

***Waste Acceptance Package for
Solid Investigation-Derived Waste
(IDW) Drums Generated Vicinity
Property G as Part of the Niagara Falls
Storage Site Environmental Investigation
WP-019351***

Prepared for
**Buffalo District USACE
1776 Niagara Street
Buffalo, NY 14207**

May 2006



TETRA TECH, INC.

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Under Subcontract to SAIC
Dublin, Ohio

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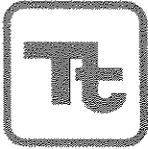
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VPG IDW Drum Activity Reports



TETRA TECH, INC.

May 26, 2006
15892 Task 5

Ms. Victoria Gutierrez
Customer Service Representative
Waste Control Specialists (WCS)
9998 W. Highway 176
Andrews, Texas 79714

Re: Updated Submittal of Waste Profile Sheets and Supporting Waste Characterization Data To Obtain Acceptance of Solid Investigation-Derived Waste (IDW) (Soil Cuttings, Personal Protective Equipment, Decontamination Pad, Demobilization Wastes) and Abandoned Drums; Vicinity Property G (VPG), Lewiston, New York

Dear Ms. Gutierrez:

As a matter of introduction and review, Tetra Tech [formerly Maxim Technologies (Maxim)] is an environmental consulting firm that recently completed remedial investigation (RI) activities at a property adjacent to an inactive Formerly Used Site Remedial Action Program (FUSRAP) site in western New York. Currently, Tetra Tech is completing IDW management activities associated with VPG for Buffalo District USACE under subcontract to SAIC, Dublin, OH. Numerous 55-gallon IDW drums contain soil cuttings, personal protective equipment (PPE), decontamination pad debris and miscellaneous trash/demobilization wastes generated during remedial investigation activities. In addition to IDW generated during RI activities, some abandoned drums were discovered at the VPG. Some of these 55-gallon drums had lost integrity and were placed in 85-gallon over-pack drums for subsequent transportation and management at WCS.

On May 26, 2004, Maxim Technologies received, on behalf of the USACE-Buffalo District, preliminary acceptance from WCS to receive IDW drums from the VPG Site in Lewiston, New York. This revised package is being submitted to you by Tetra Tech because it contains some updated chemical characterization information as well as the signed waste profile sheet (signed by a USACE representative). The waste characterization information associated with the drums to be sent to WCS are included in Attachment 3-1 (VPG Waste Profile Sheet), 3-2 (VPG Drum Inventory), 3-3 (Chemical/Radiological Characterization for Soil Cutting and Waste Drums), and 3-4 (VPG Radiological Characterization for Contact Waste Drums). A summary drum inventory associated with the VPG is as follows:

Vicinity Property G Drum Inventory (presently stored in Building 401)

- Spoil Pile Tarps - 2
- Personal Protective Equipment (PPE) – 16
- Liquid IDW carboys (will be cut up and placed into Soil bags Containers) – 6 estimated @ Demob
- Plastic Sheeting/Drum Tarps (placed into soil bag containers) – 3 estimated @ Demob

- Styrofoam components of Liquid IDW containment Structure (will be cut up and placed into Soil bags Containers) – 8 estimated @ Demob
- Soil and Laboratory Debris - 1
- Plastic Sheeting – 1
- Decontamination Pad solids/debris - 1
- Soil/Debris Drums (55-gallon Capacity) – 7
- Liquid IDW Sludge Cake – 1
- Soil/Debris Drums (Overpacks –85 gallons) - 6

TOTAL = 52 DRUMS GENERATED FROM THE VPG WILL REQUIRE DISPOSAL

A more detailed drum inventory and waste profile sheet have been included in the Attachments of this submittal for drums the VPG investigation areas. The complete package is included on CD-ROM for your convenience.

Composite samples were collected to address WCS's Waste Acceptance Criteria (WAC) from some of the drums that will require disposal. In addition, we have TCLP data with characterization data for the actual soil boring placed in a specific IDW drum. The approach of using readily available data has been previously acceptable to several waste disposal facilities as a source of toxicity characterization data for the IDW drum contents. The above-referenced approach was used for soil cuttings drums only. For the drums containing PPE, and other contact wastes, radiological activities were estimated using the algorithms described and presented in Attachment 3-4. These algorithms have been changed to better reflect the concentrations of radionuclides within the drums that will be transported to WCS during site demobilization operations.

The expected chemical and radiological characteristics of the drum contents (soil cutting drums only), have been documented on waste profile forms (on a preliminary basis and unsigned by the generator), and are included following this cover letter. The specific WPS completed for this package address the VPG IDW Drums (including the abandoned drums).

In most cases, the specific analyte groups tested during the VPG remedial investigation included the following:

- Radiological analytes with total uranium
- Volatile Organic Compounds (VOCs)
- Semi-Volatile Organic Compounds (SVOCs)
- Metals (including RCRA metals)
- Nitroaromatics
- Pesticides/PCBs

For some drums, all of these analyte groups have been provided; in other cases, only a few of the analyte groups are readily available for a specific drum. Specific analytical data, for each IDW drum by specific analyte group, is presented as part of Attachment 3-3. The results presented in this Attachment are compared to the TCLP regulatory limits presented in 40 CFR 261 (toxicity identification), to define if the waste in the drums possesses the characteristics of a toxic/hazardous waste. In most cases, specific soil cuttings were analyzed for total contaminant concentrations instead of TCLP concentrations. TCLP concentrations were calculated as estimated values, based upon the maximum concentrations of a contaminant that could be present in the TCLP test extraction fluid.

Ms. Victoria Gutierrez
May 26, 2006
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Some of the soil cuttings were analyzed for radiological parameters, including total Alpha, total Beta, Radium-226, Thorium-228, Thorium-230, Thorium-232, Total Uranium, Uranium-233/234, Uranium-235, and Uranium-238. The radiological results for the soil cuttings were subsequently compared to regional background soil concentrations.

After you review the enclosed analytical data, please address the following:

- Based on enclosed revised analytical data, forwarded for WCS review, please reconfirm acceptance of the IDW (Based on a conversation held with Ms. Anne Dean on May 26, 2004, the drums have been preliminarily accepted by the WCS waste review committee based on the analytical data submitted in our original package of May 4, 2004).
- Based on an e-mail received from Victoria Gutierrez on 8/3/04, the cost per drum for disposal at the WCS facility in Andrews is \$65/drum for disposal only and \$75/drum for any drums that may require pretreatment prior to landfill disposal. Could you reconfirm these costs?
- Is T.A.G.Transport (TransCentral, Inc.) still a transporter that is acceptable with WCS?
- Please forward a copy of this package to the Texas Board of Health. The US Army Corps of Engineers Buffalo District has requested that the Texas Board of Health review this package to determine whether acceptance of these specific wastes for disposal at WCS is acceptable.

Several wastes identified in the VPG inventory will be generated during the upcoming demobilization activities at the NFSS. These waste include styrofoam from the liquid IDW containment structure, cut up liquid IDW carboys (15-gallon capacity), and several plastic tarps used to cover drums at the solid IDW storage area. These relatively light materials may be placed in soil bags (approximately 55-gallon capacity) instead of the traditional steel 55-gallon drums. The reason for this is so the TAG Transport representatives can "double-stack" in the event room within the trucks becomes an issue during the transportation phase of the solid IDW disposal project.

Tetra Tech appreciates your assistance with our waste disposal evaluation on the above-referenced solid waste/residues. If you have any questions regarding our requests or require additional information about waste quantities or characterization, please contact me at 618-345-0669. As an option, to expedite the communication process, you can also contact me at the following e-mail address Robert.Bessent@Tetrattech.com.

Sincerely,



Robert A. Bessent
Senior Environmental Engineer

cc: Ms. Anne Dean (WCS-Texas)
Dr. Judith Leithner, USACE-Buffalo District
Ms. Michelle Rhodes, USACE – Buffalo District
Ms. Debra Engelgau, SAIC
15892 Task 5 Project files

ATTACHMENT 1

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ATTACHMENT 2

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ATTACHMENT 3

VICINITY PROPERTY G (VPG) IDW/WASTE DRUM CHARACTERIZATION

- **Waste Profile Sheet**
- **Drum Inventory**
- **Chemical/Radiological
Characterization for Soil Cuttings And Waste Drums**
- **Radiological Characterization for Contact Waste Drums**

ATTACHMENT 3-1

VICINITY PROPERTY G (VPG) IDW/WASTE DRUM CHARACTERIZATION

- **Waste Profile Sheet**

Facility Address **SAMPLE – FedEx/UPS**
 For Manifest: **Address:**
 9998 W. Hwy. 176 9998 W. Hwy. 176
 Andrews, TX 79714 Eunice, NM 88231



Business Mailing **Site Contracts:**
Address: Ph#: (888) 789-2783/
 PO Box 1129 (505) 394-4300
 Andrews, TX 79714 Fax#: (505) 394-3427

Waste Profile Sheet
 Exhibit "B"

WP-019351
 Profile Number

Sales Representative

WCS EPA ID # TXD988088464

WCS State ID/RCRA # HW-50358

Attachments: Chain of Custody MSDS Attachment for Radioactive Material (includes NORM/Exempt) Other
 RCRA Analytical Radiological Analytical Representative Sample: Yes No

List any unacceptable treatment methods: **PO Required for Invoicing:** Yes No

SECTION 1
 Generator Name: Buffalo District – US Army Corps of Engineers
 Physical Address: 1776 Niagara Street Mail Address: 1634 Eastport Plaza Drive
 City, State, Zip: Buffalo, NY 14207 City, State, Zip: Collinsville, IL 62234
 Technical Contact: Mr. Dennis Rimer, Site Superintendent Billing Contact: Bob Bessent
 e-mail: Dennis.Rimer@usace.army.mil e-mail: Robert.Bessent@tetrattech.com
 Phone #: 716-879-4444 Fax #: 716-879-4355 Phone #: 618-345-0669 Fax #: 618-345-1281
 Manifest Return Address: Tetra Tech, Inc.; 1634 Eastport Plaza Drive; Collinsville, IL 62234; ATTN: Mr. Bob Bessent

SECTION 2 Generator Regulatory Status
 EPA ID#: NY7890108973 State ID#: D0036
 Industrial Municipal PST Waste Universal Waste SQG CESQG
 Oil & Gas Exempt Oil & Gas Non-Exempt

Section 3 General Description and Regulatory Information
 Waste Name: Solid Investigation – Derived Waste (IDW) with solid contact wastes – See attached sheet for identification
 Process Generating Waste: Investigation-Derived Wastes generated from Remedial Investigation Activities at Vicinity Property G in close proximity to Niagara Falls Storage Site, Lewiston, NY (Environmental Investigation)
 Is this a US EPA hazardous waste? Yes No If yes, list all codes including all LDR subcategories – e.g. D003-cyanides (attach additional pages if necessary).
 State Waste Code #: OUTS3191

| | N/A | Yes | No | | N/A | Yes | No |
|---|-------------------------------------|--------------------------|-------------------------------------|--|-------------------------------------|--------------------------|-------------------------------------|
| | | | | RCRA Exempt Waste (List Reference...) | | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| TSCA regulated for PCB's Concentration? | | <input type="checkbox"/> | <input checked="" type="checkbox"/> | Regulated Subpart CC Waste (VOC>500ppm) | | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| Asbestos Regulated Material (if yes, is material friable?) | | <input type="checkbox"/> | <input checked="" type="checkbox"/> | Does waste contain sorbents (if yes, are sorbents biodegradeable?) | | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| Regulated Ozone Depleting Substance | | <input type="checkbox"/> | <input checked="" type="checkbox"/> | Waste soil subject to LDR alternate treatment standards | | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| Benzene NESHP Regulated | | <input type="checkbox"/> | <input checked="" type="checkbox"/> | Waste debris subject to LDR alternate treatment standards | | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| Does non-debris waste requiring treatment contain <85ppm Volatile Organic Compounds? (If yes, analysis may be required) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Does debris contain <85ppm Volatile Organic Compounds? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Does material contain any regulated UHC's If yes, list: | | <input type="checkbox"/> | <input checked="" type="checkbox"/> | | | | |

SECTION 4 Waste Composition Percentage by Weight Percentage by Volume

| Physical Composition | Actual/Avg. | Range | | Physical Composition | Actual/Avg. | Range | |
|--|-------------|-------|---|----------------------|-------------|-------|---|
| | | % | % | | % | % | % |
| Solids (soil, debris, PPE, decon waste) within Solid Waste Drums | 100% | | | | | | |

Range Totals Must Be ≥ 100%

| | | | |
|--|-----------|-----------|---|
| Metals <input checked="" type="checkbox"/> TCLP <input checked="" type="checkbox"/> Totals <input checked="" type="checkbox"/> Generator's Knowledge <input type="checkbox"/> ppm <input type="checkbox"/> ppb | | | |
| Antimony: See pages 3,8,11,14,17,22 for metals data | Cadmium: | Selenium: | Mercury: |
| Arsenic: | Chromium: | Silver: | <input checked="" type="checkbox"/> Mercury <260 ppm totals <input type="checkbox"/> Mercury >260 ppm totals |
| Barium: | Lead: | Thallium: | |
| Beryllium: | Nickel: | Zinc: | |

| | |
|---|---|
| Other Chemical Constituents | <input type="checkbox"/> ppm <input type="checkbox"/> ppb <input type="checkbox"/> % by weight <input type="checkbox"/> % by volume |
| Bromine: See pages 1,2,4-6,9,10,12,13,15,16,18-21,23-25 for other chemical constituent analytical results | Benzene : <input type="checkbox"/> TCLP <input type="checkbox"/> Totals <input type="checkbox"/> Gen. Knowledge |
| Chlorine: _____% | : <input type="checkbox"/> TCLP <input type="checkbox"/> Totals <input type="checkbox"/> Gen. Knowledge |
| Iodine: _____% | : <input type="checkbox"/> TCLP <input type="checkbox"/> Totals <input type="checkbox"/> Gen. Knowledge |
| Cyanides: Total _____ Amenable _____ Reactive _____ | : <input type="checkbox"/> TCLP <input type="checkbox"/> Totals <input type="checkbox"/> Gen. Knowledge |
| Sulfides: Total _____ Reactive _____ | : <input type="checkbox"/> TCLP <input type="checkbox"/> Totals <input type="checkbox"/> Gen. Knowledge |

Use attachment for additional chemical constituents

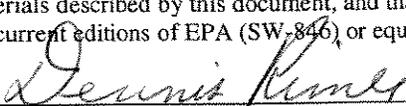
| | | | | | | |
|--|--|--|--|--|---|---|
| SECTION 5 Waste Characteristics | Flashpoint °F | pH | Turbidity | Viscosity | Fuel Values | |
| Liquid _____% Solid 100% Sludge _____% Debris _____% <input checked="" type="checkbox"/> % by weight <input type="checkbox"/> % by volume | # of Layers <u>1</u> Color _____ Odor _____ Specific Gravity _____ Density _____ Solids _____ | Note 1 Actual <input type="checkbox"/> >200 <input checked="" type="checkbox"/> >140-200 <input type="checkbox"/> >100-139 <input type="checkbox"/> <100 NA(no analysis) | <input type="checkbox"/> 0-2 <input type="checkbox"/> >2.1-4 <input checked="" type="checkbox"/> >4-10 <input type="checkbox"/> >10-12.4 <input type="checkbox"/> >12.5-14 | <input type="checkbox"/> Transparent <input type="checkbox"/> Translucent <input type="checkbox"/> Opaque <input checked="" type="checkbox"/> Other NA | <input type="checkbox"/> Light (water) NA <input type="checkbox"/> Medium (syrup) <input type="checkbox"/> Heavy (syrup) | <input checked="" type="checkbox"/> <5,000 BTU NA <input type="checkbox"/> 5,000-10,000 BTU <input type="checkbox"/> >10,000 BTU |

| | | | |
|---------------------------------------|---|--|--|
| Other Characteristics of Waste | | <input checked="" type="checkbox"/> None Apply | |
| Yes | No | Yes | No |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> Oxidizer | <input type="checkbox"/> | <input checked="" type="checkbox"/> Dioxin Listed (Storage Only) |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> Explosive (not acceptable) | <input type="checkbox"/> | <input checked="" type="checkbox"/> Infectious or Etiological (not acceptable) |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> Pyrophoric (not acceptable) | <input type="checkbox"/> | <input checked="" type="checkbox"/> Putrescible (not acceptable) |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> Water Reactive | <input type="checkbox"/> | <input checked="" type="checkbox"/> Autopolymerizable |
| | | <input type="checkbox"/> | <input checked="" type="checkbox"/> Liquid Organic Peroxide (not acceptable) |
| | | <input type="checkbox"/> | <input checked="" type="checkbox"/> Fuming/Smoking Waste |
| | | <input type="checkbox"/> | <input checked="" type="checkbox"/> Pressurized Gasses (other than aerosols, not acceptable) |
| | | <input type="checkbox"/> | <input checked="" type="checkbox"/> Solid Organic Peroxide |

| | | | |
|---|---|---|--|
| SECTION 6 Shipping Information DOT Shipping Name: Non-RCRA, Non-DOT Regulated Wastes | | | |
| Hazard Class/Div. | ID# (UN/NA) | Packing Group (PG) | RQ |
| <input type="checkbox"/> Soft Top Rolloff | <input type="checkbox"/> Vac Tanker | <input checked="" type="checkbox"/> 55 gal. (Fiber and Steel) | Quantity 52 estimated |
| <input type="checkbox"/> Hard Top Rolloff | <input type="checkbox"/> Cu Yd Box or Super Sack | <input type="checkbox"/> 30 gal. | Frequency 1X |
| <input type="checkbox"/> Gondola | <input type="checkbox"/> Shrink Wrapped Pallet | <input type="checkbox"/> 15 gal. | Overpacked Drums: Type 6 Size 85 gal. |
| <input type="checkbox"/> Intermodal | <input type="checkbox"/> Consumer Packaging | <input type="checkbox"/> 5 gal. | |
| <input type="checkbox"/> Tanker | <input type="checkbox"/> B-25 <input type="checkbox"/> B-12 | <input type="checkbox"/> 1 gal. | |
| <input checked="" type="checkbox"/> Other, please specify: 53' Box Trailer with Tractor | | | |

SECTION 7 Certification

The information contained herein is based on generator's knowledge and/or analytical data. I hereby certify that the above and attached description is complete and accurate to the best of my knowledge and ability to determine that no deliberate or willful omissions of composition properties exist and that all known suspected hazards have been disclosed. I certify that the sample(s) provided to WCS is representative of all materials described by this document, that the materials tested are representative of all materials described by this document, and that the methods of analysis used are the appropriate analytical methods as specified in the current editions of EPA (SW-846) or equivalent methods.

| | | |
|---|--|----------|
|  | Mr. Dennis Rimer, NFSS Site Superintendent | 5/9/2006 |
| Signature | Printed/Typed Name | Date |

NOTE 1

The contents of the solid IDW and waste drums had limited analyses for flashpoint during the VPG investigation activities (2 samples). A summary of the drums used to generate the flashpoint samples is as follows:

| Sample Identification | Composited Drums | Flashpoint (° F) |
|------------------------------|--|-------------------------|
| Composite Sample 1 | 0177750, 0177749, 177740, 0177739, 0177730, 0177540, 0177729, OPD-1, OPD-2, OPD-3, OPD-4, OPD-8, OPD-9 | > 140 |
| Composite Sample 2 | Lab Debris Drum | > 140 |

For the remaining drums, available laboratory analyses indicate that there are no or limited VOC concentrations associated with the contents of the drums that should result in flashpoints >140° F.

Check Appropriate Box: Storage Only Treatment/Disposal Treatment/3rd Party Disposal
 Direct Disposal Treatment/Return to Generator Disposal Site:

Radioactive Characteristics: Mixed Radioactive

Chemical Form: Solid – Investigation – derived Solid Waste Drums (Soil Cuttings/contact wastes) generated from Remedial Investigation Activities at Vicinity Property G in close proximity to the Niagara Falls Storage Site, Lewiston, New York.

Is material waste (Check one): Yes No Is material exempt (Check one): Yes No (WAC Section 3.2.1)

If Waste, what waste class (Check one): A B C or >C N/A
 (see Title 10 CFR 61.55 and 25 TAC 289.202 (ggg)(4))

Is material NORM (Check one): Yes No If NORM radium, please indicate Radon emanation rate: 2.28 pCi/m²/sec

Is material source material (Check one): Yes No

Grams of special nuclear material (Total for Profile): Pu 0 U-233 0 U-235 0

Highest dose rate in mR/hr: On contact _____ At 1 ft. Health Physicist will monitor
drums during loading process into transporters

Are the containers overpacked? (Check one): Yes No

Describe the packaging: 55-Gallon drums with several overpacks placed in a 53' Box Trailer with Tractor
 (See attached Tables for details related to radiological information associated with IDW and waste drums)

386 (est.) Total Cubic Feet

Radioactive Constituents:

List all radionuclides present in the waste, the concentration pCi/gm and the total activity in millicuries. (Attach additional sheets if necessary – please use the same table format as below.)

| Nuclide | Concentration Range (pCi/gm) | | | Total Activity (mCi) |
|---|------------------------------|-------|------|----------------------|
| | Min. | Max. | Avg. | |
| See page A-1 for where radionuclide analytical results can be found | | | | |
| Ra-226 | 0.104 | 65.12 | 4.56 | 0.046051 |
| Th-228 | 0.0 | 2.56 | 0.20 | 0.000939 |
| Th-230 | 0.113 | 31.14 | 2.27 | 0.019742 |
| U-233/234 | 0.05 | 19.45 | 1.43 | 0.014071 |
| U-235/236 | 0 | 1.76 | 0.14 | 0.001192 |
| U-238 | 0.06 | 22.02 | 1.65 | 0.014038 |

Generator's Certification:

The information contained herein is based on generator knowledge and/or analytical data. I hereby certify that the above and attached description is complete and accurate to the best of my knowledge and ability to determine that no deliberate or willful omissions of composition properties exist and that all known or suspected hazards have been disclosed. I certify that the sample(s) provided to WCS is representative of all materials described by this document, that the materials tested are representative of all materials described by this document, and that the methods of analysis used are the appropriate analytical methods as specified in the current editions of EPA (SW-846) or equivalent methods.

Authorized Signature: *Dennis Rimer* Date: 5/9/2006

Printed Name: Mr. Dennis Rimer Title: NFSS Site Superintendent

VPG IDW Drum Activity Summary (uCi)

| DRUM ID | Ra-226 | Th-228 | Th-230 | U-233/234 | U-235/236 | U-238 |
|---------------------|----------|----------|----------|-----------|-----------|----------|
| 6-A | 1.34 | 0.03 | 0.67 | 0.47 | 0.04 | 0.46 |
| 6-B | 0.03 | 0 | 0.02 | 0.01 | 0 | 0.01 |
| 6-C | 0.03 | 0 | 0.02 | 0.01 | 0 | 0.01 |
| 6-D | 0.03 | 0 | 0.02 | 0.01 | 0 | 0.01 |
| 6-E | 0.03 | 0 | 0.02 | 0.01 | 0 | 0.01 |
| 6-F | 0.03 | 0 | 0.02 | 0.01 | 0 | 0.01 |
| 6-G | 0.03 | 0 | 0.02 | 0.01 | 0 | 0.01 |
| 6-I | 0.03 | 0 | 0.02 | 0.01 | 0 | 0.01 |
| 6-J | 0.03 | 0 | 0.02 | 0.01 | 0 | 0.01 |
| 6-K | 0.03 | 0 | 0.02 | 0.01 | 0 | 0.01 |
| 6-M | 1.34 | 0.03 | 0.67 | 0.47 | 0.04 | 0.46 |
| 6-N | 0.03 | 0 | 0.02 | 0.01 | 0 | 0.01 |
| 6-P | 0.03 | 0 | 0.02 | 0.01 | 0 | 0.01 |
| 148 | 0.03 | 0 | 0.02 | 0.01 | 0 | 0.01 |
| 149 | 0.03 | 0 | 0.02 | 0.01 | 0 | 0.01 |
| 150 | 0.03 | 0 | 0.02 | 0.01 | 0 | 0.01 |
| 151 | 0.03 | 0 | 0.02 | 0.01 | 0 | 0.01 |
| Lab Debris | 13.1 | 0.12 | 2.78 | 2 | 0.15 | 1.95 |
| Plastic Sheeting | 1.34 | 0.03 | 0.67 | 0.47 | 0.04 | 0.46 |
| Decon Solids | 10.8 | 0.24 | 5.42 | 3.82 | 0.3 | 3.75 |
| 117 | 0.03 | 0 | 0.02 | 0.01 | 0 | 0.01 |
| 177729 | 0.021 | 0.009 | 0.034 | 0.043 | 0.01 | 0.058 |
| 177540 | 0.021 | 0.009 | 0.034 | 0.043 | 0.01 | 0.058 |
| 177730 | 0.021 | 0.009 | 0.034 | 0.043 | 0.01 | 0.058 |
| 177739 | 0.021 | 0.009 | 0.034 | 0.043 | 0.01 | 0.058 |
| 177740 | 0.021 | 0.009 | 0.034 | 0.043 | 0.01 | 0.058 |
| 177749 | 0.021 | 0.009 | 0.034 | 0.043 | 0.01 | 0.058 |
| 177750 | 0.021 | 0.009 | 0.034 | 0.043 | 0.01 | 0.058 |
| 177738 | 0.024 | 0.011 | 0.039 | 0.05 | 0.012 | 0.067 |
| 177728 | 0.024 | 0.011 | 0.039 | 0.05 | 0.012 | 0.067 |
| 177733 | 0.024 | 0.011 | 0.039 | 0.05 | 0.012 | 0.067 |
| 177734 | 0.024 | 0.011 | 0.039 | 0.05 | 0.012 | 0.067 |
| 177737 | 0.024 | 0.011 | 0.039 | 0.05 | 0.012 | 0.067 |
| 177727 | 0.024 | 0.011 | 0.039 | 0.05 | 0.012 | 0.067 |
| CB-1 | 2.02 | 0.04 | 1.02 | 0.71 | 0.06 | 0.7 |
| CB-2 | 2.02 | 0.04 | 1.02 | 0.71 | 0.06 | 0.7 |
| CB-3 | 2.02 | 0.04 | 1.02 | 0.71 | 0.06 | 0.7 |
| CB-4 | 2.02 | 0.04 | 1.02 | 0.71 | 0.06 | 0.7 |
| CB-5 | 2.02 | 0.04 | 1.02 | 0.71 | 0.06 | 0.7 |
| CB-6 | 2.02 | 0.04 | 1.02 | 0.71 | 0.06 | 0.7 |
| SF-1 | 0.04 | 0 | 0.02 | 0.01 | 0 | 0.01 |
| SF-2 | 0.04 | 0 | 0.02 | 0.01 | 0 | 0.01 |
| SF-3 | 0.04 | 0 | 0.02 | 0.01 | 0 | 0.01 |
| SF-4 | 0.04 | 0 | 0.02 | 0.01 | 0 | 0.01 |
| SF-5 | 0.04 | 0 | 0.02 | 0.01 | 0 | 0.01 |
| SF-6 | 0.04 | 0 | 0.02 | 0.01 | 0 | 0.01 |
| SF-7 | 0.04 | 0 | 0.02 | 0.01 | 0 | 0.01 |
| SF-8 | 0.04 | 0 | 0.02 | 0.01 | 0 | 0.01 |
| PS-1 | 1.64 | 0.04 | 0.82 | 0.58 | 0.04 | 0.57 |
| PS-2 | 1.64 | 0.04 | 0.82 | 0.58 | 0.04 | 0.57 |
| PS-3 | 1.64 | 0.04 | 0.82 | 0.58 | 0.04 | 0.57 |
| AVERAGE | 0.92102 | 0.01878 | 0.39484 | 0.28142 | 0.02384 | 0.28076 |
| Max | 13.1 | 0.24 | 5.42 | 3.82 | 0.3 | 3.75 |
| Min | 0.021 | 0 | 0.02 | 0.01 | 0 | 0.01 |
| Total Activity(uCi) | 46.051 | 0.939 | 19.742 | 14.071 | 1.192 | 14.038 |
| Total Activity(mCi) | 0.046051 | 0.000939 | 0.019742 | 0.014071 | 0.001192 | 0.014038 |

ATTACHMENT 3-2

VICINITY PROPERTY G (VPG) IDW/WASTE DRUM CHARACTERIZATION

- **Drum Inventory**

| Lab Debris Samples | |
|---------------------|-----------|
| LDG01-3012-03.0-021 | 9/16/2002 |
| LDG01-3013-03.0-010 | 9/16/2002 |
| LDG01-3014-03.0-015 | 9/16/2002 |
| LDG02-3017-03.0-001 | 9/16/2002 |
| LDG04-3037-01.0-013 | 9/16/2002 |
| Trench Samples | |
| TBG01-3000-06.0-050 | 9/11/2002 |
| TBG01-3001-03.0-021 | 9/12/2002 |
| TBG01-3002-02.0-025 | 9/11/2002 |
| TBG01-3003-05.0-016 | 9/12/2002 |
| TBG01-3004-02.0-000 | 9/13/2002 |
| TBG01-3070-03.0-021 | 9/12/2002 |
| TBG02-2857-02.0 | 5/22/2002 |
| TBG02-2858-02.0 | 5/22/2002 |
| TBG02-3015-04.5-001 | 9/16/2002 |
| TBG02-3072-02.0 | 5/22/2002 |
| TBG02-3073-02.0-001 | 9/16/2002 |
| TBG02-3076-02.0-001 | 9/16/2002 |
| TBG03-3018-01.0-011 | 9/14/2002 |
| TBG03-3071-01.0-011 | 9/16/2002 |
| TBG03-3074-01.0-011 | 9/16/2002 |
| TBG04-3025-01.0-010 | 9/13/2002 |
| TBG04-3026-05.0-013 | 9/13/2002 |
| TBG04-3027-04.0-027 | 9/13/2002 |
| TBG04-3028-06.0-030 | 9/13/2002 |
| TBG04-3029-04.0-040 | 9/13/2002 |
| TBG05-3040-05.0-012 | 9/14/2002 |
| TBG05-3041-10.0-014 | 9/14/2002 |
| TBG05-3042-04.0-035 | 9/14/2002 |
| TBG05-3043-03.0-045 | 9/14/2002 |
| TBG05-3044-07.0-050 | 9/14/2002 |
| TBG06-3056-02.0-035 | 9/15/2002 |
| TBG06-3057-02.0-045 | 9/15/2002 |
| TBG06-3058-01.0-070 | 9/15/2002 |
| TSG06-3055-015 | 9/15/2002 |
| TSG06-3059-085 | 9/15/2002 |

| Drum ID | SAIC Drum# | Gen. Date | Drum Contents | Drum Type | Field Gen. Event |
|----------------------|------------|-----------|---------------------------------|-----------|---|
| Drum 6-A | 168 | Jun-02 | Spoil Pile tarps | 55 gallon | May 2002 Trenching Mobilization |
| Drum 6-B | 173 | Jun-02 | PPE | 55 gallon | May 2002 Trenching Mobilization |
| Drum 6-C | 175 | Jun-02 | PPE | 55 gallon | May 2002 Trenching Mobilization |
| Drum 6-D | 165 | Jun-02 | PPE | 55 gallon | May 2002 Trenching Mobilization |
| Drum 6-E | 164 | Jun-02 | PPE | 55 gallon | May 2002 Trenching Mobilization |
| Drum 6-F | 163 | Jun-02 | PPE | 55 gallon | May 2002 Trenching Mobilization |
| Drum 6-G | 177 | Jun-02 | PPE | 55 gallon | May 2002 Trenching Mobilization |
| Drum 6-I | 176 | Jun-02 | PPE | 55 gallon | May 2002 Trenching Mobilization |
| Drum 6-J | 166 | Jun-02 | PPE | 55 gallon | May 2002 Trenching Mobilization |
| Drum 6-K | 172 | Jun-02 | PPE | 55 gallon | May 2002 Trenching Mobilization |
| Drum 6-M | 169 | Jun-04 | Spoil Pile tarps | 55 gallon | May 2002 Trenching Mobilization |
| Drum 6-N | 174 | Jun-02 | PPE | 55 gallon | May 2002 Trenching Mobilization |
| Drum 6-P | 167 | Jun-02 | PPE | 55 gallon | May 2002 Trenching Mobilization |
| VPG PPE | 148 | Sep-02 | PPE | 55 gallon | September 2002 VPG Trenching Mobilization |
| VPG PPE | 149 | Sep-02 | PPE | 55 gallon | September 2002 VPG Trenching Mobilization |
| VPG PPE | 150 | Sep-02 | PPE | 55 gallon | September 2002 VPG Trenching Mobilization |
| VPG PPE | 151 | Sep-02 | PPE | 55 gallon | September 2002 VPG Trenching Mobilization |
| VPG Lab Debris | NA | Sep-02 | Soil and Lab Debris | 55 gallon | September 2002 VPG Trenching Mobilization |
| VPG Plastic Sheeting | NA | Sep-02 | Plastic Sheeting | 55 gallon | September 2002 VPG Trenching Mobilization |
| VPG Decon Solids | NA | Sep-02 | Decon Solids | 55 gallon | September 2002 VPG Trenching Mobilization |
| VPG PPE | 117 | Sep-02 | PPE, plastic tarps | 55 gallon | September 2002 VPG Trenching Mobilization |
| 0177729 | NA | July-03 | Soil/Debris - Drums 9 to 15 VPG | 55 gallon | Drum Task - July 2003 |
| 0177540 | NA | July-03 | Soil/Debris - Drums 9 to 15 VPG | 55 gallon | Drum Task - July 2003 |
| 0177730 | NA | July-03 | Soil/Debris - Drums 9 to 15 VPG | 55 gallon | Drum Task - July 2003 |
| 0177739 | NA | July-03 | Soil/Debris - Drums 9 to 15 VPG | 55 gallon | Drum Task - July 2003 |
| 0177740 | NA | July-03 | Soil/Debris - Drums 9 to 15 VPG | 55 gallon | Drum Task - July 2003 |
| 0177749 | NA | July-03 | Soil/Debris - Drums 9 to 15 VPG | 55 gallon | Drum Task - July 2003 |
| 0177750 | NA | July-03 | Soil/Debris - Drums 9 to 15 VPG | 55 gallon | Drum Task - July 2003 |
| 0177738 | NA | July-03 | Soil/Debris - Drums 9 to 15 VPG | Overpack | Drum Task - July 2003 |
| 0177728 | NA | July-03 | Soil/Debris - Drums 9 to 15 VPG | Overpack | Drum Task - July 2003 |
| 0177733 | NA | July-03 | Soil/Debris - Drums 9 to 15 VPG | Overpack | Drum Task - July 2003 |
| 0177734 | NA | July-03 | Soil/Debris - Drums 9 to 15 VPG | Overpack | Drum Task - July 2003 |
| 0177737 | NA | July-03 | Soil/Debris - Drums 9 to 15 VPG | Overpack | Drum Task - July 2003 |
| 0177727 | NA | July-03 | Soil/Debris - Drums 9 to 15 VPG | Overpack | Drum Task - July 2003 |
| Carboy 1 | NA | 2005 | Cut up Carboys | Soil Bag | Demob - 2005 |
| Carboy 2 | NA | 2005 | Cut up Carboys | Soil Bag | Demob - 2005 |
| Carboy 3 | NA | 2005 | Cut up Carboys | Soil Bag | Demob - 2005 |
| Carboy 4 | NA | 2005 | Cut up Carboys | Soil Bag | Demob - 2005 |
| Carboy 5 | NA | 2005 | Cut up Carboys | Soil Bag | Demob - 2005 |
| Carboy 6 | NA | 2005 | Cut up Carboys | Soil Bag | Demob - 2005 |
| Styrofoam 1 | NA | 2005 | Styrofoam | Soil Bag | Demob - 2005 |
| Styrofoam 2 | NA | 2005 | Styrofoam | Soil Bag | Demob - 2005 |
| Styrofoam 3 | NA | 2005 | Styrofoam | Soil Bag | Demob - 2005 |
| Styrofoam 4 | NA | 2005 | Styrofoam | Soil Bag | Demob - 2005 |
| Styrofoam 5 | NA | 2005 | Styrofoam | Soil Bag | Demob - 2005 |
| Styrofoam 6 | NA | 2005 | Styrofoam | Soil Bag | Demob - 2005 |
| Styrofoam 7 | NA | 2005 | Styrofoam | Soil Bag | Demob - 2005 |
| Styrofoam 8 | NA | 2005 | Styrofoam | Soil Bag | Demob - 2005 |
| Plastic Sheeting 1 | NA | 2005 | Plastic Sheeting | Soil Bag | Demob - 2005 |
| Plastic Sheeting 2 | NA | 2005 | Plastic Sheeting | Soil Bag | Demob - 2005 |
| Plastic Sheeting 3 | NA | 2005 | Plastic Sheeting | Soil Bag | Demob - 2005 |

ATTACHMENT 3-3

VICINITY PROPERTY G (VPG) IDW/WASTE DRUM CHARACTERIZATION

- **Chemical/Radiological Characterization for Soil Cuttings
And Waste Drums**

USEPA QUALIFIERS FOR ANALYTICAL RESULTS

ORGANIC COMPOUND QUALIFIERS

- U = Indicates compound was analyzed for but not detected.
- J = Indicates an estimated value.
- N = Indicates presumptive evidence of a compound. This flag is only used for tentatively identified compounds.
- P = This flag is used for a pesticide/Aroclor target analyte where there is greater than 25% difference for detected concentrations between the two GC columns.
- C = This flag applies to pesticide results where the identification has been confirmed by GC/MS.
- B = This flag is used when the analyte is found in the associated blank as well as in the sample. It indicates possible/probable blank contamination and warns the data user to take appropriate action.
- E = This flag identifies compounds whose concentrations exceed the calibration range of the GC/MS instrument for that specific analysis.
- D = This flag identifies all compounds identified in an analysis at a secondary dilution factor. A = This flag indicates that a tentatively identified compound (TIC) is a suspected aldol-condensation product.
- X = Other specific flags may be required to properly define the results. If used, they must be fully described and such description attached to the Sample Data Summary Package and the SDG Narrative.
- H = Analytical holding time exceeded.
- h = Sample preparation or preservation holding time exceeded.

INORGANIC COMPOUND QUALIFIERS

C = Concentration qualifier - Enter "B" if the reported value was obtained from a reading that was less than the Contract Required Detection Limit (CRDL) but greater than or equal to the Instrument Detection Limit (IDL). If the analyte was analyzed for but not detected, a "U" must be entered.

Q = Qualifier - Specified entries and their meanings are as follows:

E = The reported value is estimated because of the presence of interference.

M = Duplicate injection precision not met.

N = Spiked sample recovery not within control limits. •

S = The reported value was determined by the Method of Standard Additions (MSA).

W = Post-digestion spike for Furnace AA analysis is out of control limits (85-115%), while sample absorbance is less than 50% of spike absorbance.

* = Duplicate analysis not within control limits. + = Correlation

coefficient for the MSA is less than 0.995.

H = Analytical holding time exceeded.

h = Sample preparation or preservation holding time exceeded.

Drum #'s

0177750, 0177749, 0177740, 0177739, 0177730, 0177540, 0177729

OPD-1 (0177738), OPD-2 (0177728), OPD-3 (0177733)

OPD-4 (0177734), OPD-8 (0177737), OPD-9 (0177727)

| Corrosivity, Flashpoint-140, PaintFilter, Reactive Releasable Cyanide, Reactive Releasable Sulfide EPA Method 9045C, 1010, 9095, SW846 7.3.3, SW846 Chpt. 7.3.4 Niagara Falls Storage Site (NFSS), Lewiston, New York | | | | |
|---|-----------------------------|--------------|-----------|--|
| Sample No. | | VPGOPD1-3367 | | Hazardous Waste Regulatory Limits |
| Drum Tag Number | | See above | | |
| Lab ID | | 84146002 | | |
| Collection Date | | 7/13/03 | | |
| Received Date | | 7/15/03 | | |
| SDG | | S-9-8 | | |
| Dilution Factor | | 1 | | |
| CAS Number | Parameter | EPA HW No. | Results * | |
| NA | Corrosivity | D002 | 10.2 H | >2 - <12.5 Std pH Units |
| NA | Flashpoint-140 | D001 | >140 | <140 Degree F. |
| NA | Paint Filter | - | PASS | Pass/Fail |
| NA | Reactive Releasable Cyanide | D003 | 6.34 U | 250,000 ug/Kg |
| NA | Reactive Releasable Sulfide | D003 | 23.3 U | 500 mg/Kg |

Note: * Reporting units are the same as the reporting units in the Hazardous Waste Regulatory Limits column.

Drum #'s

0177750, 0177749, 0177740, 0177739, 0177730, 0177540, 0177729
 OPD-1 (0177738), OPD-2 (0177728), OPD-3 (0177733)
 OPD-4 (0177734), OPD-8 (0177737), OPD-9 (0177727)

| TCLP Herbicides (mg/L) EPA Method 1311/8151A Niagara Falls Storage Site (NFSS), Lewiston, New York | | | | |
|--|-----------|--------------|----------|---------------------------------------|
| Sample No. | | VPGOPD1-3367 | | TCLP Regulatory Limit (mg/L) |
| Drum Tag Number | | See above | | |
| Lab ID | | 84146002 | | |
| Batch No. | | 266250 | | |
| Collection Date | | 7/13/03 | | |
| Received Date | | 7/15/03 | | |
| Extraction Date | | 7/30/03 | | |
| Analysis Date | | 8/5/03 | | |
| SDG | | S-9-8 | | |
| Dilution Factor | | 20 | | |
| CAS Number | Parameter | EPA HW No. | Results | |
| 93-72-1 | 2,4,5-TP | D017 | 0.0188 U | 1.0 |
| 94-75-7 | 2,4-D | D016 | 0.018 U | 10.0 |

Drum #'s

0177750, 0177749, 0177740, 0177739, 0177730, 0177540, 0177729
 OPD-1 (0177738), OPD-2 (0177728), OPD-3 (0177733)
 OPD-4 (0177734), OPD-8 (0177737), OPD-9 (0177727)

| TCLP Metals (mg/L) | | | | |
|---|-----------|--------------|---------|---------------------------------------|
| EPA Methods 1311/6010B/7470A | | | | |
| Niagara Falls Storage Site (NFSS), Lewiston, New York | | | | |
| Sample No. | | VPGOPD1-3367 | | TCLP Regulatory Limit (mg/L) |
| Drum Tag Number | | See above | | |
| Lab ID | | 84146002 | | |
| Batch No. | | 267225 | | |
| Collection Date | | 7/13/03 | | |
| Received Date | | 7/15/03 | | |
| Extraction Date | | 8/1/03 | | |
| Analysis Date | | 8/4/03 | | |
| SDG | | S-9-8 | | |
| CAS Number | Parameter | EPA HW No. | Results | |
| 7440-38-2 | Arsenic | D004 | 0.024 U | 5.0 |
| 7440-39-3 | Barium | D005 | 0.096 | 100.0 |
| 7440-43-9 | Cadmium | D006 | 0.006 U | 1.0 |
| 7440-47-3 | Chromium | D007 | 0.021 U | 5.0 |
| 7439-92-1 | Lead | D008 | 0.021 U | 5.0 |
| 7439-97-6 | Mercury | D009 | 0.001 U | 0.2 |
| 7782-49-2 | Selenium | D010 | 0.046 U | 1.0 |
| 7440-22-4 | Silver | D011 | 0.02 U | 5.0 |

Drum #'s

0177750, 0177749, 0177740, 0177739, 0177730, 0177540, 0177729
 OPD-1 (0177738), OPD-2 (0177728), OPD-3 (0177733)
 OPD-4 (0177734), OPD-8 (0177737), OPD-9 (0177727)

| TCLP Pesticides (mg/L) EPA Method 1311/8081A Niagara Falls Storage Site (NFSS), Lewiston, New York | | | | |
|--|---------------------|--------------|------------|---------------------------------------|
| Sample No. | | VPGOPD1-3367 | | TCLP Regulatory Limit (mg/L) |
| Drum Tag Number | | See above | | |
| Lab ID | | 84146002 | | |
| Batch No. | | 266200 | | |
| Collection Date | | 7/13/03 | | |
| Received Date | | 7/15/03 | | |
| Extraction Date | | 7/29/03 | | |
| Analysis Date | | 8/1/03 | | |
| SDG | | S-9-8 | | |
| Dilution Factor | | 1 | | |
| CAS Number | Parameter | EPA HW No. | Results | |
| 57-74-9 | Chlordane (tech.) | D020 | 0.00155 U | 0.03 |
| 72-20-8 | Endrin | D012 | 0.000038 U | 0.02 |
| 58-89-9 | gamma-BHC (Lindane) | D013 | 0.000021 U | 0.4 |
| 76-44-8 | Heptachlor | D031 | 0.000059 U | 0.008 |
| 1024-57-3 | Heptachlor epoxide | D031 | 0.00003 U | 0.008 |
| 72-43-5 | Methoxychlor | D014 | 0.000278 U | 10.0 |
| 8001-35-2 | Toxaphene | D015 | 0.00105 U | 0.5 |

Drum #'s

0177750, 0177749, 0177740, 0177739, 0177730, 0177540, 0177729
 OPD-1 (0177738), OPD-2 (0177728), OPD-3 (0177733)
 OPD-4 (0177734), OPD-8 (0177737), OPD-9 (0177727)

| TCLP Semivolatile Organic Compounds (mg/L) EPA Method 1311/8270C Niagara Falls Storage Site (NFSS), Lewiston, New York | | | | |
|--|-----------------------|--------------|-----------|---------------------------------------|
| Sample No. | | VPGOPD1-3367 | | TCLP Regulatory Limit (mg/L) |
| Drum Tag Number | | See above | | |
| Lab ID | | 84146002 | | |
| Batch No. | | 266299 | | |
| Collection Date | | 7/13/03 | | |
| Received Date | | 7/15/03 | | |
| Extraction Date | | 7/30/03 | | |
| Analysis Date | | 8/2/03 | | |
| SDG | | S-9-8 | | |
| Dilution Factor | | 1 | | |
| CAS Number | Parameter | EPA HW No. | Results | |
| 106-46-7 | 1,4-Dichlorobenzene | D027 | 0.00155 U | 7.5 |
| 95-95-4 | 2,4,5-Trichlorophenol | D041 | 0.00485 U | 400.0 |
| 88-06-2 | 2,4,6-Trichlorophenol | D042 | 0.00195 U | 2.0 |
| 121-14-2 | 2,4-Dinitrotoluene | D030 | 0.0035 U | 0.13 |
| 95-48-7 | 2-Methylphenol | D023 | 0.00225 U | 200.0 |
| 118-74-1 | Hexachlorobenzene | D032 | 0.00325 U | 0.13 |
| 87-68-3 | Hexachlorobutadiene | D033 | 0.0016 U | 0.5 |
| 67-72-1 | Hexachloroethane | D034 | 0.00215 U | 3.0 |
| 106-44-5 | m,p-Cresols | D024/D025 | 0.00295 U | 200.0 |
| 98-95-3 | Nitrobenzene | D036 | 0.00315 U | 2.0 |
| 87-86-5 | Pentachlorophenol | D037 | 0.025 U | 100.0 |
| 110-86-1 | Pyridine | D038 | 0.025 U | 5.0 |

Drum #'s

0177750, 0177749, 0177740, 0177739, 0177730, 0177540, 0177729

OPD-1 (0177738), OPD-2 (0177728), OPD-3 (0177733)

OPD-4 (0177734), OPD-8 (0177737), OPD-9 (0177727)

| TCLP Volatile Organic Compounds (mg/L) | | | | |
|---|----------------------|--------------|----------|---------------------------------------|
| EPA Method 1311/8260B | | | | |
| Niagara Falls Storage Site (NFSS), Lewiston, New York | | | | |
| Sample No. | | VPGOPD1-3367 | | TCLP Regulatory Limit (mg/L) |
| Drum Tag Number | | See above | | |
| Lab ID | | 84146002 | | |
| Batch No. | | 267126 | | |
| Collection Date | | 7/13/03 | | |
| Received Date | | 7/15/03 | | |
| Extraction Date | | 7/24/03 | | |
| Analysis Date | | 7/30/03 | | |
| SDG | | S-9-8 | | |
| Dilution Factor | | 10 | | |
| CAS Number | Parameter | EPA HW No. | Results | |
| 75-35-4 | 1,1-Dichloroethene | D029 | 0.0041 U | 0.7 |
| 107-06-2 | 1,2-Dichloroethane | D028 | 0.0029 U | 0.5 |
| 106-46-7 | 1,4-Dichlorobenzene | D027 | 0.0025 U | 7.5 |
| 78-93-3 | 2-Butanone | D035 | 0.0231 U | 200.0 |
| 71-43-2 | Benzene | D018 | 0.0033 U | 0.5 |
| 56-23-5 | Carbon tetrachloride | D019 | 0.0029 U | 0.5 |
| 108-90-7 | Chlorobenzene | D021 | 0.0032 U | 100.0 |
| 67-66-3 | Chloroform | D022 | 0.0036 U | 6.0 |
| 127-18-4 | Tetrachloroethene | D039 | 0.0033 U | 0.7 |
| 79-01-6 | Trichloroethene | D040 | 0.0036 U | 0.5 |
| 75-01-4 | Vinyl chloride | D043 | 0.0055 U | 0.2 |

Drum #'s

0177750, 0177749, 0177740, 0177739, 0177730, 0177540, 0177729

OPD-1 (0177738), OPD-2 (0177728), OPD-3 (0177733)

OPD-4 (0177734), OPD-8 (0177737), OPD-9 (0177727)

RAD (pCi/g) and Total Uranium (ug/g)
EPA Method 900, 905, HASL 300, ASTM D5174, GL-RAD-A-041
Niagara Falls Storage Site (NFSS), Lewiston, New York

| Sample No. | RS-DRUM9-3384 | RS-DRUM10-3385 | RS-DRUM11-3386 | RS-DRUM12-3387 | |
|-----------------|--------------------------|----------------|----------------|----------------|-----------|
| Drum Tag Number | See above | See above | See above | See above | |
| Lab ID | 83954018 | 83954019 | 83954020 | 83996007 | |
| Batch No. | 264600 | 264600 | 264600 | 264601 | |
| Collected Date | 7/11/03 | 7/11/03 | 7/11/03 | 7/11/03 | |
| Received Date | 7/12/03 | 7/12/03 | 7/12/03 | 7/15/03 | |
| Analysis Date | 8/25/03 | 8/25/03 | 8/25/03 | 8/23/03 | |
| SDG | S-9-6 | S-9-6 | S-9-6 | S-9-7 | |
| CAS Number | Parameter | Results | | | |
| 14952-40-0 | Actinium-227, Gamma | 0.0222 U | -0.0162 U | 0.0289 U | 0.0672 U |
| 12587-46-1 | ALPHA | 1.72 | 0.123 U | 0.504 U | 0.435 U |
| 14596-10-2 | Americium-241, Gamma | 0.0105 U | 0.0103 U | 0.00387 U | 0.00456 U |
| 12587-47-2 | BETA | 1.09 U | 0.0383 U | 0.561 U | 1.76 |
| 10045-97-3 | Cesium-137, Gamma | 0.0324 | 0.00599 U | 0.00795 U | 0.00284 U |
| 10198-40-0 | Cobalt-60, Gamma | -0.00423 U | 0.0106 U | 0.00787 U | 0.00813 U |
| 13981-16-3 | Plutonium-238, Alpha | 0 U | -0.0076 U | -0.00718 U | -0.0347 U |
| OER-100-70 | Plutonium-239/240, Alpha | 0.017 U | 0 U | -0.00718 U | -0.0289 U |
| 14331-85-2 | Protactinium-231, Gamma | 0.0369 U | -0.0148 U | 0.268 U | -0.487 U |
| 13982-63-3 | Radium-226, Gamma | 0.109 | 0.145 | 0.019 U | 0.0528 |
| 15262-20-1 | Radium-228, Gamma | 0.0389 U | 0.0829 U | 0.0117 U | 0.0404 U |
| 10098-97-2 | Strontium-90 | 0.00959 U | -0.0636 U | 0.115 U | 0.129 U |
| 14274-82-9 | Thorium-228, Alpha | 0.3 U | -1.48 U | 0.416 U | 0.449 U |
| 14274-82-9 | Thorium-228, Gamma | 0.0211 U | 0 UUI | 0.00273 U | 0.00298 U |
| 14269-63-7 | Thorium-230, Alpha | 0.243 U | 1.11 U | 0.573 U | 0.251 U |
| 7440-29-1 | Thorium-232, Alpha | 0.107 U | 0.16 U | 0.309 U | -0.0448 U |
| NA | Total Activity | -1.85 U | -3.92 U | 0.577 U | 3.11 U |
| 7440-61-1 | Total Uranium | 0.171 | 0.383 | 0.0525 U | 1.24 |
| 13966-29-5 | Uranium-233/234, Alpha | -0.127 U | 0.0286 U | 0.0671 U | 0.702 |
| 15117-96-1 | Uranium-235, Gamma | 0 UUI | 0.0678 U | 0.0299 U | 0 UUI |
| 15117-96-1 | Uranium-235/236, Alpha | 0.0131 U | 0.0505 U | 0.058 U | 0.0958 |
| 7440-61-1 | Uranium-238, Alpha | 0.153 U | 0.0504 U | 0.132 | 0.622 |
| 7440-61-1 | Uranium-238, Gamma | 0.0282 U | 0 UUI | 0.386 U | 0.436 |

Drum #'s

0177750, 0177749, 0177740, 0177739, 0177730, 0177540, 0177729
 OPD-1 (0177738), OPD-2 (0177728), OPD-3 (0177733)
 OPD-4 (0177734), OPD-8 (0177737), OPD-9 (0177727)

| Metals (mg/Kg) | | | | | |
|---|-----------|------------|---|---------------------------------------|-------|
| EPA Methods (6010B/6020/7471A) | | | | | |
| Niagara Falls Storage Site (NFSS), Lewiston, New York | | | | | |
| Sample No. | | | RS-DRUM9-3384 | | |
| Drum Tag Number | | | See above | | |
| Lab ID | | | 83954018 | | |
| Batch No. | | | 267432 | | |
| Collection Date | | | 7/11/03 | | |
| Received Date | | | 7/12/03 | | |
| Extraction Date | | | 8/7/03 | | |
| Analysis Date | | | 8/15/03 | | |
| SDG | | | S-9-6 | | |
| | | | Estimated Maximum Leachate Concentration (mg/L) | TCLP Regulatory Limit (mg/L) | |
| CAS Number | Parameter | EPA HW No. | Results | | |
| 7429-90-5 | Aluminum | - | 1600 E* | 80.0 | - |
| 7440-36-0 | Antimony | - | 0.593 BN | 0.030 | - |
| 7440-38-2 | Arsenic | D004 | 0.26 UN* | 0.01 | 5.0 |
| 7440-39-3 | Barium | D005 | 25.1 * | 1.3 | 100.0 |
| 7440-41-7 | Beryllium | - | 5.46 E* | 0.27 | - |
| 7440-42-8 | Boron | - | 9.51 E*N | 0.48 | - |
| 7440-43-9 | Cadmium | D006 | 0.626 B | 0.031 | 1.0 |
| 7440-70-2 | Calcium | - | 5070 * | 254 | - |
| 7440-47-3 | Chromium | D007 | 2.95 *N | 0.15 | 5.0 |
| 7440-48-4 | Cobalt | - | 5.26 * | 0.26 | - |
| 7440-50-8 | Copper | - | 6.21 E*N | 0.31 | - |
| 7439-89-6 | Iron | - | 2080 E* | 104 | - |
| 7439-92-1 | Lead | D008 | 8.66 N | 0.43 | 5.0 |
| 7439-93-2 | Lithium | - | 1.74 B | 0.09 | - |
| 7439-95-4 | Magnesium | - | 222000 * | 11100 | - |
| 7439-96-5 | Manganese | - | 57.1 * | 2.9 | - |
| 7439-97-6 | Mercury | D009 | 0.054 * | 0.003 | 0.2 |
| 7440-02-0 | Nickel | - | 2.18 * | 0.11 | - |
| 7440-09-7 | Potassium | - | 612 * | 30.6 | - |
| 7782-49-2 | Selenium | D010 | 0.342 B | 0.017 | 1.0 |
| 7440-22-4 | Silver | D011 | 2.9 E | 0.1 | 5.0 |
| 7440-23-5 | Sodium | - | 228 E* | 11.4 | - |
| 7440-28-0 | Thallium | - | 0.013 BE | 0.001 | - |
| 7440-62-2 | Vanadium | - | 2.34 E*N | 0.12 | - |
| 7440-66-6 | Zinc | - | 93.5 E*N | 4.7 | - |

Drum #'s

0177750, 0177749, 0177740, 0177739, 0177730, 0177540, 0177729

OPD-1 (0177738), OPD-2 (0177728), OPD-3 (0177733)

OPD-4 (0177734), OPD-8 (0177737), OPD-9 (0177727)

| PCB (ug/Kg) | | | | | |
|---|--------------|------------|---------------|--|---|
| EPA Method 8082 | | | | | |
| Niagara Falls Storage Site (NFSS), Lewiston, New York | | | | | |
| Sample No. | | | RS-DRUM9-3384 | | |
| Drum Tag Number | | | See above | | |
| Lab ID | | | 83954018 | | |
| Batch No. | | | 263634 | | |
| Collection Date | | | 7/11/03 | | |
| Received Date | | | 7/12/03 | | |
| Extraction Date | | | 7/21/03 | | |
| Analysis Date | | | 8/15/03 | | |
| SDG | | | S-9-6 | | |
| Dilution Factor | | | 1 | | |
| | | | | Estimated Maximum Leachate Concentration (ug/L) | TCLP Regulatory Limit (ug/L) |
| CAS Number | Parameter | EPA HW No. | Results | | |
| 12674-11-2 | Aroclor-1016 | - | 1.46 U | | |
| 11104-28-2 | Aroclor-1221 | - | 4.12 U | | |
| 11141-16-5 | Aroclor-1232 | - | 2.44 U | | |
| 53469-21-9 | Aroclor-1242 | - | 2.44 U | | |
| 12672-29-6 | Aroclor-1248 | - | 1.46 U | | |
| 11097-69-1 | Aroclor-1254 | - | 3.7 J | | |
| 11096-82-5 | Aroclor-1260 | - | 5 | | |
| | | | | | |
| | | | | 0.206 | - |
| | | | | 0.122 | - |
| | | | | 0.122 | - |
| | | | | 0.073 | - |
| | | | | 0.185 | - |
| | | | | 0.25 | - |

Drum #'s

0177750, 0177749, 0177740, 0177739, 0177730, 0177540, 0177729
 OPD-1 (0177738), OPD-2 (0177728), OPD-3 (0177733)
 OPD-4 (0177734), OPD-8 (0177737), OPD-9 (0177727)

| Pesticides (ug/Kg) EPA Method 8081A Niagara Falls Storage Site (NFSS), Lewiston, New York | | | | | |
|---|--------------------|---------------|---------|---|---------------------------------------|
| Sample No. | | RS-DRUM9-3384 | | Estimated Maximum Leachate Concentration (ug/L) | TCLP Regulatory Limit (ug/L) |
| Drum Tag Number | | See above | | | |
| Lab ID | | 83954018 | | | |
| Batch No. | | 263677 | | | |
| Collection Date | | 7/11/03 | | | |
| Received Date | | 7/12/03 | | | |
| Extraction Date | | 7/22/03 | | | |
| Analysis Date | | 8/18/03 | | | |
| SDG | | S-9-6 | | | |
| Dilution Factor | | 5 | | | |
| CAS Number | Parameter | EPA HW No. | Results | | |
| 72-54-8 | 4,4'-DDD | - | 1.53 U | - | - |
| 72-55-9 | 4,4'-DDE | - | 1.32 U | - | - |
| 50-29-3 | 4,4'-DDT | - | 3.42 J | - | - |
| 309-00-2 | Aldrin | - | 1.25 U | - | - |
| 319-84-6 | alpha-BHC | - | 0.844 U | - | - |
| 5103-71-9 | alpha-Chlordane | - | 1.49 U | - | - |
| 319-85-7 | beta-BHC | - | 0.693 U | - | - |
| 319-86-8 | delta-BHC | - | 0.693 U | - | - |
| 60-57-1 | Dieldrin | - | 3.83 J | - | - |
| 959-98-8 | Endosulfan I | - | 0.586 U | - | - |
| 33213-65-9 | Endosulfan II | - | 1.13 U | - | - |
| 1031-07-8 | Endosulfan sulfate | - | 1.34 U | - | - |
| 72-20-8 | Endrin | D012 | 1.47 U | 0.0735 | 20 |
| 7421-93-4 | Endrin aldehyde | - | 1.47 U | - | - |
| 53494-70-5 | Endrin ketone | - | 1.58 U | - | - |
| 58-89-9 | gamma-BHC | D013 | 0.608 U | 0.0304 | 400 |
| 5103-74-2 | gamma-Chlordane | - | 0.777 U | - | - |
| 76-44-8 | Heptachlor | D031 | 0.774 U | 0.0387 | 8 |
| 1024-57-3 | Heptachlor epoxide | D031 | 0.656 U | 0.0328 | 8 |
| 72-43-5 | Methoxychlor | D014 | 9.79 U | 0.4895 | 10000 |
| 8001-35-2 | Toxaphene | D015 | 91.3 U | 4.5650 | 500 |

Drum #'s

0177750, 0177749, 0177740, 0177739, 0177730, 0177540, 0177729
 OPD-1 (0177738), OPD-2 (0177728), OPD-3 (0177733)
 OPD-4 (0177734), OPD-8 (0177737), OPD-9 (0177727)

| Metals (mg/Kg) | | | | | |
|---|-----------|------------|----------------|---|------------------------------|
| EPA Methods (6010B/6020/7471A) | | | | | |
| Niagara Falls Storage Site (NFSS), Lewiston, New York | | | | | |
| Sample No. | | | RS-DRUM10-3385 | | |
| Drum Tag Number | | | See above | | |
| Lab ID | | | 83954019 | | |
| Batch No. | | | 267432 | | |
| Collection Date | | | 7/11/03 | | |
| Received Date | | | 7/12/03 | | |
| Extraction Date | | | 8/7/03 | | |
| Analysis Date | | | 8/15/03 | | |
| SDG | | | S-9-6 | | |
| CAS Number | Parameter | EPA HW No. | Results | Estimated Maximum Leachate Concentration (mg/L) | TCLP Regulatory Limit (mg/L) |
| 7429-90-5 | Aluminum | - | 14.2 E* | 0.7 | - |
| 7440-36-0 | Antimony | - | 1.02 BN | 0.05 | - |
| 7440-38-2 | Arsenic | D004 | 0.459 BN* | 0.023 | 5.0 |
| 7440-39-3 | Barium | D005 | 4.94 * | 0.25 | 100.0 |
| 7440-41-7 | Beryllium | - | 0.033 BE* | 0.002 | - |
| 7440-42-8 | Boron | - | 5.16 BE*N | 0.26 | - |
| 7440-43-9 | Cadmium | D006 | 0.26 B | 0.01 | 1.0 |
| 7440-70-2 | Calcium | - | 695 * | 34.8 | - |
| 7440-47-3 | Chromium | D007 | 0.29 U*N | 0.01 | 5.0 |
| 7440-48-4 | Cobalt | - | 1.87 * | 0.09 | - |
| 7440-50-8 | Copper | - | 0.701 E*N | 0.035 | - |
| 7439-89-6 | Iron | - | 12.4 BE* | 0.6 | - |
| 7439-92-1 | Lead | D008 | 2.75 N | 0.14 | 5.0 |
| 7439-93-2 | Lithium | - | 1.98 B | 0.10 | - |
| 7439-95-4 | Magnesium | - | 95900 * | 4795 | - |
| 7439-96-5 | Manganese | - | 1.51 B* | 0.08 | - |
| 7439-97-6 | Mercury | D009 | 0.018 * | 0.001 | 0.2 |
| 7440-02-0 | Nickel | - | 0.41 U* | 0.02 | - |
| 7440-09-7 | Potassium | - | 7.6 U* | 0.4 | - |
| 7782-49-2 | Selenium | D010 | 0.251 B | 0.013 | 1.0 |
| 7440-22-4 | Silver | D011 | 2.24 E | 0.11 | 5.0 |
| 7440-23-5 | Sodium | - | 11 UE* | 0.6 | - |
| 7440-28-0 | Thallium | - | 0.001 UE | 0.0001 | - |
| 7440-62-2 | Vanadium | - | 0.34 UE*N | 0.02 | - |
| 7440-66-6 | Zinc | - | 23.6 E*N | 1.2 | - |

Drum #'s

0177750, 0177749, 0177740, 0177739, 0177730, 0177540, 0177729
 OPD-1 (0177738), OPD-2 (0177728), OPD-3 (0177733)
 OPD-4 (0177734), OPD-8 (0177737), OPD-9 (0177727)

| PCB (ug/Kg) | | | | | |
|---|--------------|----------------|---------|---|---------------------------------------|
| EPA Method 8082 | | | | | |
| Niagara Falls Storage Site (NFSS), Lewiston, New York | | | | | |
| Sample No. | | RS-DRUM10-3385 | | Estimated Maximum Leachate Concentration (ug/L) | TCLP Regulatory Limit (ug/L) |
| Drum Tag Number | | See above | | | |
| Lab ID | | 83954019 | | | |
| Batch No. | | 263634 | | | |
| Collection Date | | 7/11/03 | | | |
| Received Date | | 7/12/03 | | | |
| Extraction Date | | 7/21/03 | | | |
| Analysis Date | | 8/15/03 | | | |
| SDG | | S-9-6 | | | |
| Dilution Factor | | 1 | | | |
| CAS Number | Parameter | EPA HW No. | Results | | |
| 12674-11-2 | Aroclor-1016 | - | 1.48 U | 0.074 | - |
| 11104-28-2 | Aroclor-1221 | - | 4.16 U | 0.208 | - |
| 11141-16-5 | Aroclor-1232 | - | 2.46 U | 0.123 | - |
| 53469-21-9 | Aroclor-1242 | - | 2.46 U | 0.123 | - |
| 12672-29-6 | Aroclor-1248 | - | 1.48 U | 0.074 | - |
| 11097-69-1 | Aroclor-1254 | - | 0.738 U | 0.0369 | - |
| 11096-82-5 | Aroclor-1260 | - | 1.48 U | 0.074 | - |

Drum #'s

0177750, 0177749, 0177740, 0177739, 0177730, 0177540, 0177729

OPD-1 (0177738), OPD-2 (0177728), OPD-3 (0177733)

OPD-4 (0177734), OPD-8 (0177737), OPD-9 (0177727)

| Pesticides (ug/Kg) EPA Method 8081A Niagara Falls Storage Site (NFSS), Lewiston, New York | | | | | |
|---|--------------------|------------|----------------|---|---------------------------------------|
| Sample No. | | | RS-DRUM10-3385 | | |
| Drum Tag Number | | | See above | | |
| Lab ID | | | 83954019 | | |
| Batch No. | | | 263677 | | |
| Collection Date | | | 7/11/03 | | |
| Received Date | | | 7/12/03 | | |
| Extraction Date | | | 7/22/03 | | |
| Analysis Date | | | 8/18/03 | | |
| SDG | | | S-9-6 | | |
| Dilution Factor | | | 1 | | |
| | | | | Estimated Maximum Leachate Concentration (ug/L) | TCLP Regulatory Limit (ug/L) |
| CAS Number | Parameter | EPA HW No. | Results | | |
| 72-54-8 | 4,4'-DDD | - | 0.31 U | - | - |
| 72-55-9 | 4,4'-DDE | - | 0.266 U | - | - |
| 50-29-3 | 4,4'-DDT | - | 3.11 | - | - |
| 309-00-2 | Aldrin | - | 0.253 U | - | - |
| 319-84-6 | alpha-BHC | - | 0.17 U | - | - |
| 5103-71-9 | alpha-Chlordane | - | 0.3 U | - | - |
| 319-85-7 | beta-BHC | - | 0.14 U | - | - |
| 319-86-8 | delta-BHC | - | 0.14 U | - | - |
| 60-57-1 | Dieldrin | - | 0.253 U | - | - |
| 959-98-8 | Endosulfan I | - | 0.118 U | - | - |
| 33213-65-9 | Endosulfan II | - | 0.228 U | - | - |
| 1031-07-8 | Endosulfan sulfate | - | 0.27 U | - | - |
| 72-20-8 | Endrin | D012 | 0.298 U | 0.0149 | 20 |
| 7421-93-4 | Endrin aldehyde | - | 0.298 U | - | - |
| 53494-70-5 | Endrin ketone | - | 0.32 U | - | - |
| 58-89-9 | gamma-BHC | D013 | 0.123 U | 0.0062 | 400 |
| 5103-74-2 | gamma-Chlordane | - | 0.157 U | - | - |
| 76-44-8 | Heptachlor | D031 | 0.156 U | 0.0078 | 8 |
| 1024-57-3 | Heptachlor epoxide | D031 | 0.133 U | 0.0067 | 8 |
| 72-43-5 | Methoxychlor | D014 | 1.98 U | 0.0990 | 10000 |
| 8001-35-2 | Toxaphene | D015 | 18.4 U | 0.9200 | 500 |

Drum #'s

0177750, 0177749, 0177740, 0177739, 0177730, 0177540, 0177729

OPD-1 (0177738), OPD-2 (0177728), OPD-3 (0177733)

OPD-4 (0177734), OPD-8 (0177737), OPD-9 (0177727)

| Metals (mg/Kg) | | | | | | | |
|---|----------------|------------|-----------|--------|-------|---|---------------------------------------|
| EPA Methods (6010B/6020/7471A) | | | | | | | |
| Niagara Falls Storage Site (NFSS), Lewiston, New York | | | | | | | |
| Sample No. | RS-DRUM11-3386 | | | | | Estimated Maximum Leachate Concentration (mg/L) | TCLP Regulatory Limit (mg/L) |
| Drum Tag Number | See above | | | | | | |
| Lab ID | 83954020 | | | | | | |
| Batch No. | 267432 | | | | | | |
| Collection Date | 7/11/03 | | | | | | |
| Received Date | 7/12/03 | | | | | | |
| Extraction Date | 8/7/03 | | | | | | |
| Analysis Date | 8/15/03 | | | | | | |
| SDG | S-9-6 | | | | | | |
| CAS Number | Parameter | EPA HW No. | Results | | | | |
| 7429-90-5 | Aluminum | - | 56 E* | 2.8 | - | | |
| 7440-36-0 | Antimony | - | 0.853 BN | 0.043 | - | | |
| 7440-38-2 | Arsenic | D004 | 0.531 BN* | 0.027 | 5.0 | | |
| 7440-39-3 | Barium | D005 | 1.3 * | 0.07 | 100.0 | | |
| 7440-41-7 | Beryllium | - | 0.033 UE* | 0.002 | - | | |
| 7440-42-8 | Boron | - | 20.6 E*N | 1.0 | - | | |
| 7440-43-9 | Cadmium | D006 | 0.605 B | 0.030 | 1.0 | | |
| 7440-70-2 | Calcium | - | 837 * | 41.9 | - | | |
| 7440-47-3 | Chromium | D007 | 0.3 U*N | 0.02 | 5.0 | | |
| 7440-48-4 | Cobalt | - | 2.27 * | 0.11 | - | | |
| 7440-50-8 | Copper | - | 1.17 E*N | 0.06 | - | | |
| 7439-89-6 | Iron | - | 37 UE* | 1.9 | - | | |
| 7439-92-1 | Lead | D008 | 4.07 N | 0.20 | 5.0 | | |
| 7439-93-2 | Lithium | - | 1.12 B | 0.06 | - | | |
| 7439-95-4 | Magnesium | - | 451000 * | 22550 | - | | |
| 7439-96-5 | Manganese | - | 1.1 U* | 0.1 | - | | |
| 7439-97-6 | Mercury | D009 | 0.014 B* | 0.001 | 0.2 | | |
| 7440-02-0 | Nickel | - | 0.43 U* | 0.02 | - | | |
| 7440-09-7 | Potassium | - | 32 U* | 1.6 | - | | |
| 7782-49-2 | Selenium | D010 | 1.15 B | 0.06 | 1.0 | | |
| 7440-22-4 | Silver | D011 | 0.793 E | 0.040 | 5.0 | | |
| 7440-23-5 | Sodium | - | 120 UE* | 6.0 | - | | |
| 7440-28-0 | Thallium | - | 0.001 UE | 0.0001 | - | | |
| 7440-62-2 | Vanadium | - | 0.36 UE*N | 0.02 | - | | |
| 7440-66-6 | Zinc | - | 73.5 E*N | 3.7 | - | | |

Drum #'s

0177750, 0177749, 0177740, 0177739, 0177730, 0177540, 0177729

OPD-1 (0177738), OPD-2 (0177728), OPD-3 (0177733)

OPD-4 (0177734), OPD-8 (0177737), OPD-9 (0177727)

| PCB (ug/Kg) EPA Method 8082 Niagara Falls Storage Site (NFSS), Lewiston, New York | | | | | | |
|---|--------------|------------|----------------|--------|---|---------------------------------------|
| Sample No. | | | RS-DRUM11-3386 | | Estimated Maximum Leachate Concentration (ug/L) | TCLP Regulatory Limit (ug/L) |
| Drum Tag Number | | | See above | | | |
| Lab ID | | | 83954020 | | | |
| Batch No. | | | 263634 | | | |
| Collection Date | | | 7/11/03 | | | |
| Received Date | | | 7/12/03 | | | |
| Extraction Date | | | 7/21/03 | | | |
| Analysis Date | | | 8/15/03 | | | |
| SDG | | | S-9-6 | | | |
| Dilution Factor | | | 1 | | | |
| CAS Number | Parameter | EPA HW No. | Results | | | |
| 12674-11-2 | Aroclor-1016 | - | 1.48 U | 0.074 | - | |
| 11104-28-2 | Aroclor-1221 | - | 4.17 U | 0.2085 | - | |
| 11141-16-5 | Aroclor-1232 | - | 2.47 U | 0.1235 | - | |
| 53469-21-9 | Aroclor-1242 | - | 2.47 U | 0.1235 | - | |
| 12672-29-6 | Aroclor-1248 | - | 1.48 U | 0.074 | - | |
| 11097-69-1 | Aroclor-1254 | - | 0.74 U | 0.037 | - | |
| 11096-82-5 | Aroclor-1260 | - | 1.48 U | 0.074 | - | |

Drum #'s

0177750, 0177749, 0177740, 0177739, 0177730, 0177540, 0177729

OPD-1 (0177738), OPD-2 (0177728), OPD-3 (0177733)

OPD-4 (0177734), OPD-8 (0177737), OPD-9 (0177727)

| Pesticides (ug/Kg) EPA Method 8081A Niagara Falls Storage Site (NFSS), Lewiston, New York | | | | | |
|---|--------------------|----------------|---------|---|---------------------------------------|
| Sample No. | | RS-DRUM11-3386 | | Estimated Maximum Leachate Concentration (ug/L) | TCLP Regulatory Limit (ug/L) |
| Drum Tag Number | | See above | | | |
| Lab ID | | 83954020 | | | |
| Batch No. | | 263677 | | | |
| Collection Date | | 7/11/03 | | | |
| Received Date | | 7/12/03 | | | |
| Extraction Date | | 7/22/03 | | | |
| Analysis Date | | 8/18/03 | | | |
| SDG | | S-9-6 | | | |
| Dilution Factor | | 1 | | | |
| CAS Number | Parameter | EPA HW No. | Results | | |
| 72-54-8 | 4,4'-DDD | - | 0.311 U | - | - |
| 72-55-9 | 4,4'-DDE | - | 1.57 J | - | - |
| 50-29-3 | 4,4'-DDT | - | 1.14 J | - | - |
| 309-00-2 | Aldrin | - | 0.254 U | - | - |
| 319-84-6 | alpha-BHC | - | 0.171 U | - | - |
| 5103-71-9 | alpha-Chlordane | - | 0.301 U | - | - |
| 319-85-7 | beta-BHC | - | 0.14 U | - | - |
| 319-86-8 | delta-BHC | - | 0.14 U | - | - |
| 60-57-1 | Dieldrin | - | 0.254 U | - | - |
| 959-98-8 | Endosulfan I | - | 0.119 U | - | - |
| 33213-65-9 | Endosulfan II | - | 0.229 U | - | - |
| 1031-07-8 | Endosulfan sulfate | - | 0.271 U | - | - |
| 72-20-8 | Endrin | D012 | 0.298 U | 0.0149 | 20 |
| 7421-93-4 | Endrin aldehyde | - | 0.298 U | - | - |
| 53494-70-5 | Endrin ketone | - | 0.32 U | - | - |
| 58-89-9 | gamma-BHC | D013 | 0.123 U | 0.0062 | 400 |
| 5103-74-2 | gamma-Chlordane | - | 0.157 U | - | - |
| 76-44-8 | Heptachlor | D031 | 0.157 U | 0.0079 | 8 |
| 1024-57-3 | Heptachlor epoxide | D031 | 0.133 U | 0.0067 | 8 |
| 72-43-5 | Methoxychlor | D014 | 1.98 U | 0.0990 | 10000 |
| 8001-35-2 | Toxaphene | D015 | 18.5 U | 0.9250 | 500 |

Drum #'s

0177750, 0177749, 0177740, 0177739, 0177730, 0177540, 0177729

OPD-1 (0177738), OPD-2 (0177728), OPD-3 (0177733)

OPD-4 (0177734), OPD-8 (0177737), OPD-9 (0177727)

| Metals (mg/Kg) | | | | | |
|---|-----------|------------|---|---------------------------------------|-------|
| EPA Methods (6010B/6020/7471A) | | | | | |
| Niagara Falls Storage Site (NFSS), Lewiston, New York | | | | | |
| Sample No. | | | RS-DRUM12-3387 | | |
| Drum Tag Number | | | See above | | |
| Lab ID | | | 83996007 | | |
| Batch No. | | | 267434 | | |
| Collection Date | | | 7/11/03 | | |
| Received Date | | | 7/15/03 | | |
| Extraction Date | | | 8/8/03 | | |
| Analysis Date | | | 8/18/03 | | |
| SDG | | | S-9-7 | | |
| | | | Estimated Maximum Leachate Concentration (mg/L) | TCLP Regulatory Limit (mg/L) | |
| CAS Number | Parameter | EPA HW No. | Results | | |
| 7429-90-5 | Aluminum | - | 1010 | 50.5 | - |
| 7440-36-0 | Antimony | - | 0.48 UN | 0.02 | - |
| 7440-38-2 | Arsenic | D004 | 0.398 B | 0.020 | 5.0 |
| 7440-39-3 | Barium | D005 | 1.03 BN* | 0.05 | 100.0 |
| 7440-41-7 | Beryllium | - | 0.034 B | 0.002 | - |
| 7440-42-8 | Boron | - | 7.61 N | 0.38 | - |
| 7440-43-9 | Cadmium | D006 | 0.186 B | 0.009 | 1.0 |
| 7440-70-2 | Calcium | - | 454000 | 22700 | - |
| 7440-47-3 | Chromium | D007 | 2.48 | 0.12 | 5.0 |
| 7440-48-4 | Cobalt | - | 0.461 B | 0.023 | - |
| 7440-50-8 | Copper | - | 1.62 | 0.08 | - |
| 7439-89-6 | Iron | - | 1010 | 50.5 | - |
| 7439-92-1 | Lead | D008 | 0.418 B | 0.021 | 5.0 |
| 7439-93-2 | Lithium | - | 0.612 BE | 0.031 | - |
| 7439-95-4 | Magnesium | - | 9030 | 452 | - |
| 7439-96-5 | Manganese | - | 309 | 15.5 | - |
| 7439-97-6 | Mercury | D009 | 0.007 U | 0.0004 | 0.2 |
| 7440-02-0 | Nickel | - | 2.19 | 0.11 | - |
| 7440-09-7 | Potassium | - | 40 BE | 2.0 | - |
| 7782-49-2 | Selenium | D010 | 0.413 B | 0.021 | 1.0 |
| 7440-22-4 | Silver | D011 | 0.01 B | 0.001 | 5.0 |
| 7440-23-5 | Sodium | - | 47 U | 2.4 | - |
| 7440-28-0 | Thallium | - | 0.001 U | 0.0001 | - |
| 7440-62-2 | Vanadium | - | 2.79 N | 0.14 | - |
| 7440-66-6 | Zinc | - | 12.6 | 0.6 | - |

Drum #'s

0177750, 0177749, 0177740, 0177739, 0177730, 0177540, 0177729

OPD-1 (0177738), OPD-2 (0177728), OPD-3 (0177733)

OPD-4 (0177734), OPD-8 (0177737), OPD-9 (0177727)

| PCB (ug/Kg) | | | | | |
|---|--------------|----------------|---------|---|---------------------------------------|
| EPA Method 8082 | | | | | |
| Niagara Falls Storage Site (NFSS), Lewiston, New York | | | | | |
| Sample No. | | RS-DRUM12-3387 | | Estimated Maximum Leachate Concentration (ug/L) | TCLP Regulatory Limit (ug/L) |
| Drum Tag Number | | See above | | | |
| Lab ID | | 83996007 | | | |
| Batch No. | | 264773 | | | |
| Collection Date | | 7/11/03 | | | |
| Received Date | | 7/15/03 | | | |
| Extraction Date | | 7/22/03 | | | |
| Analysis Date | | 8/15/03 | | | |
| SDG | | S-9-7 | | | |
| Dilution Factor | | 1 | | | |
| CAS Number | Parameter | EPA HW No. | Results | | |
| 12674-11-2 | Aroclor-1016 | - | 1.5 U | 0.075 | - |
| 11104-28-2 | Aroclor-1221 | - | 4.22 U | 0.211 | - |
| 11141-16-5 | Aroclor-1232 | - | 2.5 U | 0.125 | - |
| 53469-21-9 | Aroclor-1242 | - | 2.5 U | 0.125 | - |
| 12672-29-6 | Aroclor-1248 | - | 1.5 U | 0.075 | - |
| 11097-69-1 | Aroclor-1254 | - | 0.749 U | 0.03745 | - |
| 11096-82-5 | Aroclor-1260 | - | 5.7 | 0.285 | - |

Drum #'s

0177750, 0177749, 0177740, 0177739, 0177730, 0177540, 0177729

OPD-1 (0177738), OPD-2 (0177728), OPD-3 (0177733)

OPD-4 (0177734), OPD-8 (0177737), OPD-9 (0177727)

| Pesticides (ug/Kg) EPA Method 8081A Niagara Falls Storage Site (NFSS), Lewiston, New York | | | | | |
|---|--------------------|----------------|---------|---|---------------------------------------|
| Sample No. | | RS-DRUM12-3387 | | Estimated Maximum Leachate Concentration (ug/L) | TCLP Regulatory Limit (ug/L) |
| Drum Tag Number | | See above | | | |
| Lab ID | | 83996007 | | | |
| Batch No. | | 264793 | | | |
| Collection Date | | 7/11/03 | | | |
| Received Date | | 7/15/03 | | | |
| Extraction Date | | 7/23/03 | | | |
| Analysis Date | | 8/21/03 | | | |
| SDG | | S-9-7 | | | |
| Dilution Factor | | 1 | | | |
| CAS Number | Parameter | EPA HW No. | Results | | |
| 72-54-8 | 4,4'-DDD | - | 0.315 U | - | - |
| 72-55-9 | 4,4'-DDE | - | 0.27 U | - | - |
| 50-29-3 | 4,4'-DDT | - | 3.19 | - | - |
| 309-00-2 | Aldrin | - | 0.257 U | - | - |
| 319-84-6 | alpha-BHC | - | 0.173 U | - | - |
| 5103-71-9 | alpha-Chlordane | - | 0.305 U | - | - |
| 319-85-7 | beta-BHC | - | 0.142 U | - | - |
| 319-86-8 | delta-BHC | - | 0.142 U | - | - |
| 60-57-1 | Dieldrin | - | 0.257 U | - | - |
| 959-98-8 | Endosulfan I | - | 0.12 U | - | - |
| 33213-65-9 | Endosulfan II | - | 0.232 U | - | - |
| 1031-07-8 | Endosulfan sulfate | - | 0.275 U | - | - |
| 72-20-8 | Endrin | D012 | 0.302 U | 0.0151 | 20 |
| 7421-93-4 | Endrin aldehyde | - | 0.302 U | - | - |
| 53494-70-5 | Endrin ketone | - | 0.324 U | - | - |
| 58-89-9 | gamma-BHC | D013 | 0.125 U | 0.0063 | 400 |
| 5103-74-2 | gamma-Chlordane | - | 0.159 U | - | - |
| 76-44-8 | Heptachlor | D031 | 0.159 U | 0.0080 | 8 |
| 1024-57-3 | Heptachlor epoxide | D031 | 0.135 U | 0.0068 | 8 |
| 72-43-5 | Methoxychlor | D014 | 2.01 U | 0.1005 | 10000 |
| 8001-35-2 | Toxaphene | D015 | 18.7 U | 0.9350 | 500 |

Drum # Lab Debris

| Corrosivity, Flashpoint-140, PaintFilter, Reactive Releasable Cyanide, Reactive Releasable Sulfide EPA Method 9045C, 1010, 9095, SW846 7.3.3, SW846 7.3.4 Niagara Falls Storage Site (NFSS), Lewiston, New York | | | | |
|---|-----------------------------|--------------|-----------|--|
| Sample No. | | IDW-S-091702 | | Hazardous Waste Regulatory Limits |
| Drum Tag Number | | Lab Debris | | |
| Lab ID | | 67516001 | | |
| Collection Date | | 9/17/02 | | |
| Received Date | | 9/18/02 | | |
| SDG | | S-7-3 | | |
| Dilution Factor | | 1 | | |
| CAS Number | Parameter | EPA HW No. | Results * | |
| NA | Corrosivity | D002 | 7.99 H | >2 - <12.5 Std pH Units |
| NA | Flashpoint-140 | D001 | >140 | <140 Degree F. |
| NA | Paint Filter | - | PASS | Pass/Fail |
| NA | Reactive Releasable Cyanide | D003 | 4.85 U | 250,000 ug/Kg |
| NA | Reactive Releasable Sulfide | D003 | 17.8 U | 500 mg/Kg |

Note: * Reporting units are the same as the reporting units in the Hazardous Waste Regulatory Limits column.

Drum # Lab Debris

| TCLP Herbicides (mg/L) EPA Method 1311/8151A Niagara Falls Storage Site (NFSS), Lewiston, New York | | | | |
|--|--------------|------------|---------------------------------------|------|
| Sample No. | IDW-S-091702 | | TCLP Regulatory Limit (mg/L) | |
| Drum Tag Number | Lab Debris | | | |
| Lab ID | 67516001 | | | |
| Batch No. | 203785 | | | |
| Collection Date | 9/17/02 | | | |
| Received Date | 9/18/02 | | | |
| Extraction Date | 9/26/02 | | | |
| Analysis Date | 10/1/02 | | | |
| SDG | S-7-3 | | | |
| Dilution Factor | 20 | | | |
| CAS Number | Parameter | EPA HW No. | Results | |
| 93-72-1 | 2,4,5-TP | D017 | 0.095 U | 1.0 |
| 94-75-7 | 2,4-D | D016 | 0.095 U | 10.0 |

Drum # Lab Debris

| TCLP Metals (mg/L) | | | | |
|---|--------------|------------|---------|---------------------------------------|
| EPA Methods 1311/6010B/7470A | | | | |
| Niagara Falls Storage Site (NFSS), Lewiston, New York | | | | |
| Sample No. | IDW-S-091702 | | | |
| Drum Tag Number | Lab Debris | | | |
| Lab ID | 67516001 | | | |
| Batch No. | 203409 | | | |
| Collection Date | 9/17/02 | | | |
| Received Date | 9/18/02 | | | |
| Extraction Date | 9/26/02 | | | |
| Analysis Date | 10/22/02 | | | |
| SDG | S-7-3 | | | |
| | | | | TCLP Regulatory Limit (mg/L) |
| CAS Number | Parameter | EPA HW No. | Results | |
| 7440-38-2 | Arsenic | D004 | 0.04 U | 5.0 |
| 7440-39-3 | Barium | D005 | 0.772 | 100.0 |
| 7440-43-9 | Cadmium | D006 | 0.195 | 1.0 |
| 7440-47-3 | Chromium | D007 | 0.005 U | 5.0 |
| 7439-92-1 | Lead | D008 | 0.084 | 5.0 |
| 7439-97-6 | Mercury | D009 | 0 UN | 0.2 |
| 7782-49-2 | Selenium | D010 | 0.027 U | 1.0 |
| 7440-22-4 | Silver | D011 | 0.012 U | 5.0 |

Drum # Lab Debris

| TCLP Pesticides (mg/L) EPA Method 1311/8081A Niagara Falls Storage Site (NFSS), Lewiston, New York | | | | |
|--|---------------------|------------|----------|---------------------------------------|
| Sample No. | IDW-S-091702 | | | |
| Drum Tag Number | Lab Debris | | | |
| Lab ID | 67516001 | | | |
| Batch No. | 204007 | | | |
| Collection Date | 9/17/02 | | | |
| Received Date | 9/18/02 | | | |
| Extraction Date | 9/26/02 | | | |
| Analysis Date | 9/30/02 | | | |
| SDG | S-7-3 | | | |
| Dilution Factor | 1 | | | |
| | | | | TCLP Regulatory Limit (mg/L) |
| CAS Number | Parameter | EPA HW No. | Results | |
| 57-74-9 | Chlordane (tech.) | D020 | 0.0025 U | 0.03 |
| 72-20-8 | Endrin | D012 | 0.0004 U | 0.02 |
| 58-89-9 | gamma-BHC (Lindane) | D013 | 0.0002 U | 0.4 |
| 76-44-8 | Heptachlor | D031 | 0.0002 U | 0.008 |
| 1024-57-3 | Heptachlor epoxide | D031 | 0.0002 U | 0.008 |
| 72-43-5 | Methoxychlor | D014 | 0.002 U | 10.0 |
| 8001-35-2 | Toxaphene | D015 | 0.01 U | 0.5 |

Drum # Lab Debris

| TCLP Semivolatile Organic Compounds (mg/L) | | | | |
|---|-----------------------|------------|---------|---------------------------------------|
| EPA Method 1311/8270C | | | | |
| Niagara Falls Storage Site (NFSS), Lewiston, New York | | | | |
| Sample No. | IDW-S-091702 | | | |
| Drum Tag Number | Lab Debris | | | |
| Lab ID | 67516001 | | | |
| Batch No. | 203999 | | | |
| Collection Date | 9/17/02 | | | |
| Received Date | 9/18/02 | | | |
| Extraction Date | 9/25/02 | | | |
| Analysis Date | 9/27/02 | | | |
| SDG | S-7-3 | | | |
| Dilution Factor | 1 | | | |
| | | | | TCLP Regulatory Limit (mg/L) |
| CAS Number | Parameter | EPA HW No. | Results | |
| 106-46-7 | 1,4-Dichlorobenzene | D027 | 0.05 U | 7.5 |
| 95-95-4 | 2,4,5-Trichlorophenol | D041 | 0.05 U | 400.0 |
| 88-06-2 | 2,4,6-Trichlorophenol | D042 | 0.05 U | 2.0 |
| 121-14-2 | 2,4-Dinitrotoluene | D030 | 0.05 U | 0.13 |
| 95-48-7 | 2-Methylphenol | D023 | 0.05 U | 200.0 |
| 118-74-1 | Hexachlorobenzene | D032 | 0.05 U | 0.13 |
| 87-68-3 | Hexachlorobutadiene | D033 | 0.05 U | 0.5 |
| 67-72-1 | Hexachloroethane | D034 | 0.05 U | 3.0 |
| 106-44-5 | m,p-Cresols | D024/D025 | 0.05 U | 200.0 |
| 98-95-3 | Nitrobenzene | D036 | 0.05 U | 2.0 |
| 87-86-5 | Pentachlorophenol | D037 | 0.05 U | 100.0 |
| 110-86-1 | Pyridine | D038 | 0.05 U | 5.0 |

Drum # Lab Debris

| TCLP Volatile Organic Compounds (mg/L) | | | | |
|---|----------------------|--------------|---------|---------------------------------------|
| EPA Method 1311/8260B | | | | |
| Niagara Falls Storage Site (NFSS), Lewiston, New York | | | | |
| Sample No. | | IDW-S-091702 | | TCLP Regulatory Limit (mg/L) |
| Drum Tag Number | | Lab Debris | | |
| Lab ID | | 67516001 | | |
| Batch No. | | 205300 | | |
| Collection Date | | 9/17/02 | | |
| Received Date | | 9/18/02 | | |
| Extraction Date | | 9/25/02 | | |
| Analysis Date | | 10/2/02 | | |
| SDG | | S-7-3 | | |
| Dilution Factor | | 10 | | |
| CAS Number | Parameter | EPA HW No. | Results | |
| 75-35-4 | 1,1-Dichloroethene | D029 | 0.01 U | 0.7 |
| 107-06-2 | 1,2-Dichloroethane | D028 | 0.01 U | 0.5 |
| 106-46-7 | 1,4-Dichlorobenzene | D027 | 0.01 U | 7.5 |
| 78-93-3 | 2-Butanone | D035 | 0.05 U | 200.0 |
| 71-43-2 | Benzene | D018 | 0.01 U | 0.5 |
| 56-23-5 | Carbon tetrachloride | D019 | 0.01 U | 0.5 |
| 108-90-7 | Chlorobenzene | D021 | 0.01 U | 100.0 |
| 67-66-3 | Chloroform | D022 | 0.01 U | 6.0 |
| 127-18-4 | Tetrachloroethene | D039 | 0.01 U | 0.7 |
| 79-01-6 | Trichloroethene | D040 | 0.01 U | 0.5 |
| 75-01-4 | Vinyl chloride | D043 | 0.01 U | 0.2 |

ATTACHMENT 3-4

VICINITY PROPERTY G (VPG) IDW/WASTE DRUM CHARACTERIZATION

- **Radiological Characterization for Contact Waste Drums**

Purpose: This spreadsheet estimates radionuclide activity in Niagara Falls Storage Site Vicinity Property "G" (VPG) waste containers.

Method: Using VPG analytical data, mean concentrations (pCi/g) are multiplied by anticipated soil/media weight (g). Two datasets are incorporated, Lab Debris and Trench Data.

Operating Instructions: Select "VPG-Report", enter Container Number, select type of "Container Contents", enter Container Gross Weight (lbs.), select "Container Type", print.

Prior to use: Verify net weight of 55 gallon drums, soil bags and overpack drums, ensure "VPG Variables" container "Tare Weight" is correct.

Prior to use: Macros must function for spreadsheet to operate properly, select "enable macros" at startup, set Excel Security to "medium" (Tools/macro/security).

Notes:

Note: In "VPG Report", radionuclide activity is reported in units of "uCi/drum", add a column to convert to desired units.

The following worksheets are included for information only and do not affect results in real-time; "VPG Samples+Wastes", "Trench Data", "Lab Debris Data", "All Rad Data".

Use extreme caution if changing any parameters in the "VPG Variables" worksheet, all variables are inter-related.

"Soil and Lab Debris" consist of soil and laboratory debris from trenching vs "Soil/Debris" which describes soil and debris such as pieces of drums, metal scrap and/or wood.

Raw data- all non rad, potassium-40, gross alpha, gross beta, and total activity were eliminated prior to calculating summary statistics.

Animal carcass sample (ACG01-3008-01.0-006) analytical results are not included. The piece of identified animal carcass was sent to the lab and is not in a waste stream.

The lab waste bucket was placed into drum " VPG Lab Debris" with trench soil. Although the lab waste/soil ratio is on the order of 1 to 3, conservatively estimating 1 to 1.

Where multiple analysis was performed for an analyte, defaulting with alpha spectroscopy method (for accuracy).

Radionuclide concentrations below zero set to zero in summary statistics.

Questions?, contact Greg Dawdy at 314-426-0880.

DO NOT MODIFY VARIABLES UNLESS CERTAIN OF INTER-RELATIONSHIPS

| VPG Soil Content/Media | | | |
|------------------------|----------|-------------|----------|
| Item Description | Item No. | Rad Table # | Fraction |
| PPE | 1 | 2 | 0.01 |
| Spoil Pile tarps | 2 | 2 | 0.4 |
| Soil and Lab Debris | 3 | 3 | 1.0 |
| Plastic Sheetting | 4 | 2 | 0.4 |
| Decon Solids | 5 | 2 | 0.75 |
| Styrofoam | 6 | 2 | 0.01 |
| PPE, plastic tarps | 7 | 2 | 0.22 |
| Soil/Debris | 8 | 2 | 0.8 |

Content Selected #: 6

| Container Type | Cntr. Number | Tare Weight |
|----------------|--------------|-------------|
| 55 gallon drum | 1 | lbs. 55 |
| Soil Bag | 2 | lbs. 15 |
| Overpack | 3 | lbs. 47 |

Container Selected #: 2

| Soil and Lab Debris Volume | |
|----------------------------|-----|
| Lab Debris Volume | 50% |
| Soil Volume | 50% |

| Derived Values | | |
|------------------------------|----------------------|------------|
| Container gross weight: | 230 | |
| Container tare weight: | 15 | |
| Contents net weight: | 215 | |
| Soil/media fraction: | 0.01 | |
| Content soil (media) weight: | 2.15 | |
| Rad table selected: | 2 | |
| Radionuclides | Conc. (pCi/g) | uCi |
| Ac-227 | 2.38 | 0.00 |
| Ra-226 | 42.06 | 0.04 |
| U-233/234 | 14.86 | 0.01 |
| U-235/236 | 1.15 | 0.00 |
| U-238 | 14.59 | 0.01 |
| Th-228 | 0.93 | 0.00 |
| Th-230 | 21.12 | 0.02 |
| Pu-239/240 | 0.46 | 0.00 |
| Pa-231 | 2.09 | 0.00 |
| Sr-90 | 1.68 | 0.00 |

Table 1

| Lab Debris | Mean (pCi/g) | Fraction |
|------------|--------------|----------|
| Pu-239/240 | 0.72 | 1.1% |
| Pa-231 | 0.67 | 1.1% |
| Ra-226 | 59.29 | 92.68% |
| Sr-90 | 1.55 | 2.4% |
| U-233/234 | 0.62 | 1.0% |
| U-238 | 0.49 | 0.8% |
| Ra-228 | 0.09 | 0.1% |
| Th-232 | 0.12 | 0.19% |
| Th-230 | 0.37 | 0.6% |

Table 2

| Trench Soil | Mean (pCi/g) | Fraction |
|-------------|--------------|----------|
| Ac-227 | 2.38 | 2.31% |
| Ra-226 | 42.06 | 40.88% |
| U-233/234 | 14.86 | 14.44% |
| U-235/236 | 1.15 | 1.12% |
| Pu-239/240 | 0.456 | 0.4% |
| Pa-231 | 2.09 | 2.03% |
| Sr-90 | 1.68 | 1.64% |
| Ra-228 | 0.73 | 0.71% |
| Th-232 | 0.77 | 0.75% |
| U-238 | 14.59 | 14.18% |
| Th-228 | 0.93 | 0.90% |
| Th-230 | 21.12 | 20.52% |

Table 3

| Soil+Lab Debris (all) | Mean (pCi/g) | Fraction |
|-----------------------|--------------|----------|
| Pu-239/240 | 0.6 | 0.79% |
| Pa-231 | 0.3 | 0.53% |
| Ra-226 | 50.7 | 66.78% |
| Sr-90 | 0.8 | 1.21% |
| U-233/234 | 7.7 | 7.70% |
| U-238 | 7.5 | 7.47% |
| Th-230 | 10.7 | 10.55% |
| Ac-227 | 1.2 | 1.16% |
| Ra-228 | 0.4 | 0.42% |
| U-235/236 | 0.6 | 0.56% |
| Th-232 | 0.44 | 0.47% |
| Th-228 | 0.5 | 0.45% |

VPG IDW Drum Activity Report

Container ID: 6-A (SAIC #168)

Container Contents: Spoil Pile tarps

Container gross weight (lbs.): 230

Container Type: 55 gallon drum

| Radionuclide | Activity (uCi) |
|--------------|----------------|
| Ac-227 | 0.08 |
| Ra-226 | 1.34 |
| U-233/234 | 0.47 |
| U-235/236 | 0.04 |
| U-238 | 0.46 |
| Th-228 | 0.03 |
| Th-230 | 0.67 |
| Pu-239/240 | 0.01 |
| Pa-231 | 0.07 |
| Sr-90 | 0.05 |

Calculated By: R. SWALLER

Date: 2/18/2005

VPG IDW Drum Activity Report

Container ID: 6-B (SAIC #173)

Container Contents: PPE

Container gross weight (lbs.): 225

Container Type: 55 gallon drum

| Radionuclide | Activity (uCi) |
|--------------|----------------|
| Ac-227 | 0.00 |
| Ra-226 | 0.03 |
| U-233/234 | 0.01 |
| U-235/236 | 0.00 |
| U-238 | 0.01 |
| Th-228 | 0.00 |
| Th-230 | 0.02 |
| Pu-239/240 | 0.00 |
| Pa-231 | 0.00 |
| Sr-90 | 0.00 |

Calculated By: R. SWALLER

Date: 2/18/2005

VPG IDW Drum Activity Report

Container ID: 6-C (SAIC #175)
Container Contents: PPE
Container gross weight (lbs.): 225
Container Type: 55 gallon drum

| Radionuclide | Activity (uCi) |
|--------------|----------------|
| Ac-227 | 0.00 |
| Ra-226 | 0.03 |
| U-233/234 | 0.01 |
| U-235/236 | 0.00 |
| U-238 | 0.01 |
| Th-228 | 0.00 |
| Th-230 | 0.02 |
| Pu-239/240 | 0.00 |
| Pa-231 | 0.00 |
| Sr-90 | 0.00 |

Calculated By: R. SWALLER
Date: 2/18/2005

VPG IDW Drum Activity Report

Container ID: 6-D (SAIC #165)
Container Contents: PPE
Container gross weight (lbs.): 225
Container Type: 55 gallon drum

| Radionuclide | Activity (uCi) |
|--------------|----------------|
| Ac-227 | 0.00 |
| Ra-226 | 0.03 |
| U-233/234 | 0.01 |
| U-235/236 | 0.00 |
| U-238 | 0.01 |
| Th-228 | 0.00 |
| Th-230 | 0.02 |
| Pu-239/240 | 0.00 |
| Pa-231 | 0.00 |
| Sr-90 | 0.00 |

Calculated By: R. SWALLER
Date: 2/18/2005

VPG IDW Drum Activity Report

Container ID: 6-E (SAIC #164)
Container Contents: PPE
Container gross weight (lbs.): 225
Container Type: 55 gallon drum

| Radionuclide | Activity (uCi) |
|--------------|----------------|
| Ac-227 | 0.00 |
| Ra-226 | 0.03 |
| U-233/234 | 0.01 |
| U-235/236 | 0.00 |
| U-238 | 0.01 |
| Th-228 | 0.00 |
| Th-230 | 0.02 |
| Pu-239/240 | 0.00 |
| Pa-231 | 0.00 |
| Sr-90 | 0.00 |

Calculated By: R. SWALLER
Date: 2/18/2005

VPG IDW Drum Activity Report

Container ID: 6-F (SAIC #163)
Container Contents: PPE
Container gross weight (lbs.): 225
Container Type: 55 gallon drum

| Radionuclide | Activity (uCi) |
|--------------|----------------|
| Ac-227 | 0.00 |
| Ra-226 | 0.03 |
| U-233/234 | 0.01 |
| U-235/236 | 0.00 |
| U-238 | 0.01 |
| Th-228 | 0.00 |
| Th-230 | 0.02 |
| Pu-239/240 | 0.00 |
| Pa-231 | 0.00 |
| Sr-90 | 0.00 |

Calculated By: R. SWALLER
Date: 2/18/2005

VPG IDW Drum Activity Report

Container ID: 6-G (SAIC #177)
Container Contents: PPE
Container gross weight (lbs.): 225
Container Type: 55 gallon drum

| Radionuclide | Activity (uCi) |
|--------------|----------------|
| Ac-227 | 0.00 |
| Ra-226 | 0.03 |
| U-233/234 | 0.01 |
| U-235/236 | 0.00 |
| U-238 | 0.01 |
| Th-228 | 0.00 |
| Th-230 | 0.02 |
| Pu-239/240 | 0.00 |
| Pa-231 | 0.00 |
| Sr-90 | 0.00 |

Calculated By: R. SWALLER
Date: 2/18/2005

VPG IDW Drum Activity Report

Container ID: 6-I (SAIC #176)

Container Contents: PPE ▼

Container gross weight (lbs.): 225

Container Type: 55 gallon drum ▼

| Radionuclide | Activity (uCi) |
|--------------|----------------|
| Ac-227 | 0.00 |
| Ra-226 | 0.03 |
| U-233/234 | 0.01 |
| U-235/236 | 0.00 |
| U-238 | 0.01 |
| Th-228 | 0.00 |
| Th-230 | 0.02 |
| Pu-239/240 | 0.00 |
| Pa-231 | 0.00 |
| Sr-90 | 0.00 |

Calculated By: R. SWALLER

Date: 2/18/2005

VPG IDW Drum Activity Report

Container ID: 6-J (SAIC #166)
Container Contents: PPE
Container gross weight (lbs.): 225
Container Type: 55 gallon drum

| Radionuclide | Activity (uCi) |
|--------------|----------------|
| Ac-227 | 0.00 |
| Ra-226 | 0.03 |
| U-233/234 | 0.01 |
| U-235/236 | 0.00 |
| U-238 | 0.01 |
| Th-228 | 0.00 |
| Th-230 | 0.02 |
| Pu-239/240 | 0.00 |
| Pa-231 | 0.00 |
| Sr-90 | 0.00 |

Calculated By: R. SWALLER
Date: 2/18/2005

VPG IDW Drum Activity Report

Container ID: 6-K (SAIC #172)
Container Contents: PPE
Container gross weight (lbs.): 225
Container Type: 55 gallon drum

| Radionuclide | Activity (uCi) |
|--------------|----------------|
| Ac-227 | 0.00 |
| Ra-226 | 0.03 |
| U-233/234 | 0.01 |
| U-235/236 | 0.00 |
| U-238 | 0.01 |
| Th-228 | 0.00 |
| Th-230 | 0.02 |
| Pu-239/240 | 0.00 |
| Pa-231 | 0.00 |
| Sr-90 | 0.00 |

Calculated By: R. SWALLER
Date: 2/18/2005

VPG IDW Drum Activity Report

Container ID: 6-M (SAIC #169)

Container Contents: Spoil Pile tarps ▼

Container gross weight (lbs.): 230

Container Type: 55 gallon drum ▼

| Radionuclide | Activity (uCi) |
|--------------|----------------|
| Ac-227 | 0.08 |
| Ra-226 | 1.34 |
| U-233/234 | 0.47 |
| U-235/236 | 0.04 |
| U-238 | 0.46 |
| Th-228 | 0.03 |
| Th-230 | 0.67 |
| Pu-239/240 | 0.01 |
| Pa-231 | 0.07 |
| Sr-90 | 0.05 |

Calculated By: R. SWALLER
Date: 2/18/2005

VPG IDW Drum Activity Report

Container ID: 6-N (SAIC #174)
Container Contents: PPE
Container gross weight (lbs.): 225
Container Type: 55 gallon drum

| Radionuclide | Activity (uCi) |
|--------------|----------------|
| Ac-227 | 0.00 |
| Ra-226 | 0.03 |
| U-233/234 | 0.01 |
| U-235/236 | 0.00 |
| U-238 | 0.01 |
| Th-228 | 0.00 |
| Th-230 | 0.02 |
| Pu-239/240 | 0.00 |
| Pa-231 | 0.00 |
| Sr-90 | 0.00 |

Calculated By: R. SWALLER
Date: 2/18/2005

VPG IDW Drum Activity Report

Container ID: 6-P (SAIC #167)
Container Contents: PPE
Container gross weight (lbs.): 225
Container Type: 55 gallon drum

| Radionuclide | Activity (uCi) |
|--------------|----------------|
| Ac-227 | 0.00 |
| Ra-226 | 0.03 |
| U-233/234 | 0.01 |
| U-235/236 | 0.00 |
| U-238 | 0.01 |
| Th-228 | 0.00 |
| Th-230 | 0.02 |
| Pu-239/240 | 0.00 |
| Pa-231 | 0.00 |
| Sr-90 | 0.00 |

Calculated By: R. SWALLER
Date: 2/18/2005

VPG IDW Drum Activity Report

Container ID: VPG PPE (SAIC#148)

Container Contents: PPE ▼

Container gross weight (lbs.): 225

Container Type: 55 gallon drum ▼

| Radionuclide | Activity (uCi) |
|--------------|----------------|
| Ac-227 | 0.00 |
| Ra-226 | 0.03 |
| U-233/234 | 0.01 |
| U-235/236 | 0.00 |
| U-238 | 0.01 |
| Th-228 | 0.00 |
| Th-230 | 0.02 |
| Pu-239/240 | 0.00 |
| Pa-231 | 0.00 |
| Sr-90 | 0.00 |

Calculated By: R. SWALLER

Date: 2/18/2005

VPG IDW Drum Activity Report

Container ID: VPG PPE (SAIC#149)

Container Contents: PPE

Container gross weight (lbs.): 225

Container Type: 55 gallon drum

| Radionuclide | Activity (uCi) |
|--------------|----------------|
| Ac-227 | 0.00 |
| Ra-226 | 0.03 |
| U-233/234 | 0.01 |
| U-235/236 | 0.00 |
| U-238 | 0.01 |
| Th-228 | 0.00 |
| Th-230 | 0.02 |
| Pu-239/240 | 0.00 |
| Pa-231 | 0.00 |
| Sr-90 | 0.00 |

Calculated By: R. SWALLER

Date: 2/18/2005

VPG IDW Drum Activity Report

Container ID: VPG PPE (SAIC#150)

Container Contents: PPE ▼

Container gross weight (lbs.): 225

Container Type: 55 gallon drum ▼

| Radionuclide | Activity (uCi) |
|--------------|----------------|
| Ac-227 | 0.00 |
| Ra-226 | 0.03 |
| U-233/234 | 0.01 |
| U-235/236 | 0.00 |
| U-238 | 0.01 |
| Th-228 | 0.00 |
| Th-230 | 0.02 |
| Pu-239/240 | 0.00 |
| Pa-231 | 0.00 |
| Sr-90 | 0.00 |

Calculated By: R. SWALLER

Date: 2/18/2005

VPG IDW Drum Activity Report

Container ID: VPG PPE (SAIC#151)

Container Contents: PPE

Container gross weight (lbs.): 225

Container Type: 55 gallon drum

| Radionuclide | Activity (uCi) |
|--------------|----------------|
| Ac-227 | 0.00 |
| Ra-226 | 0.03 |
| U-233/234 | 0.01 |
| U-235/236 | 0.00 |
| U-238 | 0.01 |
| Th-228 | 0.00 |
| Th-230 | 0.02 |
| Pu-239/240 | 0.00 |
| Pa-231 | 0.00 |
| Sr-90 | 0.00 |

Calculated By: R. SWALLER

Date: 2/18/2005

VPG IDW Drum Activity Report

Container ID: VPG Lab Debris (9/02)

Container Contents: Soil and Lab Debris ▼

Container gross weight (lbs.): 625

Container Type: 55 gallon drum ▼

| Radionuclide | Activity (uCi) |
|--------------|----------------|
| Ac-227 | 0.31 |
| Ra-226 | 13.10 |
| U-233/234 | 2.00 |
| U-235/236 | 0.15 |
| U-238 | 1.95 |
| Th-228 | 0.12 |
| Th-230 | 2.78 |
| Pu-239/240 | 0.15 |
| Pa-231 | 0.09 |
| Sr-90 | 0.20 |

Calculated By: R. SWALLER

Date: 2/18/2005

VPG IDW Drum Activity Report

Container ID: VPG Plastic Sheet
Container Contents: Plastic Sheeting ▼
Container gross weight (lbs.): 230
Container Type: 55 gallon drum ▼

| Radionuclide | Activity (uCi) |
|--------------|----------------|
| Ac-227 | 0.08 |
| Ra-226 | 1.34 |
| U-233/234 | 0.47 |
| U-235/236 | 0.04 |
| U-238 | 0.46 |
| Th-228 | 0.03 |
| Th-230 | 0.67 |
| Pu-239/240 | 0.01 |
| Pa-231 | 0.07 |
| Sr-90 | 0.05 |

Calculated By: R. SWALLER
Date: 2/18/2005

VPG IDW Drum Activity Report

Container ID: VPG Decon Solids
Container Contents: Decon Solids
Container gross weight (lbs.): 810
Container Type: 55 gallon drum

| Radionuclide | Activity (uCi) |
|--------------|----------------|
| Ac-227 | 0.61 |
| Ra-226 | 10.80 |
| U-233/234 | 3.82 |
| U-235/236 | 0.30 |
| U-238 | 3.75 |
| Th-228 | 0.24 |
| Th-230 | 5.42 |
| Pu-239/240 | 0.12 |
| Pa-231 | 0.54 |
| Sr-90 | 0.43 |

Calculated By: R. SWALLER
Date: 2/18/2005

VPG IDW Drum Activity Report

Container ID: VPG PPE (SAIC#117)

Container Contents: PPE ▼

Container gross weight (lbs.): 225

Container Type: 55 gallon drum ▼

| Radionuclide | Activity (uCi) |
|--------------|----------------|
| Ac-227 | 0.00 |
| Ra-226 | 0.03 |
| U-233/234 | 0.01 |
| U-235/236 | 0.00 |
| U-238 | 0.01 |
| Th-228 | 0.00 |
| Th-230 | 0.02 |
| Pu-239/240 | 0.00 |
| Pa-231 | 0.00 |
| Sr-90 | 0.00 |

Calculated By: R. SWALLER
Date: 2/18/2005

VPG IDW DRUM Activity Report

Soil and Debris Drum (55-gallon Drum)

Container ID: VPG 0177729(7/03)
Container gross weight: 625
Container tare weight: 55
Contents net weight: 570
Soil/media fraction: 1.00
Content soil (media) weight: 570

| Radionuclides | Conc. (pCi/g) | Activity (uCi) |
|---------------|---------------|----------------|
| Ac-227 | 0.0255 | 0.007 |
| Ra-226 | 0.08145 | 0.021 |
| U-233/234 | 0.1677 | 0.043 |
| U-235/236 | 0.0394 | 0.010 |
| U-238 | 0.22595 | 0.058 |
| Th-228 | 0.036 | 0.009 |
| Th-230 | 0.1328 | 0.034 |
| Pu-239/240 | 0.00477 | 0.001 |
| Pa-231 | 0.1969 | 0.051 |
| Sr-90 | 0.1899 | 0.049 |

Calculated By: R. SWALLER
Date: 2/18/05

VPG IDW DRUM Activity Report

Soil and Debris Drum (55-gallon Drum)

Container ID: VPG 0177540(7/03)
Container gross weight: 800
Container tare weight: 55
Contents net weight: 745
Soil/media fraction: 1.00
Content soil (media) weight: 745

| Radionuclides | Conc. (pCi/g) | Activity (uCi) |
|---------------|---------------|----------------|
| Ac-227 | 0.0255 | 0.009 |
| Ra-226 | 0.08145 | 0.028 |
| U-233/234 | 0.1677 | 0.057 |
| U-235/236 | 0.0394 | 0.013 |
| U-238 | 0.22595 | 0.076 |
| Th-228 | 0.036 | 0.012 |
| Th-230 | 0.1328 | 0.045 |
| Pu-239/240 | 0.00477 | 0.002 |
| Pa-231 | 0.1969 | 0.067 |
| Sr-90 | 0.1899 | 0.064 |

Calculated By: R. SWALLER
Date: 2/18/05

VPG IDW DRUM Activity Report

Soil and Debris Drum (55-gallon Drum)

Container ID: VPG 0177730(7/03)
Container gross weight: 625
Container tare weight: 55
Contents net weight: 570
Soil/media fraction: 1.00
Content soil (media) weight: 570

| Radionuclides | Conc. (pCi/g) | Activity (uCi) |
|---------------|---------------|----------------|
| Ac-227 | 0.0255 | 0.007 |
| Ra-226 | 0.08145 | 0.021 |
| U-233/234 | 0.1677 | 0.043 |
| U-235/236 | 0.0394 | 0.010 |
| U-238 | 0.22595 | 0.058 |
| Th-228 | 0.036 | 0.009 |
| Th-230 | 0.1328 | 0.034 |
| Pu-239/240 | 0.00477 | 0.001 |
| Pa-231 | 0.1969 | 0.051 |
| Sr-90 | 0.1899 | 0.049 |

Calculated By: R. SWALLER
Date: 2/18/05

VPG IDW DRUM Activity Report

Soil and Debris Drum (55-gallon Drum)

Container ID: VPG 0177739(7/03)
Container gross weight: 625
Container tare weight: 55
Contents net weight: 570
Soil/media fraction: 1.00
Content soil (media) weight: 570

| Radionuclides | Conc. (pCi/g) | Activity (uCi) |
|---------------|---------------|----------------|
| Ac-227 | 0.0255 | 0.007 |
| Ra-226 | 0.08145 | 0.021 |
| U-233/234 | 0.1677 | 0.043 |
| U-235/236 | 0.0394 | 0.010 |
| U-238 | 0.22595 | 0.058 |
| Th-228 | 0.036 | 0.009 |
| Th-230 | 0.1328 | 0.034 |
| Pu-239/240 | 0.00477 | 0.001 |
| Pa-231 | 0.1969 | 0.051 |
| Sr-90 | 0.1899 | 0.049 |

Calculated By: R. SWALLER
Date: 2/18/05

VPG IDW DRUM Activity Report

Soil and Debris Drum (55-gallon Drum)

Container ID: VPG 0177740(7/03)
Container gross weight: 625
Container tare weight: 55
Contents net weight: 570
Soil/media fraction: 1.00
Content soil (media) weight: 570

| Radionuclides | Conc. (pCi/g) | Activity (uCi) |
|---------------|---------------|----------------|
| Ac-227 | 0.0255 | 0.007 |
| Ra-226 | 0.08145 | 0.021 |
| U-233/234 | 0.1677 | 0.043 |
| U-235/236 | 0.0394 | 0.010 |
| U-238 | 0.22595 | 0.058 |
| Th-228 | 0.036 | 0.009 |
| Th-230 | 0.1328 | 0.034 |
| Pu-239/240 | 0.00477 | 0.001 |
| Pa-231 | 0.1969 | 0.051 |
| Sr-90 | 0.1899 | 0.049 |

Calculated By: R. SWALLER
Date: 2/18/05

VPG IDW DRUM Activity Report

Soil and Debris Drum (55-gallon Drum)

Container ID: VPG 0177749(7/03)
Container gross weight: 625
Container tare weight: 55
Contents net weight: 570
Soil/media fraction: 1.00
Content soil (media) weight: 570

| Radionuclides | Conc. (pCi/g) | Activity (uCi) |
|---------------|---------------|----------------|
| Ac-227 | 0.0255 | 0.007 |
| Ra-226 | 0.08145 | 0.021 |
| U-233/234 | 0.1677 | 0.043 |
| U-235/236 | 0.0394 | 0.010 |
| U-238 | 0.22595 | 0.058 |
| Th-228 | 0.036 | 0.009 |
| Th-230 | 0.1328 | 0.034 |
| Pu-239/240 | 0.00477 | 0.001 |
| Pa-231 | 0.1969 | 0.051 |
| Sr-90 | 0.1899 | 0.049 |

Calculated By: R. SWALLER
Date: 2/18/05

VPG IDW DRUM Activity Report

Soil and Debris Drum (55-gallon Drum)

Container ID: VPG 0177750(7/03)
Container gross weight: 625
Container tare weight: 55
Contents net weight: 570
Soil/media fraction: 1.00
Content soil (media) weight: 570

| Radionuclides | Conc. (pCi/g) | Activity (uCi) |
|---------------|---------------|----------------|
| Ac-227 | 0.0255 | 0.007 |
| Ra-226 | 0.08145 | 0.021 |
| U-233/234 | 0.1677 | 0.043 |
| U-235/236 | 0.0394 | 0.010 |
| U-238 | 0.22595 | 0.058 |
| Th-228 | 0.036 | 0.009 |
| Th-230 | 0.1328 | 0.034 |
| Pu-239/240 | 0.00477 | 0.001 |
| Pa-231 | 0.1969 | 0.051 |
| Sr-90 | 0.1899 | 0.049 |

Calculated By: R. SWALLER
Date: 2/18/05

VPG IDW DRUM Activity Report

Soil and Debris Overpack Drum (85-gallon Drum)

Container ID: VPG 0177738(7/03)
Container gross weight: 700
Container tare weight: 47
Contents net weight: 653
Soil/media fraction: 1.00
Content soil (media) weight: 653

| Radionuclides | Conc. (pCi/g) | Activity (uCi) |
|---------------|---------------|----------------|
| Ac-227 | 0.0255 | 0.008 |
| Ra-226 | 0.08145 | 0.024 |
| U-233/234 | 0.1677 | 0.050 |
| U-235/236 | 0.0394 | 0.012 |
| U-238 | 0.22595 | 0.067 |
| Th-228 | 0.036 | 0.011 |
| Th-230 | 0.1328 | 0.039 |
| Pu-239/240 | 0.00477 | 0.001 |
| Pa-231 | 0.1969 | 0.058 |
| Sr-90 | 0.1899 | 0.056 |

Calculated By: R. SWALLER
Date: 2/18/05

VPG IDW DRUM Activity Report

Soil and Debris Overpack Drum (85-gallon Drum)

Container ID: VPG 0177728(7/03)
Container gross weight: 700
Container tare weight: 47
Contents net weight: 653
Soil/media fraction: 1.00
Content soil (media) weight: 653

| Radionuclides | Conc. (pCi/g) | Activity (uCi) |
|---------------|---------------|----------------|
| Ac-227 | 0.0255 | 0.008 |
| Ra-226 | 0.08145 | 0.024 |
| U-233/234 | 0.1677 | 0.050 |
| U-235/236 | 0.0394 | 0.012 |
| U-238 | 0.22595 | 0.067 |
| Th-228 | 0.036 | 0.011 |
| Th-230 | 0.1328 | 0.039 |
| Pu-239/240 | 0.00477 | 0.001 |
| Pa-231 | 0.1969 | 0.058 |
| Sr-90 | 0.1899 | 0.056 |

Calculated By: R. SWALLER

Date: 2/18/05

VPG IDW DRUM Activity Report

Soil and Debris Overpack Drum (85-gallon Drum)

Container ID: VPG 0177733(7/03)
Container gross weight: 700
Container tare weight: 47
Contents net weight: 653
Soil/media fraction: 1.00
Content soil (media) weight: 653

| Radionuclides | Conc. (pCi/g) | Activity (uCi) |
|---------------|---------------|----------------|
| Ac-227 | 0.0255 | 0.008 |
| Ra-226 | 0.08145 | 0.024 |
| U-233/234 | 0.1677 | 0.050 |
| U-235/236 | 0.0394 | 0.012 |
| U-238 | 0.22595 | 0.067 |
| Th-228 | 0.036 | 0.011 |
| Th-230 | 0.1328 | 0.039 |
| Pu-239/240 | 0.00477 | 0.001 |
| Pa-231 | 0.1969 | 0.058 |
| Sr-90 | 0.1899 | 0.056 |

Calculated By: R. SWALLER
Date: 2/18/05

VPG IDW DRUM Activity Report

Soil and Debris Overpack Drum (85-gallon Drum)

Container ID: VPG 0177734(7/03)
Container gross weight: 700
Container tare weight: 47
Contents net weight: 653
Soil/media fraction: 1.00
Content soil (media) weight: 653

| Radionuclides | Conc. (pCi/g) | Activity (uCi) |
|---------------|---------------|----------------|
| Ac-227 | 0.0255 | 0.008 |
| Ra-226 | 0.08145 | 0.024 |
| U-233/234 | 0.1677 | 0.050 |
| U-235/236 | 0.0394 | 0.012 |
| U-238 | 0.22595 | 0.067 |
| Th-228 | 0.036 | 0.011 |
| Th-230 | 0.1328 | 0.039 |
| Pu-239/240 | 0.00477 | 0.001 |
| Pa-231 | 0.1969 | 0.058 |
| Sr-90 | 0.1899 | 0.056 |

Calculated By: R. SWALLER
Date: 2/18/05

VPG IDW DRUM Activity Report

Soil and Debris Overpack Drum (85-gallon Drum)

Container ID: VPG 0177737(7/03)
Container gross weight: 700
Container tare weight: 47
Contents net weight: 653
Soil/media fraction: 1.00
Content soil (media) weight: 653

| Radionuclides | Conc. (pCi/g) | Activity (uCi) |
|---------------|---------------|----------------|
| Ac-227 | 0.0255 | 0.008 |
| Ra-226 | 0.08145 | 0.024 |
| U-233/234 | 0.1677 | 0.050 |
| U-235/236 | 0.0394 | 0.012 |
| U-238 | 0.22595 | 0.067 |
| Th-228 | 0.036 | 0.011 |
| Th-230 | 0.1328 | 0.039 |
| Pu-239/240 | 0.00477 | 0.001 |
| Pa-231 | 0.1969 | 0.058 |
| Sr-90 | 0.1899 | 0.056 |

Calculated By: R. SWALLER

Date: 2/18/05

VPG IDW DRUM Activity Report

Soil and Debris Overpack Drum (85-gallon Drum)

Container ID: VPG 0177727(7/03)
Container gross weight: 700
Container tare weight: 47
Contents net weight: 653
Soil/media fraction: 1.00
Content soil (media) weight: 653

| Radionuclides | Conc. (pCi/g) | Activity (uCi) |
|---------------|---------------|----------------|
| Ac-227 | 0.0255 | 0.008 |
| Ra-226 | 0.08145 | 0.024 |
| U-233/234 | 0.1677 | 0.050 |
| U-235/236 | 0.0394 | 0.012 |
| U-238 | 0.22595 | 0.067 |
| Th-228 | 0.036 | 0.011 |
| Th-230 | 0.1328 | 0.039 |
| Pu-239/240 | 0.00477 | 0.001 |
| Pa-231 | 0.1969 | 0.058 |
| Sr-90 | 0.1899 | 0.056 |

Calculated By: R. SWALLER

Date: 2/18/05

VPG IDW Drum Activity Report (to be generated at Demob)

Container ID: Carboy 1

Container Contents: Plastic Sheeting

Container gross weight (lbs.): 280

Container Type: Soil Bag

| Radionuclide | Activity (uCi) |
|--------------|----------------|
| Ac-227 | 0.11 |
| Ra-226 | 2.02 |
| U-233/234 | 0.71 |
| U-235/236 | 0.06 |
| U-238 | 0.70 |
| Th-228 | 0.04 |
| Th-230 | 1.02 |
| Pu-239/240 | 0.02 |
| Pa-231 | 0.10 |
| Sr-90 | 0.08 |

Calculated By: R. SWALLER

Date: 2/21/2005

VPG IDW Drum Activity Report (to be generated at Demob)

Container ID: Carboy 2

Container Contents: Plastic Sheeting ▼

Container gross weight (lbs.): 280

Container Type: Soil Bag ▼

| Radionuclide | Activity (uCi) |
|--------------|----------------|
| Ac-227 | 0.11 |
| Ra-226 | 2.02 |
| U-233/234 | 0.71 |
| U-235/236 | 0.06 |
| U-238 | 0.70 |
| Th-228 | 0.04 |
| Th-230 | 1.02 |
| Pu-239/240 | 0.02 |
| Pa-231 | 0.10 |
| Sr-90 | 0.08 |

Calculated By: R. SWALLER

Date: 2/21/2005

VPG IDW Drum Activity Report (to be generated at Demob)

Container ID: Carboy 3

Container Contents: Plastic Sheeting ▼

Container gross weight (lbs.): 280

Container Type: Soil Bag ▼

| Radionuclide | Activity (uCi) |
|--------------|----------------|
| Ac-227 | 0.11 |
| Ra-226 | 2.02 |
| U-233/234 | 0.71 |
| U-235/236 | 0.06 |
| U-238 | 0.70 |
| Th-228 | 0.04 |
| Th-230 | 1.02 |
| Pu-239/240 | 0.02 |
| Pa-231 | 0.10 |
| Sr-90 | 0.08 |

Calculated By: R. SWALLER

Date: 2/21/2005

VPG IDW Drum Activity Report (to be generated at Demob)

Container ID:

Container Contents: ▼

Container gross weight (lbs.):

Container Type: ▼

| Radionuclide | Activity (uCi) |
|--------------|----------------|
| Ac-227 | 0.11 |
| Ra-226 | 2.02 |
| U-233/234 | 0.71 |
| U-235/236 | 0.06 |
| U-238 | 0.70 |
| Th-228 | 0.04 |
| Th-230 | 1.02 |
| Pu-239/240 | 0.02 |
| Pa-231 | 0.10 |
| Sr-90 | 0.08 |

Calculated By: R. SWALLER

Date: 2/21/2005

VPG IDW Drum Activity Report (to be generated at Demob)

Container ID: Carboy 5

Container Contents: Plastic Sheeting ▼

Container gross weight (lbs.): 280

Container Type: Soil Bag ▼

| Radionuclide | Activity (uCi) |
|--------------|----------------|
| Ac-227 | 0.11 |
| Ra-226 | 2.02 |
| U-233/234 | 0.71 |
| U-235/236 | 0.06 |
| U-238 | 0.70 |
| Th-228 | 0.04 |
| Th-230 | 1.02 |
| Pu-239/240 | 0.02 |
| Pa-231 | 0.10 |
| Sr-90 | 0.08 |

Calculated By: R. SWALLER

Date: 2/21/2005

VPG IDW Drum Activity Report (to be generated at Demob)

Container ID: Carboy 6

Container Contents: Plastic Sheeting

Container gross weight (lbs.): 280

Container Type: Soil Bag

| Radionuclide | Activity (uCi) |
|--------------|----------------|
| Ac-227 | 0.11 |
| Ra-226 | 2.02 |
| U-233/234 | 0.71 |
| U-235/236 | 0.06 |
| U-238 | 0.70 |
| Th-228 | 0.04 |
| Th-230 | 1.02 |
| Pu-239/240 | 0.02 |
| Pa-231 | 0.10 |
| Sr-90 | 0.08 |

Calculated By: R. SWALLER

Date: 2/21/2005

VPG IDW Drum Activity Report (to be generated at Demob)

Container ID: Styrofoam 1

Container Contents: Styrofoam

Container gross weight (lbs.): 230

Container Type: Soil Bag

| Radionuclide | Activity (uCi) |
|--------------|----------------|
| Ac-227 | 0.00 |
| Ra-226 | 0.04 |
| U-233/234 | 0.01 |
| U-235/236 | 0.00 |
| U-238 | 0.01 |
| Th-228 | 0.00 |
| Th-230 | 0.02 |
| Pu-239/240 | 0.00 |
| Pa-231 | 0.00 |
| Sr-90 | 0.00 |

Calculated By: R. SWALLER

Date: 2/21/2005

VPG IDW Drum Activity Report (to be generated at Demob)

Container ID: Styrofoam 2

Container Contents: Styrofoam ▼

Container gross weight (lbs.): 230

Container Type: Soil Bag ▼

| Radionuclide | Activity (uCi) |
|--------------|----------------|
| Ac-227 | 0.00 |
| Ra-226 | 0.04 |
| U-233/234 | 0.01 |
| U-235/236 | 0.00 |
| U-238 | 0.01 |
| Th-228 | 0.00 |
| Th-230 | 0.02 |
| Pu-239/240 | 0.00 |
| Pa-231 | 0.00 |
| Sr-90 | 0.00 |

Calculated By: R. SWALLER

Date: 2/21/2005

VPG IDW Drum Activity Report (to be generated at Demob)

Container ID: Styrofoam 3

Container Contents: Styrofoam ▼

Container gross weight (lbs.): 230

Container Type: Soil Bag ▼

| Radionuclide | Activity (uCi) |
|--------------|----------------|
| Ac-227 | 0.00 |
| Ra-226 | 0.04 |
| U-233/234 | 0.01 |
| U-235/236 | 0.00 |
| U-238 | 0.01 |
| Th-228 | 0.00 |
| Th-230 | 0.02 |
| Pu-239/240 | 0.00 |
| Pa-231 | 0.00 |
| Sr-90 | 0.00 |

Calculated By: R. SWALLER

Date: 2/21/2005

VPG IDW Drum Activity Report (to be generated at Demob)

Container ID: Styrofoam 4

Container Contents: Styrofoam ▼

Container gross weight (lbs.): 230

Container Type: Soil Bag ▼

| Radionuclide | Activity (uCi) |
|--------------|----------------|
| Ac-227 | 0.00 |
| Ra-226 | 0.04 |
| U-233/234 | 0.01 |
| U-235/236 | 0.00 |
| U-238 | 0.01 |
| Th-228 | 0.00 |
| Th-230 | 0.02 |
| Pu-239/240 | 0.00 |
| Pa-231 | 0.00 |
| Sr-90 | 0.00 |

Calculated By: R. SWALLER

Date: 2/21/2005

VPG IDW Drum Activity Report (to be generated at Demob)

Container ID: Styrofoam 5

Container Contents: Styrofoam ▼

Container gross weight (lbs.): 230

Container Type: Soil Bag ▼

| Radionuclide | Activity (uCi) |
|--------------|----------------|
| Ac-227 | 0.00 |
| Ra-226 | 0.04 |
| U-233/234 | 0.01 |
| U-235/236 | 0.00 |
| U-238 | 0.01 |
| Th-228 | 0.00 |
| Th-230 | 0.02 |
| Pu-239/240 | 0.00 |
| Pa-231 | 0.00 |
| Sr-90 | 0.00 |

Calculated By: R. SWALLER

Date: 2/21/2005

VPG IDW Drum Activity Report (to be generated at Demob)

Container ID: Styrofoam 6

Container Contents: Styrofoam ▼

Container gross weight (lbs.): 230

Container Type: Soil Bag ▼

| Radionuclide | Activity (uCi) |
|--------------|----------------|
| Ac-227 | 0.00 |
| Ra-226 | 0.04 |
| U-233/234 | 0.01 |
| U-235/236 | 0.00 |
| U-238 | 0.01 |
| Th-228 | 0.00 |
| Th-230 | 0.02 |
| Pu-239/240 | 0.00 |
| Pa-231 | 0.00 |
| Sr-90 | 0.00 |

Calculated By: R. SWALLER

Date: 2/21/2005

VPG IDW Drum Activity Report (to be generated at Demob)

Container ID:

Container Contents: ▼

Container gross weight (lbs.):

Container Type: ▼

| Radionuclide | Activity (uCi) |
|--------------|----------------|
| Ac-227 | 0.00 |
| Ra-226 | 0.04 |
| U-233/234 | 0.01 |
| U-235/236 | 0.00 |
| U-238 | 0.01 |
| Th-228 | 0.00 |
| Th-230 | 0.02 |
| Pu-239/240 | 0.00 |
| Pa-231 | 0.00 |
| Sr-90 | 0.00 |

Calculated By: R. SWALLER

Date: 2/21/2005

VPG IDW Drum Activity Report (to be generated at Demob)

Container ID: Styrofoam 8
Container Contents: Styrofoam ▼
Container gross weight (lbs.): 230
Container Type: Soil Bag ▼

| Radionuclide | Activity (uCi) |
|--------------|----------------|
| Ac-227 | 0.00 |
| Ra-226 | 0.04 |
| U-233/234 | 0.01 |
| U-235/236 | 0.00 |
| U-238 | 0.01 |
| Th-228 | 0.00 |
| Th-230 | 0.02 |
| Pu-239/240 | 0.00 |
| Pa-231 | 0.00 |
| Sr-90 | 0.00 |

Calculated By: R. SWALLER
Date: 2/21/2005

VPG IDW Drum Activity Report (to be generated at Demob)

Container ID: Plastic Sheetting 1

Container Contents: Plastic Sheetting

Container gross weight (lbs.): 230

Container Type: Soil Bag

| Radionuclide | Activity (uCi) |
|--------------|----------------|
| Ac-227 | 0.09 |
| Ra-226 | 1.64 |
| U-233/234 | 0.58 |
| U-235/236 | 0.04 |
| U-238 | 0.57 |
| Th-228 | 0.04 |
| Th-230 | 0.82 |
| Pu-239/240 | 0.02 |
| Pa-231 | 0.08 |
| Sr-90 | 0.07 |

Calculated By: R. SWALLER

Date: 2/21/2005

VPG IDW Drum Activity Report (to be generated at Demob)

Container ID: Plastic Sheeting 2
Container Contents: Plastic Sheeting
Container gross weight (lbs.): 230
Container Type: Soil Bag

| Radionuclide | Activity (uCi) |
|--------------|----------------|
| Ac-227 | 0.09 |
| Ra-226 | 1.64 |
| U-233/234 | 0.58 |
| U-235/236 | 0.04 |
| U-238 | 0.57 |
| Th-228 | 0.04 |
| Th-230 | 0.82 |
| Pu-239/240 | 0.02 |
| Pa-231 | 0.08 |
| Sr-90 | 0.07 |

Calculated By: R. SWALLER
Date: 2/21/2005

VPG IDW Drum Activity Report (to be generated at Demob)

| | |
|--------------------------------|--------------------|
| Container ID: | Plastic Sheeting 3 |
| Container Contents: | Plastic Sheeting |
| Container gross weight (lbs.): | 230 |
| Container Type: | Soil Bag |

| Radionuclide | Activity (uCi) |
|--------------|----------------|
| Ac-227 | 0.09 |
| Ra-226 | 1.64 |
| U-233/234 | 0.58 |
| U-235/236 | 0.04 |
| U-238 | 0.57 |
| Th-228 | 0.04 |
| Th-230 | 0.82 |
| Pu-239/240 | 0.02 |
| Pa-231 | 0.08 |
| Sr-90 | 0.07 |

Calculated By: R. SWALLER
Date: 2/21/2005