DEPARTMENT OF ENERGY

DECOMMISSION REPORT
for the
BRINE HOLDING POND
GEOTHERMAL TEST FACILITY
EL CENTRO, CALIFORNIA

FINAL

DECEMBER 4, 1989

HIRSCH & COMPANY

SUMMARY

The six acre geothermal brine holding pond at the Department of Energy's Geothermal Test Facility near El Centro, California is to be decommissioned. Removal, transportation, disposal of the existing geothermal brine sludge layer and site restoration of the pond area shall be performed in accordance with the California Administrative Code, Title 22, Division 4, Federal Regulations 40 CFR 268 and RCRA, Subtitle C and to the satisfaction of the California Regional Water Quality Control Board (RWQCB) and the Bureau of Land Management (BLM). The State and Federal regulations apply to the transportation and disposal of the waste material, while the RWQCB and BLM are concerned with groundwater quality and site restoration, respectively.

The pond is a bermed enclosure consisting of a PVC membrane liner, and a 12-inch protective sand layer over the liner. Currently, a 6 to 8 inch "cake" of dried geothermal brine sludge covers the pond floor. In decommissioning the facility, the pond liner, sand layer and brine sludge will have to be removed and disposed of at an approved landfill.

Several hazardous materials contractors were contacted for disposal options and budget price information. Although each contractor was interested in the project, it seems apparent that GSX Services, the operator of the landfill facility in Westmorland, California is capable of removing, transporting and disposing of the waste material for the most competitive price. Typically, landfill operators such as

GSX Services do not bid directly on projects, and simply quote disposal rates to material haulers and/or brokers, but given the large quantities involved with this project (± 17,500 tons) and the relatively close distance (± 50 miles) from the site to the landfill, they have expressed interest in being the prime contractor.

Furthermore, the Westmorland facility was developed to service the waste material generated by the geothermal industry in the Imperial Valley and offer reduced disposal rates for geothermal waste. The disposal fee offered by GSX is $49.00 per ton, compared to $150.00 per ton, the least cost quoted by the other contractors.

Once the waste material is removed, the BLM requires that the site be graded to match existing grades with no surface depressions to allow ponding of water. Revegetation will not be required.

The estimated construction cost to remove and dispose of the pond liner and sludge and to restore the site is $1,900,000.

The above price includes groundwater quality testing, which the RWQCB will require. The estimated cost for supplemental engineering services to provide a groundwater testing program consisting of four monitor-test wells and sample analysis is $18,000.

INTRODUCTION

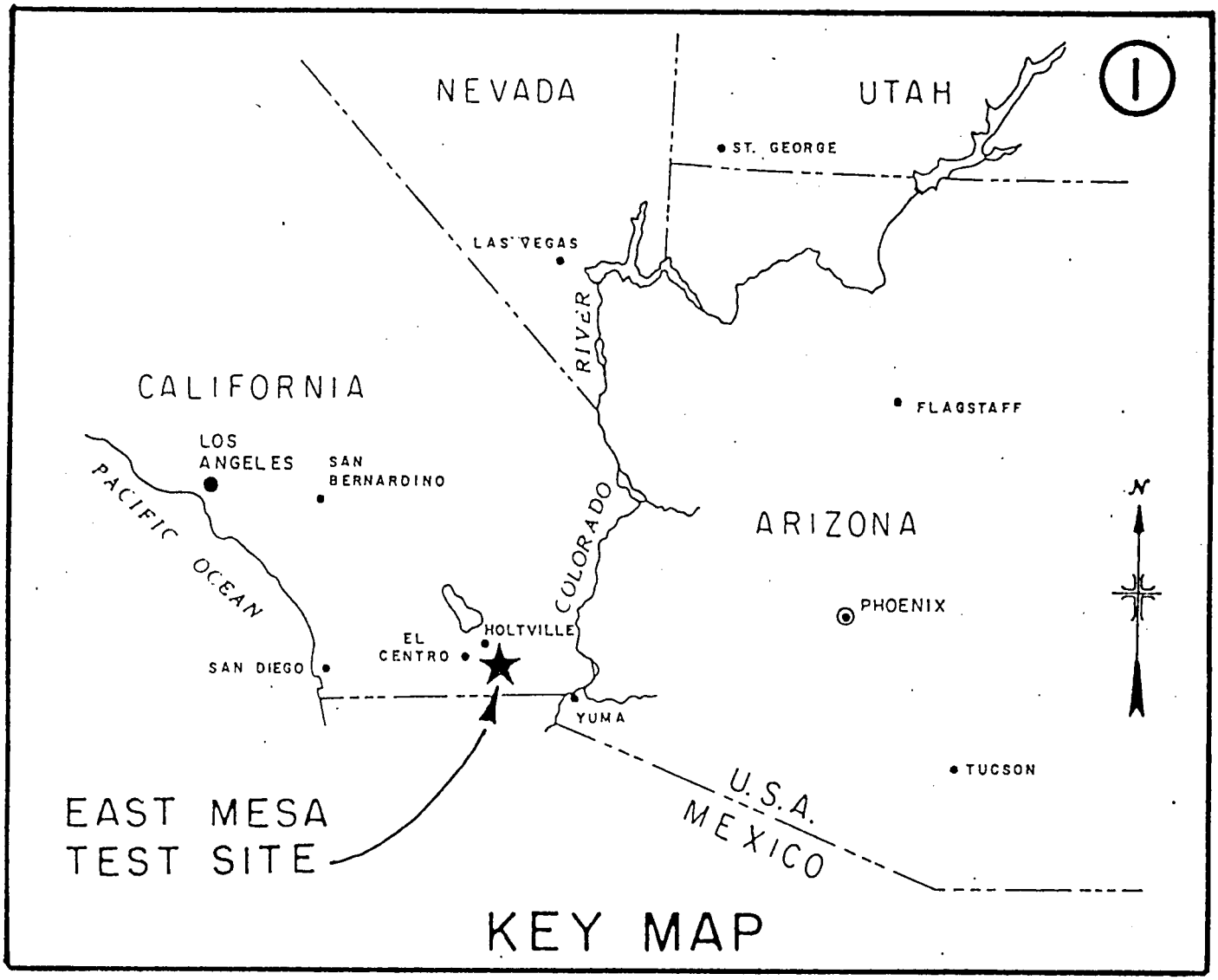
The brine holding pond at the Department of Energy's (DOE) Geothermal Test Facility is scheduled for demolition. The pond was constructed in the mid 1970's as part of the East Mesa Geothermal Test Facility. It is located in Imperial County, approximately 20 miles east of El Centro (See Figure 1).

The brine holding pond covers approximately 6 acres and is 8 feet deep with 2 (horizontal) and 1 (vertical) side slopes (See Figure 2). It was constructed with a PVC membrane containment liner covered by 12 inches of sand. From recent field observations, the pond appears to be in good condition, with the sand layer and PVC liner intact. At some locations, however, the PVC liner is exposed along the side slopes (See Figure 3).

The pond has been used over the past 10 years as a settling basin for geothermal brine water extracted in the geothermal exploration process. Currently, it contains a 6 to 8-inch sludge layer over the entire pond bottom. The sludge layer is mostly dry with no free standing water.

As the initial step in decommissioning the holding pond, the DOE has authorized this study to provide the following information:

- The composition of the sludge in the pond as determined by laboratory analysis.
- Identification of acceptable disposal site(s) for the sludge and pond liner.



DEPARTMENT OF ENERGY DECOMMISSION REPORT TO GEOTHERMAL BRINE HOLDING POND

LOCATION MAP

HIRSCH & COMPANY
CONSULTING ENGINEERS

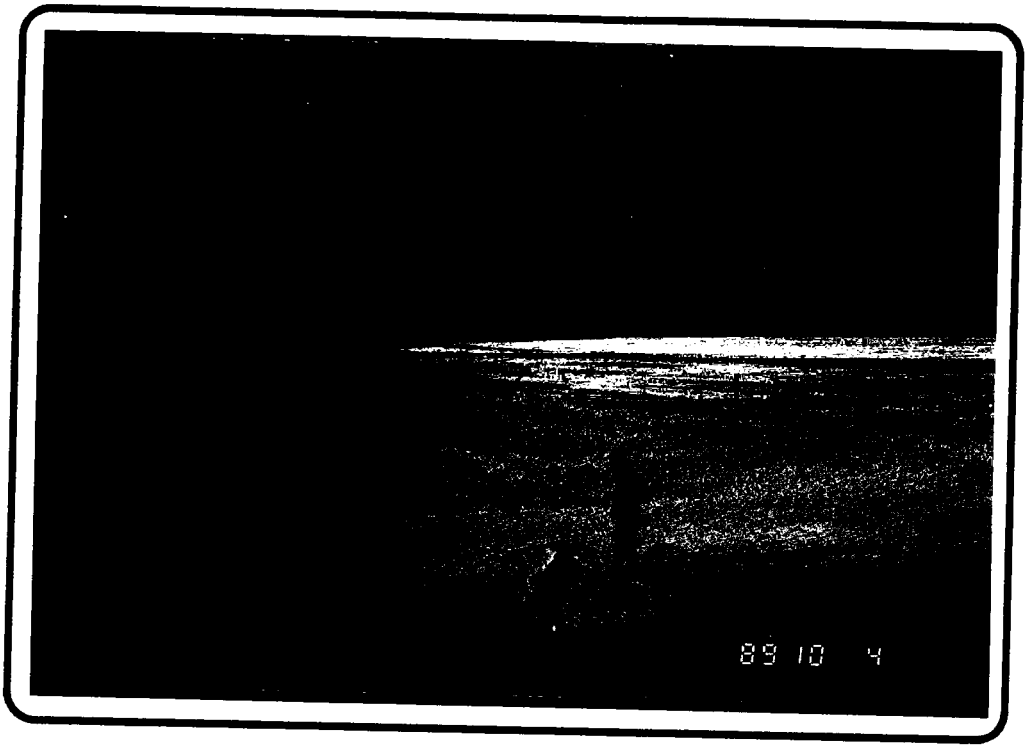
FIGURE 1

DEPARTMENT OF ENERGY
DECOMMISSION REPORT TO
GEOTHERMAL BRINE HOLDING POND

SITE PHOTOS

HIRSCH & COMPANY
CONSULTING ENGINEERS

FIGURE 2



DEPARTMENT OF ENERGY
DECOMMISSION REPORT TO
GEOTHERMAL BRINE HOLDING POND

SITE PHOTOS

HIRSCH & COMPANY
CONSULTING ENGINEERS

FIGURE 3

- The estimated cost to remove, transport and dispose of the sludge and pond liner.
- The estimated cost to restore the site to its natural condition.
- A list of firms qualified and capable of performing the requirements/tasks specified in the report.
- A summary of the Federal, State and local environmental laws and regulations governing the decommission of the brine holding pond.

SLUDGE ANALYSIS

A sample of the sludge layer was analyzed by AMTECH Laboratories, San Diego. The initial tests performed included California Administrative Code (CAC) Title 22, Total Threshold Limit Concentration (TTLC) for total metals; Cyanide by EPA Method 335Z, Sulfide by SMEWW Method 427C; and pH by EPA Method 9040. The results of these tests are shown on the following pages.

The TTLC levels indicated are all below the allowable level permitted by CAC Title 22. However, the Arsenic, Barium and Cadmium levels were high enough to suggest that the Soluble Threshold Limit Concentration (STLC) may exceed CAC Title 22. The sample was re-analyzed to determine these STLC levels; the results of which were also determined to be below CAC Title 22.

The sample analyzed is considered to be non-hazardous. However, it is our understanding that much of the brine waste material generated in the Imperial County is classified as hazardous and disposed of as such. Additional testing of the brine sludge may prove the material to be hazardous.

It is recommended, nonetheless, to dispose of the sludge material at a Class 1 landfill facility because of the material's high salt content and the possibility of hazardous constituents.

AMTECH Laboratories
4340-A Viewridge Avenue • San Diego, California 92123 (619) 560-7717

Hirsch & Company
4420 Rainier Ave., Suite 100
San Diego, CA 92120
Attn: John Harris

LABORATORY NO. 1566-89
DATE OF REPORT Oct. 27, 1989
DATE RECEIVED Oct. 16, 1989 @ 1334
IDENTIFICATION PO No. 8915; One solid sample

Enclosed with this letter is the report on the following analysis on the sample from the project identified above:

CAC Title 22 (Total Threshold Limit Concentration); Cyanide by EPA 335.2; Sulfide by SMEWW 427C; pH by EPA 9040

The sample was received by AMTECH Laboratories intact with, chain-of-custody documentation and with appropriate preservation. The test results and pertinent quality assurance/quality control data are listed on the attached tables.

Comments:

K J. Walits
Kenneth J. Walits
Laboratory Director

INV 16034
BK 3800, 2404-78, 2702-113, 116, 128

Hirsch & Company	Date Sampled: 10/16/89
4420 Rainier Ave., Suite 100	Date Received: 10/16/89
San Diego, CA 92120	Date Analyzed: 10/23/89
Attn: John Harris	Date of Report: 10/27/89
Laboratory No: 1566-89	Project: NA
Sample ID: Geothermal Brine Sludge Cake	Sample Matrix: Solid

Request: CAC Title 22 Metals
Total Threshold Limit Concentration

Method:
This sample was digested and analyzed for total metals according to the guidelines given in California Title 22.

RESULTS

Element	Found mg/kg	Title 22 TTLC mg/kg
Antimony	< 67	500
Barium	1300	10000
Beryllium	0.51	75
Cadmium	14	100
Chromium VI*	*	500
Chromium Total	11	2500
Cobalt	3.6	8000
Copper	30	2500
Lead	46	1000
Molybdenum	< 12	3500
Nickel	11	2000
Silver	< 0.6	500
Vanadium	11	2400
Zinc	150	5000
Arsenic	210	500
Mercury	< 0.22	100
Selenium	0.11	20
Thallium	< 26	700

*The total chromium found is less than the hexavalent limit.

Hirsch & Company
4420 Rainier Ave., Suite 100
San Diego, CA 92120
Attn: John Harris
Laboratory No: 1566-89
Sample ID: Geothermal Brine Sludge Cake

Date Sampled: 10/16/89
Date Received: 10/16/89
Date Analyzed: 10/23/89
Date of Report: 10/27/89
Project: NA
Sample Matrix: Solid

Request: CAC Title 22 Metals
Total Threshold Limit Concentration
Quality Assurance/Quality Control Data

Method:
This sample was digested and analyzed for total metals according to the guidelines given in California Title 22.

RESULTS

Element	MS % R	MSD % R	RPD
Antimony	56	54	4
Barium*	680	359	62
Beryllium	101	103	2
Cadmium	95	105	10
Chromium Total	95	96	1
Cobalt	109	102	7
Copper	105	106	1
Lead	81	85	5
Molybdenum	101	114	12
Nickel	90	86	5
Silver	76	75	1
Vanadium	95	103	8
Zinc	107	98	9
Arsenic	94	90	4
Mercury	104	101	3
Selenium	95	100	5
Thallium	91	92	2

MS % R = Matrix Spike Percent Recovery
MSD % R = Matrix Spike Duplicate Percent Recovery
RPD = Relative Percent Difference

COMMENT: * Barium was spiked at a level of approximately 4 % of the sample. This accounts for the poor recoveries.

Hirsch & Company
4420 Rainier Ave., Suite 100
San Diego, CA 92120
Attn: John Harris
Laboratory No: 1566-89
Sample ID: Geothermal Brine Sludge Cake
Units: See below

Date Sampled: 10/16/89
Date Received: 10/16/89
Date Analyzed: 10/23/89
Date of Report: 10/27/89
Project: NA
Sample Matrix: Solid

Results

Lab Sample ID. 1566-89

Parameter		MS % R	MSD % R	RPD
Units: mg/kg				
Cyanide	< 0.2	80	98	2
Sulfide	1.2	35	36	3
Units: None				
pH	10.17			

Quality Assurance/Quality Control Data

MS % R = Matrix Spike Percent Recovery
MSD % R = Matrix Spike Duplicate Percent Recovery
RPD = Relative Percent Difference

AMTECH Laboratories
4340-A Viewridge Avenue • San Diego, California 92123 (619) 560-7717

Hirsch & Company
4420 Ranier Ave., Suite 100
San Diego, CA 92120
Attn: John Harris

LABORATORY NO. 1635-89
DATE OF REPORT Nov. 21, 1989
DATE RECEIVED Oct. 30, 1989 @ 1454
IDENTIFICATION Geothermal Brine Sludge Cake

Enclosed with this letter is the report on the following analysis on the sample from the project identified above:

> Barium, Cadmium and Arsenic were extracted, digested and analyzed for soluble metals according to the guiedelines given in California Title 22.

The sample was received by AMTECH Laboratories intact. The test results and pertinent quality assurance/quality control data are listed on the attached tables.

Comments:

K J Walits

Kenneth J. Walits
Laboratory Director

INV 16136
BK 2404-78

Hirsh & Company
Client Sample ID: Geothermal Brine
Lab Sample ID: 1635-89
Project: NA
Sample Matrix: Liquid
Attn: John Harris

Date Sampled: 10/30/89
Date Received: 10/30/89
Date Analyzed: 11/15/89
Date of Report: 11/21/89
Units: mg/L

RESULTS

Parameter	Found	MS % R	MSD % R	RPD
Barium	3.3	70	78	11
Cadmium	.44	93	90	3
Arsenic	.61	112	88	24

Quality Assurance/Quality Control Data

MS % R = Matrix Spike Percent Recovery
MSD % R = Matrix Spike Duplicate Percent Recovery
RPD = Relative Percent Difference

DISPOSAL OPTIONS

The results of the analysis were deliverd to the following hazardous materials disposal contractors for their review:

1. GSX Services
   Westmorland, California

2. Pacific Treatment
   San Diego, California

3. AmerEco
   Phoenix, Arizona

4. IT Corporation
   El Cajon, California

5. Disposal Control Services, Inc.
   National City, California

The contractors were asked to review the material and suggest possible disposal options, disposal sites and estimate the cost to remove, transport and dispose of the sludge, sand layer and PVC liner.

Each contractor was particularly interested in performing this work, due to the large quantities of waste material involved. There are undoubtedly numerous other hazardous materials contractors who are equally interested in this project. However, in discussing the project with the above mentioned contractors and after reviewing their budget estimates, it was obvious that GSX Services, Inc. is in the best position to perform the work and can offer the most competitive disposal rate.

According to the General Manager of the GSX Facility, their site was permitted and developed to serve the planned geothermal industry in the Imperial Valley, and in doing so, they reduced the disposal cost for geothermal waste by 50 percent. GSX proposed to dispose of the sludge material, sand and liner for $49.00 per ton. Comparative costs for disposal from the other contractors were approximately $150.00 per ton.

SITE RESTORATION

Once the sludge material and liner are removed from the pond, the site will be regraded to match the surrounding topography.

Imported fill material should be brought into the site as required to eliminate depressions within the graded area. An estimated 2,000 cubic yards of import material will be required. Revegetation of the site will not be required. However, formal determination is to be obtained by the Contractor from the Bureau of Land Management prior to site grading.

The above provisions meet the requirements of the Bureau of Land Management.

ADDITIONAL SITE REMEDIATION

Before the site can be fully decommissioned, the California Regional Water Quality Control Board (CRWQCB) will require a plan to identify the groundwater sampling and analysis to be performed to determine if any groundwater contamination has occurred. This plan is to include, at a minimum, three test wells, 50 feet in depth each, determination of groundwater flow and the up gradient direction, and receive the approval of the CRWQCB. Test wells shall be positioned one up gradient of the pond and the other two down gradient. Well locations shall be reviewed by the CRWQCB prior to installation. This program should be completed in two phases. Phase 1 should be initial exploratory analysis, possibly four to six test wells, to verify groundwater quality. If contamination is found under Phase 1, then Phase 2A should be implemented to determine the extent of contamination through additional test wells and hydrogeologic modelling, and to develop a site remediation program to restore the groundwater quality. Phase 2B would be used to implement the remediation program.

DISPOSAL REQUIREMENTS

Proper disposal of the brine sludge shall be in accordance with CAC Title 22 Division 4, 40 CFR 268 and RCRA, Subtitle C.

The attached forms provided by GSX Services will be required prior to shipment.

PROJECT CERTIFICATION

To complete the project, a certification report and as-built plan should be prepared by a registered professional engineer or geologist. The report should summarize the decommissioning proceedings, document the disposal method, including all manifests, describe additional site remediation performed and the results thereof and provide an as-built map of the site showing final grading and test well locations. The report should also contain a sampling procedure, approved by the CRWQCB, to ensure all the material is properly removed.

COST ESTIMATE

The following estimate is based on budget pricing provided by GSX Services, Inc., Westmorland, California and site maps provided by the Department of Energy. It is inclusive of all costs associated with removal, transportation and disposal of the brine sludge, restoring the site to its original condition, and site certification.

ITEM	DESCRIPTION	QUANTITY	UNIT PRICE	TOTAL
1.	Remove and transport brine sludge layer, 12" sand layer & PVC liner	17,500 Ton	$29/Ton	$507,500
2.	Disposal cost for Item 1 material	17,500 Ton	$49/Ton	857,500
3.	Imperial County tax * on disposal charge	$857,500	10%	85,750
4.	Load fee	830	$10/Load	8,300
5.	Grading	20,000 CY	$ 3/CY	60,000
6.	Import	2,000 CY	$ 5/CY	10,000
7.	Mobilization	1 LS		10,000
8.	Groundwater Testing Phase 1	1 LS		18,000
	SUBTOTAL			$1,557,050
	Contingency @ 15%			233,558
	TOTAL CONSTRUCTION COST			$1,790,608
	Resident Engineer Inspection of the Decommissioning, Disposal and Restoration Operations, and Related Incidental Costs @ 5%			90,000
	TOTAL BASIC PROJECT COST			$1,880,608
	ROUNDED			$1,900,000

Groundwater Monitory & Testing

Phase II (If Required) - $50,000 to $200,000

*County tax is not required if material is classified as non-hazardous

CUSTOMER NOTIFICATION AND CERTIFICATION

GSX

ONLY STATEMENTS WITH ORIGINAL SIGNATURES WILL BE ACCEPTED!

Generator Name/Location: _____

EPA ID Number: _____

Waste Profile or ARF Number: _____

Manifest Number: _____

EPA Hazardous Waste Number(s): (_____) (_____)

Waste Analysis Available? Yes _____ No _____ If yes, please attach copy.

_____ Unrestricted Waste Notification (Category 1)

I notify that I personally have examined and am familiar with the waste through analysis and testing or through knowledge of the waste to support this notification that the waste is not restricted as specified in 40 CFR 268, Subpart D and all applicable prohibitions set forth in 40 CFR 268.32 or RCRA Section 3004(d).

_____ Restricted Waste Notification (Category 2)

I notify that I personally have examined and am familiar with the waste through analysis and testing or through knowledge of the waste to support this notification that the waste does not comply with the treatment standards specified in 40 CFR 268, Subpart D.

—(2A) Waste must be treated by the appropriate regulatory treatment standard or in such a manner which renders it non-liquid by chemical fixation or solidification prior to land disposal. Corresponding treatment standard _____

—(2B) Waste is subject to 40 CFR 268.7(a)(4) and landfilling or placing in a surface impoundment is not allowed unless conditions of category 5 below are met.

_____ Restricted Waste Variance Certification/Notification (Category 3)

I notify pursuant to 40 CFR 268.7(a)(3) and certify under penalty of law that I personally have examined and am familiar with the waste through analysis and testing or through knowledge of the waste to support this certification that the waste complies with the treatment standards specified in 40 CFR Part 268, Subpart D and all applicable prohibitions set forth in 40 CFR 268.32 or RCRA Section 3004(d). I believe that the information I submitted is true, accurate, and complete. I am aware that there are significant penalties for submitting a false certification, including the possibility of a fine and imprisonment.

Applicable Variance: _____

_____ Treated Waste Certification (Category 4)

I certify under penalty of law that I have personally examined and am familiar with the treatment technology and operation of the treatment process used to support this certification and that, based on my inquiry of those individuals immediately responsible for obtaining this information, I believe that the treatment process has been operated and maintained properly so as to comply with the performance levels specified in 40 CFR Part 268, Subpart D and all applicable prohibitions set forth in 40 CFR 268.32 or RCRA Section 3004(d) without dilution of the prohibited waste. I am aware that there are significant penalties for submitting a false certification, including the possibility of fine and imprisonment.

_____ Soft Hammer Waste Certification (Category 5)

—(5A) I certify under penalty of law that the requirements of 40 CFR 268.8(a)(1) have been met and that disposal in a landfill or surface impoundment is the only practical alternative to treatment currently available. I believe that the information submitted is true, accurate, and complete. I am aware that there are significant penalities for submitting false information, including the possibility of fine or imprisonment.

—(5B) I certify under penalty of law that the requirements of 40 CFR 268.8(a)(1) have been met and that I have contracted to treat my waste (or will otherwise provide treatment) by the practically available technology which yields the greatest environmental benefit, as indicated in my demonstration. I believe that the information submitted is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

—(5C) I certify under penalty of law that I have personally examined and am familiar with the treatment technology and operation of the treatment process used to support this certification and that, based on my inquiry of those individuals immediately responsible for obtaining this information, I believe that the treatment process has been operated and maintained properly so as to comply with treatment as specified in the generator's demonstration. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

_____ Restricted Waste Notification (Category 6)

I notify that I have personally examined and am familiar with the waste through anaylsis and testing or through knowledge of the waste to support this notification that the waste does comply with the treatment standards specified in 40 CFR 268, Subpart D.

SIGNATURE: _____ DATE: _____

PRINT NAME: _____ TITLE: _____

GSX Services (Imperial Valley), Inc

P.O. Box 158
5295 South Garvey Road
Westmorland, CA 92281
(619) 344-9400
FAX (619) 344-9405

HAZARDOUS WASTE PREDISPOSAL EVALUATION

A. IT USE ONLY

EVALUATION # _____
WASTE STREAM# _____
ACCT MGR _____
DATE SUBMITTED _____
CUSTOMER ID# _____
ANALYTICAL CHARGES _____
P O./CONTRACT# _____
BILLING INSTRUCTIONS:
_____
_____
_____

B. GENERATOR INFORMATION:

GENERATOR NAME _____
MAILING ADDRESS _____
_____
SITE ADDRESS _____
_____
EPA ID# _ _ _ _ _ _ _ _ _ _ _ _
TECHNICAL CONTACT _____ PHONE _____

C. CUSTOMER INFORMATION:

CUSTOMER NAME _____
ADDRESS _____
_____
CONTACT _____
PHONE _____
TRANSPORTER _____
EPA ID# _ _ _ _ _ _ _ _ _ _ _ _

D. Waste Description _____
_____
Generating Process _____
Volume _____ Gals _____ Yds _____ Lbs _____

FREQUENCY ☐ One Time ☐ Week ☐ Month ☐ Quarter ☐ Year
METHOD OF SHIPMENT ☐ Bulk Liquid ☐ Bulk Solid ☐ Drums
DRUM TYPE AND SIZE _____

E. SHIPPING INFORMATION:

D.O.T. PROPER SHIPPING NAME _____
_____
R.Q. _____ UN/NA# _____
HAZARD CLASS _____
RCRA WASTE? ☐ Yes ☐ No CODE _____
CA. HAZARDOUS WASTE? ☐ Yes ☐ No CODE _____
CA. RESTRICTED WASTE? ☐ Yes ☐ No

F. HAZARDS:

	LOW	MOD	HIGH		YES	NO
INHALATION	☐	☐	☐	PYROPHORIC	☐	☐
DERMAL	☐	☐	☐	EXPLOSIVE	☐	☐
ORAL	☐	☐	☐	SHOCK SENSITIVE	☐	☐
FLAMMABLE	☐	☐	☐	WATER REACTIVE	☐	☐
REACTIVITY	☐	☐	☐	OTHER	☐	☐

MATERIAL SAFETY DATA SHEETS ATTACHED? _____
SPECIAL HANDLING _____

G.

COLOR _____
ODOR _____
☐ Mild ☐ None
☐ Strong

H. PHYSICAL STATE:

☐ Liquids _____% Free Liquids
☐ Solids ☐ Single Layer
☐ Sludge ☐ Double Layer
☐ Powder ☐ Multi-Layer

I. pH:

☐ <2 ☐ 10-12
☐ 2-6 ☐ >12
☐ 6-8 ☐ _____ Exact
☐ 8-10

J. NORMALITY:

☐ 0.1-1.0 ☐ 4.1-5.0
☐ 1.1-2.0 ☐ 5.1-6.0
☐ 2.1-3.0 ☐ > 6.0
☐ 3.1-4.0 ☐ _____ Exact

K. SPECIFIC GRAVITY:

☐ <0.8 ☐ 1.4-1.7
☐ 0.8-1.0 ☐ > 1.7
☐ 1.0-1.2 ☐ _____ Exact
☐ 1.2-1.4

L. FLASH POINT:

☐ 100F
☐ 100-140F
☐ 140-200F
Method _____

M. CHEMICAL COMPOSITION:

_____ _____ %
_____ _____ %
_____ _____ %
_____ _____ %
ACID TYPES _____ _____ %
_____ _____ %
BASE TYPE _____ _____ %
OXIDIZER TYPE _____ _____ %
WATER _____ _____ %
OIL _____ _____ %
TOTAL 100%

UNK	YES	NO		
☐	☐	☐	CYANIDES	PPM
☐	☐	☐	FORMALDEHYDE	PPM
☐	☐	☐	PCB	PPM
☐	☐	☐	PHENOLS	PPM
☐	☐	☐	SULFIDES	PPM
☐	☐	☐	AMMONIA	PPM
☐	☐	☐	DIOXINS	PPM
☐	☐	☐	PESTICIDE	PPM
			PESTICIDE GROUP	
☐	☐	☐	HALOGENATED ORGANICS	PPM
			OTHER	PPM

N. METALS:

	TOTAL		SOLUBLE
Tl	PPM	Tl	PPM
As	PPM	As	PPM
Hg	PPM	Hg	PPM
Se	PPM	Se	PPM
Pb	PPM	Pb	PPM
Cd	PPM	Cd	PPM
Ni	PPM	Ni	PPM
Cr	PPM	Cr	PPM
Cr+6	PPM	Cr+6	PPM
V	PPM	V	PPM
Be	PPM	Be	PPM
Cu	PPM	Cu	PPM
Fe	PPM	Fe	PPM
Co	PPM	Co	PPM
Zn	PPM	Zn	PPM

OTHER _____
OTHER _____

O. ANALYTICAL INSTRUCTIONS: ☐ STANDARD PREDISPOSAL ☐ RUSH (subject to surcharge) ☐ REQUEST FOR ANALYSIS

SPECIFIC INSTRUCTIONS: _____
_____
_____

P. CERTIFICATION: I HEREBY CERTIFY THAT TO THE BEST OF MY KNOWLEDGE THE ABOVE INFORMATION AND ATTACHMENTS FULLY AND ACCURATELY CHARACTERIZE THE CHEMICAL AND PHYSICAL PROPERTIES OF THE WASTE STREAM. I UNDERSTAND THAT THIS SAMPLE IS ASSUMED BY IT CORPORATION TO BE REPRESENTATIVE OF THE WASTE STREAM AND THAT ACCEPTABILITY AND PRICE ESTIMATES BASED ON THIS SAMPLE MAY CHANGE ACCORDING TO THE COMPOSITION OF ACTUAL WASTES ANALYZED AT TRUCK RECEIVING.

NAME _____ SIGNATURE _____ DATE _____ PHONE _____