WASTE WATER STREAM CHARACTERIZATION FOR TA 53-2, 38, 49, 56, 410, 430, 438, 455, 461, 498, 508, 523, 607, 608, 609, 610, 707, 717, 745, 746, 814, 828, 829, 830, 831, 832, 860, 890, 1036 AND 1037

at
Los Alamos National Laboratory

ENVIRONMENTAL STUDY

CHARACTERIZATION REPORT # 27


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WASTEWATER STREAM CHARACTERIZATION FOR TA-53-2, 38, 49, 56, 410, 430, 438, 455, 461, 498, 508, 523, 607, 608, 609, 610, 707, 717, 745, 746, 814, 828, 829, 830, 831, 832, 860, 890, 1036 AND 1037

ENVIRONMENTAL STUDY

prepared for:
THE LOS ALAMOS NATIONAL LABORATORY
Los Alamos, New Mexico

under subcontract 9-XG8-2874P-1

by:
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UPDATED PER EM-8 COMMENTS OCTOBER, 1993

EXECUTIVE SUMMARY

Buildings 2, 38, 49, 56, 410, 430, 438, 455, 461, 498, 508, 523, 607, 608, 609, 610, 707, 717, 745, 746, 814, 828, 829, 830, 831, 832, 860, 890, 1036 and 1037 in TA-53 were visited to document all drain piping and building outflows and to make permitting recommendations. The pipes exiting the buildings are as follows:

1. from building 53-2: two discharges to the sanitary sewer, one discharge permitted as 03A114, ten roof drains, one discharge from a water heater, four fire water drains, one potable water backflow preventer discharge, two potable water drains, two vacuum pump exhausts, one fume hood exhaust, two gas dryer vents and one compressed air pressure relief valve discharge,

2. from buildings 53-38, 53-49, 53-56, 53-430, 53-438, 53-455, 53-461, 53-498, 53-508, 53-607, 53-608, 53-609, 53-610, 53-707, 53-717, 53-745, 53-746, 53-814, 53-828, 53-829, 53-830, 53-831, 53-832, 53-860, 53-890, 53-1036 and 53-1037: no drains,

3. from building 53-410: one discharge to the sanitary sewer and

4. from building 53-523: one discharge to the sanitary sewer.

A revised application form is included for one outfall permitted as 03A114. The flow shown on the form is estimated from site observations and discussions with users. Analytical data are defined from previously sampled outfalls. Recommendations for floor drain plugging and spill containment are provided where the potential for discharge of pollutants exists.

It should be noted that as of March, 1993 the sanitary sewer system at TA-53 was connected to the Sanitary Wastewater Systems Consolidation (SWSC) Plant at TA-46 (13S).

A waste stream database has been prepared listing the waste water type and flow rate for each outfall.

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1.0 INTRODUCTION

During January, 1992, Mark E. Wendt and Steve Diamond of Santa Fe Engineering (SFE) toured buildings 2, 38, 49, 56, 410, 430, 438, 455, 461, 498, 508, 523, 607, 608, 609, 610, 707, 717, 745, 746, 814, 828, 829, 830, 831, 832, 860, 890, 1036 and 1037 of TA-53. The purpose of this study is to identify building drain piping and to characterize the wastewater flows and sources at the time of the visit. The Wastewater Stream Characterization Policy of April 14, 1992 was followed for this study. The following tasks were performed for this purpose:

1. Building drains and all piping exiting the building were identified and laid out in schematic form;

2. Wastewater sources were identified at each drain and the wastewater was characterized according to flow rate and quality. The location of outfalls and their potential sources of discharge were determined. Potential pollutants were also noted;

3. Permit applications for discharges of clean water were not prepared since these discharges do not require permitting at this time and

4. Potential problems were identified and recommendations were made for repiping, floor drain plugging and spill containment where deemed appropriate.

The field investigation proceeded by verifying drain schematic drawings prepared by SFE from drawings provided by Los Alamos National Laboratory (LANL) Facilities Engineering Division. The other buildings were visited to insure that no drains exist for the buildings. The following process was used to define drain piping and characterize the wastewater streams:

1. Laboratory engineering drawings were used to prepare the SFE drain piping schematic. The Solid Waste Stream Characterization conducted by IT Corporation was also reviewed. The National Pollutant Discharge Elimination System (NPDES) Permit, the 1990 NPDES Permit Application submitted by LANL in September, 1990 and latest Federal Facilities Compliance Agreement (FFCA) between the Department of Energy (DOE) and the Environmental Protections Agency (EPA) and the Administrative Order (AO) Docket Number VI-91-1329 issued by EPA to the University of California were used for reference;

2. SFE verified drain piping by dye checking and

3. A site visit was performed to verify the SFE drain schematic and to identify potential outfall pipes exiting the building. The visit entailed a room by room inspection of wastewater sources and drains. Interviews with site personnel were conducted to assist in wastestream characterization.

2.0 FIELD INVESTIGATION

The pipes exiting the building have been assigned an Outlet Piping Number. The four part number, sequentially, identifies the Technical Area where the pipe is located, the building from which the pipe discharges, the letters OPN to indicate that it is an outlet piping number and the unique number for the pipe. The piping exiting the building will be labeled for easy identification in the future.

Each drain has a unique identification number. Each number consists of three parts. The first part is the floor the drain is on. The second part has letters that indicate the drain type (abbreviations used are summarized in Table 4). The final part is a unique number for each drain. For example, the floor drain numbering on the first floor would start with 1FD1. The roof drains do not have the number identifying the floor such as RD1 for Roof Drain 1.

The function of each pipe exiting from the buildings are listed in Appendix 1, Tables 1 through 3, with an abbreviations list in Table 4 and non-drain recommendations listed in appendix 5. Appendix 2 contains the wastestream characterization database output, listing wastewater source, flow rates and periodicity information for each outfall drain. Completed EPA forms are in Appendix 3 for the appropriate outfalls. Appendix 4 provides dye study information. Flow schematics of the drains from each building are attached in Appendix 5 as Figures 1 through 3 with Figure 4 being a site plan of the area.

3.0 RECOMMENDATIONS FOR BUILDING 53-2

Table 1 is a list of the drains to the building outfalls and Figure 1 is a schematic of the piping. The table lists the drains that connect to the outfall pipe and includes recommendations for changes to the drain piping. The discussion below gives the reasoning for the recommendations. It is recommended that all sinks, lavatories and trench covers in this building be posted with a sign stating "SANITARY DRAIN. NO CHEMICALS ALLOWED DOWN THIS DRAIN".

3.1 Outfall 53-2-OPN-1

This outfall is a sump pit overflow drain which, when being used, discharges to Sandia Canyon and is permitted as EPA Outfall 03A-114. This outfall receives cooling tower blowdown, once-through cooling water and some sanitary effluent flow from the building. The purpose of this outfall is to provide the existing sump pit and single submersible pump with an emergency overflow drain in case of a pump failure so as to avoid sewage from overflowing onto the parking lot. Therefore, installation of a second sump pump with controls for backup purposes and a remote power source (gasoline or otherwise) in case of a power outage is recommended. This would allow for the elimination of the permitted outfall and eliminate the possibility of affluent overflowing onto the parking lot.

It is recommended that EPA permitted outfall 03A-113 be deleted and the pipe be plugged at the sump pit and at the discharge point to Sandia Canyon. A revised EPA Form 2C is enclosed in Appendix 3.

3.2 Outfall 53-2-OPN-2

This outfall to the sanitary sewer receives flow from four sinks. Sinks 1SD14 and 1SD15 are not being used. Repairing the p-trap on 1SD15 is recommended. Parts and equipment are being washed in 1SD12 and 1SD13 with solutions containing small concentrations of nitric and hydrofluoric acids. The wash solution is currently being contained in 55-gallon drums. Rinse water flows into the sinks. Containerizing the rinse water is recommended. Repairing a leak in the piping outside of the building is recommended. Cleaning out an abandoned pit located just outside of the building on the south side is also recommended. No permitting is recommended for this outfall and no EPA forms were prepared.

3.3 Outfall 53-2-OPN-3

This outfall is from sanitary facilities and flows to a sewer manhole which drains to the TA-53 Sanitary Sewage Treatment Plant. This outfall receives flow from various sanitary drains in the building including twelve trench drains, eleven floor drains, five sink drains, two water fountains, one emergency eye wash drain, three shower drains, four lavatories, three urinals and two toilet drains.

Trench drain 1TD5 receives treated cooling water flow from a cooling tower blowdown originating on the roof of the building. Trench drains 1TD1, 1TD3 and 1TD4 in room 101 receive once-through cooling water from RF transformers and one large furnace unit. Trench drains 1TD8 through 1TD12 in room 104 receive once-through cooling water from five large furnace units and a gas dryer. These trench drains then flow into sump pit 1SP1 located at the south side of the building. The effluent is then pumped to a sanitary sewer gravity line in the building. It is recommended that trench drains 1TD1, 1TD2, 1TD6, 1TD7, 1TD8 and 1TD11 and floor drain 1FD1 be plugged and all of the once-through cooling water from the various equipment mentioned

above be recycled per Laboratory Policy. The remaining trench drains shall each be provided with an absorbent berm around them.

Reference Section 3.1 of this report for a description of the sump pump 1SP1, it's operation and any pertinent recommendations.

Sinks 1SD2 through 1SD5 located in the Klystrom Rebuild Lab room 101, were previously used for parts rinsing. The parts were thoroughly washed and dried and the debris disposed of by ENG-7 personnel prior to being rinsed in these sinks. It is recommended these four sinks be removed and waste and water lines plugged.

Sink 1SD1 is a fume hood sink. Removal of this sink and plugging of the drain line is recommended.

Shower 1SH3 located in room 111 is being used to store equipment. Plugging the drain and capping the water supply is recommended. Floor drain 1FD11 in this area should also be plugged.

Mechanical room 107 has an air compressor unit and an air dryer unit with blow-off lines discharging into floor drain 1FD4. Containerizing the liquid from these two units is recommended. No EPA forms were completed for this outfall.

3.4 Outfalls 53-2-OPN-4, 53-2-OPN-5, 53-2-OPN-6, 53-2-OPN-7, 53-2-OPN-11, 53-2-OPN-12, 53-2-OPN-13, 53-2-OPN-16, 53-2-OPN-17 and 53-2-OPN-20

These outfalls are from roof drains on the building and discharge to daylight next to the building. No permitting is recommended for these outfalls and no EPA forms were prepared.

3.5 Outfalls 53-2-OPN-8 and 53-2-OPN-19

These outfalls to daylight drain potable water from backflow preventers. These outfalls should be covered by a Notice of

Intent to Discharge (NOI). No piping changes are recommended. No EPA forms were completed.

3.6 Outfalls 53-2-OPN-9 and 53-2-OPN-10

These outfalls are not in use. Removal or capping of the piping is recommended. No EPA forms were completed.

3.7 Outfall 53-2-OPN-14, 53-2-OPN-18 and 53-2-OPN-27

These outfalls to daylight are fire water drains. These outfalls should be covered by an NOI. No piping changes are recommended. No EPA forms were prepared.

3.8 Outfall 53-2-OPN-15

This outfall is a vacuum pump exhaust to the atmosphere. No permitting or piping changes are recommended. No EPA forms were prepared.

3.9 Outfall 53-2-OPN-21

This outfall to daylight is from a water heater pressure relief valve. This outfall should be covered by an NOI. No piping changes are recommended. No EPA forms were prepared.

3.10 Outfall 53-2-OPN-22

This outfall to atmosphere is from a fume exhaust hood. No permitting or changes are recommended. No EPA forms were prepared.

3.11 Outfalls 53-2-OPN-23 and 53-2-OPN-24

These outfalls are gas dryer vent pipes to the atmosphere. No permitting or changes are recommended. No EPA forms were prepared.

3.12 Outfall 53-2-OPN-25

This outfall is a vacuum pump exhaust to the atmosphere. No permitting or changes are recommended. No EPA forms were prepared.

3.13 Outfall 53-2-OPN-26

This outfall is from a compressed air relief valve to the atmosphere. No permitting or changes are recommended. No EPA forms were prepared.

4.0 RECOMMENDATIONS FOR BUILDINGS 53-38, 53-49, 53-56, 53-430, 53-438, 53-455, 53-461, 53-498, 53-508, 53-607, 53-608, 53-609, 53-610, 53-707, 53-717, 53-745, 53-746, 53-814, 53-828, 53-829, 53-830, 53-831, 53-832, 53-860, 53-890, 53-1036 AND 53-1037

These buildings do not have supply of water and do not have any drains. No changes or permitting are recommended. No EPA forms were prepared.

5.0 RECOMMENDATION FOR BUILDING 53-410

Table 2 is a list of the drains to the building outfall and Figure 2 is a schematic of the piping. The one outfall receives water from a lavatory and flows to the TA-53 Sanitary Sewage Treatment Plant. No permitting or piping changes are recommended. No EPA forms were prepared.

6.0 RECOMMENDATION FOR BUILDING 53-523

Table 3 is a list of the drains to the building outfall and Figure 3 is a schematic of the piping. This one outfall receives flow from a lavatory and a toilet and flows to the TA-53 Sanitary Sewage Treatment Plant. No permitting or piping changes are recommended. No EPA forms were prepared.

7.0 CONCLUSION

This document provides the information to characterize buildings 2, 38, 49, 56, 410, 430, 438, 455, 461, 498, 508, 523, 607, 608, 609, 610, 707, 717, 745, 746, 814, 828, 829, 830, 831, 832, 860, 890, 1036 and 1037 of TA-53. Permit application forms have been completed for the following outfall:

Form 2C:

1. 53-2-OPN-1 (03A114)

Permitting is not recommended for the following outfalls, as itemized below:

Areas that do not have any drains:

1. 53-38	2. 53-49	3. 53-56	4. 53-430
5. 53-438	6. 53-455	7. 53-461	8. 53-498
9. 53-508	10. 53-607	11. 53-608	12. 53-609
13. 53-610	14. 53-707	15. 53-717	16. 53-745
17. 53-746	18. 53-814	19. 53-828	20. 53-829
21. 53-830	22. 53-831	23. 53-832	24. 53-860
25. 53-890	26. 53-1036	27. 53-1037	

Storm Water Discharges:

1. 53-2-OPN-4	2. 53-2-OPN-5	3. 53-2-OPN-6
4. 53-2-OPN-7	5. 53-2-OPN-11	6. 53-2-OPN-12
7. 53-2-OPN-13	8. 53-2-OPN-16	9. 53-2-OPN-17
10. 53-2-OPN-20		

Discharges to sanitary sewer:

1. 53-2-OPN-2	2. 53-2-OPN-3	3. 53-410-OPN-1
4. 53-523-OPN-1		

Discharges from back flow preventers:

1. 53-2-OPN-8	2. 53-2-OPN-19

Vapor vents:

1. 53-2-OPN-15	2. 53-2-OPN-22	3. 53-2-OPN-23
4. 53-2-OPN-24	5. 53-2-OPN-25	6. 53-2-OPN-26

Discharges from water heater:

1. 53-2-OPN-21

Discharges of fire water:

1. 53-2-OPN-14 2. 53-2-OPN-18 3. 53-2-OPN-27

Abandoned piping:

1. 53-2-OPN-9 2. 53-2-OPN-10

Recommended corrective actions are outlined in Tables 1 through 3 and Table 5 as well as in the above text. Corrective action should be performed as soon as practicable to minimize the chance of unpermitted discharge of pollutants.

TABLE 1: TA 53-2 DRAIN SUMMARY

OUTFALL NUMBER	ID NUMBER	ROOM ACTIVITY	ROOM NUMBER	RECOMMENDATIONS	EPA FORM PREPARED
53-2-OPN-1 03A114	1SP1	SOUTH SIDE EXTER.	N/A	ELIMIN. PERMIT	YES
53-2-OPN-2 SAN SEWER 13S	1SD12	ASSEMBLY/TESTING	105	CONTAINERIZE	NO
	1SD13	ASSEMBLY/TESTING	105	CONTAINERIZE	
	1SD14	ASSEMBLY/TESTING	105	NO CHANGE	
	1SD15	ASSEMBLY/TESTING	105	REPAIR P-TRAP	
53-2-OPN-3 SAN. SEWER 13S	1EW1	MAGNET LAB AREA	105	NO CHANGE	NO
	1FD1	FURNACE ROOM	104	PLUG	
	1FD2	MECHANICAL RM.	107	NO CHANGE	
	1FD3	MECHANICAL RM.	107	NO CHANGE	
	1FD4	MECHANICAL ROO	107	CONTAINERIZE	
	1FD5	FABRICATION LAB	108	NO CHANGE	
	1FD6	FABRICATION LAB	108	NO CHANGE	
	1FD7	STORAGE AREA	111	PLUG	
	1FD8	TARGET TEST LAB	108	NO CHANGE	
	1FD9	JANITOR'S CLOSET	N/A	NO CHANGE	
	1FD10	BATHROOM	113	NO CHANGE	
	1FD11	BATHROOM	113	NO CHANGE	
	1LV1	BATHROOM	113	NO CHANGE	
	1LV2	BATHROOM	113	NO CHANGE	
	1LV3	BATHROOM	113	NO CHANGE	
	1LV4	BATHROOM	113	NO CHANGE	
	1SD1	KLYSTRON LAB	101	ELIMINATE	
	1SD2	KLYSTRON LAB	101	ELIMINATE	
	1SD3	KLYSTRON LAB	101	ELIMINATE	
	1SD4	KLYSTRON LAB	101	ELIMINATE	
	1SD5	KLYSTRON LAB	101	ELIMINATE	
	1SD6	KLYSTRON LAB	101	ELIMINATE	
	1SD7	FABRICATION LAB	108	NO CHANGE	
	1SD8	LABORATORY	117	NO CHANGE	
	1SD9	JANITOR'S CLOSET	N/A	NO CHANGE	
	1SD10	MAGNET LAB AREA	105	NO CHANGE	
	1SD11	MAGNET LAB AREA	105	NO CHANGE	
	1SH1	BATHROOM	113	NO CHANGE	
	1SH2	BATHROOM	113	NO CHANGE	
	1SH3	STORAGE AREA	113	PLUG	
	1SP1	SOUTH SIDE EXTER.	N/A	MODIFY	
	1TD1	KLYSTRON LAB	101	PLUG	
	1TD2	KLYSTRON LAB	101	PLUG	

TABLE 1: TA 53-2 DRAIN SUMMARY

OUTFALL NUMBER	ID NUMBER	ROOM ACTIVITY	ROOM NUMBER	RECOMMENDATIONS	EPA FORM PREPARED
53-2-OPN-3 SAN. SEWER 13S (CONT.)	1TD3	KLYSTRON LAB	101	NO CHANGE	NO
	1TD4	KLYSTRON LAB	101	NO CHANGE	
	1TD5	MECHANICAL ROO	107	NO CHANGE	
	1TD6	MAGNET LAB	102	PLUG	
	1TD7	MAGNET LAB	102	PLUG	
	1TD8	FURNACE ROOM	104	PLUG	
	1TD9	FURNACE ROOM	104	NO CHANGE	
	1TD10	FURNACE ROOM	104	NO CHANGE	
	1TD11	FURNACE ROOM	104	PLUG	
	1TD12	FURNACE ROOM	104	NO CHANGE	
	1TL1	BATHROOM	113	NO CHANGE	
	1TL2	BATHROOM	113	NO CHANGE	
	1UR1	BATHROOM	113	NO CHANGE	
	1UR2	BATHROOM	113	NO CHANGE	
	1UR3	BATHROOM	113	NO CHANGE	
	1WF1	MAGNET LAB AREA	105	NO CHANGE	
	1WF2	CORRIDOR	N/A	NO CHANGE	
53-2-OPN-4	RD1	ROOF	N/A	NO CHANGE	NO
53-2-OPN-5	RD2	ROOF	N/A	NO CHANGE	NO
53-2-OPN-6	RD3	ROOF	N/A	NO CHANGE	NO
53-2-OPN-7	RD4	ROOF	N/A	NO CHANGE	NO
53-2-OPN-8	N/A	POTABLE WATER	105	NOI	NO
53-2-OPN-9	N/A	TESTING LAB	105	CAP OR REMOVE	NO
53-2-OPN-10	N/A	TESTING LAB	105	CAP OR REMOVE	NO
53-2-OPN-11	RD5	ROOF	N/A	NO CHANGE	NO
53-2-OPN-12	RD6	ROOF	N/A	NO CHANGE	NO
53-2-OPN-13	RD7	ROOF	N/A	NO CHANGE	NO
53-2-OPN-14	N/A	FIRE LINE DRAIN	115	NOI	NO

TABLE 1: TA 53-2 DRAIN SUMMARY

OUTFALL NUMBER	ID NUMBER	ROOM ACTIVITY	ROOM NUMBER	RECOMMENDATIONS	EPA FORM PREPARED
53-2-OPN-15	N/A	VAC. PUMP EXH.	116	NO CHANGE	NO
53-2-OPN-16	RD10	ROOF	N/A	NO CHANGE	NO
53-2-OPN-17	RD9	ROOF	N/A	NO CHANGE	NO
53-2-OPN-18	N/A	FIRE LINE DRAIN	107	NOI	NO
53-2-OPN-19	N/A	POTABLE WATER	107	NOI	NO
53-2-OPN-20	RD8	ROOF	N/A	NO CHANGE	NO
53-2-OPN-21	N/A	WATER HEATER	101	NOI	NO
53-2-OPN-22	N/A	FUME HOOD EXH.	101	NO CHANGE	NO
53-2-OPN-23	N/A	AIR DRYER VENT	104	NO CHANGE	NO
53-2-OPN-24	N/A	AIR DRYER VENT	104	NO CHANGE	NO
53-2-OPN-25	N/A	VAC. PUMP EXH.	104	NO CHANGE	NO
53-2-OPN-26	N/A	COMPR. AIR PRV	105	NO CHANGE	NO
53-2-OPN-27	N/A	FIRE LINE DRAIN	107	NOI	NO

TABLE 2: TA 53-410 DRAIN SUMMARY

OUTFALL NUMBER	ID NUMBER	ROOM ACTIVITY	ROOM NUMBER	RECOMMENDATIONS	EPA FORM PREPARED
53-410-OPN-1 SAN SEWER 13S	1LV1	LAVATORY	N/A	NO CHANGE	NO

TABLE 3: TA 53-523 DRAIN SUMMARY

OUTFALL NUMBER	ID NUMBER	ROOM ACTIVITY	ROOM NUMBER	RECOMMENDATIONS	EPA FORM PREPARED
53-523-OPN-1	1TL1	RESTROOM	N/A	NO CHANGE	NO
SAN SEWER 13S	1LV1	RESTROOM	N/A	NO CHANGE	

TABLE 4
SUMMARY OF ABBREVIATION

ABBREVIATION	MEANING
BFP	Backflow Preventer
EW	Eye Wash Drain
FD	Floor Drain
LV	Lavatory
RD	Roof Drain
SD	Sink
SH	Shower
SP	Sump Pump
----- SS -----	Sanitary sewer
TD	Trench Drain
TL	Toilet
UR	Urinal
WF	Water Fountain
WH	Water Heater

TABLE 5: NON-DRAIN RECOMMENDATIONS

TA #	BLDG. #	ROOM/AREA	RECOMMENDATION
53	2	ALL	LABEL SINKS "NO CHEMICALS DN DRAIN"
53	410	ALL	LABEL SINKS "NO CHEMICALS DN DRAIN"
53	523	ALL	LABEL SINKS "NO CHEMICALS DN DRAIN"

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TA	BLDG	OUTLET PIPING NO	EPA OUTFALL #	DRAIN #	ROOM #	ROOM DESCRIPTION	FLOW RATE		PERIODICITY	SEASONAL	SOURCE TYPES
53	2	53-2-OPN-01	03A114	1SP1	N/A	SOUTH SIDE EXTER.			INTERMITENT	No	FURNACE CLG. WTR/CLG TWR BLWDN
53	2	53-2-OPN-01	03A114	1SP1	N/A	EXTERIOR - SOUTH SIDE	12.6	GPD	INTERMITTENT	No	RF XFMR CLG. WATER/SAN. EFFLUENT
53	2	53-2-OPN-02	13S	1SD12	105	ASSEMBLY & TESTING LAB			5 DAYS PER WEEK	No	EQUIP. RINSE
53	2	53-2-OPN-02	13S	1SD13	105	ASSEMBLY & TESTING			5 DAYS PER WEEK	No	EQUIP. RINSE
53	2	53-2-OPN-02	13S	1SD14	105	ASSEMBLY & TESTING			NO FLOW	No	NONE
53	2	53-2-OPN-02	13S	1SD15	105	ASSEMBLY & TESTING LAB			NO FLOW	No	NONE
53	2	53-2-OPN-03	13S	1EW1	105	MAGNET LAB AREA			5 DAYS PER WEEK	No	EYE WASH DRAIN
53	2	53-2-OPN-03	13S	1FD02	107	MECHANICAL ROOM			FLOW IS NIL	No	FLOOR WASHING/SINK DRAIN
53	2	53-2-OPN-03	13S	1FD03	107	MECHANICAL ROOM			FLOW IS NIL	No	WATER BFP DRAINS (3)
53	2	53-2-OPN-03	13S	1FD04	107	MECHANICAL ROOM			FLOW IS NIL	No	FLOOR WASHINGS
53	2	53-2-OPN-03	13S	1FD04	107	MECHANICAL ROOM			FLOW IS NIL	No	AIR COMPR. & DRYER BLOWOFF
53	2	53-2-OPN-03	13S	1FD05	108	FABRICATION LAB			FLOW IS NIL	No	FLOOR WASHINGS
53	2	53-2-OPN-03	13S	1FD06	108	FABRICATION LAB			FLOW IS NIL	No	FLOOR WASHINGS
53	2	53-2-OPN-03	13S	1FD07	111	LAB AREA			FLOW IS NIL	No	FLOOR WASHINGS
53	2	53-2-OPN-03	13S	1FD08	116	TARGET TEST LAB			FLOW IS NIL	No	DE-IONIZED WATER/FLR WASHINGS
53	2	53-2-OPN-03	13S	1FD09	N/A	JANITOR'S CLOSET			FLOW IS NIL	No	FLOOR WASHINGS
53	2	53-2-OPN-03	13S	1FD1	104	FURNACE ROOM	35	GPD	5 DAYS PER WEEK	No	GAS DRYER COOLING WATER
53	2	53-2-OPN-03	13S	1FD10	113	BATHROOM			FLOW IS NIL	No	FLOOR WASHINGS
53	2	53-2-OPN-03	13S	1FD11	113	BATHROOM			FLOW IS NIL	No	FLOOR WASHINGS
53	2	53-2-OPN-03	13S	1LV1	113	BATHROOM			5 DAYS PER WEEK	No	LAVATORY
53	2	53-2-OPN-03	13S	1LV2	113	BATHROOM			5 DAYS PER WEEK	No	LAVATORY
53	2	53-2-OPN-03	13S	1LV3	113	BATHROOM			5 DAYS PER WEEK	No	LAVATORY
53	2	53-2-OPN-03	13S	1LV4	113	BATHROOM			5 DAYS PER WEEK	No	LAVATORY
53	2	53-2-OPN-03	13S	1SD01	101	KLYSTRON LAB			NO FLOW	No	FUME HOOD SINK
53	2	53-2-OPN-03	13S	1SD02	101	KLYSTRON LAB			5 DAYS PER WEEK	No	HAND WASHING
53	2	53-2-OPN-03	13S	1SD03	101	KLYSTRON LAB			NO FLOW	No	NONE
53	2	53-2-OPN-03	13S	1SD04	101	KLYSTRON LAB			NO FLOW	No	NONE
53	2	53-2-OPN-03	13S	1SD05	101	KLYSTRON LAB			NO FLOW	No	NONE
53	2	53-2-OPN-03	13S	1SD06	101	KLYSTRON LAB			NO FLOW	No	NONE
53	2	53-2-OPN-03	13S	1SD07	108	FABRICATION LAB			5 DAYS PER WEEK	No	BFP DRAIN/HAND WASH
53	2	53-2-OPN-03	13S	1SD08	117	TARGET DEVELOPMENT LAB			5 DAYS PER WEEK	No	HAND & DISH WASHING
53	2	53-2-OPN-03	13S	1SD09	N/A	JANITOR'S CLOSET			5 DAYS PER WEEK	No	WTR HTR T&P RELIEF/FLR WASH
53	2	53-2-OPN-03	13S	1SD10	105	MAGNET LAB AREA			5 DAYS PER WEEK	No	HAND WASHING

REPORT # 27

TA	BLDG	OUTLET PIPING NO	EPA OUTFALL #	DRAIN #	ROOM #	ROOM DESCRIPTION	FLOW RATE		PERIODICITY	SEASONAL	SOURCE TYPES
53	2	53-2-OPN-03	13S	1SD11	105	MAGNET LAB AREA			5 DAYS PER WEEK	No	HAND WASHING
53	2	53-2-OPN-03	13S	1SH1	113	BATHROOM			5 DAYS PER WEEK	No	SHOWER DRAIN
53	2	53-2-OPN-03	13S	1SH2	113	BATHROOM			5 DAYS PER WEEK	No	SHOWER DRAIN
53	2	53-2-OPN-03	13S	1SH3	111	LAB AREA			NO FLOW	No	NONE
53	2	53-2-OPN-03	13S	1SP1	N/A	SOUTH SIDE EXTER.			5 DAYS PER WEEK	No	SANITARY & INDUSTRIAL FLOW
53	2	53-2-OPN-03	13S	1TD01	101	KLYSTRON LAB			FLOW IS NIL	No	RF XFMR COOLING WATER
53	2	53-2-OPN-03	13S	1TD02	101	KLYSTRON LAB			FLOW IS NIL	No	FLOOR WASHINGS
53	2	53-2-OPN-03	13S	1TD03	101	KLYSTRON LAB			FLOW IS NIL	No	RF XFMR COOLING WATER
53	2	53-2-OPN-03	13S	1TD04	101	KLYSTRON LAB			FLOW IS NIL	No	FURNACE COOLING WATER
53	2	53-2-OPN-03	13S	1TD05	101	MECHANICAL ROOM	1015	GPD	6 MONTHS PER YEAR	Yes	TREATED COOLING WATER
53	2	53-2-OPN-03	13S	1TD06	102	MAGNET LAB			FLOW IS NIL	No	FLOOR WASHINGS
53	2	53-2-OPN-03	13S	1TD07	103	MAGNET LAB			FLOW IS NIL	No	FLOOR WASHINGS
53	2	53-2-OPN-03	13S	1TD08	104	FURNACE ROOM	42	GPD	INTERMITTENT	No	FURNACE COOLING WATER
53	2	53-2-OPN-03	13S	1TD09	104	FURNACE ROOM	42	GPD	INTERMITTENT	No	FURNACE COOLING WATER
53	2	53-2-OPN-03	13S	1TD10	104	FURNACE ROOM	42	GPD	INTERMITTENT	No	FURNACE COOLING WATER
53	2	53-2-OPN-03	13S	1TD11	104	FURNACE ROOM	42	GPD	INTERMITTENT	No	FURNACE COOLING WATER
53	2	53-2-OPN-03	13S	1TD12	104	FURNACE ROOM	42	GPD	INTERMITTENT	No	FURNACE COOLING WATER
53	2	53-2-OPN-03	13S	1TL1	113	BATHROOM			5 DAYS PER WEEK	No	TOILET
53	2	53-2-OPN-03	13S	1TL2	113	BATHROOM			5 DAYS PER WEEK	No	TOILET
53	2	53-2-OPN-03	13S	1UR1	113	BATHROOM			5 DAYS PER WEEK	No	URINAL
53	2	53-2-OPN-03	13S	1UR2	113	BATHROOM			5 DAYS PER WEEK	No	URINAL
53	2	53-2-OPN-03	13S	1UR3	113	BATHROOM			5 DAYS PER WEEK	No	URINAL
53	2	53-2-OPN-03	13S	1WF1	105	MAGNET LAB AREA			5 DAYS PER WEEK	No	WATER FOUNTAIN
53	2	53-2-OPN-03	13S	1WF2	N/A	HALLWAY			5 DAYS PER WEEK	No	WATER FOUNTAIN
53	2	53-2-OPN-04	DAYLIGHT	RD1	N/A	ROOF			MOSTLY IN SUMMER	Yes	STORM WATER
53	2	53-2-OPN-05	DAYLIGHT	RD2	N/A	ROOF			MOSTLY IN SUMMER	Yes	STORM WATER
53	2	53-2-OPN-06	DAYLIGHT	RD3	N/A	ROOF			MOSTLY IN SUMMER	Yes	STORM WATER
53	2	53-2-OPN-07	DAYLIGHT	RD4	N/A	ROOF			MOSTLY IN SUMMER	Yes	STORM WATER
53	2	53-2-OPN-08	DAYLIGHT	N/A	105	ASSEMBLY & TESTING LAB			FLOW IS NIL	No	BFP DRAIN
53	2	53-2-OPN-09	NONE	N/A	105	ASSEMBLY & TESTING LAB			NO FLOW	No	NONE
53	2	53-2-OPN-10	NONE	N/A	105	ASSEMBLY & TESTING LAB			NO FLOW	No	NONE
53	2	53-2-OPN-11	DAYLIGHT	RD5	N/A	ROOF			MOSTLY IN SUMMER	Yes	STORM WATER
53	2	53-2-OPN-12	DAYLIGHT	RD6	N/A	ROOF			MOSTLY IN SUMMER	Yes	STORM WATER

REPORT # 27

TA	BLDG	OUTLET PIPING NO	EPA OUTFALL #	DRAIN #	ROOM #	ROOM DESCRIPTION	FLOW RATE		PERIODICITY	SEASONAL	SOURCE TYPES
53	2	53-2-OPN-13	DAYLIGHT	RD7	N/A	ROOF			MOSTLY IN SUMMER	Yes	STORM WATER
53	2	53-2-OPN-14	DAYLIGHT	N/A	115	FABRICATION SHOP			ONCE ANNUALLY	No	FIRE LINE DRAIN
53	2	53-2-OPN-15	ATMOSPHR	N/A	116	TARGET TEST LAB			NO FLOW	No	VAC. PUMP EXHAUST
53	2	53-2-OPN-16	DAYLIGHT	RD10	N/A	ROOF			MOSTLY IN SUMMER	Yes	STORM WATER
53	2	53-2-OPN-17	DAYLIGHT	RD9	N/A	ROOF			MOSTLY IN SUMMER	Yes	STORM WATER
53	2	53-2-OPN-18	DAYLIGHT	N/A	107	MECHANICAL ROOM			ONCE ANNUALLY	No	FIRE LINE DRAIN
53	2	53-2-OPN-19	DAYLIGHT	N/A	107	MECHANICAL ROOM			FLOW IS NIL	No	BFP DRAIN
53	2	53-2-OPN-20	DAYLIGHT	RD8	N/A	ROOF			MOSTLY IN SUMMER	Yes	STORM WATER
53	2	53-2-OPN-21	DAYLIGHT	N/A	101	KLYSTRON LAB			FLOW IS NIL	No	WATER HTR. T&P RELIEF
53	2	53-2-OPN-22	ATMOSPHR	N/A	101	KLYSTRON LAB			NO FLOW	No	FUME HOOD EXHAUST
53	2	53-2-OPN-23	ATMOSPHR	N/A	104	FURNACE ROOM			NO FLOW	No	AIR DRYER VENT
53	2	53-2-OPN-24	ATMOSPHR	N/A	104	FURNACE ROOM			NO FLOW	No	AIR DRYER VENT
53	2	53-2-OPN-25	ATMOSPHR	N/A	104	FURNACE ROOM			NO FLOW	No	VAC. PUMP EXHAUST
53	2	53-2-OPN-26	ATMOSPHR	N/A	105	ASSEMBLY & TESTING LAB			NO FLOW	No	COMPR. AIR PRV VENT
53	2	53-2-OPN-27	DAYLIGHT	N/A	107	MECHANICAL ROOM			ONCE ANNUALLY	No	FIRE LINE DRAIN
53	38	TA-53-38	NONE	N/A	N/A	GUARD STATION			NO FLOW	No	NONE
53	56	TA-53-56	NONE	N/A	N/A	BEAD BLASTER BUILDING			NO FLOW	No	NONE
53	410	53-410-OPN-1	13S	1LV1	N/A	OFFICE TRAILER			5 DAYS PER WEEK	No	LAVATORY
53	430	TA-53-430	NONE	N/A	N/A	STORAGE TRAILER			NO FLOW	No	NONE
53	438	TA-53-438	NONE	N/A	N/A	STORAGE TRAILER			NO FLOW	No	NONE
53	455	TA-53-455	NONE	N/A	N/A	OFFICE TRAILER			NO FLOW	No	NONE
53	461	TA-53-461	NONE	N/A	N/A	STORAGE TRAILER			NO FLOW	No	NONE
53	498	TA-53-498	NONE	N/A	N/A	STORAGE TRAILER			NO FLOW	No	NONE
53	508	TA-53-508	NONE	N/A	N/A	STORAGE TRAILER			NO FLOW	No	NONE
53	523	53-523-OPN-1	13S	1LV1	N/A	OFFICE TRAILER			5 DAYS PER WEEK	No	LAVATORY
53	523	53-523-OPN-1	NONE	1TL1	N/A	OFFICE TRAILER			5 DAYS PER WEEK	No	TOILET
53	607	TA-53-607	NONE	N/A	N/A	TRANSPORTAINER			NO FLOW	No	NONE
53	608	TA-53-608	NONE	N/A	N/A	TRANSPORTAINER			NO FLOW	No	NONE
53	609	TA-53-609	NONE	N/A	N/A	TRANSPORTAINER			NO FLOW	No	NONE
53	610	TA-53-610	NONE	N/A	N/A	TRANSPORTAINER			NO FLOW	No	NONE
53	707	TA-53-707	NONE	N/A	N/A	TRANSPORTAINER			NO FLOW	No	NONE
53	717	TA-53-717	NONE	N/A	N/A	TRANSPORTAINER			NO FLOW	No	NONE
53	745	TA-53-745	NONE	N/A	N/A	EQUIPMENT SHED			NO FLOW	No	NONE

REPORT # 27

TA	BLDG	OUTLET PIPING NO	EPA OUTFALL #	DRAIN #	ROOM #	ROOM DESCRIPTION	FLOW RATE		PERIODICITY	SEASONAL	SOURCE TYPES
53	746	TA-53-746	NONE	N/A	N/A	EQUIPMENT SHED			NO FLOW	No	NONE
53	814	TA-53-814	NONE	N/A	N/A	TRANSPORTAINER			NO FLOW	No	NONE
53	828	TA-53-828	NONE	N/A	N/A	TRANSPORTAINER			NO FLOW	No	NONE
53	829	TA-53-829	NONE	N/A	N/A	TRANSPORTAINER			NO FLOW	No	NONE
53	830	TA-53-830	NONE	N/A	N/A	TRANSPORTAINER			NO FLOW	No	NONE
53	831	TA-53-831	NONE	N/A	N/A	TRANSPORTAINER			NO FLOW	No	NONE
53	832	TA-53-832	NONE	N/A	N/A	TRANSPORTAINER			NO FLOW	No	NONE
53	860	TA-53-860	NONE	N/A	N/A	TRANSPORTAINER			NO FLOW	No	NONE
53	890	TA-53-890	NONE	N/A	N/A	TRANSPORTAINER			NO FLOW	No	NONE

Please print or type in the unshaded areas only.

EPA I.D. NUMBER *(copy from Item 1 of Form 1)* NM0890010515

Form Approved
OMB No. 2040-0086
Approval expires 7-31-88

FORM 2C NPDES

EPA

U.S. ENVIRONMENTAL PROTECTION AGENCY
APPLICATION FOR PERMIT TO DISCHARGE WASTEWATER
EXISTING MANUFACTURING, COMMERCIAL, MINING AND SILVICULTURAL OPERATIONS
Consolidated Permits Program

I. OUTFALL LOCATION

For each outfall, list the latitude and longitude of its location to the nearest 15 seconds and the name of the receiving water.

A. OUTFALL NUMBER *(list)*	B. LATITUDE 1. DEG.	2. MIN.	3. SEC.	C. LONGITUDE 1. DEG.	2. MIN.	3. SEC.	D. RECEIVING WATER *(name)*
03A114	35	52	6	106	16	28	Tributaries to Sandia Canyon, an ephemeral tributary
							to the Rio Grande

II. FLOWS, SOURCES OF POLLUTION, AND TREATMENT TECHNOLOGIES

A. 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 B. 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.

B. For each outfall, provide a description of: (1) All operations contributing wastewater to the effluent, including process wastewater, sanitary wastewater, cooling water, and storm water runoff; (2) The average flow contributed by each operation; and (3) The treatment received by the wastewater. Continue on additional sheets if necessary.

1. OUT-FALL NO *(list)*	2. OPERATION(S) CONTRIBUTING FLOW a. OPERATION *(list)*	b. AVERAGE FLOW *(include units)*	3. TREATMENT a. DESCRIPTION	b. LIST CODES FROM TABLE 2C-1
114	TA-53-2 Treated Cooling Water,	12.6 GPD		
	Once-through Cooling Water,			
	Sump Pit Overflow To Outfall			

OFFICIAL USE ONLY *(effluent guidelines sub-categories)*

CONTINUE ON REVERSE

CONTINUED FROM THE FRONT

C. Except for storm runoff, leaks, or spills, are any of the discharges described in Items II-A or B intermittent or seasonal?

☒ YES *(complete the following table)* ☐ NO *(go to Section III)*

1. OUTFALL NUMBER *(list)*	2. OPERATION(s) CONTRIBUTING FLOW *(list)*	3. FREQUENCY		4. FLOW				
		a. DAYS PER WEEK *(specify average)*	b. MONTHS PER YEAR *(specify average)*	a. FLOW RATE *(in mgd)*		b. TOTAL VOLUME *(specify with units)*		c. DURATION *(in days)*
				1. LONG TERM AVERAGE	2. MAXIMUM DAILY	1. LONG TERM AVERAGE	2. MAXIMUM DAILY	
03A114	Sump Pit Overflow Consists Of: Treated Cooling Water and Once-through Cooling Water		12	0.0000012 mgd	0.0000012 mgd	12.6 gpd	12.6 gpd	Intermt.

III. PRODUCTION

A. Does an effluent guideline limitation promulgated by EPA under Section 304 of the Clean Water Act apply to your facility?

☐ YES *(complete Item III-B)* ☒ NO *(to to Section IV)*

B. Are the limitations in the applicable effluent guideline expressed in terms of production *(or other measure of operation)*?

☐ YES *(complete Item III-C)* ☐ NO *(go to Section IV)*

C. If you answered "yes" to Item III-B, list the quantity which represents an actual measurement of your level of production, expressed in the terms and units used in the applicable effluent guideline, and indicate the affected outfalls.

1. AVERAGE DAILY PRODUCTION			2. AFFECTED OUTFALLS *(list outfall numbers)*
a. QUANTITY PER DAY	b. UNITS OF MEASURE	c. OPERATION, PRODUCT, MATERIAL, ETC. *(specify)*	

IV. IMPROVEMENTS

A. Are you now required by any Federal, State or local authority to meet any implementation schedule for the construction, upgrading or operation of wastewater treatment equipment or practices or any other environmental programs which may affect the discharges described in this application? This includes, but is not limited to, permit conditions, administrative or enforcement orders, enforcement compliance schedule letters, stipulations, court orders, and grant or loan conditions.

☒ YES *(complete the following table)* ☐ NO *(go to Item IV-B)*

1. IDENTIFICATION OF CONDITION, AGREEMENT, ETC.	2. AFFECTED OUTFALLS		3. BRIEF DESCRIPTION OF PROJECT	4. FINAL COMPLIANCE DATE	
	a. NO.	b. SOURCE OF DISCHARGE		a. REQUIRED	b. PROJECTED
EPA Docket No. VI-92-1306		All	Complete Waste Stream Characterization surveys and implement corrective actions.	7/31/93	FY96

B. OPTIONAL: You may attach additional sheets describing any additional water pollution control programs *(or other environmental projects which may affect your discharges)* you now have underway or which you plan. Indicate whether each program is now underway or planned, and indicate your actual or planned schedules for construction. ☐ MARK "X" IF DESCRIPTION OF ADDITIONAL CONTROL PROGRAMS IS ATTACHED

EPA I.D. NUMBER (copy from Item 1 of Form 1)
NM0890010515

Form Approved.
OMB No. 2040-0086
Approval expires 7-31-88

V. INTAKE AND EFFLUENT CHARACTERISTICS

A, B, & C: See instructions before proceeding — Complete one set of tables for each outfall — Annotate the outfall number in the space provided. NOTE: Tables V-A, V-B, and V-C are included on separate sheets numbered V-1 through V-9.

D. Use the space below to list any of the pollutants listed in Table 2c-3 of the instructions, which you know or have reason to believe is discharged or may be discharged from any outfall. For every pollutant you list, briefly describe the reasons you believe it to be present and report any analytical data in your possession.

1. POLLUTANT	2. SOURCE	1. POLLUTANT	2. SOURCE
N/A			

VI. POTENTIAL DISCHARGES NOT COVERED BY ANALYSIS

Is any pollutant listed in Item V-C a substance or a component of a substance which you currently use or manufacture as an intermediate or final product or byproduct?

☐ YES *(list all such pollutants below)* ☒ NO *(go to Item VI-B)*

CONTINUED FROM THE FRONT

VII. BIOLOGICAL TOXICITY TESTING DATA

Do you have any knowledge or reason to believe that any biological test for acute or chronic toxicity has been made on any of your discharges or on a receiving water in relation to your discharge within the last 3 years?

☐ YES *(identify the test(s) and describe their purposes below)* ☒ NO *(go to Section VIII)*

VIII. CONTRACT ANALYSIS INFORMATION

Were any of the analyses reported in Item V performed by a contract laboratory or consulting firm?

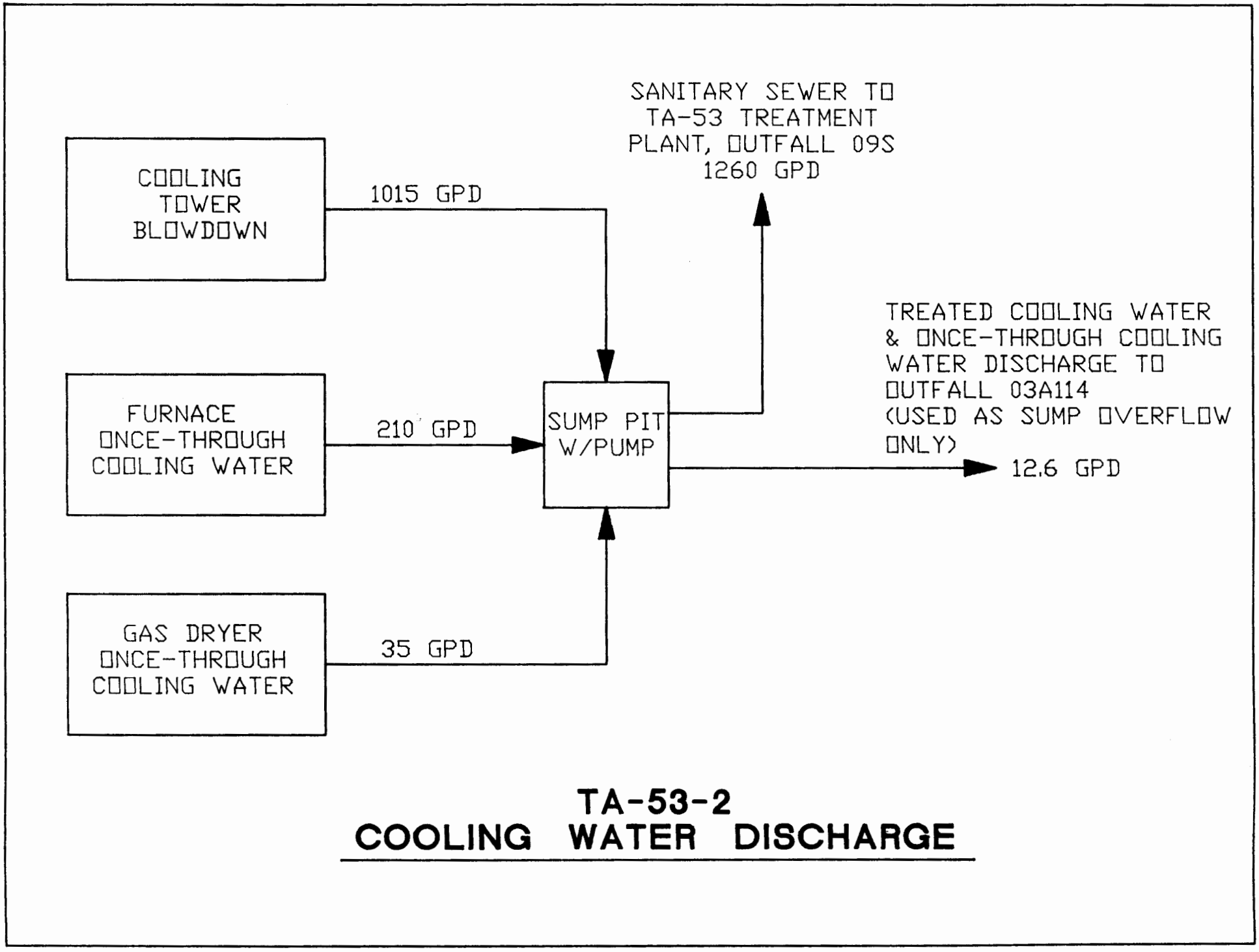
☐ YES *(list the name, address, and telephone number of, and pollutants analyzed by, each such laboratory or firm below)* ☒ NO *(go to Section IX)*

A. NAME	B. ADDRESS	C. TELEPHONE (area code & no.)	D. POLLUTANTS ANALYZED (list)

IX. 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 & OFFICIAL TITLE (type or print)	B. PHONE NO. (area code & no.)
JERRY L. P[illegible]OWS, AREA MANAGER, DOE	505-667-5105
ALLEN J. T[illegible]MAN, ASSOC. DIRECTOR FOR OPERATIONS	505-667-9390
C. SIGNATURE	D. DATE SIGNED



TA-53-2
COOLING WATER DISCHARGE

Data from worst case composite.

PLEASE PRINT OR TYPE IN THE UNSHADED AREAS ONLY. You may report some or all of this information on separate sheets *(use the same format)* instead of completing these pages. SEE INSTRUCTIONS.

EPA I.D. NUMBER *(copy from Item 1 of Form 1)*: NM0890010515

Form Approved. OMB No. 2040-0086 Approval expires 7-31-88

V. INTAKE AND EFFLUENT CHARACTERISTICS *(continued from page 3 of Form 2-C)*

OUTFALL NO. 03A114

PART A - You must provide the results of at least one analysis for every pollutant in this table. Complete one table for each outfall. See instructions for additional details.

1. POLLUTANT	2. EFFLUENT a. MAXIMUM DAILY VALUE (1) CONCENTRATION	a. MAXIMUM DAILY VALUE (2) MASS	b. MAXIMUM 30 DAY VALUE (if available) (1) CONCENTRATION	b. MAXIMUM 30 DAY VALUE (if available) (2) MASS	c. LONG TERM AVRG. VALUE (if available) (1) CONCENTRATION	c. LONG TERM AVRG. VALUE (if available) (2) MASS	d. NO. OF ANALYSES	3. UNITS (specify if blank) a. CONCENTRATION	3. UNITS b. MASS	4. INTAKE (optional) a. LONG TERM AVERAGE VALUE (1) CONCENTRATION	4. INTAKE a. LONG TERM AVERAGE VALUE (2) MASS	4. INTAKE b. NO. OF ANALYSES
a. Biochemical Oxygen Demand *(BOD)*	2.0	95.4						mg/l	mg/d			
b. Chemical Oxygen Demand *(COD)*	42.0	2.0						mg/l	g/d			
c. Total Organic Carbon *(TOC)*	7.4	0.4						mg/l	g/d			
d. Total Suspended Solids *(TSS)*	7.0	0.3						mg/l	g/d			
e. Ammonia *(as N)*	< .01	< 0.477						mg/l	mg/d			
f. Flow	VALUE 12.6		VALUE		VALUE			gal/day		VALUE		
g. Temperature *(winter)*	VALUE 36.9 C		VALUE		VALUE			°C		VALUE		
h. Temperature *(summer)*	VALUE		VALUE		VALUE			°C		VALUE		
i. pH	MINIMUM 6.8	MAXIMUM 8.8	MINIMUM 6.0	MAXIMUM 9.0				STANDARD UNITS				

PART B - Mark "X" in column 2-a for each pollutant you know or have reason to believe is present. Mark "X" in column 2-b for each pollutant you believe to be absent. If you mark column 2a for any pollutant which is limited either directly, or indirectly but expressly, in an effluent limitations guideline, you must provide the results of at least one analysis for that pollutant. For other pollutants for which you mark column 2a, you must provide quantitative data or an explanation of their presence in your discharge. Complete one table for each outfall. See the instructions for additional details and requirements.

1. POLLUTANT AND CAS NO. *(if available)*	2. MARK 'X' a. BELIEVED PRESENT	2. MARK 'X' b. BELIEVED ABSENT	3. EFFLUENT a. MAXIMUM DAILY VALUE (1) CONCENTRATION	a. MAXIMUM DAILY VALUE (2) MASS	b. MAXIMUM 30 DAY VALUE (if available) (1) CONCENTRATION	b. MAXIMUM 30 DAY VALUE (if available) (2) MASS	c. LONG TERM AVRG. VALUE (if available) (1) CONCENTRATION	c. LONG TERM AVRG. VALUE (if available) (2) MASS	d. NO. OF ANALYSES	4. UNITS a. CONCENTRATION	4. UNITS b. MASS	5. INTAKE (optional) a. LONG TERM AVERAGE VALUE (1) CONCENTRATION	5. INTAKE a. LONG TERM AVERAGE VALUE (2) MASS	5. INTAKE b. NO. OF ANALYSES
a. Bromide (24959-67-9)	X		3.24	0.2						mg/l	g/d			
b. Chlorine, Total Residual		X	0.0	0.0						mg/l	mg/d			
c. Color	X		10							units				
d. Fecal Coliform		X												
e. Fluoride (16984-48-8)	X		0.52	24.8						mg/l	mg/d			
f. Nitrate-Nitrite *(as N)*	X		1.13	53.9						mg/l	mg/d			

ITEM V-B CONTINUED FROM FRONT

1. POLLUTANT AND CAS NO. (if available)	2. MARK 'X'		3. EFFLUENT							4. UNITS		5. INTAKE (optional)		
	a. BELIEVED PRESENT	b. BELIEVED ABSENT	a. MAXIMUM DAILY VALUE (1) CONCENTRATION	a. MAXIMUM DAILY VALUE (2) MASS	b. MAXIMUM 30 DAY VALUE (if available) (1) CONCENTRATION	b. MAXIMUM 30 DAY VALUE (if available) (2) MASS	c. LONG TERM AVRG. VALUE (if available) (1) CONCENTRATION	c. LONG TERM AVRG. VALUE (if available) (2) MASS	d. NO. OF ANALYSES	a. CONCENTRATION	b. MASS	a. LONG TERM AVERAGE VALUE (1) CONCENTRATION	a. LONG TERM AVERAGE VALUE (2) MASS	b. NO. OF ANALYSES
g. Nitrogen, Total Organic (as N)	X		2.3	0.1						mg/l	g/d			
h. Oil and Grease		X	< 1.2	< 57.2						mg/l	mg/d			
i. Phosphorus (as P), Total (7723-14-0)	X		.306	14.6						mg/l	mg/d			
j. Radioactivity														
(1) Alpha, Total	X		14	0.7						pCi/l	nCi/d			
(2) Beta, Total	X		6.6	0.3						pCi/l	nCi/d			
(3) Radium, Total	X													
(4) Radium 226, Total	X		0.07	3.3						pCi/l	nCi/d			
k. Sulfate (as SO_4) (14808-79-8)	X		143	6.8						mg/l	g/d			
l. Sulfide (as S)	X		70.2	3.3						mg/l	g/d			
m. Sulfite (as SO_3) (14265-45-3)	X		18.8	0.9						mg/l	g/d			
n. Surfactants	X		0.11	5.2						mg/l	mg/d			
o. Aluminum, Total (7429-90-5)	X		0.06	2.9						mg/l	mg/d			
p. Barium, Total (7440-39-3)	X		0.11	5.2						mg/l	mg/d			
q. Boron, Total (7440-42-8)	X		0.33	15.7						mg/l	mg/d			
r. Cobalt, Total (7440-48-4)		X	0.07	3.3						mg/l	mg/d			
s. Iron, Total (7439-89-6)	X		1.1	52.5						mg/l	mg/d			
t. Magnesium, Total (7439-95-4)	X		5.8	0.3						mg/l	g/d			
u. Molybdenum, Total (7439-98-7)	X		1.7	81.1						mg/l	mg/d			
v. Manganese, Total (7439-96-5)	X		0.05	2.4						mg/l	mg/d			
w. Tin, Total (7440-31-5)		X	< 0.050	< 2.4						mg/l	mg/d			
x. Titanium, Total (7440-32-6)		X	< 0.004	< 0.2						mg/l	mg/d			

EPA I.D. NUMBER (copy from Item 1 of Form 1)	OUTFALL NUMBER
NM0890010515	03A114

Form Approved.
OMB No. 2040-0086
Approval expires 7-31-88

CONTINUED FROM PAGE 3 OF FORM 2-C

PART C - If you are a primary industry and this outfall contains process wastewater, refer to Table 2c-2 in the instructions to determine which of the GC/MS fractions you must test for. Mark "X" in column 2-a for all such GC/MS fractions that apply to your industry and for ALL toxic metals, cyanides, and total phenols. If you are not required to mark column 2-a *(secondary industries, nonprocess wastewater outfalls, and nonrequired GC/MS fractions)*, mark "X" in column 2-b for each pollutant you know or have reason to believe is present. Mark "X" in column 2-c for each pollutant you believe is absent. If you mark column 2a for any pollutant, you must provide the results of at least one analysis for that pollutant. If you mark column 2b for any pollutant, you must provide the results of at least one analysis for that pollutant if you know or have reason to believe it will be discharged in concentrations of 10 ppb or greater. If you mark column 2b for acrolein, acrylonitrile, 2,4 dinitrophenol, or 2-methyl-4, 6 dinitrophenol, you must provide the results of at least one analysis for each of these pollutants which you know or have reason to believe that you discharge in concentrations of 100 ppb or greater. Otherwise, for pollutants for which you mark column 2b, you must either submit at least one analysis or briefly describe the reasons the pollutant is expected to be discharged. Note that there are 7 pages to this part; please review each carefully. Complete one table *(all 7 pages)* for each outfall. See instructions for additional details and requirements.

1. POLLUTANT AND CAS NUMBER (if available)	2. MARK 'X'			3. EFFLUENT							4. UNITS		5. INTAKE (optional)		
	a. TESTING REQUIRED	b. BELIEVED PRESENT	c. BELIEVED ABSENT	a. MAXIMUM DAILY VALUE (1) CONCENTRATION	a. MAXIMUM DAILY VALUE (2) MASS	b. MAXIMUM 30 DAY VALUE (if available) (1) CONCENTRATION	b. MAXIMUM 30 DAY VALUE (if available) (2) MASS	c. LONG TERM AVRG. VALUE (if available) (1) CONCENTRATION	c. LONG TERM AVRG. VALUE (if available) (2) MASS	d. NO. OF ANALYSES	a. CONCENTRATION	b. MASS	a. LONG TERM AVERAGE VALUE (1) CONCENTRATION	a. LONG TERM AVERAGE VALUE (2) MASS	b. NO. OF ANALYSES
METALS, CYANIDE, AND TOTAL PHENOLS															
1M. Antimony, Total (7440-36-0)			X	< 0.050	< 2.4						mg/l	mg/d			
2M. Arsenic, Total (7440-38-2)		X		0.04	1.9						mg/l	mg/d			
3M. Beryllium, Total, 7440-41-7)			X	< 0.1	< 4.8						mg/l	mg/d			
4M. Cadmium, Total (7440-43-9)		X		.004	0.2						mg/l	mg/d			
5M. Chromium, Total (7440-47-3)		X		.260	12.4						mg/l	mg/d			
6M. Copper, Total (7440-50-8)		X		0.1	4.8						mg/l	mg/d			
7M. Lead, Total (7439-92-1)		X		.050	2.4						mg/l	mg/d			
8M. Mercury, Total (7439-97-6)			X	< .0002	< 0.00						mg/l	mg/d			
9M. Nickel, Total (7440-02-0)		X		.28	13.4						mg/l	mg/d			
10M. Selenium, Total (7782-49-2)			X	< .001	< 0.0						mg/l	mg/d			
11M. Silver, Total (7440-22-4)			X	< 0.01	< 0.5						mg/l	mg/d			
12M. Thallium, Total (7440-28-0)		X		0.51	24.3						mg/l	mg/d			
13M. Zinc, Total (7440-66-6)		X		.071	3.4						mg/l	mg/d			
14M. Cyanide, Total (57-12-5)		X		.033	1.6						mg/l	mg/d			
15M. Phenols, Total			X	< .01	< 0.5						mg/l	mg/d			
DIOXIN															
2,3,7,8-Tetrachlorodibenzo-P-Dioxin (1764-01-6)			X	DESCRIBE RESULTS											

1. POLLUTANT AND CAS NUMBER (if available)	2. MARK 'X'			3. EFFLUENT							4. UNITS		5. INTAKE (optional)		
	a. TESTING REQUIRED	b. BELIEVED PRESENT	c. BELIEVED ABSENT	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVRG. VALUE (if available)		d. NO. OF ANALYSES	a. CONCENTRATION	b. MASS	a. LONG TERM AVERAGE VALUE		b. NO. OF ANALYSES
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
GC/MS FRACTION – VOLATILE COMPOUNDS															
1V. Acrolein (107-02-8)			X												
2V. Acrylonitrile (107-13-1)			X												
3V, Benzene (71-43-2)			X	< 0.005	< 0.2						mg/l	mg/d			
4V. Bis *(Chloromethyl)* Ether (542-88-1)			X												
5V. Bromoform (75-25-2)			X	< 0.005	< 0.2						mg/l	mg/d			
6V. Carbon Tetrachloride (56-23-5)			X	< 0.005	< 0.2						mg/l	mg/d			
7V. Chlorobenzene (108-90-7)			X	< 0.005	< 0.2						mg/l	mg/d			
8V. Chlorodibromomethane (124-48-1)			X	< 0.005	< 0.2						mg/l	mg/d			
9V. Chloroethane (75-00-3)			X	< 0.010	< 0.000						mg/l	mg/d			
10V. 2-Chloroethylvinyl Ether (110-75-8)			X												
11V. Chloroform (67-66-3)			X	< 0.005	< 0.2						mg/l	mg/d			
12V. Dichlorobromomethane (75-27-4)			X	< 0.005	< 0.2						mg/l	mg/d			
13V. Dichlorodifluoromethane (75-71-8)			X												
14V. 1,1-Dichloroethane (75-34-3)			X	< 0.005	< 0.2						mg/l	mg/d			
15V. 1,2-Dichloroethane (107-06-2)			X	< 0.005	< 0.2						mg/l	mg/d			
16V. 1,1-Dichloroethylene (75-35-4)			X	< 0.005	< 0.2						mg/l	mg/d			
17V. 1,2-Dichloropropane (78-87-5)			X	< 0.005	< 0.2						mg/l	kg/d			
18V. 1,3-Dichloropropylene (542-75-6)			X	< 0.005	< 0.2						mg/l	mg/d			
19V. Ethylbenzene (100-41-4)			X	< 0.005	< 0.2	X					mg/l	mg/d			
20V. Methyl Bromide (74-83-9)			X	< 0.010	< 0.5						mg/l	mg/d			
21V. Methyl Chloride (74-87-3)			X	< 0.010	< 0.5						mg/l	mg/d			

CONTINUED FROM PAGE V-4

1. POLLUTANT AND CAS NUMBER (if available)	2. MARK 'X'			3. EFFLUENT							4. UNITS		5. INTAKE (optional)		
	a. TEST-ING REQUIRED	b. BELIEVED PRESENT	c. BELIEVED ABSENT	a. MAXIMUM DAILY VALUE (1) CONCENTRATION	a. MAXIMUM DAILY VALUE (2) MASS	b. MAXIMUM 30 DAY VALUE (if available) (1) CONCENTRATION	b. MAXIMUM 30 DAY VALUE (if available) (2) MASS	c. LONG TERM AVRG. VALUE (if available) (1) CONCENTRATION	c. LONG TERM AVRG. VALUE (if available) (2) MASS	d. NO. OF ANALYSES	a. CONCENTRATION	b. MASS	a. LONG TERM AVERAGE VALUE (1) CONCENTRATION	a. LONG TERM AVERAGE VALUE (2) MASS	b. NO. OF ANALYSES
GC/MS FRACTION – VOLATILE COMPOUNDS *(continued)*															
22V. Methyl Chloride			X	< 0.005	< 0.2						mg/l	mg/d			
23V. 1,1,2,2-Tetrachloroethane (79-34-5)			X	< 0.005	< 0.2						mg/l	mg/d			
24V. Tetrachloroethylene (127-18-4)			X	< 0.005	< 0.2						mg/l	mg/d			
25V. Toluene (108-88-3)			X	< 0.005	< 0.2						mg/l	mg/d			
26V. 1,2-Trans-Dichloroethylene (156-60-5)			X	< 0.005	< 0.2						mg/l	mg/d			
27V. 1,1,1-Trichloroethane (71-55-6)			X	< 0.005	< 0.2						mg/l	mg/d			
28V. 1,1,2-Trichloroethane (79-00-5)			X	< 0.005	< 0.2						mg/l	mg/d			
29V. Trichloroethylene (79-01-6)			X	< 0.005	< 0.2						mg/l	mg/d			
30V. Trichlorofluoromethane (75-69-4)			X	< 0.005	< 0.2						mg/l	mg/d			
31V. Vinyl Chloride (75-01-4)			X	< 0.010	< 0.5						mg/l	mg/d			
GC/MS FRACTION – ACID COMPOUNDS															
1A. 2-Chlorophenol (95-57-8)			X	< 0.010	< 0.5						mg/l	mg/d			
2A. 2,4-Dichlorophenol (120-83-2)			X	< 0.010	< 0.5						mg/l	mg/d			
3A. 2,4-Dimethylphenol (105-67-9)			X	< 0.010	< 0.5						mg/l	mg/d			
4A. 4,6-Dinitro-O-Cresol (534-52-1)			X	< 0.010	< 0.5						mg/l	mg/d			
5A. 2,4-Dinitrophenol (51-28-5)			X	< 0.010	< 0.5						mg/l	mg/d			
6A. 2-Nitrophenol (88-75-5)			X	< 0.010	< 0.5						mg/l	mg/d			
7A. 4-Nitrophenol (100-02-7)			X	< 0.010	< 0.5						mg/l	mg/d			
8A. P-Chloro-M-Cresol (59-50-7)			X	< 0.010	< 0.5						mg/l	mg/d			
9A. Pentachlorophenol (87-86-5)			X	< 0.010	< 0.5						mg/l	mg/d			
10A. Phenol (108-95-2)			X	< 0.010	< 0.5						mg/l	mg/d			
11A. 2,4,6-Trichlorophenol (88-06-2)			X	< 0.010	< 0.5						mg/l	mg/d			

CONTINUE ON REVERSE

CONTINUED FROM THE FRONT

1. POLLUTANT AND CAS NUMBER (if available)	2. MARK 'X' a. TESTING REQUIRED	b. BELIEVED PRESENT	c. BELIEVED ABSENT	3. EFFLUENT a. MAXIMUM DAILY VALUE (1) CONCENTRATION	(2) MASS	b. MAXIMUM 30 DAY VALUE (if available) (1) CONCENTRATION	(2) MASS	c. LONG TERM AVRG. VALUE (if available) (1) CONCENTRATION	(2) MASS	d. NO. OF ANALYSES	4. UNITS a. CONCENTRATION	b. MASS	5. INTAKE (optional) a. LONG TERM AVERAGE VALUE (1) CONCENTRATION	(2) MASS	b. NO. OF ANALYSES
GC/MS FRACTION – BASE/NEUTRAL COMPOUNDS															
1B. Acenaphthene (83-32-9)			X	< 0.010	< 0.5						mg/l	mg/d			
2B. Acenaphtylene (208-96-8)			X	< 0.010	< 0.5						mg/l	mg/d			
3B. Anthracene (120-12-7)			X	< 0.010	< 0.5						mg/l	mg/d			
4B. Benzidine (92-87-5)			X	< 0.010	< 0.5						mg/l	mg/d			
5B. Benzo *(a)* Anthracene (56-55-3)			X	< 0.010	< 0.5						mg/l	mg/d			
6B. Benzo *(a)* Pyrene (50-32-8)			X	< 0.010	< 0.5						mg/l	mg/d			
7B. 3,4-Benzo-fluoranthene (205-99-2)			X	< 0.010	< 0.5						mg/l	mg/d			
8B. Benzo *(ghi)* Perylene (191-24-2)			X	< 0.010	< 0.5						mg/l	mg/d			
9B. Benzo *(k)* Fluoranthene (207-08-9)			X	< 0.010	< 0.5						mg/l	mg/d			
10B. Bis *(2-Chloro-ethoxy)* Methane (111-91-1)			X	< 0.010	< 0.5						mg/l	mg/d			
11B. Bis *(2-Chloro-ethyl)* Ether (111-44-4)			X	< 0.010	< 0.5						mg/l	mg/d			
12B. Bis *(2-Chloroiso-propyl)* Ether (102-60-1)			X	< 0.010	< 0.5						mg/l	mg/d			
13B. Bis *(2-Ethyl-hexyl)* Phthalate (117-81-7)			X	< 0.010	< 0.5						mg/l	mg/d			
14B. 4-Bromo-phenyl Phenyl Ether (101-55-3)			X	< 0.010	< 0.5						mg/l	mg/d			
15B. Butyl Benzyl Phthalate (85-68-7)			X	< 0.010	< 0.5						mg/l	mg/d			
16B. 2-Chloro-naphthalene (91-58-7)			X	< 0.010	< 0.5						mg/l	mg/d			
17B. 4-Chloro-phenyl Phenyl Ether (7005-72-3)			X	< 0.010	< 0.5						mg/l	mg/d			
18B. Chrysene (218-01-9)			X	< 0.010	< 0.5						mg/l	mg/d			
19B. Dibenzo *(a,h)* Anthracene (53-70-3)			X	< 0.010	< 0.5						mg/l	mg/d			
20B. 1,2-Dichloro-benzene (95-50-1)			X	< 0.010	< 0.5						mg/l	mg/d			
21B. 1,3-Dichloro-benzene (541-73-1)			X	< 0.010	< 0.5						mg/l	mg/d			

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OMB No. 2040-0086
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1. POLLUTANT AND CAS NUMBER (if available)	2. MARK 'X' a. TESTING REQUIRED	b. BELIEVED PRESENT	c. BELIEVED ABSENT	3. EFFLUENT a. MAXIMUM DAILY VALUE (1) CONCENTRATION	(2) MASS	b. MAXIMUM 30 DAY VALUE (if available) (1) CONCENTRATION	(2) MASS	c. LONG TERM AVRG. VALUE (if available) (1) CONCENTRATION	(2) MASS	d. NO. OF ANALYSES	4. UNITS a. CONCENTRATION	b. MASS	5. INTAKE (optional) a. LONG TERM AVERAGE VALUE (1) CONCENTRATION	(2) MASS	b. NO. OF ANALYSES
GC/MS FRACTION – BASE/NEUTRAL COMPOUNDS *(continued)*															
22B. 1,4-Dichlorobenzene (106-46-7)			X	< 0.010	< 0.5						mg/l	mg/d			
23B. 3,3'-Dichlorobenzidine (91-94-1)			X	< 0.010	< 0.5						mg/l	mg/d			
24B. Diethyl Phthalate (84-66-2)			X	< 0.010	< 0.5						mg/l	mg/d			
25B. Dimethyl Phthalate (131-11-3)			X	< 0.010	< 0.5						mg/l	mg/d			
26B. Di-N-Butyl Phthalate (84-74-2)			X	< 0.010	< 0.5						mg/l	mg/d			
27B. 2,4-Dinitrotoluene (121-14-2)			X	< 0.010	< 0.5						mg/l	mg/d			
28B. 2,6-Dinitrotoluene (606-20-2)			X	< 0.010	< 0.5						mg/l	mg/d			
29B. Di-N-Octyl Phthalate (117-84-0)			X	< 0.010	< 0.5						mg/l	mg/d			
30B. 1,2-Diphenylhydrazine *(as Azobenzene)* (122-66-7)			X	< 0.010	< 0.5						mg/l	mg/d			
31B. Fluoranthene (206-44-0)			X	< 0.010	< 0.5						mg/l	mg/d			
32B. Fluorene (86-73-7)			X	< 0.010	< 0.5						mg/l	mg/d			
33B. Hexachlorobenzene (118-74-1)			X	< 0.010	< 0.5						mg/l	mg/d			
34B. Hexachlorobutadiene (87-68-3)			X	< 0.010	< 0.5						mg/l	mg/d			
35B. Hexachlorocyclopentadiene (77-47-4)			X	< 0.010	< 0.5						mg/l	mg/d			
36B. Hexachloroethane (67-72-1)			X	< 0.010	< 0.5						mg/l	mg/d			
37B. Indeno *(1,2,3-cd)* Pyrene (193-39-5)			X	< 0.010	< 0.5						mg/l	mg/d			
38B. Isophorone (78-59-1)			X	< 0.010	< 0.5						mg/l	mg/d			
39B. Naphthalene (91-20-3)			X	< 0.010	< 0.5						mg/l	mg/d			
40B. Nitrobenzene (98-95-3)			X	< 0.010	< 0.5						mg/l	mg/d			
41B. N-Nitrosodimethylamine (62-75-9)			X	< 0.010	< 0.5						mg/l	mg/d			
42B. N-Nitrosodi-N-Propylamine (621-64-7)			X	< 0.010	< 0.5						mg/l	mg/d			

CONTINUED FROM THE FRONT

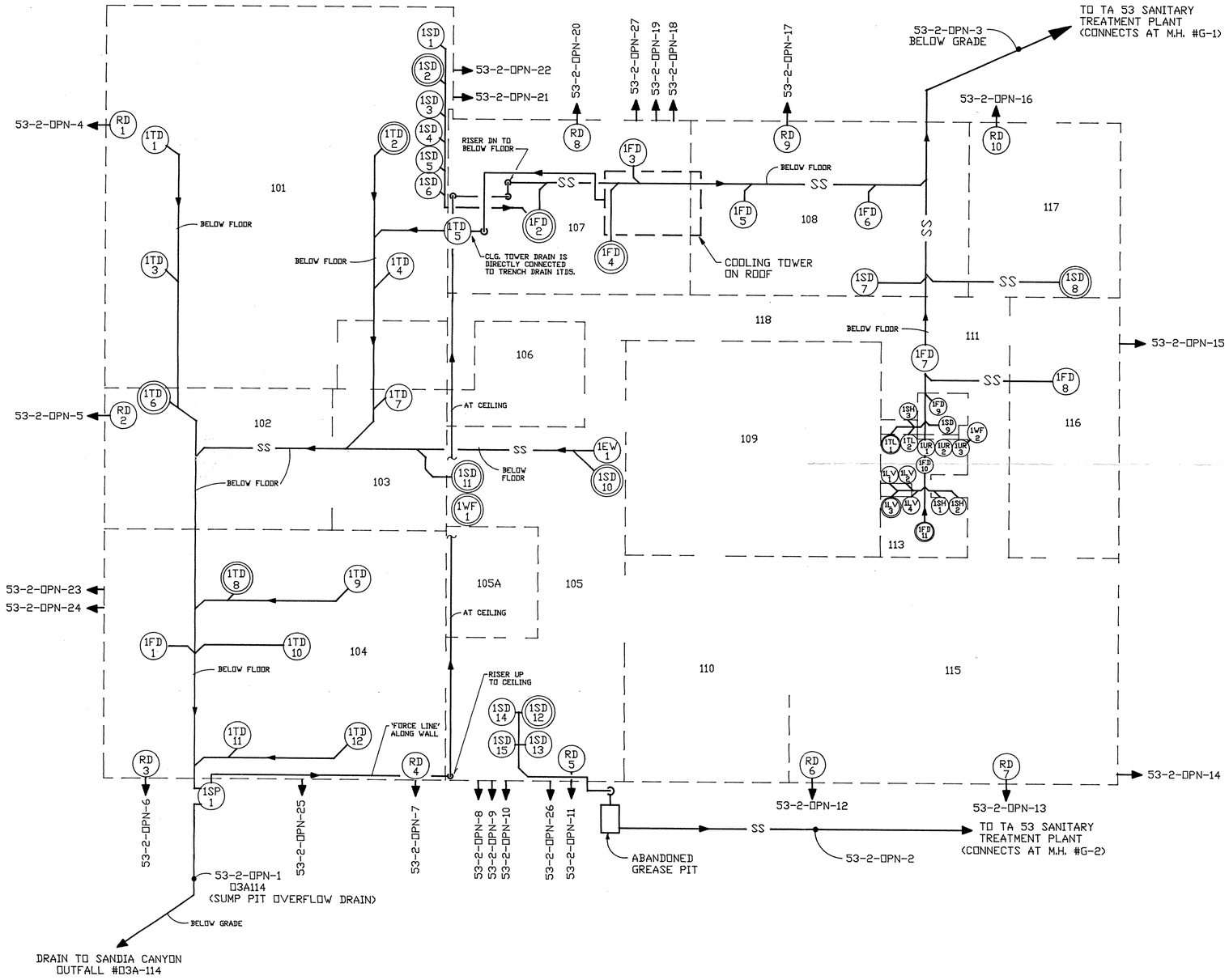
1. POLLUTANT AND CAS NUMBER (if available)	2. MARK 'X' a. TESTING REQUIRED	b. BELIEVED PRESENT	c. BELIEVED ABSENT	3. EFFLUENT a. MAXIMUM DAILY VALUE (1) CONCENTRATION	(2) MASS	b. MAXIMUM 30 DAY VALUE (if available) (1) CONCENTRATION	(2) MASS	c. LONG TERM AVRG. VALUE (if available) (1) CONCENTRATION	(2) MASS	d. NO. OF ANALYSES	4. UNITS a. CONCENTRATION	b. MASS	5. INTAKE (optional) a. LONG TERM AVERAGE VALUE (1) CONCENTRATION	(2) MASS	b. NO. OF ANALYSES
GC/MS FRACTION — BASE/NEUTRAL COMPOUNDS (continued)															
43B. N-Nitrosodiphenylamine (86-30-6)			X	< 0.010	< 0.5						mg/l	mg/d			
44B. Phenanthrene (85-01-8)			X	< 0.010	< 0.5						mg/l	mg/d			
45B. Pyrene (129-00-0)			X	< 0.010	< 0.5						mg/l	mg/d			
46B. 1,2,4 - Trichlorobenzene (120-82-1)			X	< 0.010	< 0.5						mg/l	mg/d			
GC/MS FRACTION — PESTICIDES															
1P. Aldrin (309-00-2)			X	< 0.06	< 2.9						ug/l	ug/d			
2P. α-BHC (319-84-6)			X	< 0.04	< 1.9						ug/l	ug/d			
3P. β-BHC (319-85-7)			X	< 0.1	< 4.8						ug/l	ug/d			
4P. γ-BHC (58-89-9)			X	< 0.03	< 1.4						ug/l	ug/d			
5P. δ-BHC (319-86-8)			X	< 0.12	< 5.7						ug/l	ug/d			
6P. Chlordane (57-74-9)			X	< 0.25	< 11.9						ug/l	ug/d			
7P. 4,4'-DDT (50-29-3)			X	< 0.06	< 2.9						ug/l	ug/d			
8P. 4,4'-DDE (72-55-9)			X	< 0.08	< 3.8						ug/l	ug/d			
9P. 4,4'-DDD (72-54-8)			X	< 0.08	< 3.8						ug/l	ug/d			
10P. Dieldrin (60-57-1)			X	< 0.08	< 3.8						ug/l	ug/d			
11P. α-Endosulfan (115-29-7)			X	< 0.05	< 2.4						ug/l	ug/d			
12P. β-Endosulfan (115-29-7)			X	< 0.08	< 3.8						ug/l	ug/d			
13P. Endosulfan Sulfate (1031-07-8)			X	< 0.09	< 4.3						ug/l	ug/d			
14P. Endrin (72-20-8)			X	< 0.06	< 2.9						ug/l	ug/d			
15P. Endrin Aldehyde (7421-93-4)			X	< 0.62	< 29.6						ug/l	ug/d			
16P. Heptachlor (76-44-8)			X	< 0.03	< 1.4						ug/l	ug/d			

CONTINUED FROM PAGE V-8

1. POLLUTANT AND CAS NUMBER (if available)	2. MARK 'X' a. TESTING REQUIRED	2. MARK 'X' b. BELIEVED PRESENT	2. MARK 'X' c. BELIEVED ABSENT	3. EFFLUENT a. MAXIMUM DAILY VALUE (1) CONCENTRATION	a. MAXIMUM DAILY VALUE (2) MASS	b. MAXIMUM 30 DAY VALUE (if available) (1) CONCENTRATION	b. MAXIMUM 30 DAY VALUE (if available) (2) MASS	c. LONG TERM AVRG. VALUE (if available) (1) CONCENTRATION	c. LONG TERM AVRG. VALUE (if available) (2) MASS	d. NO. OF ANALYSES	4. UNITS a. CONCENTRATION	4. UNITS b. MASS	5. INTAKE (optional) a. LONG TERM AVERAGE VALUE (1) CONCENTRATION	5. INTAKE (optional) a. LONG TERM AVERAGE VALUE (2) MASS	5. INTAKE (optional) b. NO. OF ANALYSES
GC/MS FRACTION – PESTICIDES *(continued)*															
17P. Heptachlor Epoxide (1024-57-3)			X	< 0.08	< 3.8						ug/l	ug/d			
18P. PCB-1242 (53469-21-9)			X	< 0.71	< 33.9						ug/l	ug/d			
19P. PCB-1254 (11097-69-1)			X	< 0.71	< 33.9						ug/l	ug/d			
20P. PCB-1221 (11104-28-2)			X	N.D.											
21P. PCB-1232 (11141-16-5)			X	N.D.											
22P. PCB-1248 (12672-29-6)			X	N.D.											
23P. PCB-1260 (11096-82-5)			X	< 0.71	< 33.9						ug/l	ug/d			
24P. PCB-1016 (12674-11-2)			X	N.D.											
25P. Toxaphene (8001-35-2)			X	< 2.5	< 0.1						ug/l	mg/d			

DYE STUDY INFORMATION

BUILDING NUMBER	DRAIN NUMBER	DID DYE REACH EXPECT DESTINATION?	COMMENTS
53-2	1FD2	YES	TO SANITARY SEWER
53-2	1FD4	YES	TO SANITARY SEWER
53-2	1FD11	YES	TO SANITARY SEWER
53-2	1LV3	YES	TO SANITARY SEWER
53-2	1SD2	YES	TO SANITARY SEWER
53-2	1SD8	YES	TO SANITARY SEWER
53-2	1SD10	YES	TO SANITARY SEWER
53-2	1SD11	YES	TO SANITARY SEWER
53-2	1SD12	YES	TO SANITARY SEWER
53-2	1TD2	YES	TO SANITARY SEWER
53-2	1TD6	YES	TO SANITARY SEWER
53-2	1TD8	YES	TO SANITARY SEWER
53-2	1TL1	YES	TO SANITARY SEWER
53-2	1WF1	YES	TO SANITARY SEWER
53-410	1LV1	YES	TO SANITARY SEWER
53-523	1TL1	YES	TO SANITARY SEWER



SYMBOL LEGEND	
ED	EYE WASH DRAIN
FD	FLOOR DRAIN
LV	LAVATORY
RD	ROOF DRAIN
SD	SINK DRAIN
SH	SHOWER
SP	SUMP PIT W/PUMP
—SS—	SANITARY SEWER PIPE
TL	TOILET
TD	TRENCH DRAIN
UR	URINAL
WF	WATER FOUNTAIN

DYE TESTED DRAIN

NOTES:

DRAIN SCHEMATIC LAYOUT FROM L.A.N.L. DRAWINGS C-57355, C-57356, C-57361, 57362, 57381, 57382, C-51003, C-57383, C-57385, C-51019, C-51031, C-50165, C-50989, C-38 & 24 AND SITE VISITS.

15250-A

SANTA FE ENGINEERING, LTD.

TA 53-2
DRAIN SUMMARY

DRAWN	M.E.W.
DESIGN	M.E.W.
CHECKED	P.E.B.
DATE	2-3-92

SUBMITTED | RECOMMENDED | APPROVED

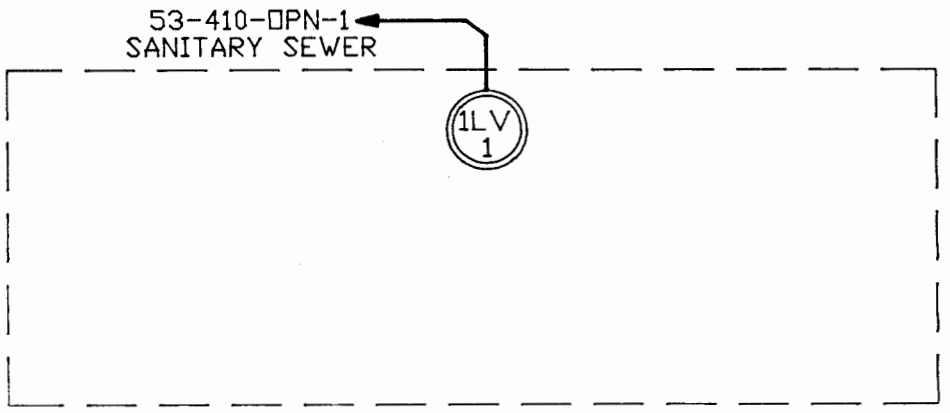
Los Alamos — Los Alamos National Laboratory, Los Alamos, New Mexico 87545

SHEET 1 OF 1

CLASSIFICATION | REVIEWER | DATE

REQUESTING DIVISION | LAB JOB NO. 11056-27 | DRAWING NO. FIGURE 1 | REV.

REQUESTING GROUP EM-8



SYMBOL LEGEND	
LV	LAVATORY

DYE TESTED DRAIN

NOTES:

1. SCHEMATIC BASED ON SITE VISIT.

SANTA FE ENGINEERING, LTD.

TA 53-410 DRAIN SUMMARY

DRAWN	M.E.W.
DESIGN	M.E.W.
CHECKED	P.E.B.
DATE	2-3-92

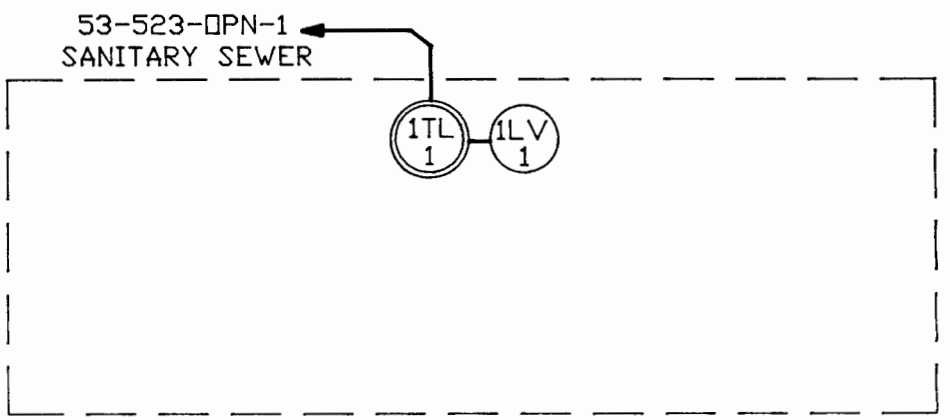
SUBMITTED	RECOMMENDED	APPROVED

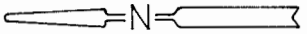
Los Alamos — Los Alamos National Laboratory, Los Alamos, New Mexico 87545

SHEET 1 OF 1

CLASSIFICATION | REVIEWER | DATE

REQUESTING DIVISION	LAB JOB NO.	DRAWING NO.	REV.
REQUESTING GROUP EM-8	11056-27	FIGURE 2	





SYMBOL LEGEND	
TL	TOILET
LV	LAVATORY

DYE TESTED DRAIN

NOTES:

1. SCHEMATIC BASED ON SITE VISIT.

SANTA FE ENGINEERING, LTD.

TA53-523 DRAIN SUMMARY

DRAWN	M.E.W.
DESIGN	M.E.W.
CHECKED	P.E.B.
DATE	2-3-92

SUBMITTED	RECOMMENDED	APPROVED

Los Alamos — Los Alamos National Laboratory, Los Alamos, New Mexico 87545

SHEET 1 OF 1

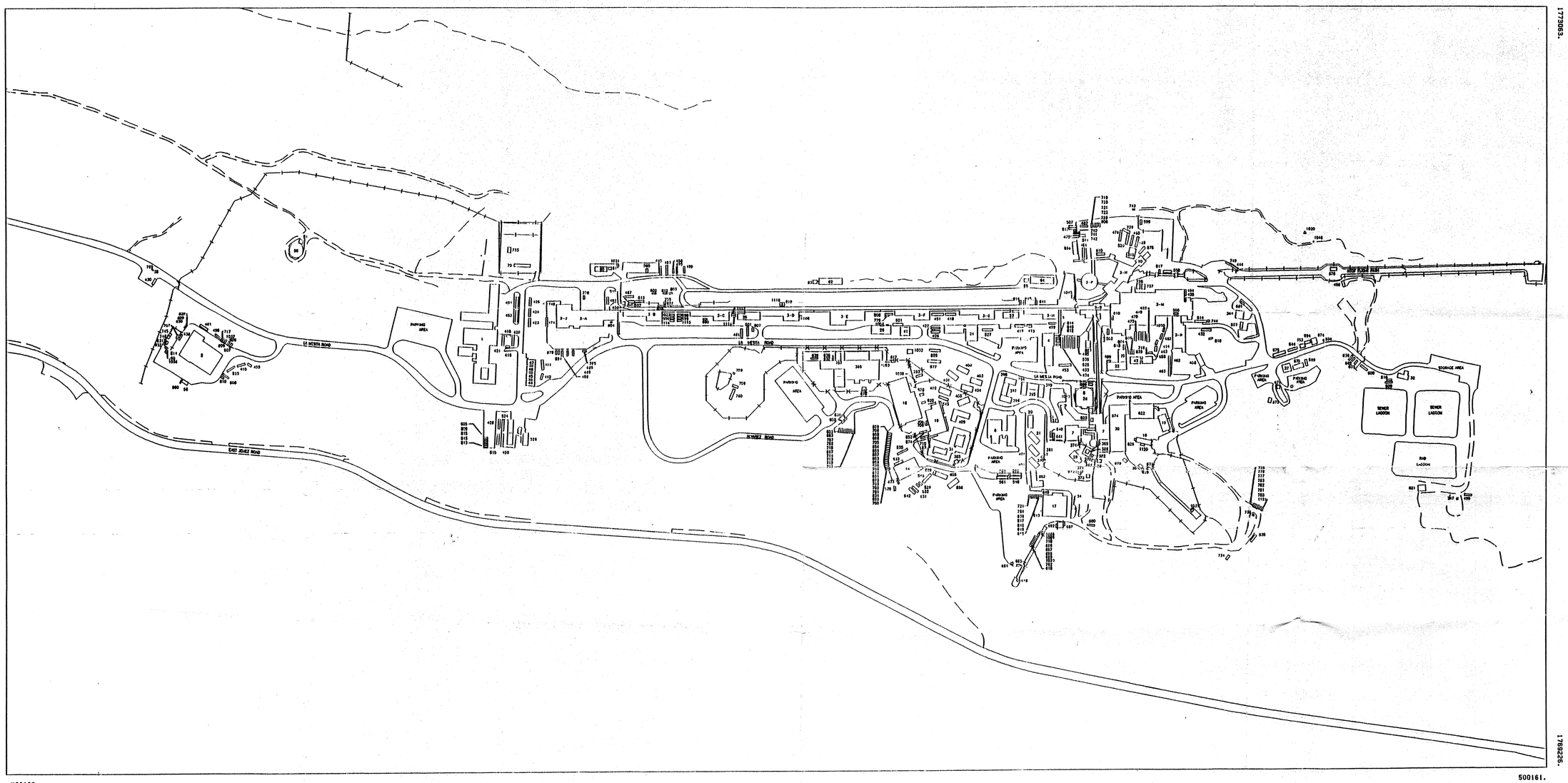
CLASSIFICATION	REVIEWER	DATE

REQUESTING DIVISION	LAB JOB NO.	DRAWING NO.	REV.
REQUESTING GROUP EM-8	11056-27	FIGURE 3	

TA-53

492182. 500161.

1773063. 1773063.



1769226. 1769226.

492182. 500161.

SCALE 1: 3600.

300 0 300 600 FEET

N

15250-B

TA-53 SITE PLAN		DRAWN	
		DESIGN	
		CHECKED	
		DATE	4-28-92
SUBMITTED	RECOMMENDED	APPROVED	
Los Alamos — Los Alamos National Laboratory, Los Alamos, New Mexico 87545		SHEET	1 OF 1
CLASSIFICATION	REVIEWER	DATE	
REQUESTING DIVISION	LAB JOB NO.	DRAWING NO.	REV.
REQUESTING GROUP EM-8	11056-29	FIGURE 4	