WASTEWATER STREAM CHARACTERIZATION FOR TA 16-362, 363, 370, 372, 386, 387, 388, 389, 390, 392, 394, 399, 401, 402, 406, 439, 476, 477, 478, 1365 & 1409

at
Los Alamos National Laboratory

ENVIRONMENTAL STUDY

CHARACTERIZATION REPORT # 11

15204

ENVIRONMENTAL MANAGEMENT DIVISION
Los Alamos National Laboratory
Los Alamos, New Mexico 87545

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ENVIRONMENTAL STUDY

prepared for:
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under subcontract 9-XG8-2874P-1

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EXECUTIVE SUMMARY

Buildings 362, 363, 370, 372, 386, 387, 388, 389, 390, 392, 394, 399, 401, 402, 406, 439, 476, 477, 478, 1365 and 1409 in TA-16 were visited to document all drain piping and to make permitting recommendations. The outfall pipes exiting the building are as follows:

1) from 16-362, 439, 1365 and 1409: no discharges;

2) from 16-363: one discharge permitted as 05A055;

3) from 16-370: two rain drains, one discharge permitted as 04A092, one discharge from two septic tanks, one discharge of condensate that is not permitted and one equipment vent;

4) from 16-372: an abandoned cooling tower with no discharges;

5) from 16-386, 387, 388 and 389: no discharge of waste water from these burning areas (discharge of contaminated storm water is a potential);

6) from 16-389: discharge from a septic tank;

7) from 16-390, 392, 394, 401, 402, 409 and 476: no discharges;

8) from 16-477: one discharge of rain water;

9) from 16-478: one discharge of condensate that should be permitted, one discharge from a steam pressure relief valve, one vent from a condensate tank and one potential discharge from a High Explosives (HE) sump;

Application forms are included for four outfalls (two are already permitted). Flows shown on the forms are estimated from site observations and discussions with users.

RecommendationS for repiping are provided to allow outfall consolidation to minimize permit maintenance and to bring the facility into compliance with the Laboratory's NPDES permit. Floor drain plugging is recommended where the potential for discharge of pollutants exists.

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

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1.0 INTRODUCTION

On June 28, 1991, Patrick E. Binkley of Santa Fe Engineering (SFE) toured buildings 362, 363, 370, 372, 386, 387, 388, 389, 390, 392, 394, 399, 401, 402, 406, 439, 476, 477, 478, 1365 and 1408 in TA-16 with Loren Abercrombie of Engineering and Information Resources (WX-12). 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. This report will not reflect any subsequent changes in piping or operation. 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 discharges 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 using the WX-12 drawings during a site visit to verify the SFE schematics and to insure that all pipes exiting the building were documented. The following information was used to define drain piping and characterize the wastewater streams:

1. Laboratory engineering drawings were used to prepare both WX-12 drawings and 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 Los Alamos National Laboratory (LANL) in September, 1990, the latest Federal Facilities Compliance Agreement (FFCA) between the Department of Energy (DOE) and the Environmental Protection 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. WX-12 verified drain piping by dye checking and

3. A site visit was performed to verify both WX-12 drawings and 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 3). 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 functions of each pipe exiting from the buildings are listed Appendix 1 in Tables 1 and 2, with an abbreviations list in Table 3. Appendix 2 contains the waste stream 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 a copy of the WX-12 drawings and dye study information. Flow schematics of the drains from building 370 is attached in Appendix 5 as Figure 2.

3.0 RECOMMENDATIONS FOR BUILDINGS 362, 439, 1365 AND 1409

These four buildings are transportainers that have no drains. No permitting or changes are recommended for these buildings.

4.0 RECOMMENDATION FOR BUILDING 363

This building contains the treaters for the waste water produced at the burning grounds. Figure 1 is a plot plan of the burning ground. The water passes through particulate filters then carbon absorbers and discharges through outfall 16-363-OPN-1 into the canyon. This outfall is permitted as 05A055. No changes are recommended. An EPA Form 2C is included in Appendix 3.

5.0 RECOMMENDATIONS FOR BUILDING 370

Table 1 is a list of the drains to the building outfalls and Figure 2 is a schematic of the piping. The table lists the drains that connect to each outfall pipe and includes recommendations for changes to the drain piping. The discussion below gives the reasoning for the recommendations.

5.1 Outfall 16-370-OPN-1 and 16-370-OPN-5

These two outfalls to daylight receive flow from the three roof drains. No permitting or changes are recommended. No EPA forms were prepared.

5.2 Outfall 16-370-OPN-2

This outfall receives flow from 29 floor drains (three of which are plugged), one air vent, one eye wash, one water fountain and one sink. This outfall is permitted as 04A092. The floor drains can receive metal shavings from the cutting equipment in the metal shop. Floor drains 1FD1 through 1FD17 and 3FD7 and 3FD8 should be plugged. The only drain to receive a regular flow is

1FD18. The flow is once through cooling water from a welding machine. The drain should be modified to exclude floor washings. The flow is less than 1 gpm when operating. The sink 3S1 should be removed. Water fountains 1WF1 should be repiped to the septic tank or replaced with bottled water. An EPA Form 2C is included in Appendix 3 for this outfall.

5.3 Outfall 16-370-OPN-3

This outfall is the combined effluent from two septic tanks. The flow to the septic tanks is from rest room facilities, a water fountain and a metal shop. The floor drains and drain trough in the metal shop can receive oil and metal shavings. Plugging of these drains (3FD1 through 3FD4) and trough (3TD1) will eliminate the chance of overloading the septic tanks with oil and metal. No EPA forms were completed for this outfall.

5.4 Outfall 16-370-OPN-4

This outfall to daylight is from a steam valve pit outside of the building. The flow is 5 gpm of steam condensate. This flow is a result of a leak in the main condensate return system. The piping was plugged down stream from the building requiring the condensate from the building to be discharged to the canyon. The large and continuous amount of flow requires that the outfall be permitted. An EPA Form 2D is included in Appendix 3 for this outfall.

5.5 Outfall 16-370-OPN-6

This outfall is a vapor vent to atmosphere from equipment in the third floor metal shop. No changes or permitting are recommended. No EPA Forms were prepared.

6.0 RECOMMENDATIONS FOR BUILDING 372

This structure is an abandoned cooling tower and does not discharge any water. Removal of this cooling tower is recommended to eliminate the chance of any residue in the cooling tower being washed out during a rain storm. As this structure is dry and made of wood it is a considered a fire hazard. No permitting is recommended and no EPA forms were completed.

7.0 RECOMMENDATIONS FOR BUILDINGS 386, 387, 388 AND 399

These four areas are burning areas for high explosives (HE) contaminated equipment. The equipment will be burned to remove any HE prior to disposal in a landfill. The only discharge from this area will be storm water runoff. No EPA forms were prepared.

8.0 RECOMMENDATIONS FOR BUILDING 389

This is a control shelter for the burning areas. The building does have a sanitary discharge (16-389-OPN-1) to a septic tank. The discharge is from a rest room containing a toilet and a sink and from a storage room containing a floor drain. No changes or permitting are recommended for this outfall. No EPA forms were prepared.

9.0 RECOMMENDATIONS FOR BUILDINGS 390, 392, 394, 401, 402 AND 406

These five areas are all part of the burning grounds with no discharges directly to the environment. Structures 401 and 406 are filters that discharge HE contaminated water to carbon absorbers in building 363. No changes or permitting are recommended. No EPA forms were completed.

10.0 RECOMMENDATIONS FOR BUILDING 476

This building is an abandoned laboratory with no drains and no discharges. The layout of this building and buildings 477 and 478 is on Figure 3 in Appendix 5. The contents of the building have been removed. No changes or permitting are recommended. No EPA forms were completed.

11.0 RECOMMENDATIONS FOR BUILDING 477

This building is an abandoned laboratory and has one outfall (16-477-OPN-1). The entrance to the building has a trough that drains water to a pit southeast of the building. The building is presently empty and the only flow to the pit will be rain water. Plugging of the trough is recommended. No permitting is recommended for this outfall. No EPA forms were completed.

12.0 RECOMMENDATIONS FOR BUILDING 478

This building is used infrequently for HE testing and has four outfalls. Figure 3 shows the location of the outfalls. The discussion below provides recommendations for each outfall.

12.1 Outfall 16-478-OPN-1

This outfall to the canyon is from a floor drain (1FD1) in an equipment room. The flow is 2 gpm of steam condensate. The floor drain is covered with a steel plate that does not stop the flow to the canyon. This outfall was formerly permitted as 04A134 and was eliminated on May 16, 1990. This outfall should be repermitted since it has a continuous flow or the leak should be fixed. An EPA Form 2D is included for this outfall.

12.2 Outfall 16-478-OPN-2

This outfall is from a steam pressure relief valve. The relief valve was leaking through at a rate of about 10 gpm to grade. Tapping on the relief valve slowed the leak to about 5 gpm. Loren Abercrombie initiated a work order to have the valve repaired. This outfall should be included in a Notice of Intent (NOI) to Discharge. No EPA forms were prepared.

12.3 Outfall 16-478-OPN-3

This outfall is a vent to atmosphere from a condensate tank in the equipment room. This outfall usually has no flow. This outfall should be included in an NOI. No changes are recommended. No EPA forms were prepared.

12.4 Outfall 16-478-OPN-4

The room in which the testing is performed has a trough that flows to an HE sump outside the building. The sump has no discharge point, but could overflow from rain water leaking into the sump. Installing a level alarm on the sump is recommended. No permitting is recommended and no EPA forms were prepared.

13.0 CONCLUSION

This document provides the information to characterize buildings 362, 363, 370, 372, 386, 387, 388, 389, 390, 392, 394, 399, 401, 402, 406, 439, 476, 477, 478, 1365 and 1408 in TA-16. Permit application forms have been completed for the following outfalls (Appendix 3):

Forms 2C:

1. 16-363-OPN-1 (05A055)
2. 16-370-OPN-2 (04A092)

Forms 2D:

1. 16-370-OPN-4
2. 16-478-OPN-1

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

Vapor vents:

1. 16-370-OPN-6
2. 16-478-OPN-2
3. 16-478-OPN-3

Areas with no discharges:

1. 16-362
2. 16-372
3. 16-390
4. 16-392
5. 16-394
6. 16-401
7. 16-402
8. 16-406
9. 16-439
10. 16-476
11. 16-478-OPN-4
12. 16-1365
13. 16-1409

Storm water discharges:

1. 16-370-OPN-1
2. 16-370-OPN-5
3. 16-386
4. 16-387
5. 16-388
6. 16-399
7. 16-477-OPN-1

Discharges to septic tanks:

1. 16-370-OPN-3
2. 16-389-OPN-1

The following outfalls have storm water combined with non-storm water discharges, as defined in Forms 2D, Appendix 3:

None

Recommended permitting and corrective actions are outlined in Tables 1 and 2 as well as in the above text. Corrective actions

should be performed as soon as practicable to minimize the chance of unpermitted discharge of pollutants.

TABLE 1: TA 16-370 DRAIN SUMMARY

OUTFALL NUMBER	ID NUMBER	ROOM ACTIVITY	STATUS OR RECOMMENDATIONS	EPA FORM PREPARED
16-370-OPN-1	RD1	Roof	No change	No
	RD3	Roof	No change	
16-370-OPN-2 03A092	1AVD1	Storage	No change	Yes
	1EW1	Metal shop	No change	
	1FD1	Tool storage	Plug	
	1FD2	Tool storage	Plug	
	1FD3	Tool storage	Plug	
	1FD4	Tool storage	Plug	
	1FD5	Tool storage	Plug	
	1FD6	Metal shop	Plug	
	1FD7	Metal shop	Plug	
	1FD8	Metal shop	Plug	
	1FD9	Metal shop	Plug	
	1FD10	Metal shop	Plug	
	1FD11	Metal shop	Plugged	
	1FD12	Metal shop	Plug	
	1FD13	Storage	Plug	
	1FD14	Storage	Plug	
	1FD15	Storage	Plug	
	1FD16	Storage	Plug	
	1FD17	Storage	Plug	
	1FD18	Storage	Modify	
	1WF1	Storage	Repipe to septic tank	
	2FD1	Equipment room	No change	
	2FD2	Equipment room	No change	
	2FD3	Equipment room	No change	
	2FD4	Equipment room	No change	
	2FD5	Equipment room	No change	
	2FD6	Equipment room	No change	
	2FD7	Equipment room	No change	
	3FD7	Storage	Plug	
	3FD8	Storage	Plug	
	3FD9	Office	Plugged	
	3FD10	Office	Plugged	
	3S1	Storage	Remove	

TABLE 1: TA 16-370 DRAIN SUMMARY

OUTFALL NUMBER	ID NUMBER	ROOM ACTIVITY	STATUS OR RECOMMENDATIONS	EPA FORM PREPARED
16-370-OPN-3 Septic Tank	1S1	Rest room	No change	No
	1T1	Rest room	No change	
	3FD1	Metal shop	Plug	
	3FD2	Metal shop	Plug	
	3FD3	Metal shop	Plug	
	3FD4	Metal shop	Plug	
	3FD5	Rest room	No change	
	3FD6	Rest room	No change	
	3LV1	Rest room	No change	
	3LV2	Rest room	No change	
	3T1	Rest room	No change	
	3T2	Rest room	No change	
	3T3	Rest room	No change	
	3TD1	Metal shop	Plug	
	3UR1	Rest room	No change	
	3WF1	Hallway	No change	
16-370-OPN-4	1STD1	Steam pit	Permit	Yes
16-370-OPN-5	RD2	Roof	No change	No
16-370-OPN-6		Equipment vent	No change	No

TABLE 2: TA 16-478 DRAIN SUMMARY

OUTFALL NUMBER	ID NUMBER	ROOM ACTIVITY	STATUS OR RECOMMENDATIONS	EPA FORM PREPARED
16-478-OPN-1	1FD1	Equipment Room	Permit or Repair	Yes
16-478-OPN-2		Steam Relief Valve	NOI	No
16-478-OPN-3		Condesate Vent	NOI	No
16-478-OPN-4		Sump Drain	Alarm sump level	No

TABLE 3
SUMMARY OF ABBREVIATIONS

ABBREVIATION	MEANING
AVD	Air Vent Drain
EW	Eye Wash
FD	Floor Drain
LV	Lavatory
RD	Roof Drain
S	Sink
STD	Steam Pit Drain
T	Toilet
TD	Trough Drain
UR	Urinal
WF	Water Fountain

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TA	BLDG	OUTLET PIPING NUMBER	EPA OUTFALL #	DRAIN #	ROOM DESCRIPTION	FLOW	RATE	PERIODICITY	SEASONAL	ROOM #	SOURCE TYPES
16	362	16-362			TRANSPORTAINER			NO FLOW	no		NONE
16	363	16-363-OPN-1	05A055		WATER TREATER BUILDING	0.08	GPM	1 750 GAL BATCH/WEEK	no		HE CONTAMINATED WATER
16	370	16-370-OPN-1		RD1	ROOF			MOSTLY IN SUMMER	no	ROOF	RAIN
16	370	16-370-OPN-1		RD3	ROOF			MOSTLY IN SUMMER	no	ROOF	RAIN
16	370	16-370-OPN-2	04A092	1AVD1	AIR VENT			MORE IN RAINY SEASON	no	102	CONDENSED WATER
16	370	16-370-OPN-2	04A092	1EW1	METAL SHOP			DURING EMERGENCY	no	103	POTABLE WATER
16	370	16-370-OPN-2	04A092	1FD01	TOOL STORAGE			4 DAYS PER WEEK	no	104	FLOOR WASHINGS
16	370	16-370-OPN-2	04A092	1FD02	TOOL STORAGE			4 DAYS PER WEEK	no	104	FLOOR WASHINGS
16	370	16-370-OPN-2	04A092	1FD03	TOOL STORAGE			4 DAYS PER WEEK	no	104	FLOOR WASHINGS
16	370	16-370-OPN-2	04A092	1FD04	TOOL STORAGE			4 DAYS PER WEEK	no	104	FLOOR WASHINGS
16	370	16-370-OPN-2	04A092	1FD05	TOOL STORAGE			4 DAYS PER WEEK	no	103	FLOOR WASHINGS
16	370	16-370-OPN-2	04A092	1FD06	METAL SHOP			4 DAYS PER WEEK	no	103	FLOOR WASHINGS
16	370	16-370-OPN-2	04A092	1FD07	METAL SHOP			4 DAYS PER WEEK	no	103	FLOOR WASHINGS
16	370	16-370-OPN-2	04A092	1FD08	METAL SHOP			4 DAYS PER WEEK	no	103	FLOOR WASHINGS
16	370	16-370-OPN-2	04A092	1FD09	METAL SHOP			4 DAYS PER WEEK	no	103	FLOOR WASHINGS
16	370	16-370-OPN-2	04A092	1FD10	METAL SHOP			4 DAYS PER WEEK	no	103	FLOOR WASHINGS
16	370	16-370-OPN-2	04A092	1FD11	METAL SHOP			PLUGGED	no	103	NONE
16	370	16-370-OPN-2	04A092	1FD12	METAL SHOP			4 DAYS PER WEEK	no	103	FLOOR WASHINGS
16	370	16-370-OPN-2	04A092	1FD13	STORAGE			4 DAYS PER WEEK	no	101	FLOOR WASHINGS
16	370	16-370-OPN-2	04A092	1FD14	STORAGE			4 DAYS PER WEEK	no	101	FLOOR WASHINGS
16	370	16-370-OPN-2	04A092	1FD15	STORAGE			4 DAYS PER WEEK	no	101	FLOOR WASHINGS
16	370	16-370-OPN-2	04A092	1FD16	STORAGE			4 DAYS PER WEEK	no	101	FLOOR WASHINGS
16	370	16-370-OPN-2	04A092	1FD17	STORAGE			4 DAYS PER WEEK	no	102	FLOOR WASHINGS
16	370	16-370-OPN-2	04A092	1FD18	STORAGE	1	GPM	FLOWS WHEN WELDING	no	102	NON CONTACT COOLING WATER
16	370	16-370-OPN-2	04A092	1WF1	STORAGE			4 DAYS PER WEEK	no	102	DRINKING WATER
16	370	16-370-OPN-2	04A092	2FD01	EQUIPMENT ROOM			4 DAYS PER WEEK	no	201	FLOOR WASHINGSS
16	370	16-370-OPN-2	04A092	2FD02	EQUIPMENT ROOM			4 DAYS PER WEEK	no	201	FLOOR WASHINGS
16	370	16-370-OPN-2	04A092	2FD03	EQUIPMENT ROOM			4 DAYS PER WEEK	no	201	FLOOR WASHINGS
16	370	16-370-OPN-2	04A092	2FD04	EQUIPMENT ROOM			4 DAYS PER WEEK	no	201	FLOOR WASHINGS
16	370	16-370-OPN-2	04A092	2FD05	EQUIPMENT ROOM			4 DAYS PER WEEK	no	201	FLOOR WASHINGS
16	370	16-370-OPN-2	04A092	2FD06	EQUIPMENT ROOM			4 DAYS PER WEEK	no	201	FLOOR WASHINGS
16	370	16-370-OPN-2	04A092	2FD07	EQUIPMENT ROOM			4 DAYS PER WEEK	no	201	FLOOR WASHINGS
16	370	16-370-OPN-2	04A092	3FD07	STORAGE			4 DAYS PER WEEK	no	301	FLOOR WASHINGS
16	370	16-370-OPN-2	04A092	3FD08	STORAGE			4 DAYS PER WEEK	no	301	FLOOR WASHINGS
16	370	16-370-OPN-2	04A092	3FD09	OFFICE			PLUGGED	no	301	NONE
16	370	16-370-OPN-2	04A092	3FD10	OFFICE			PLUGGED	no	301	NONE
16	370	16-370-OPN-2	04A092	3S1	STORAGE			4 DAYS PER WEEK	no	301	HAND WASHINGS
16	370	16-370-OPN-3	SEPTIC TANK	1S1	REST ROOM			4 DAYS PER WEEK	no	101	SANITARY WASTE

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TA BLDG	OUTLET PIPING NUMBER	EPA OUTFALL #	DRAIN #	ROOM DESCRIPTION	FLOW RATE	PERIODICITY	SEASONAL	ROOM #	SOURCE TYPES
16 370	16-370-OPN-3	SEPTIC TANK	1T1	REST ROOM		4 DAYS PER WEEK	no	101	SANITARY WASTE
16 370	16-370-OPN-3	SEPTIC TANK	3FD01	METAL SHOP		4 DAYS PER WEEK	no	302	FLOOR WASHINGS
16 370	16-370-OPN-3	SEPTIC TANK	3FD02	METAL SHOP		4 DAYS PER WEEK	no	302	FLOOR WASHINGS
16 370	16-370-OPN-3	SEPTIC TANK	3FD03	METAL SHOP		4 DAYS PER WEEK	no	302	FLOOR WASHINGS
16 370	16-370-OPN-3	SEPTIC TANK	3FD04	METAL SHOP		4 DAYS PER WEEK	no	302	FLOOR WASHINGS
16 370	16-370-OPN-3	SEPTIC TANK	3FD5	REST ROOM		4 DAYS PER WEEK	no	304	FLOOR WASHINGS
16 370	16-370-OPN-3	SEPTIC TANK	3FD6	REST ROOM		4 DAYS PER WEEK	no	303	FLOOR WASHINGS
16 370	16-370-OPN-3	SEPTIC TANK	3LV1	REST ROOM		4 DAYS PER WEEK	no	304	HAND WASHING
16 370	16-370-OPN-3	SEPTIC TANK	3LV2	REST ROOM		4 DAYS PER WEEK	no	303	HAND WASHINGS
16 370	16-370-OPN-3	SEPTIC TANK	3T1	REST ROOM		4 DAYS PER WEEK	no	304	SANITARY WASTE
16 370	16-370-OPN-3	SEPTIC TANK	3T2	REST ROOM		4 DAYS PER WEEK	no	303	SANITARY WASTE
16 370	16-370-OPN-3	SEPTIC TANK	3T3	REST ROOM		4 DAYS PER WEEK	no	303	SANITARY WASTE
16 370	16-370-OPN-3	SEPTIC TANK	3TD1	METAL SHOP		4 DAYS PER WEEK	no	302	FLOOR WASHINGS
16 370	16-370-OPN-3	SEPTIC TANK	3UR1	REST ROOM		4 DAYS PER WEEK	no	304	SANITARY WASTE
16 370	16-370-OPN-3	SEPTIC TANK	3WF1	HALLWAY		MORE IN SUMMER	no	HALLWAY	DRINKING WATER
16 370	16-370-OPN-4		1STD1	STEAM PIT	5 GPM	DURING LEAKS	no	102	STEAM CONDENSATE
16 370	16-370-OPN-5		RD2	ROOF		MOSTLY IN SUMMER	no	ROOF	RAIN
16 370	16-370-OPN-6			EQUIPMENT VENT		NO LIQUIDS	no	301	VAPOR VENT
16 372	16-372			COOLING TOWER (ABANDONED)		ABANDONED	no		NONE
16 386	16-386			BURNING AREA		MOSTLY SUMMER	no		RAIN
16 387	16-387			BURNING AREA		MOSTLY SUMMER	no		RAIN
16 388	16-388			BURNING AREA		MOSTLY SUMMER	no		RAIN
16 389	16-389-OPN-1	SEPTIC TANK	1FD1	CONTROL SHELTER		4 DAYS PER WEEK	no	STORAGE	FLOOR WASHINGS
16 389	16-389-OPN-1	SEPTIC TANK	1S1	CONTROL SHELTER		4 DAYS PER WEEK	no	REST ROOM	HAND WASHING
16 389	16-389-OPN-1	SEPTIC TANK	1T1	CONTROL SHELTER		4 DAYS PER WEEK	no	REST ROOM	SANITARY WASTE
16 390	16-390			BACK WASH BUILDING		NO FLOW	no		NONE
16 392	16-392			FILTER BED		NO FLOW	no		HE CONTAMINATED WATER
16 394	16-394			FILTER BED		NO FLOW	no		HE CONTAMINATED WATER
16 399	16-399			BURNING AREA		MOSTLY SUMMER	no		RAIN
16 401	16-401			PRESSURE TANK		NO FLOW	no		HE CONTAMINATED WATER
16 402	16-402			AIR HEATER		NO FLOW	no		NONE
16 406	16-406			PRESSURE TANK		NO FLOW	no		HE CONTAMINATED WATER
16 439	16-439			TRANSPORTAINER		NO FLOW	no		NONE
16 476	16-476			LAB		BUILDING NOT USED	no		NONE
16 477	16-477-OPN-1			LAB		BUILDING NOT USED	no		NONE
16 478	16-478-OPN-1	04A134	1FD1	LAB	2 GPM	CONTINUOUS	no	EQUIP RM	STEAM CONDENSATE
16 478	16-478-OPN-2			LAB	5 GPM	CONTINUOUS (BROKEN)	no	EQUIP RM	STEAM CONDENSATE
16 478	16-478-OPN-3			LAB		DURING LEAKS	no	EQUIP RM	STEAM CONDENSATE

REPORT 11

TA	BLDG	OUTLET PIPING NUMBER	EPA OUTFALL #	DRAIN #	ROOM DESCRIPTION	FLOW RATE	PERIODICITY	SEASONAL	ROOM #	SOURCE TYPES
16	478	16-478-OPN-4			LAB		DURING UPSETS	no	TEST RM	FLOOR SPILLAGE
16	1,365	16-1365			TRANSPORTAINER		NO FLOW	no		NONE
16	1,409	16-1409			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)
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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			C. LONGITUDE			D. RECEIVING WATER (name)
	1. DEG.	2. MIN.	3. SEC.	1. DEG.	2. MIN.	3. SEC.	
05A055	35	50	48	106	19	48	VALLE CANYON
04A092	35	50	11	106	20	13	WATER CANYON

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 avera flows between intakes, operations, treatment units, and outfalls. If a water balance cannot be determined *(e.g., for certain mining activities)*, provide 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 wastewat cooling water, and storm water runoff; (2) The average flow contributed by each operation; and (3) The treatment received by the wastewater. Contin on additional sheets if necessary.

1. OUTFALL NO. (list)	2. OPERATION(S) CONTRIBUTING FLOW		3. TREATMENT		
	a. OPERATION (list)	b. AVERAGE FLOW (include units)	a. DESCRIPTION	b. LIST CODES FR TABLE 2C-1	
055	TA 16-363 HE BURNING GROUNDS EFFLUENT WATER	.08 GPM	A SAND FILTER IS USED TO FILTER OUT HE RESIDUE. CARBON ADSORBERS REMOVE COD.	1R	2A
092	TA 16-370 METAL FORMING BUILDING	1 GPM	NONE		

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

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?

[X] YES *(complete the following table)* [ ] NO *(go to Section III)*

1. OUTFALL NUMBER *(list)*	2. OPERATION(s) CONTRIBUTING FLOW *(list)*	3. FREQUENCY a. DAYS PER WEEK *(specify average)*	3. FREQUENCY b. MONTHS PER YEAR *(specify average)*	4. FLOW a. FLOW RATE *(in mgd)* 1. LONG TERM AVERAGE	4. FLOW a. FLOW RATE *(in mgd)* 2. MAXIMUM DAILY	4. FLOW b. TOTAL VOLUME *(specify with units)* 1. LONG TERM AVERAGE	4. FLOW b. TOTAL VOLUME *(specify with units)* 2. MAXIMUM DAILY	4. FLOW c. DUR ATIO *(in da*
055	HIGH EXPLOSIVE DISCH.	1	12	1.2X	8 X	115	800	1
				10-4	10-4	GPD	GPD	H/I
092	NONCONTACT COOLING	3	2	2.4X	2.4X	240	240	4
	WATER			10-4	10-4	GPD	GPD	H/I

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)* [X] 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)* [X] 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 unit used in the applicable effluent guideline, and indicate the affected outfalls.

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

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 wast water treatment equipment or practices or any other environmental programs which may affect the discharges described in this application? This include but is not limited to, permit conditions, administrative or enforcement orders, enforcement compliance schedule letters, stipulations, court orders, and gra or loan conditions.

[ ] YES *(complete the following table)* [X] NO *(go to Item IV-B)*

1. IDENTIFICATION OF CONDITION, AGREEMENT, ETC.	2. AFFECTED OUTFALLS a. NO.	2. AFFECTED OUTFALLS b. SOURCE OF DISCHARGE	3. BRIEF DESCRIPTION OF PROJECT	4. FINAL COM PLIANCE DATE a. RE-QUIRED	4. FINAL COM PLIANCE DATE b. PRO-JECTED

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

 CONTINUE ON PAG

CONTINUED FROM PAGE 2

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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 ma 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 possession.

1. POLLUTANT	2. SOURCE	1. POLLUTANT	2. SOURCE
n-BUTYL ACETATE	055 AS A SOLVENT IN HE OPERATIONS		

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)*

CONTINUE ON REVE

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)* X 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)* X 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 designe assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the syste those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and comp I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violation

A. NAME & OFFICIAL TITLE (Type or print)	B. PHONE (Area code & no.)
JERRY L. BELLOWS, DOE AREA MANAGER ALLEN J. TIEDMAN, ASSOC. DIRECTOR FOR OPERATIONS	505-667-5105 505-667-9390
C. SIGNATURE	D. DATE SIGNED

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

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

OUTFALL NO. 05A055

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 (2) MASS	c. LONG TERM AVRG. VALUE (if available) (1) CONCENTRATION	c. LONG TERM AVRG. VALUE (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)*	3.4	1.5						mg/l	g/d			
b. Chemical Oxygen Demand *(COD)*	32.5	14.1						mg/l	g/d			
c. Total Organic Carbon *(TOC)*	8.8	3.8						mg/l	g/d			
d. Total Suspended Solids *(TSS)*	< 1	< 435.3						mg/l	mg/d			
e. Ammonia *(as N)*	.43	187.2						mg/l	mg/d			
f. Flow	VALUE 115		VALUE		VALUE			gal/day		VALUE		
g. Temperature *(winter)*	VALUE 18.2		VALUE		VALUE			°C		VALUE		
h. Temperature *(summer)*	VALUE		VALUE		VALUE			°C		VALUE		
i. pH	MINIMUM 7.16	MAXIMUM 9.0	MINIMUM	MAXIMUM				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 (2) MASS	c. LONG TERM AVRG. VALUE (if available) (1) CONCENTRATION	c. LONG TERM AVRG. VALUE (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	< .5	< 217.6						mg/l	mg/d			
b. Chlorine, Total Residual	X		.2	87.1						mg/l	mg/d			
c. Color	X		18							units				
d. Fecal Coliform		X												
e. Fluoride (16984-48-8)	X		.32	139.3						mg/l	mg/d			
f. Nitrate-Nitrite *(as N)*	X		.985	428.7						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		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	
g. Nitrogen, Total Organic (as N)	X		27.4	11.9						mg/l	g/d			
h. Oil and Grease	X		24	10.4						mg/l	g/d			
i. Phosphorus (as P), Total (7723-14-0)	X		.07	30.5						mg/l	mg/d			
j. Radioactivity														
(1) Alpha, Total	X		5	2.2						pCi/l	nCi/d			
(2) Beta, Total	X		3.8	1.7						pCi/l	nCi/d			
(3) Radium, Total	X													
(4) Radium 226, Total	X		.04	17.4						pCi/l	pCi/d			
k. Sulfate (as SO_4) (14808-79-8)	X		6.02	2.6						mg/l	g/d			
l. Sulfide (as S)		X	< .05	< 21.8						mg/l	mg/d			
m. Sulfite (as SO_3) (14265-45-3)		X												
n. Surfactants	X		.36	156.7						mg/l	mg/d			
o. Aluminum, Total (7429-90-5)		X	< .04	< 17.4						mg/l	mg/d			
p. Barium, Total (7440-39-3)	X		.76	330.8						mg/l	mg/d			
q. Boron, Total (7440-42-8)	X		.03	13.1						mg/l	mg/d			
r. Cobalt, Total (7440-48-4)		X	< .1	< 43.5						mg/l	mg/d			
s. Iron, Total (7439-89-6)	X		.28	121.9						mg/l	mg/d			
t. Magnesium, Total (7439-95-4)	X		3	1.3						mg/l	g/d			
u. Molybdenum, Total (7439-98-7)	X		.042	18.3						mg/l	mg/d			
v. Manganese, Total (7439-96-5)	X		.007	3.0						mg/l	mg/d			
w. Tin, Total (7440-31-5)		X	< .050	< 21.8						mg/l	mg/d			
x. Titanium, Total (7440-32-6)		X	< .004	< 1.7						mg/l	mg/d			

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NM0890010515	05A055

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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	< .050	< 21.8						mg/l	mg/d			
2M. Arsenic, Total (7440-38-2)			X	< .002	< 870.6						mg/l	ug/d			
3M. Beryllium, Total, 7440-41-7)			X	< .001	< 435.3						mg/l	ug/d			
4M. Cadmium, Total (7440-43-9)			X	< .010	< 4.4						mg/l	mg/d			
5M. Chromium, Total (7440-47-3)		X		.071	30.9						mg/l	mg/d			
6M. Copper, Total (7440-50-8)		X		.032	13.9						mg/l	mg/d			
7M. Lead, Total (7439-92-1)			X	< .050	< 21.8						mg/l	mg/d			
8M. Mercury, Total (7439-97-6)		X		.0002	87.1						mg/l	ug/d			
9M. Nickel, Total (7440-02-0)		X		.11	47.9						mg/l	mg/d			
10M. Selenium, Total (7782-49-2)			X	< .001	< 435.3						mg/l	ug/d			
11M. Silver, Total (7440-22-4)			X	< .010	< 4.4						mg/l	mg/d			
12M. Thallium, Total (7440-28-0)			X	< .4	< 174.1						mg/l	mg/d			
13M. Zinc, Total (7440-66-6)		X		.097	42.2						mg/l	mg/d			
14M. Cyanide, Total (57-12-5)		X		.12	52.2						mg/l	mg/d			
15M. Phenols, Total			X	< .01	< 4.4						mg/l	mg/d			
DIOXIN															
2,3,7,8-Tetrachlorodibenzo-P Dioxin (1764-01-6)			X	DESCRIBE RESULTS											

CONTINUED FROM THE FRONT

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	< .005	< 2.2						mg/l	mg/d			
4V. Bis (*Chloromethyl*) Ether (542-88-1)			X												
5V. Bromoform (75-25-2)			X	< .005	< 2.2						mg/l	mg/d			
6V. Carbon Tetrachloride (56-23-5)			X	< .005	< 2.2						mg/l	mg/d			
7V. Chlorobenzene (108-90-7)			X	< .005	< 2.2						mg/l	mg/d			
8V. Chlorodibromomethane (124-48-1)			X	< .005	< 2.2						mg/l	mg/d			
9V. Chloroethane (75-00-3)			X	< .010	< 4.4						mg/l	mg/d			
10V. 2-Chloroethylvinyl Ether (110-75-8)			X												
11V. Chloroform (67-66-3)			X	< .005	< 2.2						mg/l	mg/d			
12V. Dichlorobromomethane (75-27-4)			X	< .005	< 2.2						mg/l	mg/d			
13V. Dichlorodifluoromethane (75-71-8)			X												
14V. 1,1-Dichloroethane (75-34-3)			X	< .005	< 2.2						mg/l	mg/d			
15V. 1,2-Dichloroethane (107-06-2)			X	< .005	< 2.2						mg/l	mg/d			
16V. 1,1-Dichloroethylene (75-35-4)			X	< .005	< 2.2						mg/l	mg/d			
17V. 1,2-Dichloropropane (78-87-5)			X	< .005	< 2.2						mg/l	mg/d			
18V. 1,3-Dichloropropylene (542-75-6)			X												
19V. Ethylbenzene (100-41-4)			X	< .005	< 2.2						mg/l	mg/d			
20V. Methyl Bromide (74-83-9)			X	< .010	< 4.4						mg/l	mg/d			
21V. Methyl Chloride (74-87-3)			X	< .010	< 4.4						mg/l	mg/d			

CONTINUED FROM PAGE V-4

EPA I.D. NUMBER (copy from Item 1 of Form 1)	OUTFALL NUMBER
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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 – VOLATILE COMPOUNDS *(continued)*															
22V. Methylene Chloride (75-09-2)			X	< .005	< 2.2						mg/l	mg/d			
23V. 1,1,2,2-Tetrachloroethane (79-34-5)			X	< .005	< 2.2						mg/l	mg/d			
24V. Tetrachloroethylene (127-18-4)			X	< .005	< 2.2						mg/l	mg/d			
25V. Toluene (108-88-3)			X	< .005	< 2.2						mg/l	mg/d			
26V. 1,2-Trans-Dichloroethylene (156-60-5)			X	< .005	< 2.2						mg/l	mg/d			
27V. 1,1,1-Trichloroethane (71-55-6)		X		.006	2.6						mg/l	mg/d			
28V. 1,1,2-Trichloroethane (79-00-5)			X	< .005	< 2.2						mg/l	mg/d			
29V. Trichloroethylene (79-01-6)			X	< .005	< 2.2						mg/l	mg/d			
30V. Trichlorofluoromethane (75-69-4)		X		.0084	3.7						mg/l	mg/d			
31V. Vinyl Chloride (75-01-4)			X	< .010	< 4.4						mg/l	mg/d			
GC/MS FRACTION – ACID COMPOUNDS															
1A. 2-Chlorophenol (95-57-8)			X	< .010	< 4.4						mg/l	mg/d			
2A. 2,4-Dichlorophenol (120-83-2)			X	< .010	< 4.4						mg/l	mg/d			
3A. 2,4-Dimethylphenol (105-67-9)			X	< .010	< 4.4						mg/l	mg/d			
4A. 4,6-Dinitro-O-Cresol (534-52-1)			X	< .010	< 4.4						mg/l	mg/d			
5A. 2,4-Dinitrophenol (51-28-5)			X	< .010	< 4.4						mg/l	mg/d			
6A. 2-Nitrophenol (88-75-5)			X	< .010	< 4.4						mg/l	mg/d			
7A. 4-Nitrophenol (100-02-7)			X	< .010	< 4.4						mg/l	mg/d			
8A. P-Chloro-M-Cresol (59-50-7)			X	< .010	< 4.4						mg/l	mg/d			
9A. Pentachlorophenol (87-86-5)			X	< .010	< 4.4						mg/l	mg/d			
10A. Phenol (108-95-2)			X	< .010	< 4.4						mg/l	mg/d			

CONTINUED FROM THE FRONT

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 — BASE/NEUTRAL COMPOUNDS															
1B. Acenaphthene (83-32-9)			X	< .010	< 4.4						mg/l	mg/d			
2B. Acenaphtylene (208-96-8)			X	< .010	< 4.4						mg/l	mg/d			
3B. Anthracene (120-12-7)			X	< .010	< 4.4						mg/l	mg/d			
4B. Benzidine (92-87-5)			X	< .010	< 4.4						mg/l	mg/d			
5B. Benzo (a) Anthracene (56-55-3)			X	< .010	< 4.4						mg/l	mg/d			
6B. Benzo (a) Pyrene (50-32-8)			X	< .010	< 4.4						mg/l	mg/d			
7B. 3,4-Benzo-fluoranthene (205-99-2)			X	< .010	< 4.4						mg/l	mg/d			
8B. Benzo (ghi) Perylene (191-24-2)			X	< .010	< 4.4						mg/l	mg/d			
9B. Benzo (k) Fluoranthene (207-08-9)			X	< .010	< 4.4						mg/l	mg/d			
10B. Bis (2-Chloro-ethoxy) Methane (111-91-1)			X	< .010	< 4.4						mg/l	mg/d			
11B. Bis (2-Chloro-ethyl) Ether (111-44-4)			X	< .010	< 4.4						mg/l	mg/d			
12B. Bis (2-Chloroiso-propyl) Ether (102-60-1)			X	< .010	< 4.4						mg/l	mg/d			
13B. Bis (2-Ethyl-hexyl) Phthalate (117-81-7)			X	< .010	< 4.4						mg/l	mg/d			
14B. 4-Bromo-phenyl Phenyl Ether (101-55-3)			X	< .010	< 4.4						mg/l	mg/d			
15B. Butyl Benzyl Phthalate (85-68-7)			X	< .010	< 4.4						mg/l	mg/d			
16B. 2-Chloro-naphthalene (91-58-7)			X	< .010	< 4.4						mg/l	mg/d			
17B. 4-Chloro-phenyl Phenyl Ether (7005-72-3)			X	< .010	< 4.4						mg/l	mg/d			
18B. Chrysene (218-01-9)			X	< .010	< 4.4						mg/l	mg/d			
19B. Dibenzo (a,h) Anthracene (53-70-3)			X	< .010	< 4.4						mg/l	mg/d			
20B. 1,2-Dichloro-benzene (95-50-1)			X	< .010	< 4.4						mg/l	mg/d			
21B. 1,3-Dichloro-benzene (541-73-1)			X	< .010	< 4.4						mg/l	mg/d			

EPA I.D. NUMBER (copy from Item 1 of Form 1)	OUTFALL NUMBER
NM0890010515	05A055

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

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	< .010	< 4.4						mg/l	mg/d			
23B. 3,3'-Dichlorobenzidine (91-94-1)			X	< .010	< 4.4						mg/l	mg/d			
24B. Diethyl Phthalate (84-66-2)			X	< .010	< 4.4						mg/l	mg/d			
25B. Dimethyl Phthalate (131-11-3)			X	< .010	< 4.4						mg/l	mg/d			
26B. Di-N-Butyl Phthalate (84-74-2)			X	< .010	< 4.4						mg/l	mg/d			
27B. 2,4-Dinitrotoluene (121-14-2)			X	< .010	< 4.4						mg/l	mg/d			
28B. 2,6-Dinitrotoluene (606-20-2)			X	< .010	< 4.4						mg/l	mg/d			
29B. Di-N-Octyl Phthalate (117-84-0)			X	< .010	< 4.4						mg/l	mg/d			
30B. 1,2-Diphenylhydrazine *(as Azobenzene)* (122-66-7)			X	< .010	< 4.4						mg/l	mg/d			
31B. Fluoranthene (206-44-0)			X	< .010	< 4.4						mg/l	mg/d			
32B. Fluorene (86-73-7)			X	< .010	< 4.4						mg/l	mg/d			
33B. Hexachlorobenzene (118-74-1)			X	< .010	< 4.4						mg/l	mg/d			
34B. Hexachlorobutadiene (87-68-3)			X	< .010	< 4.4						mg/l	mg/d			
35B. Hexachlorocyclopentadiene (77-47-4)			X	< .010	< 4.4						mg/l	mg/d			
36B. Hexachloroethane (67-72-1)			X	< .010	< 4.4						mg/l	mg/d			
37B. Indeno *(1,2,3-cd)* Pyrene (193-39-5)			X	< .010	< 4.4						mg/l	mg/d			
38B. Isophorone (78-59-1)			X	< .010	< 4.4						mg/l	mg/d			
39B. Naphthalene (91-20-3)			X	< .010	< 4.4						mg/l	mg/d			
40B. Nitrobenzene (98-95-3)			X	< .010	< 4.4						mg/l	mg/d			
41B. N-Nitrosodimethylamine (62-75-9)			X	< .010	< 4.4						mg/l	mg/d			
42B. N-Nitrosodi-															

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	< .010	< 4.4						mg/l	mg/d			
44B. Phenanthrene (85-01-8)			X	< .010	< 4.4						mg/l	mg/d			
45B. Pyrene (129-00-0)			X	< .010	< 4.4						mg/l	mg/d			
46B. 1,2,4-Trichlorobenzene (120-82-1)			X	< .010	< 4.4						mg/l	mg/d			
GC/MS FRACTION – PESTICIDES															
1P. Aldrin (309-00-2)			X	< .06	< 26.1						ug/l	ug/d			
2P. α-BHC (319-84-6)			X	< 1.0	< 435.3						ug/l	ug/d			
3P. β-BHC (319-85-7)			X	< .4	< 174.1						ug/l	ug/d			
4P. γ-BHC (58-89-9)			X	< .12	< 52.2						ug/l	ug/d			
5P. δ-BHC (319-86-8)			X	< .24	< 104.5						ug/l	ug/d			
6P. Chlordane (57-74-9)			X	< .25	< 108.8						ug/l	ug/d			
7P. 4,4'-DDT (50-29-3)			X	< .06	< 26.1						ug/l	ug/d			
8P. 4,4'-DDE (72-55-9)			X	< .08	< 34.8						ug/l	ug/d			
9P. 4,4'-DDD (72-54-8)			X	< .08	< 34.8						ug/l	ug/d			
10P. Dieldrin (60-57-1)			X	< .08	< 34.8						ug/l	ug/d			
11P. α-Endosulfan (115-29-7)			X	< .05	< 21.8						ug/l	ug/d			
12P. β-Endosulfan (115-29-7)			X	< .08	< 34.8						ug/l	ug/d			
13P. Endosulfan Sulfate (1031-07-8)			X	< .09	< 39.2						ug/l	ug/d			
14P. Endrin (72-20-8)			X	< .06	< 26.1						ug/l	ug/d			
15P. Endrin Aldehyde (7421-93-4)			X	< .31	< 134.9						ug/l	ug/d			
16P. Heptachlor (76-44-8)			X	< .15	< 65.3						ug/l	ug/d			

CONTINUED FROM PAGE V-8

EPA I.D. NUMBER (copy from Item 1 of Form 1)	OUTFALL NUMBER
NM0890010515	05A055

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

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 -- PESTICIDES *(continued)*															
17P. Heptachlor Epoxide (1024-57-3)			X	< .08	< 34.8						ug/l	ug/d			
18P. PCB-1242 (53469-21-9)			X	< 2.0	< 870.6						ug/l	ug/d			
19P. PCB-1254 (11097-69-1)			X	< 2.0	< 870.6						ug/l	ug/d			
20P. PCB-1221 (11104-28-2)			X												
21P. PCB-1232 (11141-16-5)			X												
22P. PCB-1248 (12672-29-6)			X												
23P. PCB-1260 (11096-82-5)			X	< 2.0	< 870.6						ug/l	ug/d			
24P. PCB-1016 (12674-11-2)			X												
25P. Toxaphene (8001-35-2)			X	< 2.5	< 1.1						ug/l	mg/d			

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. 04A092

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 (2) MASS	c. LONG TERM AVRG. VALUE (if available) (1) CONCENTRATION	c. LONG TERM AVRG. VALUE (2) MASS	d. NO. OF ANALYSES	3. UNITS (specify if blank) a. CONCENTRATION	b. MASS	4. INTAKE (optional) a. LONG TERM AVERAGE VALUE (1) CONCENTRATION	a. LONG TERM AVERAGE VALUE (2) MASS	b. NO. OF ANALYSES
a. Biochemical Oxygen Demand *(BOD)*	< 2.0	< 1.8						mg/l	g/d			
b. Chemical Oxygen Demand *(COD)*	< 10.0	< 9.1						mg/l	g/d			
c. Total Organic Carbon *(TOC)*	.59	536.0						mg/l	mg/d			
d. Total Suspended Solids *(TSS)*	18.0	16.4						mg/l	g/d			
e. Ammonia *(as N)*	< 0.1	90.8						mg/l	mg/d			
f. Flow	VALUE 240		VALUE		VALUE			gal/day	of non	VALUE -contact cooling		water
g. Temperature *(winter)*	VALUE 13.9		VALUE		VALUE			°C		VALUE		
h. Temperature *(summer)*	VALUE NA		VALUE		VALUE			°C		VALUE		
i. pH	MINIMUM 8.45	MAXIMUM 8.80	MINIMUM 8.3	MAXIMUM 8.9				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	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 (2) MASS	c. LONG TERM AVRG. VALUE (if available) (1) CONCENTRATION	c. LONG TERM AVRG. VALUE (2) MASS	d. NO. OF ANALYSES	4. UNITS a. CONCENTRATION	b. MASS	5. INTAKE (optional) a. LONG TERM AVERAGE VALUE (1) CONCENTRATION	a. LONG TERM AVERAGE VALUE (2) MASS	b. NO. OF ANALYSES
a. Bromide (24959-67-9)		X	< 0.5	< 454.2						mg/l	mg/d			
b. Chlorine, Total Residual	X		0.05	45.4						mg/l	mg/d			
c. Color	X		7.0							units				
d. Fecal Coliform		X												
e. Fluoride (16984-48-8)	X		.21	190.8						mg/l	mg/d			
f. Nitrate-Nitrite *(as N)*	X		.304	276.2						mg/l	mg/d			

ITEM V-B CONTINUED FROM FRONT

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 (2) MASS	c. LONG TERM AVRG. VALUE (if available) (1) CONCENTRATION	c. LONG TERM AVRG. VALUE (2) MASS	d. NO. OF ANALYSES	4. UNITS a. CONCENTRATION	4. UNITS b. MASS	5. INTAKE (optional) 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	< 0.5	< 454.2						mg/l	mg/d			
h. Oil and Grease		X	< 1.05	< 953.8						mg/l	mg/d			
i. Phosphorus (as P), Total (7723-14-0)	X		.05	45.4						mg/l	mg/d			
j. Radioactivity														
(1) Alpha, Total	X		0.1	90.8						pCi/l	pCi/l			
(2) Beta, Total	X		6.6	6.0						pCi/l	nCi/l			
(3) Radium, Total	X													
(4) Radium 226, Total	X		.06	54.5						pCi/l	pCi/l			
k. Sulfate (as SO_4) (14808-79-8)	X		3.16	2.9						mg/l	g/d			
l. Sulfide (as S)		X												
m. Sulfite (as SO_3) (14265-45-3)		X	< .05	< 45.4						mg/l	mg/d			
n. Surfactants		X	< .1	< 90.8						mg/l	mg/d			
o. Aluminum, Total (7429-90-5)		X	< 0.04	< 36.3						mg/l	mg/d			
p. Barium, Total (7440-39-3)	X		0.03	27.3						mg/l	mg/d			
q. Boron, Total (7440-42-8)	X		0.02	18.2						mg/l	mg/d			
r. Cobalt, Total (7440-48-4)		X	< .1	< 90.8						mg/l	mg/d			
s. Iron, Total (7439-89-6)	X		0.41	372.4						mg/l	mg/d			
t. Magnesium, Total (7439-95-4)	X		2.5	2.3						mg/l	g/d			
u. Molybdenum, Total (7439-98-7)		X	< .02	< 18.2						mg/l	mg/d			
v. Manganese, Total (7439-96-5)	X		.01	9.1						mg/l	mg/d			
w. Tin, Total (7440-31-5)		X	< .050	< 45.4						mg/l	mg/d			
x. Titanium, Total		X	< .004	< 3.6						mg/l	mg/d			

EPA I.D. NUMBER (copy from Item 1 of Form 1)	OUTFALL NUMBER
NM0890010515	04A092

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	< .050	< 45.4						mg/l	mg/d			
2M. Arsenic, Total (7440-38-2)		X		.002	1.8						mg/l	mg/d			
3M. Beryllium, Total, 7440-41-7)			X	< .001	< 908.4						mg/l	ug/d			
4M. Cadmium, Total (7440-43-9)			X	< .010	< 9.1						mg/l	mg/d			
5M. Chromium, Total (7440-47-3)		X		.040	36.3						mg/l	mg/d			
6M. Copper, Total (7440-50-8)		X		.031	28.2						mg/l	mg/d			
7M. Lead, Total (7439-92-1)			X	< .050	< 45.4						mg/l	mg/d			
8M. Mercury, Total (7439-97-6)			X	< .0002	< 181.7						mg/l	ug/d			
9M. Nickel, Total (7440-02-0)		X		0.06	54.5						mg/l	mg/d			
10M. Selenium, Total (7782-49-2)			X	< .001	< 0.0						mg/l	ug/d			
11M. Silver, Total (7440-22-4)			X	< .010	< 9.1						mg/l	mg/d			
12M. Thallium, Total (7440-28-0)			X	< 0.4	< 363.4						mg/l	mg/d			
13M. Zinc, Total (7440-66-6)		X		.043	39.1						mg/l	mg/d			
14M. Cyanide, Total (57-12-5)			X	< .01	< 9.1						mg/l	mg/d			
15M. Phenols, Total			X	< .01	< 9.1						mg/l	mg/d			
DIOXIN															
2,3,7,8-Tetrachlorodibenzo-P-Dioxin (1764-01-6)			X	DESCRIBE RESULTS											

CONTINUED FROM THE FRONT

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	< .005	< 4.5						mg/l	mg/d			
4V. Bis *(Chloromethyl)* Ether (542-88-1)			X												
5V. Bromoform (75-25-2)			X	< .005	< 4.5						mg/l	mg/d			
6V. Carbon Tetrachloride (56-23-5)			X	< .005	< 4.5						mg/l	mg/d			
7V. Chlorobenzene (108-90-7)			X	< .005	< 4.5						mg/l	mg/d			
8V. Chlorodibromomethane (124-48-1)			X	< .005	< 4.5						mg/l	mg/d			
9V. Chloroethane (75-00-3)			X	< .010	< 9.1						mg/l	mg/d			
10V. 2-Chloroethylvinyl Ether (110-75-8)			X												
11V. Chloroform (67-66-3)			X	< .005	< 4.5						mg/l	mg/d			
12V. Dichlorobromomethane (75-27-4)			X	< .005	< 4.5						mg/l	mg/d			
13V. Dichlorodifluoromethane (75-71-8)			X												
14V. 1,1-Dichloroethane (75-34-3)			X	< .005	< 4.5						mg/l	mg/d			
15V. 1,2-Dichloroethane (107-06-2)			X	< .005	< 4.5						mg/l	mg/d			
16V. 1,1-Dichloroethylene (75-35-4)			X	< .005	< 4.5						mg/l	mg/d			
17V. 1,2-Dichloropropane (78-87-5)			X	< .005	< 4.5						mg/l	mg/d			
18V. 1,3-Dichloropropylene (542-75-6)			X												
19V. Ethylbenzene (100-41-4)			X	< .005	< 4.5						mg/l	mg/d			
20V. Methyl Bromide (74-83-9)			X	< .010	< 9.1						mg/l	mg/d			
21V. Methyl Chloride (74-87-3)			X	< .010	< 9.1						mg/l	mg/d			

CONTINUED FROM PAGE V-4

EPA I.D. NUMBER (copy from Item 1 of Form 1)	OUTFALL NUMBER
NM0890010515	04A092

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

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
GC/MS FRACTION – VOLATILE COMPOUNDS *(continued)*															
22V. Methylene Chloride (75-09-2)			X	< .005	< 4.5						mg/l	mg/d			
23V. 1,1,2,2-Tetrachloroethane (79-34-5)			X	< .005	< 4.5						mg/l	mg/d			
24V. Tetrachloroethylene (127-18-4)			X	< .005	< 4.5						mg/l	mg/d			
25V. Toluene (108-88-3)			X	< .005	< 4.5						mg/l	mg/d			
26V. 1,2-Trans-Dichloroethylene (156-60-5)			X	< .005	< 4.5						mg/l	mg/d			
27V. 1,1,1-Trichloroethane (71-55-6)			X	< .005	< 4.5						mg/l	mg/d			
28V. 1,1,2-Trichloroethane (79-00-5)			X	< .005	< 4.5						mg/l	mg/d			
29V. Trichloroethylene (79-01-6)			X	< .005	< 4.5						mg/l	mg/d			
30V. Trichlorofluoromethane (75-69-4)			X	< .005	< 4.5						mg/l	mg/d			
31V. Vinyl Chloride (75-01-4)			X	< .010	< 9.1						mg/l	mg/d			
GC/MS FRACTION – ACID COMPOUNDS															
1A. 2-Chlorophenol (95-57-8)			X	< .010	< 9.1						mg/l	mg/d			
2A. 2,4-Dichlorophenol (120-83-2)			X	< .010	< 9.1						mg/l	mg/d			
3A. 2,4-Dimethylphenol (105-67-9)			X	< .010	< 9.1						mg/l	mg/d			
4A. 4,6-Dinitro-O-Cresol (534-52-1)			X	< .010	< 9.1						mg/l	mg/d			
5A. 2,4-Dinitrophenol (51-28-5)			X	< .010	< 9.1						mg/l	mg/d			
6A. 2-Nitrophenol (88-75-5)			X	< .010	< 9.1						mg/l	mg/d			
7A. 4-Nitrophenol (100-02-7)			X	< .010	< 9.1						mg/l	mg/d			
8A. P-Chloro-M-Cresol (59-50-7)			X	< .010	< 9.1						mg/l	mg/d			
9A. Pentachlorophenol (87-86-5)			X	< .010	< 9.1						mg/l	mg/d			
10A. Phenol (108-95-2)			X	< .010	< 9.1						mg/l	mg/d			

CONTINUED FROM THE FRONT

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 – BASE/NEUTRAL COMPOUNDS															
1B. Acenaphthene (83-32-9)			X	< .010	< 9.1						mg/l	mg/d			
2B. Acenaphtylene (208-96-8)			X	< .010	< 9.1						mg/l	mg/d			
3B. Anthracene (120-12-7)			X	< .010	< 9.1						mg/l	mg/d			
4B. Benzidine (92-87-5)			X	< .010	< 9.1						mg/l	mg/d			
5B. Benzo *(a)* Anthracene (56-55-3)			X	< .010	< 9.1						mg/l	mg/d			
6B. Benzo *(a)* Pyrene (50-32-8)			X	< .010	< 9.1						mg/l	mg/d			
7B. 3,4-Benzo-fluoranthene (205-99-2)			X	< .010	< 9.1						mg/l	mg/d			
8B. Benzo *(ghi)* Perylene (191-24-2)			X	< .010	< 9.1						mg/l	mg/d			
9B. Benzo *(k)* Fluoranthene (207-08-9)			X	< .010	< 9.1						mg/l	mg/d			
10B. Bis *(2-Chloro-ethoxy)* Methane (111-91-1)			X	< .010	< 9.1						mg/l	mg/d			
11B. Bis *(2-Chloro-ethyl)* Ether (111-44-4)			X	< .010	< 9.1						mg/l	mg/d			
12B. Bis *(2-Chloroiso-propyl)* Ether (102-60-1)			X	< .010	< 9.1						mg/l	mg/d			
13B. Bis *(2-Ethyl-hexyl)* Phthalate (117-81-7)			X	< .010	< 9.1						mg/l	mg/d			
14B. 4-Bromo-phenyl Phenyl Ether (101-55-3)			X	< .010	< 9.1						mg/l	mg/d			
15B. Butyl Benzyl Phthalate (85-68-7)			X	< .010	< 9.1						mg/l	mg/d			
16B. 2-Chloro-naphthalene (91-58-7)			X	< .010	< 9.1						mg/l	mg/d			
17B. 4-Chloro-phenyl Phenyl Ether (7005-72-3)			X	< .010	< 9.1						mg/l	mg/d			
18B. Chrysene (218-01-9)			X	< .010	< 9.1						mg/l	mg/d			
19B. Dibenzo *(a,h)* Anthracene (53-70-3)			X	< .010	< 9.1						mg/l	mg/d			
20B. 1,2-Dichloro-benzene (95-50-1)			X	< .010	< 9.1						mg/l	mg/d			
21B. 1,3-Dichloro-															

EPA I.D. NUMBER (copy from Item 1 of Form 1): NM0890010515 | OUTFALL NUMBER: 04A092

CONTINUED FROM PAGE V-6

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	< .010	< 9.1						mg/l	mg/d			
23B. 3,3'-Dichlorobenzidine (91-94-1)			X	< .010	< 9.1						mg/l	mg/d			
24B. Diethyl Phthalate (84-66-2)			X	< .010	< 9.1						mg/l	mg/d			
25B. Dimethyl Phthalate (131-11-3)			X	< .010	< 9.1						mg/l	mg/d			
26B. Di-N-Butyl Phthalate (84-74-2)			X	< .010	< 9.1						mg/l	mg/d			
27B. 2,4-Dinitrotoluene (121-14-2)			X	< .010	< 9.1						mg/l	mg/d			
28B. 2,6-Dinitrotoluene (606-20-2)			X	< .010	< 9.1						mg/l	mg/d			
29B. Di-N-Octyl Phthalate (117-84-0)			X	< .010	< 9.1						mg/l	mg/d			
30B. 1,2-Diphenylhydrazine *(as Azobenzene)* (122-66-7)			X	< .010	< 9.1						mg/l	mg/d			
31B. Fluoranthene (206-44-0)			X	< .010	< 9.1						mg/l	mg/d			
32B. Fluorene (86-73-7)			X	< .010	< 9.1						mg/l	mg/d			
33B. Hexachlorobenzene (118-74-1)			X	< .010	< 9.1						mg/l	mg/d			
34B. Hexachlorobutadiene (87-68-3)			X	< .010	< 9.1						mg/l	mg/d			
35B. Hexachlorocyclopentadiene (77-47-4)			X	< .010	< 9.1						mg/l	mg/d			
36B. Hexachloroethane (67-72-1)			X	< .010	< 9.1						mg/l	mg/d			
37B. Indeno *(1,2,3-cd)* Pyrene (193-39-5)			X	< .010	< 9.1						mg/l	mg/d			
38B. Isophorone (78-59-1)			X	< .010	< 9.1						mg/l	mg/d			
39B. Naphthalene (91-20-3)			X	< .010	< 9.1						mg/l	mg/d			
40B. Nitrobenzene (98-95-3)			X	< .010	< 9.1						mg/l	mg/d			
41B. N-Nitrosodimethylamine (62-75-9)			X	< .010	< 9.1						mg/l	mg/d			

CONTINUED FROM THE FRONT

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
GC/MS FRACTION – BASE/NEUTRAL COMPOUNDS *(continued)*															
43B. N-Nitrosodiphenylamine (86-30-6)			X	< .010	< 9.1						mg/l	mg/d			
44B. Phenanthrene (85-01-8)			X	< .010	< 9.1						mg/l	mg/d			
45B. Pyrene (129-00-0)			X	< .010	< 9.1						mg/l	mg/d			
46B. 1,2,4-Trichlorobenzene (120-82-1)			X	< .010	< 9.1						mg/l	mg/d			
GC/MS FRACTION – PESTICIDES															
1P. Aldrin (309-00-2)			X	< .06	< 54.5						ug/l	ug/d			
2P. α-BHC (319-84-6)			X	< .02	< 18.2						ug/l	ug/d			
3P. β-BHC (319-85-7)			X	< .1	< 90.8						ug/l	ug/d			
4P. γ-BHC (58-89-9)			X	< .03	< 27.3						ug/l	ug/d			
5P. δ-BHC (319-86-8)			X	< .12	< 109.0						ug/l	ug/d			
6P. Chlordane (57-74-9)			X	< .25	< 227.1						ug/l	ug/d			
7P. 4,4'-DDT (50-29-3)			X	< .06	< 54.5						ug/l	ug/d			
8P. 4,4'-DDE (72-55-9)			X	< .08	< 72.7						ug/l	ug/d			
9P. 4,4'-DDD (72-54-8)			X	< .08	< 72.7						ug/l	ug/d			
10P. Dieldrin (60-57-1)			X	< .08	< 72.7						ug/l	ug/d			
11P. α-Endosulfan (115-29-7)			X	< .05	< 45.4						ug/l	ug/d			
12P. β-Endosulfan (115-29-7)			X	< .08	< 72.7						ug/l	ug/d			
13P. Endosulfan Sulfate (1031-07-8)			X	< .09	< 81.8						ug/l	ug/d			
14P. Endrin (72-20-8)			X	< .06	< 54.5						ug/l	ug/d			
15P. Endrin Aldehyde (7421-93-4)			X	< .62	< 563.2						ug/l	ug/d			
16P. Heptachlor			X	< .03	< 27.3						ug/l	ug/d			

CONTINUED FROM PAGE V-8

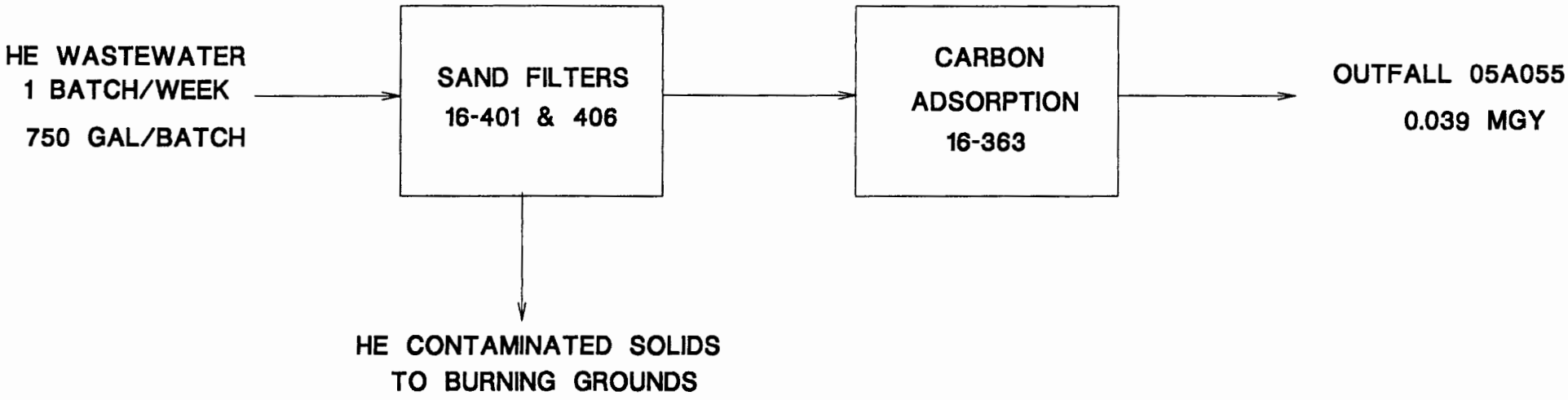
EPA I.D. NUMBER (copy from Item 1 of Form 1)	OUTFALL NUMBER
NM0890010515	04A092

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

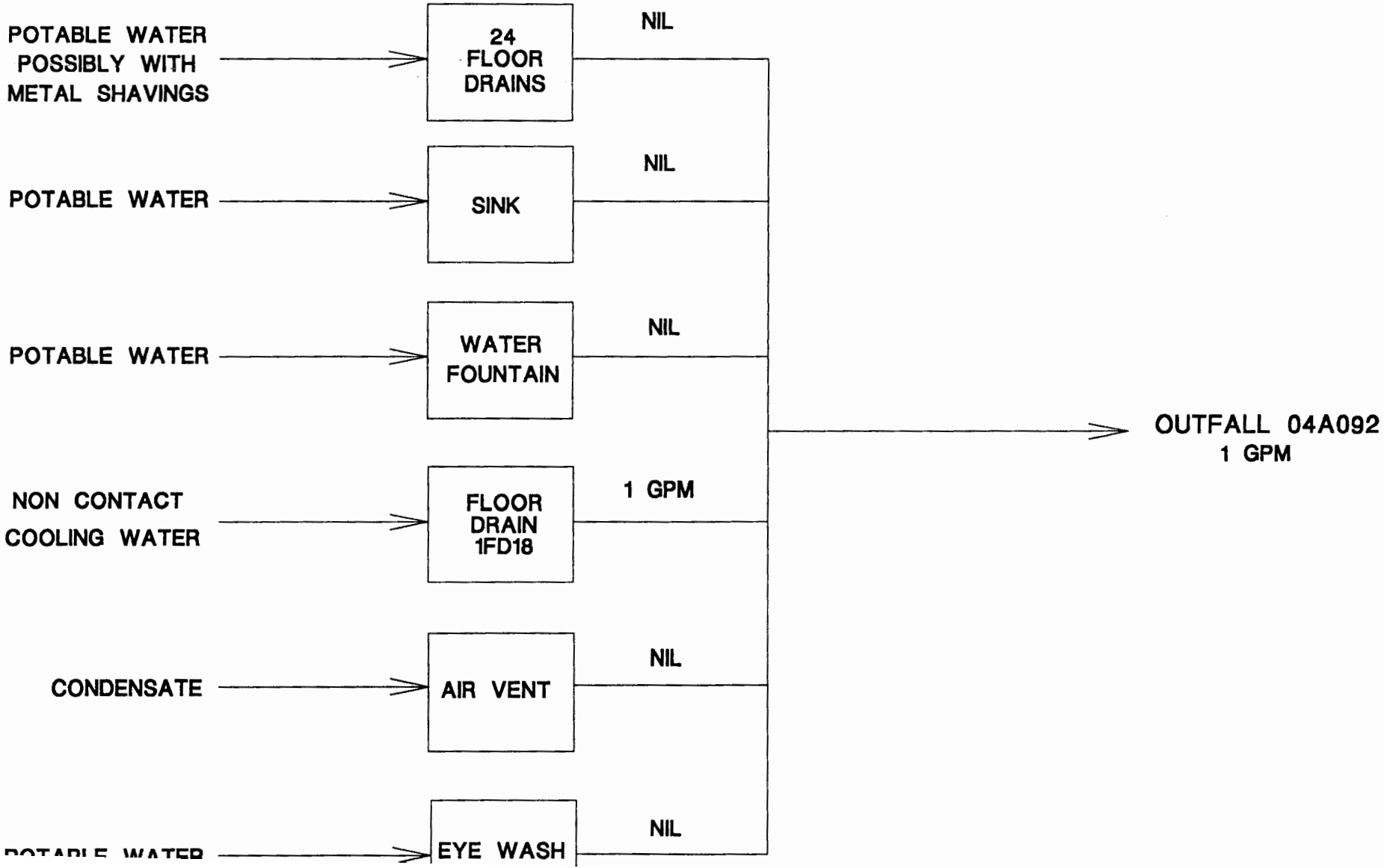
1. POLLUTANT AND CAS NUMBER (if available)	2. MARK 'X'			3. EFFLUENT							4. UNITS		5. INTAKE (optional)		
	a. TESTING REQUIRED	b. BELIEVED PRESENT	c. BELIEVED ABSENT	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVRG. VALUE (if available)		d. NO. OF ANALYSES	a. CONCENTRATION	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 – PESTICIDES *(continued)*															
17P. Heptachlor Epoxide (1024-57-3)			X	< .04	< 36.3						ug/l	ug/d			
18P. PCB-1242 (53469-21-9)			X	< .68	< 617.7						ug/l	ug/d			
19P. PCB-1254 (11097-69-1)			X	< .68	< 617.7						ug/l	ug/d			
20P. PCB-1221 (11104-28-2)			X												
21P. PCB-1232 (11141-16-5)			X												
22P. PCB-1248 (12672-29-6)			X												
23P. PCB-1260 (11096-82-5)			X	< .68	< 617.7						ug/l	ug/d			
24P. PCB-1016 (12674-11-2)			X												
25P. Toxaphene (8001-35-2)			X	< 2.5	< 2.3						ug/l	mg/d			

SCHEMATIC OF WATER FLOW

OUTFALL 16-363-OPN-1



SCHEMATIC OF WATER FLOW
OUTFALL 16-370-OPN-2



Please type or print in the unshaded areas only

EPA ID Number *(copy from Item 1 of Form 1)* NM0890010515

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

Form 2D NPDES

EPA New Sources and New Dischargers Application for Permit to Discharge Process Wastewate

I. Outfall Location

For each outfall, list the latitude and longitude, and the name of the receiving water.

Outfall Number *(list)*	Latitude Deg	Latitude Min	Latitude Sec	Longitude Deg	Longitude Min	Longitude Sec	Receiving Water *(name)*
16-370-	35	50	11	106	20	13	WATER CANYON
OPN-4							
16-478-	35	50	44	106	20	20	VALLE CANYON
OPN-1							

II. Discharge Date *(When do you expect to begin discharging?)*

III. Flows, Sources of Pollution, and Treatment Technologies

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

Outfall Number	1. Operations Contributing Flow *(list)*	2. Average Flow *(include units)*	3. Treatment *(Description or List Codes from Table 2D-1*
16-370-	STEAM CONDENSATE	1 GPM	NONE
OPN-4			
16-478-	STEAM CONDENSATE	2 GPM	NONE
OPN-1			

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)*

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)*
NA			

 CONTINUE ON NEXT PA

CONTINUED FROM THE FRONT	EPA ID Number *(copy from Item 1 of Form 1)* NM 0890010515	Outfall Number 16-370-OPN-4 and 16-378-OPN-1

V. Effluent Characteristics

A, and B: These items require you to report estimated amounts *(both concentration and mass)* of the pollutants to be discharged from each of your outfalls. Each part of this item addresses a different set of pollutants and should be completed in accordance with the specific instructions for that part. Data for each outfall should be on a separate page. Attach additional sheets of paper if necessary.

General Instructions *(See table 2D-2 for Pollutants)*

Each part of this item requests you to provide an estimated daily maximum and average for certain pollutants and the source of information. Data for all pollutants in Group A, for all outfalls, must be submitted unless waived by the permitting authority. For all outfalls, data for pollutants in Group B should be reported only for pollutants which you believe will be present or are limited directly by an effluent limitations guideline or NSPS or indirectly through limitations on an indicator pollutant.

1. Pollutant	2. Maximum Daily Value *(include units)*	3. Average Daily Value *(include units)*	4. Source *(see instructions)*
NA			

CONTINUED FROM THE FRONT	EPA ID Number *(copy from Item 1 of Form 1)* NM 0890010515

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

1. Pollutant	2. Reason for Discharge
NA	

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 th 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 thi production facility with respect to production processes, wastewater constituents, or wastewater treatments.

Name	Location
NONE	

 CONTINUE ON NEXT PA

EPA ID Number *(copy from item one of Form*

NM0890010515

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.

NA

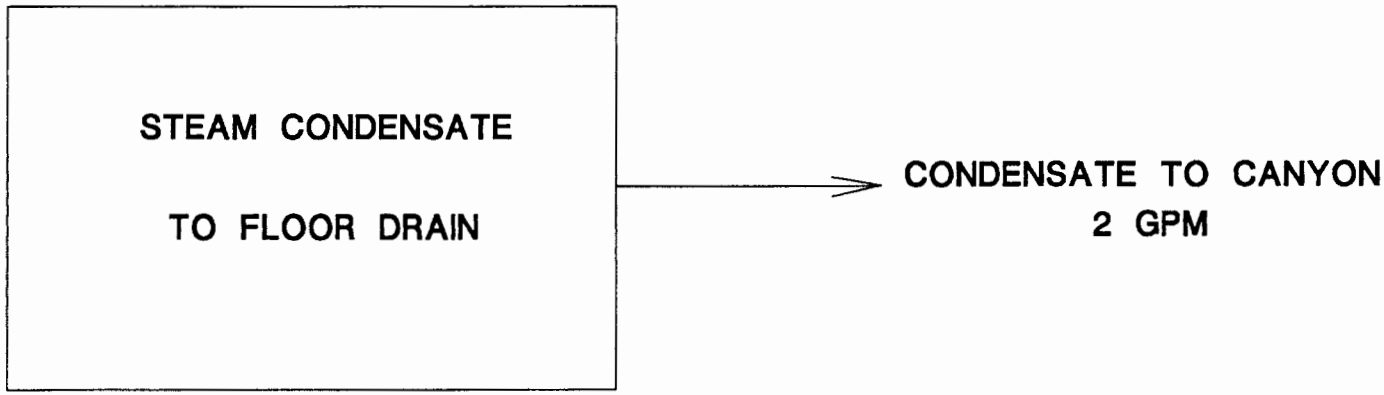
VIII. Certification

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.

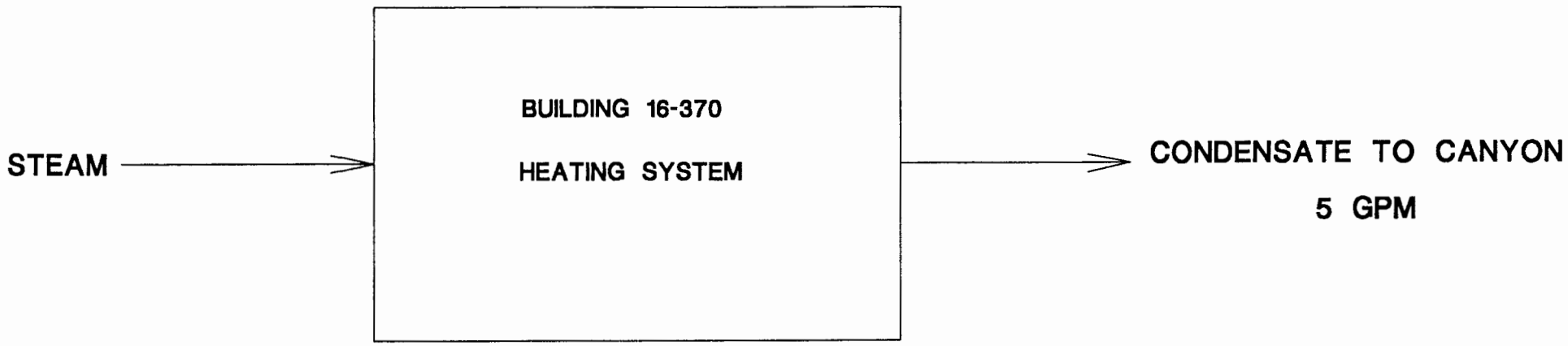
A. Name and Official Title *(type or print)*	B. Phone No.
JERRY L. BELLOWS, DOE AREA MANAGER	505-667-510
ALLEN J. TIEDMAN, ASSOC. DIRECTOR FOR OPERATIONS	505-667-939
C. Signature	**D. Date Signed**

*U.S. Government Printing Office : 1986 -491-191/52940

SCHEMATIC OF WATER FLOW
OUTFALL 16-478-OPN-1



SCHEMATIC OF WATER FLOW
OUTFALL 16-370-OPN-4



4 UNCLASSIFIED | 3 UNCLASSIFIED | 2 UNCLASSIFIED | 1 UNCLASSIFIED

DYE TESTED 9-18-90

PART OR CONTROL NUMBER	REVISIONS ISS	CLASS REVIEW	DESCRIPTION
N/A	A	J.H.	DRAWN BY - LAUER CHECKER - ABERCROMBIE 9-24-91 ENGINEER - PALMER APPROVED - PALMER

TA-16-370
INDEX SHEET

13Y-192147 SHT 1----SITE DRAINAGE PLAN
13Y-192147 SHT 2----FIRST FLOOR PLUMBING DRAIN PLAN
13Y-192147 SHT 3----SECOND FLOOR PLUMBING DRAIN PLAN
13Y-192147 SHT 4----THIRD FLOOR PLUMBING AND DRAIN PLAN
13Y-192147 SHT 5----ROOF PLAN
13Y-192147 SHT 6----POTENTIAL EFFULENT
13Y-192147 SHT 7----FIRST FLOOR ELECTRICAL HAZARD PLAN
13Y-192147 SHT 8----SECOND FLOOR ELECTRICAL HAZARD PLAN
13Y-192147 SHT 9----THIRD FLOOR ELECTRICAL HAZARD PLAN
13Y-192147 SHT 10---FIRST FLOOR EVACUATION PLAN
13Y-192147 SHT 11---SECOND FLOOR EVACUATION PLAN
13Y-192147 SHT 12---THIRD FLOOR EVACUATION PLAN

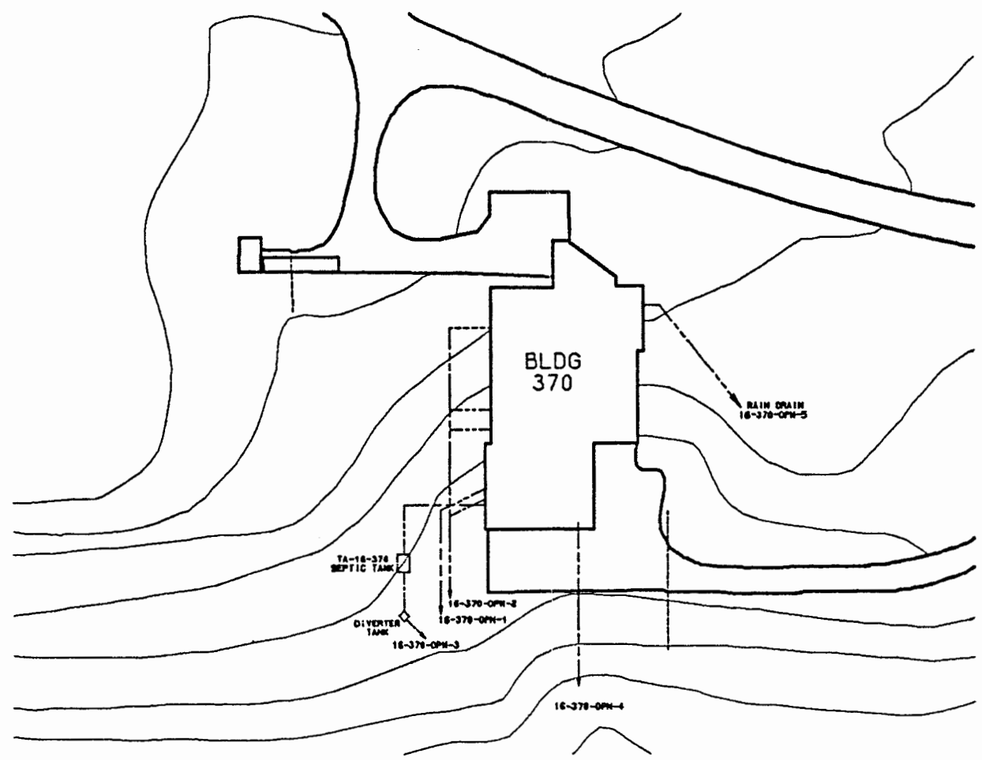
ENGLISH (FT/IN)
THIRD ANGLE PROJECTION

PART CODE: LOS ALAMOS NATIONAL LABORATORY
SHEET 0
ISSUE a
PART CLASSIFICATION: UNCLASSIFIED
TITLE: (U) TITLE CLASSIFICATION
TA-16-370 INDEX SHEET
DRAWING CLASSIFICATION: UNCLASSIFIED
SIZE D
DRAWING NUMBER: 13Y-192147
09-24-91 15:18
PSCM 88516 SCALE 1/1 SHEET 0 OF -
STATUS
ORIGIN LA-ICEMPLUS-V2.03

4 UNCLASSIFIED | 3 UNCLASSIFIED | 2 UNCLASSIFIED | 1 UNCLASSIFIED

4 UNCLASSIFIED | 3 UNCLASSIFIED | 2 UNCLASSIFIED | 1 UNCLASSIFIED

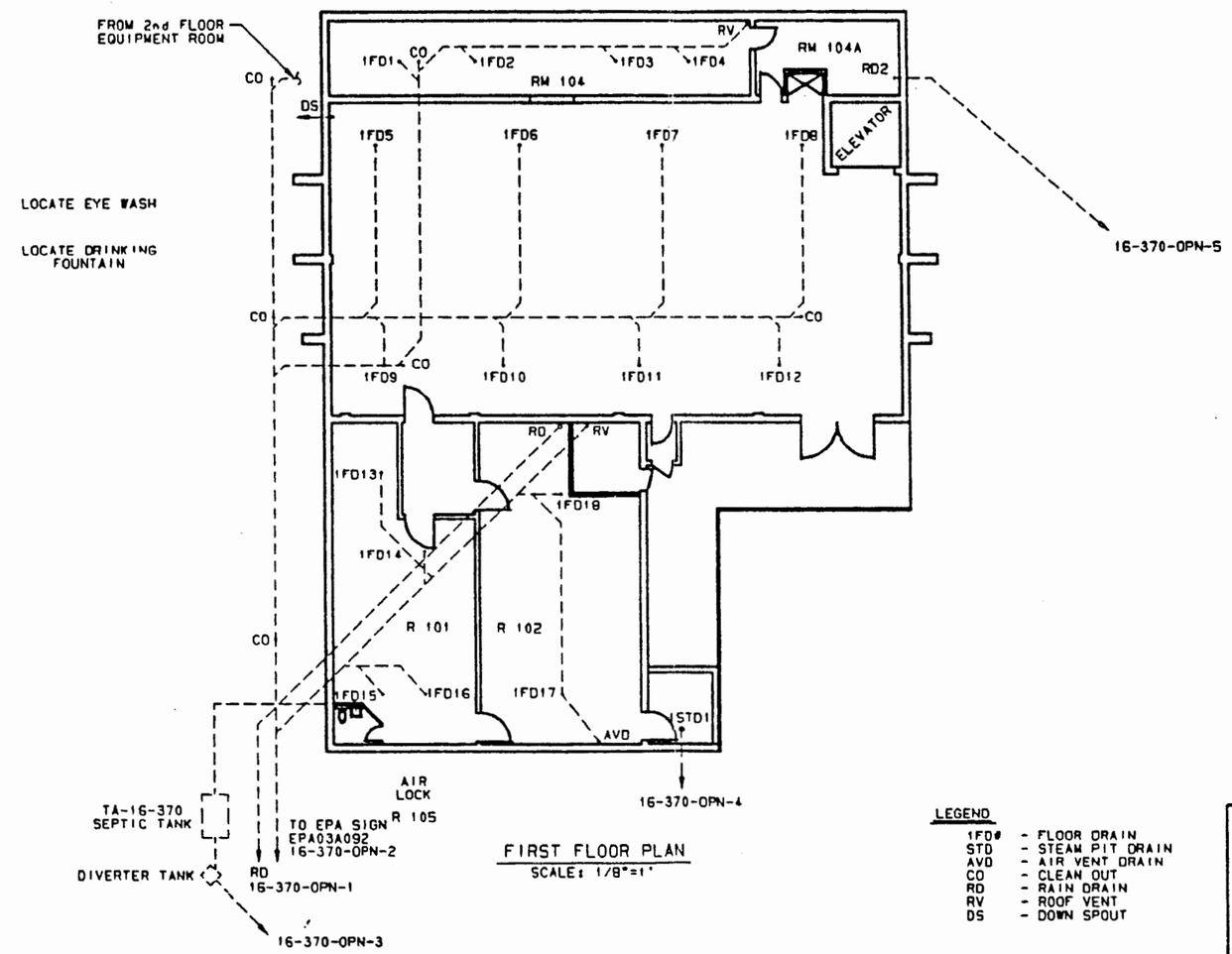
PART OR CONTROL NUMBER	REVISIONS		
	ISS	CLASS REVIEW	DESCRIPTION
NA	A	LS	DRAWN BY - LAUER CHECKER - ABERCROMBIE 9-24-91 ENGINEER - D. PALMER APPROVED - PALMER



PART CODE	LOS ALAMOS NATIONAL LABORATORY	
SHEET 1 / ISSUE A	TITLE (UNC) TITLE CLASSIFICATION SITE PLAN TA-16-370	
PART CLASSIFICATION UNCLASSIFIED		
ENGLISH (FT/IN)	DRAWING CLASSIFICATION UNCLASSIFIED	SIZE D / DRAWING NUMBER 13Y-192147
THIRD ANGLE PROJECTION	09-24-91 14:34	FSCM 88516 / SCALE / SHEET 1 OF -
STATUS		ORIGIN LA-ICEMPLUS-V2.03

4 UNCLASSIFIED | 3 UNCLASSIFIED | 2 UNCLASSIFIED | 1 UNCLASSIFIED

PART OR CONTROL NUMBER	REVISIONS		
	IBS	CLASS REVIEW	DESCRIPTION
NA	A		DRAWN BY - LAUER CHECKER - L. ABERCROMBIE ENGINEER - D. PALMER APPROVED -



FIRST FLOOR PLAN

SCALE: 1/8"=1'

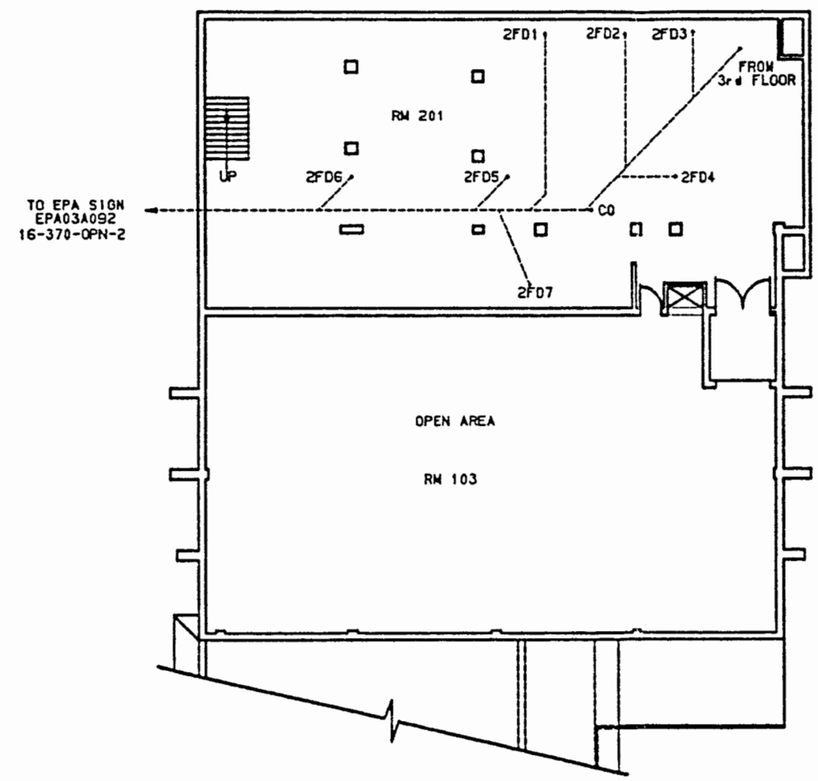
LEGEND

1FD#	-	FLOOR DRAIN
STD	-	STEAM PIT DRAIN
AVD	-	AIR VENT DRAIN
CO	-	CLEAN OUT
RD	-	RAIN DRAIN
RV	-	ROOF VENT
DS	-	DOWN SPOUT

PART CODE	LOS ALAMOS NATIONAL LABORATORY	
SHEET 2 / ISSUE A	TITLE (U) TITLE CLASSIFICATION FIRST FLOOR PLUMBING AND DRAIN PLAN TA-16-370	
PART CLASSIFICATION UNCLASSIFIED		
ENGLISH (FT/IN)	DRAWING CLASSIFICATION UNCLASSIFIED	SIZE D / DRAWING NUMBER 13Y-192147
THIRD ANGLE PROJECTION	09-23-91 18:35	FSCM 88516 SCALE NOTED SHEET 2 OF -
STATUS		ORIGIN LA-ICEMPLUS-V2.03

UNCLASSIFIED

PART OR CONTROL NUMBER	REVISIONS		
	ISS	CLASS REVIEW	DESCRIPTION
NA	A	TCW	DRAWN BY - LAUER CHECKER - L. ABERCROMBIE ENGINEER - D. PALMER APPROVED - PALMER



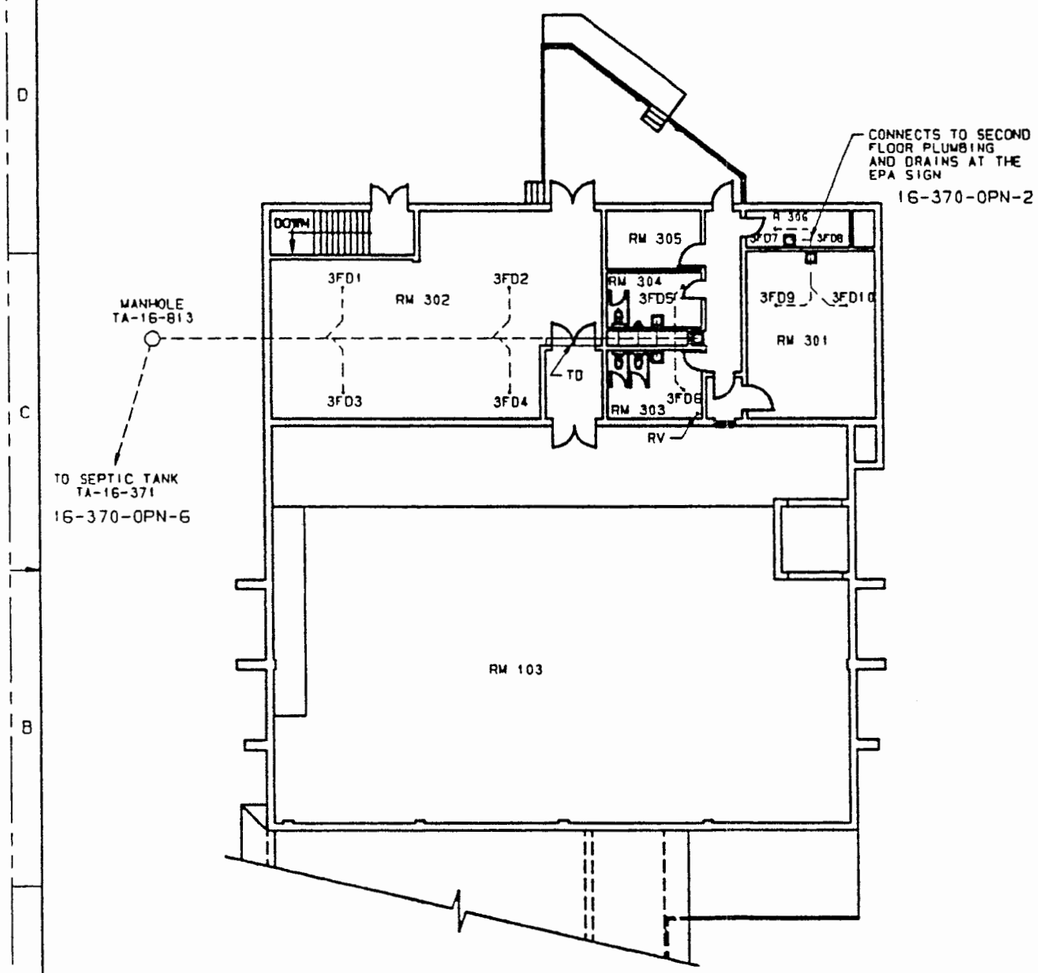
SECOND FLOOR PLAN
SCALE: 1/8"=1'

LEGEND
2FD# - FLOOR DRAIN
CO - CLEAN OUT

PART CODE	LOS ALAMOS NATIONAL LABORATORY
SHEET 3 / ISSUE A	TITLE (U) TITLE CLASSIFICATION: SECOND FLOOR PLUMBING AND DRAIN PLAN TA-16-370
PART CLASSIFICATION	UNCLASSIFIED
ENGLISH (FT/IN)	DRAWING CLASSIFICATION: UNCLASSIFIED
SIZE	D
DRAWING NUMBER	13Y-192147
THIRD ANGLE PROJECTION	
08-24-91 18:28	FSCM 88516 SCALE NOTED SHEET 3 OF -
STATUS	ORIGIN LA-ICEMPLUS-V2.03

UNCLASSIFIED

PART OR CONTROL NUMBER	REVISIONS		
	ISS	CLASS REVIEW	DESCRIPTION
NA	A	TCM	DRAWN BY - LAUER CHECKER - L. ABERCROMBIE ENGINEER - D. PALMER APPROVED -



THIRD FLOOR PLAN
SCALE: 1/8"=1'

LEGEND
3FD# - FLOOR DRAIN
CO - CLEAN OUT
TD - TRENCH DRAIN
RV - ROOF VENT

PART CODE	LOS ALAMOS NATIONAL LABORATORY
SHEET 4 / ISSUE A	TITLE (U) TITLE CLASSIFICATION: THIRD FLOOR PLUMBING AND DRAIN PLAN TA-16-370
PART CLASSIFICATION	UNCLASSIFIED
ENGLISH (FT/IN)	DRAWING CLASSIFICATION: UNCLASSIFIED
SIZE	D
DRAWING NUMBER	13Y-192147
THIRD ANGLE PROJECTION	23-91 18:47
FSCM 88516	SCALE NOTED SHEET 4 OF -
STATUS	ORIGIN LA-ICEMPLUS-V2.03

PART OR CONTROL NUMBER	REVISIONS		
	ISS	CLASS REVIEW	DESCRIPTION
N/A	A	LS	DRAWN BY - LAUER CHECKER - ENGINEER - APPROVED -

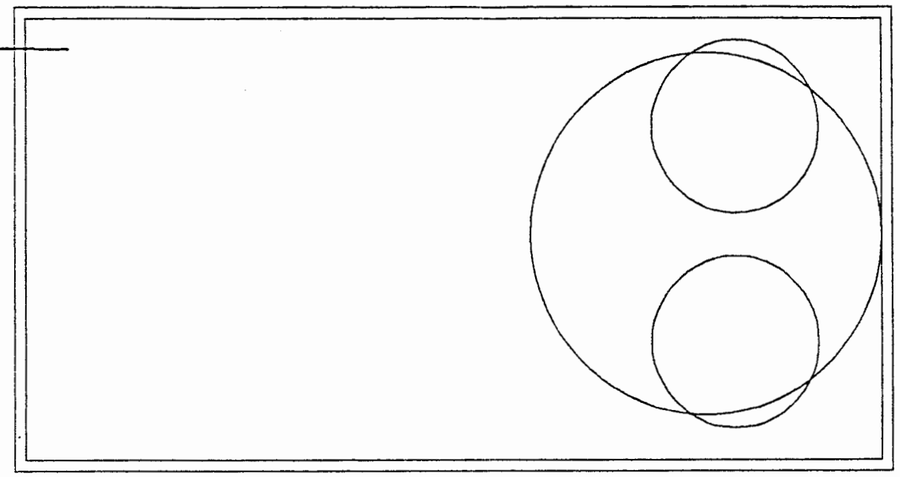
BLDG OUTFALL NO	BLDG ROOM NO	DRAIN NO	POTENTIAL EFFLUENT
16-363-OPN-1	-	055	H2O-T

PART CODE		
SHEET 3	TITLE (UNC) TITLE CLASSIFICATION	
ISSUE A	DRAIN SCHEDULE TA-16-BG	
PART CLASSIFICATION UNCLASSIFIED		
ENGLISH	DRAWING CLASSIFICATION UNCLASSIFIED	SIZE D / DRAWING NUMBER 13Y-192115
THIRD ANGLE PROJECTION	25-91 19:20	FSCM 88516 SCALE 1/1 SHEET 3 OF
STATUS	ORIGIN LA-ICEMPLUS-V2.03	

UNCLASSIFIED 4 3 2 1 UNCLASSIFIED

PART OR CONTROL NUMBER	REVISIONS		
	ISS	CLASS REVIEW	DESCRIPTION
N/A	A	LS	DRAWN BY - LAUER CHECKER - ENGINEER - APPROVED -

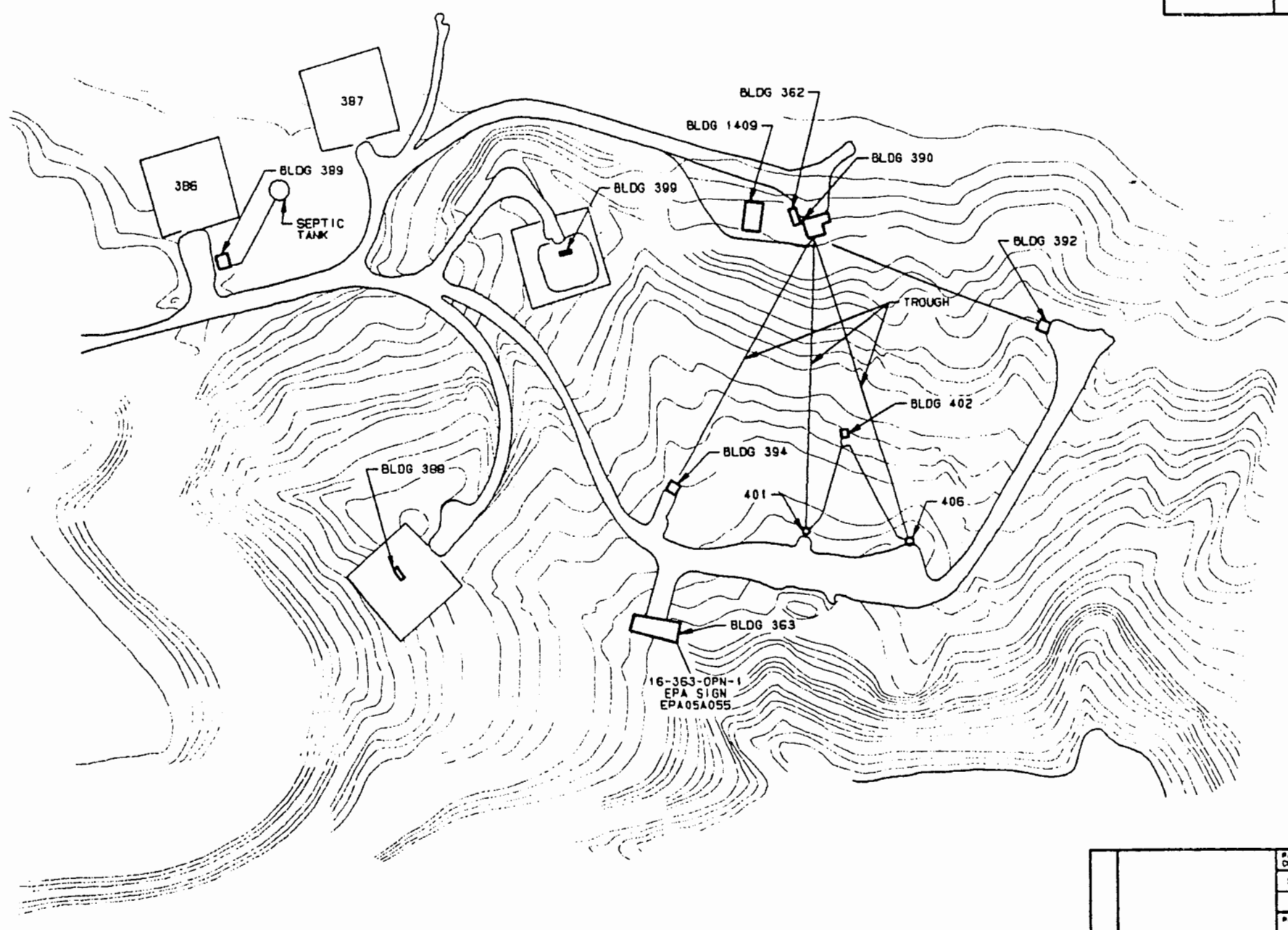
EPA SIGN
EPA05A055



PART CODE		
SHEET 2	TITLE	(UNC) TITLE CLASSIFICATION DRAIN PLAN TA-16-BG
ISSUE		
PART CLASSIFICATION UNCLASSIFIED		
ENGLISH (FT/IN)	DRAWING CLASSIFICATION UNCLASSIFIED	SIZE C / DRAWING NUMBER 13Y-192115
THIRD ANGLE PROJECTION	09-25-91 19:13	FSCM 88516 / SCALE / SHEET 2 OF
	STATUS	ORIGIN LA-ICEMPLUS-V2.03

UNCLASSIFIED 4 3 2 1 UNCLASSIFIED

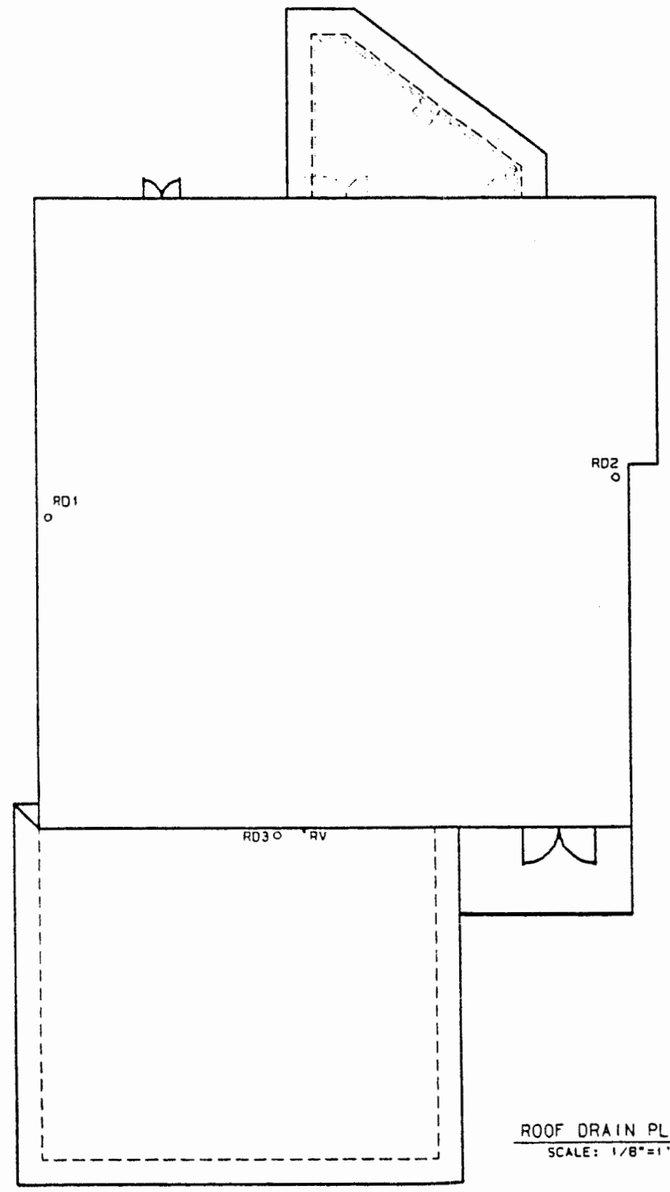
PART OR CONTROL NUMBER	REVISIONS		
	ISS	CLASS REVIEW	DESCRIPTION
N/A	A	LS	DRAWN BY - LAUER 7-2-91 CHECKER - ENGINEER - APPROVED -



PART CODE	LOS ALAMOS NATIONAL LABORATORY	
SHEET 1 / ISSUE A	TITLE (UNC) TITLE CLASSIFICATION DRAINAGE PLAN TA-16-BG	
PART CLASSIFICATION UNCLASSIFIED		
ENGLISH (FT/IN)	DRAWING CLASSIFICATION UNCLASSIFIED	SIZE D / DRAWING NUMBER 13Y-192115
THIRD ANGLE PROJECTION	09-25-91 19:01	FSCM 88516 / SCALE / SHEET 1 OF -
	STATUS	ORIGIN LA-ICEMPLUS-V2.03

GEOMETRIC PRECISION XXX.XXXXXXXX

PART OR CONTROL NUMBER	REVISIONS		
	ISS	CLASS REVIEW	DESCRIPTION
NA	A		DRAWN BY - LAUER CHECKER - L. ABERCROMBIE ENGINEER - D. PALMER APPROVED -



ROOF DRAIN PLAN
SCALE: 1/8"=1'

LEGEND
RD# - ROOF DRAIN
RV - ROOF VENT

PART CODE	LOS ALAMOS NATIONAL LABORATORY
SHEET 5 / ISSUE A	TITLE (UNC) TITLE CLASSIFICATION: ROOF DRAIN PLAN TA-16-370
PART CLASSIFICATION: UNCLASSIFIED	
ENGLISH (FT/IN)	DRAWING CLASSIFICATION: UNCLASSIFIED; SIZE D; DRAWING NUMBER 13Y-192147
THIRD ANGLE PROJECTION	23-91 19:18; FSCM 88516; SCALE NOTED; SHEET 5 OF -
STATUS	ORIGIN LA-ICEMPLUS-V2.03

DYE STUDY REPORT FOR BUILDINGS
16-362, 16-363, 16-370, 16-372, 16-386, 16-387, 16-388,
16-389, 16-390, 16-392, 16-394, 16-399, 16-401, 16-402,
16-406, 16-439, 16-477, 16-478, 16-1365, AND 16-1409
COMPILED BY ENGINEERING AND INFORMATION RESOURCES (WX-12)

BUILDINGS 362, 439, 1365, AND 1409

These buildings do not have floor drains

BUILDING 363--Field investigated June 28, 1991.

DRAIN No	DRAIN LOCATION	END OF PIPE
1FD1	RM 1	16-363-OPN-1 EPA outlet 05A055

BUILDING 370--Field investigated August 21, 1990.

DRAIN No	DRAIN LOCATION	END OF PIPE
1FD1-1FD4	RM 104	These floor drains are plugged.
1FD8	RM 103	16-370-OPN-2 EPA outlet 03A092
1FD12	RM 103	16-370-OPN-2 EPA outlet 03A092
1FD10	RM 103	16-370-OPN-2 EPA outlet 03A092
1FD13	RM 101	16-370-OPN-2 EPA outlet 03A092
1FD14	RM 101	16-370-OPN-2 EPA outlet 03A092
1FD16	RM 101	16-370-OPN-2 EPA outlet 03A092
1FD17	RM 102	16-370-OPN-2 EPA outlet 03A092
2FD4	RM 201	16-370-OPN-2 EPA outlet 03A092
2FD5	RM 201	16-370-OPN-2 EPA outlet 03A092
2FD7	RM 201	16-370-OPN-2 EPA outlet 03A092
3FD4	RM 302	16-370-OPN-6 septic tank TA-16-371
3FD1-3FD3	RM 302	16-370-OPN-6 septic tank Ta-16-371 These interconnections were verified from the second floor equipment room.
3FD7	RM 302	16-370-OPN-2 EPA outlet 03A092
3FD9-3FD10	RM 301	16-370-OPN-2 EPA outlet 03A092 These floor drains are currently covered with carpet.
RD1	Roof Drain	16-370-OPN-1
RD2	Roof Drain	16-370-OPN-5
RD3	Roof Drain	16-370-OPN-1
1STD1	Steam Pit	16-370-OPN-4

BUILDING 372--Field investigated June 28, 1991.
This structure is the abandoned cooling tower for building 370. This structure does not discharge any water.

STRUCTURE 16-386, 387, 388 and 399--Field investigated June 28, 1991.
These four areas are the burning areas at the S-Site (TA-16) burning ground. The only discharge from this area is from rain runoff.

BUILDING 389--Field investigated June 28, 1991.
This building was not dye tested. The building has only one bathroom which is connected to the septic tank next to the building.

STRUCTURE 16-390, 392, 394, 401, and 406--Field investigated June 28, 1991.

These five area are at the S-Site (TA-16) burning grounds. Structure 401 and 406 are the filter beds that strain out the HE prior to treatment in building 363.

BUILDINGS 476--Field investigated June 28, 1991.

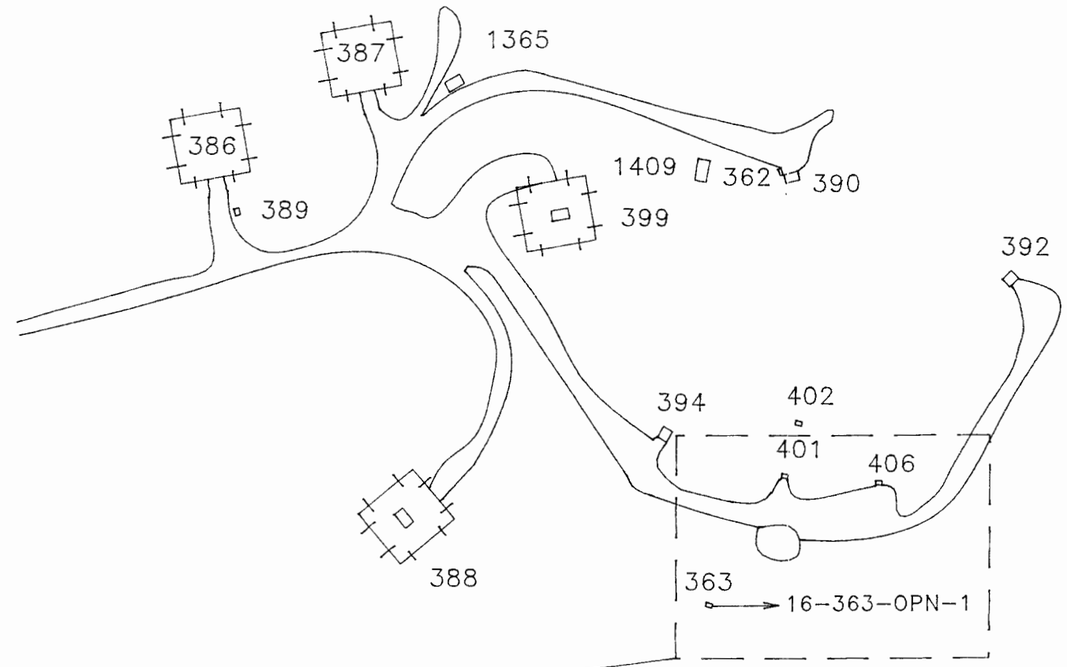
These building does not have any floor drains.

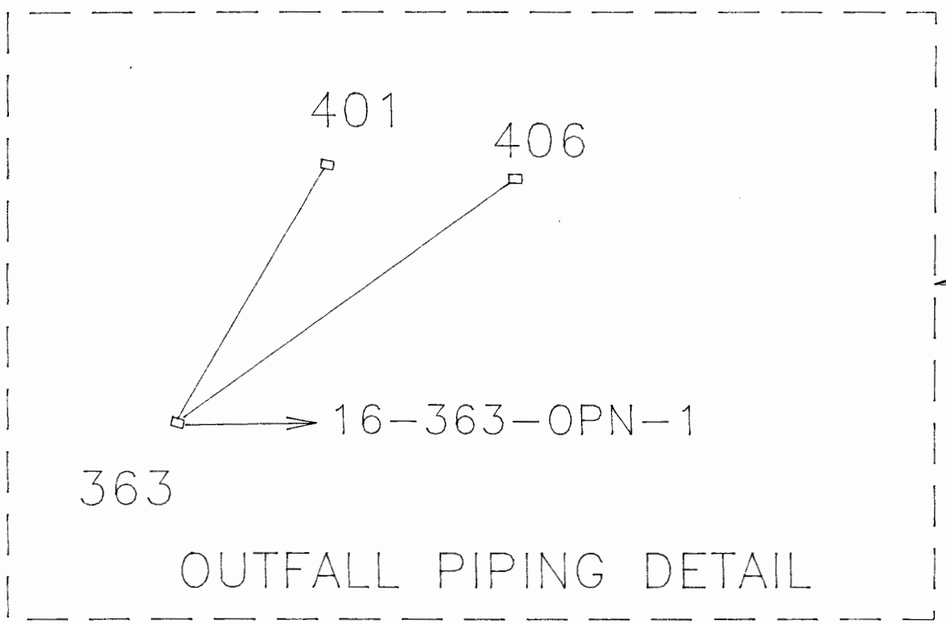
BUILDING 477--Field investigated September 28, 1990.

This building was not dye tested. See section 11.0 RECOMMENDATIONS FOR BUILDING 16-477 in this report.

BUILDING 478--Field investigated September 28, 1990.

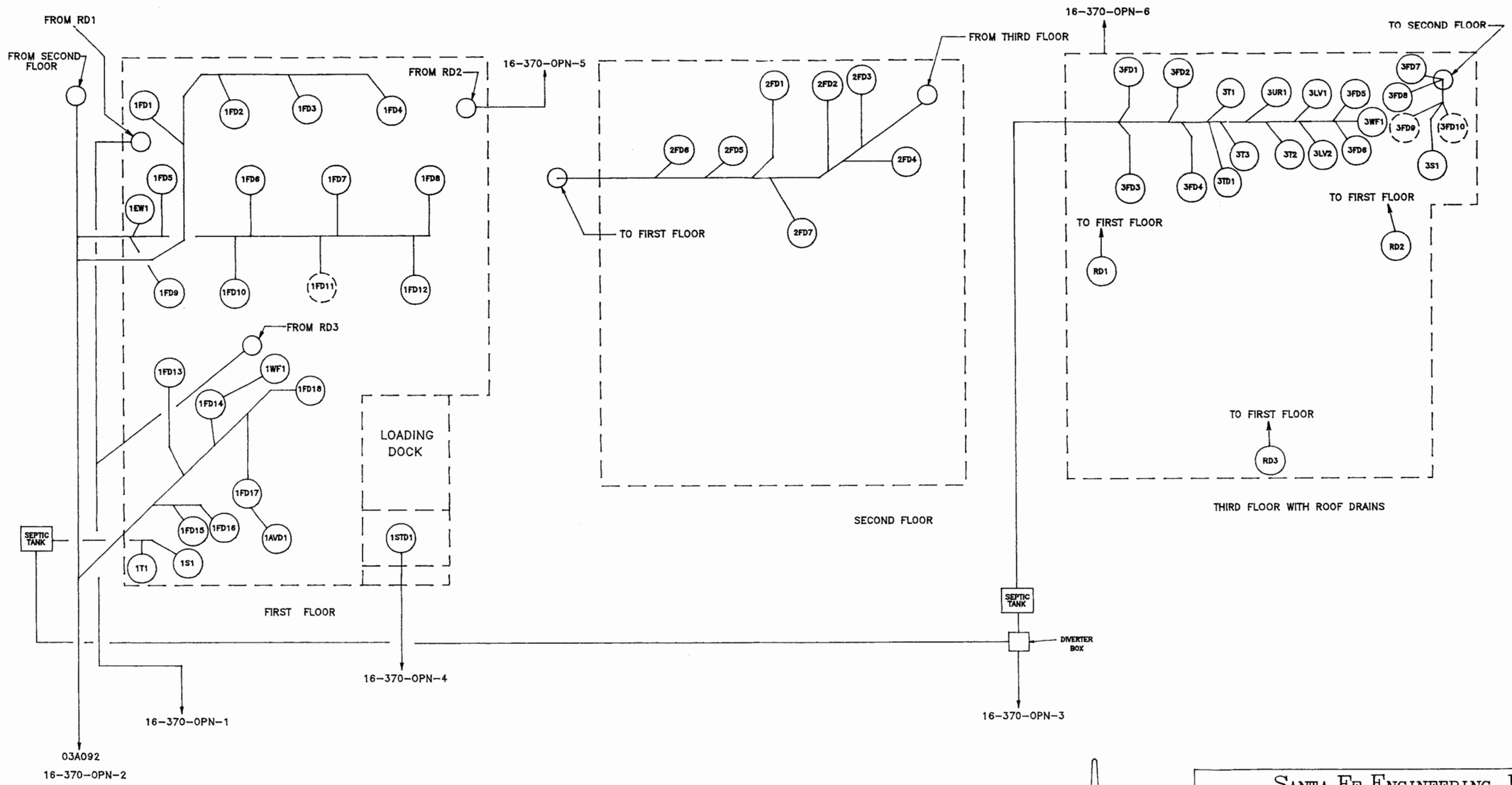
This building was not dye tested. See section 12.0 RECOMMENDATIONS FOR BUILDING 16-478 in this report.





N

SANTA FE ENGINEERING, LTD.		
TA-16 BURNING GROUNDS PLOT PLAN	DRAWN	PEB
	DESIGN	PEB
	CHECKED	LBA
	DATE	8/21/92
SUBMITTED / RECOMMENDED / APPROVED		
Los Alamos — Los Alamos National Laboratory, Los Alamos, New Mexico 87545	SHEET	OF
CLASSIFICATION / REVIEWER / DATE		
REQUESTING DIVISION / REQUESTING GROUP	LAB JOB NO. 11056-11	DRAWING NO. FIGURE 1 / REV.



LEGEND:

EW – EYE WASH
FD – FLOOR DRAIN
LV – LAVATORY
RD – ROOF DRAIN
S – SINK
STD – STEAM PIT DRAIN
T – TOILET
TD – THROUGH DRAIN
UR – URINAL
WF – WATER FOUNTAIN

NOTES:

NOTE 1 – PIPING LAYOUT FROM DRAWINGS:
C-15856, C-15857 & C-15878

NOTE 2 – ACTUAL PIPING DETERMINED FROM DRAWINGS, AS NOTED, WX-12 DYE VERIFICATION, AND SITE INSPECTION.

NOTE 3 – DOTTED CIRCLE INDICATES FLOOR DRAIN HAS BEEN PLUGGED.

SANTA FE ENGINEERING, LTD.

TA 16-370
BUILDING DRAIN SCHEMATIC

DRAWN	PEB
DESIGN	PEB
CHECKED	LBA
DATE	5/14/92

SUBMITTED | RECOMMENDED | APPROVED

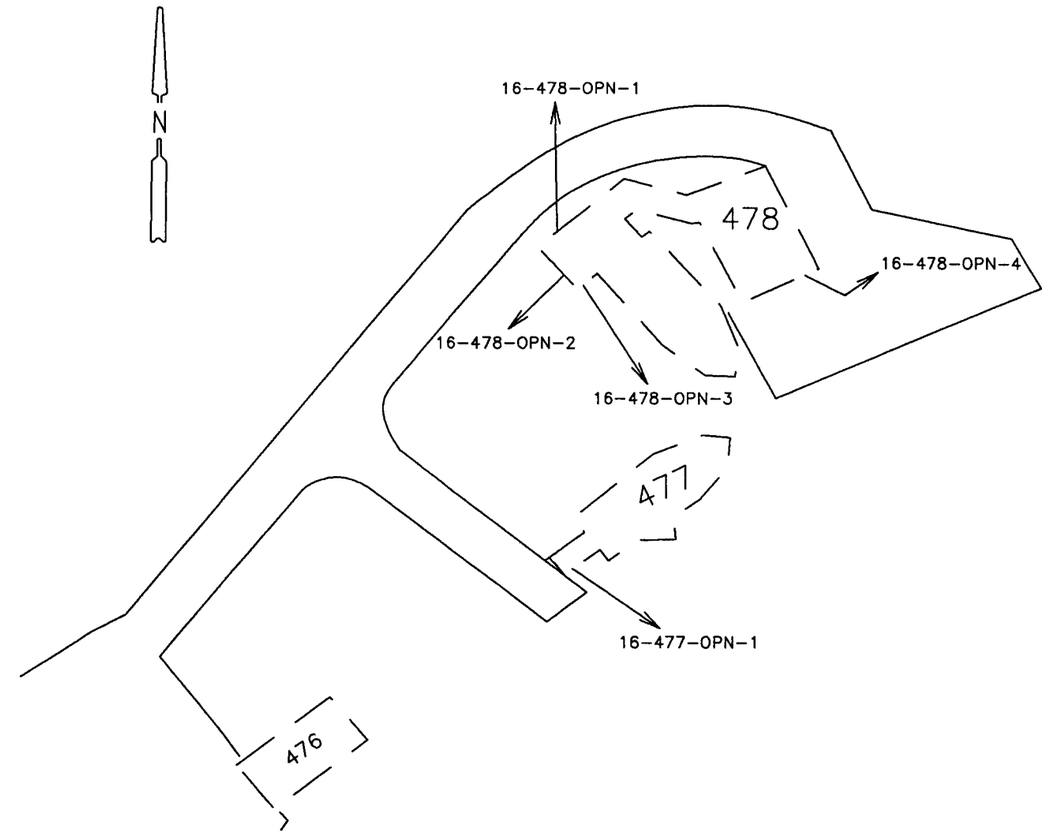
Los Alamos — Los Alamos National Laboratory, Los Alamos, New Mexico 87545

SHEET / OF

CLASSIFICATION | REVIEWER | DATE

REQUESTING DIVISION | LAB JOB NO. | DRAWING NO. | REV.

REQUESTING GROUP | 11056-11 | FIGURE 2



NOTE – LAYOUT BASED ON DRAWING C-26628 AND SITE VISIT

SANTA FE ENGINEERING, LTD.		
TA 16-476, 477 & 478 PLOT PLAN	DRAWN	PEB
	DESIGN	PEB
	CHECKED	LBA
	DATE	5/14/92
SUBMITTED	RECOMMENDED	APPROVED
Los Alamos — Los Alamos National Laboratory, Los Alamos, New Mexico 87545	SHEET	OF
CLASSIFICATION	REVIEWER	DATE
REQUESTING DIVISION / REQUESTING GROUP	LAB JOB NO. 11056-11	DRAWING NO. FIGURE 3 / REV.