

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

cc -> Stephanie
 Kelly Crossman

APR 10 1987

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. Myron Knudson, Director
 Water Management Division, 6W
 U.S. Environmental Protection Agency
 Region VI
 Allied Bank Tower at Fountain Place
 1445 Ross Ave.
 Dallas, TX 75270

Dear Mr. Knudson:

NPDES PERMIT NM0028355 MODIFICATION

This letter is being sent to the Environmental Protection Agency to clarify the status of several outfalls in our existing National Pollution Discharge Elimination System (NPDES) Permit. We are providing the information in accordance with Paragraph G, ADDITIONAL OR DELETED OUTFALLS, Part III of our Permit, effective March 1, 1986. Items to be changed are:

1) Twenty-two outfalls are no longer discharging. The discharge was discontinued because the process generating wastewater was discontinued or modified so that there no longer is an effluent. We are requesting that the following outfalls be eliminated.

- | | | |
|-----|-------------|-------------|
| 1. | Outfall 010 | TA-3-105 |
| 2. | Outfall 011 | TA-22-5N |
| 3. | Outfall 012 | TA-35-67 |
| 4. | Outfall 030 | TA-21-2 |
| 5. | Outfall 044 | TA-46-86 |
| 6. | Outfall 065 | TA-22-1 |
| 7. | Outfall 079 | TA-40-4 |
| 8. | Outfall 084 | TA-22-5S |
| 9. | Outfall 086 | TA-3-216 |
| 10. | Outfall 087 | TA-35-46 |
| 11. | Outfall 088 | TA-35-67 |
| 12. | Outfall 090 | TA-35-85 |
| 13. | Outfall 095 | TA-3-170 |
| 14. | Outfall 101 | TA-40-9 |
| 15. | Outfall 104 | TA-18-30-31 |
| 16. | Outfall 111 | TA-52-1 |
| 17. | Outfall 112 | TA-52-11 |
| 18. | Outfall 116 | TA-35-29 |
| 19. | Outfall 117 | TA-46-41 |
| 20. | Outfall 119 | TA-0 |
| 21. | Outfall 121 | TA-15-263 |
| 22. | Outfall 122 | TA-15-R45 |



- 2) Outfall 007 was eliminated from the permit approximately six years ago. We request that the permit for Outfall 007 be re-activated, as we wish to resume our surface discharge. There has not been a change in effluent quality since Outfall 007 was originally permitted.
- 3) The discharge from Outfall 040, treated cooling water, was combined with the discharge from Outfall 041, non-contact cooling water. We request that the combined effluents be permitted in Category 03A as treated cooling water.
- 4) Outfall 064 has been combined with Outfall 078. Outfall 11S has been combined with Outfall 02S. Outfall 08S has been combined with Outfall 10S.

Items 5 through 8 describe corrections that should be noted regarding the March 1986 permit re-application for NPDES Permit NM0028355.

- 5) The place of discharge for Outfall 069 should be changed from Valle Canyon to Water Canyon.
- 6) The place of discharge for Outfall 118 should be changed to Canada del Buey.
- 7) The place of discharge for Outfall 123 should be changed from Pajarito Canyon to Valle Canyon.
- 8) The Building Identification Number for Outfall 125 should be changed from TA-53-29 to TA-53-28.
- 9) Three new outfalls are anticipated to begin discharging by May 31, 1987. An EPA Form 3510-2D has been prepared for each outfall and is enclosed. The outfalls are: Outfall 130, treated cooling water; Outfall 131, non-contact cooling water; and Outfall 132, photo waste.

To recapitulate our requests:

Twenty-two outfalls have been eliminated.

Outfall 007 is being re-activated.

Three outfalls consist of combined discharges.

Four permitted outfalls require correction regarding either the place of discharge or the origin of the discharge.

Three new outfalls require permits.

By copy of this letter to the New Mexico Environmental Improvement Division, the provisions of Section 1-201 and 3-106.B of the New Mexico Water Quality Control Commission Regulations are met.

M. Knudson

3

The term "Daylight" used in our Discharge Monitoring Reports (DMRs) means that there was no discharge for that particular period.

Should you have further questions concerning these NPDES permit changes, please call James Phoenix (FTS 843-5288) of my staff.

Sincerely,


Harold E. Valencia
Area Manager

6655A(3)7

Enclosures:
As stated

cc w/enclosures:

M. Burkhart, Director, NMEID, Santa Fe, NM
K. Sisneros, NMEID, Santa Fe, NM
J. Highland, USEPA, Region VI, Dallas, TX

B. Attach a line drawing showing the water flow through the facility. Indicate sources of intake water, operations contributing wastewater to the effluent, and treatment units labeled to correspond to the more detailed descriptions in Item III-A. Construct a water balance on the line drawing by showing average flows between intakes, operations, treatment units, and outfalls. If a water balance cannot be determined (e.g., for certain mining activities), provide a pictorial description of the nature and amount of any sources of water and any collection or treatment measures.

C. Except for storm runoff, leaks, or spills, will any of the discharges described in item III-A be intermittent or seasonal?

Yes (complete the following table) No (go to item IV)

Outfall Number	1. Frequency		2. Flow		
	a. Days Per Week (specify average)	b. Months Per Year (specify average)	a. Maximum Daily Flow Rate (in mgd)	b. Maximum Total Volume (specify with units)	c. Duration (in days)
130	7	12	.007	7200 gal	1

IV. Production

If there is an applicable production-based effluent guideline or NSPS, for each outfall list the estimated level of production (projection of actual production level, not design), expressed in the terms and units used in the applicable effluent guideline or NSPS, for each of the first 3 years of operation. If production is likely to vary, you may also submit alternative estimates (attach a separate sheet).

Year	a. Quantity Per Day	b. Units of Measure	c. Operation, Product, Material, etc (specify)
-	-	-	Discharge is not a function of production

C. Use the space below to list any of the pollutants listed in Table 2D-3 of the instructions which you know or have reason to believe will be discharged from any outfall. For every pollutant you list, briefly describe the reasons you believe it will be present.

1. Pollutant	2. Reason for Discharge
NONE	

VI. Engineering Report on Wastewater Treatment

A. If there is any technical evaluation concerning your wastewater treatment, including engineering reports or pilot plant studies, check the appropriate box below.

 Report Available No Report

B. Provide the name and location of any existing plant(s) which, to the best of your knowledge, resembles this production facility with respect to production processes, wastewater constituents, or wastewater treatments.

Name	Location
TA-53-62	Outfall 048, discharging treated cooling water.

VII. Other Information (Optional)

Use the space below to expand upon any of the above questions or to bring to the attention of the reviewer any other information you feel should be considered in establishing permit limitations for the proposed facility. Attach additional sheets if necessary.

The discharge from Outfall 130 will be potable water, used in a cooling tower at Technical Area 11, Building 30. An algaecide is added to the potable water prior to use and discharge.

VIII. Certification

I certify under penalty of law 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 fine and imprisonment for knowing violations.

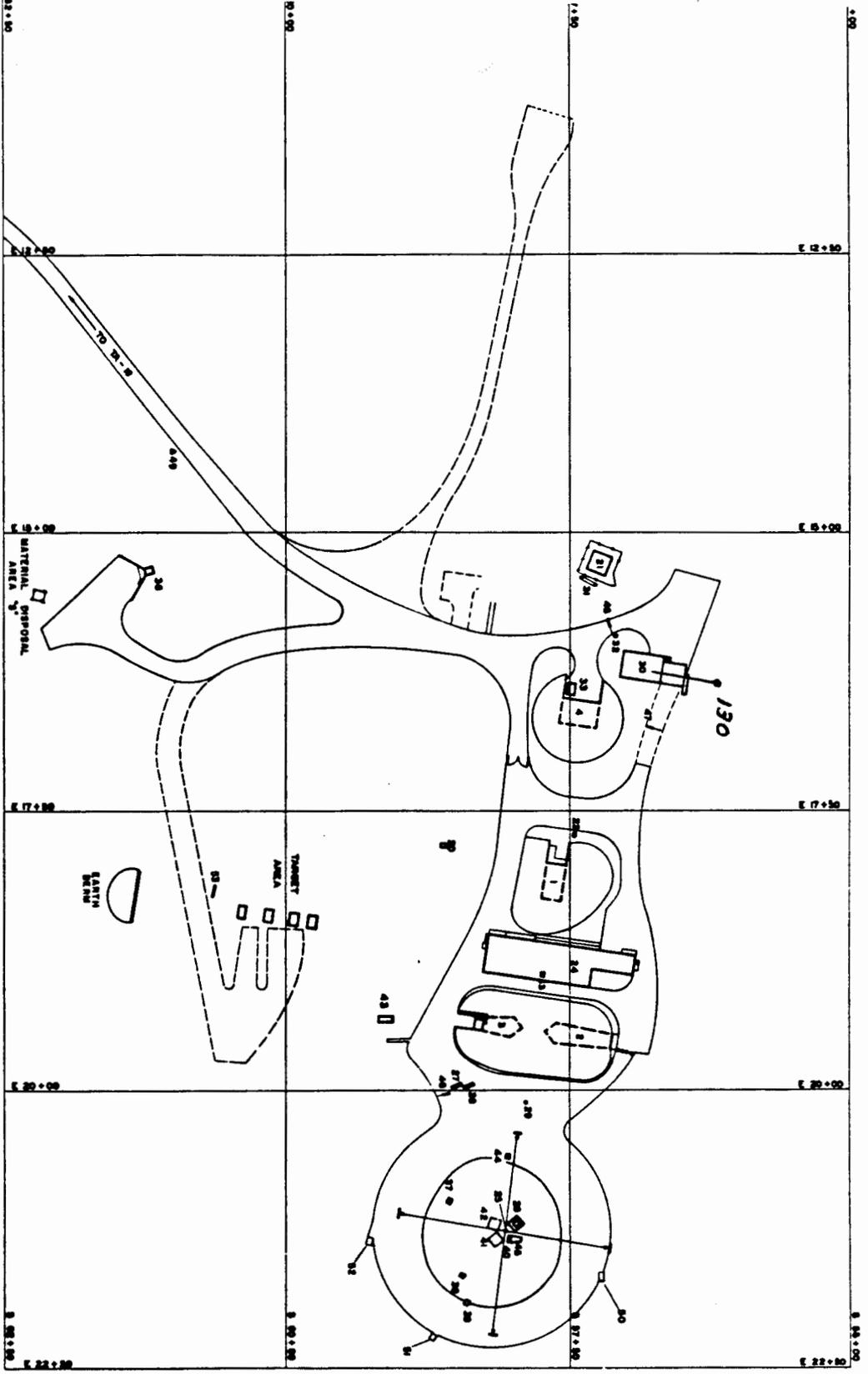
<p>A. Name and Official Title (type or print)</p> <p>Harold E. Valencia, Area Manager</p>	<p>B. Phone No.</p> <p>(505) 667-5105</p>
<p>C. Signature</p> 	<p>D. Date Signed</p> <p>4-10-87</p>

Table G-44. (cont)

		Primary Chemical Quality Required for Municipal Use (concentration in mg/l)									
1985 (month-day)		Ag	As	Ba	Cd	Cr	F	Hg	N	Pb	Se
Well Fields and Gallery											
Los Alamos Field											
Well LA-1B	3-20	<0.001	0.039	0.05	<0.0002	0.025	3.0	<0.0001	1.2	<0.002	<0.003
Well LA-2	3-20	<0.001	0.010	0.09	<0.0002	0.017	1.1	<0.0001	5.3	<0.002	<0.003
Well LA-3	3-20	<0.001	0.005	0.05	<0.0002	0.008	0.5	<0.0001	1.8	<0.002	<0.003
Well LA-4	3-20	<0.001	<0.001	0.02	<0.0002	0.004	0.4	<0.0001	0.3	0.006	<0.003
Ganja Field											
Well G-1	3-20	<0.001	0.003	-0.06	<0.0002	0.005	0.3	<0.0001	0.4	<0.002	<0.003
Well G-1A	3-20	<0.001	0.013	-0.04	<0.0002	0.008	0.5	<0.0001	0.4	<0.002	<0.003
Well G-2	3-20	<0.001	0.050	-0.07	<0.0002	0.010	0.9	<0.0001	0.5	0.012	<0.003
Well G-3	3-20	<0.001	0.003	<0.01	<0.0002	0.004	0.3	<0.0001	0.2	0.020	<0.003
Well G-4	3-20	<0.001	0.001	0.01	<0.0002	0.003	0.3	<0.0001	0.5	<0.002	<0.003
Well G-5	3-20	<0.001	0.002	<0.01	<0.0002	0.002	0.3	<0.0001	0.5	<0.002	<0.003
Well G-6	3-20	<0.001	0.001	<0.01	<0.0002	0.002	0.3	<0.0001	0.4	<0.002	<0.003
Pajarito Field											
Well PM-1	3-20	<0.001	<0.001	0.07	<0.0002	0.004	0.3	<0.0001	0.5	<0.002	<0.003
Well PM-2	3-20	<0.001	0.002	0.02	<0.0002	0.003	0.2	<0.0001	0.2	0.006	<0.003
Well PM-3	3-20	<0.001	<0.001	0.05	<0.0002	0.004	0.3	<0.0001	<0.2	<0.002	<0.003
Well PM-4	3-20	<0.001	<0.001	0.02	<0.0002	0.006	0.3	<0.0001	0.2	<0.002	<0.003
Well PM-5	—										
Water Canyon Gallery											
Gallery	3-20	<0.001	0.003	0.02	<0.0002	0.002	<0.1	<0.0001	<0.2	<0.002	<0.003
Summary of Wells and Gallery											
No. of Analyses		16	16	16	16	16	16	16	16	16	16
Minimum		—	<0.001	<0.01	—	0.002	0.3	—	<0.2	<0.002	—
Maximum		—	0.050	0.07	—	0.025	3.0	—	5.3	0.020	—
Average		<0.001	<0.009	<0.04	<0.0002	0.007	<0.6	<0.0001	<0.8	0.004	<0.003
s		—	0.014	0.02	—	0.006	0.7	—	1.2	0.005	—

Primary Chemical Quality Required for Municipal Use
(concentration in mg/l)

	1985 (month-day)	Primary Chemical Quality Required for Municipal Use (concentration in mg/l)									
		Ag	As	Ba	Cd	Cr	F	Hg	N	Pb	Se
Distribution											
Fire Station 1	3-13	<0.001	0.002	0.02	<0.0002	0.005	0.4	<0.0002	0.3	<0.002	<0.003
Fire Station 2	3-13	<0.001	0.012	0.04	<0.0002	0.006	0.6	<0.0002	0.4	<0.002	<0.003
Fire Station 3	3-13	<0.001	0.012	0.02	<0.0002	0.005	0.6	<0.0002	0.5	<0.002	<0.003
Fire Station 4	3-13	<0.001	0.001	0.05	<0.0002	0.004	0.7	<0.0002	0.5	<0.002	<0.003
Fire Station 5	3-13	<0.001	0.010	0.03	<0.0002	0.006	0.6	<0.0002	0.5	<0.002	<0.003
Bandelier National Monument	4-2	<0.001	0.012	0.03	<0.0002	0.006	0.5	<0.0002	0.5	<0.002	<0.003
Fenton Hill (TA-57)	4-2	<0.001	<0.001	0.07	<0.0002	0.005	0.5	<0.0002	<0.2	<0.002	<0.003
Summary of Distribution											
No. of Analyses		7	7	7	7	7	7	7	7	7	7
Minimum		—	<0.001	0.02	—	0.004	0.4	—	<0.2	—	—
Maximum		—	0.012	0.07	—	0.006	0.7	—	0.5	<0.002	—
Average		<0.001	<0.007	0.04	<0.0002	0.005	0.6	<0.0002	<0.4	—	<0.003
s		—	0.005	0.02	—	0.001	0.1	—	0.1	—	—
USEPA and NMFID^e											
Maximum Primary Concentration Levels		0.05	0.05	1.0	0.01	0.05	2.0	0.002	1.0	0.05	0.01



UNIVERSITY OF CALIFORNIA Los Alamos Los Alamos National Laboratory Los Alamos, New Mexico 87545		PROJECT NO. 115	
FACILITIES ENGINEERING DIVISION		DATE 11/75	
STRUCTURE LOCATION PLAN		DRAWN BY [Signature]	
TA-11 K-SITE		CHECKED BY [Signature]	
DATE 9-18-68		DESIGNED BY [Signature]	
SCALE 1" = 1'		APPROVED BY [Signature]	
ENGINEER NO. ENG-R 8108		PROJECT NO. 115	

E. Attach a line drawing showing water flow through the facility. Indicate sources of intake water, operations contributing wastewater to the effluent, and treatment units labeled to correspond to the more detailed descriptions in Item III-A. Construct a water balance on the line drawing by showing average flows between intakes, operations, treatment units, and outfalls. If a water balance cannot be determined (e.g., for certain mining activities), provide a pictorial description of the nature and amount of any sources of water and any collection or treatment measures.

C. Except for storm runoff, leaks, or spills, will any of the discharges described in item III-A be intermittent or seasonal?

Yes (complete the following table) No (go to item IV)

Outfall Number	1. Frequency		2. Flow		
	a. Days Per Week (specify average)	b. Months Per Year (specify average)	a. Maximum Daily Flow Rate (in mgd)	b. Maximum Total Volume (specify with units)	c. Duration (in days)
131	5	12	.007	7200 gal	1

IV. Production

If there is an applicable production-based effluent guideline or NSPS, for each outfall list the estimated level of production (projection of actual production level, not design), expressed in the terms and units used in the applicable effluent guideline or NSPS, for each of the first 3 years of operation. If production is likely to vary, you may also submit alternative estimates (attach a separate sheet).

Year	a. Quantity Per Day	b. Units of Measure	c. Operation, Product, Material, etc (specify)
			Not applicable

C. Use the space below to list any of the pollutants listed in Table 2D-3 of the instructions which you know or have reason to believe will be discharged from any outfall. For every pollutant you list, briefly describe the reasons you believe it will be present.

1. Pollutant	2. Reason for Discharge
None	

VI. Engineering Report on Wastewater Treatment

A. If there is any technical evaluation concerning your wastewater treatment, including engineering reports or pilot plant studies, check the appropriate box below.

Report Available No Report

B. Provide the name and location of any existing plant(s) which, to the best of your knowledge, resembles this production facility with respect to production processes, wastewater constituents, or wastewater treatments.

Name	Location
Outfall 048	TA -53-62 has a similar production process and discharge

VII. Other Information (Optional)

Use the space below to expand upon any of the above questions or to bring to the attention of the reviewer any other information you feel should be considered in establishing permit limitations for the proposed facility. Attach additional sheets if necessary.

VIII. Certification

I certify under penalty of law 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 fine and imprisonment for knowing violations.

<p>A. Name and Official Title (type or print)</p> <p>Harold E. Valencia, Area Manager</p>	<p>B. Phone No.</p> <p>(505) 667-5105</p>
<p>C. Signature</p> <p>Original signed by Harold E. Valencia</p>	<p>D. Date Signed</p> <p>APR 10 1987</p>

Table G-44. (cont)

	1985 (month-day)	Primary Chemical Quality Required for Municipal Use (concentration in mg/l)									
		Ag	As	Ba	Cd	Cr	F	Hg	N	Pb	Se
Well Fields and Gallery											
Los Alamos Field											
Well LA-1B	3-20	<0.001	0.039	0.05	<0.0002	0.025	3.0	<0.0001	1.2	<0.002	<0.003
Well LA-2	3-20	<0.001	0.010	0.09	<0.0002	0.017	1.1	<0.0001	5.3	<0.002	<0.003
Well LA-3	3-20	<0.001	0.005	0.05	<0.0002	0.008	0.5	<0.0001	1.8	<0.002	<0.003
Well LA-4	3-20	<0.001	<0.001	0.02	<0.0002	0.004	0.4	<0.0001	0.3	0.006	<0.003
Ganja Field											
Well G-1	3-20	<0.001	0.003	-0.06	<0.0002	0.005	0.3	<0.0001	0.4	<0.002	<0.003
Well G-1A	3-20	<0.001	0.013	-0.04	<0.0002	0.008	0.5	<0.0001	0.4	<0.002	<0.003
Well G-2	3-20	<0.001	0.050	-0.07	<0.0002	0.010	0.9	<0.0001	0.5	0.012	<0.003
Well G-3	3-20	<0.001	0.003	<0.01	<0.0002	0.004	0.3	<0.0001	0.2	0.020	<0.003
Well G-4	3-20	<0.001	0.001	0.01	<0.0002	0.003	0.3	<0.0001	0.5	<0.002	<0.003
Well G-5	3-20	<0.001	0.002	<0.01	<0.0002	0.002	0.3	<0.0001	0.5	<0.002	<0.003
Well G-6	3-20	<0.001	0.001	<0.01	<0.0002	0.002	0.3	<0.0001	0.4	<0.002	<0.003
Pajarito Field											
Well PM-1	3-20	<0.001	<0.001	0.07	<0.0002	0.004	0.3	<0.0001	0.5	<0.002	<0.003
Well PM-2	3-20	<0.001	0.002	0.02	<0.0002	0.003	0.2	<0.0001	0.2	0.006	<0.003
Well PM-3	3-20	<0.001	<0.001	0.05	<0.0002	0.004	0.3	<0.0001	<0.2	<0.002	<0.003
Well PM-4	3-20	<0.001	<0.001	0.02	<0.0002	0.006	0.3	<0.0001	0.2	<0.002	<0.003
Well PM-5	—										
Water Canyon Gallery											
Gallery	3-20	<0.001	0.003	0.02	<0.0002	0.002	<0.1	<0.0001	<0.2	<0.002	<0.003
Summary of Wells and Gallery											
No. of Analyses		16	16	16	16	16	16	16	16	16	16
Minimum		—	<0.001	<0.01	—	0.002	0.3	—	<0.2	<0.002	—
Maximum		—	0.050	0.07	—	0.025	3.0	—	5.3	0.020	—
Average		<0.001	<0.009	<0.04	<0.0002	0.007	<0.6	<0.0001	<0.8	0.004	<0.003
s		—	0.014	0.02	—	0.006	0.7	—	1.2	0.005	—

**Primary Chemical Quality Required for Municipal Use
(concentration in mg/l)**

	1985 (month-day)	Primary Chemical Quality Required for Municipal Use (concentration in mg/l)									
		Ag	As	Ba	Cd	Cr	F	Hg	N	Pb	Se
Distribution											
Fire Station 1	3-13	<0.001	0.002	0.02	<0.0002	0.005	0.4	<0.0002	0.3	<0.002	<0.003
Fire Station 2	3-13	<0.001	0.012	0.04	<0.0002	0.006	0.6	<0.0002	0.4	<0.002	<0.003
Fire Station 3	3-13	<0.001	0.012	0.02	<0.0002	0.005	0.6	<0.0002	0.5	<0.002	<0.003
Fire Station 4	3-13	<0.001	0.001	0.05	<0.0002	0.004	0.7	<0.0002	0.5	<0.002	<0.003
Fire Station 5	3-13	<0.001	0.010	0.03	<0.0002	0.006	0.6	<0.0002	0.5	<0.002	<0.003
Bandelier National Monument	4-2	<0.001	0.012	0.03	<0.0002	0.006	0.5	<0.0002	0.5	<0.002	<0.003
Fenton Hill (TA-57)	4-2	<0.001	<0.001	0.07	<0.0002	0.005	0.5	<0.0002	<0.2	<0.002	<0.003
Summary of Distribution											
No. of Analyses		7	7	7	7	7	7	7	7	7	7
Minimum		—	<0.001	0.02	—	0.004	0.4	—	<0.2	—	—
Maximum		—	0.012	0.07	—	0.006	0.7	—	0.5	<0.002	—
Average		<0.001	<0.007	0.04	<0.0002	0.005	0.6	<0.0002	<0.4	—	<0.003
s		—	0.005	0.02	—	0.001	0.1	—	0.1	—	—
USEPA and NMFID²											
Maximum Primary Concentration Levels		0.05	0.05	1.0	0.01	0.05	2.0	0.002	1.0	0.05	0.01

B. Attach a line drawing showing the water flow through the facility. Include sources of intake water, operations contributing wastewater to the effluent, and treatment units labeled to correspond to the more detailed descriptions in Item III-A. Construct a water balance on the line drawing by showing average flows between intakes, operations, treatment units, and outfalls. If a water balance cannot be determined (e.g., for certain mining activities), provide a pictorial description of the nature and amount of any sources of water and any collection or treatment measures.

C. Except for storm runoff, leaks, or spills, will any of the discharges described in item III-A be intermittent or seasonal?

Yes (complete the following table) No (go to item IV)

Outfall Number	1. Frequency		2. Flow		
	a. Days Per Week (specify average)	b. Months Per Year (specify average)	a. Maximum Daily Flow Rate (in mgd)	b. Maximum Total Volume (specify with units)	c. Duration (in days)
132	5	12	.003	3000 gal	1

IV. Production

If there is an applicable production-based effluent guideline or NSPS, for each outfall list the estimated level of production (projection of actual production level, not design), expressed in the terms and units used in the applicable effluent guideline or NSPS, for each of the first 3 years of operation. If production is likely to vary, you may also submit alternative estimates (attach a separate sheet).

Year	a. Quantity Per Day	b. Units of Measure	c. Operation, Product, Material, etc (specify)
			See representative photo develop water quality data
			for Outfall 073

C. Use the space below to list any of the pollutants listed in Table 2D-3 of the instructions which you know or have reason to believe will be discharged from any outfall. For every pollutant you list, briefly describe the reasons you believe it will be present.

1. Pollutant	2. Reason for Discharge
None	

VI. Engineering Report on Wastewater Treatment

A. If there is any technical evaluation concerning your wastewater treatment, including engineering reports or pilot plant studies, check the appropriate box below.

 Report Available No Report

B. Provide the name and location of any existing plant(s) which, to the best of your knowledge, resembles this production facility with respect to production processes, wastewater constituents, or wastewater treatments.

Name	Location
Outfall 073	TA-16-222 is discharging a similar wastewater

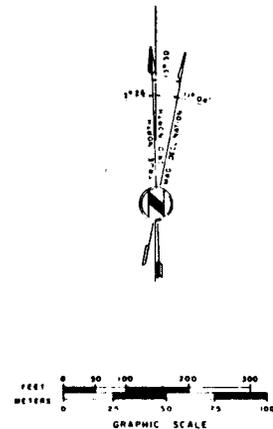
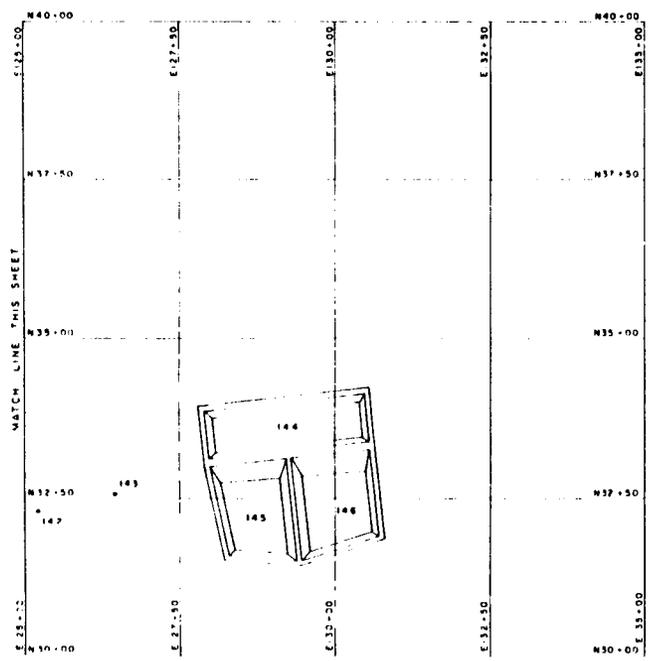
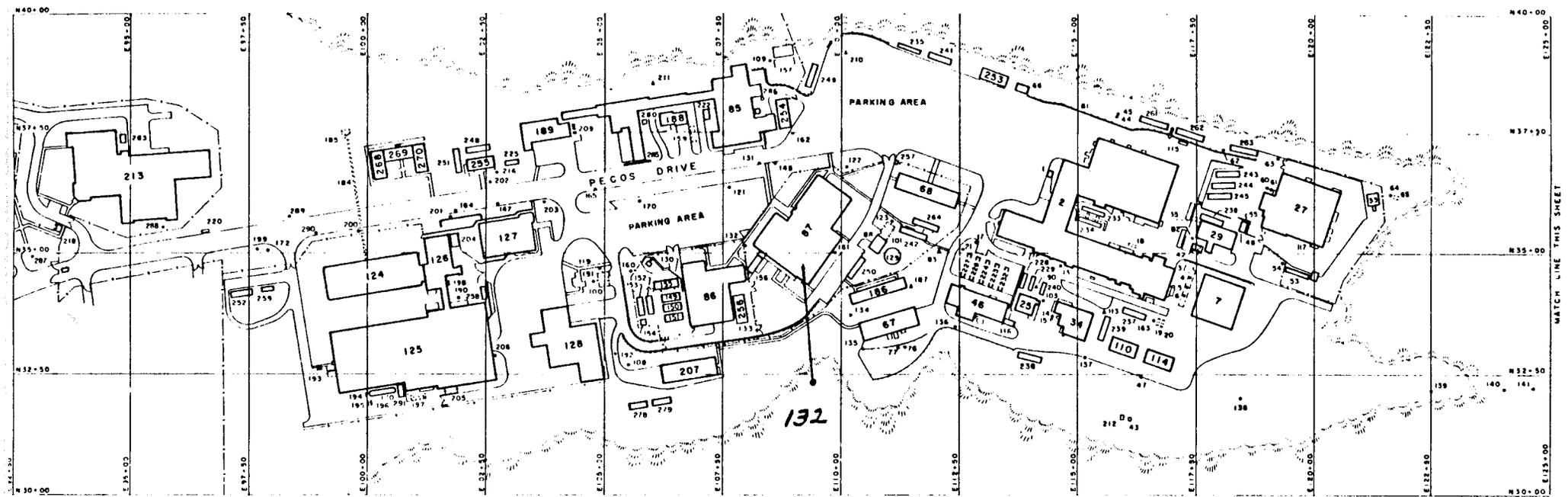
VII. Other Information (Optional)

Use the space below to expand upon any of the above questions or to bring to the attention of the reviewer any other information you feel should be considered in establishing permit limitations for the proposed facility. Attach additional sheets if necessary.

VIII. Certification

I certify under penalty of law 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 fine and imprisonment for knowing violations.

A. Name and Official Title (type or print) Harold E. Valencia, Area Manager	B. Phone No. (505) 667-5105
C. Signature Original signed by Harold E. Valencia	D. Date Signed APR 10 1987



73	7-25-86	REDRAWN & REVISED TO STATUS OF 8-11-86	ALC	
REV	DATE	REVISION	BY	PRO
UNIVERSITY OF CALIFORNIA				
Los Alamos 105 G. SHERMAN DRIVE, LOS ALAMOS, NEW MEXICO 87545				
FACILITIES ENGINEERING DIVISION				
STRUCTURE LOCATION PLAN			SPEC. CLASSIFICATION	
TA-35			CLASS	
TEN SITE			REVISION	
DATE			26	A.S.
DESIGNED	BY	RECOMMENDED	APPROVED	
DWGN	WR/AC	DR	DR	
DATE	7-25-86	SHEET NO	3 OF 3	ENG-R5117