WASTE MANAGEMENT, TRANSPORTATION AND DISPOSAL PLAN

Demolition of Building 401

Niagara Falls Storage Site
Lewiston, New York

Contract Number DACW 49-03-R-0033

Prepared By:

Sevenson Environmental Services, Inc.
Niagara Falls, New York

September 2003

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Introduction

The purpose of the Waste Management, Transportation and Disposal Plan (WMTDP) is to include procedures for waste material handling, preparation, transportation and disposal from the site.

All non-hazardous debris, radiologically contaminated debris, and other potential Federal or State regulated wastes will be segregated, handled, and stored in accordance with the approved Site Operations Plan (SOP), Site Demolition Plan (SDP), Radiation Control Plan (RCP) and Site Safety and Health Plan (SSHP), applicable Federal, State, and local regulations, and as specified herein.

? Does not specify which parts of this 191 acre site will be used as project support areas.

Site diagrams detailing Site support areas and existing structures have been included as Figures 1 and 2 of this Plan.

1.0 IDENTIFICATION OF WASTES

This WMTDP covers all aspects of onsite management, transport and disposal of various waste materials generated as part of the Niagara Falls Storage Facility, Building 401 Site (the Site) located in Lewiston, New York. Copies of disposal facility waste approval profile forms are included in Appendix A of this Plan.

1.1 Non-Radiologically Contaminated Debris

All Site debris with radiological levels meeting unrestricted release criteria as defined in the RCP will be shipped offsite for Subtitle D (non-hazardous) landfill disposal. As this debris originates from a Formerly Utilized Sites Remedial Action Program (FUSRAP) Site, only non-New York state landfills will be utilized for final disposal. It is estimated that up to 9000 tons of non-hazardous debris meeting the criteria for unrestricted release will be generated during demolition activities.

1.1.1 Waste Hauler

Primary Transporter: (To be determined)

US EPA Transporter ID Number:
Facility Address:
Name of Responsible Contact:
Telephone Number:
Unit of Measure for Costing Purposes: Per ton

(To be determined) will provide aluminum body end dump trailers or intermodal containers to ship the non-hazardous debris to the appropriate disposal facility.

1.1.2 Non-Radiologically Contaminated Debris Disposal

Primary Facility Name: (To be determined)

US EPA ID Number:
Facility Location:
Name of Responsible Contact:

Telephone Number:
Unit of Measure for Costing Purposes: Per ton
Date of Last Compliance:
Outstanding Enforcement Actions:

(To be determined) will be providing non-hazardous debris disposal.

1.2 Radiologically Contaminated Debris

All demolition debris with radiological contamination levels that exceed unrestricted release criteria as defined in the RCP will be segregated for shipment to a landfill facility licensed by the Nuclear Regulatory Commission (NRC) or one that is permitted by Federal and State regulators to accept radioactive materials. It is estimated that up to 9000 tons of debris exceeding the criteria for unrestricted release will be generated during demolition activities.

1.2.1 Waste Hauler

Primary Transporter: (To be determined)

US EPA ID Number:
Facility Location:
Name of Responsible:
Telephone Number:
Unit of Measure for Costing Purposes: Per ton

(To be determined) will provide intermodal rail containers to transport the radiologically contaminated debris to the appropriate disposal facility.

1.2.2 Radiologically Contaminated Debris Disposal

Primary Facility Name: (To be determined)

US EPA ID Number:
Facility Location:
Name of Responsible Contact:
Telephone Number:
Unit of Measure for Costing Purposes: Per ton
Date of Last Compliance Inspection:
Outstanding Enforcement Actions:

(To be determined) will be providing final secure landfill disposal for all radiological debris.

1.3 Drummed Wastes

Prior to the commencement of demolition activities, a survey of all potentially hazardous material remaining in the building will be conducted. These materials may include: mercury containing switches, thermostats, or lights; PCB containing capacitors and/or light ballasts; bird/animal waste; and any other hazardous material not previously identified in building surveys. All waste materials will be removed and grouped with like materials for disposal management. All potential hazardous wastes will be first scanned per the RCP to verify the absence of radiological contamination. Non-radiologically contaminated wastes will be placed into suitable containers and sampled, as necessary, to

determine RCRA-hazardous waste status. Radiologically contaminated wastes will be placed into separate suitable containers and sampled, as necessary, to determine whether management as a mixed waste containing regulated hazardous waste and radioactive constituents.

1.3.1 Waste Hauler

Primary Transporter: (To be determined)

US EPA Transporter ID Number:
Facility Address:
Name of Responsible Contact:
Telephone Number:
Unit of Measure for Costing Purposes: Per ton

(To be determined) will provide box van trailers to ship the drummed wastes to the appropriate disposal facility.

1.3.2 RCRA Hazardous and Mixed Waste Drum Disposal

Primary Facility Name: (To be determined)

US EPA ID Number:
Facility Location:
Name of Responsible Contact:
Telephone Number:
Unit of Measure for Costing Purposes: Per ton
Date of Last Compliance:
Outstanding Enforcement Actions:

(To be determined) will be providing RCRA Hazardous and Mixed Waste Drum disposal.

1.4. Site Water

All water and sampling-related liquids generated at the Site will be pumped for temporary storage prior to being processed through an onsite water treatment system or shipped for offsite disposal. All waters will either be pumped directly to temporary storage with portable pumps and hoses or consolidated and transported to storage by a tanker truck unit.

1.4.1 Waste Hauler (Off-site disposal)

Primary Transporter: (To be determined)

US EPA Transporter ID Number:
Facility Address:
Name of Responsible Contact:
Telephone Number:
Unit of Measure for Costing Purposes: Per gallon

(To be determined) will provide tank trailers to ship the wastewater to the appropriate disposal facility.

1.4.2 Site Water Disposal (Offsite)

Primary Facility Name: (To be determined)

US EPA ID Number:
Facility Location:
Name of Responsible Contact:

Telephone Number:
Unit of Measure for Costing Purposes: Per ton
Date of Last Compliance:
Outstanding Enforcement Actions:

(To be determined) will be providing Site Water disposal.

1.5. Investigational Derived Waste (IDW) and Personal Protective Equipment (PPE) Solids

All newly generated IDW (if any) and PPE (tyvek, spent filter cartridges, etc.) will be consolidated daily into drums for storage. As necessary, all drummed solids will be bulk consolidated into intermodal containers for disposal at the radiological landfill facility. Empty drums will be reused after consolidation; crushed RCRA-empty drums will be consolidated with bulk wastes for final disposal.

1.5.1 Waste Hauler

Per 1.2.1 or 1.2.2 as applicable.

1.5.2 IDW and PPE Solids Disposal

Per 1.2.1 or 1.2.2 as applicable.

1.6 Municipal (Office) Waste Disposal

(To be determined) provides a trash dumpster and periodically removes all office waste.

1.7 Sanitary Services (Port-a-Johns)

(To be determined) provides and maintains Port-a-Johns at the Site for use by site workers.

2.0 ONSITE MANAGEMENT

2.1 Segregation of Waste Materials

The following classifications of waste material are expected during the excavation activities:

Waste Type Designation	Waste Definition
Non-contaminated building debris	Any building debris with radiological contamination level less than unrestricted release criteria as defined in the RCP
Contaminated building debris	Any building debris with radiological contamination level greater than unrestricted release criteria as defined in the RCP
Drummed RCRA hazardous or mixed wastes	Drummed miscellaneous wastes (either RCRA regulated only or mixed waste, as determined by radiological scan or analysis) removed prior to building demolition that may include the following waste types: • mercury containing switches, thermostats, or lights; • PCB containing capacitors and/or light ballasts; and • bird/animal waste.
Site Water	Waters generated on-site that are not treated onsite or utilized for dust control that must be disposed of off-site.

Sevenson will segregate waste material for disposal purposes based upon procedures defined in the RCP, SDP and at the site engineer's direction.

If it appears, at any time during the demolition process, that the material is becoming mixed, and/or it becomes impossible to segregate the waste, Sevenson will initiate the stockpiling of material to facilitate waste segregation with regards to expediting disposal of the material.

2.2 Sampling and Waste Characterization

2.2.1 Demolition Debris

All demolition debris will be sampled and characterized per the RCP and SAP, submitted under separate cover. It is anticipated that all debris will be segregated based upon radiological contamination levels for either unrestricted release for non-hazardous landfill or restricted release to a landfill licensed by the NRC as contaminated.

2.2.2 Site Waters

Accumulation of water within work zones will be limited by procedures detailed in the SOP, submitted under separate cover with the next task order. Any water that collects in

the work zone will be transferred with a pump and 2-inch line to a temporary water storage tank. All water generated during sampling or decontamination of trucks or Site equipment will also be collected and stored in the temporary tank. This water may be treated onsite or utilized during site operations for dust control purposes. Any water remaining will be sampled per the SAP for disposal purposes. Not comfortable with this.

2.2.3 Investigation-Derived Waste (IDW)/Personal Protective Equipment (PPE)

All IDW and PPE, including discarded disposable sampling equipment and plastic sheeting, will be consolidated on a daily basis at the decontamination pad area at the Site. IDW/PPE will be placed in plastic bags on a daily basis prior to weekly consolidation into (55) gallon drums for storage. Once offsite transportation of waste commences, the (55) gallon drums will be emptied into loads of waste being shipped for disposal.

2.2.4 Drummed Waste

All drums of like waste material will be consolidated at a central storage area for inventory and disposal management. Samples representative of varying waste streams will be collected and analyzed per the SAP.

2.3 Onsite Waste Handling

2.3.1 Demolition and Removal of Waste

Refer to the SOP and SDP, submitted under separate cover.

2.3.2 Preparation of Waste for Offsite Transport

Each offsite disposal facility designated in Section 1.0 of this plan requires that no free liquids be present in any incoming truckload of material. Each truckload of material loaded at the Site will be visually inspected prior to weighing and tarping to confirm the absence of free liquid in the load.

No excessive liquid (moisture) content is expected to be present in the demolition debris. The operator will visually monitor for liquid content as each intermodal or truck is loaded to verify and will notify the field supervisor if excess liquid is present. If necessary, the operator will add an approved moisture control agent (i.e. Portland cement or lime) in order to control moisture content.

COMPLETION OF INDEPENDENT TECHNICAL REVIEW

The Contractor has completed the **(Waste Management, Transportation, and Disposal Plan) (Item:4.8)** of (Demolition of Building 401 @ the Niagara Falls Storage Site, Lewiston, New York). Notice is hereby given than an independent technical review has been conducted that is appropriate to the level of risk and complexity inherent in the project, as defined in the Quality Control Plan. During the independent technical review, compliance with established policy principles and procedures, utilizing justified and valid assumptions, was verified. This included review of assumptions; methods, procedures, and material used in analyses; alternatives evaluated; the appropriateness of data used and level of data obtained; and reasonableness of the results, including whether the product meets the customer's needs consistent with law and existing Corps' policy.

_____/Signature/_____ Date: _____
Design Team Leader

_____/Signature/ Jennifer A Singer Date: 9/18/03
Design Team Members

_____/Signature/_____ Date: 9/17/03
Independent Technical Review Team Leader

_____/Signature/_____ Date: 9/19/03
Independent Technical Review Team Members

CERTIFICATION OF INDEPENDENT TECHNICAL REVIEW

Significant concerns and the explanation of the resolution are as follows:

(Describe the major technical concerns, possible impact, and resolution)

As noted above, all concerns resulting from independent technical review of the project have been considered.

_____(Signature) Date: 9/19/03

Principal W/CONTRACTOR firm

Demolition of Building 401, Niagara Falls Storage Site, Lewiston, NY
USACE Contract Number: DACW49-03-R-0033

COMPLETION OF INDEPENDENT TECHNICAL REVIEW

Item No: 4.8

Submittal Title: Waste Management, Transportation, and Disposal Plan

Significant concerns and the explanation of the resolution are as follows:

(Describe the major technical concerns, possible impact, and resolution)

-Information describing water treatment added

-Clearly states that radiologically contaminated waste will be disposed of in a licensed L/F

-Moisture Control alternatives for possible wet loads of debris added

2.3.3 Loading of Waste

Typically, all waste will be loaded directly into intermodal boxes or end dump trailers. Prior to loading, the boxes or trailers that are hauling contaminated material are lined with a six-mil polyethylene liner placed in the box. Non-contaminated loads will not be lined, as it is not required by the landfill. The liner assists in the removal of the contaminated material, inhibits the migration of any trapped moisture during transit, and prevents the intermodal or trailer box from becoming contaminated.

Waste material is loaded into the container by use of a backhoe at the temporary staging area. Once loaded, the excess liner from the sidewalls of contaminated loads is placed over the waste forming an envelope to seal the material in the box. A visual inspection will be performed at the loading site to ensure that no contaminated material has spilled onto the sides of the trailer.

The intermodal box or tractor-trailer unit then proceeds to the Contamination Reduction Zone (CRZ) for a confirmatory weighing, final tarping and decontamination.

Once cleaned and released from the decontamination pad, the load will be manifested and all shipping documents, bills of lading, weigh tickets, etc. will be completed and issued to the drivers.

(Needs to be reviewed by Craig Riemann

2.3.4 Control of Surface Water

Refer to the Site Operations Plan.

2.3.5. Odor Control

Not applicable.

2.3.6 Transport Vehicle Decontamination

All offsite transport vehicles which enter an Exclusion Zone (EZ) will be assumed to be contaminated and will be routed through the decontamination pad constructed at the site. Any large amounts of debris or dust which may adhere to the truck will be removed prior to the vehicle exiting the EZ to minimize the possibility of contaminating the Site transport road and to reduce the amounts of solids and/or decontamination waters generated at the decontamination pad.

As the truck enters the decontamination pad from the EZ side, a second gross decontamination will be performed by the decontamination personnel. Dry removal of solids, using either nylon or wire brooms and brushes, will then be followed by the use of high-pressure water sprayers, as necessary. All areas on the truck where debris or contamination may accumulate will be decontaminated. Special care will be taken to

remove solids from under wheel-wells, from between tire treads, truck undercarriage, and inside bumpers. Once the vehicle has been decontaminated, it is subject to a radiological scan per the RCP to confirm the absence of contamination.

Each vehicle that is decontaminated will be issued a Certificate of Decontamination. Each certificate will be prepared and signed by Sevenson's Site Health and Safety Officer. Copies of all Certificates of Decontamination will be maintained at the Site by Sevenson's Project Manager.

Additional details regarding project decontamination procedures may be found in the RCP and SSHP submitted under separate cover.

2.3.7 Weighing of Trucks

Loaded trucks will be weighed at the scale location to confirm that they have not been either over or under loaded prior to leaving the Site. This on-site scale will not be certified, its purpose is to provide an estimated qualification for "over-the-road" legality. The trucks will then proceed to a certified scale at the appropriate disposal facility for final certified weighing to corroborate the final disposal costs.

2.4 Onsite Storage of Waste

During periods where demolition quantities are minimal, waste material may be stockpiled on contaminated areas awaiting loading. Stockpiles will be covered with six-mil polyethylene to suppress dust, prevent erosion, and facilitate water runoff without contamination. Stockpiles will be kept to a minimum, typically under five hundred cubic yards. Water infiltration control measures including silt fence, sand bags, etc. will be installed around stockpiles to prevent the migration of contaminated material.

3.0 PRE-TRANSPORT REQUIREMENTS

3.1 DOT-Required Placards

All transport vehicles operating with the Site perimeter that do not travel public access roadways will not require D.O.T. placarding.

All D.O.T. and/or RCRA regulated materials shipped from the Site to the appropriate disposal facility will be transported in properly placarded, permitted vehicles. It is anticipated that radiologically contaminated debris will not meet the criteria of a Class 7 (radioactive) waste (< 2000 pCi/g) and will be shipped as an unregulated material. The

following is a list, by waste type, of D.O.T. shipping name, hazard class, and placard requirements:

Waste Type	Hazard D.O.T. Shipping Name	Hazard Class	Number
Non-contaminated Debris	Non- D.O.T. Regulated Material (site debris)	None	N/A
Contaminated Debris	Non- D.O.T. Regulated Material (site debris)	None	N/A
Site water	Non- D.O.T. Regulated Material (site water)	None	N/A
Drummed Waste	(To be determined based on generator knowledge and/or laboratory analysis)		

If required, a total of four placards will be placed on each vehicle, with one placard affixed in a place that is clearly visible on each side and on each end of the intermodal or dump box of the vehicle. The position, durability, color, size and type of the placard will comply with all requirements set forth by 49 CFR Section 172.504, 172.508, 172.516, 172.519, 172.331, and 172.332.

Office Waste and Sanitary Facility Waste from the Site are not considered D.O.T. or RCRA hazardous. They will be transported by truck for disposal by the appropriate

municipal or private entity or subcontractor for offsite management. No D.O.T. placarding of this material shall be required.

3.2 Example of Placards

(To be determined)

4.0 MODE AND ROUTE OF TRANSPORTATION

Sevenson personnel and the designated onsite Transportation Coordinator will manage all aspects of transportation for disposal for all waste at the Site. This will include the scheduling, staging, directing from various Site locations, issuance of required paperwork, and final inspection prior to exit from the Site.

A log of all truckloads will be maintained on site. This log, as a minimum, will contain the date shipped, truck number/license plate number, weight, manifest number, truck tare weight, and any other pertinent information pertaining to a particular shipment.

4.1 Type of Transporter

Bulk solid wastes will be loaded directly into either unlined or polypropylene-lined (as appropriate) intermodal boxes or aluminum-bodied end dump trailers for transport to the appropriate disposal facility as referenced in Section 1.0 of this Plan.

Site water shipped for offsite disposal will be loaded into 5000-gallon vacuum takers.

Any drummed solid waste generated at the Site will be loaded into box van trailers for offsite disposal.

Municipal (Office) wastes will be consolidated into a commercial dumpster that will be staged at the Site. The contracted municipal waste hauler will empty the container into a bulk transfer trailer.

Sanitary waste will be removed from Site Port-A-Johns by the contracted septic waste service. Each Port-A-John unit will be emptied with a vacuum tanker.

4.2. Transporter Capacity

The bulk solid intermodal boxes will measure approximately 20' long (outside dimensions), 6' wide (outside dimensions) and 6' high. Each intermodal box will hold approximately 24 cubic yards or 20 tons of material

The bulk solid dump trailers will measure approximately 40' long (outside dimensions), 8' wide (outside dimensions) and 7' high. Each dump trailer will hold approximately 40 cubic yards or between 22-25 tons of material.

Vacuum tanker and box van trailers are detachable units that will be pulled by a semi-tractor. Each complete unit will be approximately 45-50 feet in length.

Municipal and sanitary contractors will supply adequate equipment to perform removal of their designated wastes.

4.3. Anticipated Shipment Frequency

Empty intermodal boxes or dump trailers for bulk solids will be loaded inside the safety-fenced site area, but from outside the temporary storage pad or demolition exclusion zone areas. All full containers will be immediately tarped to prevent the infiltration of

precipitation and any possible drying/dusting problems. All loading and removal will be performed between the hours of 7:00 am and 5:00 pm, subject to change by request. An estimated 300 tons will be sized after the material has been segregated and shipped from the Site on a daily basis.

The project schedule and the proposed demolition plan may require the shipment of waste to either disposal facility on any given workday. Sevenson will coordinate closely with each facility's designated representative and/or transportation coordinator. A review of the past days' removal, and the current days anticipated production will be conducted with field supervisors and operators at the morning tailgate meeting. A daily verification of completed and proposed scheduling of demolition will be made with the onsite transportation coordinator, each disposal facility, and the anticipated transporters of waste. Records pertaining to all daily demolition activities and contacts with various subcontractors will be maintained in the Daily Quality Control Reports for the Site.

Office waste will be collected in appropriate containers (dumpsters) onsite and picked up on a weekly basis by a municipal waste contractor.

Sanitary wastes will be collected on a minimum weekly basis, or more frequently as required, by the septic disposal contractor in septic waste vacuum tanker.

4.4 Transportation Route and Estimated Transit Time

(to be determined)

All municipal solid waste and sanitary waste transport vehicles will also utilize these routes to enter and leave the Site.

4.5 Temporary Off-Site Storage

All transport vehicles will travel directly to their intended disposal facility. No offsite temporary storage of Site materials is anticipated. Should mechanical failure or driver injury necessitate the unscheduled storage of materials once the vehicle is en route, the appropriate parties will immediately notify Sevenson. Sevenson will make the generator aware of any transport irregularities and will coordinate with the generator to resolve any difficulties.

If possible, the vehicle should be returned to the Site or removed to the transporter's own secure facility or service yard until alternate arrangements can be made. If this is not possible, another facility's secured yard or lot will be desirable.

5.0 REGULATIONS

5.1 Weight and Size Limitations

The bulk solid intermodal box and dump trailers and their associated transport vehicle furnished by the transporters will have a legal over-the-road weight capacity of 80,000 pounds gross weight. Each tractor and trailer combination will vary slightly in payload capacity, so the driver of the vehicle will be consulted prior to exiting the Site to confirm payload appropriateness.

All other types of transport vehicles will be subject to limitations according to their manufacturers requirements. All hauling weights will be confirmed with the driver and their respective dispatcher prior to the first removal of a particular waste from the Site.

5.2 Vehicle Licensing and Registration Requirements

All vehicles will be licensed and permitted in all states through which they may travel. The onsite Transportation Coordinator will confirm all permitting issues with the dispatcher of the trucking company. Copies of all permits and licenses will be made available onsite upon request by the generator.

6.0 Sample Shipping Papers

6.1 Summary and Examples of Completed Shipping Papers

The required shipping papers for each shipment of contaminated waste from the Site will consist of a Waste Manifest, Radioactive Waste Shipment and Disposal Record and a truckers' bill of lading.

Non-contaminated debris will be shipped with a Waste Manifest and truckers' bill of lading.

Drums of hazardous or mixed waste, as necessary, will be shipped with a Waste Manifest, Land Ban Notification Form, Radioactive Waste Shipment and Disposal Record (if required) and a truckers' bill of lading.

One set of forms will be provided for each load. When ready to exit the Site, the truck driver will be presented the completed paperwork. He will sign the manifest(s) as directed, and carry the manifest(s), Land Disposal Restriction (LDR) form, and bill of lading in his cab at all times until he arrives at the disposal facility.

Copies of all shipping documents can be found in Appendix B of this Plan.

7.0 TRANSPORTATION QA PROGRAM

7.1 Truck Inspection Criteria and Corrective Action Procedures

7.1.1 Truck Integrity

All truck/transportation vehicle tires should be inspected immediately upon arrival at Site by the designated Transportation Coordinator and/or Sevenson's Project Manager for punctures, cracks, or protrusions. It is the responsibility of the appropriate transportation subcontractor to deliver well-maintained, usable transport vehicles and containers to the Site and the responsibility of Sevenson to determine if the vehicle and container is fit to carry the specific waste. If the vehicle is not acceptable to Sevenson, the subcontractor shall be notified immediately that the vehicle has been rejected and arrangements shall be made for replacement.

7.1.2 Lining and Tarping Procedures

All bulk solid contaminated waste transport vehicles will be lined with a 6-mil polyethylene liner. The liners will have two end flaps and side flaps which extend over the edges of the box to protect from contamination. Once loaded, the flaps will be folded into the center of the waste to partially cover the load.

The tarps (top covers) are made of 9 mil woven polypropylene fabric and measure approximately 10' wide x 24' long. The tarps will be secured using braided rope through 16 tie-down hooks.

Liners for non-hazardous trucks may be used at the discretion of the disposal facility and Sevenson. All non-hazardous loads will be securely tarped, however, before leaving the Site.

7.1.3 Spill Response Contingency Plan

All transportation subcontractors will have spill response contingency plans for handling spills ranging from small incidental releases to large releases caused by overturns. Sevenson or its subcontractor personnel will handle small releases onsite. Large releases caused by full overturns or offsite incidents will be handled by teams of the transporter's in-house response crews supplemented by subcontractors as required. Manpower, equipment and materials are handled on a case-by-case basis. Any subcontractor will notify Sevenson in the event that any spillage occurs during transit to its appropriate designation facility. Each truck transporter is required to maintain and follow a Spill Contingency Plan. Notification by the truckers of any incidents shall be made to Sevenson. In turn, Sevenson will notify all appropriate individuals associated with this

project of any spill and the response actions being taken. Copies of the transporter's Spill Contingency Plan are included in Appendix C.

FIGURES

FIGURE 1-1: GENERAL LOCATION OF NIAGARA FALLS STORAGE SITE

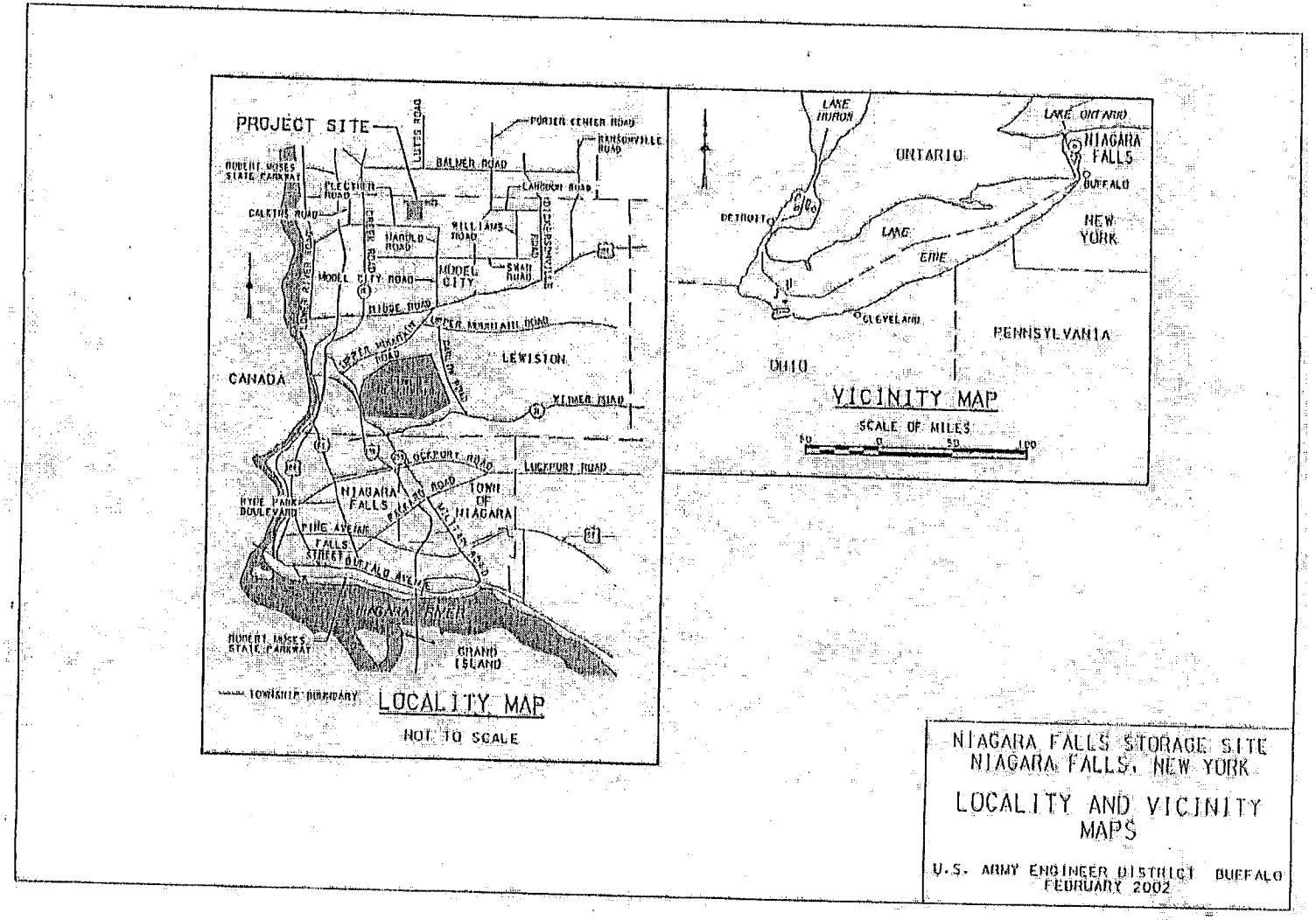
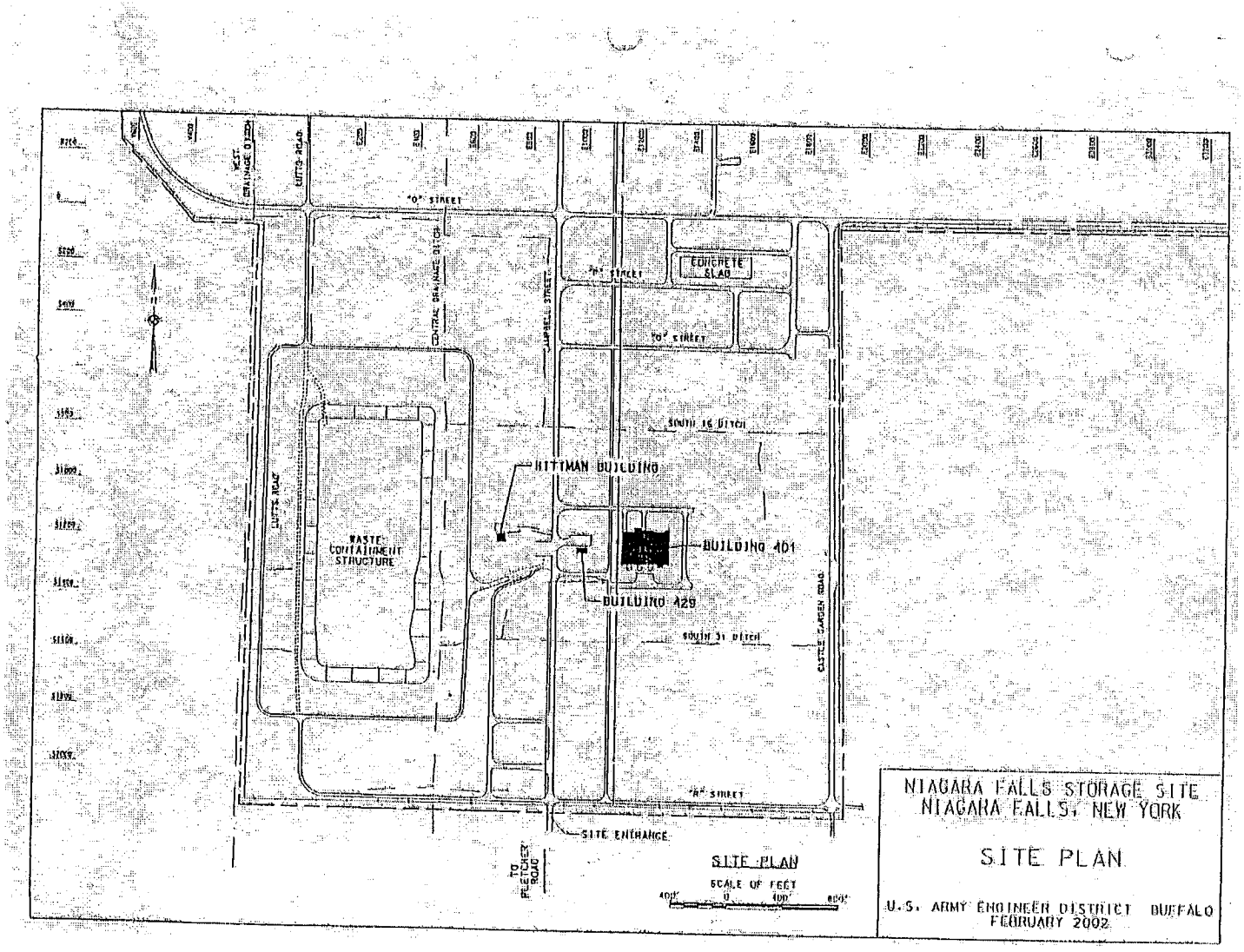


FIGURE 1-2: SITE MAP



Appendix A

WASTE PROFILES

ENVIROCARE
of Utah, Inc.

RADIOACTIVE WASTE PROFILE RECORD

EC-0230, Revision 4

A. GENERATOR AND WASTE STREAM INFORMATION

GENERAL: Complete this form for one waste stream. Contact Envirocare at (801) 532-1330 if you have any questions while completing this form. Please indicate "N/A" if a category does not apply.

1. GENERATOR INFORMATION

Generator Name: _____ EPA ID #: _____

Generator Contact: _____ Title: _____

Mailing Address: _____

_____ Utah Site Access Permit #: _____

Phone: _____ Fax: _____ Email: _____

Contractor Name: _____ Location of Material (City, State): _____

Name & Title of Person Completing Form: _____ Phone: _____

2. WASTE STREAM INFORMATION

Waste Stream ID: _____ Waste Stream Name: _____

Revision: _____ Date: _____ Volume (ft^3): _____ Delivery Date: _____

CHECK APPROPRIATE BOXES BELOW. Please verify the required forms requested below are completed and submitted with the Radioactive Waste Profile Record.

HAZARDOUS MATERIAL: Is the waste classified as hazardous waste as defined by 40 CFR 261?

Y ☐ N ☐ If No, complete and attach the "Low-Level Radioactive Waste Analysis Certification Attachment".

If Yes, complete and attach the "Hazardous Waste Analysis Certification Attachment" and check applicable box below.
Has the waste been treated to meet applicable treatment standards per 40 CFR 268? Y ☐ N ☐
Is the waste to be treated by Envirocare? Y ☐ N ☐

LOW-LEVEL RADIOACTIVE MATERIAL: Is the radioactivity contained in the waste material Low-Level Radioactive Waste as defined in the Low-Level Radioactive Waste Policy Amendments Act of 1985 or in DOE Order 435.1?

Y ☐ N ☐ If Yes, a current copy of a LLRW Compact Export letter authorizing export must be submitted if applicable. This authorization is applicable for non-DOE LLRW (i.e., Mixed Waste, NORM/NARM, 11e.(2) material, and waste from DOE do not require a Compact Export Letter).
If No, check appropriate box: NORM/NARM ☐ 11e.(2) Byproduct Material ☐ Other: _____

SPECIAL NUCLEAR MATERIAL: Does the waste stream contain material with uranium enriched in U-235 or any of the following radionuclides: U-233, Pu-236, Pu-238, Pu-239, Pu-240, Pu-241, Pu-242, Pu-243, or Pu-244?

Y ☐ N ☐ If Yes, complete and attach the "SNM Exemption Certification" form (EC-0230-SNM). Supporting statements, analytical results, and documentation must be included with the submittal.

PCB MATERIAL: Does the waste contain Polychlorinated Biphenyls (PCB's) that are regulated for disposal per 40 CFR 761?

Y ☐ N ☐ If Yes, complete and attach the "PCB Waste Certification" form (EC-98279).

ASBESTOS: Does the waste contain Asbestos Containing Material?

Y ☐ N ☐ If Yes, Asbestos Containing Material must be managed in accordance with 40 CFR 61. Provide a detailed description of the waste containing asbestos in Section B.5 of the waste profile.

ENVIROCARE of Utah, Inc.

RADIOACTIVE WASTE PROFILE RECORD

EC-0230, Revision 4

B. WASTE PHYSICAL PROPERTIES & PACKAGE INFORMATION

1. GENERAL CHARACTERISTICS

Does the waste contain free liquids? Y ☐ N ☐ If Yes, what is the percent of free liquid by waste volume?_____%

Does the waste contain absorbent? Y ☐ N ☐ Density range of the waste:_____-_____ S.G. ☐ lb/ft3 ☐

List percentage of waste type by volume: Soil_____% Concrete & Metal_____% DAW_____% Resins_____% Sludge_____%

Other constituents and percentage by volume? _____

2. MATERIAL SIZE

Gradation of Material: Indicate the percentage of waste material that would pass through the following grid sizes. For example, 95% of the material would pass through a 12" square, 90% passes through a 4" square, 80% passes through a 1" square, etc.

12"_____% 4"_____% 1"_____% 1/4"_____% 1/40"_____% 1/200"_____%

Does the waste stream contain oversize debris (i.e., no dimension < 10 inches and any dimension > 12 feet)? Y ☐ N ☐
If Yes, include a detailed description (i.e., weight, size, drawings, etc.) of the oversize debris in the narrative of Section B.5.

3. MOISTURE CONTENT

For soil or soil-like materials, please use **Std. Proctor Method ASTM D-698** to determine the optimum moisture content. The waste material must not exceed 3 percentage points above optimum moisture upon arrival at Envirocare's disposal facility unless approved by Envirocare.

Optimum Moisture Content: _____% at Maximum Dry Density (lb/ft^3): _____

Average Moisture Content: _____% Moisture Content Range: _____% - _____%

4. WASTE SHIPPING & PACKAGING

Transportation Mode: ☐ Highway ☐ Rail

Shipping & Container Packages: (Check all that apply) ☐ Drums (≤ 85 gallons) ☐ Boxes (≤ 100 ft^3) ☐ Soft-Sided Bags (≤ 10 yd^3)

☐ Intermodal ☐ Sealand ☐ Gondola* ☐ Box Car

Other:_____

*Dimensions of gondola railcars must be between 48 to 56.5 feet in length and 8.5 to 12.5 feet in height as measured from the top of the rail to the top of the railcar unless approved by Envirocare.

5. NARRATIVE DESCRIPTION AND HISTORY OF WASTE

Please submit a narrative description and history of the waste as an attachment to the Radioactive Waste Profile Record. This attachment should include the following:

- Process that generated the waste
- Waste material physical composition and characteristics
- Radiological and chemical characterization method
- Basis for determining manifested radionuclide concentrations
- Description and amounts of absorbents, if applicable
- Basis of non-hazardous or hazardous waste determinations
- Treatment processes, if applicable
- Product information or Material Safety Data Sheets associated with the waste as applicable
- Information requested in other sections of this form

ENVIROCARE
of Utah, Inc.

RADIOACTIVE WASTE PROFILE RECORD

EC-0230, Revision 4

C. RADIOLOGICAL INFORMATION

Obtain sufficient samples to adequately determine a range and weighted average of activity in the waste. Attach the gamma spectroscopy or radiochemistry data supporting the radionuclide information listed below.

1. Does the waste material contain accessible surfaces with contact dose rates greater than 500 mR/hr? Y ☐ N ☐

2. Does the waste material contain any of the following isotopes: Aluminum-26, Berkelium-247, Calcium-41. Californium-249, Californium-250, Chlorine-36, Rhenium-187, Terbium-157, or Terbium-158? Y ☐ N ☐

3. Please list the following information for each isotope associated with the waste. The manifested concentration on the Uniform LLRW Manifest Form 541 must not exceed the upper concentration range listed below for each isotope. Provide an explanation in the narrative description of Section B.5 if the waste contains localized "hot spots" or elevated concentrations that significantly exceed the upper concentration range. Envirocare's license assumes that short-lived decay products of specified isotopes are present in concentrations equal to the parent. Consequently, these short-lived isotopes do not need to be listed below. If additional space is needed, provide an Attachment C.3 to this profile record formatted as below.

Isotopes	Manifested Concentration Range (pCi/g)			Weighted Avg. per Container (pCi/g)	Isotopes	Manifested Concentration Range (pCi/g)			Weighted Avg. per Container (pCi/g)
		to					to		
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ENVIROCARE of Utah, Inc.

RADIOACTIVE WASTE PROFILE RECORD

EC-0230, Revision 4

HAZARDOUS WASTE ANALYSIS CERTIFICATION ATTACHMENT

This form is required only if the checkbox for Hazardous Material on page one has been checked YES. Envirocare may waive the chemical laboratory analyses if the material is not amenable to chemical sampling and analysis (e.g., debris items including metal pieces, concrete, plastic, etc.). Justification for waiving the chemical analyses must be provided in Section B.5.

D. MINIMUM REQUIRED CHEMICAL ANALYSIS

The following parameters must be analyzed by a Utah or NELAC certified laboratory. Typical SW-846 analytical methods have been listed. Other approved methods are acceptable. Attach the most recent or applicable chemical analytical results representing the waste.

1. GENERAL CHEMICAL PARAMETERS

	SW-846 Analytical Methods
Soil pH:_____	**Method 9045** Please provide the range of the pH analyses performed.
PFLT:_____ Pass / Fail	**Method 9095** Not applicable for liquid radioactive waste streams.
Reactive Sulfide:_____ mg/kg	**Method 9034**
Reactive Cyanide:_____ mg/kg	**Method 9014** If the Reactive Cyanide is > 50 mg/kg , total and amenable cyanide are required.
	Method 9010 Total cyanide:_____ mg/kg Amenable cyanide:_____ mg/kg
TOX:_____ mg/kg	**Method 9020** TOX or Method 8260 & 8270 analyses (totals). If TOX >200 mg/kg, Method 8260 & 8270 analyses (totals) are required.

Has the waste been analyzed for volatile or semi-volatile constituents (Method 8260 or 8270)? Y ☐ N ☐

Any distinguishing color or odor? Y ☐ N ☐ If Yes, color: _____; odor: _____

2. HAZARDOUS WASTE CODES AND TREATMENT STANDARDS (40 CFR 268)

List all hazardous waste codes and treatment standards. Include hazardous waste codes that have been removed through treatment and indicate "Former" in the second column. Worst-case concentrations only need to be provided for concentration based treatment standards. If additional space is needed, provide an Attachment D.2 to this profile record formatted as below. Include a description of hazardous waste determinations and any variances, exclusions, etc. in the narrative requested in Section B.5.

EPA HW Codes	**Description, Constituent of Concern, or Subcategory**	**Treatment Standard** (mg/kg unless noted as mg/L TCLP or Technology Code)	**Worst-Case Concentration** (mg/kg unless noted as mg/L TCLP)

ENVIROCARE of Utah, Inc.

RADIOACTIVE WASTE PROFILE RECORD

EC-0230, Revision 4

D. 2. HAZARDOUS WASTE CODES AND TREATMENT STANDARDS (Continued)

EPA HW Codes	Description, Constituent of Concern, or Subcategory	Treatment Standard (mg/kg unless noted as mg/L TCLP or Technology Code)	Worst-Case Concentration (mg/kg unless noted as mg/L TCLP)

3. UNDERLYING HAZARDOUS CONSTITUENTS (40 CFR 268.48)

List all underlying hazardous constituents (UHCs) and treatment standards. Include UHCs that have been removed through treatment. Worst-case concentrations only need to be provided for concentration based treatment standards. If additional space is needed, provide an Attachment D.3 to this profile record formatted as below.

Underlying Hazardous Constituents	Treatment Standard (mg/kg unless noted as mg/L TCLP or Technology Code)	Worst-Case Concentration (mg/kg unless noted as mg/L TCLP)

ENVIROCARE of Utah, Inc.

RADIOACTIVE WASTE PROFILE RECORD

EC-0230, Revision 4

D. 4. OTHER CHEMICAL CONSTITUENTS

List any other chemical constituents of concern (e.g., PCBs, chelating agents, etc.) and worst-case concentrations. If additional space is needed, provide an Attachment D.4 to this profile record formatted as below.

Other Chemical Constituents	**Worst Case Concentration** (mg/kg unless noted as mg/L TCLP)	**Other Hazardous Constituents**	**Worst-Case Concentration** (mg/kg unless noted as mg/L TCLP)

5. LABORATORY CERTIFICATION INFORMATION

☐ **UTAH or NELAC CERTIFIED**
The Utah or NELAC certified laboratory holds a current certification for the applicable chemical test methods insofar as such official certifications are given. Please provide a copy of the laboratory's current certification letter for each parameter analyzed and each method used for chemical analyses required by this form.

☐ **OTHER LABORATORY CERTIFICATION** (Describe below)

_____

6. CERTIFICATION

I certify that sample results representative of the waste described in this profile were or shall be obtained using state- and EPA-approved analytical methods. I also certify that where necessary representative samples were or shall be provided to Envirocare and to qualified laboratories for the analytical results reported herein. I further certify that the waste described in this record is not prohibited from land disposal in 40 CFR 268 (unless prior arrangements are made for treatment at Envirocare) and that all applicable treatment standards are clearly indicated on this form. I also certify that the information provided on this form is complete, true, and correct and is accurately supported and documented by any laboratory testing as required by Envirocare. I certify that the results of any said testing have been submitted to Envirocare. I certify that the waste does not contain any prohibited items listed in Envirocare's Radioactive Material License or RCRA Permit.

Generator's Signature: _____ Title: _____ Date: _____

ENVIROCARE of Utah, Inc.

RADIOACTIVE WASTE PROFILE RECORD

EC-0230, Revision 4

LOW-LEVEL RADIOACTIVE WASTE CERTIFICATION ATTACHMENT

This form is required only if the checkbox for Hazardous Material on page one has been checked No. Envirocare may waive the chemical laboratory analyses if the material is not amenable to chemical sampling and analysis (e.g., debris items including metal pieces, concrete, plastic, etc.). Justification for waiving the chemical analyses must be provided in Section B.5.

D. MINIMUM REQUIRED CHEMICAL ANALYSIS

The following parameters must be analyzed by a Utah or NELAC certified laboratory. Typical SW-846 analytical methods have been listed. Other approved methods are acceptable. Attach the most recent or applicable chemical analytical results representing the waste.

1. GENERAL CHEMICAL PARAMETERS

	SW-846 Analytical Methods
Soil pH:_____	**Method 9045** Please provide the range of the pH analyses performed.
PFLT:_____ Pass / Fail	**Method 9095** Not applicable for liquid radioactive waste streams.
Reactive Sulfide:_____ mg/kg	**Method 9034**
Reactive Cyanide:_____ mg/kg	**Method 9014**

2. 40 CFR 261.24 Table 1 – Contaminants of Toxicity Characteristic

Metals plus Zinc: Methods 6010 & *7470 (Envirocare's GWQDP requires zinc analysis) ☐ TCLP (mg/L) or ☐ Total (mg/kg)

Arsenic_____	Chromium_____	Selenium_____
Barium_____	Lead_____	Silver_____
Cadmium_____	*Mercury_____	Zinc_____

Organics, Pesticides/Herbicides: Methods 8081/8151 ☐ TCLP (mg/L) or ☐ Total (mg/kg)

Endrin_____	Toxaphene_____	Chlordane_____
Lindane_____	*2,4-D_____	Heptachlor_____
Methoxychlor_____	*2,4,5-TP Silvex_____	

Organics, Semi-Volatile: Method 8270 ☐ TCLP (mg/L) or ☐ Total (mg/kg)

o-Cresol_____	Hexachlorobenzene_____	Pentrachlorophenol_____
m-Cresol_____	Hexachlorobutadiene_____	Pyridine_____
p-Cresol_____	Hexachloroethane_____	2,4,5-Trichlorophenol_____
Total Cresol_____	Nitrobenzene_____	2,4,6-Trichlorophenol_____
2,4-Dinitrotoluene_____		

Organics, Volatile: Method 8260 ☐ TCLP (mg/L) or ☐ Total (mg/kg)

Benzene_____	1,4-Dichlorobenzene_____	Methyl ethyl keytone_____
Carbon Tetrachloride_____	1,2-Dichloroethane_____	Tetrachloroethylene_____
Chlorobenzene_____	1,1-Dichloroethylene_____	Trichloroethylene_____
Chloroform_____		

3. Was the waste at the point of generation a RCRA hazardous waste per 40 CFR 261? Y ☐ N ☐

If Yes, list former hazardous waste codes and former underlying hazardous constituents. List worst-case concentrations for each hazardous constituent. If additional space is needed, provide an Attachment D.3 to this profile record formatted as below. Attach the most recent chemical analytical results demonstrating compliance with applicable treatment standards.

If No, indicate "N/A" in Section D.3 below.

ENVIROCARE of Utah, Inc.

RADIOACTIVE WASTE PROFILE RECORD

EC-0230, Revision 4

D. 3.

Former EPA HW Codes or Underlying Hazardous Constituents	Treatment Standard (mg/kg unless noted as mg/L TCLP or Technology Code)	Worst Case Concentration (mg/kg unless noted as mg/L TCLP)

4. OTHER CHEMICAL CONSTITUENTS

List any other chemical constituents of concern (e.g., PCBs, chelating agents, etc.) and worst-case concentrations. If additional space is needed, provide an Attachment D.4 to this profile record formatted as below.

Other Chemical Constituents	Worst-Case Concentration (mg/kg unless noted as mg/L TCLP)	Other Hazardous Constituents	Worst-Case Concentration (mg/kg unless noted as mg/L TCLP)

5. LABORATORY CERTIFICATION

☐ **UTAH or NELAC CERTIFIED**
The Utah or NELAC certified laboratory holds a current certification for the applicable chemical test methods insofar as such official certifications are given. Please provide a copy of the laboratory's current certification letter for each parameter analyzed and each method used for chemical analyses required by this form.

☐ **OTHER LABORATORY CERTIFICATION** (Describe below)

_____

6. CERTIFICATION

I certify that sample results representative of the waste described in this profile were or shall be obtained using state- and EPA-approved analytical methods. I also certify that where necessary representative samples were or shall be provided to Envirocare and to qualified laboratories for the analytical results reported herein. I further certify that the waste described in this record is not prohibited from land disposal in 40 CFR 268 (unless prior arrangements are made for treatment at Envirocare) and that all applicable treatment standards are clearly indicated on this form. I also certify that the information provided on this form is complete, true, and correct and is accurately supported and documented by any laboratory testing as required by Envirocare. I certify that the results of any said testing have been submitted to Envirocare. I certify that the waste does not contain any prohibited items listed in Envirocare's Radioactive Material License.

Generator's Signature: _____ Title: _____ Date: _____

ATTACHMENT B.5
PHYSICAL PROPERTIES

Generator Name:_____ Generator # / Waste Stream #:_____
Revision #:_____ Revision Date:_____

ENVIROCARE OF UTAH, INC.
THE SAFE ALTERNATIVE

Certified Containerized Waste Profile Record

EC-98210, Revision 2

1.0 Generator/Customer Information

Generator Name _____ Generator Number (to be assigned by Envirocare) _____
Contractor Name _____
Revision Number _____ Date _____ Utah Site Access Permit # _____

Mailing Address _____
Phone _____ Fax _____
Location of Waste (City, State) _____
Generator Contact _____ Title _____
Mailing Address (if different) _____
Email Address _____
Phone _____ Fax _____

2.0 Class A LLRW Types to be Certified (check those that apply)*

Licensed: Y ☐ N ☐ DOE ☐ Asbestos Y ☐ N ☐
PCB Radioactive Y ☐ N ☐ SNM Y ☐ N ☐

- ☐ Dry active waste
  - ☐ Compactible
  - ☐ Noncompactible
- ☐ Resins
  - ☐ Dewatered
  - ☐ Dried
- ☐ Filters
  - ☐ Dewatered
  - ☐ Dried
- ☐ Treated biological, pathogenic, or infectious materials
- ☐ Soil/soil-like material
- ☐ Evaporator bottoms/sludges/ concentrates
- ☐ Solidified materials
  - ☐ Contaminated water
  - ☐ Scintillation products
  - ☐ Filters
  - ☐ Resins
  - ☐ Other (describe below)
- ☐ Incinerator ash
- ☐ Large objects (>331 cf nominal volume)

Other material (describe) _____

* Envirocare may request density ranges for the waste types identified above.

3.0 Container Types to be used for Shipment (check those that apply)

- ☐ Metal box (nominal volume up to 100 cf)
- ☐ Metal tank or liner (nominal volume up to 331 cf)
- ☐ Concrete tank or liner (nominal volume up to 331 cf)
- ☐ Polyethlene tank or liner (nominal volume up to 331 cf)
- ☐ Fiberglass tank or liner (nominal volume up to 331 cf)
- ☐ Metal drum (nominal volume up to 15 cf)
- ☐ Unpackaged components
- ☐ High Integrity Container (specify below)

Other containers (describe) _____
Any of the above shipped in casks _____
HICs (list manufacturer and model) _____
_____

4.0 Supporting Documentation

Please submit the following information relative to the waste forms and container types checked above. The Process Control Program may cover some of the items described below. If so, duplicate submittal is not necessary. Electronic copies of the documentation described below are acceptable and preferred.

A. Process Control Program, if applicable.

B. 10 CFR 61 Sampling and Analysis Program

C. Quality Assurance Program

D. IE 79-19 Personnel Training Program

E. Radioactive Waste Shipping Program

F. Implementing procedures (table of contents) for activities related to waste characterization, waste classification, liquid verification, packaging, and transportation of shipments to Envirocare (if not included in documentation listed above). Include related procedures from brokers or processors if applicable.

G. NRC or Agreement State and/or third-party industry audit reports related to the above items for the preceding three years. Include any responses and corrective actions prepared relative to reported deficiencies.

5.0 Certification Statement

I certify that all waste shipments to Envirocare under this Generator Certification Record will be characterized in accordance with all applicable NRC and EPA regulations and guidance documents. I further certify that the waste is not restricted from land disposal in 40 CFR 268; nor is the waste treated characteristic or listed hazardous waste under 40 CFR 261.

I further certify that all waste shipments to Envirocare under this Generator Certification Record will be packaged in accordance with the requirements of Envirocare's Radioactive Material License and Containerized Waste Facility - Waste Acceptance Criteria.

I further certify that all waste shipments to Envirocare under this Generator Certification Record will be transported in accordance with all applicable DOT and/or NRC requirements for radioactive material shipments.

Generator's Signature	Date
Printed name	Title

GENERATOR'S WASTE PROFILE SHEET

PLEASE PRINT IN INK OR TYPE

Service Agreement on File? ☐YES ☐NO

☐Hazardous ☐Non-Hazardous ☐TSCA

Profile Number: WMI CM 1433

Renewal Date: / /

A. Waste Generator Information

1. Generator Name: _____
2. SIC Code: _____
3. Facility Street Address: _____
4. Phone: ( ) _____
5. Facility City: _____
6. State/Province: _____
7. Zip/Postal Code: _____
8. Generator USEPA/Federal ID #: _____
9. County: _____
10. State/Province ID #: _____
11. Customer Name: _____
12. Customer Phone: ( ) _____
13. Customer Contact: _____
14. Customer Fax: _____
15. Billing Address ☐Same as above

B. Waste Stream Information

1. **Description**

a. Name of Waste: _____

b. Process Generating Waste: _____

c. Color	d. Strong odor (describe):	e. Physical state @ 70°F	f. Layers	g. Free liquid range to %
		☐Solid ☐Liquid ☐Gas ☐Sludge ☐Other	☐Single Layer ☐Multi-layer	h. pH: Range to %

i. Liquid Flash Point: ☐<73°F ☐73-99°F ☐100-139°F ☐140-199°F ☐≥ 200°F ☐Not applicable

j. Chemical Composition (List all constituents [including halogenated organics, debris, and UHC's] present in any concentration and submit representative analysis):

Constituents	Concentration Range	Constituents	Concentration Range

TOTAL COMPOSITION MUST EQUAL OR EXCEED 100%

k. ☐Oxidizer ☐Pyrophoric ☐Explosive ☐Radioactive ☐Carcinogen ☐Infectious ☐Shock Sensitive ☐Water Reactive

l. Does the waste represented by this profile contain any of the carcinogens which require OSHA notification? (list in Section B.1.j)..... ☐YES ☐NO

m. Does the waste represented by this profile contain dioxins? (list in Section B.1.j)..... ☐YES ☐NO

n. Does the waste represented by this profile contain asbestos?..... ☐YES ☐NO

If yes..... ☐friable ☐non-friable

o. Does the waste represented by this profile contain benzene?..... ☐YES ☐NO

If yes, concentration _____ ppm

Is the waste subject to the benzene waste operations NESHAP?..... ☐YES ☐NO

p. Is the waste subject to RCRA Subpart CC controls?..... ☐YES ☐NO

If yes, volatile organic concentration _____ ppmw

q. Does the waste contain any Class I or Class II ozone-depleting substances?..... ☐YES ☐NO

r. Does the waste contain debris? (list in Section B.1.j)..... ☐YES ☐NO

2. **Quantity of Waste**

Estimated Annual Volume _____ ☐Tons ☐Yards ☐Drums ☐Other (specify) _____

3. **Shipping Information**

a. Packaging:

☐Bulk Solid; Type/Size: _____ ☐Bulk Liquid; Type/Size: _____

☐Drum; Type; Size: _____ ☐Other: _____

b. Shipping Frequency: Units _____ Per: ☐Month ☐Quarter ☐Year ☐One time ☐Other _____

c. Is this a U.S. Department of Transportation (USDOT) Hazardous Material? (If no, skip d, e, and f)..... ☐YES ☐NO

GENERATOR'S WASTE PROFILE SHEET

PLEASE PRINT IN INK OR TYPE

d. Reportable Quantity (lbs.;kgs.): _____ e. Hazard Class/ID #: _____

f. USDOT Shipping Name: _____

g. Personal Protective Equipment Requirements: _____

h. Transporter/Transfer Station: _____

C. Generator's Certification (Please check appropriate responses, sign, and date below.)

1. Is this a USEPA hazardous waste (40 CFR Part 261)? If the answer is no, skip to 2..... ☐YES ☐NO
   a. If yes, identify ALL USEPA listed and characteristic waste code numbers (D, F, K, P, U) _____
   b. If a characteristic hazardous waste, do underlying hazardous constituents (UHCs) apply? (if yes, list in Section B.1.j)..... ☐YES ☐NO
   c. Does this waste contain debris? (if yes, list size and type in Chemical Composition - B.1.)..... ☐YES ☐NO

2. Is this a state hazardous waste?..... ☐YES ☐NO
   Identify ALL state hazardous waste codes _____

3. Is the waste from a CERCLA (40 CFR 300, Appendix B) or state mandated clean-up?..... ☐YES ☐NO
   If yes, attach Record of Decision (ROD), 104/106 or 122 order or court order that governs site clean-up activity. For state mandated clean-up, provide relevant documentation.

4. Does the waste represented by this waste profile sheet contain radioactive material, or is disposal regulated by the Nuclear Regulatory Commission?..... ☐YES ☐NO

5. Does the waste represented by this waste profile sheet contain concentrations of Polychlorinated Biphenyls (PCBs) regulated by 40 CFR 761? (if yes, list in Chemical Composition - B.1.j)..... ☐YES ☐NO
   a. If yes, were the PCBs imported into the U.S.?..... ☐YES ☐NO

6. Do the waste profile sheet and all attachments contain true and accurate descriptions of the waste material, and has all relevant information within the possession of the Generator regarding known or suspected hazards pertaining to the waste been disclosed to the Contractor?..... ☐YES ☐NO

7. Will all changes which occur in the character of the waste be identified by the Generator and disclosed to the Contractor prior to providing the waste to the Contractor?..... ☐YES ☐NO

☐Check here if a Certificate of Destruction or Disposal is required.

Any sample submitted is representative as defined in 40 CFR 261 - Appendix I or by using an equivalent method. I authorize WM to obtain a sample from any waste shipment for purposes of recertification. If this certification is made by a broker, the undersigned signs as authorized agent of the generator and has confirmed the information contained in this Profile Sheet from information provided by the generator and additional information as it has determined to be reasonably necessary. If approved for management, Contractor has all the necessary permits and licenses for the waste that has been characterized and identified by this approved profile.

Certification Signature: _____ Title: _____

Name (Type or Print): _____ Company Name: _____ Date: _____

☐Check if additional information is attached. Indicate the number of attached pages _____

D. WM Management's Decision — FOR WM USE ONLY

1. Management Method ☐Landfill ☐Non-hazardous Solidification ☐Bioremediation ☐Incineration
   ☐Hazardous Stabilization ☐Other (Specify) _____
2. Proposed Ultimate Management Facility: _____
3. Precautions, Special Handling Procedures, or Limitation on Approval: _____

4. Waste Form _____ 5. Source _____ 6. System Type _____

Special Waste Decision..... ☐Approved ☐Disapproved

Salesperson's Signature: _____ Date: _____

Division Approval Signature (Optional): _____ Date: _____

Special Waste Approvals Person Signature: _____ Date: _____

Appendix B

SHIPPING DOCUMENTATION

ENVIROCARE OF UTAH, INC.
The Safe Alternative

5 WORKING-DAY SHIPMENT NOTIFICATION

(EC-98096) Revision 3

Generator Name:_____ Date: _____
Gen # - Waste Stream #: _____ Utah Site Access Permit No.: _____
Contact Name: _____ Waste Profile Rev#: ____ Rev. Date: _____
Contact E-mail Address: _____ Contact Phone #: _____
Carrier Company: _____ Phone #: _____
Waste Type: NORM ☐ LLRW ☐ 11e. (2) ☐ Mixed Waste ☐ MW Requiring Treatment ☐
PCB Radioactive ☐ PCB Mixed Waste ☐ Other:_____

REQUESTED DATE OF DELIVERY: _____
Shipment delivery dates are subject to change. The shipment is not scheduled unless confirmed by Envirocare's Scheduling Dept.

Shipment Number (gen#-ws#-ship#)	Physical Description of Waste (e.g. soil, metal, wood, sludge, etc.)	Number & Type of Containers	Truck/Trailer or Railcar Numbers	Bulk Container ID Number (For Intermodal, Sealand, etc.)

SPECIAL HANDLING INFORMATION (Please check all items)

	Yes	No	Comments - If "Yes", please specify:
1. Do any of the containers have contact dose rates greater than 100 mrem/hr?	☐	☐	Maximum contact dose rate on container (mrem/hr): _____
2. Are there items inside the container with contact dose rates exceeding 100 mrem/hr?	☐	☐	Maximum contact dose rate on item (mrem/hr): _____
3. Are you shipping containers other than a B12, B25, 55-gal drum, sealand, intermodal, or gondola?	☐	☐	Container type: _____ Dimensions (ft): _____
4. If applicable, are drums palletized?	☐	☐	☐ Not Applicable
5. Is there oversized debris (i.e., no dimension <10" or any dimension >12') in any of the containers?	☐	☐	Describe oversized debris in the above table under "Physical Description"
6. Is any of the waste potentially dusty?	☐	☐	
7. For shipments in an enclosed trailer, do any of the containers weigh >7,000 lbs.?	☐	☐	Max Weight (lbs.): _____
8. For shipments, on a flatbed trailer, do any of the containers weigh > 14,000 lbs.?	☐	☐	Max Weight (lbs.): _____
9. For bulk containers (e.g., Intermodal, Sea Land, etc.), does the container weigh > 65,000 lbs.?	☐	☐	Max Weight (lbs.): _____
10. Does the shipping container include other containers within (e.g., drums inside an intermodal)?	☐	☐	Shipment/Container configuration: _____
11. Does the waste contain asbestos?	☐	☐	Friable ☐ or Non-Friable ☐ (Must comply with 40 CFR Part 61)
12. Any other special handling requirements?	☐	☐	Specify: _____

Please complete and submit the attached form for bulk containers being returned via truck or for other special container return requests.

Email 5-Day Notice to scheduling@envirocareutah.com or fax to (435) 884-3549, Attention Scheduling Dept.
Email manifest to manifest@envirocareutah.com or fax to (435) 884-1721, Shipping & Receiving Dept.

ENVIROCARE OF UTAH, INC.
THE SAFE ALTERNATIVE

Advanced Shipment Notification Form
EC-98242, Revision 1

1.0 Generator Information

Generator Name _____
Generator No. _____
***Utah DRC Site Acc. Per. No. _____
Contact Name/Email Address _____
Contact Phone/Fax No. _____
Submittal Date _____

2.0 Shipment Information

Requested Delivery Date _____
Total Activity (mCi or curies) _____
Maximum Contact Package Dose Rate (mR/hr or R/hr - if more than one package, highest individual dose rate) _____
Percent of Each Waste Descriptor by Volume (Refer to CWF WAC Section 6.3.5.10) _____
Disposal Volume (ft^3) _____
Container Gross Weight (lbs) (if more than one pkg, highest individual gross wt) _____
Cask Model Number (if applicable) _____
HIC or Liner Model Number (if applicable) _____
Conveyance Type (e.g., van) _____
Waste Class _____
Any Special Isotopes* (list) _____
SNM (grams) _____
Unusual Hazards** _____
Special Requirements (Describe) _____
Cask Return Address (if applicable) - List company name, address,and phone number) _____

* See Section 5.4.10 of the Waste Acceptance Criteria; in addition, any act. Metal isotopes (C-14, Ni-59, Nb-94, Ni-63)
** See Section 6.11.10 of the Waste Acceptance Criteria.
*** As listed in Block 5 of Form 540.

3.0 For Envirocare Use Only

Shipment ID No. _____
Scheduled Delivery Date _____
CWF Operations Mgr. Approval _____ Date _____
CWF Site RSO Approval _____ Date _____

ENVIROCARE OF UTAH, INC.
The Safe Alternative

5 Working-Day Shipment Notification - Attachment

Request for Container Return

*Requested Container Return Date:_____ Truck Type: _____

Type & Number of Containers: _____

Truck No.: _____ Trailer No.: _____

Trucking Company Name: _____

Shipping Address: _____

_____

_____

_____

Comments: _____

* The container return date is not scheduled unless confirmed by Envirocare's Scheduling Department.

For Envirocare use only:

Site Facility Operator: _____ Date: _____

S/R Manager: _____ Date: _____

S/R Scheduler: _____ Date: _____

Email 5-Day Notice to scheduling@envirocareutah.com or fax to (435) 884-3549, Attention Scheduling Dept.
Email manifest to manifest@envirocareutah.com or fax to (435) 884-1721, Shipping & Receiving Dept.

Gene... ...me: _____
Address: _____
_____
City: _____ State: _____ Zip: _____
Contact Person: _____
Phone No: (___) _____

(2)
Bill Disposal Charges To: _____
Name: _____
P.O. #/Contract #: _____
Address: _____
City: _____ State: _____ Zip: _____
Phone No: (___) _____

(3)
Agent/Broker: _____
Contact Person: _____
Address: _____
City: _____ State: _____ Zip: _____
Phone No: (___) _____

_____
Broker's Signature Date

(4)
Carrier: _____ Shipping Date: _____
Carrier EPA #(if any): _____
Address: _____
City: _____ State: _____ Zip: _____
Contact Person: _____
Phone No: (___) _____

Type of Container	Container Volume Cu. Ft.	# of Packages	Cu. Ft. Per Container Type
Drums:			
Over Pack:			
55			
30			
Boxes:			
1st Size,			
2nd Size			
3rd Size			
Rail Cars:			
Truck/Trailer:			
Dump			
Trailer			
Other			
Other			
Other			
Shipment Totals			

RADIOACTIVE WASTE SHIPMENT & DISPOSAL RECORD

ENVIROCARE OF UTAH, INC.
215 S. State St., Suite 1160
Salt Lake City, Utah 84111

Ph. (801) 532-1330
Fax: (801) 537-7345

Consigned to: **ENVIROCARE OF UTAH, INC.**
Clive Disposal Site
Interstate 80, Exit 49
West of Salt Lake City, Utah

(5)

TOTAL FOR EACH CLASS		PROPER SHIPPING NAME & HAZARD CLASS (Per 49 CFR 172.101)	DOT ID Number
# of Packages	Weight (Tons)		
		"NORM" Contaminated Solids, USDOT Exempt	No. ID#
		Radioactive Material - Low Specific Activity - LSA	UN 2912

(6)

SHIPMENT TOTALS										
Total # of Packages/ Cars, etc.	Volume Cu. Ft.	Activity in milliCuries								
		Ra-226	U-238	Th-230	Th-232					All Isotopes

THIS IS TO CERTIFY THAT THE HEREIN-NAMED MATERIALS ARE PROPERLY CLASSIFIED, DESCRIBED, PACKAGED, MARKED AND LABELED, AND ARE IN PROPER CONDITION FOR TRANSPORTATION ACCORDING TO THE APPLICABLE REGULATIONS OF THE DEPARTMENT OF TRANSPORTATION, AND ARE IN COMPLIANCE WITH ALL REQUIREMENTS APPLICABLE AT THE DESIGNATED DISPOSAL SITE, AND THE REQUIREMENTS OF 10 CFR PART 61 AND PART 20.311 OR EQUIVALENT STATE REGULATIONS. IT IS FURTHER CERTIFIED THAT ALL ITEMS ON THIS RADIOACTIVE WASTE SHIPMENT & DISPOSAL RECORD HAVE BEEN THOROUGHLY EXAMINED, INCLUDING DIAGRAMS, AND ALL INFORMATION SUBMITTED IS TRUE, CORRECT, AND COMPLETE.

_____
Authorized Signature of Customer Title Date

TERMS AND CONDITIONS

A. HAZARDOUS MATERIALS: Generator represents and warrants that Waste material ☐ is -- OR -- ☐ is not a hazardous waste as defined in 40 CFR 261. Where the material is a hazardous waste, this shipment is also accompanied by a separate and completed hazardous waste manifest, along with the appropriate land-disposal restriction notice and/or certification as required by 40 CFR 268.1.

B. TITLE: Upon acceptance at the disposal site by Envirocare of Utah, Inc, and all appropriate regulatory authorities, title to the Waste which conforms to Generator's representations herein shall thereupon transfer from Generator and be vested in Envirocare of Utah, Inc.

C. WASTE MATERIAL: Generator represents and warrants that all data set forth in this RADIOACTIVE WASTE SHIPMENT & DISPOSAL RECORD are true and correct in all respects and in accordance with all applicable governmental laws, rules, regulations and Envirocare of Utah, Inc.'s facility license.

D. INDEMNIFICATION: Generator agrees to indemnify Envirocare of Utah, Inc., its officers, employees and agents against all loses and liability whatsoever if such loses or liability results from the failure of the Waste Material to conform in all material respects to the data supplied on the RADIOACTIVE WASTE SHIPMENT & DISPOSAL RECORD, or if this shipment fails to meet the standards prescribed by the Department of Transportation or any governmental agency having jurisdiction over such matters.

FOR ENVIROCARE OF UTAH USE ONLY

CHECK ALL THAT APPLY TO THIS LOAD: DESCRIBE INADEQUACIES IN COMMENTS

_____ Record Waste Description Inadequate.
_____ Contamination or Leakage Detected.
_____ Unexpected Exposure Rates Detected.
_____ Labels, Markings, etc. Inadequate.
_____ Container Integrity Inadequate.
_____ Other
_____ No Violations Detected on this Shipment.

COMMENTS:

SHIPMENT ACCEPTED FOR DISPOSAL ☐
SHIPMENT REJECTED FOR DISPOSAL ☐

_____
INSPECTOR DATE

ENVIROCARE INVOICE #: _____
ENVIROCARE INVOICE DATE: _____
ENVIROCARE CUSTOMER #: _____

DISTRIBUTION:

White, Yellow, Pink - Must accompany waste in transit.

Green - Must be mailed to and be approved by Envirocare of Utah prior to shipment.

Gold - Customer Copy

FORM #E 100
Rev. 4-92

GENERATOR NAME: _____

AGENT/BROKER: _____

BATES: _____

ENVIROCARE OF UTAH, INC.

Continuation Sheet

RECORD # _____

PAGE _____ OF _____

Item Number (8)	Container Type (9)	Container Volume (C.F.) (10)	Container Weight (tons) (11)	Physical Form (12)	Waste Class (A,B,C) (13)	Solidification Agent (If used) (14)	Waste Description (15)	Chemical Form / Chelating Agent (16)	Chelating Agent % (17)	Radionuclide(s) Present (18)	Total Activity (mCuries) (19)	Radionuclide Concentration (pCi/gram) (20)	Special Nuclear Material (Kg) (21)	Source Material (Kg) (22)	Radiation Levels (mR/hr) (µR/h) Surface (23)	1 Meter (24)	OFFICE USE ONLY (25)	Transport Index (26)	Fissile Class (27)	D. O. T. Label (49 CFR 172.400) (28)
				PAGE TOTALS						TOTAL ACTIVITY				AVG. CONCENTRATION						

White, Yellow, Pink - Must accompany waste in transit. Green - Must be mailed to and approved by Envirocare of Utah prior to shipment. Gold - Customer copy.

Please print or type
(Form designed for use on elite (12-pitch) typewriter.)

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. | Manifest Doc. No. | 2. Page 1 of

GENERATOR

3. Generator's Name and Mailing Address

4. Generator's Phone ( )

5. Transporter 1 Company Name | 6. US EPA ID Number | A. Transporter's Phone

7. Transporter 2 Company Name | 8. US EPA ID Number | B. Transporter's Phone

9. Designated Facility Name and Site Address | 10. US EPA ID Number | C. Facility's Phone

11. Waste Shipping Name and Description	12. Containers No.	12. Containers Type	13. Total Quantity	14. Unit Wt/Vol
a.				
b.				
c.				
d.				

D. Additional Descriptions for Materials Listed Above

E. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

16. **GENERATOR'S CERTIFICATION:** I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Printed/Typed Name | Signature | Month | Day | Year

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name | Signature | Month | Day | Year

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name | Signature | Month | Day | Year

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 19.

Printed/Typed Name | Signature | Month | Day | Year

Printed by J. J. KELLER & ASSOCIATES, INC.
Neenah, WI 54957-0368

ORIGINAL – RETURN TO GENERATOR

12-BLS-C5 Rev. 12/98

NYG2236194

STATE OF NEW YORK
DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF SOLID & HAZARDOUS MATERIALS

HAZARDOUS WASTE MANIFEST

P.O. Box 12820, Albany, New York 12212

(Hazardous Waste Manifest 1/5/99)

Please type or print. Do not staple

In case of emergency or spill immediately call the National Response Center (800) 424-8802 and the NYS Department of Environmental Conservation (518) 457-7362

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.

Manifest Doc. No.

2. Page 1 of

Information within heavy bold line is not required by Federal Law.

GENERATOR

3. Generator's Name and Mailing Address

4. Generator's Telephone Number ( )

A. NYG2236194

B. Generator's ID

5. Transporter 1 (Company Name)

6. US EPA ID Number

C. State Transporter's ID

D. Transporter's Telephone ( )

7 Transporter 2 (Company Name)

8. US EPA ID Number

E. State Transporter's ID

F. Transporter's Telephone ( )

9. Designated Facility Name and Site Address

10. US EPA ID Number

G. State Facility ID

H. Facility Telephone ( )

11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)	12. Containers Number	12. Containers Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a.					EPA / STATE
b.					EPA / STATE
c					EPA / STATE
d.					EPA / STATE

J. Additional Descriptions for Materials listed Above

a

b

c

d

K. Handling Codes for Wastes Listed Above

a

b

c

d

15. Special Handling Instructions and Additional Information

16. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations and state laws and regulations.

If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name | Signature | Mo. | Day | Year

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name | Signature | Mo. | Day | Year

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name | Signature | Mo. | Day | Year

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.

Printed/Typed Name | Signature | Mo. | Day | Year

COPY 1—Disposer State—Mailed by TSD Facility

Appendix C

SPILL CONTINGENCY PLAN

(Chosen Transportation Contractors Plan to be Included)