

7964

R-020-101.8

NATIONWIDE MIXED WASTE DISPOSAL CONTRACT

01/07/97

DOE-0400-97
DOE-FEMP DOE-OR
8
MEMORANDUM

United States Government

Department of Energy

Fernald Area Office

memorandum

JAN 7 1997

DATE: DOE-0400-97

REPLY TO: FEMP-Danner
ATTN OF:

SUBJECT: NATIONWIDE MIXED WASTE DISPOSAL CONTRACT

TO: Jane Powell, DOE-OR

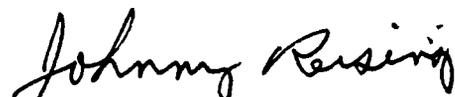
The Department of Energy, Oak Ridge Office (DOE-OR) has a contract with Envirocare of Utah for the disposal of DOE-generated mixed waste. The Fernald Environmental Management Project (FEMP) has, ready for disposal, approximately 399yd³ of nonland disposal restricted "F" listed mixed waste which meets Envirocare's radiological license limits and Waste Acceptance Criteria (WAC). Fernald is planning to complete shipment of waste to Envirocare by January 31, 1997.

Envirocare's scope of work for this project includes the receipt, handling and disposal of approximately 399 cubic yards of mixed waste contained in 112 white metal boxes. The physical composition of this waste stream is 95% soil and 5% inert debris generated during the closure of the Fernald Fire Training Facility Burn Pond. This waste meets Environmental Protection Agency (EPA) treatment standards, Land Disposal Restrictions and the Envirocare Waste Acceptance Criteria. Historical data, process knowledge and analytical data were employed to ensure the acceptance of this material for direct land disposal at Envirocare. A waste profile record is attached.

Prior to the shipment campaign, funds for disposal of this mixed waste will be made available to DOE-OR, via an On-line Payment and Cost (OPAC) account from the current project budget in 16C3. Budgetary figures for disposal cost estimating are included as Attachment 1 with a cost-not-to-exceed \$550,000.

We request that you process, as soon as conveniently possible, a delivery order and any other necessary documentation to facilitate the shipment and disposal.

If you should have any questions or require additional information, please contact Keith Sparks at (513) 648-5731 or Robert Danner, of my staff, at (513) 648-3167.



Johnny W. Reising
Associate Director
Environmental Management

Attachment: As Stated

cc w/att:

R. Danner, DOE-FEMP
J. Sattler, DOE-FEMP
D. Dilday, FDF/16-2
A. Sparks, FDF/16-2
AR Coordinator/78
EDC, FDF/52-7

7964

United States Government

Department of Energy

memorandum

Ohio Field Office

DATE: JAN 10 1997
 OH-0371-97
 SUBJECT: OH:Pennington
 FUNDING AUTHORITY FOR FERNALD MIXED WASTE DISPOSAL

TO: James Martin, Financial Services, OR
 Julie Ramsey, Budget Division, OR

Oak Ridge Operations Office, through its contract with Envirocare of Utah, is authorized to provide support for mixed waste disposal at the Fernald Environmental Management Project (FEMP). (See Attachment for Scope of Work).

This authorization provides \$550,000 to complete this task and is available as follows:

CID	M7G000022
Allot	OH7291
B&R	EW2010302
ADS	OHFN16C3
OPI	OH90

Reimbursement will be made via OPAC through the Finance Division, Ohio Field Office (Attn: William Winn).

If you have any questions or require additional information, please call Trish Pennington of my staff at 513-865-4265.



Philip S. Van Loan
 Acting Budget Director

Attachment

cc w/o attachment:
 R. Danner, FEMP
 W. Winn, OS



000003

TOTAL P.003

DISPOSAL FEE INFORMATION	
<u>FTE SOILS AND DEBRIS</u>	
112 WMB @ 96.00 CF/Box	10,752.00 CF
1 Drum @ <u>11.35 CF/Drum</u>	<u>11.35 CF</u>
TOTAL DISPOSAL VOLUME (10,763.35 CF/27 ^{CF}/CY)	~ 399CY
Base Rate Containers	1,539.00/CY
In Trucks	38.00/CY
Winter Delivery	<u>30.00/CY</u>
SubTotal	\$1,607.00/CY
Less than 10% Debris	<u>Deduct from Unit Price - 486.00/CY</u>
TOTAL BURIAL COST/CY	\$1,121.00/CY
TOTAL BURIAL COST (399CY X \$1,121.00/CY)	\$447,279.00
COST-NOT-TO-EXCEED	\$550,000.00

RADIOACTIVE WASTE PROFILE RECORD

(EC-0230)

(11/21/95)

Generator Name: DOE-FERNALD; Generator #/Waste Stream #: 6010-04-0001; Volume of Waste Material: 10,500 ft³
 Contractor Name: Fluor Daniel - Fernald; Waste Stream Name: Contaminated Soil and Debris; Delivery Date: 23 December 1996
 Check appropriate boxes: Licensed Y N ; NORM/NARM ; LLRW ; MW ; MW Treated ; MW Needing Treatment ; DOE ; 11e.(2)
 Original Submission: Y N ; Revision # 1; Date of Revision: 6 December 1996
 Name & Title of Person Completing Form: Keith Sparks, Environmental Engineer II Phone: (513) 648-5731

A. CUSTOMER INFORMATION:

GENERAL: Please read carefully and complete this form for one waste stream. This information will be used to determine how to properly manage the waste. Should there be any questions while completing this form, contact Envirocare at (801) 532-1330. **WASTES CANNOT BE ACCEPTED AT ENVIROCARE UNLESS THIS FORM IS COMPLETED.** If a category does not apply, please indicate. **This form must be updated annually.**

1. GENERATOR INFORMATION

EPA ID #: OH 68900008976 EPA Hazardous Waste Number(s) (if applicable): F002, F005
 Mailing Address: P.O. Box 538704 Cincinnati, Ohio 45253-8704
 Phone: (513) 648-3167 Fax: (513) 648-3076
 Location of Material (City, ST): Fernald, Ohio
 Generator Contact: Robert Danner Title: DOE Waste Management Engineer
 Mailing Address (if different from above): S/A
 Phone: S/A Fax: S/A

B. WASTE PHYSICAL PROPERTIES (Should you have any questions while completing this section, contact Envirocare Customer Support Representative at (801) 532-1330. See Attachment A for Section B's - Complete Physical Description)

1. PHYSICAL DATA (Indicate percentage of material that will pass through the following grid sizes, e.g., 12" 100%, 4" 96%, 1" 74%, 1/4" 50%, 1/40" 30%, 1/200", 5%.)	GRADATION OF MATERIAL:
	12" <u>100</u> %
2. DESCRIPTION: <u>Color Various</u> Odor: <u>Slight organic odor may be present</u>	4" <u>99</u> %
Liquid: <input type="checkbox"/> Solid: <u>100</u> % Sludge: <input type="checkbox"/> Powder/Dust: <u>0</u> %	1" <u>70</u> %
3. DENSITY RANGE: (Indicate dimensions) <u>~35</u> - <u>~110</u> S.G. lb./ft ³ lb./yd ³	1/4" <u>50</u> %
	1/40" <u>20</u> %
	1/200" <u>5</u> %

4. GENERAL CHARACTERISTICS (% OF EACH)

Soil >95 % Building Debris Rubble Pipe Scale Tailings Process Waste Concrete Plastic/Resin ~1 %

Other constituents and approximate % contribution of each: See Attachment A for Section B's - Physical Description

5. MOISTURE CONTENT: (For soil or soil-like materials). (Use Std Proctor Method ASTM D-698)

Optimum Moisture Content: _____ %
 Average Moisture Content: _____ %
 Moisture Content Range: _____ %

Filled in by ENVIROCARE'S ANALYTICAL RESULTS.

6. DESCRIPTION OF WASTE (Please attach a description of the waste with respect to its physical composition and characteristics. This description can be attached separately or included with the attachment for Item D.1.)

C. RADIOLOGICAL EVALUATION. See Attachment C & D for Radiological Information

1. WASTE STREAM INFORMATION. For each radioactive isotope associated with the waste, please list the following information. Envirocare's license assumes daughter products to be present in equilibrium, these are not required to be listed below and do not require manifesting. (Use additional copies of this form if necessary).

Isotopes	Concentration Range (pCi/g)	Weighted Average (pCi/g)	Isotopes	Concentration Range (pCi/g)	Weighted Average (pCi/g)
a. <u>U 234</u>	<u>1.19</u> to <u>50.78</u>	<u>14.40</u>	g. <u>Th 232</u>	<u>0.62</u> to <u>1.00</u>	<u>0.84</u>
b. <u>U 235/236</u>	<u>0.54</u> to <u>3.70</u>	<u>1.60</u>	h. _____	_____ to _____	_____
c. <u>U 238</u>	<u>8.70</u> to <u>69.00</u>	<u>29.22</u>	i. _____	_____ to _____	_____
d. <u>K-40</u>	<u>13.00</u> to <u>18.00</u>	<u>14.91</u>	k. _____	_____ to _____	_____
e. <u>Tc 99</u>	<u>4.70</u> to <u>25.00</u>	<u>11.46</u>	l. _____	_____ to _____	_____
f. <u>Ra 226</u>	<u>0.66</u> to <u>0.89</u>	<u>0.77</u>			

2. Y N 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 5820.2A, Chapter III? (Please Circle) If yes, check "LLRW" block on line 3 of page 1.

3. Y N LICENSED MATERIAL: Is the waste material listed or included on an active Nuclear Regulatory Commission or Agreement State license? (Please circle)

(If Yes) TYPE OF LICENSE: Source _____; Special Nuclear Material _____; By-Product _____; NORM _____; NARM _____;

LICENSING AGENCY: _____

D. CHEMICAL AND HAZARDOUS CHARACTERISTICS See Attachment A

1. DESCRIPTION AND HISTORY OF WASTE

Please attach a description of the waste to this profile. Include the following as applicable: The process by which the waste was generated. Available process knowledge of the waste. The basis of hazardous waste determinations. A list of the chemicals and materials used in or commingled with the waste; a list of any and all applicable EPA Hazardous Waste Numbers, current or former; and, a list of any and all applicable land-disposal prohibition or hazardous-waste exclusions, extensions, exemptions, effective dates, variances or delistings. Attach the most recent or applicable analytical results of the waste's hazardous-waste characteristics, constituents and applicable hazardous-waste treatment standards. Attach any applicable analytical results involving the composition of the waste. Attach any product information or Material Safety Data Sheets associated with the waste. If a category on this Waste Profile Record does not apply, describe why it does not.

Please describe the history, and include the following:

See Attachment A

- Y N Was this waste mixed, treated, neutralized, solidified, commingled, dried, or otherwise processed upon generation or at any time thereafter?
- Y N Has this waste been transported or otherwise removed from the location or site where it was originally generated?
- Y N Was this waste derived from (or is the waste a residue of) the treatment, storage, and/or disposal of hazardous waste defined by 40 CFR 261?
- Y N Has this material been treated at any time to meet any applicable treatment standard?

2. LIST ALL KNOWN AND POSSIBLE CHEMICAL COMPONENTS OR HAZARDOUS WASTE CHARACTERISTICS

	(Y)	(N)		(Y)	(N)		(Y)	(N)
a. Listed HW	<u>Y</u>	_____	b. "Derived-From" HW	_____	<u>N</u>	c. Toxic	<u>Y</u>	_____
d. Cyanides	_____	<u>N</u>	e. Sulfides	_____	<u>N</u>	f. Dioxins	_____	<u>N</u>
g. Pesticides	_____	<u>N</u>	h. Herbicides	_____	<u>N</u>	i. PCBs	_____	<u>N</u>
j. Explosives	_____	<u>N</u>	k. Pyrophorics	_____	<u>N</u>	l. Solvents	<u>Y</u>	_____
m. Organics	_____	<u>N</u>	n. Phenolics	_____	<u>N</u>	o. Infectious	_____	<u>N</u>
p. Ignitable	_____	<u>N</u>	q. Corrosive	_____	<u>N</u>	r. Reactive	_____	<u>N</u>
s. Antimony	_____	<u>N</u>	t. Beryllium	_____	<u>N</u>	u. Copper	_____	<u>N</u>
v. Nickel	_____	<u>N</u>	w. Thallium	_____	<u>N</u>	x. Vanadium	_____	<u>N</u>
y. Alcohols	_____	<u>N</u>	z. Arsenic	_____	<u>N</u>	aa. Barium	_____	<u>N</u>
bb. Cadmium	_____	<u>N</u>	cc. Chromium	_____	<u>N</u>	dd. Lead	_____	<u>N</u>
ee. Mercury	_____	<u>N</u>	ff. Selenium	_____	<u>N</u>	gg. Silver	_____	<u>N</u>
hh. Benzene	_____	<u>N</u>	ii. Nitrate	_____	<u>N</u>	jj. Nitrite	_____	<u>N</u>
kk. Fluoride	_____	<u>N</u>	ll. Oil	_____	<u>N</u>	mm. Fuel	_____	<u>N</u>
nn. Chelating Agents	_____	<u>N</u>						
oo. Other Known or Possible Materials or Chemicals:	_____							

3. **ANALYTICAL RESULTS FOR TOXICITY CHARACTERISTIC.** (Please transcribe results on the blank spaces provided. Attach additional sheets if needed, indicate range or worst-case results).

Metals (circle one):		Total (mg/kg) or	TCLP (mg/l)	Organics (circle one):		Total (ug/kg) or	TCLP (mg/l)
Arsenic	<u>N/A</u>	Lead	<u>N/A</u>	Toluene	<u>2 - 10</u>	_____	_____
Barium	<u>N/A</u>	Mercury	<u>N/A</u>	1,1,1-TCA	<u>4 - 11</u>	_____	_____
Cadmium	<u>N/A</u>	Selenium	<u>N/A</u>	_____	_____	_____	_____
Chromium	<u>N/A</u>	Silver	<u>N/A</u>	_____	_____	_____	_____
Copper	<u>N/A</u>	Zinc	<u>N/A</u>	_____	_____	_____	_____

4. **ANALYTICAL RESULTS FOR REQUIRED PARAMETERS:** (Please transcribe results on the blank spaces provided. Attached additional sheets if needed).

Soil pH	<u>6.8 - 7.8</u>	Paint Filter	<u>Pass</u>	Cyanide	<u>.084 - .30</u>	Sulfide	<u>20 - 50</u>
		Liquids Test	(Pass/Fail)	Released	mg/kg	Released	mg/kg

5. **IGNITABILITY** (40 CFR 261.21[a][2],[4].)

Flash Point \geq N/A °F °C Is the waste a RCRA oxidizer? Y N

6. **CHEMICAL COMPOSITION** (List all known chemical components and circle the applicable concentration dimensions. Use attachments to complete, if necessary.) See Attachment A

Chemical Component	Concentration	Chemical Component	Concentration
<u>Soil</u>	<u>~ 95</u> % mg/kg	<u>Plastic</u>	<u>~ 01</u> % mg/kg
<u>Absorbent Material</u>	<u>~ 02</u> % mg/kg	_____	_____ % mg/kg
<u>Rock</u>	<u>~ 01</u> % mg/kg		
<u>Wood</u>	<u>~ 01</u> % mg/kg	Halogenated Organic (HOC)	<u>N/A</u> mg/kg
		Compounds (Sum of the list of HOCs.)	

7. **TREATMENT STANDARDS. (FOR MIXED WASTE ONLY).** Describe the waste's applicable treatment standards. Include the EPA Hazardous Waste Numbers and information with respect to the waste's subcategory (e.g. low mercury subcategory), treatability group (e.g. non-wastewaters), treatment standards and concentration or technology (e.g. 5.7 mg/l selenium in extract or INCIN [incineration]), and any applicable exemptions, exclusions, variances, extension, allowances, etc. The following format is suggested. If additional space is needed, provide an attachment to this profile record.

EPA HW Number	Subcategory	Treatability Group	Treatment Standard(s) and Concentrations or Technology	Any Exemptions, Variances, Extensions or Exclusions
(List 40 CFR reference)				
<u>F002</u>	<u>(Toluene)</u>	<u>Non-Wastewater</u>	<u>6.0 mg/kg</u>	[Y N] <u>40 CFR 268 Subpart D</u>
<u>F005</u>	<u>(1,1,1-Trichloroethane)</u>	<u>Non-Wastewater</u>	<u>10.0 mg/kg</u>	[Y N] <u>40 CFR 268 Subpart D</u>

E. **REQUIRED CHEMICAL LABORATORY ANALYSIS.** Generator must submit results of analyses of samples of the waste. Results are required from a qualified laboratory for the following analytical parameters unless nonapplicability of the analysis for the waste can be stated and justified in attached statements. Attach all analytical results and QA/QC documentation. (CAUTION: PRIOR TO ARRANGING FOR LABORATORY ANALYSES, CHECK WITH ENVIROCARE AND LABORATORY REGARDING UTAH LABORATORY CERTIFICATIONS.) See Attachment C & D for Analytical Information

FOR ALL WASTE TYPES: CHEMICAL ANALYSIS: Soil pH (9045), Paint Filter Liquids Test (9095); Reactivity (cyanide and sulfide).

1. **MINIMUM ADDITIONAL ANALYTICAL REQUIRED FOR:**

- a. Non-RCRA Waste (Non Mixed Waste, i.e. LLRW, NORM): TCLP including the 32 organics, 8 metals, and copper (Cu) and zinc (Zn).
- b. Mixed Waste: Results to show why the waste is hazardous, and the following analytical results:

- (1) TOX (Total Organic Halides SW-846 9020/9022) or volatile & semi-volatile organics (8240+8270, required if TOX > 200 mg/kg)
- (2) Applicable concentration-based treatment standards

(3) Total and Amenable Cyanide. SW-846 9010 or 9012, required if reactive cyanide >20 mg/kg

2. **REQUIRED RADIOLOGICAL ANALYSES.** Please obtain sufficient samples to adequately determine a range and weighted average of activity in the waste. Have a sufficient number of samples analyzed by gamma spectral analysis for all natural and man-made isotopes such that they support the range and weighted average information for the waste stream that will be recorded in item D.1. If Uranium, Plutonium, Thorium, or other non-gamma emitting nuclides are present in the material, have at least (1) sample evaluated by radiochemistry to determine the concentration of these additional contaminants in the material.

3. **PRE-SHIPMENT SAMPLES OF WASTE TO ENVIROCARE**

Once permission has been obtained from Envirocare, please send 5 representative samples of the waste to Envirocare. A completed EC-2000 form must be included with the sample containers. These samples will be used to establish the waste's incoming shipment acceptance parameter tolerances and may be analyzed for additional parameters. Send about two pounds (one liter) for each sample in an airtight clean glass container via United Parcel Post (UPS) or Federal Express to:

Envirocare of Utah, Inc., Attn: Sample Control, Tooele County, Interstate-80, Exit 49, Clive, Utah 84029
(For Federal Express Use Zip Code 84083). Phone: (801) 521-9619.

4. **LABORATORY CERTIFICATION INFORMATION.** Please indicate below which of the following categories applies to your laboratory data.

a. Note analytical data that is to represent mixed waste must be Utah certified or from the USEPA. All radiological data used to support the data in item C.1. must be from a Utah-certified laboratory.

UTAH CERTIFIED. The laboratory holds a current certification for the applicable chemical or radiologic parameters from the Utah Department of Health insofar as such official certifications are given.

GENERATOR'S STATE CERTIFICATION. The laboratory holds a current certification for the applicable chemical parameters from the generator's State insofar as such official certifications are given, or

GENERATOR'S STATE LABORATORY REQUIREMENTS. The laboratory meets the requirements of the generator's State or cognizant agency for chemical laboratories, or:

If using a non-Utah certified laboratory, briefly describe the generator state's requirements for chemical analytical laboratories to defend the determination that the laboratory used meets those requirements, especially in terms of whether the requirements are parameter specific, method specific, or involve CLP or other QA data packages. Note: When process or project knowledge of this waste is applied, additional analytical results may not be necessary to complete Section B, D.2, D.5, or D.6 of this form.

b. For analytical work done by Utah-certified laboratories, please provide a copy of the laboratory's current certification letter for each parameter analyzed and each method used for analyses required by this form.

c. For analytical work done by laboratories which are not Utah-Certified, please provide the following information:

_____	_____	_____
State or Other Agency Contact Person	Generator's State	Telephone Number
_____	_____	_____
Lab Contact Person	Laboratory's State	Telephone Number

F. **CERTIFICATION**

GENERATOR'S CERTIFICATION OF REPRESENTATIVE SAMPLES, ANALYTICAL RESULTS FROM QUALIFIED LABORATORIES, USE OF APPROVED ANALYTICAL AND SAMPLING METHODS, AND ARRANGEMENTS FOR TREATMENT OR NON-PROHIBITED DISPOSAL: I certify that samples representative of the waste described in this profile were or shall be obtained using state- and EPA-approved sampling methods. I also certify that where necessary those 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 of Utah, Inc. I certify that the results of any said testing have been submitted to Envirocare of Utah, Inc.

Generator's Signature A. Keith Spalding Title Environmental Engineer II Date 18, November 1996
(Sign for the above certifications).