



Department of Energy  
Field Office, Albuquerque  
Los Alamos Area Office  
Los Alamos, New Mexico 87544

*Handwritten signature*

MAY 22 1992

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Edward Horst, Program Manager  
Radioactive and Hazardous Waste Bureau  
State of New Mexico Environment Department  
525 Camino de Los Marquez  
Suite 4, P.O. Box 26110  
Santa Fe, NM 87502



Dear Mr. Horst:

Enclosed please find the Department of Energy's response to the Notice of Deficiency (NOD) regarding the Technical Area 54, Waste Oil Storage Tank closure plan. This NOD was received by our office on April 8, 1992. The original due date of this response was May 8, 1992, but a two week extension was granted changing the due date to May 22, 1992.

Los Alamos National Laboratory (LANL) personnel supervised the closure activity and have generated responses to each of your comments. The comments and applicable responses are listed in the order that we received them from your office.

Should you have any questions pertaining to this additional information, please contact David McInroy of LANL's Environmental Protection Group, at 667-0819.

Sincerely,

*Jerry L. Bellows*  
Jerry L. Bellows  
Area Manager

LESH:2SS-043

Enclosures

cc w/o enclosures:

- A. Tiedman, LANL, MS A120
- T. Gunderson, EM-DO, LANL, MS K491
- K. Hargis, (EM-8:92-1351-1) EM-8, LANL, MS K490
- R. Vocke, EM-13, LANL, MS M992

8/6/92  
This NOD response was received and is inadequate because it does not contain a soil sampling plan for clean closure of the tank units.  
(See Approval closure plan dated 8/6/92)



11262

*TV*

*MA*

# Los Alamos

Los Alamos National Laboratory  
Los Alamos, New Mexico 87545

DATE May 22, 1992  
IN REPLY REFER TO ADO :92-477  
MAIL STOP A120  
TELEPHONE (505) 667-9390  
(FTS) 843-9390

Mr. Jerry L. Bellows  
Area Manager  
U. S. Department of Energy  
Los Alamos Area Office  
Los Alamos, New Mexico 87544

Dear Mr. Bellows:

**SUBJECT: NOD RESPONSE FOR TA-54 AREA L WASTE OIL TANK  
CLOSURE**

Enclosed is a draft letter for your concurrence and signature. The letter is to Mr. Edward Horst of the New Mexico Environment Department (NMED). It transmits the Laboratory's response to the Notice of Deficiency received pertaining to the Closure Report for the Technical Area 54 Waste Oil Storage Tanks.

Please finalize the transmittal letter and sign Enclosure 3, the *Certification of Accuracy* and transmit the package as soon as possible. This response must reach NMED by May 22, 1992.

If you have any questions regarding this response, please contact Dave McInroy of my staff. He can be reached at 667-0819 or page him at 104-1924.

Sincerely,



Allen J. Tiedman  
Associate Director  
for Operations

AJT:DM/gr

Mr. J. L. Bello  
ADO

-2-

Enc. a/s

Cy: T. Gunderson, EM-DO, w/enc., MS K491  
K. Hargis (EM-8:92-1351), EM-8, w/enc., MS K490  
B. Vocke, EM-13, w/enc., MS M992  
L. Maassen, EM-13, w/enc., MS M992  
D. McInroy, EM-8, w/enc., MS K490  
EM-8 AI #151, w/enc.  
EM-DO AI #284, w/enc.  
CRM-4, w/enc., MS A150  
Circ. File, w/o enc.

## Closure Plan Comments

1. Section 5.1.4 Secondary Containment Decontamination procedures; Page 7. The closure plan states that the liner will be cleaned to meet the standards of HWMR-6, Part VI, Section 40 CFR 265.228(a)(1). This section of the regulations apply to surface impoundments that treat, store or dispose of hazardous waste according to Section 40 CFR 265.220. Closure of secondary containment systems for tanks is covered under Section 40 CFR 265.197. The closure plan must be revised to indicate the correct closure requirements if the rectangular tank secondary containment is not a surface impoundment. Provide an explanation of how the secondary containment system meets all applicable design and management requirements of Section 40 CFR 265.193. Include design and construction specifications.

If the unit constitutes a surface impoundment then a separate closure plan must be submitted that meets all requirements of Section 40 CFR 228.

*Response:* Section 40 CFR 265.228(a)(1) was incorrectly cited as the decontamination standards for the liner, in the closure plan. Enclosure 1 is a revised page 7 to replace the incorrect page within your copy of the closure plan. This secondary containment system consisted of a plastic liner bermed with sandbags, for the sole purpose of decontamination of the rectangular tank. This liner was never used for secondary containment while the tank was in operation, thus not subject to requirements of Section 40 CFR 265.193.

2. Section 5.1.5 Soil Sampling and Groundwater Investigation Plan; Page 7. This section of the closure plan states that any visibly contaminated soil underlying and surrounding the decontamination area will be sampled in order to determine any remedial requirements for clean closure, and that the former location of the tanks (Area L) will be investigated during closure of that area.

The soil sampling plan is inadequate. Los Alamos must demonstrate through sample collection and analysis that all contaminated soils are removed and decontaminated in order to achieve clean closure. Los Alamos must develop an acceptable soil sampling and analysis plan. We suggest that Los Alamos formally request that this plan be incorporated into the closure plan for Area L. In this case, and if all other technical requirements for the TA-54 Waste Oil Storage Tank closure are met, NMED can approve the TA-54 Waste Oil Storage Tank closure plan. However, we will not be able to grant clean closure for the TA-54 Waste Oil Storage Tank

**closure until after clean closure for the units is demonstrated through Area L closure activities. Otherwise, the soil sampling and analysis strategy must be included in the TA-54 Waste Oil Storage Tank closure plan.**

**Los Alamos should consider one of the above mentioned options or an equivalent option and submit the soil sampling and analysis plan specifically for contaminated soils associated with closure of the tanks.**

*Response:* Because of the former location of these vessels it would be impractical to perform a clean closure demonstration on the soil within Area L. Prior to these tanks being placed at this location, hazardous waste was stored and disposed of in the immediate vicinity. After the tanks were removed, hazardous waste is still stored in this exact location. For these reasons Los Alamos has had meetings with the Environmental Protection Agency (EPA) and personnel within your office to discuss delaying of any soil sampling and remediation, if necessary, until Area L is closed. Please find Enclosure 2 which includes a letter from your office stating that LANL should include a section within the RCRA Facility Investigation (RFI) Work Plan, which specifically addresses all interim status units at TAs-51 and 54. LANL has taken this integrated approach which will meet both the RCRA and HSWA requirements and included Closure Plan modification verbiage in the Work Plan for TA-54. This Work Plan will be submitted to EPA and your office for approval on May 23, 1992.

3. **Contingent Closure and Post-Closure Plans. If all tanks undergoing closure did not have secondary containment systems that meet the requirements of Section 40 CFR 265.193(b) through (f) then a contingent closure and post-closure plan for closing such tanks as landfills must be submitted. Provide the appropriate documentation of secondary containment or submit contingent closure and post-closure plans. Los Alamos may formally request that the contingent closure and post-closure plan (if applicable) be included with the closure plan for Area L. If contingent closure and post-closure plans apply to these units then they must be submitted either in the Area L closure plan or the TA-54 Waste Oil Storage Tank closure plan in response to this notice of deficiency.**

*Response:* The closure and post-closure requirements will be addressed in the above referenced RFI Work Plan.

**Closure Certification Report Comments**

4. **The closure certification report is unclear. The report must be revised to include a narrative of how the tank decontamination sampling and analysis shows that the tanks were successfully decontaminated. Enclosure 2 Summary of Analysis needs to be explained. Specify which (if any) hazardous constituents were identified in what concentrations for the final rinsewater analysis from each tank. This information may be put in tabular form.**

*Response:* Section 5.1.3 of the Closure Plan that is included in the closure certification report describes *Tank Decontamination Procedures*. Enclosure 2 in the closure certification report is a table summarizing the analytical results for two sampling events. The first decontamination effort of the tanks took place between March 27, and April 6, 1990. The tanks were sampled on April 18, 1990. The final rinse water from this decontamination effort was sampled and revealed no EP Toxicity levels of metals or polychlorinated biphenyls (PCBs) remained in any of the vessels. Analyses revealed that tank number 7 still had volatile and semi-volatile organic contamination associated with it. Final rinse waters from tank number 8 and the rectangular tank showed the presence of semi-volatile organics. The final rinse water from the tank truck indicated the presence of volatile organic compounds. Tanks 5 and 6 were determined to be clean after the first decontamination effort because there was no contamination (EP Tox metals, PCBs, volatile or semi-volatile organics) detected in the water from the last rinse.

Tanks that had contamination associated with them after the first decontamination effort, were cleaned again. Those tanks were then resampled on August 22, 1990, for the type of contamination that was detected from the first round of sampling. The water from the third rinse of the tanks showed no contaminants remaining in any of the tanks.

5. **The certification located in Enclosure 5 needs to be signed by Mr. Bellows.**

*Response:* A signed Certification by Mr. Allen J. Tiedman and Mr. Jerry L. Bellows can be found in Enclosure 3. Please substitute it for the original Enclosure 5, in the Closure Report.

6. **Provide a copy of all supporting documentation pertaining to this closure which is on file at Los Alamos as described in the front page of the closure report.**

*Response:* As confirmed by a telephone conversation between Marc Sides of your office and Dave McInroy of LANL on May 18, 1992, the following information is being provided: Enclosure 4 is a copy of David McInroy's log book, Enclosure 5 is a copy of the Chemical Waste Disposal Request, and finally Enclosure 6 consists of the Hazardous Waste Shipping Manifests associated with the waste generated from this project.

**ENCLOSURE 1**

REVISED PAGE 7 OF THE CLOSURE PLAN

#### 5.1.4 Secondary Containment Decontamination Procedures

##### 5.1.4.1 Rectangular Tank Secondary Container

The Laboratory will remove any contaminants, if present, from the surface of the liner providing secondary containment for the rectangular tank. To accomplish this, the liner will be cleaned to meet the standards of 40 CFR 265.197. In lieu of cleaning, the Laboratory may select to package and dispose of the liner as hazardous waste or PCB-contaminated material at a permitted facility.

The liner will be pre-washed using pressurized hot water to remove remaining residue. Rinsate will be collected and handled in the same manner as residue from the rectangular tank. Following the pre-wash, the liner will be scrubbed using a surfactant and rinsed with pressurized hot water. Steam will not be used because it may damage the liner. Rinsate from the second wash will be collected and handled in the same manner as tank rinsate fluids.

A representative sample of the final rinsate will be collected and preserved in accordance with procedures presented in Section 5.1.6. The sample will be analyzed for PCBs, volatile and semivolatile organic constituents, and EP Toxic metals. Methods for treatment and/or disposal of the rinsate will depend on results of sampling. It is expected that rinsate from the second wash will not be hazardous waste as defined in 40 CFR 261.3 (HWMR-6, Part II). A determination that the rinsate from the second wash is not a hazardous waste (e.g., does not contain detectable concentrations of organic compounds or EP Toxic concentrations of metals) will indicate that the liner does not contain hazardous constituents which are leachable in quantities sufficient for the liner to be determined a hazardous waste; thus, meeting the requirements of 40 CFR 265.197. The washing procedures will be repeated, as necessary, utilizing appropriate surfactant solutions until the rinsate is no longer a hazardous waste.

##### 5.1.4.2 Fiberglass Tanks Secondary Container

Since the rectangular tank will be used as the secondary containment vessel for the fiberglass tanks, decontamination will be covered during final cleaning of the rectangular tank.

##### 5.1.5 Soil Sampling and Ground Water Investigation Plan

Any visibly contaminated soil underlying and surrounding the decontamination area will be sampled and analyzed in order to determine any remedial requirements for clean closure. The former location of the tanks (Area L) will be investigated during the closure of that area.

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**ENCLOSURE 2**

CORRESPONDENCE BETWEEN NMED AND LANL

**ENCLOSURE 3**

SIGNED CERTIFICATION OF ACCURACY

**CERTIFICATION OF ACCURACY**

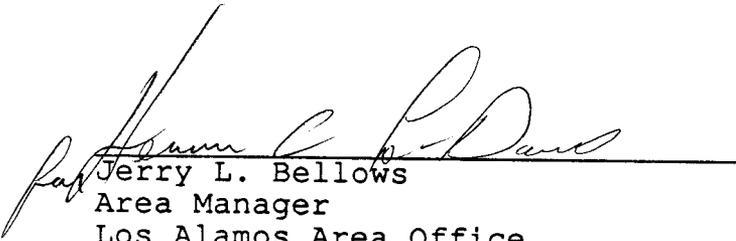
I certify that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fines and imprisonment for knowing violations.



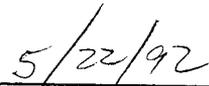
Allen J. Tiedman  
Associated Director for Operations  
Los Alamos National Laboratory  
Operator



Date Signed



Jerry L. Bellows  
Area Manager  
Los Alamos Area Office  
U. S. Department of Energy  
Albuquerque Operations  
Owner



Date Signed

**ENCLOSURE 4**

COPY OF LOGBOOK

S 021058

INSTRUCTIONS FOR USING THIS NOTEBOOK

Fill in this information:

THIS NOTEBOOK IS USED BY: DAVID MCINROY  
GROUP: HSE-8 STARTING DATE: FEB. 1990

DATE EACH DAY'S ENTRY      RECORD ALL EXPERIMENTAL WORK  
SIGN EACH DAY'S ENTRY      RECORD ALL NEW CONCEPTS

AS SOON AS A CLASSIFIED ENTRY IS MADE IN THIS NOTEBOOK IT MUST BE PROPERLY MARKED AND SAFEGUARDED AS DESCRIBED IN THE "OFFICE PROCEDURES MANUAL".

This book is an official record for which you are responsible. Its purpose is to assist you in keeping accurate record of technical work, calculations, experiments, ideas, etc., and to provide the United States Government with a means of reviewing our work, both while it is in progress and when it is completed, and, if necessary, to prove in court that work was done on definite dates in order to support applications for patents, or to defend patents issued, as a result of our work.

IT IS RECOMMENDED THAT THE PROCEDURE OUTLINED BELOW BE FOLLOWED WHEN USING THIS BOOK:

1. Record all experimental work, calculations, sketches, and the like DIRECTLY in this book.
2. Make successive entries on consecutive pages.
3. Do not start a new page until the previous one is full or has been so marked that no additional entries can be made on it.
4. At the end of each day sign and date the material you have entered in the book on that day.
5. Have the entries in the book witnessed and dated, preferably by someone who has observed and understood the actual work recorded.
6. After an entry has been signed and dated, DO NOT make any changes, interlineations, deletions, or additions. Make a new entry for corrections and refer back to the original entry.
7. Do not erase or blot out any entry at any time. Before an entry has been signed and dated, changes may be made but care must be taken not to obliterate what was written originally: simply indicate any deletion by a single line through the material to be deleted.
8. Record everything—better too much than too little.
9. Do not remove any pages from this book.

It is the responsibility of the one using this book to see that it is marked with the correct classification and properly safeguarded as soon as a classified entry is made in it.

This notebook is the property of the U.S. Government—if you terminate your employment at the Los Alamos National Laboratory you must turn this notebook over to your group office or must send it to the CRMO Records Center.

WHEN THIS NOTEBOOK IS COMPLETE, SEND IT TO: LOS ALAMOS NATIONAL LABORATORY RECORDS CENTER, CRMO, MS 322.

*The University of California, Los Alamos National Laboratory, Los Alamos, NM 87545*

Feb. 22, 1990

A LABORATORY WORKORDER HAS BEEN SIGNED AND THE WORK SCHEDULED TO START SOMETIME IN MARCH. THE WO. # IS 6-5708-54.

*[Signature]* HSE-8, LANL

MARCH 16, 1990

Submittal of Scope of Work (SOW) to John Kruger for the closure of the waste oil tanks. I have estimated the cost of this project to be \$74.5K, with a completion date of May 15, 1990 (excluding certification and final report).

TASK ID # AL-LA-RC-2

*[Signature]* HSE-8, LANL

MARCH 20, 1990 - 1:30 pm PREJOB CONFERENCE @ AREA "G"

Objectives of Job Explained: KEITH Rendel - ENG-5 104-1551

DAN Broughton - Job Sup. 118 -

Albino TRUJILLO - LABOR FRMAN.

Mike Bailey - PAN Am ENV. 7-0104

MIKE STROSINSKI - PAN Am SAFETY

*[Signature]*  
HSE-8 LANL

MARCH 27, 1990 DECON OF RECTANGULAR TANK

STARTED. SECONDARY CONTAINMENT SET UP

- PLASTIC + SANDBAGS. LIDS OF THE TANK ARE

Removed and set inside AND CLEANED

- Residual Oil pumped AND DRUMMED

- 2, 55 gallon drums of WASTE OIL + SLUDGE Generated.

- 2 LABORERS WORKING TODAY.

*[Signature]* HSE-8, LANL

MARCH 28, 1990 - 8:30 am

TELEPHONE CONVERSATION: DAN Broughton

- ONCE RECTANGULAR TANK CLEANED, IT SHOULD BE USED AS secondary CONTAINMENT FOR the 4 fiberglass TANK decon.

MARCH 28, 1990 (CONT.)

- CUT OPENINGS IN FIBERGLASS TANKS w/ SKILL SAW.
- BE CAREFUL NOT TO GENERATE too much RINSATE WITH STEAM CLEANER -
- They ARE STARTING the decon of the fiberglass TANKS today.

*[Signature]* HSE-8, LANL

APRIL 2, 1990 - 10:15 AM

LABORERS have completed the triple WASH AND RINSE OF the 4 fiberglass TANKS (TANK # 5-8). Tomorrow they will steam clean (the LAST STEP) the tanks.

*[Signature]* HSE-8, LANL

APRIL 3, 1990

TELEPHONE CONVERSATION: DAN Broughton

- HAVE completed two tanks - Ready to sample
- steam cleaner problem after two tanks
- 3 drums of rinsate generated so far
- Mike HARVEY will fill in for DAN for the next couple days.

*[Signature]* HSE-8, LANL

APRIL 4, 9:15 AM

Albino and three others are cleaning the LAST two fiberglass tank. They look very clean. I am optimistic that they will NOT have to be cleaned again

Need to pick-up some of the plastic blowing around AND secure. cover the tanks that ARE DONE.

WASTE GENERATED:		TRUCK PARTS - 1 DRUM
OILSOAKED RAGS	OIL/SLUDGE -	5 DRUMS
12 DRUMS	RINSATE -	4 DRUMS

APRIL 4, 1990 (CONT)

ALBINO IS TO ACCUMULATE ALL DRUMS TO ONE AREA AND PUT ON PALLETS AND INSPECT DAILY.

- Supplement to increase funding *(signature)* HSE-8, LANL

APRIL 6, 1990 11:15 AM

Crew has taken off ancillary equipment from the TANK TRUCK: GAS TANK  
GRATING FROM TOP  
Smaller VALVES.

- They should drum smaller pieces that can't be decontaminated or have NO SALVAGE VALUE. LABEL drum "TRUCK PARTS"
- GAS TANK should be emptied AND PURGED CUT + CLEANED. CONTACT MIKE STROSISKI/PA SAFETY
- If SECONDARY CONTAINMENT under TANKER CANT BE kept from blowing around, it should be drummed every night.
- SAW Mike Harvey on the way out of AREA "G"

*(signature)* HSE-8, LANL

APRIL 6, (CONT)

CALL FROM: Mike Harvey

ISSUES: - TANKS (ALL) ARE CLEANED AND READY TO SAMPLE.

- Q \* can truck grating be sent to salvage?
- Secure all equipment for shut down until ANALYTICAL RESULTS ARE BACK (5-7 weeks)

- He will check on # of drums generated: +
- MAKE SURE TANKS ARE COVERED

*(signature)* HSE-8, LANL

APRIL 10, 1990

TELEPHONE CONVERSATIONS:

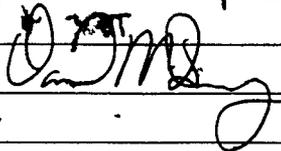
9:00 - Kelly BITNER - IT CORP. Alb.

Recommends that I call Tony  
Spinelli (S)? from IT Austin to  
supply analytical duplicates.  
# (512) 892-6684

11:00 - Carrol Sutcliff } HSE-9 They would like samples  
- Chuck R } submitted next week.

1:15 Tony SPINELLI - IT AUSTIN

TONY can take sample any time  
I am ready to sample. He will FAX  
a QUOTE TO ME AND send a sampling  
PACKAGE, should get in couple days.



APRIL 16, 1990

~~PRE~~SAMPLING CONF:

with Chuck and Carrol, Dee  
will sample wed. 18, 1990

will need: 2 - 40ml Glass w/septom for VOA  
2 - 1000ml Glass w/teflon for SemiVOA, EPTOX  
1 - 100? ml Glass w/teflon for PCBs

 HSE-8, LANL

April 18, 1990 2:15 - TANK SAMPLING -

TANKS have all been cleaned, by scrubbing with a brush AND deionized water I will perform the 4th WASH + RINSE ON EACH TANK. This WATER will be collected AND ANALYZED FOR HAZARDOUS CONSTITUENTS.

WEATHER CONDITIONS:

TEMP. 42°F, RAINING total precip. .28 in

April 17, 1990 Temp - High 52°F, total precip. .24 in

TANK #	EP tox Metals	VOA	Semi VOA	PCB
5 dup(ET)	TA-54-1	TA-54-8	TA-54-16	TA-54-23
6	TA-54-2	TA-54-9	TA-54-17	TA-54-24
7	TA-54-3	TA-54-10	TA-54-18	TA-54-25
8	TA-54-4	TA-54-11	TA-54-19	TA-54-26
RECT	TA-54-5	TA-54-12	TA-54-20	TA-54-27
TANK Truck	TA-54-6	TA-54-13	TA-54-21	TA-54-28
Field Blank	TA-54-7	TA-54-14	TA-54-22	TA-54-29
Trip Blank		TA-54-15		

Observations - Some SAMPLES SHOW A SHEEN ON TOP OF WATER. I'll SUBMIT AN SEC WHAT HAPPENS.

TANK 5 was sampled for duplicate sent to IT

6

April 18, 1990 (cont)

Samples Shipped to IT ANALYTICAL 1:30 pm  
via Federal Express.

Samples Submitted to LIBBY JONES (HSE-9) AT 2:00 pm.  
Service Request Numbers 10305 ORGANIC  
10313 INORGANIC

Four Chain of Custody Cards Submitted

- 1 for VOA
- 1 for Semi VOAs
- 1 for ~~PCBs~~ PCBs
- 1 for EP tox Metals

*[Signature]* HSE-8, LANL

April 24, 1990

9:00am TELEPHONE CONVERSATION:

Bill Kopp of AREA "G" called AND IS  
upset about "mess" at decon site. He is  
concerned ABOUT upcoming inspection.

I told him that I would INVESTIGATE.

*[Signature]* HSE-8, LANL

3:00pm call to Keith Rendell:

told him of complaint at Area G.  
He said he was out just the other day  
and it didn't look bad. I asked if  
we could meet at the job site tomorrow  
and inspect w/ Bill Kopp.

we will meet at 8:30 in morning

*[Signature]* HSE-8, LANL

April 25, 1990

8:40am

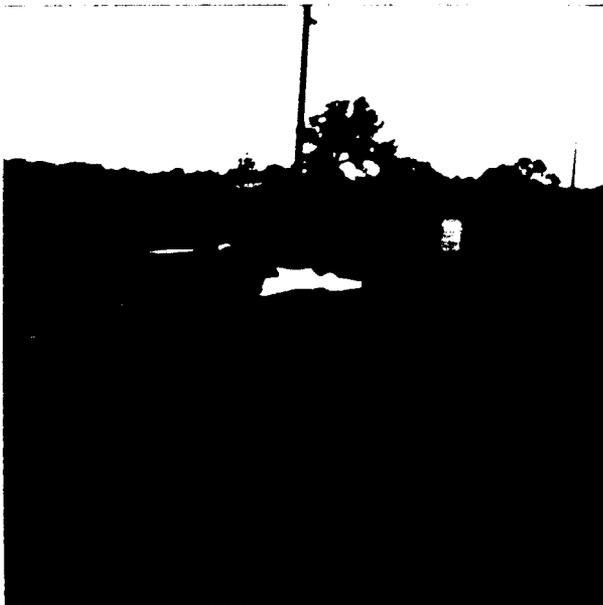
met w/ Keith Rendell  
Dan Broughton  
Albino Trujillo  
Bill Kopp

- Inspection of Job site
- I think the place looks pretty good
- Some tarp had blown off, (Replaced)

- INSTRUCT ALBINO TO STAGE ALL DRUM together on pallets  
drums should be LABELED FOR PICK-UP + Disposal.
- take down ladders, compile all cleaning equipment and cover.

Photo 1. Rectangular Tank  
AND FIBERGLASS TANK covered  
awaiting Analytical results

Photo 2. TANK TRUCK and  
ASSOCIATED DRUMS of WASTE  
OIL + RUSTATE + RAGS.



MAY 30, 1990 ANALYTICAL RESULTS FROM LANL

TANK #	EP TOX	VOA	Semi VOA	PCBS
5	OK	OK	OK	OK
6	OK	OK	OK	OK
7	OK	*HIT	*HIT	OK
8	OK	OK	*HIT	OK
Rect.	OK	OK	*HIT	OK
TANK TRUCK	OK	*HIT	OK	OK
Field Blank	OK	*HIT	OK	OK
TRIP BLANK		OK		

Duplicate TO IT ANALYTICAL

TANK #5      OK      OK      OK      OK

*[Signature]* HSE-8

MAY 31, 1990 - 8:15 AM

PHONE CALL: Keith Rendell

TOPICS:

- ALL TANKS BUT #5 AND #6 need cleaned again. This time no PCB cleaners or grease strippers. JUST FANTASTIC AND STEAM CLEAN
- He will schedule the work

*[Signature]* HSE-8, LANL

*Keith conversation*

Crew has been pulled away doing asbestos work elsewhere at the LAD they will return to tank JOB LATER THIS SUMMER.

Aug. 17, 1990

8:30 - Phone conversation: All Tanks had been cleaned again, Ready to Resample.  
 - CWBR to Montoya  $\approx$  30 drums  
 1015 - Presampling Conference w/ HSE-9 and IT  
 will sample when I receive sampling kit from IT. Probably early next week

*[Signature]*  
 HSE-8, LANL

August 22, 1990 - TANK SAMPLING - 9:25 AM

I will collect samples by the same method as performed during 1st sampling effort.

WEATHER CONDITIONS:

TEMP. 62°F, RAINING, Total Precip. .22 in  
 Aug. 21, 1990 TEMP. 70°F, .07 in RAIN

TANK #	VOA	Semi VOA	TIME	Duplicate
7	TA-54-30	TA-54-33	0900	IT (VOA, Semi) ✓
8		TA-54-34	0930	IT (VOA, Semi)
Rect.		TA-54-35	0945	
TANK TRUCK	TA-54-31		0915	IT (VOA, Semi)
BLANK	TA-54-32		0900	

1100 Six Sample Submitted to SANDRA Cisneros - FLORES (HSE-9) EACH SAMPLE HAS chain of CUSTODY CARD.

1132 Samples MAILED Federal Express TO IT ANALYTICAL

*[Signature]*  
 HSE-8, LANL

Aug 29, 1990

## Analytical Results (Second Sampling)

<u>TANK #</u>	<u>VOAS</u>	<u>Semi VOAS</u>
7	ND*	ND*
8	ND	ND*
Rectangular	ND	ND
TANK TRUCK	ND*	ND

\* Duplicate Sample sent to IT. showed ND

Rinseate from the last decan was mixed with others. - I believe all should be disposed of as HAZARDOUS WASTE.

*[Signature]* HSE-8

**ENCLOSURE 5**

CHEMICAL WASTE DISPOSAL REQUEST

# Los Alamos

Los Alamos National Laboratory  
Los Alamos, New Mexico 87545

**CHEMICAL WASTE DISPOSAL REQUEST**  
RETURN FORM TO WASTE MANAGEMENT, MS J593  
Telephone Number 667-7579

FOR DISPOSAL INQUIRIES  
PLEASE CALL  
665-4000

Requested By (Name A) DAVID MCINROY	Telephone Number 7-0819	Group HSE-8	Date Sent 10/90			
Waste Generator (Name By) HSE-DO/ER	Telephone Number 7-0808	Tech Area	Building			

Line Number	Number of Containers	Volume of Each Container	CHEMICAL NAME <sup>1</sup>	HAZARD <sup>2</sup>
1	18	55gal	Rags Soaked w/WASTE OIL w/Semi VOA + VOA <sup>PCBs</sup> contamination	
2				
3	16	55gal	RinSATE from cleaning WASTE OIL TANKS	
4			Semi VOA + VOA contamination, PCBs	
5				
6	1	55gal	Small metal TRUCK PARTS contaminated	
7			w/ VOA AND Semi VOAs, PCBs	
8				
9				
10				
11				
12				
13				
14				

I hereby certify that the information supplied above is correct.

Generator Signature 	Date 8/5/90
-------------------------	----------------

<sup>1</sup>CHEMICAL NAME - Name of single compound, names of all compounds in mixture, trade name and/or number of commercial product. For trade name products, attach the manufacturer's MSDS.  
<sup>2</sup>For HAZARD insert the appropriate letter: C = corrosive, I = ignitable, R = radioactive, T = toxic, X = reactive, S = solid, L = liquid, G = gas.

**ENCLOSURE 6**

HAZARDOUS WASTE SHIPPING MANIFESTS

NOTE: FORM DESIGNED TO PRINT 8 LINES PER PAGE.

EPA Form 8700-22 (Rev. 6-89)

Form Approved. OMB No. 2050-0039, Expires 9-30-91

<b>UNIFORM HAZARDOUS WASTE MANIFEST</b>		1. Generator's US EPA ID No. <b>NM0890010515</b>		Manifest Document No. <b>90285</b>		2. Page 1 of 1		Information in the shaded areas is not required by Federal law, but is required by Illinois law.	
3. Generator's Name and Mailing Address <b>LOS ALAMOS NATIONAL LABS BOX 1663, MSJ593 LOS ALAMOS, NEW MEXICO 87545</b>				Location If Different:		A. Illinois Manifest Document Number <b>IL4275948</b> MANIFEST FEE PAID			
4. Generator's Phone <b>(505) 667-7579</b>				5. Transporter 1 Company Name <b>Ozinga Transportation</b>		6. US EPA ID Number <b>1LD982067175</b>		B. Illinois Generator's ID <b>9350005012</b>	
7. Transporter 2 Company Name				8. US EPA ID Number		C. Illinois Transporter's ID <b>10710</b>		D. <b>(312) 3886257</b> Transporter's Phone	
9. Designated Facility Name and Site Address <b>Trade Waste Incineration 7 Mobile Ave Sauget, Illinois 62201</b>				10. US EPA ID Number <b>1LD098642427</b>		E. Illinois Transporter's ID		F. ( ) Transporter's Phone	
11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)				12. Containers No. Type		13. Total Quantity		14. Unit Wt/Vol	
a. Hazardous Waste, solid, n.o.s. (Cadmium, Chromium) ORM-E NA9189				J60312		.15 DM 800		1 I	
b. Waste, Battery, dry				J77177		.50 F 611		1 I	
c. Illinois Special Waste				J29483		.29 DM 1495		1 I	
d. Illinois Special Waste				J77050		.10 DM 55		1 I	
J. Additional Descriptions for Materials Listed Above 11a. also D007, D008: 906452, 906447, 905819, 905821, 905820, 905823, 905822, 905818, 906302, 906799, 906957, 906949, 906818, 906819, 906820. 11b. 906106, 906108, 906471, 906792 11c. 906449, 906440, 906450, 906409, 906408, 906407, 906700, 906567, 906566, 906565.				K. Handling Codes for Wastes Listed Above In Item # 14 1 = Gallons 2 = Cubic Yards					
15. Special Handling Instructions and Additional Information 11d. 906404				906555-906564, 906953-906956, 906929-906931, 906939, 906895					
24-hour emergency # 505-667-7878									
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. 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 <b>RON CONRAD</b>				Signature <i>Ron Conrad</i>				Date <b>09/13/90</b>	
17. Transporter 1 Acknowledgement of Receipt of Materials									
Printed/Typed Name <b>David Hodge</b>				Signature <i>David Hodge</i>				Date <b>09/13/90</b>	
18. Transporter 2 Acknowledgement of Receipt of Materials									
Printed/Typed Name				Signature				Date	
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 <b>LINDA Bilbrey</b>				Signature <i>Linda Bilbrey</i>				Date <b>09/18/90</b>	

This Agency is authorized to require, pursuant to Illinois Revised Statutes, Chapter 111 1/2 Section 21, that this information be submitted to the Agency. Failure to provide the information may result in a civil penalty against the owner or operator of not to exceed \$25,000 per day of violation. Falsification of this information may result in a fine up to \$50,000 per day of violation and imprisonment up to 3 years. This form has been approved by the Forms Management Center.

6-8214 C A 0-8212  
COPY 1. TSD MAIL TO GENERATOR  
A-8215 D BA-8213

In case of a spill call the Illinois Office of Emergency Response at 217/782-3637 and the National Response Center at 800/424-6367 or 1-800-424-6367

**UNIFORM HAZARDOUS WASTE MANIFEST**

1. Generator's US EPA ID No. **N.M.089.0.0.1.0.5159.0.29.4**

2. Page 1 of Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address  
**Los Alamos National Laboratory  
Bx 1663 Los Alamos N.M. 87545  
M.S. J543**

A. State Manifest Document Number  
B. State Generator's ID

4. Generator's Phone (505) **667-7579**

5. Transporter 1 Company Name  
**Chemical Waste Management**

C. State Transporter's ID

D. Transporter's Phone

6. US EPA ID Number  
**11.L.0099.2.026.8.1**

7. Transporter 2 Company Name

E. State Transporter's ID

F. Transporter's Phone

8. US EPA ID Number

9. Designated Facility Name and Site Address  
**Oil & Solvent Process Company  
9131 East 96th Ave  
Henderson C.O.**

G. State Facility's ID

H. Facility's Phone  
**303-289-4827**

10. US EPA ID Number  
**C.O.D.9.8.0.59.1.1.8.4**

11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)

12. Containers No. Type

13. Total Quantity

14. Unit Wt/Vol

1. Waste No.

a. **Waste Flammable liquid, N.O.S. / Flammable liquid / UN 1993 (Paint thinner, Acetone)**

0.0.7 D.M. 0.0.3.8.5 G

0001  
F003  
F004  
F005

b. **Hazardous Waste liquid, N.O.S. / ORM-E NA 9189 (Oil w/ trace of Barium & Solvents)**

0.1.6 D.M. 0.0.8.8.0 G

F001  
F003  
D005

c. **Waste ORM-A, N.O.S. / ORM-A / NA 1693 (Freon & water)**

0.0.1 D.M. 0.0.0.5.5 G

F001

d. **Hazardous Waste liquid, N.O.S. / ORM-E NA 9189 (Oil & Coolant)**

0.4.6 D.M. 0.2.4.2.0 G

F001  
F002  
F003  
F005

J. Additional Descriptions for Materials Listed Above

K. Handling Codes for Wastes Listed Above

a) G91105 DM# D907144 thru D907147, D907253B, D906989B, D9069388

00004

b) H06272 DM# D907025, D907003, D906546B, D906548B, D906450B, D906550 thru D906554, D906451, D906452, D906707, D906710

c) G91104 DM# D906936B

15. Special Handling Instructions and Additional Information

d) H06273 DM# D907114 thru D907136, D907225 thru D907238, D907385 thru D907393

24 hr Emergency # 505-667-7080

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, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national governmental regulations.

Printed/Typed Name: **Andrew J. Montoya** Signature: *Andrew J. Montoya* Month: **10/02**

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name: **Les Young** Signature: *Les Young* Month: **10/02**

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name: Signature: Month:

19. Discrepancy Indication Space #11A: Based on analytical results, (5) drums switched to profile 2 and would be better characterized as Hazardous Waste liquid, N.O.S., ORM-E, NA 9189 (line count: 2 drums) #11B: due to change in 11A, drum count 21, however, 2 drums switched to profile # J20433 (non-regulated). Total line count 19 for profile H06273  
Jed 10-15-02

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

Printed/Typed Name: **Troy A. Winkler** Signature: *Troy A. Winkler*

# UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. **N.M.089-00-105-15** Manifest Document No. **90271**

2. Page 1 of 2 Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address  
**Los Alamos National Laboratory  
8703 Los Alamos, N.M. 87545 MS393**

A. State Manifest Document Number

4. Generator's Phone **(505) 667-7571**

B. State Generator's ID

5. Transporter 1 Company Name **Chemical Waste Management** 6. US EPA ID Number **11-L-00942-0-2-6-8-1**

C. State Transporter's ID

7. Transporter 2 Company Name

D. Transporter's Phone **(505) 289-4227**

E. State Transporter's ID

F. Transporter's Phone

9. Designated Facility Name and Site Address  
**Oil & Solvent Process Co.  
9131 East 46th Avenue  
Henderson, CO 80640** 10. US EPA ID Number **K.O.D.92.059.1.1.8.4**

G. State Facility's ID

H. Facility's Phone **303-289-4827**

11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)

12. Containers No. Type

13. Total Quantity

14. Unit Wt/Vol

15. Waste No.

a. Waste Flammable liquid, N.O.S. (Petroleum based) (UN1993) (0001, F003) **0.2** **DM** **0.0-1.6** **6** **F003 0001**

b. Waste Flammable liquid, N.O.S. (Petroleum based) (UN1993) (0001) **0.0-1** **DM** **0.0-0.55** **6** **D001**

c. Waste Flammable liquid, N.O.S. (TCE) (UN1993) (F002, D001) **0.0-1** **DM** **0.0-0.55** **6** **F002 0001**

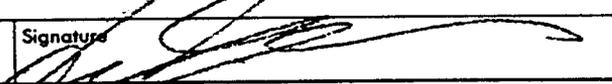
d. Waste Flammable liquid, N.O.S. (TCE) (UN1993) (F001, D001) **0.0-1** **DM** **0.0-0.55** **6** **F001 0001**

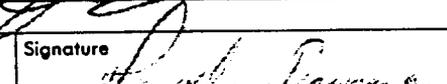
K. Handling Codes for Wastes Listed Above

J. Additional Descriptions for Materials Listed Above  
a) G91105 DM # D906911B, ~~D906831L~~, D906814B  
b) G91105 DM # D905854  
c) G91105 DM # D906683L  
d) G91105 DM # D906736B

15. Special Handling Instructions and Additional Information  
**Bulk 5579**  
**Bored & Rings are tight 24 hr Emergency # 505-667-7080**

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 governmental 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 **Andrew G. Gustavson** Signature  Month Day Year **8/9/90**

17. Transporter 1 Acknowledgement of Receipt of Materials  
Printed/Typed Name **Paul W. Peterson** Signature  Month Day Year **10/9/1/90**

18. Transporter 2 Acknowledgement of Receipt of Materials  
Printed/Typed Name \_\_\_\_\_ Signature \_\_\_\_\_ Month Day Year \_\_\_\_\_

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 \_\_\_\_\_ Month Day Year \_\_\_\_\_

**UNIFORM HAZARDOUS WASTE MANIFEST**  
(Continuation Sheet)

21. Generator's US EPA ID No.

Manifest Document No.

22. State

Information in the shaded areas is not required by Federal law.

N.M.O.R.9.001.0515 40.2.71 2012

23. Generator's Name

Los Alamos National Laboratory  
Bldg 1663 Los Alamos NM 87545 ms 3593

L. State Manifest Document Number

M. State Generator's ID

24. Transporter Company Name

Chemical Waste Management

25. US EPA ID Number

1.L.D.049.2.02.6.81

N. State Transporter's ID

O. Transporter's Phone: 505 357-0112

26. Transporter Company Name

27. US EPA ID Number

P. State Transporter's ID

Q. Transporter's Phone

28. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)

29. Containers

30. Total Quantity

31. Unit Wt/Val

R. Waste No.

	HM	No	Type			
a.	Hazardous Waste Liquid, N.O.S. /ORM-E NA 9189 (FO01) (coolant, oil)	029	DM	01595	6	FO01
b.	Hazardous Waste Liquid, N.O.S. /ORM-E NA 9189 (FO03) (coolant, oil)	013	DM	00715	6	FO03
c.	Hazardous Waste Liquid, N.O.S. /ORM-E NA 9189 (D008) (water with lead)	001	DM	00055	6	D008
d.	NON-Regulated Waste	029	DM	01595	6	
e.	Hazardous Waste Liquid, N.O.S. /ORM-E NA 9189 (water & solvent)	006	DM	00330	6	FO01
f.						
g.						
h.						
i.						

S. Additional Descriptions for Materials Listed Above

- a) H06222 DM # 090677
- b) H06222 DM # 090666
- c) H06222 DM # 090645
- d) H06222 DM # 090671

T. Handling Codes for Wastes Listed Above

32. Special Handling Instructions and Additional Information

D406271B, D406274B, D406211, D406272B, D406100, D406381E, D406342B  
D406101B, D406442, D406067B, D406685B, D406643, D406672, D406642E  
D406270E, D406440, D406441  
e) H06222 DM # 090640 + W, D406645

33. Transporter Acknowledgement of Receipt of Materials

Printed/Typed Name: *Ronald...* Signature: *Ronald...* Date: 09/11/90

34. Transporter Acknowledgement of Receipt of Materials

Printed/Typed Name: Signature: Date: Month Day Year

35. Discrepancy Indication Space

GENERATOR

TRANSPORTER

FACILITY