

**WASTEWATER STREAM
CHARACTERIZATION FOR
TA 3-70, 71, 73, 75, 78, 79, 80,
179, 225, 226, 227, 271, 478,
479, 1315, 1332, 1333, 1494,
1501, 1503, 1766, 1841, 1874,
1963, 1966, 1968, 1969, 1976,
1977, 1978, 1979, 1989, 1990,
1997, 2061, 2137, 2138 AND
2182**

**at
Los Alamos National Laboratory**

ENVIRONMENTAL STUDY

CHARACTERIZATION REPORT #54

REVISION NO.	<u>1</u>
REVISION DATE:	<u>3/94</u>
COPY NO.	<u>2 of 3</u>
ISSUED TO:	_____

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**ENVIRONMENTAL MANAGEMENT DIVISION
Los Alamos National Laboratory
Los Alamos, New Mexico 87545
United States Department of Energy**

WASTEWATER STREAM
CHARACTERIZATION

FOR TA-3-70, 71, 73, 75, 78, 79, 80, 179,
225, 226, 227, 271, 478, 479, 1315, 1332,
1333, 1494, 1501, 1503, 1766, 1841, 1874,
1963, 1966, 1968, 1969, 1976, 1977, 1978,
1979, 1989, 1990, 1997, 2061, 2137, 2138 AND
2182

an
ENVIRONMENTAL STUDY

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

under subcontract 9-XG8-2874P-1

by:
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January, 1993

Updated Per ESH-8 Comments February 1994

EXECUTIVE SUMMARY

Buildings TA-3-70, 71, 73, 75, 78, 79, 80, 179, 225, 226, 227, 271, 478, 479, 1315, 1332, 1333, 1494, 1501, 1503, 1766, 1841, 1874, 1963, 1966, 1968, 1969, 1976, 1977, 1978, 1979, 1989, 1990, 1997, 2061, 2137, 2138 and 2182 were visited to document all drain piping and building outfalls and to make permitting recommendations. The pipes exiting the buildings are as follows:

- 1) from TA-3-70: one discharge of sanitary waste from a floor drain, a water fountain and rest room facilities to the SWSC sanitary collector, one discharge from a pipe drain to daylight and one discharge from a roof gutter to daylight,
- 2) from TA-3-71: one discharge to daylight from an eyewash drain, a pressure relief valve, a pipe drain and a disconnected pipe,
- 3) from TA-3-73: one discharge to Sandia Canyon as EPA permitted outfall 04A-109 and eleven discharges to daylight from premix plant vents, drains and pressure relief valves,
- 4) from TA-3-75: three discharges to daylight from truck wash station drains,
- 5) from TA-3-79: one discharge to the SWSC collection system from a sink drain and one discharge from an ice machine drain to daylight,
- 6) from TA-3-226: one discharge to daylight from a sanitary sink drain,
- 7) from TA-3-271: one discharge to the TA-3 Sanitary Treatment Plant and one discharge to daylight from a hot water heater pressure relief valve and
- 8) from TA-3-1968: six discharges to daylight from oil tank vents and drains.

Buildings TA-3-78, 80, 179, 225, 227, 478, 479, 1315, 1332, 1333, 1494, 1501, 1503, 1766, 1841, 1874, 1963, 1966, 1969, 1976, 1977, 1978, 1979, 1989, 1990, 1997, 2061, 2137, 2138 and 2182 do not have any water supplies and no drains.

Recommendations for repiping are provided to permit outfall consolidation to minimize permit maintenance requirements.

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

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1.0 INTRODUCTION

On December 2, 1992, Ed Hepworth of Santa Fe Engineering (SFE) toured buildings 70, 71, 73, 75, 78, 79, 80, 179, 225, 226, 227, 271, 478, 479, 1315, 1332, 1333, 1494, 1501, 1503, 1766, 1841, 1874, 1963, 1966, 1968, 1969, 1976, 1977, 1978, 1979, 1989, 1990, 1997, 2061, 2137, 2138 and 2182 of TA-3. The purpose of this study is to identify building drain piping and to characterize the wastewater flows at the time of the visit. This report will not reflect any subsequent changes in piping or operation. The Wastewater Stream Characterization Policy of September 10, 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 using drain schematic drawings prepared by SFE to aid in the field investigation 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 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-92-1306 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 Outlet Piping Numbers. 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 pipe 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 indicates the floor on which the drain is located. The second part has letters that indicate the type of drain (see Table 1). The final part is the unique number for the drain. For example, the first floor drain in the sequence on the basement floor of a building would be labeled BFD1. Similarly, the first Roof Drain in a sequence would be identified as RD1.

The functions of each pipe exiting from the buildings are listed in Appendix 1, Tables 2 through 9, with an abbreviations list in Table 1 and non-drain recommendations in Table 10. 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 8.

3.0 RECOMMENDATIONS FOR BUILDING 3-70

Table 2 is a list of the three building outfalls. The table lists the sources for each outfall pipe and includes recommendations for changes to the drain piping (see Figure 2). The discussion below gives the reasoning for the recommendations.

3.1 Outfall 3-70-OPN-1

This outfall drains the building's sanitary facilities to the Sanitary Waste Systems Consolidation (SWSC) Plant. No piping changes are recommended. No EPA forms were prepared.

3.2 Outfall 3-70-OPN-2

This outfall to daylight is from an equipment drain that receives mechanical equipment condensate. Including the outfall in a Notice of Intent (NOI) to Discharge is recommended. No piping changes are recommended. No EPA forms were prepared.

3.3 Outfall 3-70-OPN-3

This outfall drains a roof gutter to daylight. No piping changes are recommended. No EPA forms were prepared.

4.0 RECOMMENDATIONS FOR BUILDING 3-71

Table 3 is a list of the building's four outfalls. The table lists the drains that connect to each outfall pipe and includes recommendations for changes to the drain piping (see Figure 3). The discussion below gives the reasoning for the recommendations.

4.1 Outfall 3-71-OPN-1

This outfall discharges drain water from an eye wash station to daylight. It is recommended that this drain be piped to the

sanitary sewer or containerized. Permitting is not recommended, however, an EPA form 2D has been prepared.

4.2 Outfall 3-71-OPN-2

This outfall consists of a disconnected pipe. The pipe should be removed. No other changes are recommended and no EPA forms were prepared.

4.3 Outfall 3-71-OPN-3

This outfall discharges drain water from a hot water pressure relief valve to daylight. It should be included in an NOI. No permitting is recommended and no EPA forms were prepared.

4.4 Outfall 3-71-OPN-4

This outfall discharges condensate from a steam pipe condensate drain to daylight. It should be included in an NOI. No permitting is recommended and no EPA forms were prepared.

5.0 RECOMMENDATIONS FOR BUILDING 3-73

Table 4 is a list of the building's twelve outfalls. The table lists the drains that connect to each outfall pipe and includes recommendations for changes to the drain piping (see Figure 3). The discussion below gives the reasoning for the piping recommendations. In addition to the piping recommendations below, it is recommended that the truck loading area at the south end of the building have secondary containment to prevent premix components from entering the groundwater. The Laboratory's Storm Water Pollution Prevention Plan (SWPPP) and Spill Prevention, Control and Countermeasures Plan (SPCC) should be implemented in this area to minimize environmental safety threats.

5.1 Outfall 3-73-OPN-1

This outfall drains air washer blowdown water from the premix plant scrubber reservoir. It is currently permitted as 04A109, where 04A denotes once-through cooling water. Under the current permit application this permit will be changed to an 07A category. A revised EPA form 2C has been prepared to reflect this. The subject air washer cleans air that has been used to heat the dry components used in the batch plant (i.e. sand and gravel) and does not contact the oil or tar components. Blowdown from the air washer includes water and some suspended solids (dust, sand). The blowdown rate is 0.22 gallons per minute (gpm) for approximately 6 hours per week or 80 gallons per week. It is recommended that this small blowdown be routed to the sanitary sewer and the permit eliminated. This can be accomplished by installation of a new sanitary line below grade to an existing manhole or possibly by using a removable transfer line once a week. Analysis of the blowdown should be made and, if required, a pretreatment system (i.e. settling system) could be implemented.

5.2 Outfalls 3-73-OPN-2 and 3-73-OPN-3

These two outfalls to daylight are drains from the air washer water system. Discharge from these outfalls is infrequent, occurring only for maintenance or repair of the system. It is recommended that these two discharges either be connected to the blowdown outfall (to permit or sanitary) or, due to their infrequent use, be included in a general Laboratory NOI.

5.3 Outfall 3-73-OPN-4

This outfall drains the potable water supply system to the air wash blowdown system. Discharge only occurs for maintenance or repair work. It should be included in an NOI. No piping changes are recommended. No EPA forms were prepared.

5.4 Outfalls 3-73-OPN-5, 3-73-OPN-6 and 3-73-OPN-7

These outfalls drain steam condensate from the premix plant. They should each be included in an NOI. No piping changes are recommended. No EPA forms were prepared.

5.5 Outfall 3-73-OPN-8

This outfall drains hot oil from the premix plant. It should be containerized to prevent contamination of the groundwater and violation of the permit for outfall 04A109. No EPA forms were prepared.

5.6 Outfall 3-73-OPN-9

This outfall drains hot water from the premix plant. It should be included in an NOI. No piping changes are recommended. No EPA forms were prepared.

5.7 Outfall 3-73-OPN-10

This outfall drains from a steam pressure relief valve. It should be included in an NOI. No piping changes are recommended. No EPA forms were prepared.

5.8 Outfall 3-73-OPN-11

This outfall drains from a hot water filter drain. It should be included in an NOI. No piping changes are recommended. No EPA forms were prepared.

5.9 Outfall 3-73-OPN-12

This outfall drains from a steam vent condensate drain. It should be included in an NOI. No piping changes are recommended. No EPA forms were prepared.

6.0 **RECOMMENDATIONS FOR BUILDING 3-75**

Table 5 is a list of the three building outfalls. The table lists the sources for each outfall pipe and includes recommendations for changes to the drain piping (see Figure 5). The discussion below gives the reasoning for the piping recommendations.

6.1 Outfall 3-75-OPN-1

This outfall was originally used to wash down the beds of premix trucks. Washing premix trucks has been discontinued due to pollution potential, therefore dismantling and removing the wash station is recommended. No EPA forms were prepared.

6.2 Outfall 3-75-OPN-2

This outfall drains the truck wash sprayer system which is no longer in use. Removing the system and this outfall is recommended. No EPA forms were prepared.

6.3 Outfall 3-75-OPN-3

This outfall drains the water supply to the truck wash sprayer system which is no longer in use. Removing the outfall and disconnecting the water supply is recommended. No EPA forms were prepared.

7.0 RECOMMENDATIONS FOR BUILDINGS 3-78, 80, 179, 225, 227, 478, 479, 1332, 1333, 1494, 1501, 1503, 1766, 1841, 1874, 1963, 1966, 1969, 1976, 1977, 1978, 1979, 1989, 1990, 1997, 2061, 2137, 2138 AND 2182

These buildings have no drains. No permitting or piping changes are recommended. No EPA forms were completed.

8.0 RECOMMENDATIONS FOR BUILDING 3-79

Table 6 is a list of the building's two outfalls. The table lists the sources for each outfall pipe and includes recommendations for changes to the drain piping (see Figure 2). The discussion below gives the reasoning for the piping recommendations.

8.1 Outfall 3-79-OPN-1

This outfall discharges from a sanitary sink to the site sanitary sewer system. No piping changes are recommended. No EPA forms were prepared.

8.2 Outfall 3-79-OPN-2

This outfall discharges condensate to daylight from an ice machine drain. It should be included in an NOI or should be repiped to the sanitary sewer. No permitting is recommended. No EPA forms were prepared.

9.0 RECOMMENDATIONS FOR BUILDING 3-226

Table 7 is a summary of the building's single outfall. The table indicates the source for the outfall pipe as a sanitary sink drain (see Figure 6) which discharges to daylight. This sink should be repiped to the sanitary sewer system. Permitting is not recommended, however, an EPA form 2D has been prepared.

10.0 RECOMMENDATIONS FOR BUILDING 3-271

Table 8 is a list of the two building outfalls. The table lists the sources for each outfall pipe and includes recommendations for changes to the drain piping (see Figure 7). The discussion below gives the reasoning for the piping recommendations. In addition to the piping changes recommended below, it is recommended that the secondary containment area for the Solid Waste Management Unit (SWMU) located southwest of the building be more closely monitored according to the Laboratory's Spill Prevention, Control and Countermeasures (SPCC) plan. The SWMU in question is an uncovered drum storage area located approximately 25 feet southwest of the sanitary manhole depicted in Figure 1. Locking of the two storage area drains was not observed during the site visit and the drum storage methods in effect were not appropriate.

10.1 Outfall 3-271-OPN-1

This outfall drains a hot water heater pressure relief valve to daylight. It should be included in an NOI. No piping changes are recommended. No EPA forms were prepared.

10.2 Outfall 3-271-OPN-2

This outfall drains the building's sanitary facilities to the SWSC collector. No piping changes are recommended. No EPA forms were prepared.

11.0 RECOMMENDATIONS FOR BUILDING 3-1315

This structure has no drains but is in close proximity to an unmarked drum. The drum should be identified and removed. No piping changes are recommended. No EPA forms were prepared.

12.0 RECOMMENDATIONS FOR BUILDING 3-1968

Table 9 is a list of the six building outfalls. The table lists the sources for each outfall pipe and includes recommendations for changes to the drain piping (see Figure 8). The discussion below gives the reasoning for the piping recommendations.

12.1 Outfall 3-1968-OPN-1

This outfall discharges collected storm water drainage from the area around buildings 3-73 and 3-1168. It currently flows from a pond to join permitted outfall 04A109 (3-73-OPN-1) in Sandia Canyon. The pond consists of a concrete wall penetrated by a pipe with a gate valve, and bermed sand and gravel forming the remaining sides. The original function of the pond was to control drainage of water in the area, which is used as a storage and preparation grounds for road-repair and road-sanding materials. The pond also collects drainage from premix-plant outfalls and the truck washing station which is no longer used. The pond currently acts as an evaporation pond preventing oil and other potential pollutants from the batch plant from discharging to the canyon. It is recommended that the existing discharge valve be locked to prevent accidental discharge. Continued operation of this retainage pond is now governed by the Laboratory's SWPPP and SPCC plans. In particular, a Group SPCC Implementation Plan (GSIP) is currently being formulated for this area, including this pond, and that document will govern all future operational aspects.

12.2 Outfalls 3-1968-OPN-2 and 3-1968-OPN-3

These outfalls drain premix oil from the storage tank and its connection to the premix plant. There is residual premix oil on the ground below their discharge points. Secondary containment of the valves, such as drip containers, is recommended to prevent discharge of oil onto the ground during and after the valves are

used. Concrete pads on the ground in the areas around the valves are recommended to prevent spills during usage. Operating procedures and maintenance schedules should be developed and followed to prevent leakage or spillage of oil onto the ground. No piping changes are recommended. No EPA forms were prepared.

12.3 Outfalls 3-1968-OPN-4, 3-1968-OPN-5 and 3-1968-OPN-6

These outfalls drain premix oil from the storage tank vent system. Secondary containment of the valves at their points of discharge is recommended. Concrete pads on the ground in the areas around the valves are recommended to prevent spills during usage. Maintenance schedules should be developed and followed to prevent spillage of oil onto the ground. No piping changes are recommended. No EPA forms were prepared.

13.0 CONCLUSION

This document provides the information to characterize buildings 70, 71, 73, 75, 78, 79, 80, 179, 225, 226, 227, 271, 478, 479, 1315, 1332, 1333, 1494, 1501, 1503, 1766, 1841, 1874, 1963, 1966, 1968, 1969, 1976, 1977, 1978, 1979, 1989, 1990, 1997, 2061, 2137, 2138 and 2182 in TA-3. An NPDES application Form 2C has been completed for maintenance of the outfall 109 (3-73-OPN-1) permit. The drains in the technical area are itemized below:

Discharges to the SWSC Sanitary Collector:

1. 3-70-OPN-1
2. 3-271-OPN-2

Discharges to daylight from eyewash drains:

1. 3-71-OPN-1

Discharges to daylight from disconnected pipes:

1. 3-71-OPN-2

Discharges to daylight from Pressure Relief Valves:

1. 3-71-OPN-3
2. 3-73-OPN-10
3. 3-271-OPN-1

Discharges from pipe drains:

1. 3-70-OPN-2
2. 3-71-OPN-4

Discharges from roof downspouts:

1. 3-70-OPN-3

Permitted discharges of air wash blowdown:

1. 3-73-OPN-1

Discharges from blowdown system drains:

1. 3-73-OPN-2
2. 3-73-OPN-3

Discharges from air wash drains:

1. 3-73-OPN-4

Discharges from steam condensate drains:

1. 3-73-OPN-5
2. 3-73-OPN-6
3. 3-73-OPN-7

Discharges from ice machine drains:

1. 3-79-OPN-2

Discharges from hot tar drains:

1. 3-73-OPN-8

Discharges from hot water drains:

1. 3-73-OPN-9

Discharges from hot water filter drains:

1. 3-73-OPN-11

Discharges from steam vent drains:

1. 3-73-OPN-12

Discharges from truck wash sprayers:

1. 3-75-OPN-2

Discharges from sprayer drains:

1. 3-75-OPN-2

Discharges from cold water drains:

1. 3-75-OPN-3

Discharges from drainage ponds:

1. 3-1968-OPN-1

Discharges from oil tank drains:

1. 3-1968-OPN-2

2. 3-1968-OPN-3

Discharges from oil tank vent drains:

1. 3-1968-OPN-4

2. 3-1968-OPN-5

3. 3-1968-OPN-6

Recommended permitting and corrective action items are outlined in Tables 2 through 9 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
SUMMARY OF ABBREVIATIONS

ABBREVIATION	MEANING
EW	Eye Wash Drain
FD	Floor Drain
LV	Lavatory
PD	Pipe Drain
PRV	Pressure Relief Valve
RD	Roof Drain
SD	Sink Drain
SH	Shower
TL	Toilet
UR	Urinal
WF	Water Fountain
WH	Water Heater

TABLE 2: TA 3-70 DRAIN SUMMARY

OUTFALL NUMBER	ID NUMBER	ROOM ACTIVITY	ROOM NUMBER	STATUS OR RECOMMENDATIONS	EPA FORM PREPARED
3-70-OPN-1 SANITARY	1FD1	PARKS AND REFUSE OFFICE	9A	PLUGGED	NO
	1LV1	PARKS AND REFUSE OFFICE	7	NO CHANGE	
	1LV2	PARKS AND REFUSE OFFICE	8	NO CHANGE	
	1LV3	PARKS AND REFUSE OFFICE	8	NO CHANGE	
	1LV4	PARKS AND REFUSE OFFICE	8	NO CHANGE	
	1LV5	PARKS AND REFUSE OFFICE	8	NO CHANGE	
	1SH1	PARKS AND REFUSE OFFICE	8	NO CHANGE	
	1SH2	PARKS AND REFUSE OFFICE	8	NO CHANGE	
	1TL1	PARKS AND REFUSE OFFICE	7	NO CHANGE	
	1TL2	PARKS AND REFUSE OFFICE	8	NO CHANGE	
	1TL3	PARKS AND REFUSE OFFICE	8	NO CHANGE	
	1TL4	PARKS AND REFUSE OFFICE	8	NO CHANGE	
	1TL5	PARKS AND REFUSE OFFICE	8	NO CHANGE	
	1UR1	PARKS AND REFUSE OFFICE	8	NO CHANGE	
	1UR2	PARKS AND REFUSE OFFICE	8	NO CHANGE	
1UR3	PARKS AND REFUSE OFFICE	8	NO CHANGE		
1WF1	PARKS AND REFUSE OFFICE	4C	NO CHANGE		
3-70-OPN-2	N/A	CONDENSATE	8	NOI	NO
3-70-OPN-3	ROOF	GUTTER DRAIN	ROOF	NO CHANGE	NO

TABLE 3: TA 3-71 DRAIN SUMMARY

OUTFALL NUMBER	ID NUMBER	ROOM ACTIVITY	ROOM NUMBER	STATUS OR RECOMMENDATIONS	EPA FORM PREPARED
3-71-OPN-1	1EW1	STORAGE BUILDING	N/A	PIPE TO SS/CONTAIN	YES
3-71-OPN-2	N/A	STORAGE BUILDING	N/A	ELIMINATE	NO
3-71-OPN-3	N/A	WH PRV	N/A	NOI	NO
3-71-OPN-4	N/A	STEAM CONDENSATE	N/A	NOI	NO

TABLE 4: TA 3-73 DRAIN SUMMARY

OUTFALL NUMBER	ID NUMBER	ROOM ACTIVITY	ROOM NUMBER	STATUS OR RECOMMENDATIONS	EPA FORM PREPARED
3-73-OPN-1 04A109	N/A	PREMIX PLANT	N/A	MODIFY	YES
3-73-OPN-2	N/A	PREMIX PLANT	N/A	REPIPE	YES
3-73-OPN-3	N/A	PREMIX PLANT	N/A	REPIPE	YES
3-73-OPN-4	N/A	PREMIX PLANT	N/A	NOI	NO

TABLE 4: TA 3-73 DRAIN SUMMARY

OUTFALL NUMBER	ID NUMBER	ROOM ACTIVITY	ROOM NUMBER	STATUS OR RECOMMENDATIONS	EPA FORM PREPARED
3-73-OPN-5	N/A	STEAM CONDENSATE	N/A	NOI	NO
3-73-OPN-6	N/A	STEAM CONDENSATE	N/A	NOI	NO
3-73-OPN-7	N/A	STEAM CONDENSATE	N/A	NOI	NO
3-73-OPN-8	N/A	PREMIX PLANT (OIL)	N/A	CONTAINERIZE	NO
3-73-OPN-9	N/A	PREMIX PLANT (HOT WATER)	N/A	NOI	NO
3-73-OPN-10	N/A	STEAM PRV	N/A	NOI	NO
3-73-OPN-11	N/A	WATER FILTER DR.	N/A	NOI	NO
3-73-OPN-12	N/A	STEAM CONDENSATE	N/A	NOI	NO

TABLE 5: TA 3-75 DRAIN SUMMARY

OUTFALL NUMBER	ID NUMBER	ROOM ACTIVITY	ROOM NUMBER	STATUS OR RECOMMENDATIONS	EPA FORM PREPARED
3-75-OPN-1	N/A	TRUCK WASH STATION	N/A	REMOVE	NO
3-75-OPN-2	N/A	TRUCK WASH STATION	N/A	REMOVE	NO
3-75-OPN-3	N/A	TRUCK WASH STATION	N/A	REMOVE	NO

TABLE 6: TA 3-79 DRAIN SUMMARY

OUTFALL NUMBER	ID NUMBER	ROOM ACTIVITY	ROOM NUMBER	STATUS OR RECOMMENDATIONS	EPA FORM PREPARED
3-79-OPN-1 SANITARY	1SD1	STORAGE BLDG.	6	NO CHANGE	NO
3-79-OPN-2	N/A	ICE MACHINE DRAIN	6	TO S.S./NOI	NO

TABLE 7: TA 3-226 DRAIN SUMMARY

OUTFALL NUMBER	ID NUMBER	ROOM ACTIVITY	ROOM NUMBER	STATUS OR RECOMMENDATIONS	EPA FORM PREPARED
3-226-OPN-1 DAYLIGHT	1SD1	GREENHOUSE	N/A	PIPE TO S.S.	YES

TABLE 8: TA 3-271 DRAIN SUMMARY

OUTFALL NUMBER	ID NUMBER	ROOM ACTIVITY	ROOM NUMBER	STATUS OR RECOMMENDATIONS	EPA FORM PREPARED
3-271-OPN-1	WH	WH PRESS. RELIEF VALVE	N/A	NOI	NO
3-271-OPN-2 SANITARY	1LV1	REST ROOM	N/A	NO CHANGE	NO
	1LV2	REST ROOM	N/A	NO CHANGE	
	1TL1	REST ROOM	N/A	NO CHANGE	
	1TL2	REST ROOM	N/A	NO CHANGE	
	1WF1	HALLWAY	100	NO CHANGE	

TABLE 9: TA 3-1968 DRAIN SUMMARY

OUTFALL NUMBER	ID NUMBER	ROOM ACTIVITY	ROOM NUMBER	STATUS OR RECOMMENDATIONS	EPA FORM PREPARED
3-1968-OPN-1 DAYLIGHT	N/A	OIL TANK DRAINAGE POND	N/A	SPCC PLAN	NO
3-1968-OPN-2 DAYLIGHT	N/A	OIL TANK DRAIN	N/A	CONTAIN	NO
3-1968-OPN-3 DAYLIGHT	N/A	OIL TANK DRAIN	N/A	CONTAIN	NO
3-1968-OPN-4 DAYLIGHT	VENT	OIL TANK VENT	N/A	CONTAIN	NO
3-1968-OPN-5 DAYLIGHT	VENT	OIL TANK VENT	N/A	CONTAIN	NO
3-1968-OPN-6 DAYLIGHT	VENT	OIL TANK VENT	N/A	CONTAIN	NO

TABLE 10

NON DRAIN RECOMMENDATIONS

TECHNICAL AREA	BUILDING NUMBER	ROOM OR LOCATION	RECOMMENDATION
3	73	TRUCK LOADING AREA	PROVIDE SECONDARY CONTAINMENT AT TRUCK LOADING AREA
3	271	SWMU AREA	ADDITIONAL MONITORING PER SPCC PLAN IS RECOMMENDED
3	1315	EXTERIOR	LABEL OR REMOVE UNMARKED STORAGE DRUM (CONTENTS UNKNOWN)
3	1968	DRAINAGE POND	PROVIDE LOCKING VALVE. REVIEW SWPPP, SPCC AND GSIP.
3		PERMIT 04A109	PRETREAT PIPE TO SANITARY DELETE PERMIT
3	SANITARY LIFT STATION 693	OVERFLOW	PROVIDE CONTAINMENT OR REMOVE

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TA	BLDG	OUTLET PIPING NO	EPA OUTFALL #	DRAIN #	ROOM #	ROOM DESCRIPTION	FLOW RATE	PERIODICITY	SEASONAL	SOURCE TYPES
3	70	3-70-OPN-1	01S/SWSC	1FD1	9A	PARKS AND REFUSE		NO FLOW	No	NONE - PLUGGED
3	70	3-70-OPN-1	01S/SWSC	1LV1	7	PARKS AND REFUSE		5 DAYS PER WEEK	No	HAND WASHINGS
3	70	3-70-OPN-1	01S/SWSC	1LV2	8	PARKS AND REFUSE		5 DAYS PER WEEK	No	HAND WASHINGS
3	70	3-70-OPN-1	01S/SWSC	1LV3	8	PARKS AND REFUSE		5 DAYS PER WEEK	No	HAND WASHINGS
3	70	3-70-OPN-1	01S/SWSC	1LV4	8	PARKS AND REFUSE		5 DAYS PER WEEK	No	HAND WASHINGS
3	70	3-70-OPN-1	01S/SWSC	1LV5	8	PARKS AND REFUSE		5 DAYS PER WEEK	No	HAND WASHINGS
3	70	3-70-OPN-1	01S/SWSC	1SH1	8	PARKS AND REFUSE		5 DAYS PER WEEK	No	SHOWER DRAIN
3	70	3-70-OPN-1	01S/SWSC	1SH2	8	PARKS AND REFUSE		5 DAYS PER WEEK	No	SHOWER DRAIN
3	70	3-70-OPN-1	01S/SWSC	1TL1	7	PARKS AND REFUSE		5 DAYS PER WEEK	No	TOILET DRAIN
3	70	3-70-OPN-1	01S/SWSC	1TL2	8	PARKS AND REFUSE		5 DAYS PER WEEK	No	TOILET DRAIN
3	70	3-70-OPN-1	01S/SWSC	1TL3	8	PARKS AND REFUSE		5 DAYS PER WEEK	No	TOILET DRAIN
3	70	3-70-OPN-1	01S/SWSC	1TL4	8	PARKS AND REFUSE		5 DAYS PER WEEK	No	TOILET DRAIN
3	70	3-70-OPN-1	01S/SWSC	1TL5	8	PARKS AND REFUSE		5 DAYS PER WEEK	No	TOILET DRAIN
3	70	3-70-OPN-1	01S/SWSC	1UR1	8	PARKS AND REFUSE		5 DAYS PER WEEK	No	URINAL DRAIN
3	70	3-70-OPN-1	01S/SWSC	1UR2	8	PARKS AND REFUSE		5 DAYS PER WEEK	No	URINAL DRAIN
3	70	3-70-OPN-1	01S/SWSC	1UR3	8	PARKS AND REFUSE		5 DAYS PER WEEK	No	URINAL DRAIN
3	70	3-70-OPN-1	01S/SWSC	1WF1	4C	PARKS AND REFUSE		5 DAYS PER WEEK	No	DRINKING FOUNTAIN
3	70	3-70-OPN-2	DAYLIGHT	1ED1	8	PARKS AND REFUSE		FLOW IS NIL	No	HVAC CONDENSATE
3	70	3-70-OPN-3	DAYLIGHT	ROOF	ROOF	PARKS AND REFUSE		MOSTLY SUMMER	Yes	STORM WATER DOWNSPOUT
3	71	3-71-OPN-1	DAYLIGHT	1EW1	N/A	STORAGE BUILDING		FLOW IS NIL	No	EYE WASH DRAIN
3	71	3-71-OPN-2	N/A	N/A	N/A	STORAGE BUILDING		FLOW IS NIL	No	DISCONNECTED PIPE
3	71	3-71-OPN-3	DAYLIGHT	N/A	N/A	STORAGE BUILDING		FLOW IS NIL	No	HOT WATER PRESSURE RELIEF
3	71	3-71-OPN-4	DAYLIGHT	N/A	N/A	STORAGE BUILDING		FLOW IS NIL	No	STEAM CONDENSATE DRAIN
3	73	3-73-OPN-01	04A109	N/A	N/A	PREMIX PLANT	0.22 GPM	6 HRS PER WEEK	No	AIR WASH BLOWDOWN
3	73	3-73-OPN-02	DAYLIGHT	N/A	N/A	PREMIX PLANT		FLOW IS NIL	No	BLOWDOWN SYSTEM DRAIN
3	73	3-73-OPN-03	DAYLIGHT	N/A	N/A	PREMIX PLANT		FLOW IS NIL	No	BLOWDOWN SYSTEM DRAIN
3	73	3-73-OPN-04	DAYLIGHT	N/A	N/A	PREMIX PLANT		FLOW IS NIL	No	AIR WASH DRAIN
3	73	3-73-OPN-05	DAYLIGHT	N/A	N/A	PREMIX PLANT		FLOW IS NIL	No	STEAM CONDENSATE DRAIN
3	73	3-73-OPN-06	DAYLIGHT	N/A	N/A	PREMIX PLANT		FLOW IS NIL	No	STEAM CONDENSATE DRAIN
3	73	3-73-OPN-07	DAYLIGHT	N/A	N/A	PREMIX PLANT		FLOW IS NIL	No	STEAM CONDENSATE DRAIN
3	73	3-73-OPN-08	DAYLIGHT	N/A	N/A	PREMIX PLANT		FLOW IS NIL	No	HOT TAR DRAIN
3	73	3-73-OPN-09	DAYLIGHT	N/A	N/A	PREMIX PLANT		FLOW IS NIL	No	HOT WATER DRAIN
3	73	3-73-OPN-10	DAYLIGHT	N/A	N/A	PREMIX PLANT		FLOW IS NIL	No	STEAM PRESSURE RELIEF DRAIN

REPORT # 54

TA	BLDG	OUTLET PIPING NO	EPA OUTFALL #	DRAIN #	ROOM #	ROOM DESCRIPTION	FLOW RATE	PERIODICITY	SEASONAL	SOURCE TYPES
3	73	3-73-OPN-11	DAYLIGHT	N/A	N/A	PREMIX PLANT		FLOW IS NIL	No	HOT WATER FILTER DRAIN
3	73	3-73-OPN-12	DAYLIGHT	N/A	N/A	PREMIX PLANT		FLOW IS NIL	No	STEAM VENT DRAIN
3	75	3-75-OPN-1	DAYLIGHT	N/A	N/A	TRUCK WASH STATION		NO FLOW	No	TRUCK WASH SPRAYER
3	75	3-75-OPN-2	DAYLIGHT	N/A	N/A	TRUCK WASH STATION		NO FLOW	No	TRUCK WASH SPRAYER DRAIN
3	75	3-75-OPN-3	DAYLIGHT	N/A	N/A	TRUCK WASH STATION		NO FLOW	No	COLD WATER DRAIN
3	78	3-78	ND	N/A	N/A	STORAGE BLDG.		NO FLOW	No	NO DRAINS
3	79	3-79-OPN-1	01S/SWSC	1SD1	6	STORAGE BLDG.		5 DAYS PER WEEK	No	HAND WASHINGS
3	79	3-79-OPN-2	DAYLIGHT	N/A	6	STORAGE BLDG.		FLOW IS NIL	No	ICE MACHINE DRAIN
3	80	3-80	ND	N/A	N/A	ELECTRICAL SUPPLY BOX		NO FLOW	No	NO DRAINS
3	179	3-179	ND	N/A	N/A	METAL SHED		NO FLOW	No	NO DRAINS
3	225	3-225	ND	N/A	N/A	STORAGE SHED		NO FLOW	No	NO DRAINS
3	226	3-226-OPN-1	DAYLIGHT	1SD1	N/A	GREENHOUSE		FLOW IS NIL	No	HAND WASHINGS
3	227	3-227	ND	N/A	N/A	TRAILER		NO FLOW	No	NO DRAINS
3	271	3-271-OPN-1	DAYLIGHT	1WH1	N/A	REST ROOM		FLOW IS NIL	No	HOT WATER PRESSURE RELIEF
3	271	3-271-OPN-2	01S/SWSC	1LV1	N/A	REST ROOM		5 DAYS PER WEEK	No	HAND WASHINGS
3	271	3-271-OPN-2	01S/SWSC	1LV2	N/A	REST ROOM		5 DAYS PER WEEK	No	HAND WASHINGS
3	271	3-271-OPN-2	01S/SWSC	1TL1	N/A	REST ROOM		5 DAYS PER WEEK	No	TOILET DRAIN
3	271	3-271-OPN-2	01S/SWSC	1TL2	N/A	REST ROOM		5 DAYS PER WEEK	No	TOILET DRAIN
3	271	3-271-OPN-2	01S/SWSC	1WF1	100	SALVAGE AND SURPLUS		5 DAYS PER WEEK	No	DRINKING FOUNTAIN
3	478	3-478	ND	N/A	N/A	STORAGE SHED		NO FLOW	No	NO DRAINS
3	479	3-479	ND	N/A	N/A	STORAGE SHED		NO FLOW	No	NO DRAINS
3	1333	3-1333	ND	N/A	N/A	ELECTRICAL SUPPLY BOX		NO FLOW	No	NO DRAINS
3	1494	3-1494	ND	N/A	N/A	WOODEN SHED		NO FLOW	No	NO DRAINS
3	1501	3-1501	ND	N/A	N/A	TRAILER		NO FLOW	No	NO DRAINS
3	1503	3-1503	ND	N/A	N/A	TRAILER		NO FLOW	No	NO DRAINS
3	1766	3-1766	ND	N/A	N/A	PAN AM SHED		NO FLOW	No	NO DRAINS
3	1874	3-1874	ND	N/A	N/A	ELECTRICAL SUPPLY BOX		NO FLOW	No	NO DRAINS
3	1963	3-1963	ND	N/A	N/A	PAN AM SHED		NO FLOW	No	NO DRAINS
3	1966	3-1966	ND	N/A	N/A	THREE-SIDED SHELTER		NO FLOW	No	NO DRAINS
3	1968	3-1968-OPN-1	04A109	N/A	N/A	OIL TANK		7 DAYS PER WEEK	No	DRAINAGE POND OUTLET
3	1968	3-1968-OPN-2	DAYLIGHT	N/A	N/A	OIL TANK		FLOW IS NIL	No	OIL PIPE DRAIN
3	1968	3-1968-OPN-3	DAYLIGHT	N/A	N/A	OIL TANK		FLOW IS NIL	No	OIL TANK DRAIN
3	1968	3-1968-OPN-4	DAYLIGHT	N/A	N/A	OIL TANK		FLOW IS NIL	No	OIL TANK VENT DRAIN

REPORT # 54

TA	BLDG	OUTLET PIPING NO	EPA OUTFALL #	DRAIN #	ROOM #	ROOM DESCRIPTION	FLOW RATE	PERIODICITY	SEASONAL	SOURCE TYPES
3	1968	3-1968-OPN-5	DAYLIGHT	N/A	N/A	OIL TANK		FLOW IS NIL	No	OIL TANK VENT DRAIN
3	1968	3-1968-OPN-6	DAYLIGHT	N/A	N/A	OIL TANK		FLOW IS NIL	No	OIL TANK VENT PIPE DRAIN
3	1969	3-1969	ND	N/A	N/A	FUEL TANK		NO FLOW	No	NO DRAINS
3	1976	3-1976	ND	N/A	N/A	STORAGE SHED		NO FLOW	No	NO DRAINS
3	1977	3-1977	ND	N/A	N/A	Z-MORGAN SHED		NO FLOW	No	NO DRAINS
3	1978	3-1978	ND	N/A	N/A	Z-MORGAN SHED		NO FLOW	No	NO DRAINS
3	1979	3-1979	ND	N/A	N/A	STORAGE SHED		NO FLOW	No	NO DRAINS
3	1989	3-1989	ND	N/A	N/A	STORAGE SHED		NO FLOW	No	NO DRAINS
3	1990	3-1990	ND	N/A	N/A	MORGAN SHED		NO FLOW	No	NO DRAINS
3	1997	3-1997	ND	N/A	N/A	OLD GUARD HOUSE		NO FLOW	No	NO DRAINS
3	2061	3-2061	ND	N/A	N/A	PERSONNEL CONTROL BOO		NO FLOW	No	NO DRAINS
3	2137	3-2137	ND	N/A	N/A	METAL SHED		NO FLOW	No	NO DRAINS
3	2138	3-2138	ND	N/A	N/A	OLD GUARD HOUSE		NO FLOW	No	NO DRAINS
3	2182	3-2182	ND	N/A	N/A	STORAGE SHED		NO FLOW	No	NO DRAINS

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				C. DURATION (in days)
		a. DAYS PER WEEK (specify average)	b. MONTHS PER YEAR (specify average)	B. FLOW RATE (in mgd)		E. TOTAL VOLUME (specify with units)		
				1. LONG TERM AVERAGE	2. MAXIMUM DAILY	1. LONG TERM AVERAGE	2. MAXIMUM DAILY	
07A109	Air Washer Blowdown	0.25	12	0.00008	0.00008	80 GPD	80 GPD	14 day/yr

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 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

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

CONTINUED FROM PAGE 2

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
see datasheet			

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)

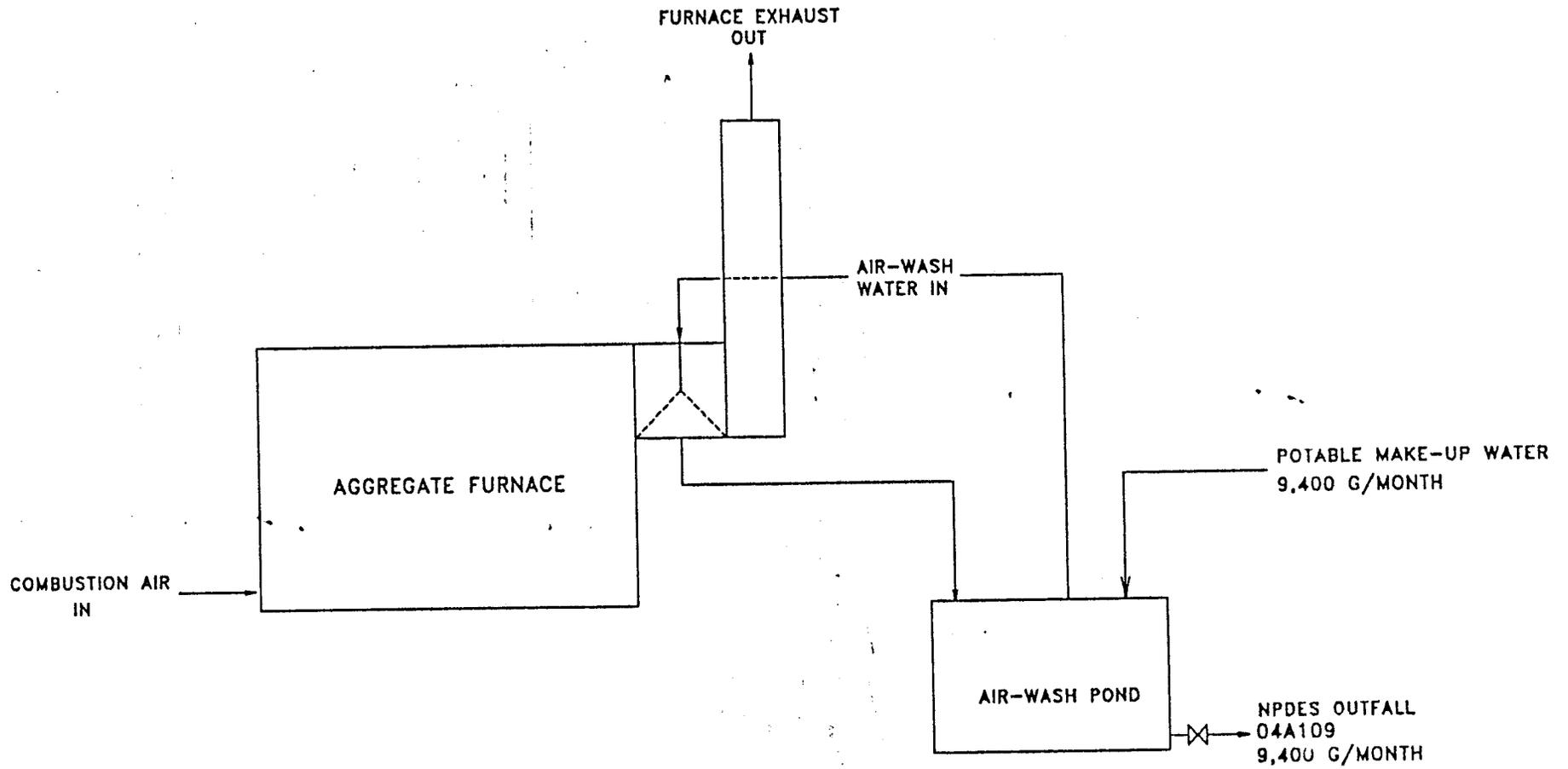
NO (go to Section IX)

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. BELLOWS, AREA MANAGER, DOE ALLEN J. TIEDMAN, ASSOC. DIRECTOR FOR OPERATIONS	505-667-5105 505-667-9390
C. SIGNATURE	D. DATE SIGNED



TA-3-73
ASPHALT PLANT
AIR-WASH

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.

07A109

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						d. NO. OF ANALYSES	3. UNITS (specify if blank)		4. INTAKE (optional)		
	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVRG. VALUE (if available)			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	
a. Biochemical Oxygen Demand (BOD)	< 2.0	< 0.6						mg/l	g/d			
b. Chemical Oxygen Demand (COD)	< 10.0	< 3.0						mg/l	g/d			
c. Total Organic Carbon (TOC)	0.6	0.2						mg/l	g/d			
d. Total Suspended Solids (TSS)	18.0	5.5						mg/l	g/d			
e. Ammonia (as N)	< 0.1	< 30.280						mg/l	g/d			
f. Flow	VALUE 80		VALUE		VALUE			gal/day		VALUE		
g. Temperature (winter)	VALUE 13.9		VALUE		VALUE			°C		VALUE		
h. Temperature (summer)	VALUE N/A		VALUE		VALUE			°C		VALUE		
i. pH	MINIMUM 8.45	MAXIMUM 8.80	MINIMUM	MAXIMUM	X			STANDARD UNITS		X		

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'		3. EFFLUENT						4. UNITS		5. INTAKE (optional)			
	a. PRESENT	b. 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	
a. Bromide (24959-67-9)		X	< 0.5	< 0.2						mg/l	g/d			
b. Chlorine, Total Residual	X		0.05	0.0						mg/l	mg/d			
c. Color	X		7.0							units				
d. Fecal Coliform		X												
e. Fluoride (16984-48-8)	X		0.21	63.6						mg/l	g/d			
f. Nitrate-Nitrite (as N)	X		0.304	92.1						mg/l	g/d			

ITEM V-B CONTINUED FROM FRONT

1. POLLUTANT AND CAS NO. (if available)	2. MARK 'X'		3. EFFLUENT						4. UNITS		5. INTAKE (optional)			
	B. BELIEVED PRESENT	D. BELIEVED ABSENT	B. MAXIMUM DAILY VALUE		D. MAXIMUM 30 DAY VALUE (if available)		G. LONG TERM AVRG. VALUE (if available)		d. NO. OF ANALYSES	8. CONCENTRATION	b. MASS	8. LONG TERM AVERAGE VALUE		9. NO. OF ANALYSES
			(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS						
g. Nitrogen, Total Organic (as N)		X	< 0.5	< 0.2						mg/l	g/d			
h. Oil and Grease		X	< 1.05	< 0.3						mg/l	g/d			
i. Phosphorus (as P), Total (7723-14-0)	X		0.05	15.1						mg/l	mg/d			
j. Radioactivity														
(1) Alpha, Total	X		0.1	30.3						pCi/l	pCi/d			
(2) Beta, Total	X		6.6	2.0						pCi/l	nCi/d			
(3) Radium, Total	X													
(4) Radium 226, Total	X		0.06	18.2						pCi/l	pCi/d			
k. Sulfate (as SO ₄) (14808-79-8)	X		3.16	1.0						mg/l	g/d			
l. Sulfide (as S)		X		0.0						mg/l	mg/d			
m. Sulfite (as SO ₃) (14265-45-3)		X	< 0.05	< 15.1						mg/l	mg/d			
n. Surfactants		X	< 0.1	< 30.3						mg/l	mg/d			
o. Aluminum, Total (7429-90-5)		X	< 0.04	< 12.1						mg/l	mg/d			
p. Barium, Total (7440-39-3)	X		0.03	9.1						mg/l	mg/d			
q. Boron, Total (7440-42-8)	X		0.02	6.1						mg/l	mg/d			
r. Cobalt, Total (7440-48-4)		X	< 0.1	< 30.3						mg/l	mg/d			
s. Iron, Total (7439-89-6)	X		0.41	0.1						mg/l	g/d			
t. Magnesium, Total (7439-95-4)	X		2.5	0.8						mg/l	g/d			
u. Molybdenum, Total (7439-98-7)		X	< 0.02	< 6.1						mg/l	mg/d			
v. Manganese, Total (7439-96-6)		X	0.01	3.0						mg/l	mg/d			
w. Tin, Total (7440-31-5)		X	< 0.050	< 15.1						mg/l	mg/d			
x. Titanium, Total (7440-32-6)		X	< 0.004	< 1.2						mg/l	mg/d			

NM0890010515

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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				d. NO. OF ANALYSES	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 AVG. VALUE (if available)		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	
METALS, CYANIDE, AND TOTAL PHENOLS															
1M. Antimony, Total (7440-36-0)			X	< 0.050	< 15.1					mg/l	mg/d				
2M. Arsenic, Total (7440-38-2)		X		0.002	0.6					mg/l	mg/d				
3M. Beryllium, Total, 7440-41-7)			X	< 0.001	< 0.3					mg/l	mg/d				
4M. Cadmium, Total (7440-43-9)			X	< 0.010	< 3.0					mg/l	mg/d				
5M. Chromium, Total (7440-47-3)		X		0.040	12.1					mg/l	mg/d				
6M. Copper, Total (7440-50-8)		X		0.031	9.4					mg/l	mg/d				
7M. Lead, Total (7439-92-1)			X	< 0.050	< 15.1					mg/l	mg/d				
8M. Mercury, Total (7439-97-6)			X	< 0.0002	< 0.1					mg/l	mg/d				
9M. Nickel, Total (7440-02-0)		X		0.06	18.2					mg/l	mg/d				
0M. Selenium, total (7782-49-2)			X	< 0.001	< 0.3					mg/l	mg/d				
1M. Silver, Total (7440-22-4)			X	< 0.010	< 3.0					mg/l	mg/d				
2M. Thallium, Total (7440-28-0)			X	< 0.4	< 0.1					mg/l	g/d				
3M. Zinc, Total (7440-66-6)		X		0.043	13.0					mg/l	mg/d				
4M. Cyanide, Total (57-12-6)			X	0.01	3.0					mg/l	mg/d				
5M. Phenols, Total			X	< 0.01	< 3.0					mg/l	mg/d				

DIOXIN													
1. POLLUTANT AND CAS NUMBER (if available)	2. MARK 'X'			3. DESCRIBE RESULTS									
2,3,7,8-Tetra-chlorodibenzo-P-dioxin (1764-01-6)			X										

1. POLLUTANT AND CAS NUMBER (if available)	2. MARK 'X'			3. EFFLUENT						4. UNITS		5. INTAKE (optional)			
	a. TESTING REQUIRED	b. BE-LIEVED PRESENT	c. BE-LIEVED ABSENT	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVG. VALUE (if available)		d. NO. OF ANALYSES	a. CONCENTRATION	b. MASS	b. 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	< 1.5						mg/l	mg/d			
4V. Bis (Chloromethyl) Ether (542-88-1)			X												
5V. Bromoform (75-25-2)			X	< 0.005	< 1.5						mg/l	mg/d			
6V. Carbon Tetrachloride (56-23-5)			X	< 0.005	< 1.5						mg/l	mg/d			
7V. Chlorobenzene (108-90-7)			X	< 0.005	< 1.5						mg/l	mg/d			
8V. Chlorodibromomethane (124-48-1)			X	< 0.005	< 1.5						mg/l	mg/d			
9V. Chloroethane (75-00-3)			X	< 0.010	< 0.00						mg/l	mg/d			
10V. 2-Chloroethylnyl Ether (110-75-8)			X												
11V. Chloroform (67-66-3)			X	< 0.005	< 1.5						mg/l	mg/d			
12V. Dichlorobromomethane (75-27-4)			X	< 0.005	< 1.5						mg/l	mg/d			
13V. Dichlorodifluoromethane (75-71-8)			X												
14V. 1,1-Dichloroethane (75-34-3)			X	< 0.005	< 1.5						mg/l	mg/d			
15V. 1,2-Dichloroethane (107-06-2)			X	< 0.005	< 1.5						mg/l	mg/d			
16V. 1,1-Dichloroethylene (75-35-4)			X	< 0.005	< 1.5						mg/l	mg/d			
17V. 1,2-Dichloropropane (78-87-5)			X	< 0.005	< 1.5						mg/l	kg/d			
18V. 1,3-Dichloropropylene (542-75-6)			X	<	< 0.0						mg/l	mg/d			
19V. Ethylbenzene (100-41-4)			X	< 0.005	< 1.5						mg/l	mg/d			
20V. Methyl Bromide (74-83-9)			X	< 0.010	< 3.0						mg/l	mg/d			
21V. Methyl Chloride (74-87-3)			X	< 0.010	< 3.0						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. TESTING RE-QUIRED	B. BELIEVED PRE-SENT	C. BELIEVED AB-SENT	B. MAXIMUM DAILY VALUE		D. MAXIMUM 30 DAY VALUE (if available)		C. LONG TERM AVRG. VALUE (if available)		d. NO. OF ANAL- YSES	B. CON- TRATION	D. MASS	B. LONG TERM AVERAGE VALUE		D. NO. OF ANAL- YSES
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
GC/MS FRACTION -- VOLATILE COMPOUNDS (continued)															
22V. Methylene Chloride (75-09-2)			X	< 0.005	< 1.5						mg/l	mg/d			
23V. 1,1,2,2-Tetra- chloroethane (79-34-5)			X	< 0.005	< 1.5						mg/l	mg/d			
24V. Tetrachloro- ethylene (127-18-4)			X	< 0.005	< 1.5						mg/l	mg/d			
25V. Toluene (108-98-3)			X	< 0.005	< 1.5						mg/l	mg/d			
26V. 1,2-Trans- Dichloroethylene (156-60-5)			X	< 0.005	< 1.5						mg/l	mg/d			
27V. 1,1,1-Tri- chloroethane (71-55-6)			X	< 0.005	< 1.5						mg/l	mg/d			
28V. 1,1,2-Tri- chloroethane (79-00-5)			X	< 0.005	< 1.5						mg/l	mg/d			
29V. Trichloro- ethylene (79-01-6)			X	< 0.005	< 1.5						mg/l	mg/d			
30V. Trichloro- fluoromethane (75-69-4)			X	< 0.005	< 1.5						mg/l	mg/d			
31V. Vinyl Chloride (75-01-4)			X	< 0.010	< 3.0						mg/l	mg/d			
GC/MS FRACTION -- ACID COMPOUNDS															
1A. 2-Chloropheno (95-57-8)			X	< 0.010	< 3.0						mg/l	mg/d			
2A. 2,4-Dichloro- phenol (120-83-2)			X	< 0.010	< 3.0						mg/l	mg/d			
3A. 2,4-Dimethyl- phenol (105-67-9)			X	< 0.010	< 3.0						mg/l	mg/d			
4A. 4,6-Dinitro-O- Cresol (534-52-1)			X	< 0.010	< 3.0						mg/l	mg/d			
5A. 2,4-Dinitro- phenol (51-28-5)			X	< 0.010	< 3.0						mg/l	mg/d			
6A. 2-Nitrophenol (88-75-8)			X	< 0.010	< 3.0						mg/l	mg/d			
7A. 4-Nitrophenol (100-02-7)			X	< 0.010	< 3.0						mg/l	mg/d			
8A. P-Chloro-M- Cresol (99-50-7)			X	< 0.010	< 3.0						mg/l	mg/d			
9A. Pentachloro- phenol (87-86-5)			X	< 0.010	< 3.0						mg/l	mg/d			
10A. Phenol (108-95-2)			X	< 0.010	< 3.0						mg/l	mg/d			
11A. 2,4,6-Tri- chlorophenol (88-06-2)			X	< 0.010	< 3.0						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. TEST-ING RE-QUIRED	b. RE-LIEVED PRE-SENT	c. RE-LIEVED AB-SENT	3. MAXIMUM DAILY VALUE		d. MAXIMUM 30 DAY VALUE (if available)		e. LONG TERM AVG. VALUE (if available)		d. NO. OF ANAL-YSES	b. CONCENTRATION	b. MASS	8. LONG TERM AVERAGE VALUE		d. NO. OF ANAL-YSES
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS						
3C/MS FRACTION - BASE/NEUTRAL COMPOUNDS															
1B. Acenaphthene (83-32-9)			X	< 0.010	< 3.0						mg/l	mg/d			
2B. Acenaphthylene (208-96-8)			X	< 0.010	< 3.0						mg/l	mg/d			
3B. Anthracene (120-12-7)			X	< 0.010	< 3.0						mg/l	mg/d			
4B. Benzidine (92-87-5)			X	< 0.010	< 3.0						mg/l	mg/d			
5B. Benzo (a) Anthracene (56-85-3)			X	< 0.010	< 3.0						mg/l	mg/d			
6B. Benzo (a) Pyrene (50-32-8)			X	< 0.010	< 3.0						mg/l	mg/d			
7B. 3,4-Benzo-fluoranthene (205-99-2)			X	< 0.010	< 3.0						mg/l	mg/d			
8B. Benzo (ghi) Perylene (191-24-2)			X	< 0.010	< 3.0						mg/l	mg/d			
9B. Benzo (k) Fluoranthene (207-08-9)			X	< 0.010	< 3.0						mg/l	mg/d			
10B. Bis (2-Chloroethoxy) Methane (111-91-1)			X	< 0.010	< 3.0						mg/l	mg/d			
11B. Bis (2-Chloroethyl) Ether (111-44-4)			X	< 0.010	< 3.0						mg/l	mg/d			
12B. Bis (2-Chloroisopropyl) Ether (102-60-1)			X	< 0.010	< 3.0						mg/l	mg/d			
13B. Bis (2-Ethylhexyl) Phthalate (117-81-7)			X	< 0.010	< 3.0						mg/l	mg/d			
14B. 4-Bromophenyl Phenyl Ether (101-55-3)			X	< 0.010	< 3.0						mg/l	mg/d			
15B. Butyl Benzyl Phthalate (85-68-7)			X	< 0.010	< 3.0						mg/l	mg/d			
16B. 2-Chloronaphthalene (91-58-7)			X	< 0.010	< 3.0						mg/l	mg/d			
17B. 4-Chlorophenyl Phenyl Ether (7005-72-3)			X	< 0.010	< 3.0						mg/l	mg/d			
18B. Chrysene (218-01-9)			X	< 0.010	< 3.0						mg/l	mg/d			
19B. Dibenzo (a,h) Anthracene (53-70-3)			X	< 0.010	< 3.0						mg/l	mg/d			
20B. 1,2-Dichlorobenzene (95-50-1)			X	< 0.010	< 3.0						mg/l	mg/d			
21B. 1,3-Dichlorobenzene (541-73-1)			X	< 0.010	< 3.0						mg/l	mg/d			

CONTINUED FROM PAGE V-6

1. POLLUTANT AND CAS NUMBER (if available)	2. MARK 'X'			3. EFFLUENT						d. NO. OF ANALYSES	4. UNITS		5. INTAKE (optional)		
	B. TESTING REQUIRED	D. BELIEVED PRESENT	C. BELIEVED ABSENT	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVRG. VALUE (if available)			b. CONCENTRATION	b. MASS	a. LONG TERM AVERAGE VALUE		d. 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 (continued)															
22B. 1,4-Dichlorobenzene (106-46-7)			X	< 0.010	< 3.0						mg/l	mg/d			
23B. 3,3'-Dichlorobenzidine (91-94-1)			X	< 0.010	< 3.0						mg/l	mg/d			
24B. Diethyl Phthalate (84-66-2)			X	< 0.010	< 3.0						mg/l	mg/d			
25B. Dimethyl Phthalate (131-11-3)			X	< 0.010	< 3.0						mg/l	mg/d			
26B. DI-N-Butyl Phthalate (84-74-2)			X	< 0.010	< 3.0						mg/l	mg/d			
27B. 2,4-Dinitrotoluene (121-14-2)			X	< 0.010	< 3.0						mg/l	mg/d			
28B. 2,6-Dinitrotoluene (606-20-2)			X	< 0.010	< 3.0						mg/l	mg/d			
29B. DI-N-Octyl Phthalate (117-84-0)			X	< 0.010	< 3.0						mg/l	mg/d			
30B. 1,2-Diphenylhydrazine (as Azobenzene) (122-66-7)			X	< 0.010	< 3.0						mg/l	mg/d			
31B. Fluoranthene (206-44-0)			X	< 0.010	< 3.0						mg/l	mg/d			
32B. Fluorane (86-73-7)			X	< 0.010	< 3.0						mg/l	mg/d			
33B. Hexachlorobenzene (118-74-1)			X	< 0.010	< 3.0						mg/l	mg/d			
34B. Hexachlorobutadiene (87-68-3)			X	< 0.010	< 3.0						mg/l	mg/d			
35B. Hexachlorocyclopentadiene (77-47-4)			X	< 0.010	< 3.0						mg/l	mg/d			
36B. Hexachloroethene (67-72-1)			X	< 0.010	< 3.0						mg/l	mg/d			
37B. Indeno (1,2,3-cd) Pyrene (193-39-5)			X	< 0.010	< 3.0						mg/l	mg/d			
38B. Isophorone (78-69-1)			X	< 0.010	< 3.0						mg/l	mg/d			
39B. Naphthalene (91-20-3)			X	< 0.010	< 3.0						mg/l	mg/d			
40B. Nitrobenzene (98-95-3)			X	< 0.010	< 3.0						mg/l	mg/d			
41B. N-Nitrosodimethylamine (62-75-9)			X	< 0.010	< 3.0						mg/l	mg/d			
42B. N-Nitrosodi-N-Propylamine (621-54-7)			X	< 0.010	< 3.0						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	B. MAXIMUM DAILY VALUE		D. MAXIMUM 30 DAY VALUE (if available)		C. LONG TERM AVRG. VALUE (if available)		d. NO. OF ANALYSES	a. CONCENTRATION	b. MASS	B. LONG TERM AVERAGE VALUE		D. 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 (continued)															
43B. N-Nitrosodiphenylamine (85-30-6)			X	< 0.010	< 3.0						mg/l	mg/d			
44B. Phenanthrene (85-01-8)			X	< 0.010	< 3.0						mg/l	mg/d			
45B. Pyrene (129-00-0)			X	< 0.010	< 3.0						mg/l	mg/d			
46B. 1,2,4-Trichlorobenzene (120-82-1)			X	< 0.010	< 3.0						mg/l	mg/d			
GC/MS FRACTION - PESTICIDES															
1P. Aldrin (809-00-2)			X	< 0.06	< 18.2						ug/l	ug/d			
2P. α -BHC (819-84-6)			X	< 0.02	< 6.1						ug/l	ug/d			
3P. β -BHC (819-85-7)			X	< 0.1	< 30.3						ug/l	ug/d			
4P. γ -BHC (88-89-9)			X	< 0.03	< 9.1						ug/l	ug/d			
5P. δ -BHC (819-86-8)			X	< 0.12	< 36.3						ug/l	ug/d			
6P. Chlordane (57-74-9)			X	< 0.25	< 75.7						ug/l	ug/d			
7P. 4,4'-DDT (50-29-3)			X	< 0.06	< 18.2						ug/l	ug/d			
8P. 4,4'-DDE (72-55-9)			X	< 0.08	< 24.2						ug/l	ug/d			
9P. 4,4'-DDD (72-54-8)			X	< 0.08	< 24.2						ug/l	ug/d			
10P. Dieldrin (50-57-1)			X	< 0.08	< 24.2						ug/l	ug/d			
11P. α -Endosulfan (115-29-7)			X	< 0.05	< 15.1						ug/l	ug/d			
12P. β -Endosulfan (115-29-7)			X	< 0.08	< 24.2						ug/l	ug/d			
13P. Endosulfan Sulfate (1031-07-8)			X	< 0.09	< 27.3						ug/l	ug/d			
14P. Endrin (72-20-8)			X	< 0.06	< 18.2						ug/l	ug/d			
15P. Endrin Aldehyde (7421-93-4)			X	< 0.62	< 0.2						ug/l	ug/d			
16P. Heptachlor (76-44-8)			X	< 0.3	< 90.8						ug/l	ug/d			

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EPA I.D. NUMBER (copy from Item 1 of Form 1) **NM0890010515** OUTFALL NUMBER **07A109**

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 RE-QUIRED	b. BELIEVED PRE-SENT	c. BELIEVED AB-SENT	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVRG. VALUE (if available)		d. NO. OF ANAL-YSES	a. CONCEN-TRATION	b. MASS	a. LONG TERM AVERAGE VALUE		b. NO. OF ANAL-YSES
				(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	< 0.04	< 12.1						ug/l	ug/d			
18P. PCB-1242 (53469-21-9)			X	< 0.68	< 0.2						ug/l	ug/d			
19P. PCB-1254 (11097-69-1)			X	< 0.68	< 0.2						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 (11098-82-5)			X	< 0.68	< 0.2						ug/l	ug/d			
24P. PCB-1016 (12674-11-2)			X	N.D.											
25P. Toxaphene (8001-35-2)			X	< 2.5	< 0.8						ug/l	mg/d			

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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)
			N/A

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

1. Pollutant	2. Reason for Discharge
N/A	

VI. Engineering Report on Wastewater Treatment

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

Report Available

No Report

Waste Stream Characterization Report #54

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

Name	Location
N/A	

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.

Discharge is consistent with potable water.

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) JERRY L. BELLOWS, AREA MANAGER, DOE ALLEN J. TIEDMAN, ASSOC. DIRECTOR FOR OPERATIONS	B. Phone No. 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

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.
04A

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						3. UNITS (specify if blank)		4. INTAKE (optional)			
	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVG. VALUE (if available)		d. NO. OF ANALYSES	a. CONCENTRATION	b. MASS	b. LONG TERM AVERAGE VALUE		d. NO. OF ANALYSES
	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
a. Biochemical Oxygen Demand (BOD)	< 2.0	< 37.9						mg/l	g/d			
b. Chemical Oxygen Demand (COD)	< 10.0	< 0.2						mg/l	g/d			
c. Total Organic Carbon (TOC)	0.6	11.2						mg/l	g/d			
d. Total Suspended Solids (TSS)	18.0	0.3						mg/l	g/d			
e. Ammonia (as N)	< 0.1	< 1.893						mg/l	g/d			
f. Flow	VALUE 5		VALUE		VALUE			gal/day		VALUE		
g. Temperature (winter)	VALUE 13.9		VALUE		VALUE			°C		VALUE		
h. Temperature (summer)	VALUE N/A		VALUE		VALUE			°C		VALUE		
i. pH	MINIMUM 8.45	MAXIMUM 8.80	MINIMUM	MAXIMUM	X			STANDARD UNITS		X		

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'		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 AVG. VALUE (if available)		d. NO. OF ANALYSES	a. CONCENTRATION	b. MASS	b. LONG TERM AVERAGE VALUE		d. NO. OF ANALYSES
			(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
a. Bromide (24959-67-9)		X	< 0.5	< 9.5						mg/l	g/d			
b. Chlorine, Total Residual	X		0.05	0.0						mg/l	mg/d			
c. Color	X		7.0							units				
d. Fecal Coliform		X												
e. Fluoride (16984-48-8)	X		0.21	4.0						mg/l	g/d			
f. Nitrate-Nitrite (as N)	X		0.304	5.8						mg/l	g/d			

1. POLLUTANT AND CAS NO. (if available)	2. MARK 'X'		3. EFFLUENT						4. UNITS		5. INTAKE (optional)			
	B. BELIEVED PRESENT	D. BELIEVED ABSENT	B. MAXIMUM DAILY VALUE		D. MAXIMUM 30 DAY VALUE (if available)		C. LONG TERM AVG. VALUE (if available)		D. NO. OF ANALYSES	B. CONCENTRATION	D. MASS	E. LONG TERM AVERAGE VALUE		D. 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	< 0.5	< 9.5						mg/l	mg/d			
h. Oil and Grease		X	< 1.05	< 19.9						mg/l	mg/d			
i. Phosphorus (as P), Total (7723-14-0)	X		0.05	0.9						mg/l	mg/d			
j. Radioactivity														
(1) Alpha, Total	X		0.1	1.9						pCi/l	pCi/d			
(2) Beta, Total	X		6.6	0.1						pCi/l	nCi/d			
(3) Radium, Total	X													
(4) Radium 226, Total	X		0.06	1.1						pCi/l	pCi/d			
k. Sulfate (as SO ₄) (14808-79-8)	X		3.16	59.8						mg/l	mg/d			
l. Sulfide (as S)		X		0.0						mg/l	mg/d			
m. Sulfite (as SO ₃) (14265-45-3)		X	< 0.05	< 0.9						mg/l	mg/d			
n. Surfactants		X	< 0.1	< 1.9						mg/l	mg/d			
o. Aluminum, Total (7429-90-5)		X	< 0.04	< 0.8						mg/l	mg/d			
p. Barium, Total (7440-39-3)	X		0.03	0.6						mg/l	mg/d			
q. Boron, Total (7440-42-8)	X		0.02	0.4						mg/l	mg/d			
r. Cobalt, Total (7440-48-4)		X	< 0.1	< 1.9						mg/l	mg/d			
s. Iron, Total (7439-89-6)	X		0.41	7.8						mg/l	mg/d			
t. Magnesium, Total (7439-95-4)	X		2.5	47.3						mg/l	mg/d			
u. Molybdenum, Total (7439-98-7)		X	< 0.02	< 0.4						mg/l	mg/d			
v. Manganese, Total (7439-96-5)	X		0.01	0.2						mg/l	mg/d			
w. Tin, Total (7440-31-5)		X	< 0.050	< 0.9						mg/l	mg/d			
x. Titanium, Total (7440-32-6)		X	< 0.004	< 0.1						mg/l	mg/d			

NM0890010515

04A

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		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVG. VALUE (if available)		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	
METALS, CYANIDE, AND TOTAL PHENOLS														
1M. Antimony, Total (7440-36-0)			X	< 0.050	< 0.9					mg/l	mg/d			
2M. Arsenic, Total (7440-38-2)		X		0.002	0.0					mg/l	mg/d			
3M. Beryllium, Total, 7440-41-7)			X	< 0.001	< 0.0					mg/l	mg/d			
4M. Cadmium, Total (7440-43-9)			X	< 0.010	< 0.2					mg/l	mg/d			
5M. Chromium, Total (7440-47-3)		X		0.040	0.8					mg/l	mg/d			
6M. Copper, Total (7440-50-8)		X		0.031	0.6					mg/l	mg/d			
7M. Lead, Total (7439-92-1)			X	< 0.050	< 0.9					mg/l	mg/d			
8M. Mercury, Total (7439-97-6)			X	< 0.0002	< 0.00					mg/l	mg/d			
9M. Nickel, Total (7440-02-0)		X		0.06	1.1					mg/l	mg/d			
0M. Selenium, Total (7782-49-2)			X	< 0.001	< 0.0					mg/l	mg/d			
1M. Silver, Total (7440-22-4)			X	< 0.010	< 0.2					mg/l	mg/d			
2M. Thallium, Total (7440-28-0)			X	< 0.4	< 7.6					mg/l	mg/d			
3M. Zinc, Total (7440-66-6)		X		0.043	0.8					mg/l	mg/d			
4M. Cyanide, total (57-12-6)			X	0.01	0.2					mg/l	mg/d			
5M. Phenols, total			X	< 0.01	< 0.2					mg/l	mg/d			
DIOXIN														
2,3,7,8-Tetra-chlorodibenzo-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)			
	B. TESTING RE-REQUIRED	D. BELIEVED PRESENT	C. BELIEVED ABSENT	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVG. VALUE (if available)		d. NO. OF ANALYSES	8. CONCENTRATION	b. MASS	8. LONG TERM AVERAGE VALUE		d. NO. OF ANALYSES
				(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	< 0.1						mg/l	mg/d			
4V. Bis (Chloromethyl) Ether (542-88-1)			X												
5V. Bromoform (75-25-2)			X	< 0.005	< 0.1						mg/l	mg/d			
6V. Carbon Tetrachloride (56-23-5)			X	< 0.005	< 0.1						mg/l	mg/d			
7V. Chlorobenzene (108-90-7)			X	< 0.005	< 0.1						mg/l	mg/d			
8V. Chlorodibromomethane (124-48-1)			X	< 0.005	< 0.1						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	< 0.1						mg/l	mg/d			
12V. Dichlorobromomethane (75-27-4)			X	< 0.005	< 0.1						mg/l	mg/d			
13V. Dichlorodifluoromethane (75-71-8)			X												
14V. 1,1-Dichloroethane (75-34-3)			X	< 0.005	< 0.1						mg/l	mg/d			
15V. 1,2-Dichloroethane (107-06-2)			X	< 0.005	< 0.1						mg/l	mg/d			
16V. 1,1-Dichloroethylene (75-35-4)			X	< 0.005	< 0.1						mg/l	mg/d			
17V. 1,2-Dichloropropane (78-87-5)			X	< 0.005	< 0.1						mg/l	kg/d			
18V. 1,3-Dichloropropylene (542-75-8)			X	<	< 0.0						mg/l	mg/d			
19V. Ethylbenzene (100-41-4)			X	< 0.005	< 0.1						mg/l	mg/d			
20V. Methyl Bromide (74-83-9)			X	< 0.010	< 0.2						mg/l	mg/d			
21V. Methyl Chloride (74-87-3)			X	< 0.010	< 0.2						mg/l	mg/d			

1. POLLUTANT AND CAS NUMBER (if available)	2. MARK 'X'			3. EFFLUENT						4. UNITS		5. INTAKE (optional)			
	a. TESTING RE-REQUIRED	b. BELIEVED PRESENT	c. BELIEVED ABSENT	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVG. VALUE (if available)		d. NO. OF ANALYSES	e. CONCENTRATION	f. MASS	g. LONG TERM AVERAGE VALUE		h. NO. OF ANALYSES
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
GC/MS FRACTION - VOLATILE COMPOUNDS (continued)															
22V. Methylene Chloride (75-09-2)			X	< 0.005	< 0.1						mg/l	mg/d			
23V. 1,1,2,2-Tetrachloroethane (79-34-5)			X	< 0.005	< 0.1						mg/l	mg/d			
24V. Tetrachloroethylene (127-18-4)			X	< 0.005	< 0.1						mg/l	mg/d			
25V. Toluene (108-88-3)			X	< 0.005	< 0.1						mg/l	mg/d			
26V. 1,2-Trans-Dichloroethylene (156-60-5)			X	< 0.005	< 0.1						mg/l	mg/d			
27V. 1,1,1-Trichloroethane (71-55-6)			X	< 0.005	< 0.1						mg/l	mg/d			
28V. 1,1,2-Trichloroethane (79-00-5)			X	< 0.005	< 0.1						mg/l	mg/d			
29V. Trichloroethylene (79-01-6)			X	< 0.005	< 0.1						mg/l	mg/d			
30V. Trichlorofluoromethane (75-69-4)			X	< 0.005	< 0.1						mg/l	mg/d			
31V. Vinyl Chloride (75-01-4)			X	< 0.010	< 0.2						mg/l	mg/d			
GC/MS FRACTION - ACID COMPOUNDS															
1A. 2-Chlorophenol (95-57-8)			X	< 0.010	< 0.2						mg/l	mg/d			
2A. 2,4-Dichlorophenol (120-83-2)			X	< 0.010	< 0.2						mg/l	mg/d			
3A. 2,4-Dimethylphenol (105-67-9)			X	< 0.010	< 0.2						mg/l	mg/d			
4A. 4,6-Dinitro-O-Cresol (534-52-1)			X	< 0.010	< 0.2						mg/l	mg/d			
5A. 2,4-Dinitrophenol (51-28-5)			X	< 0.010	< 0.2						mg/l	mg/d			
6A. 2-Nitrophenol (88-75-5)			X	< 0.010	< 0.2						mg/l	mg/d			
7A. 4-Nitrophenol (100-02-7)			X	< 0.010	< 0.2						mg/l	mg/d			
8A. P-Chloro-M-Cresol (59-50-7)			X	< 0.010	< 0.2						mg/l	mg/d			
9A. Pentachlorophenol (87-86-5)			X	< 0.010	< 0.2						mg/l	mg/d			
10A. Phenol (108-95-2)			X	< 0.010	< 0.2						mg/l	mg/d			
11A. 2,4,6-Trichlorophenol (88-06-2)			X	< 0.010	< 0.2						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)			
	B. TEST-ING RE-QUIR-ED	D. RE-LIEVED PRE-SENT	C. RE-LIEVED AB-SENT	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVG. VALUE (if available)		d. NO. OF ANAL-YSES	a. CONCENT-RATION	b. MASS	e. LONG TERM AVERAGE VALUE		b. NO. OF ANAL-YSES
				(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	< 0.010	< 0.2						mg/l	mg/d			
2B. Acenaphthylene (208-96-8)			X	< 0.010	< 0.2						mg/l	mg/d			
3B. Anthracene (120-12-7)			X	< 0.010	< 0.2						mg/l	mg/d			
4B. Benzidine (92-87-5)			X	< 0.010	< 0.2						mg/l	mg/d			
5B. Benzo (a) Anthracene (56-55-3)			X	< 0.010	< 0.2						mg/l	mg/d			
6B. Benzo (a) Pyrene (50-32-8)			X	< 0.010	< 0.2						mg/l	mg/d			
7B. 3,4-Benzo-fluoranthene (205-99-2)			X	< 0.010	< 0.2						mg/l	mg/d			
8B. Benzo (ghi) Perylene (191-24-2)			X	< 0.010	< 0.2						mg/l	mg/d			
9B. Benzo (k) Fluoranthene (207-08-9)			X	< 0.010	< 0.2						mg/l	mg/d			
10B. Bis (2-Chloro-ethoxy) Methane (111-91-1)			X	< 0.010	< 0.2						mg/l	mg/d			
11B. Bis (2-Chloro-ethyl) Ether (111-44-4)			X	< 0.010	< 0.2						mg/l	mg/d			
12B. Bis (2-Chloroiso-propyl) Ether (102-60-1)			X	< 0.010	< 0.2						mg/l	mg/d			
13B. Bis (2-Ethyl-hexyl) Phthalate (117-81-7)			X	< 0.010	< 0.2						mg/l	mg/d			
14B. 4-Bromo-phenyl Phenyl Ether (101-55-3)			X	< 0.010	< 0.2						mg/l	mg/d			
15B. Butyl Benzyl Phthalate (85-68-7)			X	< 0.010	< 0.2						mg/l	mg/d			
16B. 2-Chloro-naphthalene (91-58-7)			X	< 0.010	< 0.2						mg/l	mg/d			
17B. 4-Chloro-phenyl Phenyl Ether (7005-72-3)			X	< 0.010	< 0.2						mg/l	mg/d			
18B. Chrysene (218-01-8)			X	< 0.010	< 0.2						mg/l	mg/d			
19B. Dibenzo (a,h) Anthracene (53-70-3)			X	< 0.010	< 0.2						mg/l	mg/d			
20B. 1,2-Dichloro-benzene (95-50-1)			X	< 0.010	< 0.2						mg/l	mg/d			
21B. 1,3-Dichloro-benzene (541-73-1)			X	< 0.010	< 0.2						mg/l	mg/d			

CONTINUED FROM PAGE V-6

1. POLLUTANT AND CAS NUMBER (if available)	2. MARK 'X'			3. EFFLUENT								4. UNITS		5. INTAKE (optional)		
	TESTING REQUIRED	D. BELIEVED PRESENT	C. BELIEVED ASSENT	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVRG. VALUE (if available)		d. NO. OF ANALYSES	B. CONCENTRATION	b. MASS	3. LONG TERM AVERAGE VALUE		b. NO. OF ANALYSES	
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS							
GC/MS FRACTION - BASE/NEUTRAL COMPOUNDS (continued)																
22B. 1,4-Dichlorobenzene (106-46-7)			X	< 0.010	< 0.2						mg/l	mg/d				
23B. 3,3'-Dichlorobenzidine (91-94-1)			X	< 0.010	< 0.2						mg/l	mg/d				
24B. Diethyl Phthalate (84-86-2)			X	< 0.010	< 0.2						mg/l	mg/d				
25B. Dimethyl Phthalate (131-11-3)			X	< 0.010	< 0.2						mg/l	mg/d				
26B. Di-N-Butyl Phthalate (84-74-2)			X	< 0.010	< 0.2						mg/l	mg/d				
27B. 2,4-Dinitrotoluene (121-14-2)			X	< 0.010	< 0.2						mg/l	mg/d				
28B. 2,6-Dinitrotoluene (606-20-2)			X	< 0.010	< 0.2						mg/l	mg/d				
29B. Di-N-Octyl Phthalate (117-84-0)			X	< 0.010	< 0.2						mg/l	mg/d				
30B. 1,2-Diphenylhydrazine (as Azobenzene) (122-66-7)			X	< 0.010	< 0.2						mg/l	mg/d				
31B. Fluoranthene (206-44-0)			X	< 0.010	< 0.2						mg/l	mg/d				
32B. Fluorane (86-73-7)			X	< 0.010	< 0.2						mg/l	mg/d				
33B. Hexachlorobenzene (118-74-1)			X	< 0.010	< 0.2						mg/l	mg/d				
34B. Hexachlorobutadiene (87-68-3)			X	< 0.010	< 0.2						mg/l	mg/d				
35B. Hexachlorocyclopentadiene (77-47-4)			X	< 0.010	< 0.2						mg/l	mg/d				
36B. Hexachloroethane (67-72-1)			X	< 0.010	< 0.2						mg/l	mg/d				
37B. Indeno (1,2,3-cd) Pyrene (193-39-5)			X	< 0.010	< 0.2						mg/l	mg/d				
38B. Isophorone (78-59-1)			X	< 0.010	< 0.2						mg/l	mg/d				
39B. Naphthalene (91-20-3)			X	< 0.010	< 0.2						mg/l	mg/d				
40B. Nitrobenzene (98-96-3)			X	< 0.010	< 0.2						mg/l	mg/d				
41B. N-Nitrosodimethylamine (62-75-9)			X	< 0.010	< 0.2						mg/l	mg/d				
42B. N-Nitrosodi-N-Propylamine (621-64-7)			X	< 0.010	< 0.2						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	8. 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 (continued)															
43B. N-Nitrosodiphenylamine (85-30-6)			X	< 0.010	< 0.4						mg/l	mg/d			
44B. Phenanthrene (85-01-8)			X	< 0.010	< 0.4						mg/l	mg/d			
45B. Pyrene (129-00-0)			X	< 0.010	< 0.4						mg/l	mg/d			
46B. 1,2,4-Trichlorobenzene (120-82-1)			X	< 0.010	< 0.4						mg/l	mg/d			
GC/MS FRACTION - PESTICIDES															
1P. Aldrin (309-00-2)			X	< 0.06	< 2.2						ug/l	ug/d			
2P. α -BHC (319-84-6)			X	< 0.02	< 0.7						ug/l	ug/d			
3P. β -BHC (319-85-7)			X	< 0.1	< 3.6						ug/l	ug/d			
4P. γ -BHC (38-89-8)			X	< 0.03	< 1.1						ug/l	ug/d			
5P. δ -BHC (319-86-8)			X	< 0.12	< 4.3						ug/l	ug/d			
6P. Chlordane (57-74-9)			X	< 0.25	< 9.0						ug/l	ug/d			
7P. 4,4'-DDT (50-29-3)			X	< 0.06	< 2.2						ug/l	ug/d			
8P. 4,4'-DDE (72-65-9)			X	< 0.08	< 2.9						ug/l	ug/d			
9P. 4,4'-DDD (72-54-8)			X	< 0.08	< 2.9						ug/l	ug/d			
10P. Dieldrin (50-57-1)			X	< 0.08	< 2.9						ug/l	ug/d			
11P. α -Endosulfan (115-29-7)			X	< 0.05	< 1.8						ug/l	ug/d			
12P. β -Endosulfan (115-29-7)			X	< 0.08	< 2.9						ug/l	ug/d			
13P. Endosulfan Sulfate (1031-07-8)			X	< 0.09	< 3.2						ug/l	ug/d			
14P. Endrin (72-20-8)			X	< 0.06	< 2.2						ug/l	ug/d			
15P. Endrin Aldehyde (7421-93-4)			X	< 0.62	< 22.3						ug/l	ug/d			
16P. Heptachlor (76-44-8)			X	< 0.3	< 10.8						ug/l	mg/d			

CONTINUED FROM PAGE V-8

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

 OUTFALL NUMBER **04A**

 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 AVG. 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	< 0.04	< 1.4						ug/l	ug/d			
18P. PCB-1242 (53469-21-9)			X	< 0.68	< 24.5						ug/l	ug/d			
19P. PCB-1254 (11097-69-1)			X	< 0.68	< 24.5						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 (11098-82-5)			X	< 0.68	< 24.5						ug/l	ug/d			
24P. PCB-1016 (12674-11-2)			X	N.D.											
25P. Toxaphene (8001-35-2)			X	< 2.5	< 89.9						ug/l	mg/d			

PAGE V-9

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)
3-226-OPN-1	5	12	0.000005	5 GPD	260 day/yr

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)
			N/A

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

1. Pollutant	2. Reason for Discharge
N/A	

VI. Engineering Report on Wastewater Treatment

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

Report Available

No Report

Waste Stream Characterization Report #54

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

Name	Location
N/A	

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.

See attached 04A datasheets and line drawing. Discharge is consistent with potable water with hand washing activities (grey water).

VIII. Certification

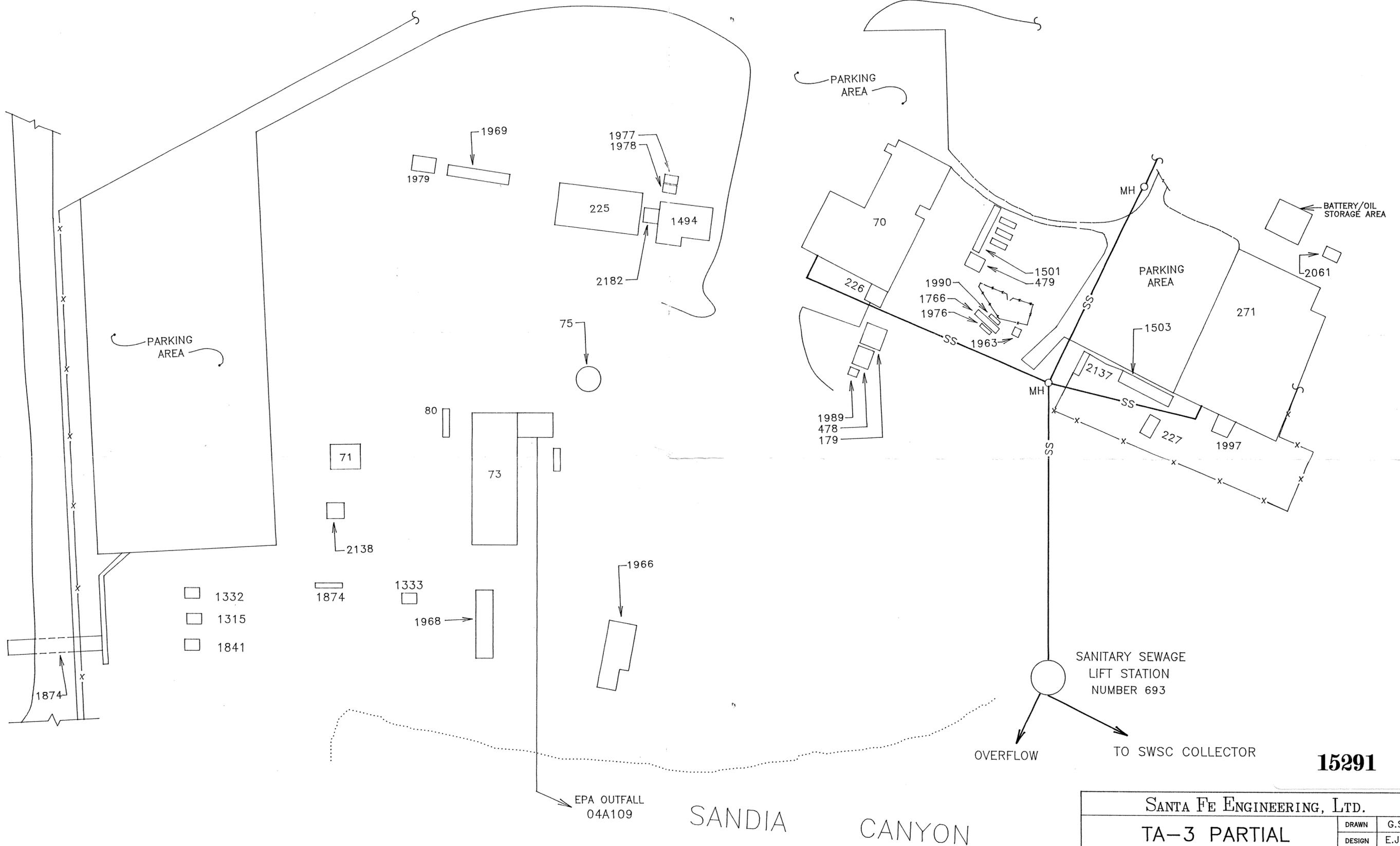
I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage 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) JERRY L. BELLOWS, AREA MANAGER, DOE ALLEN J. TIEDMAN, ASSOC. DIRECTOR FOR OPERATIONS	B. Phone No. 505-667-5105 505-667-9390
C. Signature	D. Date Signed

DYE STUDY INFORMATION

BUILDING NUMBER	DRAIN NUMBER	DID DYE REACH EXPECTED DESTINATION?	COMMENTS
3-70	1TL1	YES	NONE
3-70	1TL2	YES	NONE
3-79	1SD1	YES	NONE
3-271	1TL1	YES	NONE
3-271	1TL2	YES	NONE

DRAINS FOR BUILDINGS 3-71, 73, 75, 226 AND 1968 WERE VISUALLY TRACED.



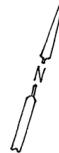
15291

NOTES:

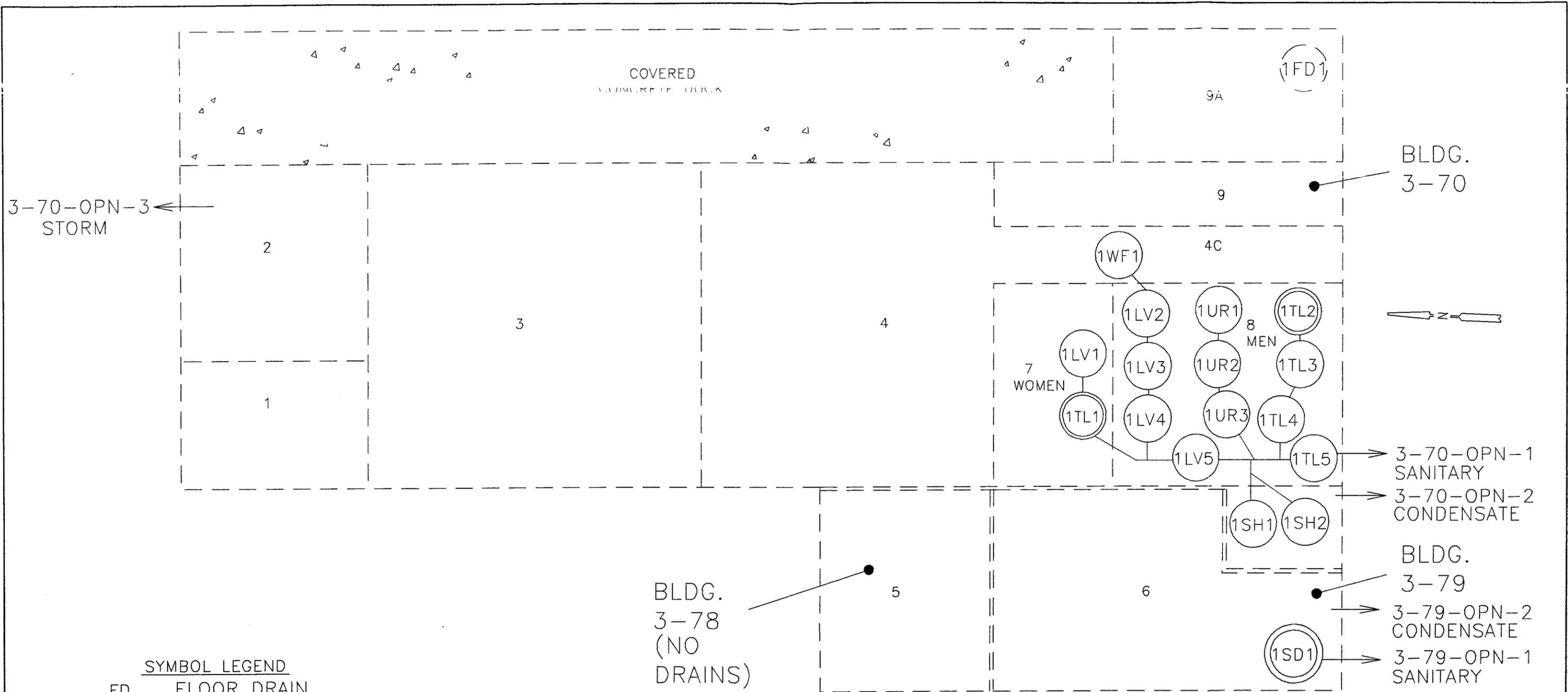
1) ACTUAL PIPING DETERMINED FROM ENGINEERING DRAWINGS R 5134, SHEET 4 AND C 51441, SHEET 10, AND ON-SITE INSPECTION.

TA-3 PARTIAL SITE PLAN

- NOT TO SCALE -



SANTA FE ENGINEERING, LTD.			
TA-3 PARTIAL SITE PLAN		DRAWN	G.S.
		DESIGN	E.J.H.
		CHECKED	P.E.B.
		RELEASED	
		DATE	11-18-92
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	11056-54	FIGURE 1	



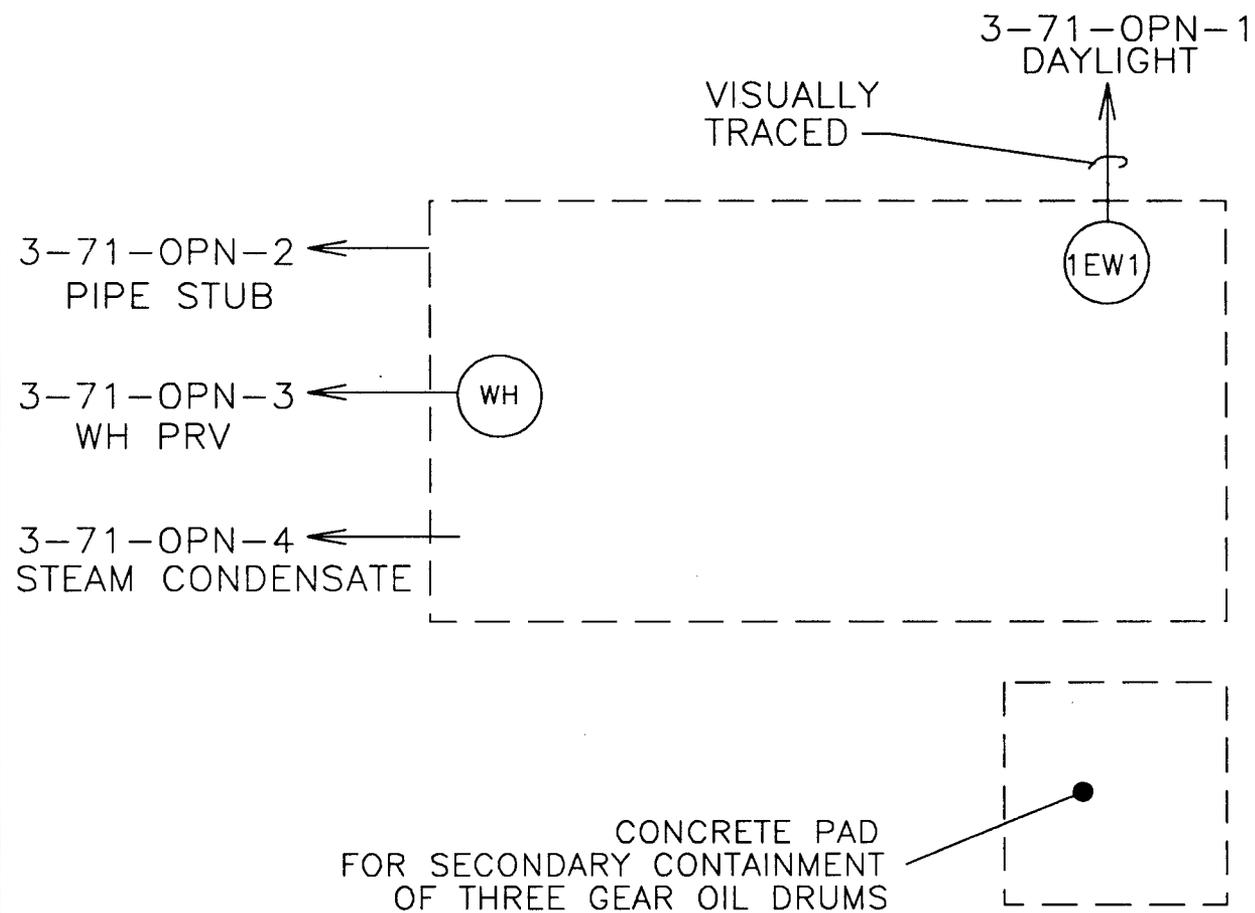
SYMBOL LEGEND

- FD FLOOR DRAIN
- LV LAVATORY
- SD SINK DRAIN
- SH SHOWER
- TL TOILET
- WF WATER FOUNTAIN
- WH WATER HEATER
- UR URINAL
-  DYE TESTED DRAIN
-  PLUGGED DRAIN

NOTES:

1) ACTUAL PIPING DETERMINED FROM ENGINEERING DRAWING C-46229 AND ON-SITE INSPECTION.

SANTA FE ENGINEERING, LTD.			
TA-3 BUILDINGS 70, 78 AND 79		DRAWN	D.A.H.
DRAIN SCHEMATIC		DESIGN	E.J.H.
		CHECKED	P.E.B.
		DATE	12/3/92
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.	
REQUESTING GROUP EM-8	11056-54	FIGURE 2	
		REV.	



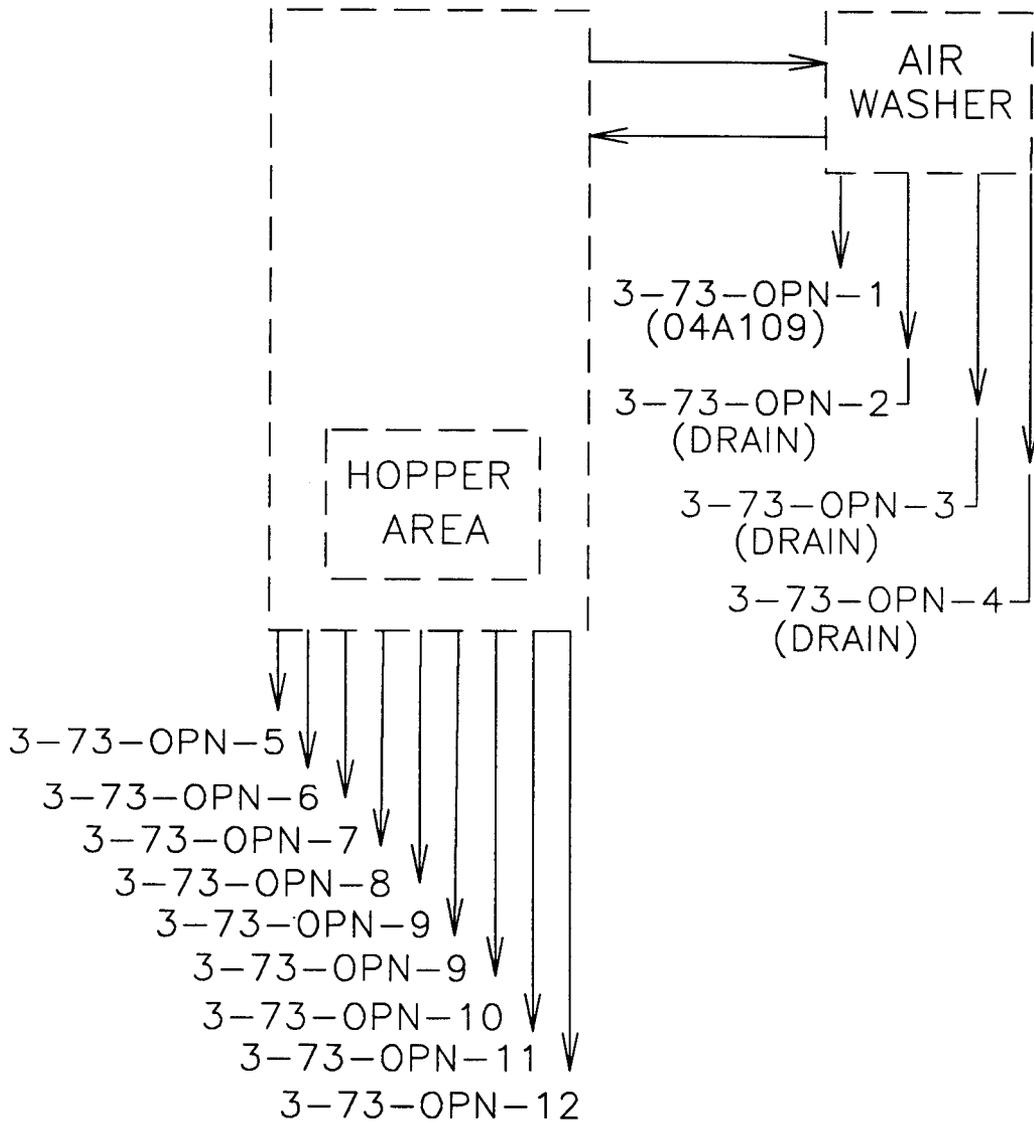
LEGEND

- EW - EYE WASH
- PD - PIPE DRAIN
- PRV - PRESSURE RELIEF VALVE
- WH - WATER HEATER

NOTES

1) ACTUAL PIPING DETERMINED FROM ON-SITE INSPECTION.

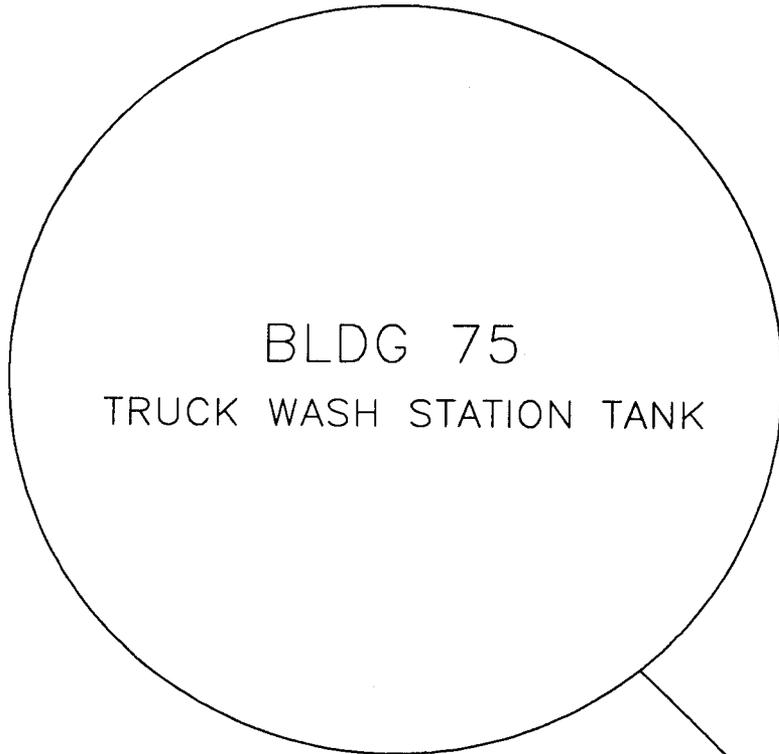
SANTA FE ENGINEERING, LTD.			
TA-3-71		DRAWN EJH	DESIGN EJH
DRAIN SCHEMATIC		CHECKED PEB	DATE 12/29/92
SUBMITTED	RECOMMENDED	APPROVED	
Los Alamos		Los Alamos National Laboratory Los Alamos, New Mexico 87545	SHEET 1 OF 1
CLASSIFICATION	REVIEWER	DATE	
REQUESTING DIVISION	LAB JOB NO.	DRAWING NO.	REV.
REQUESTING GROUP EM-8	11056-54	FIGURE 3	



NOTES

- 1) ACTUAL PIPING DETERMINED FROM ON-SITE INSPECTION.
- 2) PIPING VISUALLY TRACED.

SANTA FE ENGINEERING, LTD.			
TA-3-73		DRAWN EJH	SHEET 1 OF 1
DRAIN SCHEMATIC		DESIGN EJH	
		CHECKED PEB	
		DATE 12/29/92	
SUBMITTED	RECOMMENDED	APPROVED	
Los Alamos Los Alamos National Laboratory Los Alamos, New Mexico 87545			
CLASSIFICATION	REVIEWER	DATE	
REQUESTING DIVISION	LAB JOB NO.	DRAWING NO.	REV.
REQUESTING GROUP EM-8	11056-54	FIGURE 4	



BLDG 75
TRUCK WASH STATION TANK

3-75-OPN-3
SYSTEM DRAIN

3-75-OPN-2
SYSTEM DRAIN

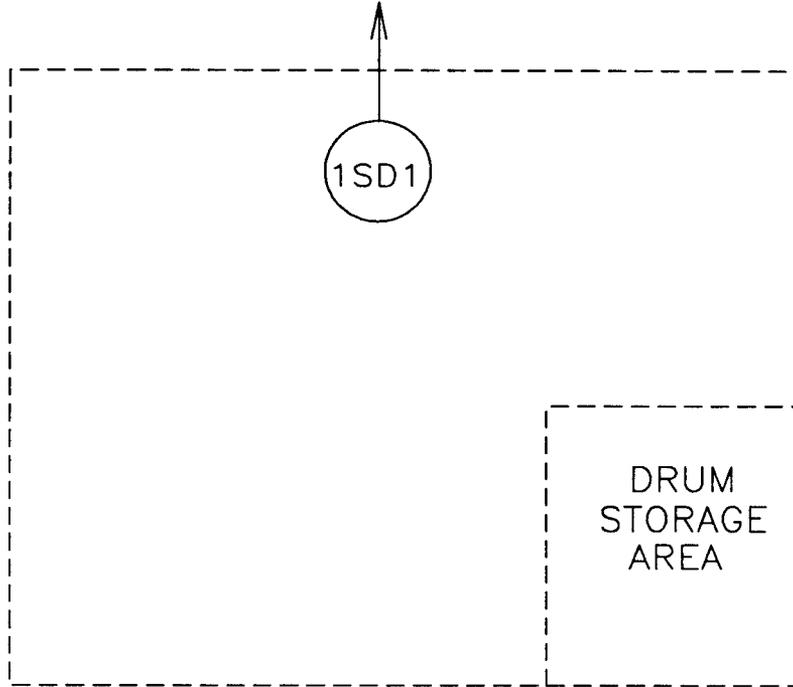
3-75-OPN-1
(WASH SYSTEM)

NOTES

- 1) ACTUAL PIPING DETERMINED FROM ON-SITE INSPECTION.
- 2) PIPING VISUALLY TRACED.

SANTA FE ENGINEERING, LTD.			
TA-3-75		DRAWN	EJH
DRAIN SCHEMATIC		DESIGN	EJH
		CHECKED	PEB
		DATE	12/29/92
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.	
REQUESTING GROUP EM-8	11056-54	FIGURE 5	
		REV.	

3-226-OPN-1
TO DAYLIGHT



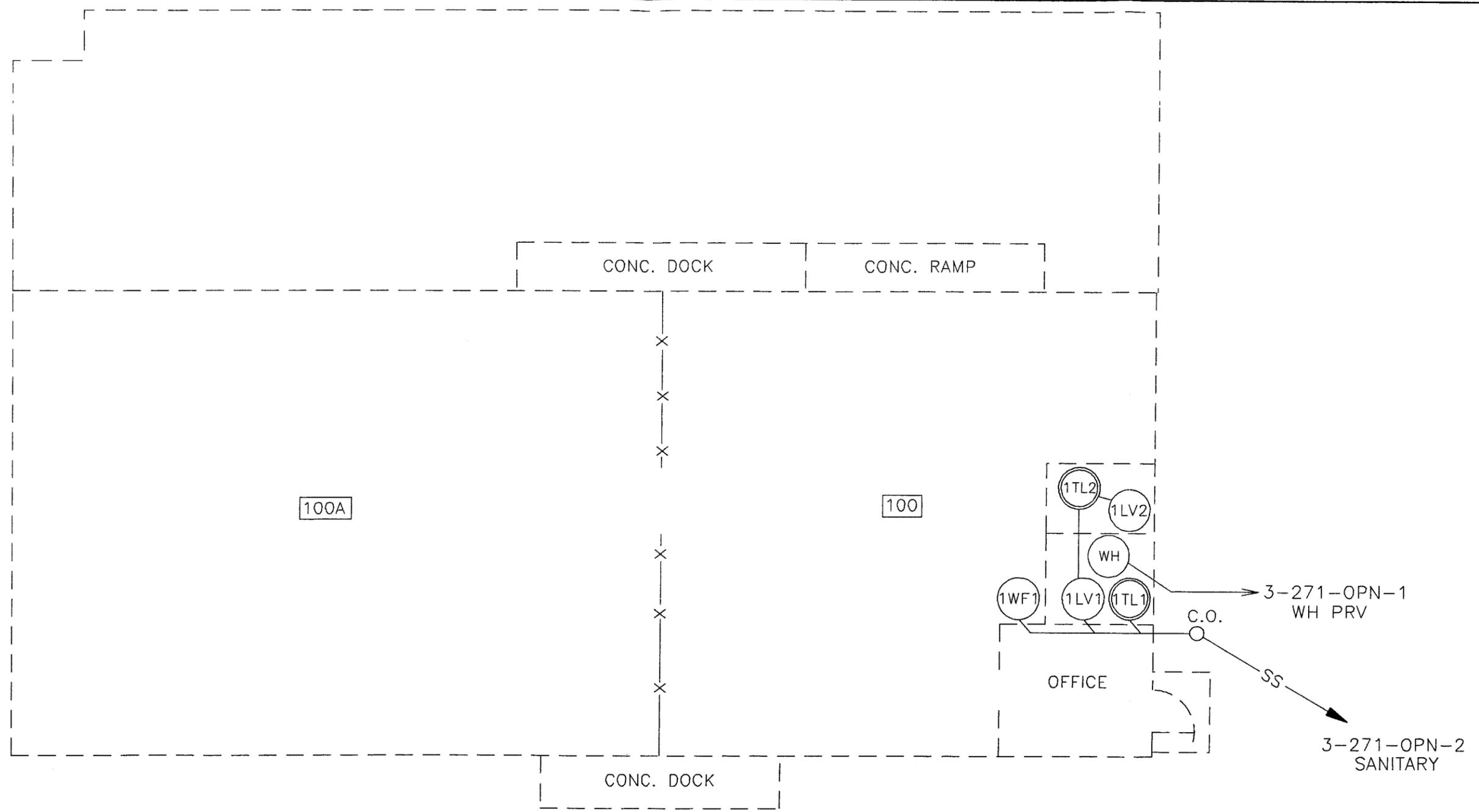
LEGEND

SD - SINK DRAIN

NOTES

- 1) ACTUAL PIPING DETERMINED FROM ON-SITE INSPECTION.
- 2) PIPING VISUALLY TRACED.

SANTA FE ENGINEERING, LTD.			
TA-3-226		DRAWN	EJH
DRAIN SCHEMATIC		DESIGN	EJH
		CHECKED	PEB
		DATE	12/29/92
SUBMITTED	RECOMMENDED	APPROVED	
Los Alamos		Los Alamos National Laboratory Los Alamos, New Mexico 87545	SHEET 1 OF 1
CLASSIFICATION		REVIEWER	
REQUESTING DIVISION	LAB JOB NO.	DATE	
REQUESTING GROUP EM-8	11056-54	DRAWING NO. FIGURE 6	
		REV.	



TA-3-271

- NOT TO SCALE -

NOTES:

- 1) ACTUAL PIPING DETERMINED FROM ENGINEERING DRAWING C-36851 AND ON-SITE INSPECTION.

SYMBOL LEGEND	
CO	CLEAN-OUT
LV	LAVATORY
PRV	PRESSURE RELIEF VALVE
TL	TOILET
WF	WATER FOUNTAIN
WH	WATER HEATER

 DYE TESTED DRAIN

SANTA FE ENGINEERING, LTD.

TA-3-271
DRAIN SCHEMATIC

DRAWN	G.S.
DESIGN	EJH
CHECKED	PEB
DATE	11/20/92

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 11056-54 FIGURE 7

OIL SUPPLY TO BLDG 3-73

BLDG. 3-1968
OIL TANK

3-1968-OPN-2
TANK DRAIN

3-1968-OPN-3
TANK DRAIN

3-1968-OPN-6
(VENT)

3-1968-OPN-4 (VENT)

3-1968-OPN-5 (VENT)

UNMARKED STRUCTURE
DRAINAGE POND

OIL AND WATER
DRAINAGE

VALVE

3-1968-OPN-1
DAYLIGHT

NOTES

- 1) ACTUAL PIPING DETERMINED FROM ON-SITE INSPECTION.

SANTA FE ENGINEERING, LTD.

TA-3-1968

DRAIN SCHEMATIC

DRAWN	EJH
DESIGN	EJH
CHECKED	PEB
DATE	12/29/92

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	11056-54	FIGURE 8			