160(u)-0775-GW | 20 | 20.5 | 0.0044 | 0.0044 | 5 |
| Iron (MG/L) | WBGMW-160(u)-0775-GW | 0.0895 | 0.121 | 0.032 | 0.032 | - |
| Lead (MG/L) | WBGMW-160(u)-0775-GW | 1.42 | 1.81 | - | - | - |
| Magnesium (MG/L) | WBGMW-160(u)-0775-GW | 7.01 | 7.44 | - | - | - |
| Manganese (MG/L) | WBGMW-160(u)-0775-GW | - | - | - | - | - |
| Potassium (MG/L) | WBGMW-160(u)-0775-GW | - | - | - | - | - |
| RDX (MG/L) | WBGMW-160(u)-0775-GW | - | - | - | - | - |
| Sodium (MG/L) | WBGMW-160(u)-0775-GW | - | - | - | - | - |

Concentrations were adjusted for comparison to TCLP criteria. Total soil concentrations are divided by the TCLP extraction dilution factor of 20.
Program idsum04 run on 24 JUL 98 at 04:15 using data set wbdrm2.

Ravenna Winklepeck Burning Ground Investigation Derived Waste
Summary of Analytes Detected Compared to TCLP Criteria

04:15 Friday, July 24, 1998 31

Drum ID=WBGMW-007

| Chemical (units) | ID of Max Concentration | Mean | Max Detect for TCLP (mg/L) | Mean Adj. for TCLP (mg/L) | Max Detect Adj. for TCLP (mg/L) | TCLP Criteria (mg/L) | Max > TCLP |
|---------------------------|-------------------------|---------|----------------------------|---------------------------|---------------------------------|----------------------|------------|
| 2,4-Dinitrotoluene (MG/L) | WBGMW-161(u)-0944-FD | 0.00008 | 0.00003 | 0.00008 | 0.00003 | 0.13 | N |
| Aluminum (MG/L) | WBGMW-161(u)-0944-FD | 27.9 | 30.5 | - | - | - | - |
| Arsenic (MG/L) | WBGMW-161(u)-0776-GW | 0.0496 | 0.096 | 0.0496 | 0.096 | 5 | N |
| Barium (MG/L) | WBGMW-161(u)-0944-FD | 0.098 | 0.195 | 0.098 | 0.195 | 100 | N |
| Calcium (MG/L) | WBGMW-161(u)-0944-FD | 55.7 | 66 | - | - | - | - |
| Chromium (MG/L) | WBGMW-161(u)-0944-FD | 0.0292 | 0.0516 | 0.0292 | 0.0516 | 5 | N |
| Cobalt (MG/L) | WBGMW-161(u)-0776-GW | 0.0436 | 0.0375 | - | - | - | - |
| Copper (MG/L) | WBGMW-161(u)-0944-FD | 0.0539 | 0.0862 | - | - | - | - |
| Iron (MG/L) | WBGMW-161(u)-0944-FD | 42.6 | 85.8 | - | - | - | - |
| Lead (MG/L) | WBGMW-161(u)-0776-GW | 0.0247 | 0.0467 | 0.0247 | 0.0467 | 5 | N |
| Magnesium (MG/L) | WBGMW-161(u)-0944-FD | 16.1 | 22.6 | - | - | - | - |
| Manganese (MG/L) | WBGMW-161(u)-0944-FD | 1.03 | 2.03 | - | - | - | - |
| Mercury (MG/L) | WBGMW-161(u)-0776-GW | 0.00015 | 0.0001 | 0.00015 | 0.0001 | 0.2 | N |
| Nickel (MG/L) | WBGMW-161(u)-0944-FD | 0.0668 | 0.0963 | - | - | - | - |
| Potassium (MG/L) | WBGMW-161(u)-0944-FD | 4.18 | 8.22 | - | - | - | - |
| Selenium (MG/L) | WBGMW-161(u)-0944-FD | 0.00498 | 0.0049 | 0.00498 | 0.0049 | 1 | N |
| Sodium (MG/L) | WBGMW-161(u)-0944-FD | 3.95 | 4.97 | - | - | - | - |
| Thallium (MG/L) | WBGMW-161(u)-0776-GW | 0.00178 | 0.0016 | - | - | - | - |
| Vanadium (MG/L) | WBGMW-161(u)-0944-FD | 0.0496 | 0.0531 | - | - | - | - |
| Zinc (MG/L) | WBGMW-161(u)-0776-GW | 0.332 | 0.651 | - | - | - | - |

Drum ID=WBGMW-007-1

| Chemical (units) | ID of Max Concentration | Mean | Max Detect for TCLP (mg/L) | Mean Adj. for TCLP (mg/L) | Max Detect Adj. for TCLP (mg/L) | TCLP Criteria (mg/L) | Max > TCLP |
|---------------------------|-------------------------|---------|----------------------------|---------------------------|---------------------------------|----------------------|------------|
| 2,4-Dinitrotoluene (MG/L) | WBGMW-161(u)-0944-FD | 0.00008 | 0.00003 | 0.00008 | 0.00003 | 0.13 | N |
| Aluminum (MG/L) | WBGMW-161(u)-0944-FD | 27.9 | 30.5 | - | - | - | - |
| Arsenic (MG/L) | WBGMW-161(u)-0776-GW | 0.0496 | 0.096 | 0.0496 | 0.096 | 5 | N |
| Barium (MG/L) | WBGMW-161(u)-0944-FD | 0.098 | 0.195 | 0.098 | 0.195 | 100 | N |
| Calcium (MG/L) | WBGMW-161(u)-0944-FD | 55.7 | 66 | - | - | - | - |
| Chromium (MG/L) | WBGMW-161(u)-0944-FD | 0.0292 | 0.0516 | 0.0292 | 0.0516 | 5 | N |
| Cobalt (MG/L) | WBGMW-161(u)-0776-GW | 0.0436 | 0.0375 | - | - | - | - |
| Copper (MG/L) | WBGMW-161(u)-0944-FD | 0.0539 | 0.0862 | - | - | - | - |
| Iron (MG/L) | WBGMW-161(u)-0944-FD | 42.6 | 85.8 | - | - | - | - |
| Lead (MG/L) | WBGMW-161(u)-0776-GW | 0.0247 | 0.0467 | 0.0247 | 0.0467 | 5 | N |
| Magnesium (MG/L) | WBGMW-161(u)-0944-FD | 16.1 | 22.6 | - | - | - | - |

Concentrations were adjusted for comparison to TCLP criteria. Total soil concentrations are divided by the TCLP extraction dilution factor of 20.
Program idsum04 run on 24Jul98 at 04:15 using data set wbgdrum2.

Drum ID=WBGMW-007-1

(continued)

| Chemical (units) | ID of Max Concentration | Mean | Max Detect | Mean Adj. for TCLP (mg/L) | TCLP Criteria (mg/L) | Max > TCLP |
|------------------|-------------------------|---------|------------|---------------------------|----------------------|------------|
| Manganese (MG/L) | WBGMW-161(u)-0944-FD | 1.03 | 2.03 | 0.00015 | 0.0001 | 0.2 |
| Mercury (MG/L) | WBGMW-161(u)-0776-GW | 0.00015 | 0.0001 | - | - | N |
| Nickel (MG/L) | WBGMW-161(u)-0944-FD | 0.0668 | 0.0963 | - | - | - |
| Potassium (MG/L) | WBGMW-161(u)-0944-FD | 4.18 | 8.22 | - | - | - |
| Selenium (MG/L) | WBGMW-161(u)-0944-FD | 0.00498 | 0.0049 | 0.00498 | 0.0049 | 1 |
| Sodium (MG/L) | WBGMW-161(u)-0944-FD | 3.95 | 4.97 | - | - | - |
| Thallium (MG/L) | WBGMW-161(u)-0776-GW | 0.00178 | 0.0016 | - | - | - |
| Vanadium (MG/L) | WBGMW-161(u)-0944-FD | 0.0496 | 0.0531 | - | - | - |
| Zinc (MG/L) | WBGMW-161(u)-0776-GW | 0.332 | 0.651 | - | - | - |

Drum ID=WBGMW-007-2

| Chemical (units) | ID of Max Concentration | Mean | Max Detect | Mean Adj. for TCLP (mg/L) | TCLP Criteria (mg/L) | Max > TCLP |
|---------------------------|-------------------------|---------|------------|---------------------------|----------------------|------------|
| 2,4-Dinitrotoluene (MG/L) | WBGMW-161(u)-0944-FD | 0.00008 | 0.00003 | 0.00008 | 0.00003 | 0.13 |
| Aluminum (MG/L) | WBGMW-161(u)-0944-FD | 27.9 | 30.5 | - | - | N |
| Arsenic (MG/L) | WBGMW-161(u)-0776-GW | 0.0496 | 0.096 | 0.0496 | 0.096 | 5 |
| Barium (MG/L) | WBGMW-161(u)-0944-FD | 0.098 | 0.195 | 0.098 | 0.195 | 100 |
| Calcium (MG/L) | WBGMW-161(u)-0944-FD | 55.7 | 66 | - | - | N |
| Chromium (MG/L) | WBGMW-161(u)-0944-FD | 0.0292 | 0.0516 | 0.0292 | 0.0516 | 5 |
| Cobalt (MG/L) | WBGMW-161(u)-0776-GW | 0.0436 | 0.0375 | - | - | - |
| Copper (MG/L) | WBGMW-161(u)-0944-FD | 0.0539 | 0.0862 | - | - | - |
| Iron (MG/L) | WBGMW-161(u)-0944-FD | 42.6 | 85.8 | - | - | - |
| Lead (MG/L) | WBGMW-161(u)-0776-GW | 0.0247 | 0.0467 | 0.0247 | 0.0467 | 5 |
| Magnesium (MG/L) | WBGMW-161(u)-0944-FD | 16.1 | 22.6 | - | - | N |
| Manganese (MG/L) | WBGMW-161(u)-0944-FD | 1.03 | 2.03 | - | - | - |
| Mercury (MG/L) | WBGMW-161(u)-0776-GW | 0.00015 | 0.0001 | 0.00015 | 0.0001 | 0.2 |
| Nickel (MG/L) | WBGMW-161(u)-0944-FD | 0.0668 | 0.0963 | - | - | - |
| Potassium (MG/L) | WBGMW-161(u)-0944-FD | 4.18 | 8.22 | - | - | - |
| Selenium (MG/L) | WBGMW-161(u)-0944-FD | 0.0498 | 0.049 | 0.0498 | 0.049 | 1 |
| Sodium (MG/L) | WBGMW-161(u)-0944-FD | 3.95 | 4.97 | - | - | - |
| Thallium (MG/L) | WBGMW-161(u)-0776-GW | 0.00178 | 0.0016 | - | - | - |
| Vanadium (MG/L) | WBGMW-161(u)-0944-FD | 0.0496 | 0.0531 | - | - | - |
| Zinc (MG/L) | WBGMW-161(u)-0776-GW | 0.332 | 0.651 | - | - | - |

Concentrations were adjusted for comparison to TCLP criteria. Total soil concentrations are divided by the TCLP extraction dilution factor of 20.
Program idwsun04 run on 24JUL98 at 04:15 using data set wbdrum2.

Ravenna Winklepeck Burning Ground Investigation Derived Waste
Summary of Analytes Detected Compared to TCLP Criteria

04:15 Friday, July 24, 1998 33

Drum ID=WBGMW-008

| Chemical (units) | ID of Max Concentration | Mean | Max Detect | Mean Adj. for TCLP (mg/L) | TCLP Criteria (mg/L) | Max > TCLP |
|-------------------|-------------------------|---------|------------|---------------------------|----------------------|------------|
| Aluminum (MG/L) | WBGMW-162(u)-0777-GW | 13.5 | 13.5 | 0.0184 | 0.0317 | 5 |
| Arsenic (MG/L) | WBGMW-162(u)-0777-GW | 0.0184 | 0.0317 | 0.0184 | 0.0317 | N |
| Barium (MG/L) | WBGMW-162(u)-0777-GW | 0.0677 | 0.0999 | 0.0677 | 0.0999 | N |
| Calcium (MG/L) | WBGMW-162(u)-0777-GW | 83.8 | 85.3 | 0.00064 | 0.00064 | 6 |
| Chloroform (MG/L) | WBGMW-162(u)-0777-GW | 0.00064 | 0.00064 | 0.00064 | 0.00064 | N |
| Chromium (MG/L) | WBGMW-162(u)-0777-GW | 0.0156 | 0.0212 | 0.0156 | 0.0212 | 5 |
| Copper (MG/L) | WBGMW-162(u)-0777-GW | 0.0431 | 0.0631 | - | - | - |
| Iron (MG/L) | WBGMW-162(u)-0777-GW | 15.8 | 31.4 | - | - | - |
| Lead (MG/L) | WBGMW-162(u)-0777-GW | 0.0113 | 0.0195 | 0.0113 | 0.0195 | N |
| Magnesium (MG/L) | WBGMW-162(u)-0777-GW | 23.3 | 24.3 | - | - | - |
| Manganese (MG/L) | WBGMW-162(u)-0777-GW | 3 | 3.07 | - | - | - |
| Nickel (MG/L) | WBGMW-162(u)-0777-GW | 0.0362 | 0.0323 | - | - | - |
| Potassium (MG/L) | WBGMW-162(u)-0777-GW | 3.58 | 5.36 | - | - | - |
| Sodium (MG/L) | WBGMW-162(u)-0777-GW | 13.7 | 13.9 | - | - | - |
| Vanadium (MG/L) | WBGMW-162(u)-0777-GW | 0.0372 | 0.0244 | - | - | - |
| Zinc (MG/L) | WBGMW-162(u)-0777-GW | 0.0795 | 0.142 | - | - | - |

Drum ID=WBGMW-008-1

| Chemical (units) | ID of Max Concentration | Mean | Max Detect | Mean Adj. for TCLP (mg/L) | TCLP Criteria (mg/L) | Max > TCLP |
|-------------------|-------------------------|---------|------------|---------------------------|----------------------|------------|
| Aluminum (MG/L) | WBGMW-162(u)-0777-GW | 13.5 | 13.5 | 0.0184 | 0.0317 | 5 |
| Arsenic (MG/L) | WBGMW-162(u)-0777-GW | 0.0184 | 0.0317 | 0.0184 | 0.0317 | N |
| Barium (MG/L) | WBGMW-162(u)-0777-GW | 0.0677 | 0.0999 | 0.0677 | 0.0999 | N |
| Calcium (MG/L) | WBGMW-162(u)-0777-GW | 83.8 | 85.3 | 0.00064 | 0.00064 | 6 |
| Chloroform (MG/L) | WBGMW-162(u)-0777-GW | 0.00064 | 0.00064 | 0.00064 | 0.00064 | N |
| Chromium (MG/L) | WBGMW-162(u)-0777-GW | 0.0156 | 0.0212 | 0.0156 | 0.0212 | 5 |
| Copper (MG/L) | WBGMW-162(u)-0777-GW | 0.0431 | 0.0431 | - | - | - |
| Iron (MG/L) | WBGMW-162(u)-0777-GW | 15.8 | 31.4 | - | - | - |
| Lead (MG/L) | WBGMW-162(u)-0777-GW | 0.0113 | 0.0195 | 0.0113 | 0.0195 | 5 |
| Magnesium (MG/L) | WBGMW-162(u)-0777-GW | 23.3 | 24.3 | - | - | - |
| Manganese (MG/L) | WBGMW-162(u)-0777-GW | 3 | 3.07 | - | - | - |
| Nickel (MG/L) | WBGMW-162(u)-0777-GW | 0.0362 | 0.0323 | - | - | - |
| Potassium (MG/L) | WBGMW-162(u)-0777-GW | 3.58 | 5.36 | - | - | - |
| Sodium (MG/L) | WBGMW-162(u)-0777-GW | 13.7 | 13.9 | - | - | - |
| Vanadium (MG/L) | WBGMW-162(u)-0777-GW | 0.0372 | 0.0244 | - | - | - |

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Concentrations were adjusted for comparison to TCLP criteria. Total soil concentrations are divided by the TCLP extraction dilution factor of 20. Program idusum04 run on 24JUL98 at 04:15 using data set wbgrum2.

Ravenna Winklepeck Burning Ground Investigation Derived Waste
Summary of Analytes Detected Compared to TCLP Criteria

04:15 Friday, July 24, 1998 34

Drum ID=WBGMW-008-1
(continued)

| Chemical (units) | ID of Max Concentration | Mean | Max Detect | Mean Adj. for TCLP (mg/L) | Max Detect Adj. for TCLP (mg/L) | TCLP Criteria (mg/L) | Max > TCLP |
|------------------|-------------------------|--------|------------|---------------------------|---------------------------------|----------------------|------------|
| Zinc (MG/L) | WBGMW-162(u)-0777-GW | 0.0795 | 0.142 | - | - | - | - |

Drum ID=WBGMW-008-2

| Chemical (units) | ID of Max Concentration | Mean | Max Detect | Mean Adj. for TCLP (mg/L) | Max Detect Adj. for TCLP (mg/L) | TCLP Criteria (mg/L) | Max > TCLP |
|-------------------|-------------------------|---------|------------|---------------------------|---------------------------------|----------------------|------------|
| Aluminum (MG/L) | WBGMW-162(u)-0777-GW | 13.5 | 13.5 | 0.0317 | 0.0317 | 5 | N |
| Arsenic (MG/L) | WBGMW-162(u)-0777-GW | 0.0184 | 0.0317 | 0.0184 | 0.0317 | 5 | N |
| Barium (MG/L) | WBGMW-162(u)-0777-GW | 0.0677 | 0.0999 | 0.0677 | 0.0999 | 100 | N |
| Calcium (MG/L) | WBGMW-162(u)-0777-GW | 83.8 | 85.3 | - | - | - | - |
| Chloroform (MG/L) | WBGMW-162(u)-0777-GW | 0.00064 | 0.00064 | 0.00064 | 0.00064 | 6 | N |
| Chromium (MG/L) | WBGMW-162(u)-0777-GW | 0.0156 | 0.0212 | 0.0156 | 0.0212 | 5 | N |
| Copper (MG/L) | WBGMW-162(u)-0777-GW | 0.0631 | 0.0431 | - | - | - | - |
| Iron (MG/L) | WBGMW-162(u)-0777-GW | 15.8 | 31.4 | - | - | - | - |
| Lead (MG/L) | WBGMW-162(u)-0777-GW | 0.0113 | 0.0195 | 0.0113 | 0.0195 | 5 | N |
| Magnesium (MG/L) | WBGMW-162(u)-0777-GW | 23.3 | 24.3 | - | - | - | - |
| Manganese (MG/L) | WBGMW-162(u)-0777-GW | 3 | 3.07 | - | - | - | - |
| Nickel (MG/L) | WBGMW-162(u)-0777-GW | 0.0362 | 0.0323 | - | - | - | - |
| Potassium (MG/L) | WBGMW-162(u)-0777-GW | 3.58 | 5.36 | - | - | - | - |
| Sodium (MG/L) | WBGMW-162(u)-0777-GW | 13.7 | 13.9 | - | - | - | - |
| Vanadium (MG/L) | WBGMW-162(u)-0777-GW | 0.0372 | 0.0244 | - | - | - | - |
| Zinc (MG/L) | WBGMW-162(u)-0777-GW | 0.0795 | 0.142 | - | - | - | - |

Drum ID=WBGMW-009

| Chemical (units) | ID of Max Concentration | Mean | Max Detect | Mean Adj. for TCLP (mg/L) | Max Detect Adj. for TCLP (mg/L) | TCLP Criteria (mg/L) | Max > TCLP |
|-------------------|-------------------------|---------|------------|---------------------------|---------------------------------|----------------------|------------|
| Aluminum (MG/L) | WBGMW-163(u)-0778-GW | 5.88 | 5.88 | 0.00565 | 0.00565 | 5 | N |
| Arsenic (MG/L) | WBGMW-163(u)-0778-GW | 0.00565 | 0.0063 | 0.00565 | 0.0063 | 100 | N |
| Barium (MG/L) | WBGMW-163(u)-0778-GW | 0.0364 | 0.0499 | 0.0364 | 0.0499 | - | - |
| Calcium (MG/L) | WBGMW-163(u)-0778-GW | 50.2 | 50.4 | - | - | - | - |
| Chloroform (MG/L) | WBGMW-163(u)-0778-GW | 0.0011 | 0.0011 | 0.0011 | 0.0011 | 6 | N |

Concentrations were adjusted for comparison to TCLP criteria. Total soil concentrations are divided by the TCLP extraction dilution factor of 20.
Program idusrun4 run on 24JUL98 at 04:15 using data set wbgrun2.

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Summary of Analytes Detected Compared to TCLP Criteria

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-- Drum ID=WBGMW-009
(cont'd)

| Chemical (units) | ID of Max Concentration | Mean | Max Detect | Mean Adj. for TCLP (mg/L) | Max Detect Adj. for TCLP (mg/L) | TCLP Criteria (mg/L) | Max > TCLP |
|---------------------|-------------------------|---------|------------|---------------------------|---------------------------------|----------------------|------------|
| Chromium (MG/L) | WBGMW-163(u)-0778-GW | 0.0101 | 0.0102 | 0.0101 | 0.0102 | - | - |
| Copper (MG/L) | WBGMW-163(u)-0778-GW | 0.0103 | 0.0172 | - | - | - | - |
| Cyanide (MG/L) | WBGMW-163(u)-0778-GW | 0.0145 | 0.019 | - | - | - | - |
| Iron (MG/L) | WBGMW-163(u)-0778-GW | 7.55 | 15 | - | - | - | - |
| Lead (MG/L) | WBGMW-163(u)-0778-GW | 0.00615 | 0.0093 | 0.00615 | 0.0093 | - | - |
| Magnesium (MG/L) | WBGMW-163(u)-0778-GW | 16.1 | 17 | - | - | - | - |
| Manganese (MG/L) | WBGMW-163(u)-0778-GW | 0.533 | 0.669 | - | - | - | - |
| Nickel (MG/L) | WBGMW-163(u)-0778-GW | 0.03 | 0.02 | - | - | - | - |
| Nitrobenzene (MG/L) | WBGMW-163(u)-0778-GW | 0.00503 | 0.00006 | 0.00503 | 0.00006 | - | - |
| Potassium (MG/L) | WBGMW-163(u)-0778-GW | 2.84 | 3.55 | - | - | - | - |
| RDX (MG/L) | WBGMW-163(u)-0778-GW | 0.0011 | 0.0011 | - | - | - | - |
| Sodium (MG/L) | WBGMW-163(u)-0778-GW | 6.34 | 6.96 | - | - | - | - |
| Vanadium (MG/L) | WBGMW-163(u)-0778-GW | 0.01 | 0.01 | - | - | - | - |

-- Drum ID=WBGMW-009-1

| Chemical (units) | ID of Max Concentration | Mean | Max Detect | Mean Adj. for TCLP (mg/L) | Max Detect Adj. for TCLP (mg/L) | TCLP Criteria (mg/L) | Max > TCLP |
|---------------------|-------------------------|---------|------------|---------------------------|---------------------------------|----------------------|------------|
| Aluminum (MG/L) | WBGMW-163(u)-0778-GW | 5.88 | 5.88 | 0.00565 | 0.0063 | - | - |
| Arsenic (MG/L) | WBGMW-163(u)-0778-GW | 0.00565 | 0.0063 | 0.00565 | 0.0063 | - | - |
| Barium (MG/L) | WBGMW-163(u)-0778-GW | 0.0364 | 0.0499 | 0.0364 | 0.0499 | - | - |
| Calcium (MG/L) | WBGMW-163(u)-0778-GW | 50.2 | 50.4 | - | - | - | - |
| Chloroform (MG/L) | WBGMW-163(u)-0778-GW | 0.0011 | 0.0011 | 0.0011 | 0.0011 | - | - |
| Chromium (MG/L) | WBGMW-163(u)-0778-GW | 0.0101 | 0.0102 | 0.0101 | 0.0102 | - | - |
| Copper (MG/L) | WBGMW-163(u)-0778-GW | 0.0103 | 0.0172 | - | - | - | - |
| Cyanide (MG/L) | WBGMW-163(u)-0778-GW | 0.0145 | 0.019 | - | - | - | - |
| Iron (MG/L) | WBGMW-163(u)-0778-GW | 7.55 | 15 | - | - | - | - |
| Lead (MG/L) | WBGMW-163(u)-0778-GW | 0.00615 | 0.0093 | 0.00615 | 0.0093 | - | - |
| Magnesium (MG/L) | WBGMW-163(u)-0778-GW | 16.1 | 17 | - | - | - | - |
| Manganese (MG/L) | WBGMW-163(u)-0778-GW | 0.533 | 0.669 | - | - | - | - |
| Nickel (MG/L) | WBGMW-163(u)-0778-GW | 0.03 | 0.02 | - | - | - | - |
| Nitrobenzene (MG/L) | WBGMW-163(u)-0778-GW | 2.84 | 3.55 | - | - | - | - |
| Potassium (MG/L) | WBGMW-163(u)-0778-GW | 0.0011 | 0.0011 | - | - | - | - |
| RDX (MG/L) | WBGMW-163(u)-0778-GW | 6.34 | 6.96 | - | - | - | - |

Concentrations were adjusted for comparison to TCLP criteria. Total soil concentrations are divided by the TCLP extraction dilution factor of 20.
Program idsum04 run on 24JUL98 at 04:15 using data set wbgedrum2.

Ravenna Winklepeck Burning Ground Investigation Derived Waste
Summary of Analytes Detected Compared to TCLP Criteria

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Drum ID=WBGMW-009-1
(continued)

| Chemical (units) | ID of Max Concentration | Mean | Max Detect | Mean Adj. for TCLP (mg/L) | Max Detect Adj. for TCLP (mg/L) | TCLP Criteria (mg/L) | Max > TCLP |
|------------------|-------------------------|------|------------|---------------------------|---------------------------------|----------------------|------------|
| Vanadium (MG/L) | WBGMW-163(u)-0778-GW | 0.01 | 0.01 | - | - | - | - |

Drum ID=WBGMW-009-2

| Chemical (units) | ID of Max Concentration | Mean | Max Detect | Mean Adj. for TCLP (mg/L) | Max Detect Adj. for TCLP (mg/L) | TCLP Criteria (mg/L) | Max > TCLP |
|---------------------|-------------------------|---------|------------|---------------------------|---------------------------------|----------------------|------------|
| Aluminum (MG/L) | WBGMW-163(u)-0778-GW | 5.88 | 5.88 | - | - | - | - |
| Arsenic (MG/L) | WBGMW-163(u)-0778-GW | 0.00565 | 0.00565 | 0.0063 | 0.0063 | 5 | N |
| Barium (MG/L) | WBGMW-163(u)-0778-GW | 0.0364 | 0.0499 | 0.0364 | 0.0499 | 100 | N |
| Calcium (MG/L) | WBGMW-163(u)-0778-GW | 50.2 | 50.4 | - | - | - | - |
| Chloroform (MG/L) | WBGMW-163(u)-0778-GW | 0.0011 | 0.0011 | 0.0011 | 0.0011 | 6 | N |
| Chromium (MG/L) | WBGMW-163(u)-0778-GW | 0.0101 | 0.0102 | 0.0101 | 0.0102 | 5 | N |
| Copper (MG/L) | WBGMW-163(u)-0778-GW | 0.0103 | 0.0172 | - | - | - | - |
| Cyanide (MG/L) | WBGMW-163(u)-0778-GW | 0.0145 | 0.019 | - | - | - | - |
| Iron (MG/L) | WBGMW-163(u)-0778-GW | 7.55 | 15 | - | - | - | - |
| Lead (MG/L) | WBGMW-163(u)-0778-GW | 0.00615 | 0.00615 | 0.00615 | 0.00615 | 5 | N |
| Magnesium (MG/L) | WBGMW-163(u)-0778-GW | 16.1 | 17 | - | - | - | - |
| Manganese (MG/L) | WBGMW-163(u)-0778-GW | 0.533 | 0.669 | - | - | - | - |
| Nickel (MG/L) | WBGMW-163(u)-0778-GW | 0.03 | 0.12 | - | - | - | - |
| Nitrobenzene (MG/L) | WBGMW-163(u)-0778-GW | 0.00503 | 0.00006 | 0.00503 | 0.00006 | 2 | N |
| Potassium (MG/L) | WBGMW-163(u)-0778-GW | 2.84 | 3.55 | - | - | - | - |
| RDX (MG/L) | WBGMW-163(u)-0778-GW | 0.0011 | 0.0011 | - | - | - | - |
| Sodium (MG/L) | WBGMW-163(u)-0778-GW | 6.34 | 6.96 | - | - | - | - |
| Vanadium (MG/L) | WBGMW-163(u)-0778-GW | 0.01 | 0.01 | - | - | - | - |

Drum ID=WBGMW-009-3

| Chemical (units) | ID of Max Concentration | Mean | Max Detect | Mean Adj. for TCLP (mg/L) | Max Detect Adj. for TCLP (mg/L) | TCLP Criteria (mg/L) | Max > TCLP |
|------------------|-------------------------|---------|------------|---------------------------|---------------------------------|----------------------|------------|
| Aluminum (MG/L) | WBGMW-163(u)-0778-GW | 5.88 | 5.88 | - | - | - | - |
| Arsenic (MG/L) | WBGMW-163(u)-0778-GW | 0.00565 | 0.0063 | 0.00565 | 0.0063 | 5 | N |
| Barium (MG/L) | WBGMW-163(u)-0778-GW | 0.0364 | 0.0499 | 0.0364 | 0.0499 | 100 | N |

Concentrations were adjusted for comparison to TCLP criteria. Total soil concentrations are divided by the TCLP extraction dilution factor of 20.
Program idsumrun2 run on 24 JUL 98 at 04:15 using data set wbgdrun2.

Drum ID=WBGMW-009-3
(continued)

| Chemical (units) | ID of Max Concentration | Mean | Max Detect | Mean Adj. for TCLP (mg/L) | Max Detect Adj. for TCLP (mg/L) | TCLP Criteria (mg/L) | Max > TCLP |
|---------------------|-------------------------|---------|------------|---------------------------|---------------------------------|----------------------|------------|
| Calcium (MG/L) | WBGMW-163(u)-0778-GW | 50.2 | 50.4 | 0.0011 | 0.0011 | - | - |
| Chloroform (MG/L) | WBGMW-163(u)-0778-GW | 0.0011 | 0.0011 | 0.0011 | 0.0011 | 6 | N |
| Chromium (MG/L) | WBGMW-163(u)-0778-GW | 0.0101 | 0.0102 | 0.0101 | 0.0102 | 5 | N |
| Copper (MG/L) | WBGMW-163(u)-0778-GW | 0.0103 | 0.0172 | - | - | - | - |
| Cyanide (MG/L) | WBGMW-163(u)-0778-GW | 0.0145 | 0.019 | - | - | - | - |
| Iron (MG/L) | WBGMW-163(u)-0778-GW | 7.55 | 15 | - | - | - | - |
| Lead (MG/L) | WBGMW-163(u)-0778-GW | 0.00615 | 0.0093 | 0.00615 | 0.0093 | 5 | N |
| Magnesium (MG/L) | WBGMW-163(u)-0778-GW | 0.533 | 17 | - | - | - | - |
| Manganese (MG/L) | WBGMW-163(u)-0778-GW | 0.533 | 0.669 | - | - | - | - |
| Nickel (MG/L) | WBGMW-163(u)-0778-GW | 0.03 | 0.02 | - | - | - | - |
| Nitrobenzene (MG/L) | WBGMW-163(u)-0778-GW | 0.00503 | 0.00096 | 0.00503 | 0.00096 | 2 | N |
| Potassium (MG/L) | WBGMW-163(u)-0778-GW | 2.84 | 3.55 | - | - | - | - |
| RDX (MG/L) | WBGMW-163(u)-0778-GW | 0.0011 | 0.0011 | - | - | - | - |
| Sodium (MG/L) | WBGMW-163(u)-0778-GW | 6.34 | 6.96 | - | - | - | - |
| Vanadium (MG/L) | WBGMW-163(u)-0778-GW | 0.01 | 0.01 | - | - | - | - |

Concentrations were adjusted for comparison to TCLP criteria. Total soil concentrations are divided by the TCLP extraction dilution factor of 20.
Program idusun04 run on 24JUL98 at 04:15 using data set Wbgdrum2.

Ravenna Winklepeck Burning Ground Investigation Derived Waste
Summary of Analytes Detected Compared to TCLP Criteria

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Drum ID=BKGmW-019-24

| Chemical (units) | ID of Max Concentration | Mean | Max Detect | Mean Adj. for TCLP (mg/L) | Max Detect Adj. for TCLP (mg/L) | TCLP Criteria (mg/L) | Max > TCLP |
|------------------|-------------------------|---------|------------|---------------------------|---------------------------------|----------------------|------------|
| Aluminum (MG/L) | BKGmW-019(u)-0837-GW | 31.2 | 31.2 | 0.0476 | 0.0476 | 0.0902 | 5 |
| Arsenic (MG/L) | BKGmW-019(u)-0837-GW | 0.0476 | 0.0902 | 0.327 | 0.178 | 0.327 | 100 |
| Barium (MG/L) | BKGmW-019(u)-0837-GW | 0.178 | 0.327 | 194 | - | - | N |
| Calcium (MG/L) | BKGmW-019(u)-0837-GW | 149 | - | 0.0537 | 0.0319 | 0.0537 | 5 |
| Chromium (MG/L) | BKGmW-019(u)-0837-GW | 0.0319 | 0.0537 | 0.0537 | 0.0319 | - | N |
| Cobalt (MG/L) | BKGmW-019(u)-0837-GW | 0.0454 | 0.0408 | - | - | - | - |
| Copper (MG/L) | BKGmW-019(u)-0837-GW | 0.138 | 0.138 | - | - | - | - |
| Iron (MG/L) | BKGmW-019(u)-0837-GW | 60.5 | 121 | - | - | - | - |
| Lead (MG/L) | BKGmW-019(u)-0837-GW | 0.0379 | 0.0728 | 0.0379 | 0.0728 | 0.0728 | 5 |
| Magnesium (MG/L) | BKGmW-019(u)-0837-GW | 44 | 58.4 | - | - | - | - |
| Manganese (MG/L) | BKGmW-019(u)-0837-GW | 1.44 | 2.43 | - | - | - | - |
| Mercury (MG/L) | BKGmW-019(u)-0837-GW | 0.00015 | 0.00009 | 0.00015 | 0.00009 | 0.00009 | 0.2 |
| Nickel (MG/L) | BKGmW-019(u)-0837-GW | 0.0668 | 0.0926 | - | - | - | - |
| Potassium (MG/L) | BKGmW-019(u)-0837-GW | 4.57 | 7.17 | - | - | - | - |
| Sodium (MG/L) | BKGmW-019(u)-0837-GW | 9.93 | 11.1 | - | - | - | - |
| Vanadium (MG/L) | BKGmW-019(u)-0837-GW | 0.0657 | 0.0633 | - | - | - | - |
| Zinc (MG/L) | BKGmW-019(u)-0837-GW | 0.279 | 0.536 | - | - | - | - |

Drum ID=BKGmW-019-3w

| Chemical (units) | ID of Max Concentration | Mean | Max Detect | Mean Adj. for TCLP (mg/L) | Max Detect Adj. for TCLP (mg/L) | TCLP Criteria (mg/L) | Max > TCLP |
|------------------|-------------------------|---------|------------|---------------------------|---------------------------------|----------------------|------------|
| Aluminum (MG/L) | BKGmW-019(u)-0837-GW | 31.2 | 31.2 | 0.0476 | 0.0476 | 0.0902 | 5 |
| Arsenic (MG/L) | BKGmW-019(u)-0837-GW | 0.0476 | 0.0902 | 0.327 | 0.178 | 0.327 | 100 |
| Barium (MG/L) | BKGmW-019(u)-0837-GW | 0.178 | 0.327 | 194 | - | - | N |
| Calcium (MG/L) | BKGmW-019(u)-0837-GW | 149 | - | 0.0537 | 0.0319 | 0.0537 | 5 |
| Chromium (MG/L) | BKGmW-019(u)-0837-GW | 0.0319 | 0.0537 | 0.0537 | 0.0319 | - | N |
| Cobalt (MG/L) | BKGmW-019(u)-0837-GW | 0.0454 | 0.0408 | - | - | - | - |
| Copper (MG/L) | BKGmW-019(u)-0837-GW | 0.138 | 0.138 | - | - | - | - |
| Iron (MG/L) | BKGmW-019(u)-0837-GW | 60.5 | 121 | - | - | - | N |
| Lead (MG/L) | BKGmW-019(u)-0837-GW | 0.0379 | 0.0728 | 0.0379 | 0.0728 | 0.0728 | 5 |
| Magnesium (MG/L) | BKGmW-019(u)-0837-GW | 44 | 58.4 | - | - | - | - |
| Manganese (MG/L) | BKGmW-019(u)-0837-GW | 1.44 | 2.43 | - | - | - | N |
| Mercury (MG/L) | BKGmW-019(u)-0837-GW | 0.00015 | 0.00009 | 0.00015 | 0.00009 | 0.00009 | 0.2 |
| Nickel (MG/L) | BKGmW-019(u)-0837-GW | 0.0668 | 0.0936 | - | - | - | - |
| Potassium (MG/L) | BKGmW-019(u)-0837-GW | 4.57 | 7.17 | - | - | - | - |

Concentrations were adjusted for comparison to TCLP criteria. Total soil concentrations are divided by the TCLP extraction dilution factor of 20.
Program idhwsum4 run on 24Jul98 at 04:15 using data set abgdrum2.

Ravenna Winklapeck & Burning Ground Investigation Derived Waste
Summary of Analytes Detected Compared to TCLP Criteria

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Drum ID=BKGmw-019-3W
(continued)

| Chemical (units) | ID of Max Concentration | Mean | Max Detect | Mean Adj. for TCLP (mg/L) | Max Detect Adj. for TCLP (mg/L) | TCLP Criteria (mg/L) | Max > TCLP |
|------------------|-------------------------|--------|------------|---------------------------|---------------------------------|----------------------|------------|
| Sodium (MG/L) | BKGmw-019(u)-0837-GW | 9.93 | 11.1 | - | - | - | - |
| Vanadium (MG/L) | BKGmw-019(u)-0837-GW | 0.0567 | 0.0633 | - | - | - | - |
| Zinc (MG/L) | BKGmw-019(u)-0837-GW | 0.279 | 0.536 | - | - | - | - |

Drum ID=BKGmw-020

| Chemical (units) | ID of Max Concentration | Mean | Max Detect | Mean Adj. for TCLP (mg/L) | Max Detect Adj. for TCLP (mg/L) | TCLP Criteria (mg/L) | Max > TCLP |
|------------------|-------------------------|--------|------------|---------------------------|---------------------------------|----------------------|------------|
| Aluminum (MG/L) | BKGmw-020(r)-0838-GW | 1.81 | 1.81 | - | - | - | - |
| Barium (MG/L) | BKGmw-020(r)-0838-GW | 0.122 | 0.149 | - | - | - | - |
| Calcium (MG/L) | BKGmw-020(r)-0838-GW | 45.8 | 67.7 | - | - | - | - |
| Copper (MG/L) | BKGmw-020(r)-0838-GW | 0.0163 | 0.0076 | - | - | - | - |
| Iron (MG/L) | BKGmw-020(r)-0838-GW | 2.91 | 4.38 | - | - | - | - |
| Lead (MG/L) | BKGmw-020(r)-0838-GW | 0.0026 | 0.0022 | - | - | - | - |
| Magnesium (MG/L) | BKGmw-020(r)-0838-GW | 13.3 | 13.7 | - | - | - | - |
| Manganese (MG/L) | BKGmw-020(r)-0838-GW | 0.494 | 0.511 | - | - | - | - |
| Potassium (MG/L) | BKGmw-020(r)-0838-GW | 3.02 | 3.21 | - | - | - | - |
| Sodium (MG/L) | BKGmw-020(r)-0838-GW | 8.76 | 9.77 | - | - | - | - |
| Zinc (MG/L) | BKGmw-020(r)-0838-GW | 0.0626 | 0.0728 | - | - | - | - |

Drum ID=BKGmw-021

| Chemical (units) | ID of Max Concentration | Mean | Max Detect | Mean Adj. for TCLP (mg/L) | Max Detect Adj. for TCLP (mg/L) | TCLP Criteria (mg/L) | Max > TCLP |
|------------------|-------------------------|---------|------------|---------------------------|---------------------------------|----------------------|------------|
| Aluminum (MG/L) | BKGmw-021(u)-0844-GW | 5.18 | 5.18 | - | - | - | - |
| Arsenic (MG/L) | BKGmw-021(u)-0844-GW | 0.00645 | 0.0079 | 0.00645 | 0.0079 | - | - |
| Barium (MG/L) | BKGmw-021(u)-0844-GW | 0.056 | 0.0719 | 0.056 | 0.0719 | - | - |
| Calcium (MG/L) | BKGmw-021(u)-0844-GW | 97.3 | 97.4 | - | - | - | - |
| Copper (MG/L) | BKGmw-021(u)-0844-GW | 0.016 | 0.016 | - | - | - | - |
| Iron (MG/L) | BKGmw-021(u)-0844-GW | 5.4 | 10.7 | - | - | - | - |
| Lead (MG/L) | BKGmw-021(u)-0844-GW | 0.0055 | 0.008 | 0.0055 | 0.008 | - | - |
| Magnesium (MG/L) | BKGmw-021(u)-0844-GW | 40.8 | 41.2 | - | - | - | - |

Concentrations were adjusted for comparison to TCLP criteria. Total soil concentrations are divided by the TCLP extraction dilution factor of 20.
Program idwsrun04 run on 24JUL98 at 04:15 using data set wbgdrum2.

Ravenna Winklepeck Burning Ground Investigation Derived Waste
Summary of Analytes Detected Compared to TCLP Criteria

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Drum ID=BKGmw-021

(continued)

| Chemical (units) | ID of Max Concentration | Mean | Max Detect | Mean Adj. for TCLP (mg/L) | Max Detect Adj. for TCLP (mg/L) | TCLP Criteria (mg/L) | Max > TCLP |
|------------------|-------------------------|-------|------------|---------------------------|---------------------------------|----------------------|------------|
| Manganese (MG/L) | BKGmw-021(u)-0844-GW | 0.156 | 0.306 | - | - | - | - |
| Potassium (MG/L) | BKGmw-021(u)-0844-GW | 1.7 | 2.29 | - | - | - | - |
| Sodium (MG/L) | BKGmw-021(u)-0844-GW | 45.2 | 45.7 | - | - | - | - |
| Vanadium (MG/L) | BKGmw-021(u)-0844-GW | 0.029 | 0.0079 | - | - | - | - |

Drum ID=BKGmw-015

| Chemical (units) | ID of Max Concentration | Mean | Max Detect | Mean Adj. for TCLP (mg/L) | Max Detect Adj. for TCLP (mg/L) | TCLP Criteria (mg/L) | Max > TCLP |
|------------------|-------------------------|--------|------------|---------------------------|---------------------------------|----------------------|------------|
| Aluminum (MG/L) | BKGmw-015(u)-0850-GW | 1.52 | 2.84 | - | - | - | - |
| Arsenic (MG/L) | BKGmw-015(u)-0850-GW | 0.0051 | 0.0052 | 0.0051 | 0.0052 | 5 | N |
| Barium (MG/L) | BKGmw-015(u)-0850-GW | 0.249 | 0.256 | 0.249 | 0.256 | 100 | N |
| Calcium (MG/L) | BKGmw-015(u)-0850-GW | 31.5 | 32 | - | - | - | - |
| Copper (MG/L) | BKGmw-015(u)-0850-GW | 0.0182 | 0.0113 | - | - | - | - |
| Cyanide (MG/L) | BKGmw-015(u)-0850-GW | 0.0125 | 0.0115 | - | - | - | - |
| Iron (MG/L) | BKGmw-015(u)-0850-GW | 3.14 | 6.17 | - | - | - | - |
| Lead (MG/L) | BKGmw-015(u)-0850-GW | 0.0038 | 0.0046 | - | - | - | - |
| Magnesium (MG/L) | BKGmw-015(u)-0850-GW | 13 | 13 | - | - | - | - |
| Manganese (MG/L) | BKGmw-015(u)-0850-GW | 0.0978 | 0.163 | - | - | - | - |
| Nickel (MG/L) | BKGmw-015(u)-0850-GW | 0.0312 | 0.0224 | - | - | - | - |
| Potassium (MG/L) | BKGmw-015(u)-0850-GW | 5.92 | 6.06 | - | - | - | - |
| Sodium (MG/L) | BKGmw-015(u)-0850-GW | 14.3 | 14.3 | - | - | - | - |
| Zinc (MG/L) | BKGmw-015(u)-0850-GW | 0.0432 | 0.0577 | - | - | - | - |

Drum ID=DECON-PPE

| Chemical (units) | ID of Max Concentration | Mean | Max Detect | Mean Adj. for TCLP (mg/L) | Max Detect Adj. for TCLP (mg/L) | TCLP Criteria (mg/L) | Max > TCLP |
|---------------------------|-------------------------|---------|------------|---------------------------|---------------------------------|----------------------|------------|
| 1,3-Dinitrobenzene (MG/L) | WBGqc-002-0957 | 0.0007 | 0.0009 | - | - | - | - |
| 2,4-Dinitrotoluene (MG/L) | WBGqc-002-0957 | 0.00112 | 0.00044 | 0.00112 | 0.00044 | 0.13 | N |
| Arsenic (MG/L) | WBGqc-002-0956 | 0.024 | 0.026 | 0.024 | 0.026 | 5 | N |
| Barium (MG/L) | WBGqc-002-0956 | 0.054 | 0.067 | 0.054 | 0.067 | 100 | N |

Concentrations were adjusted for comparison to TCLP criteria. Total soil concentrations are divided by the TCLP extraction dilution factor of 20.
Program idwsu05 run on 24Jul98 at 04:15 using data set wb9drum2.



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09-01
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September 3, 1998

Mr. Kevin Jasper
U.S. Army Corps of Engineers, Louisville District
Attn. CEORL-DL-B (Jasper)
P.O. Box 59
Louisville, Kentucky 40201-0059

Reference: Contract No. DACA62-94-D-0029, Delivery Order No. 0060: Phase II Remedial Investigation of Winklepeck Burning Grounds at the Ravenna Army Ammunition Plant, Ravenna, Ohio

Subject: Deliverable - Final Investigation-Derived Waste Characterization and Disposal Report

Dear Mr. Jasper:

Please find attached a revised Table 2, Summary of Waste Characterization and Recommended Disposal Options, from the previously submitted (August 14, 1998) Investigation-Derived Waste Characterization and Disposal Report. Table 2 has been revised to reflect final waste classifications and recommended waste disposal methods based on review comments received from the USACE and Ohio EPA regarding the previously submitted report. The changes to Table 2 are summarized as follows:

1. Containers WBGSUB01 (soil) and WBGSUB02 (soil) are reclassified as Non-Hazardous Contaminated Waste instead of Hazardous Waste (D008) based on a comparison of the mean adjusted TCLP value for lead instead of using the maximum adjusted TCLP value for lead. In both cases, the mean adjusted TCLP concentrations are below the TCLP regulatory level for lead. Elevated concentrations of metals and detected concentrations of explosives exist in each container and require that both containers be classified as Non-Hazardous Contaminated Waste and recommended for disposal off-site at a permitted facility.
2. Containers OBGmw-003 (water), WBGmw-008 (water), WBGmw-008 (water), WBGmw-008-1 (soil), and WBGmw-008-2 (soil) are reclassified as Non-Hazardous and Non-Contaminated Waste instead of Non-Hazardous Contaminated Waste because after further review the concentrations of metals appear to be within observed background concentrations. These containers are recommended for disposal on-site at the point of origin.

Mr. Kevin Jasper
September 3, 1998
Page 2 of 2

3. Containers WBGmw-005 (soil), WBGmw-005 (water), and WBGmw-005-3w (water) remain classified as Non-Hazardous Contaminated Waste based on detected explosives constituents instead of both explosives and organics as had previously been stated. No organic compounds were detected. These containers are still recommended for disposal off-site at a permitted facility.

The final characterization and disposal recommendations include ~~two~~^{four} containers classified as potentially Hazardous for off-site disposal at a permitted facility, 33 containers as Non-Hazardous Contaminated Waste for off-site disposal at a permitted facility, and 39 containers as Non-Hazardous and Non-Contaminated Waste for on-site disposal. Following your approval of these final recommendations, we will proceed with waste disposal as described in the revised Table 2. In addition, 14 containers from the Phase I Remedial Investigation of High Priority Areas of Concern previously characterized as Non-Hazardous Contaminated Waste will be disposed of off-site at a permitted facility in conjunction with the Phase II RI wastes, as we have previously discussed.

If you have questions or comments, please contact me at (423) 481-8761.

Sincerely,

SCIENCE APPLICATIONS INTERNATIONAL CORPORATION



Stephen B. Selecman
Project Manager

c w/attachments: Bob Whelove, IOC
 Mark Patterson, RVAAP
 Eileen Mohr, Ohio EPA
 John Jent, USACE-Louisville
 Ike Diggs, SAIC
 Martha Turpin, SAIC
 Kathy Dominic, SAIC
 Project File

Table 2. Summary of Final Waste Classification and Recommended Disposal Options

| RCRA Hazardous Waste | | | |
|----------------------|----------------|------------------------|-------------------------|
| Container Number | Media | Waste Criteria | Disposal Recommendation |
| ACETONE-CAUS | Liquid | D001 | Permitted Facility |
| ACETONE-SOIL | Saturated Soil | D001 | Permitted Facility |
| WBGSURF01 | Soil | D005, D006, D007, D008 | Permitted Facility |
| WBGSURF02 | Soil | D005, D008 | Permitted Facility |

| Non Hazardous Contaminated Waste | | | |
|----------------------------------|--------|---------------------|-------------------------|
| Container Number | Media | Waste Criteria | Disposal Recommendation |
| WBGSUB01 | Soil | Explosives & Metals | Permitted Facility |
| WBGSUB02 | Soil | Explosives & Metals | Permitted Facility |
| DECON-HCl | Liquid | Metals | Permitted Facility |
| DECON-Wash | Water | Explosives | Permitted Facility |
| DECON-Wash 2 | Water | Explosives | Permitted Facility |
| DECON-Wash 3 | Water | Explosives | Permitted Facility |
| WBGmw-005 | Soil | Explosives | Permitted Facility |
| WBGmw-005 | Water | Explosives | Permitted Facility |
| WBGmw-005-3w | Water | Explosives | Permitted Facility |
| SPILL-013 | Soil | Hydraulic Oil | Permitted Facility |
| OBGmw-001 | Water | Explosives | Permitted Facility |
| OBGmw-002 | Water | Explosives | Permitted Facility |

Table 2. cont'd

| Container Number | Media | Waste Criteria | Disposal Recommendation |
|-------------------------|--------------|-----------------------|--------------------------------|
| OBGmw-004 | Water | Explosives | Permitted Facility |
| WBgmw-006 | Water | Explosives & Organics | Permitted Facility |
| WBGmw-006-1 | Soil | Explosives & Organics | Permitted Facility |
| WBGmw-006-2 | Soil | Explosives & Organics | Permitted Facility |
| WBGmw-007 | Water | Explosives | Permitted Facility |
| WBGmw-007 | Water | Explosives | Permitted Facility |
| WBGmw-007 | Water | Explosives | Permitted Facility |
| WBGmw-007-1 | Soil | Explosives | Permitted Facility |
| WBGmw-007-2 | Soil | Explosives | Permitted Facility |
| WBGmw-009 | Water | Explosives | Permitted Facility |
| WBGmw-009 | Water | Explosives | Permitted Facility |
| WBGmw-009 | Water | Explosives | Permitted Facility |
| WBGmw-009-1 | Soil | Explosives | Permitted Facility |
| WBGmw-009-2 | Soil | Explosives | Permitted Facility |
| WBGmw-009-3 | Soil | Explosives | Permitted Facility |
| DECON-PPE | PPE | Explosives | Permitted Facility |
| EXCESS-1 | Soil | Explosives & Organics | Permitted Facility |
| SLUDGE-1 | SLUDGE | Explosives | Permitted Facility |
| SLUDGE-2 | SLUDGE | Explosives | Permitted Facility |
| 69710705 | Water | Explosives | Permitted Facility |
| 20314-100 | Water | Explosives | Permitted Facility |

Table 2. cont'd

| Non-Hazardous and Non-Contaminated Waste | | | |
|---|--------------|--------------------------|--------------------------------|
| Container Number | Media | Waste Criteria | Disposal Recommendation |
| WBGmw-008 | Water | No detected contaminants | On-site at point of origin |
| WBGmw-008 | Water | No detected contaminants | On-site at point of origin |
| WBGmw-008-1 | Soil | No detected contaminants | On-site at point of origin |
| WBGmw-008-2 | Soil | No detected contaminants | On-site at point of origin |
| OBGmw-003 | Water | No detected contaminants | On-site at point of origin |
| BKGmw-004 | Water | No detected contaminants | On-site at point of origin |
| BKGmw-006 | Water | No detected contaminants | On-site at point of origin |
| BKGmw-006-1w | Water | No detected contaminants | On-site at point of origin |
| BKGmw-006-2w | Water | No detected contaminants | On-site at point of origin |
| BKGmw-018 | Water | No detected contaminants | On-site at point of origin |
| BKGmw-018-1w | Water | No detected contaminants | On-site at point of origin |
| BKGmw-018-2w | Water | No detected contaminants | On-site at point of origin |
| BKGmw-018-3w | Water | No detected contaminants | On-site at point of origin |
| BKGmw-018-4w | Water | No detected contaminants | On-site at point of origin |
| BKGmw-005-1w | Water | No detected contaminants | On-site at point of origin |
| BKGmw-005-2w | Water | No detected contaminants | On-site at point of origin |
| BKGmw-005-3w | Water | No detected contaminants | On-site at point of origin |
| BKGmw-008 | Water | No detected contaminants | On-site at point of origin |
| BKGmw-010 | Water | No detected contaminants | On-site at point of origin |
| BKGmw-012 | Water | No detected contaminants | On-site at point of origin |
| BKGmw-012-1w | Water | No detected contaminants | On-site at point of origin |
| BKGmw-012-2w | Water | No detected contaminants | On-site at point of origin |

Table 2. cont'd

| Container Number | Media | Waste Criteria | Disposal Recommendation |
|-------------------------|--------------|--------------------------|--------------------------------|
| BKGmw-013 | Water | No detected contaminants | On-site at point of origin |
| BKGmw-015 | Water | No detected contaminants | On-site at point of origin |
| BKGmw-016 | Water | No detected contaminants | On-site at point of origin |
| BKGmw-016-1 | Water | No detected contaminants | On-site at point of origin |
| BKGmw-016-2w | Water | No detected contaminants | On-site at point of origin |
| BKGmw-017-1w | Water | No detected contaminants | On-site at point of origin |
| BKGmw-017-2w | Water | No detected contaminants | On-site at point of origin |
| BKGmw-017-3w | Water | No detected contaminants | On-site at point of origin |
| BKGmw-017-4w | Water | No detected contaminants | On-site at point of origin |
| BKGmw-019 | Water | No detected contaminants | On-site at point of origin |
| BKGmw-019-1w | Water | No detected contaminants | On-site at point of origin |
| BKGmw-019-2w | Water | No detected contaminants | On-site at point of origin |
| BKGmw-019-3w | Water | No detected contaminants | On-site at point of origin |
| BKGmw-20 | Water | No detected contaminants | On-site at point of origin |
| BKGmw-020 | Water | No detected contaminants | On-site at point of origin |
| BKGmw-021 | Water | No detected contaminants | On-site at point of origin |
| BKGmw-021 | Water | No detected contaminants | On-site at point of origin |