

**WASTEWATER STREAM  
CHARACTERIZATION FOR  
TA 53-6, 17, 18, 19, 31, 293,  
294, 385, 400, 401, 402, 403,  
404, 405, 409, 543, 577, 617,  
620, 678, 708, 709, 710, 764,  
833, 835, 852, 874, 888,  
1032, 1038 AND 1053**

**at  
Los Alamos National Laboratory**

**ENVIRONMENTAL STUDY**

**CHARACTERIZATION REPORT # 30**

REVISION NO.	<u>1</u>
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ENVIRONMENTAL STUDY

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

under subcontract 9-XG8-2874P-1

by:  
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UPDATED PER EM-8 COMMENTS OCTOBER, 1993

## EXECUTIVE SUMMARY

Buildings 6, 17, 18, 19, 31, 293, 294, 385, 400, 401, 402, 403, 404, 405, 409, 543, 577, 617, 620, 678, 708, 709, 710, 764, 833, 835, 852, 874, 888, 1032, 1038 and 1053 in TA-53 were visited to document all drain piping and building outflows and to make permitting recommendations. The pipes exiting the buildings are as follows:

1. from 53-6: two sanitary sewer connections, one connection to outfall 03A145, five roof drains, six fire protection drains and two condensed water drains,
2. from 53-17: one sanitary sewer connection, one water heater relief valve and three fire protection drains,
3. from 53-18: two sanitary sewer connections, seven fire protection drains, two domestic water backflow preventer discharges, two abandoned pipes and one condensed water drain line,
4. from 53-19: one sanitary sewer connection, one connection to outfall 04A133, two fire protection drains, four condensed water drains, three vacuum pump exhausts, three water drains from evaporative coolers and two compressed gas pressure valve discharges,
5. from 53-31: one sanitary sewer connection, twelve roof drain outlets, two fire protection drains and two condensed water drains,
6. from 53-293: one connection to outfall 03A113,
7. from 53-294: one connection to outfall 03A113,
8. from 53-385, 617, 620, 678, 708, 709, 710, 764, 833, 835, 852, 874, 1038 and 1053: no drains,
9. from 53-400: one sanitary sewer connection and one water drain from an evaporative cooler,
10. from 53-401: one sanitary sewer connection and one water drain from an evaporative cooler,
11. from 53-402: one sanitary sewer connection,
12. from 53-403: one sanitary sewer connection and one water drain from an evaporative cooler,
13. from 53-404: one sanitary sewer connection, one water heater relief valve drain and one water drain from an evaporative cooler,

14. from 53-405: one sanitary sewer connection and one water drain from an evaporative cooler,
15. from 53-409: one sanitary sewer connection and two water drains from an evaporative coolers,
16. from 53-543: building removed,
17. from 53-577: one sanitary sewer connection, one water heater relief valve drain and three water drains from evaporative coolers,
18. from 53-888: one sanitary sewer connection and
19. from 53-1032: one connection to outfall 03A113.

The small cooling tower on the northeast corner of building 53-365 was previously documented to blowdown into permitted outfall 03A113 per EPA permit dated August 31, 1990. During the site investigation it was found that this cooling tower blowdown actually drains to sanitary sewer in the mechanical room of building 365. This cooling tower will be addressed further in a subsequent report on building 53-365.

Revised application forms are included for each of the two permitted outfalls (03A145 and 03A113). The flows shown on the forms are estimated from site observation and discussions with Users and analytical data are defined from information from the previously sampled outfalls.

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

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

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

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## 1.0 INTRODUCTION

During February, 1992, Mark E. Wendt of Santa Fe Engineering (SFE) toured buildings 6, 17, 18, 19, 31, 293, 294, 385, 400, 401, 402, 403, 404, 405, 409, 543, 577, 617, 620, 678, 708, 709, 710, 764, 833, 835, 852, 874, 888, 1032, 1038 and 1053 in TA-53. The purpose of this study is to identify building drain piping, locate outfalls which discharge into the environment and to characterize the wastewater flows and sources existing at the time of the visit. This report will not reflect any subsequent changes in piping or operation. The Waste Stream Characterization Policy of April 14, 1992 was followed for this study. The following tasks were performed for this purpose:

1. Building drains and all piping exiting the building were identified and laid out in schematic form;
2. Wastewater sources were identified at each drain and the wastewater was characterized according to flow rate and quality. The location of outfalls and their potential sources of discharge were determined. Potential pollutants were also noted;
3. Permit applications for discharges of clean water were not prepared since these discharges do not require permitting at this time and
4. Potential problems were identified and recommendations were made for repiping, floor drain plugging and spill containment where deemed appropriate.

The field investigation proceeded by verifying drain schematic drawings prepared by SFE for the appropriate

buildings (Figures 1 through 19) from drawings provided by Los Alamos National Laboratory (LANL) Facilities Engineering Division. The other buildings were visited to insure that no drains exist for the buildings. The following process was used to define drain piping and characterize the wastewater streams:

1. Laboratory engineering drawings were used to prepare the SFE drain piping schematic. The Solid Waste Stream Characterization conducted by IT Corporation was reviewed. The National Pollutant Discharge Elimination System (NPDES) Permit, the 1990 NPDES Permit Application submitted by 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 references;
2. A site visit was performed to verify the SFE drain schematics 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 and
3. SFE verified drain piping by dye checking.

## 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 18). The final part is a unique number for each drain. For example, the floor drain numbering on the first floor would start with 1FD1. The roof drains do not have the number identifying the floor such as RD1 for Roof Drain 1.

The function of each pipe exiting from buildings are listed in Appendix 1, Tables 1 through 17, with an abbreviations list in Table 18 and non-drain recommendations listed in Table 19. 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 information about the dye study of building drains. Flow schematics of the drains from each building are attached in Appendix 5 as Figures 1 through 19 with Figure 19 being a Site Plan showing locations of buildings included in this report.

### 3.0 RECOMMENDATIONS FOR BUILDING 53-6

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

#### 3.1 Outfall 53-6-OPN-1

This outfall is from sanitary facilities and flows into a sanitary sewer manhole which drains into TA-53 Sewage Treatment Plant. No chemicals are drained into any of the drains or fixtures. The air compressor located in mechanical room 113 has a bleed-off line which currently drains to floor drain, 1FD2. It is recommended that this liquid be contained. No permitting is recommended for this outfall. No EPA forms have been prepared.

#### 3.2 Outfall 53-6-OPN-2

This outfall is from sanitary sewer facilities and flows into a sanitary sewer manhole which drains into TA-53 Sewage Treatment Plant. No chemicals are drained into any of the drains or fixtures. Two hot water heating pumps located in mechanical room 140 are leaking lubricating oil and could possibly could drain into floor drain 1ED2. Secondary containment is recommended for these two pumps. No permitting is recommended. No EPA forms have been prepared.

#### 3.3 Outfall 53-6-OPN-3

This outfall is permitted as 03A145 and receives treated cooling water blowdown. This outfall currently drains to a culvert below the driveway at the northeast corner of building 6, which drains in turn to the storm sewer system.

No changes are recommended and a revised EPA Form 2C is attached for the permitted outfall.

3.4 Outfalls 53-6-OPN-4, 53-6-OPN-9, 53-6-OPN-11, 53-6-OPN-13 and 53-6-OPN-14

These outfalls are roof drains from the building. The downspouts from each of these drains dump the water to daylight next to the building. No permitting is recommended. No EPA forms have been prepared.

3.5 Outfalls 53-6-OPN-5, 53-6-OPN-7, 53-6-OPN-8, 53-6-OPN-12, 53-6-OPN-15 and 53-6-OPN-16

These outfalls are fire water system drains which discharge to daylight next to the building. These outfalls should be covered by a Notice of Intent to Discharge (NOI). No changes are recommended. No EPA forms were completed.

3.6 Outfall 53-6-OPN-6

This outfall drains condensed water from a packaged mechanical heating/cooling unit to daylight next to the building. This outfall should be covered by an NOI. No changes are recommended. No EPA forms were completed.

3.7 Outfall 53-6-OPN-10

This outfall is from an ice machine condensate drain to daylight. This outfall should be covered by an NOI. It is recommended this outfall be piped to the sanitary sewer system. No EPA forms were completed.

**4.0 RECOMMENDATIONS FOR BUILDING 53-17**

Table 2 is a list of the drains to the building outfalls and Figure 2 is a schematic of the piping. The table lists the

recommendations for changes to the drain piping. The discussion below gives the reasoning for the recommendation.

#### 4.1 Outfall 53-17-OPN-1

This outfall is from sanitary facilities and flows into a sanitary sewer manhole which drains into the TA-53 Sewage Treatment Plant. No chemicals are drained into any of the drains or fixtures. The air compressor located in mechanical room 103 has a bleed-off line which currently drains to equipment drain 1ED1. It is recommended that the liquid from this compressor be contained. Plugging floor drains 1FD2, 1FD6, 1FD7, 1FD9 is recommended. It is recommended that sink 1SD2 in room 102 be removed and the drain line plugged. It is also recommended that sink 1SD5 in room 109 be provided with a sign stating "THIS IS A SANITARY SINK. NO CHEMICALS DOWN THIS DRAIN". This sign shall be posted in plain view from the sink. No permitting is recommended for this outfall. No EPA forms have been prepared.

#### 4.2 Outfalls 53-17-OPN-2, 53-17-OPN-3 and 53-17-OPN-5

These outfalls are fire water system drains which discharge to daylight next to the building. This outfall should be covered by an NOI. No changes are recommended for these outfalls. No EPA forms have been prepared.

#### 4.3 Outfall 53-17-OPN-4

This outfall discharges from a water heater pressure relief valve to daylight next to the building. This outfall should be covered by an NOI. No changes are recommended for this outfall. No EPA forms have been prepared.

## 5.0 RECOMMENDATIONS FOR BUILDING 53-18

Table 3 is a list of the drains to the building outfalls and Figure 3 is a schematic of the piping. The table lists the drains that connect to the outfall piping and includes recommendations for changes to the drain piping. The discussion below gives the reasoning for the recommendation. Permitted outfall 04A135 no longer exists at this building and the User group removed all of the piping related to this outfall. It is recommended this EPA permit be deleted.

### 5.1 Outfall 53-18-OPN-1

This outfall is from sanitary facilities and flows into a sewage lift station which pumps into a sanitary sewer manhole. This manhole drains into the TA-53 Sewage Treatment Plant. No chemicals are drained into any of the drains or fixtures. No permitting is recommended for this outfall. No EPA forms have been prepared.

### 5.2 Outfall 53-18-OPN-2

This outfall is from sanitary facilities and flows into a sewage lift station which pumps into a sanitary sewer manhole. This manhole drains into the TA-53 Sewage Treatment Plant. No chemicals are drained into any of the drains or fixtures. It is recommended that floor drains 1FD5 and 1FD6 and trench drain 1TD3 be plugged or re-routed to the Radioactive Liquid Waste (RLW) piping system. No permitting is recommended for this outfall. No EPA forms have been prepared.

5.3 Outfalls 53-18-OPN-3, 53-18-OPN-4, 53-18-OPN-7,  
53-18-OPN-8, 53-18-OPN-9, 53-18-OPN-10 and 53-18-OPN-14

These outfalls are fire water system drains which discharge to daylight next to the building. These outfalls should be covered by an NOI. No changes are recommended. No EPA forms were completed.

5.4 Outfalls 53-18-OPN-5 and 53-18-OPN-6

These outfalls discharge potable water from backflow preventers to daylight next to the building. These outfalls should be covered by an NOI. No changes are recommended. No EPA forms were completed.

5.5 Outfalls 53-18-OPN-11 and 53-18-OPN-12

These outfalls are no longer in use and have been abandoned. Removal or plugging of piping associated with these outfalls is recommended. No permitting is recommended. No EPA forms were completed.

5.6 Outfall 53-18-OPN-13

This outfall drains condensed water from a heating/cooling unit to daylight next to the building. This outfall should be covered by an NOI. No changes are recommended. No EPA forms were completed.

**6.0 RECOMMENDATIONS FOR BUILDING 53-19**

Table 4 is a list of the drains to the building outfalls and Figure 4 is a schematic of the piping. The table lists the drains that connect to the outfall piping and includes recommendations for changes to the drain piping. The discussion below gives the reasoning for the

recommendations. Two oil-filled transformers (no PCB's) are located at the exterior of building 19 on the northeast side which have the possibility of leaking oil into the storm water system via a manhole grate. These two transformers are number 53-19-318 and 53-19-319. Secondary containment is recommended for each of these two transformers.

#### 6.1 Outfall 53-19-OPN-1

This outfall is from sanitary facilities and flows into a sewage lift station which pumps into a sanitary sewer manhole. This manhole drains into the TA-53 Sewage Treatment Plant. No chemicals are drained into any of the drains or fixtures. Two air compressors are located in mechanical room 120. Each one has a bleed-off line which currently drains to equipment drain 1ED1. It is recommended that these two bleed-offs be contained. No permitting is recommended. No EPA forms have been prepared.

#### 6.2 Outfalls 53-19-OPN-2, 53-19-OPN-5, 53-19-OPN-11 and 53-19-OPN-14

These outfalls drain condensed water from heating/cooling units to daylight next to the building. These outfalls should be covered by an NOI. No changes are recommended. No EPA forms were completed.

#### 6.3 Outfall 53-19-OPN-3

This is permitted as outfall 04A133. The outfall is no longer in use and has been abandoned. It is recommended the EPA permit for this outfall be deleted and the piping associated with this outfall be removed or plugged. No EPA forms were completed.

#### 6.4 Outfalls 53-19-OPN-4 and 53-19-OPN-8

These outfalls are fire water system drains which discharge to daylight next to the building. These outfalls should be covered by an NOI. No changes are recommended. No EPA forms were completed.

#### 6.5 Outfalls 53-19-OPN-6, 53-19-OPN-7 and 53-19-OPN-13

These outfalls are vacuum pump exhaust pipes discharging to atmosphere. No permitting is recommended for these outfalls. No EPA forms were completed.

#### 6.6 Outfalls 53-19-OPN-9, 53-19-OPN-10 and 53-19-OPN-12

These outfalls drain untreated water from evaporative coolers to daylight next to the building. These outfalls should be covered by an NOI. No changes are recommended. No EPA forms were completed.

#### 6.7 Outfalls 53-19-OPN-15 and 53-19-OPN-16

These outfalls are compressed gas pressure relief valve discharges to atmosphere. No permitting or changes are recommended. No EPA forms were completed.

### 7.0 RECOMMENDATIONS FOR BUILDING 53-31

Table 5 is a list of the drains to the building outfalls and Figures 5 and 6 are schematics of the piping. The table lists the drains that connect to the outfall piping and includes recommendations for changes to the drain piping. The discussion below gives the reasoning for the recommendations.

### 7.1 Outfall 53-31-OPN-1

This outfall is from sanitary facilities and flows into a sewage lift station which pumps into a sanitary sewer manhole. This manhole drains into the TA-53 Sewage Treatment Plant. No chemicals are drained into any of the drains or fixtures. The air compressor located in mechanical room 102 is leaking some oil onto the floor and is flowing into equipment drains 1ED1 and 1ED2. This same air compressor has a bleed-off line which drains to equipment drain 1ED1. Containment of the liquids is recommended. The air compressor should either be repaired or provided with secondary containment. No permitting is recommended for this outfall. No EPA forms have been prepared.

### 7.2 Outfalls 53-31-OPN-2, 53-31-OPN-3, 53-31-OPN-5, 53-31-OPN-6, 53-31-OPN-7, 53-31-OPN-9, 53-31-OPN-11, 53-31-OPN-12, 53-31-OPN-13, 53-31-OPN-14, 53-31-OPN-16 and 53-31-OPN-17

These outfalls are roof drains from the building. The downspouts from each of these drains dump the water to daylight next to the building. No permitting is recommended for these outfalls and no EPA forms have been prepared.

### 7.3 Outfalls 53-31-OPN-4 and 53-31-OPN-8

These outfalls are fire water system drains which discharge to daylight next to the building. These outfalls should be covered by an NOI. No changes are recommended. No EPA forms were completed.

#### **7.4 Outfalls 53-31-OPN-10 and 53-31-OPN-15**

These outfalls drain condensed water from mechanical condensing units to daylight near the building. These outfalls should be covered by an NOI. No changes are recommended. No EPA forms were completed.

#### **8.0 RECOMMENDATIONS FOR BUILDING 53-293**

Table 6 is a list of the drains to the building outfalls and Figure 7 is a schematic of the piping. Building 53-293 is a cooling tower which serves building 53-19. The cooling tower has one outfall number 53-293-OPN-1 which discharges treated cooling water blowdown to permitted outfall 03A113 and drains to daylight in Sandia Canyon. No changes are recommended. Better record-keeping for cooling tower make-up water and blowdown flows is recommended. A revised EPA Form 2C is attached for the permitted outfall.

#### **9.0 RECOMMENDATIONS FOR BUILDING 53-294**

Table 7 is a list of the drains to the building outfall and Figure 8 is a schematic of the piping. Building 53-294 is a cooling tower which serves building 53-18. The cooling tower has one outfall numbered 53-294-OPN-1 which discharges treated cooling water blowdown to permitted outfall 03A113 and drains to daylight in Sandia Canyon. No changes are recommended. Better record-keeping for cooling tower make-up water and blowdown flows is recommended. A revised EPA Form 2C is attached for the permitted outfall.

#### **10.0 RECOMMENDATIONS FOR BUILDINGS 53-385, 617, 620, 678, 708, 709, 710, 764, 833, 835, 852, 874, 1038 AND 1053**

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

## **11.0 RECOMMENDATIONS FOR BUILDING 53-400**

Table 8 is a list of the drains to the building outfall and Figure 9 is a schematic of the piping. The table lists the drains that connect to the outfall piping and includes recommendations for changes to the drain piping. The discussion below gives the reasoning for the recommendation.

### **11.1 Outfall 53-400-OPN-1**

This outfall receives flow from two lavatories, one urinal and two toilets and flows to the TA-53 Sewage Treatment Plant. No permitting or changes are recommended. No EPA forms were prepared.

### **11.2 Outfall 53-400-OPN-2**

This outfall drains untreated water from an evaporative cooler to daylight next to the building. This outfall should be covered by an NOI. No changes are recommended. No EPA forms were completed.

## **12.0 RECOMMENDATIONS FOR BUILDING 53-401**

Table 9 is a list of the drains to the building outfall and Figure 10 is a schematic of the piping. The table lists the drains that connect to the outfall piping and includes recommendations for changes to the drain piping. The discussion below gives the reasoning for the recommendations.

### 12.1 Outfall 53-401-OPN-1

This outfall receives flow from two lavatories, one urinal, one water fountain and two toilets and flows to the TA-53 Sewage Treatment Plant. No permitting or changes are recommended. No EPA forms were prepared.

### 12.2 Outfall 53-401-OPN-2

This outfall drains untreated water from an evaporative cooler to daylight next to the building. This outfall should be covered by and NOI. No changes are recommended. No EPA forms were completed.

## 13.0 RECOMMENDATIONS FOR BUILDING 53-402

Table 10 is a list of the drains to this building outfall and Figure 11 is a schematic of the piping. This outfall receives flow from two lavatories, one urinal, one water fountain and two toilets and flows to the TA-53 Sewage Treatment Plant. No permitting or changes are recommended. No EPA forms were prepared.

## 14.0 RECOMMENDATIONS FOR BUILDING 53-403

Table 11 is a list of the drains to the building outfall and Figure 12 is a schematic of the piping. The table lists the drains that connect to the outfall piping and includes recommendations for changes to the drain piping. The discussion below gives the reasoning for the recommendation.

#### 14.1 Outfall 53-403-OPN-1

This outfall receives flow from two lavatories, one urinal and two toilets and flows to the TA-53 Sewage Treatment Plant. No permitting or changes are recommended. No EPA forms were prepared.

#### 14.2 Outfall 53-403-OPN-2

This outfall drains untreated water from an evaporative cooler to daylight next to the building. This outfall should be covered by an NOI. No changes are recommended. No EPA forms were completed.

### 15.0 RECOMMENDATIONS FOR BUILDING 53-404

Table 12 is a list of the drains to the building outfall and Figure 13 is a schematic of the piping. The table lists the drains that connect to the outfall piping and includes recommendations for changes to the drain piping. The discussion below gives the reasoning for the recommendation.

#### 15.1 Outfall 53-404-OPN-1

This outfall receives flow from two lavatories, one urinal and two toilets and flows to the TA-53 Sewage Treatment Plant. No permitting or changes are recommended. No EPA forms were prepared.

#### 15.2 Outfall 53-404-OPN-2

This outfall discharges from a water heater pressure relief valve to daylight next to the building. This outfall should be covered by an NOI. No changes are recommended. No EPA forms have been prepared.

### 15.3 Outfall 53-404-OPN-3

This outfall drains untreated water from an evaporative cooler to daylight next to the building. This outfall should be covered by an NOI. No changes are recommended. No EPA forms were completed.

## 16.0 RECOMMENDATIONS FOR BUILDING 53-405

Table 13 is a list of the drains to the building outfall and Figure 14 is a schematic of the piping. The table lists the drains that connect to the outfall piping and includes recommendations for changes to the drain piping. The discussion below gives the reasoning for the recommendations.

### 16.1 Outfall 53-405-OPN-1

This outfall receives flow from two lavatories, one urinal and two toilets and flows to the TA-53 Sewage Treatment Plant. No permitting or changes are recommended. No EPA forms were prepared.

### 16.2 Outfall 53-405-OPN-2

This outfall drains untreated water from an evaporative cooler to daylight next to the building. This outfall should be covered by an NOI. No changes are recommended. No EPA forms were completed.

## 17.0 RECOMMENDATIONS FOR BUILDING 53-409

Table 14 is a list of the drains to the building outfall and Figure 15 is a schematic of the piping. The table lists the drains that connect to the outfall piping and includes recommendations for changes to the drain piping. The

discussion below gives the reasoning for the recommendations.

#### 17.1 Outfall 53-409-OPN-1

This outfall is from sanitary facilities and flows into a sewage lift station which pumps into a sanitary sewer manhole. This manhole drains into the TA-53 Sewage Treatment Plant. No chemicals are drained into any of the drains or fixtures. No permitting is recommended for this outfall and no EPA forms have been prepared.

#### 17.2 Outfalls 53-409-OPN-2 and 53-409-OPN-3

These outfalls drain untreated water from evaporative coolers to daylight next to the building. These outfalls should be covered by an NOI. No changes are recommended. No EPA forms were completed.

#### **18.0 RECOMMENDATIONS FOR BUILDING 53-543**

This building is a trailer which has been removed. No changes or permitting are recommended. No EPA forms were prepared.

#### **19.0 RECOMMENDATIONS FOR BUILDING 53-577**

Table 15 is a list of the drains to the building outfall and Figure 16 is a schematic of the piping. The table lists the drains that connect to the outfall piping and includes recommendations for changes to the drain piping. The discussion below gives the reasoning for the recommendation.

### 19.1 Outfall 53-577-OPN-1

This outfall receives flow from two showers, one lavatory, one toilet and one water fountain and flows to the TA-53 Sewage Treatment Plant. No permitting or changes are recommended. No EPA forms were prepared.

### 19.2 Outfall 53-577-OPN-2

This outfall discharges from a water heater pressure relief valve to daylight next to the building. This outfall should be covered by an NOI. No changes are recommended. No EPA forms have been prepared.

### 19.3 Outfalls 53-577-OPN-3, 53-577-OPN-4 and 53-577-OPN-5

These outfalls drain untreated water from evaporative coolers to daylight next to the building. These outfalls should be covered by an NOI. No changes are recommended. No EPA forms were completed.

## **20.0 RECOMMENDATIONS FOR BUILDING 53-888**

Table 16 is a list of the drains to the building outfall and Figure 17 is a schematic of the piping. The one building outfall receives flow from sanitary drains and fixtures and flows to the TA-53 Sewage Treatment Plant. No permitting or changes are recommended. No EPA forms were prepared.

## **21.0 RECOMMENDATIONS FOR BUILDING 53-1032**

Table 17 is a list of the drains to the building outfall and Figure 18 is a schematic of the piping. Building 53-1032 is a cooling tower and has one outfall. This outfall discharges treated cooling water blowdown and is permitted as 03A113. The outfall discharges to daylight in Sandia

Canyon. No changes are recommended. Better record keeping for cooling tower make-up water and blowdown flows is recommended. A revised EPA Form 2C is attached for the permitted outfall.

## 22.0 CONCLUSION

This document provides the information to characterize buildings 6, 17, 18, 19, 31, 293, 294, 385, 400, 401, 402, 403, 404, 405, 409, 543, 577, 617, 620, 678, 708, 709, 710, 764, 833, 835, 852, 874, 888, 1032, 1038 and 1053 of TA-53. Permit application forms have been completed for the following outfalls (Appendix 3):

Form 2C:

- |                          |                           |
|--------------------------|---------------------------|
| 1. 53-6-OPN-3 (03A145)   | 2. 53-293-OPN-1 (03A113)  |
| 3. 53-294-OPN-1 (03A113) | 4. 53-1032-OPN-1 (03A113) |

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

Areas that do not have any drains:

- |            |             |             |            |
|------------|-------------|-------------|------------|
| 1. 53-385  | 2. 53-543   | 3. 53-617   | 4. 53-620  |
| 5. 53-678  | 6. 53-708   | 7. 53-709   | 8. 53-710  |
| 9. 53-764  | 10. 53-833  | 11. 53-835  | 12. 53-852 |
| 13. 53-874 | 14. 53-1038 | 15. 53-1053 |            |

Storm water discharges:

- |                  |                  |                  |
|------------------|------------------|------------------|
| 1. 53-6-OPN-4    | 2. 53-6-OPN-9    | 3. 53-6-OPN-11   |
| 4. 53-6-OPN-13   | 5. 53-6-OPN-14   | 6. 53-31-OPN-2   |
| 7. 53-31-OPN-3   | 8. 53-31-OPN-5   | 9. 53-31-OPN-6   |
| 10. 53-31-OPN-7  | 11. 53-31-OPN-9  | 12. 53-31-OPN-11 |
| 13. 53-31-OPN-12 | 14. 53-31-OPN-13 | 15. 53-31-OPN-14 |
| 16. 53-31-OPN-16 | 17. 53-31-OPN-17 |                  |

Discharges from vacuum pump exhaust:

- |                |                |                 |
|----------------|----------------|-----------------|
| 1. 53-19-OPN-6 | 2. 53-19-OPN-7 | 3. 53-19-OPN-13 |
|----------------|----------------|-----------------|

Discharges from backflow preventers:

- |                |                |
|----------------|----------------|
| 1. 53-18-OPN-5 | 2. 53-18-OPN-6 |
|----------------|----------------|

Discharges from hot water heaters:

- |                |                 |                 |
|----------------|-----------------|-----------------|
| 1. 53-17-OPN-4 | 2. 53-404-OPN-2 | 3. 53-577-OPN-2 |
|----------------|-----------------|-----------------|

Discharges to TA-53 Sanitary Sewer Collection System:

- |                  |                  |                  |
|------------------|------------------|------------------|
| 1. 53-6-OPN-1    | 2. 53-6-OPN-2    | 3. 53-17-OPN-1   |
| 4. 53-18-OPN-1   | 5. 53-18-OPN-2   | 6. 53-19-OPN-1   |
| 7. 53-31-OPN-1   | 8. 53-400-OPN-1  | 9. 53-401-OPN-1  |
| 10. 53-402-OPN-1 | 11. 53-403-OPN-1 | 12. 53-404-OPN-1 |
| 13. 53-405-OPN-1 | 14. 53-409-OPN-1 | 15. 53-577-OPN-1 |
| 16. 53-888-OPN-1 |                  |                  |

Discharges from the fire water system:

- |                  |                 |                  |
|------------------|-----------------|------------------|
| 1. 53-6-OPN-5    | 2. 53-6-OPN-7   | 3. 53-6-OPN-8    |
| 4. 53-6-OPN-12   | 5. 53-6-OPN-15  | 6. 53-6-OPN-16   |
| 7. 53-17-OPN-2   | 8. 53-17-OPN-3  | 9. 53-17-OPN-5   |
| 10. 53-18-OPN-3  | 11. 53-18-OPN-4 | 12. 53-18-OPN-7  |
| 13. 53-18-OPN-8  | 14. 53-18-OPN-9 | 15. 53-18-OPN-10 |
| 16. 53-18-OPN-14 | 17. 53-19-OPN-4 | 18. 53-19-OPN-8  |
| 19. 53-31-OPN-4  | 20. 53-31-OPN-8 |                  |

Discharges of condensed water:

- |                 |                 |                 |
|-----------------|-----------------|-----------------|
| 1. 53-6-OPN-6   | 2. 53-6-OPN-10  | 3. 53-18-OPN-13 |
| 4. 53-19-OPN-2  | 5. 53-19-OPN-5  | 6. 53-19-OPN-11 |
| 7. 53-19-OPN-14 | 8. 53-31-OPN-10 | 9. 53-31-OPN-15 |

Discharges from evaporative coolers:

- |                  |                  |                  |
|------------------|------------------|------------------|
| 1. 53-19-OPN-9   | 2. 53-19-OPN-10  | 3. 53-19-OPN-12  |
| 4. 53-400-OPN-2  | 5. 53-401-OPN-2  | 6. 53-403-OPN-2  |
| 7. 53-404-OPN-3  | 8. 53-405-OPN-2  | 9. 53-409-OPN-2  |
| 10. 53-409-OPN-3 | 11. 53-577-OPN-3 | 12. 53-577-OPN-4 |
| 13. 53-577-OPN-5 |                  |                  |

Abandoned piping:

- |                 |                 |                |
|-----------------|-----------------|----------------|
| 1. 53-18-OPN-11 | 2. 53-18-OPN-12 | 3. 53-19-OPN-3 |
|-----------------|-----------------|----------------|

Gas relief valves:

- |                 |                 |
|-----------------|-----------------|
| 1. 53-19-OPN-15 | 2. 53-19-OPN-16 |
|-----------------|-----------------|

Recommended corrective actions are outlined in Tables 1 through 17 as well as in the above text. Corrective action should be performed as soon as practicable to minimize the chance of unpermitted discharge of pollutants.

TABLE 1: TA 53-6 DRAIN SUMMARY

OUTFALL NUMBER	ID NUMBER	ROOM ACTIVITY	ROOM NUMBER	STATUS OR RECOMMENDATIONS	EPA FORM PREPARED
53-6-OPN-1 SAN SEWER 13S	1ED1	BOILER ROOM	117	NO CHANGE	NO
	1FD1	MECH. ROOM	113	NO CHANGE	
	1FD2	MECH. ROOM	113	CONTAIN COMPR	
	1WF1	HALLWAY	100B	NO CHANGE	
	2LV1	RESTROOM	213	NO CHANGE	
	2LV2	RESTROOM	213	NO CHANGE	
	2LV3	RESTROOM	221	NO CHANGE	
	2LV4	RESTROOM	221	NO CHANGE	
	2LV5	RESTROOM	221	NO CHANGE	
	2SD1	HALLWAY	200	NO CHANGE	
	2SD2	JANITOR'S CLOSET	219	NO CHANGE	
	2TL1	RESTROOM	213	NO CHANGE	
	2TL2	RESTROOM	213	NO CHANGE	
	2TL3	RESTROOM	221	NO CHANGE	
	2TL4	RESTROOM	221	NO CHANGE	
	2TL5	RESTROOM	221	NO CHANGE	
	2UR1	RESTROOM	221	NO CHANGE	
	2UR2	RESTROOM	221	NO CHANGE	
2WF1	HALLWAY	200	NO CHANGE		
3SD1	HALLWAY	300	NO CHANGE		
3WF1	HALLWAY	300	NO CHANGE		
53-6-OPN-2 SAN SEWER 13S	1ED2	MECH. ROOM	140	CONTAIN PUMPS	NO
	1LV1	RESTROOM	149	NO CHANGE	
	1LV2	RESTROOM	149	NO CHANGE	
	1LV3	RESTROOM	147	NO CHANGE	
	1LV4	RESTROOM	147	NO CHANGE	
	1SD1	BREAK ROOM	123	NO CHANGE	
	1SD2	JANITOR'S CLOSET	131	NO CHANGE	
	1TL1	RESTROOM	149	NO CHANGE	
	1TL2	RESTROOM	149	NO CHANGE	
	1TL3	RESTROOM	149	NO CHANGE	
	1TL4	RESTROOM	147	NO CHANGE	
	1TL5	RESTROOM	147	NO CHANGE	
	1UR1	RESTROOM	147	NO CHANGE	
	1WF2	HALLWAY	100A	NO CHANGE	
53-6-OPN-3 03A145	N/A	MECH. ROOM	140	NO CHANGE	YES
53-6-OPN-4 STORM	RD7	ROOF		NO CHANGE	NO
	RD8	ROOF		NO CHANGE	
	RD9	ROOF		NO CHANGE	

TABLE 2: TA 53-17 DRAIN SUMMARY

OUTFALL NUMBER	ID NUMBER	ROOM ACTIVITY	ROOM NUMBER	STATUS OR RECOMMENDATIONS	EPA FORM PREPARED
53-17-OPN-1 SAN SEWER 13S	1ED1	MECH. ROOM	103	CONTAIN COMPR	NO
	1ED2	MECH. ROOM	103	NO CHANGE	
	1FD1	SHOP	110	NO CHANGE	
	1FD2	R.F. PULSE LAB	102A	PLUG	
	1FD3	SHOP	101	NO CHANGE	
	1FD4	SHOP	100	NO CHANGE	
	1FD5	SHOP	105	NO CHANGE	
	1FD6	VACUUM LAB	109	PLUG	
	1FD7	VACUUM LAB	109	PLUG	
	1FD8	ELECTRONICS LAB	109	PLUGGED	
	1FD9	ELECTRONICS LAB	109	PLUG	
	1LV1	RESTROOM	107	NO CHANGE	
	1LV2	RESTROOM	107	NO CHANGE	
	1LV3	RESTROOM	108	NO CHANGE	
	1SD1	SHOP	110	NO CHANGE	
	1SD2	R.F. PULSE LAB	102	PLUG	
	1SD3	JANITOR'S CLOSET	106	NO CHANGE	
	1SD4	SHOP	105	NO CHANGE	
	1SD5	ELECTRONICS LAB	109	LABEL	
	1TL1	RESTROOM	107	NO CHANGE	
	1TL2	RESTROOM	107	NO CHANGE	
	1TL3	RESTROOM	108	NO CHANGE	
	1UR1	RESTROOM	107	NO CHANGE	
1WF1	SHOP AREA	104	NO CHANGE		
53-17-OPN-2	N/A	FIRE LINE DRAIN	103	NOI	NO
53-17-OPN-3	N/A	FIRE LINE DRAIN	103	NOI	NO
53-17-OPN-4	N/A	WATER HTR. DRAIN	103	NOI	NO
53-17-OPN-5	N/A	FIRE LINE DRAIN	109	NOI	NO

TABLE 3: TA 53-18 DRAIN SUMMARY

OUTFALL NUMBER	ID NUMBER	ROOM ACTIVITY	ROOM NUMBER	STATUS OR RECOMMENDATIONS	EPA FORM PREPARED		
53-18-OPN-1 SAN SEWER 13S	1ED1	SHOP	134	NO CHANGE	NO		
	1FD11	SHOP	134	NO CHANGE			
	1FD12	SHOP	133	NO CHANGE			
	1FD13	TRUCK ACCESS	132	NO CHANGE			
	1FD14	HIGH BAY AREA	131	NO CHANGE			
	1FD15	HIGH BAY AREA	131	NO CHANGE			
	1FD16	SHOP	130A	NO CHANGE			
	1FD17	MACHINE SHOP	130	NO CHANGE			
	1SD1	MACHINE SHOP	130	REMOVED			
	2ED1	WORK ROOM	202	NO CHANGE			
	2ED2	MECH. ROOM	201	NO CHANGE			
	2ED3	MECH. ROOM	201	NO CHANGE			
	2ED4	MECH. ROOM	201	NO CHANGE			
	2ED5	MECH. ROOM	201	NO CHANGE			
	2SD1	WORK ROOM	203	NO CHANGE			
53-18-OPN-2 SAN SEWER 13S	1FD1	BATHROOM	111	NO CHANGE	NO		
	1FD2	BATHROOM	109	NO CHANGE			
	1FD3	JANITOR'S CLOSET	107	NO CHANGE			
	1FD4	EXPERIMNT AREA	104	PLUGGED			
	1FD5	PROC. WATER RM.	116	PLUG/MODIFY			
	1FD6	PROC. WATER RM.	116	PLUG/MODIFY			
	1FD7	ELEC. EQUIP. RM.	114	NO CHANGE			
	1FD8	EXPERIMNT AREA	104	PLUGGED			
	1FD9	EXPERIMNT AREA	104	PLUGGED			
	1FD10	EXPERIMNT AREA	104	PLUGGED			
	1LV1	BATHROOM	111	NO CHANGE			
	1LV2	BATHROOM	109	NO CHANGE			
	1LV3	BATHROOM	109	NO CHANGE			
	1SD1	JANITOR'S CLOSET	107	NO CHANGE			
	1SD2	ELEC. EQUIP. RM.	114	NO CHANGE			
	1SH1	BATHROOM	111	NO CHANGE			
	1SH2	BATHROOM	109	NO CHANGE			
	1TD1	EXPERIMENT AREA	129	NO CHANGE			
	1TD2	HI BAY AREA	131	NO CHANGE			
	1TD3	PROC. WATER RM.	116	NO CHANGE			
	1TL1	BATHROOM	111	NO CHANGE			
	1TL2	BATHROOM	109	NO CHANGE			
	1UR1	BATHROOM	109	NO CHANGE			
	1WF1	HI BAY AREA	131	NO CHANGE			
	53-18-OPN-3	N/A	FIRE LINE DRAIN	N/A		NOI	NO

**TABLE 3: TA 53-18 DRAIN SUMMARY**

OUTFALL NUMBER	ID NUMBER	ROOM ACTIVITY	ROOM NUMBER	STATUS OR RECOMMENDATIONS	EPA FORM PREPARED
53-18-OPN-4	N/A	FIRE LINE DRAIN	N/A	NOI	NO
53-18-OPN-5	N/A	DOM. BFP DRAIN	104	NOI	NO
53-18-OPN-6	N/A	DOM. BFP DRAIN	104	NOI	NO
53-18-OPN-7	N/A	FIRE LINE DRAIN	104	NOI	NO
53-18-OPN-8	N/A	FIRE LINE DRAIN	104	NOI	NO
53-18-OPN-9	N/A	FIRE LINE DRAIN	104	NOI	NO
53-18-OPN-10	N/A	FIRE LINE DRAIN	104	NOI	NO
53-18-OPN-11	N/A	WATER FILL LINE	104	REMOVE	NO
53-18-OPN-12	N/A	WATER FILL LINE	104	REMOVE	NO
53-18-OPN-13	N/A	CONDENS. WATER	EXTER.	NOI	NO
53-18-OPN-14	N/A	FIRE DRAIN LINE	134	NOI	NO

TABLE 4: TA 53-19 DRAIN SUMMARY

OUTFALL NUMBER	ID NUMBER	ROOM ACTIVITY	ROOM NUMBER	STATUS OR RECOMMENDATIONS	EPA FORM PREPARED
53-19-OPN-1 SAN SEWER 13S	1ED1	MECH. ROOM	120	NO CHANGE	NO
	1FD1	BATHROOM	101C	NO CHANGE	
	1FD2	BATHROOM	101B	NO CHANGE	
	1FD3	JANITOR'S CLOSET	101A	NO CHANGE	
	1LV1	BATHROOM	101C	NO CHANGE	
	1LV2	BATHROOM	101B	NO CHANGE	
	1SD1	JANITOR'S CLOSET	101A	NO CHANGE	
	1SH1	BATHROOM	101C	NO CHANGE	
	1SH2	BATHROOM	101B	NO CHANGE	
	1TL1	BATHROOM	101C	NO CHANGE	
	1TL2	BATHROOM	101B	NO CHANGE	
	1UR1	BATHROOM	101B	NO CHANGE	
	1WF1	HALLWAY	101	NO CHANGE	
53-19-OPN-2	N/A	CONDENS. WATER	EXTER.	NOI	NO
53-19-OPN-3	N/A	OUTFALL 04A133	101	DELETE PERMIT	NO
53-19-OPN-4	N/A	FIRE LINE DRAIN	101A	NOI	NO
53-19-OPN-5	N/A	CONDENS. WATER	EXTER.	NOI	NO
53-19-OPN-6	N/A	VAC. PUMP EXH.	101	NO CHANGE	NO
53-19-OPN-7	N/A	VAC. PUMP EXH.	101	NO CHANGE	NO
53-19-OPN-8	N/A	FIRE LINE DRAIN	120	NOI	NO
53-19-OPN-9	N/A	CONDENS. WATER	EXTER.	NOI	NO
53-19-OPN-10	N/A	CONDENS. WATER	EXTER.	NOI	NO
53-19-OPN-11	N/A	CONDENS. WATER	EXTER.	NOI	NO
53-19-OPN-12	N/A	CONDENS. WATER	EXTER.	NOI	NO
53-19-OPN-13	N/A	VAC. PUMP EXH.	101	NO CHANGE	NO
53-19-OPN-14	N/A	CONDENS. WATER	EXTER.	NOI	NO
53-19-OPN-15	N/A	GAS P.R.V.	101	NO CHANGE	NO
53-19-OPN-16	N/A	GAS P.R.V.	101	NO CHANGE	NO

TABLE 5: TA 53-31 DRAIN SUMMARY

OUTFALL NUMBER	ID NUMBER	ROOM ACTIVITY	ROOM NUMBER	STATUS OR RECOMMENDATIONS	EPA FORM PREPARED
53-31-OPN-1 SAN SEWER 13S	1ED1	MECH. ROOM	102	CONTAIN OIL	NO
	1ED2	MECH. ROOM	102	CONTAIN OIL	
	1FD1	COMPUTER ROOM	145	NO CHANGE	
	1FD2	BATHROOM	132A	NO CHANGE	
	1FD3	BATHROOM	132	NO CHANGE	
	1FD4	BATHROOM	130	NO CHANGE	
	1FD5	BATHROOM	130A	NO CHANGE	
	1FD6	MECH. ROOM	102	NO CHANGE	
	1FD7	RESTROOM	156	NO CHANGE	
	1FD8	COMPUTER ROOM	164	NO CHANGE	
	1LV1	BATHROOM	132	NO CHANGE	
	1LV2	BATHROOM	132	NO CHANGE	
	1LV3	BATHROOM	130	NO CHANGE	
	1LV4	BATHROOM	130	NO CHANGE	
	1LV5	BATHROOM	130	NO CHANGE	
	1LV6	RESTROOM	156	NO CHANGE	
	1LV7	RESTROOM	156	NO CHANGE	
	1LV8	RESTROOM	156	NO CHANGE	
	1SD1	CORRIDOR	100B	NO CHANGE	
	1SD2	JANITOR'S CLOSET	134	NO CHANGE	
	1SD3	JANITOR'S CLOSET	154	NO CHANGE	
	1SD4	CORRIDOR	100D	NO CHANGE	
	1SD5	BREAK ROOM	170	NO CHANGE	
	1SH1	BATHROOM	132	NO CHANGE	
	1SH2	BATHROOM	130	NO CHANGE	
	1TL1	BATHROOM	132	NO CHANGE	
	1TL2	BATHROOM	132	NO CHANGE	
	1TL3	BATHROOM	130	NO CHANGE	
	1TL4	BATHROOM	130	NO CHANGE	
	1TL5	RESTROOM	156	NO CHANGE	
	1TL6	RESTROOM	156	NO CHANGE	
	1UR1	BATHROOM	130	NO CHANGE	
	1UR2	BATHROOM	130	NO CHANGE	
	1UR3	RESTROOM	156	NO CHANGE	
	1UR4	RESTROOM	156	NO CHANGE	
	1WF1	CORRIDOR	100B	NO CHANGE	
	1WF2	CORRIDOR	100D	NO CHANGE	
	2FD1	RESTROOM	232	NO CHANGE	
	2FD2	BATHROOM	230	NO CHANGE	
	2FD3	BATHROOM	230A	NO CHANGE	

TABLE 5: TA 53-31 DRAIN SUMMARY

OUTFALL NUMBER	ID NUMBER	ROOM ACTIVITY	ROOM NUMBER	STATUS OR RECOMMENDATIONS	EPA FORM PREPARED
53-31-OPN-1 SANITARY 13S CONT.	2FD4	RESTROOM	256	NO CHANGE	NO
	2LV1	RESTROOM	232	NO CHANGE	
	2LV2	RESTROOM	232	NO CHANGE	
	2LV3	BATHROOM	230	NO CHANGE	
	2LV4	BATHROOM	230	NO CHANGE	
	2LV5	BATHROOM	230	NO CHANGE	
	2LV6	RESTROOM	256	NO CHANGE	
	2LV7	RESTROOM	256	NO CHANGE	
	2LV8	RESTROOM	256	NO CHANGE	
	2SD1	CORRIDOR	200B	NO CHANGE	
	2SD2	JANITOR'S CLOSET	234	NO CHANGE	
	2SD3	CONFERENCE ROOM	201	NO CHANGE	
	2SD4	JANITOR'S CLOSET	254	NO CHANGE	
	2SD5	CORRIDOR	200D	NO CHANGE	
	2SH1	BATHROOM	230	NO CHANGE	
	2TL1	RESTROOM	232	NO CHANGE	
	2TL2	RESTROOM	232	NO CHANGE	
	2TL3	BATHROOM	230	NO CHANGE	
	2TL4	BATHROOM	230	NO CHANGE	
	2TL5	RESTROOM	256	NO CHANGE	
	2TL6	RESTROOM	256	NO CHANGE	
	2UR1	BATHROOM	230	NO CHANGE	
	2UR2	BATHROOM	230	NO CHANGE	
	2UR3	RESTROOM	256	NO CHANGE	
	2UR4	RESTROOM	256	NO CHANGE	
	2WF1	CORRIDOR	200B	NO CHANGE	
	2WF2	CORRIDOR	200D	NO CHANGE	
	3FD1	RESTROOM	232	NO CHANGE	
	3FD2	RESTROOM	230	NO CHANGE	
	3FD3	RESTROOM	256	NO CHANGE	
	3LV1	RESTROOM	334	NO CHANGE	
	3LV2	RESTROOM	334	NO CHANGE	
	3LV3	RESTROOM	332	NO CHANGE	
	3LV4	RESTROOM	332	NO CHANGE	
	3LV5	RESTROOM	332	NO CHANGE	
	3LV6	RESTROOM	356	NO CHANGE	
	3LV7	RESTROOM	356	NO CHANGE	
	3LV8	RESTROOM	356	NO CHANGE	
	3SD1	CORRIDOR	300B	NO CHANGE	
	3SD2	JANITOR'S CLOSET	336	NO CHANGE	

TABLE 5: TA 53-31 DRAIN SUMMARY

OUTFALL NUMBER	ID NUMBER	ROOM ACTIVITY	ROOM NUMBER	STATUS OR RECOMMENDATIONS	EPA FORM PREPARED
53-31-OPN-1 SANITARY 13S CONT.	3SD3	CONFERENCE ROOM	305	NO CHANGE	NO
	3SD4	JANITOR'S CLOSET	354	NO CHANGE	
	3SD5	CORRIDOR	300D	NO CHANGE	
	3TL1	RESTROOM	334	NO CHANGE	
	3TL2	RESTROOM	334	NO CHANGE	
	3TL3	RESTROOM	332	NO CHANGE	
	3TL4	RESTROOM	332	NO CHANGE	
	3TL5	RESTROOM	356	NO CHANGE	
	3TL6	RESTROOM	356	NO CHANGE	
	3UR1	RESTROOM	332	NO CHANGE	
	3UR2	RESTROOM	332	NO CHANGE	
	3UR3	RESTROOM	356	NO CHANGE	
	3UR4	RESTROOM	356	NO CHANGE	
	3WF1	CORRIDOR	300B	NO CHANGE	
3WF2	CORRIDOR	300D	NO CHANGE		
53-31-OPN-2	RD7	ROOF	N/A	NO CHANGE	NO
53-31-OPN-3	RD6	ROOF	N/A	NO CHANGE	NO
53-31-OPN-4	N/A	FIRE LINE DRAIN	102	NOI	NO
53-31-OPN-5 STORM	RD4	ROOF	N/A	NO CHANGE	NO
	RD5	ROOF	N/A	NO CHANGE	
53-31-OPN-6	RD3	ROOF	N/A	NO CHANGE	NO
53-31-OPN-7	RD2	ROOF	N/A	NO CHANGE	NO
53-31-OPN-8	N/A	FIRE LINE DRAIN	N/A	NOI	NO
53-31-OPN-9	RD1	ROOF	N/A	NO CHANGE	NO
53-31-OPN-10	N/A	CONDENSED WATER	EXTER.	NOI	NO
53-31-OPN-11	RD16	ROOF	N/A	NO CHANGE	NO
53-31-OPN-12 STORM	RD13	ROOF	N/A	NO CHANGE	NO
	RD14	LOWER ROOF	N/A	NO CHANGE	
	RD15	ROOF	N/A	NO CHANGE	
53-31-OPN-13	RD12	ROOF	N/A	NO CHANGE	NO
53-31-OPN-14	RD10	ROOF	N/A	NO CHANGE	NO
53-31-OPN-15	N/A	CONDENSED WATER	EXTER.	NOI	NO
53-31-OPN-16	RD9	ROOF	N/A	NO CHANGE	NO
53-31-OPN-17	RD8	ROOF	N/A	NO CHANGE	NO

TABLE 6: TA 53-293 DRAIN SUMMARY

OUTFALL NUMBER	ID NUMBER	ROOM ACTIVITY	ROOM NUMBER	STATUS OR RECOMMENDATIONS	EPA FORM PREPARED
53-293-OPN-1 03A113	N/A	COOLING TOWER	N/A	NO CHANGE	YES

TABLE 7: TA 53-294 DRAIN SUMMARY

OUTFALL NUMBER	ID NUMBER	ROOM ACTIVITY	ROOM NUMBER	STATUS OR RECOMMENDATIONS	EPA FORM PREPARED
53-294-OPN-1 03A113	N/A	COOLING TOWER	N/A	NO CHANGE	YES

TABLE 8: TA 53-400 DRAIN SUMMARY

OUTFALL NUMBER	ID NUMBER	ROOM ACTIVITY	ROOM NUMBER	STATUS OR RECOMMENDATIONS	EPA FORM PREPARED
53-400-OPN-1 SANITARY 13S	1LV1	RESTROOM	N/A	NO CHANGE	NO
	1LV2	RESTROOM	N/A	NO CHANGE	
	1TL1	RESTROOM	N/A	NO CHANGE	
	1TL2	RESTROOM	N/A	NO CHANGE	
	1UR1	RESTROOM	N/A	NO CHANGE	
53-400-OPN-2	N/A	CONDENSED WATER	ROOF	NOI	NO

TABLE 9: TA 53-401 DRAIN SUMMARY

OUTFALL NUMBER	ID NUMBER	ROOM ACTIVITY	ROOM NUMBER	RECOMMENDATIONS	EPA FORM PREPARED
53-401-OPN-1 SANITARY 13S	1LV1	RESTROOM	N/A	NO CHANGE	NO
	1LV2	RESTROOM	N/A	NO CHANGE	
	1TL1	RESTROOM	N/A	NO CHANGE	
	1TL2	RESTROOM	N/A	NO CHANGE	
	1UR1	RESTROOM	N/A	NO CHANGE	
	1WF1	HALLWAY	N/A	NO CHANGE	
53-401-OPN-2	N/A	CONDENSED WATER	ROOF	NOI	NO

TABLE 10: TA 53-402 DRAIN SUMMARY

OUTFALL NUMBER	ID NUMBER	ROOM ACTIVITY	ROOM NUMBER	RECOMMENDATIONS	EPA FORM PREPARED
53-402-OPN-1 SANITARY 13S	1LV1	RESTROOM	N/A	NO CHANGE	NO
	1LV2	RESTROOM	N/A	NO CHANGE	
	1TL1	RESTROOM	N/A	NO CHANGE	
	1TL2	RESTROOM	N/A	NO CHANGE	
	1UR1	RESTROOM	N/A	NO CHANGE	
	1WF1	HALLWAY	N/A	NO CHANGE	

TABLE 11: TA 53-403 DRAIN SUMMARY

OUTFALL NUMBER	ID NUMBER	ROOM ACTIVITY	ROOM NUMBER	RECOMMENDATIONS	EPA FORM PREPARED
53-403-OPN-1 SANITARY 13S	1LV1	RESTROOM	N/A	NO CHANGE	NO
	1LV2	RESTROOM	N/A	NO CHANGE	
	1TL1	RESTROOM	N/A	NO CHANGE	
	1TL2	RESTROOM	N/A	NO CHANGE	
	1UR1	RESTROOM	N/A	NO CHANGE	
53-403-OPN-2	N/A	CONDENSED WATER	ROOF	NOI	NO

TABLE 12: TA 53-404 DRAIN SUMMARY

OUTFALL NUMBER	ID NUMBER	ROOM ACTIVITY	ROOM NUMBER	STATUS OR RECOMMENDATIONS	EPA FORM PREPARED
53-404-OPN-1 SANITARY 13S	1LV1	RESTROOM	N/A	NO CHANGE	NO
	1LV2	RESTROOM	N/A	NO CHANGE	
	1TL1	RESTROOM	N/A	NO CHANGE	
	1TL2	RESTROOM	N/A	NO CHANGE	
	1UR1	RESTROOM	N/A	NO CHANGE	
53-404-OPN-2	N/A	WATER HEATER	N/A	NOI	NO
53-404-OPN-3	N/A	CONDENSED WATER	ROOF	NOI	NO

TABLE 13: TA 53-405 DRAIN SUMMARY

OUTFALL NUMBER	ID NUMBER	ROOM ACTIVITY	ROOM NUMBER	STATUS OR RECOMMENDATIONS	EPA FORM PREPARED
53-405-OPN-1 SANITARY 13S	1LV1	RESTROOM	N/A	NO CHANGE	NO
	1LV2	RESTROOM	N/A	NO CHANGE	
	1TL1	RESTROOM	N/A	NO CHANGE	
	1TL2	RESTROOM	N/A	NO CHANGE	
	1UR1	RESTROOM	N/A	NO CHANGE	
	1WF1	HALLWAY	N/A	NO CHANGE	
53-405-OPN-2	N/A	CONDENSED WATER	ROOF	NOI	NO

TABLE 14: TA 53-409 DRAIN SUMMARY

OUTFALL NUMBER	ID NUMBER	ROOM ACTIVITY	ROOM NUMBER	STATUS OR RECOMMENDATIONS	EPA FORM PREPARED
53-409-OPN-1 SANITARY 13S	1LV1	RESTROOM	N/A	NO CHANGE	NO
	1LV2	RESTROOM	N/A	NO CHANGE	
	1SD1	JANITOR'S CLOSET	N/A	NO CHANGE	
	1SD2	HALLWAY	N/A	NO CHANGE	
	1TL1	RESTROOM	N/A	NO CHANGE	
	1TL2	RESTROOM	N/A	NO CHANGE	
	1WF1	HALLWAY	N/A	NO CHANGE	
53-409-OPN-2	N/A	CONDENSED WATER	ROOF	NOI	NO
53-409-OPN-3	N/A	CONDENSED WATER	ROOF	NOI	NO

TABLE 15: TA 53-577 DRAIN SUMMARY

OUTFALL NUMBER	ID NUMBER	ROOM ACTIVITY	ROOM NUMBER	STATUS OR RECOMMENDATIONS	EPA FORM PREPARED
53-577-OPN-1 SANITARY 13S	1LV1	BATHROOM	N/A	NO CHANGE	NO
	1SH1	BATHROOM	N/A	NO CHANGE	
	1SH2	BATHROOM	N/A	NO CHANGE	
	1TL1	BATHROOM	N/A	NO CHANGE	
	1WF1	HALLWAY	N/A	NO CHANGE	
53-577-OPN-2	N/A	WATER HEATER	N/A	NOI	NO
53-577-OPN-3	N/A	CONDENS. WATER	ROOF	NOI	NO
53-577-OPN-4	N/A	CONDENS. WATER	ROOF	NOI	NO
53-577-OPN-5	N/A	CONDENS. WATER	ROOF	NOI	NO

TABLE 16: TA 53-888 DRAIN SUMMARY

OUTFALL NUMBER	ID NUMBER	ROOM ACTIVITY	ROOM NUMBER	STATUS OR RECOMMENDATIONS	EPA FORM PREPARED
53-888-OPN-1 SANIT.(13S)	1LV1	RESTROOM	N/A	NO CHANGE	NO
	1TL1	RESTROOM	N/A	NO CHANGE	

TABLE 17: TA 53-1032 DRAIN SUMMARY

OUTFALL NUMBER	ID NUMBER	ROOM ACTIVITY	ROOM NUMBER	STATUS OR RECOMMENDATIONS	EPA FORM PREPARED
53-1032-OPN-1 03A113	N/A	COOLING TOWER	N/A	NO CHANGE	YES

**TABLE 18**  
**SUMMARY OF ABBREVIATIONS**

ABBREVIATION	MEANING
ED	Equipment Drain
FD	Floor Drain
IM	Ice Machine
LV	Lavatory
RD	Roof Drain
----- SD -----	Storm Pipe
SD	Sink
SH	Shower
----- SS -----	Sanitary Sewer Pipe
TD	Trench Drain
TL	Toilet
UR	Urinal
WF	Water Fountain

TABLE 19: NON-DRAIN RECOMMENDATIONS

TA #	BLDG. #	ROOM/AREA	RECOMMENDATION
53	18	EXTERIOR	DELETE PERMITTED OUTFALL 04A135
53	293	COOLING TOWER	IMPROVE RECORD KEEPING
53	294	COOLING TOWER	IMPROVE RECORD KEEPING
53	1032	COOLING TOWER	IMPROVE RECORD KEEPING
53	ALL	ALL SINKS	LABEL "NO CHEMICAL DN THIS DRAIN"

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TA	BLDG	OUTLET PIPING NO	EPA OUTFALL #	DRAIN #	ROOM #	ROOM DESCRIPTION	FLOW RATE	PERIODICITY	SEASONAL	SOURCE TYPES
53	6	53-6-OPN-01	13S	1ED1	117	BOILER ROOM		FLOW IS NIL	No	BFP & PRESS. RELIEF DRAIN
53	6	53-6-OPN-01	13S	1FD1	113	MECHANICAL ROOM		FLOW IS NIL	No	FLOOR WASHINGS
53	6	53-6-OPN-01	13S	1FD2	113	MECHANICAL ROOM		FLOW IS NIL	No	AIR COMPRESSOR DRAIN
53	6	53-6-OPN-01	13S	1WF1	100B	HALLWAY		5 DAYS/WEEK	No	WATER FOUNTAIN
53	6	53-6-OPN-01	13S	2LV1	213	RESTROOM		5 DAYS/WEEK	No	LAVATORY
53	6	53-6-OPN-01	13S	2LV2	213	RESTROOM		5 DAYS/WEEK	No	LAVATORY
53	6	53-6-OPN-01	13S	2LV3	221	RESTROOM		5 DAYS/WEEK	No	LAVATORY
53	6	53-6-OPN-01	13S	2LV4	221	RESTROOM		5 DAYS/WEEK	No	LAVATORY
53	6	53-6-OPN-01	13S	2LV5	221	RESTROOM		5 DAYS/WEEK	No	LAVATORY
53	6	53-6-OPN-01	13S	2SD1	200	HALLWAY		5 DAYS/WEEK	No	COUNTERTOP SINK
53	6	53-6-OPN-01	13S	2SD2	219	JANITOR'S CLOSET		5 DAYS/WEEK	No	SERVICE SINK
53	6	53-6-OPN-01	13S	2TL1	213	RESTROOM		5 DAYS/WEEK	No	TOILET
53	6	53-6-OPN-01	13S	2TL2	213	RESTROOM		5 DAYS/WEEK	No	TOILET
53	6	53-6-OPN-01	13S	2TL3	221	RESTROOM		5 DAYS/WEEK	No	TOILET
53	6	53-6-OPN-01	13S	2TL4	221	RESTROOM		5 DAYS/WEEK	No	TOILET
53	6	53-6-OPN-01	13S	2TL5	221	RESTROOM		5 DAYS/WEEK	No	TOILET
53	6	53-6-OPN-01	13S	2UR1	221	RESTROOM		5 DAYS/WEEK	No	URINAL
53	6	53-6-OPN-01	13S	2UR2	221	RESTROOM		5 DAYS/WEEK	No	URINAL
53	6	53-6-OPN-01	13S	2WF1	200	HALLWAY		5 DAYS/WEEK	No	WATER FOUNTAIN
53	6	53-6-OPN-01	13S	3SD1	300	HALLWAY		5 DAYS/WEEK	No	COUNTERTOP SINK
53	6	53-6-OPN-01	13S	3WF1	300	HALLWAY		5 DAYS/WEEK	No	WATER FOUNTAIN
53	6	53-6-OPN-02	13S	1ED2	140	MECHANICAL ROOM		FLOW IS NIL	No	BFP/BOILER PRESS. RELIEF
53	6	53-6-OPN-02	13S	1LV1	149	RESTROOM		5 DAYS/WEEK	No	LAVATORY
53	6	53-6-OPN-02	13S	1LV2	149	RESTROOM		5 DAYS/WEEK	No	LAVATORY
53	6	53-6-OPN-02	13S	1LV3	149	RESTROOM		5 DAYS/WEEK	No	LAVATORY
53	6	53-6-OPN-02	13S	1LV4	147	RESTROOM		5 DAYS/WEEK	No	LAVATORY
53	6	53-6-OPN-02	13S	1LV5	147	RESTROOM		5 DAYS/WEEK	No	LAVATORY
53	6	53-6-OPN-02	13S	1SD1	123	BREAK ROOM		5 DAYS/WEEK	No	COUNTERTOP SINK
53	6	53-6-OPN-02	13S	1SD2	131	JANITOR'S CLOSET		5 DAYS/WEEK	No	SERVICE SINK
53	6	53-6-OPN-02	13S	1TL1	149	RESTROOM		5 DAYS/WEEK	No	TOILET
53	6	53-6-OPN-02	13S	1TL2	149	RESTROOM		5 DAYS/WEEK	No	TOILET
53	6	53-6-OPN-02	13S	1TL3	147	RESTROOM		5 DAYS/WEEK	No	TOILET
53	6	53-6-OPN-02	13S	1TL4	147	RESTROOM		5 DAYS/WEEK	No	TOILET

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TA	BLDG	OUTLET PIPING NO	EPA OUTFALL #	DRAIN #	ROOM #	ROOM DESCRIPTION	FLOW RATE	PERIODICITY	SEASONAL	SOURCE TYPES	
53	6	53-6-OPN-02	13S	1UR1	147	RESTROOM		5 DAYS/WEEK	No	URINAL	
53	6	53-6-OPN-02	13S	1WF1	100A	HALLWAY		5 DAYS/WEEK	No	WATER FOUNTAIN	
53	6	53-6-OPN-03	03A145	N/A	140	MECHANICAL ROOM	2.5	GPM	6 MONTHS/YEAR	Yes	COOLING TOWER BLOWDOWN
53	6	53-6-OPN-04	DAYLIGHT	RD7	N/A	ROOF			MOSTLY SUMMER	Yes	STORM DRAIN
53	6	53-6-OPN-04	DAYLIGHT	RD8	N/A	ROOF			MOSTLY SUMMER	Yes	STORM DRAIN
53	6	53-6-OPN-04	DAYLIGHT	RD9	N/A	ROOF			MOSTLY SUMMER	Yes	STORM DRAIN
53	6	53-6-OPN-05	DAYLIGHT	N/A	STW-1	STAIRWELL			FLOW IS NIL	No	FIRE LINE DRAIN
53	6	53-6-OPN-06	DAYLIGHT	N/A	N/A	EXTERIOR AREA			FLOW IS NIL	No	EQUIP. CONDENSED WATER
53	6	53-6-OPN-07	DAYLIGHT	N/A	113	MECHANICAL ROOM			FLOW IS NIL	No	FIRE LINE DRAIN
53	6	53-6-OPN-08	DAYLIGHT	N/A	113	MECHANICAL ROOM			FLOW IS NIL	No	FIRE LINE DRAIN
53	6	53-6-OPN-09	DAYLIGHT	N/A	N/A	ROOF			MOSTLY SUMMER	Yes	STORM DRAIN
53	6	53-6-OPN-10	DAYLIGHT	1IM1	123	BREAK ROOM			FLOW IS NIL	No	ICE MACHINE DRAIN
53	6	53-6-OPN-11	DAYLIGHT	RD5	N/A	ROOF			MOSTLY SUMMER	Yes	STORM DRAIN
53	6	53-6-OPN-12	DAYLIGHT	N/A	162	AUDITORIUM			FLOW IS NIL	No	FIRE LINE DRAIN
53	6	53-6-OPN-13	DAYLIGHT	RD3	N/A	ROOF			MOSTLY SUMMER	Yes	STORM DRAIN
53	6	53-6-OPN-13	DAYLIGHT	RD4	N/A	ROOF			MOSTLY SUMMER	Yes	STORM DRAIN
53	6	53-6-OPN-14	DAYLIGHT	RD1	N/A	ROOF			MOSTLY SUMMER	Yes	STORM DRAIN
53	6	53-6-OPN-14	DAYLIGHT	RD2	N/A	ROOF			MOSTLY SUMMER	Yes	STORM DRAIN
53	6	53-6-OPN-15	DAYLIGHT	N/A	146	OFFICE			FLOW IS NIL	No	FIRE LINE DRAIN
53	6	53-6-OPN-16	DAYLIGHT	N/A	146	OFFICE			FLOW IS NIL	No	FIRE LINE DRAIN
53	17	53-17-OPN-1	13S	1ED1	103	MECHANICAL ROOM			FLOW IS NIL	No	DOMESTIC WATER PRV DRAIN
53	17	53-17-OPN-1	13S	1ED2	103	MECHANICAL ROOM			FLOW IS NIL	No	WATER PRV DRAIN
53	17	53-17-OPN-1	13S	1FD1	110	SHOP			FLOW IS NIL	No	FLOOR WASHINGS
53	17	53-17-OPN-1	13S	1FD2	102A	R.F. PULSE LAB			FLOW IS NIL	No	FLOOR WASHINGS
53	17	53-17-OPN-1	13S	1FD3	101	SHOP			FLOW IS NIL	No	FLOOR WASHINGS
53	17	53-17-OPN-1	13S	1FD4	100	SHOP			FLOW IS NIL	No	FLOOR WASHINGS
53	17	53-17-OPN-1	13S	1FD5	105	SHOP			FLOW IS NIL	No	FLOOR WASHINGS
53	17	53-17-OPN-1	13S	1FD6	109	VACUUM LAB			FLOW IS NIL	No	FLOOR WASHINGS
53	17	53-17-OPN-1	13S	1FD7	109	VACUUM LAB			FLOW IS NIL	No	FLOOR WASHINGS
53	17	53-17-OPN-1	13S	1FD8	109	ELECTRONICS LAB			FLOW IS NIL	No	FLOOR WASHINGS
53	17	53-17-OPN-1	13S	1FD9	109	ELECTRONICS LAB			FLOW IS NIL	No	FLOOR WASHINGS
53	17	53-17-OPN-1	13S	1LV1	107	RESTROOM			5 DAYS/WEEK	No	LAVATORY
53	17	53-17-OPN-1	13S	1LV2	107	RESTROOM			5 DAYS/WEEK	No	LAVATORY

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TA	BLDG	OUTLET PIPING NO	EPA OUTFALL #	DRAIN #	ROOM #	ROOM DESCRIPTION	FLOW RATE	PERIODICITY	SEASONAL	SOURCE TYPES
53	17	53-17-OPN-1	13S	1LV3	108	RESTROOM		5 DAYS/WEEK	No	LAVATORY
53	17	53-17-OPN-1	13S	1SD1	110	SHOP		5 DAYS/WEEK	No	HAND WASHING
53	17	53-17-OPN-1	13S	1SD2	102	R.F. PULSE LAB		5 DAYS/WEEK	No	HAND WASHING
53	17	53-17-OPN-1	13S	1SD3	106	JANITOR'S CLOSET		5 DAYS/WEEK	No	SERVICE SINK
53	17	53-17-OPN-1	13S	1SD4	105	SHOP		5 DAYS/WEEK	No	HAND WASHING
53	17	53-17-OPN-1	13S	1SD5	109	ELECTRONICS LAB		5 DAYS/WEEK	No	HAND WASHING
53	17	53-17-OPN-1	13S	1TL1	107	RESTROOM		5 DAYS/WEEK	No	TOILET
53	17	53-17-OPN-1	13S	1TL2	107	RESTROOM		5 DAYS/WEEK	No	TOILET
53	17	53-17-OPN-1	13S	1TL3	108	RESTROOM		5 DAYS/WEEK	No	TOILET
53	17	53-17-OPN-1	13S	1UR1	107	RESTROOM		5 DAYS/WEEK	No	URINAL
53	17	53-17-OPN-1	13S	1WF1	104	SHOP AREA		5 DAYS/WEEK	No	DRINKING FOUNTAIN
53	17	53-17-OPN-2	DAYLIGHT	N/A	103	MECHANICAL ROOM		FLOW IS NIL	No	FIRE LINE DRAIN
53	17	53-17-OPN-3	DAYLIGHT	N/A	103	MECHANICAL ROOM		FLOW IS NIL	No	FIRE LINE DRAIN
53	17	53-17-OPN-4	DAYLIGHT	N/A	103	MECHANICAL ROOM		FLOW IS NIL	No	WATER HEATER RELIEF VALVE
53	17	53-17-OPN-5	DAYLIGHT	N/A	109	ELECTRONICS LAB		FLOW IS NIL	No	FIRE LINE DRAIN
53	18	53-18-OPN-01	13S	1ED1	134	SHOP		FLOW IS NIL	No	EQUIP. CONDENSATE DRAIN
53	18	53-18-OPN-01	13S	1FD11	134	SHOP		FLOW IS NIL	No	FLOOR WASHINGS
53	18	53-18-OPN-01	13S	1FD12	133	SHOP		FLOW IS NIL	No	FLOOR WASHINGS
53	18	53-18-OPN-01	13S	1FD13	132	TRUCK LOADING AREA		FLOW IS NIL	No	FLOOR WASHINGS
53	18	53-18-OPN-01	13S	1FD14	131	HIGH BAY AREA		FLOW IS NIL	No	FLOOR WASHINGS
53	18	53-18-OPN-01	13S	1FD15	131	HIGH BAY AREA		FLOW IS NIL	No	FLOOR WASHINGS
53	18	53-18-OPN-01	13S	1FD16	130A	SHOP		FLOW IS NIL	No	FLOOR WASHINGS
53	18	53-18-OPN-01	13S	1FD17	130	MACHINE SHOP		FLOW IS NIL	No	FLOOR WASHINGS
53	18	53-18-OPN-01	13S	1SD1	130	MACHINE SHOP		NO FLOW	No	SINK DRAIN (REMOVED)
53	18	53-18-OPN-01	13S	2ED1	202	WORK ROOM		6 MONTHS/YEAR	Yes	CONDENSED WATER DRAIN
53	18	53-18-OPN-01	13S	2ED2	201	MECHANICAL ROOM		FLOW IS NIL	No	WATER HEATER RELIEF VALVE
53	18	53-18-OPN-01	13S	2ED3	201	MECHANICAL ROOM		FLOW IS NIL	No	HEATING HW & EXPANS. TANK
53	18	53-18-OPN-01	13S	2ED4	201	MECHANICAL ROOM		FLOW IS NIL	No	WTR HTR RELIEF/EQUIP DRAIN
53	18	53-18-OPN-01	13S	2ED5	201	MECHANICAL ROOM		FLOW IS NIL	No	ELECTRIC HUMIDIFIER DRAIN
53	18	53-18-OPN-01	13S	2SD1	203	WORK ROOM		5 DAYS/WEEK	No	HAND WASH
53	18	53-18-OPN-02	13S	1FD01	111	BATHROOM		FLOW IS NIL	No	FLOOR WASHINGS
53	18	53-18-OPN-02	13S	1FD02	109	BATHROOM		FLOW IS NIL	No	FLOOR WASHINGS
53	18	53-18-OPN-02	13S	1FD03	107	JANITOR'S CLOSET		FLOW IS NIL	No	FLOOR WASHINGS

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TA	BLDG	OUTLET PIPING NO	EPA OUTFALL #	DRAIN #	ROOM #	ROOM DESCRIPTION	FLOW RATE	PERIODICITY	SEASONAL	SOURCE TYPES
53	18	53-18-OPN-02	13S	1FD04	104	EXPERIMENT AREA		NO FLOW	No	PLUGGED
53	18	53-18-OPN-02	13S	1FD05	116	PROCESS WATER ROOM		FLOW IS NIL	No	FLOOR WASHINGS
53	18	53-18-OPN-02	13S	1FD06	116	PROCESS WATER ROOM		FLOW IS NIL	No	BACKFLOW PREVENTERS (2)
53	18	53-18-OPN-02	13S	1FD07	114	ELECTRICAL EQUIP. ROOM		FLOW IS NIL	No	FLOOR WASHINGS
53	18	53-18-OPN-02	13S	1FD08	104	EXPERIMENT AREA		NO FLOW	No	PLUGGED
53	18	53-18-OPN-02	13S	1FD09	104	EXPERIMENT AREA		NO FLOW	No	PLUGGED
53	18	53-18-OPN-02	13S	1FD10	104	EXPERIMENT AREA		NO FLOW	No	PLUGGED
53	18	53-18-OPN-02	13S	1LV1	111	BATHROOM		5 DAYS/WEEK	No	LAVATORY
53	18	53-18-OPN-02	13S	1LV2	109	BATHROOM		5 DAYS/WEEK	No	LAVATORY
53	18	53-18-OPN-02	13S	1LV3	109	BATHROOM		5 DAYS/WEEK	No	LAVATORY
53	18	53-18-OPN-02	13S	1SD1	107	JANITOR'S CLOSET		5 DAYS/WEEK	No	SERVICE SINK
53	18	53-18-OPN-02	13S	1SD2	114	ELECTRICAL EQUIP. ROOM		5 DAYS/WEEK	No	HAND WASH
53	18	53-18-OPN-02	13S	1SH1	111	BATHROOM		5 DAYS/WEEK	No	SHOWER DRAIN
53	18	53-18-OPN-02	13S	1SH2	109	BATHROOM		5 DAYS/WEEK	No	SHOWER DRAIN
53	18	53-18-OPN-02	13S	1TD1	129	EXPERIMENT AREA		FLOW IS NIL	No	FLOOR WASHINGS
53	18	53-18-OPN-02	13S	1TD2	131	HIGH BAY AREA		FLOW IS NIL	No	FLOOR WASHINGS
53	18	53-18-OPN-02	13S	1TD3	116	PROCESS WATER ROOM		FLOW IS NIL	No	EQUIPMENT DRAIN
53	18	53-18-OPN-02	13S	1TL1	111	BATHROOM		5 DAYS/WEEK	No	TOILET
53	18	53-18-OPN-02	13S	1TL2	109	BATHROOM		5 DAYS/WEEK	No	TOILET
53	18	53-18-OPN-02	13S	1UR1	109	BATHROOM		5 DAYS/WEEK	No	URINAL
53	18	53-18-OPN-02	13S	1WF1	131	HIGH BAY AREA		5 DAYS/WEEK	No	WATER FOUNTAIN
53	18	53-18-OPN-03	DAYLIGHT	N/A	N/A	STAIRWELL		FLOW IS NIL	No	FIRE LINE DRAIN
53	18	53-18-OPN-04	DAYLIGHT	N/A	130	MACHINE SHOP		FLOW IS NIL	No	FIRE LINE DRAIN
53	18	53-18-OPN-05	DAYLIGHT	N/A	104	EXPERIMENT AREA		FLOW IS NIL	No	WATER BACKFLOW PREVENTER
53	18	53-18-OPN-06	DAYLIGHT	N/A	104	EXPERIMENT AREA		FLOW IS NIL	No	WATER BACKFLOW PREVENTER
53	18	53-18-OPN-07	DAYLIGHT	N/A	104	EXPERIMENT AREA		FLOW IS NIL	No	FIRE LINE DRAIN
53	18	53-18-OPN-08	DAYLIGHT	N/A	104	EXPERIMENT AREA		FLOW IS NIL	No	FIRE LINE DRAIN
53	18	53-18-OPN-09	DAYLIGHT	N/A	104	EXPERIMENT AREA		FLOW IS NIL	No	FIRE LINE DRAIN
53	18	53-18-OPN-10	DAYLIGHT	N/A	104	EXPERIMENT AREA		FLOW IS NIL	No	FIRE LINE DRAIN
53	18	53-18-OPN-11	DAYLIGHT	N/A	104	EXPERIMENT AREA		FLOW IS NIL	No	WATER FILL LINE
53	18	53-18-OPN-12	DAYLIGHT	N/A	104	EXPERIMENT AREA		FLOW IS NIL	No	WATER FILL LINE
53	18	53-18-OPN-13	DAYLIGHT	N/A	N/A	EXTERIOR AREA		FLOW IS NIL	No	EQUIP. CONDENSED WATER
53	18	53-18-OPN-14	DAYLIGHT	N/A	134	SHOP		FLOW IS NIL	No	FIRE LINE DRAIN

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TA	BLDG	OUTLET PIPING NO	EPA OUTFALL #	DRAIN #	ROOM #	ROOM DESCRIPTION	FLOW RATE	PERIODICITY	SEASONAL	SOURCE TYPES
53	19	53-19-OPN-01	13S	1ED1	120	MECHANICAL ROOM		FLOW IS NIL	No	AIR COMPRESSOR DRAIN
53	19	53-19-OPN-01	13S	1FD1	101C	BATHROOM		FLOW IS NIL	No	FLOOR WASHINGS
53	19	53-19-OPN-01	13S	1FD2	101B	BATHROOM		FLOW IS NIL	No	FLOOR WASHINGS
53	19	53-19-OPN-01	13S	1FD3	101A	JANITOR'S CLOSET		FLOW IS NIL	No	WATER HEATER RELIEF VALVE
53	19	53-19-OPN-01	13S	1LV1	101C	BATHROOM		5 DAYS/WEEK	No	LAVATORY
53	19	53-19-OPN-01	13S	1LV2	101B	BATHROOM		5 DAYS/WEEK	No	LAVATORY
53	19	53-19-OPN-01	13S	1SD1	101A	JANITOR'S CLOSET		5 DAYS/WEEK	No	HAND WASH/INDIR. DRAIN
53	19	53-19-OPN-01	13S	1SH1	101C	BATHROOM		5 DAYS/WEEK	No	SHOWER
53	19	53-19-OPN-01	13S	1SH2	101B	BATHROOM		5 DAYS/WEEK	No	SHOWER
53	19	53-19-OPN-01	13S	1TL1	101C	BATHROOM		5 DAYS/WEEK	No	TOILET
53	19	53-19-OPN-01	13S	1TL2	101B	BATHROOM		5 DAYS/WEEK	No	TOILET
53	19	53-19-OPN-01	13S	1UR1	101B	BATHROOM		5 DAYS/WEEK	No	URINAL
53	19	53-19-OPN-01	13S	1WF1	101	HALLWAY		5 DAYS/WEEK	No	DRINKING FOUNTAIN
53	19	53-19-OPN-02	DAYLIGHT	N/A	N/A	EXTERIOR AREA		FLOW IS NIL	No	EQUIP. CONDENSED WATER
53	19	53-19-OPN-03	04A133	N/A	101	SHOP		NO FLOW	No	DE-IONIZED WATER (ABAND.)
53	19	53-19-OPN-04	DAYLIGHT	N/A	101A	JANITOR'S CLOSET		FLOW IS NIL	No	FIRE LINE DRAIN
53	19	53-19-OPN-05	DAYLIGHT	N/A	N/A	EXTERIOR AREA		FLOW IS NIL	No	EQUIP. CONDENSED WATER
53	19	53-19-OPN-06	DAYLIGHT	N/A	101	SHOP		NO FLOW	No	VACUUM PUMP EXHAUST
53	19	53-19-OPN-07	DAYLIGHT	N/A	101	SHOP		NO FLOW	No	VACUUM PUMP EXHAUST
53	19	53-19-OPN-08	DAYLIGHT	N/A	120	MECHANICAL ROOM		FLOW IS NIL	No	FIRE LINE DRAIN
53	19	53-19-OPN-09	DAYLIGHT	N/A	N/A	EXTERIOR AREA		6 MONTHS/YEAR	Yes	CONDENSED WATER DRAIN
53	19	53-19-OPN-10	DAYLIGHT	N/A	N/A	EXTERIOR AREA		6 MONTHS/YEAR	Yes	CONDENSED WATER DRAIN
53	19	53-19-OPN-11	DAYLIGHT	N/A	N/A	EXTERIOR AREA		6 MONTHS/YEAR	Yes	CONDENSED WATER DRAIN
53	19	53-19-OPN-12	DAYLIGHT	N/A	N/A	EXTERIOR AREA		6 MONTHS/YEAR	Yes	CONDENSED WATER DRAIN
53	19	53-19-OPN-13	DAYLIGHT	N/A	101	SHOP		NO FLOW	No	VACUUM PUMP EXHAUST
53	19	53-19-OPN-14	DAYLIGHT	N/A	N/A	EXTERIOR AREA		FLOW IS NIL	No	EQUIP. CONDENSED WATER
53	19	53-19-OPN-15	DAYLIGHT	N/A	101	SHOP		NO FLOW	No	COMPR. GAS PRESS. RELIE
53	19	53-19-OPN-16	DAYLIGHT	N/A	101	SHOP		NO FLOW	No	COMPR. GAS PRESS. RELIE
53	31	53-31-OPN-01	13S	1ED1	102	MECHANICAL ROOM		FLOW IS NIL	No	STEAM BLWOF/PRESS RELIEF
53	31	53-31-OPN-01	13S	1ED1	102	MECHANICAL ROOM		FLOW IS NIL	No	AIR COMPRESSOR DRAIN
53	31	53-31-OPN-01	13S	1ED2	102	MECHANICAL ROOM		FLOW IS NIL	No	BACKFLOW PREVENTER (3)
53	31	53-31-OPN-01	13S	1ED2	102	MECHANICAL ROOM		FLOW IS NIL	No	AIR COMPRESSOR DRAIN
53	31	53-31-OPN-01	13S	1FD1	145	COMPUTER ROOM		FLOW IS NIL	No	FLOOR WASHINGS

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TA	BLDG	OUTLET PIPING NO	EPA OUTFALL #	DRAIN #	ROOM #	ROOM DESCRIPTION	FLOW RATE	PERIODICITY	SEASONAL	SOURCE TYPES
53	31	53-31-OPN-01	13S	1FD2	132A	BATHROOM		FLOW IS NIL	No	FLOOR WASHINGS
53	31	53-31-OPN-01	13S	1FD3	132	BATHROOM		FLOW IS NIL	No	FLOOR WASHINGS
53	31	53-31-OPN-01	13S	1FD4	130	BATHROOM		FLOW IS NIL	No	FLOOR WASHINGS
53	31	53-31-OPN-01	13S	1FD5	130A	BATHROOM		FLOW IS NIL	No	FLOOR WASHINGS
53	31	53-31-OPN-01	13S	1FD6	102	MECHANICAL ROOM		FLOW IS NIL	No	FLOOR WASHINGS
53	31	53-31-OPN-01	13S	1FD7	156	RESTROOM		FLOW IS NIL	No	FLOOR WASHINGS
53	31	53-31-OPN-01	13S	1FD8	164	COMPUTER ROOM		FLOW IS NIL	No	FLOOR WASHINGS
53	31	53-31-OPN-01	13S	1LV1	132	BATHROOM		5 DAYS/WEEK	No	LAVATORY
53	31	53-31-OPN-01	13S	1LV2	132	BATHROOM		5 DAYS/WEEK	No	LAVATORY
53	31	53-31-OPN-01	13S	1LV3	130	BATHROOM		5 DAYS/WEEK	No	LAVATORY
53	31	53-31-OPN-01	13S	1LV4	130	BATHROOM		5 DAYS/WEEK	No	LAVATORY
53	31	53-31-OPN-01	13S	1LV5	130	BATHROOM		5 DAYS/WEEK	No	LAVATORY
53	31	53-31-OPN-01	13S	1LV6	156	RESTROOM		5 DAYS/WEEK	No	LAVATORY
53	31	53-31-OPN-01	13S	1LV7	156	RESTROOM		5 DAYS/WEEK	No	LAVATORY
53	31	53-31-OPN-01	13S	1LV8	156	RESTROOM		5 DAYS/WEEK	No	LAVATORY
53	31	53-31-OPN-01	13S	1SD1	100B	CORRIDOR		5 DAYS/WEEK	No	COUNTERTOP SINK
53	31	53-31-OPN-01	13S	1SD2	134	JANITOR'S CLOSET		5 DAYS/WEEK	No	SERVICE SINK
53	31	53-31-OPN-01	13S	1SD3	154	JANITOR'S CLOSET		5 DAYS/WEEK	No	SERVICE SINK
53	31	53-31-OPN-01	13S	1SD4	100D	CORRIDOR		5 DAYS/WEEK	No	COUNTERTOP SINK
53	31	53-31-OPN-01	13S	1SD5	170	BREAK ROOM		5 DAYS/WEEK	No	KITCHENETTE UNIT SINK
53	31	53-31-OPN-01	13S	1SH1	132	BATHROOM		5 DAYS/WEEK	No	SHOWER DRAIN
53	31	53-31-OPN-01	13S	1SH2	130	BATHROOM		5 DAYS/WEEK	No	SHOWER DRAIN
53	31	53-31-OPN-01	13S	1TL1	132	BATHROOM		5 DAYS/WEEK	No	TOILET
53	31	53-31-OPN-01	13S	1TL2	132	BATHROOM		5 DAYS/WEEK	No	TOILET
53	31	53-31-OPN-01	13S	1TL3	130	BATHROOM		5 DAYS/WEEK	No	TOILET
53	31	53-31-OPN-01	13S	1TL4	130	BATHROOM		5 DAYS/WEEK	No	TOILET
53	31	53-31-OPN-01	13S	1TL5	156	RESTROOM		5 DAYS/WEEK	No	TOILET
53	31	53-31-OPN-01	13S	1TL6	156	RESTROOM		5 DAYS/WEEK	No	TOILET
53	31	53-31-OPN-01	13S	1UR1	130	BATHROOM		5 DAYS/WEEK	No	URINAL
53	31	53-31-OPN-01	13S	1UR2	130	BATHROOM		5 DAYS/WEEK	No	URINAL
53	31	53-31-OPN-01	13S	1UR3	156	RESTROOM		5 DAYS/WEEK	No	URINAL
53	31	53-31-OPN-01	13S	1UR4	156	RESTROOM		5 DAYS/WEEK	No	URINAL
53	31	53-31-OPN-01	13S	1WF1	100B	CORRIDOR		5 DAYS/WEEK	No	WATER FOUNTAIN

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TA	BLDG	OUTLET PIPING NO	EPA OUTFALL #	DRAIN #	ROOM #	ROOM DESCRIPTION	FLOW RATE	PERIODICITY	SEASONAL	SOURCE TYPES
53	31	53-31-OPN-01	13S	1WF2	100D	CORRIDOR		5 DAYS/WEEK	No	WATER FOUNTAIN
53	31	53-31-OPN-01	13S	2FD1	232	RESTROOM		FLOW IS NIL	No	FLOOR WASHINGS
53	31	53-31-OPN-01	13S	2FD2	230	BATHROOM		FLOW IS NIL	No	FLOOR WASHINGS
53	31	53-31-OPN-01	13S	2FD3	230A	BATHROOM		FLOW IS NIL	No	FLOOR WASHINGS
53	31	53-31-OPN-01	13S	2FD4	256	RESTROOM		FLOW IS NIL	No	FLOOR WASHINGS
53	31	53-31-OPN-01	13S	2LV1	232	RESTROOM		5 DAYS/WEEK	No	LAVATORY
53	31	53-31-OPN-01	13S	2LV2	232	RESTROOM		5 DAYS/WEEK	No	LAVATORY
53	31	53-31-OPN-01	13S	2LV3	230	BATHROOM		5 DAYS/WEEK	No	LAVATORY
53	31	53-31-OPN-01	13S	2LV4	230	BATHROOM		5 DAYS/WEEK	No	LAVATORY
53	31	53-31-OPN-01	13S	2LV5	230	BATHROOM		5 DAYS/WEEK	No	LAVATORY
53	31	53-31-OPN-01	13S	2LV6	256	RESTROOM		5 DAYS/WEEK	No	LAVATORY
53	31	53-31-OPN-01	13S	2LV7	256	RESTROOM		5 DAYS/WEEK	No	LAVATORY
53	31	53-31-OPN-01	13S	2LV8	256	RESTROOM		5 DAYS/WEEK	No	LAVATORY
53	31	53-31-OPN-01	13S	2SD1	200B	CORRIDOR		5 DAYS/WEEK	No	COUNTERTOP SINK
53	31	53-31-OPN-01	13S	2SD2	234	JANITOR'S CLOSET		5 DAYS/WEEK	No	SERVICE SINK
53	31	53-31-OPN-01	13S	2SD3	201	CONFERENCE ROOM		5 DAYS/WEEK	No	COUNTERTOP SINK
53	31	53-31-OPN-01	13S	2SD4	254	JANITOR'S CLOSET		5 DAYS/WEEK	No	SERVICE SINK
53	31	53-31-OPN-01	13S	2SD5	200D	CORRIDOR		5 DAYS/WEEK	No	COUNTERTOP SINK
53	31	53-31-OPN-01	13S	2SH1	230	BATHROOM		5 DAYS/WEEK	No	SHOWER DRAIN
53	31	53-31-OPN-01	13S	2TL1	232	RESTROOM		5 DAYS/WEEK	No	TOILET
53	31	53-31-OPN-01	13S	2TL2	232	RESTROOM		5 DAYS/WEEK	No	TOILET
53	31	53-31-OPN-01	13S	2TL3	230	BATHROOM		5 DAYS/WEEK	No	TOILET
53	31	53-31-OPN-01	13S	2TL4	230	BATHROOM		5 DAYS/WEEK	No	TOILET
53	31	53-31-OPN-01	13S	2TL5	256	RESTROOM		5 DAYS/WEEK	No	TOILET
53	31	53-31-OPN-01	13S	2TL6	256	RESTROOM		5 DAYS/WEEK	No	TOILET
53	31	53-31-OPN-01	13S	2UR1	230	BATHROOM		5 DAYS/WEEK	No	URINAL
53	31	53-31-OPN-01	13S	2UR2	230	BATHROOM		5 DAYS/WEEK	No	URINAL
53	31	53-31-OPN-01	13S	2UR3	256	RESTROOM		5 DAYS/WEEK	No	URINAL
53	31	53-31-OPN-01	13S	2UR4	256	RESTROOM		5 DAYS/WEEK	No	URINAL
53	31	53-31-OPN-01	13S	2WF1	200B	CORRIDOR		5 DAYS/WEEK	No	WATER FOUNTAIN
53	31	53-31-OPN-01	13S	2WF2	200D	CORRIDOR		5 DAYS/WEEK	No	WATER FOUNTAIN
53	31	53-31-OPN-01	13S	3FD1	232	RESTROOM		FLOW IS NIL	No	FLOOR WASHINGS
53	31	53-31-OPN-01	13S	3FD2	230	RESTROOM		FLOW IS NIL	No	FLOOR WASHINGS

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TA	BLDG	OUTLET PIPING NO	EPA OUTFALL #	DRAIN #	ROOM #	ROOM DESCRIPTION	FLOW RATE	PERIODICITY	SEASONAL	SOURCE TYPES
53	31	53-31-OPN-01	13S	3FD3	256	RESTROOM		FLOW IS NIL	No	FLOOR WASHINGS
53	31	53-31-OPN-01	13S	3LV1	334	RESTROOM		5 DAYS/WEEK	No	LAVATORY
53	31	53-31-OPN-01	13S	3LV2	334	RESTROOM		5 DAYS/WEEK	No	LAVATORY
53	31	53-31-OPN-01	13S	3LV3	332	RESTROOM		5 DAYS/WEEK	No	LAVATORY
53	31	53-31-OPN-01	13S	3LV4	332	RESTROOM		5 DAYS/WEEK	No	LAVATORY
53	31	53-31-OPN-01	13S	3LV5	332	RESTROOM		5 DAYS/WEEK	No	LAVATORY
53	31	53-31-OPN-01	13S	3LV6	356	RESTROOM		5 DAYS/WEEK	No	LAVATORY
53	31	53-31-OPN-01	13S	3LV7	356	RESTROOM		5 DAYS/WEEK	No	LAVATORY
53	31	53-31-OPN-01	13S	3LV8	356	RESTROOM		5 DAYS/WEEK	No	LAVATORY
53	31	53-31-OPN-01	13S	3SD1	300B	CORRIDOR		5 DAYS/WEEK	No	COUNTERTOP SINK
53	31	53-31-OPN-01	13S	3SD2	336	JANITOR'S CLOSET		5 DAYS/WEEK	No	SERVICE SINK
53	31	53-31-OPN-01	13S	3SD3	305	CONFERENCE ROOM		5 DAYS/WEEK	No	COUNTERTOP SINK
53	31	53-31-OPN-01	13S	3SD4	354	JANITOR'S CLOSET		FLOW IS NIL	No	HEAT/COOL UNITS OVERFLOW
53	31	53-31-OPN-01	13S	3SD5	300D	CORRIDOR		5 DAYS/WEEK	No	COUNTERTOP SINK
53	31	53-31-OPN-01	13S	3TL1	334	RESTROOM		5 DAYS/WEEK	No	TOILET
53	31	53-31-OPN-01	13S	3TL2	334	RESTROOM		5 DAYS/WEEK	No	TOILET
53	31	53-31-OPN-01	13S	3TL3	332	RESTROOM		5 DAYS/WEEK	No	TOILET
53	31	53-31-OPN-01	13S	3TL4	332	RESTROOM		5 DAYS/WEEK	No	TOILET
53	31	53-31-OPN-01	13S	3TL5	356	RESTROOM		5 DAYS/WEEK	No	TOILET
53	31	53-31-OPN-01	13S	3TL6	356	RESTROOM		5 DAYS/WEEK	No	TOILET
53	31	53-31-OPN-01	13S	3UR1	332	RESTROOM		5 DAYS/WEEK	No	URINAL
53	31	53-31-OPN-01	13S	3UR2	332	RESTROOM		5 DAYS/WEEK	No	URINAL
53	31	53-31-OPN-01	13S	3UR3	356	RESTROOM		5 DAYS/WEEK	No	URINAL
53	31	53-31-OPN-01	13S	3UR4	356	RESTROOM		5 DAYS/WEEK	No	URINAL
53	31	53-31-OPN-01	13S	3WF1	300B	CORRIDOR		5 DAYS/WEEK	No	WATER FOUNTAIN
53	31	53-31-OPN-01	13S	3WF2	300D	CORRIDOR		5 DAYS/WEEK	No	WATER FOUNTAIN
53	31	53-31-OPN-02	DAYLIGHT	RD7	N/A	ROOF		MOSTLY SUMMER	Yes	STORM DRAIN
53	31	53-31-OPN-03	DAYLIGHT	RD6	N/A	ROOF		MOSTLY SUMMER	Yes	STORM DRAIN
53	31	53-31-OPN-04	DAYLIGHT	N/A	102	MECHANICAL ROOM		FLOW IS NIL	No	FIRE LINE DRAIN
53	31	53-31-OPN-05	DAYLIGHT	RD4	N/A	ROOF		MOSTLY SUMMER	Yes	STORM DRAIN
53	31	53-31-OPN-05	DAYLIGHT	RD5	N/A	ROOF		MOSTLY SUMMER	Yes	STORM DRAIN
53	31	53-31-OPN-06	DAYLIGHT	RD3	N/A	ROOF		MOSTLY SUMMER	Yes	STORM DRAIN
53	31	53-31-OPN-07	DAYLIGHT	RD2	N/A	ROOF		MOSTLY SUMMER	Yes	STORM DRAIN

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TA	BLDG	OUTLET PIPING NO	EPA OUTFALL #	DRAIN #	ROOM #	ROOM DESCRIPTION	FLOW RATE	PERIODICITY	SEASONAL	SOURCE TYPES
53	31	53-31-OPN-08	DAYLIGHT	N/A	N/A	STAIRWELL		FLOW IS NIL	No	FIRE LINE DRAIN
53	31	53-31-OPN-09	DAYLIGHT	RD1	N/A	ROOF		MOSTLY SUMMER	Yes	STORM DRAIN
53	31	53-31-OPN-10	DAYLIGHT	N/A	N/A	EXTERIOR AREA		FLOW IS NIL	No	EQUIP. CONDENSED WATER
53	31	53-31-OPN-11	DAYLIGHT	RD16	N/A	ROOF		MOSTLY SUMMER	Yes	STORM DRAIN
53	31	53-31-OPN-12	DAYLIGHT	RD13	N/A	ROOF		MOSTLY SUMMER	Yes	STORM DRAIN
53	31	53-31-OPN-12	DAYLIGHT	RD14	N/A	ROOF		MOSTLY SUMMER	Yes	STORM DRAIN
53	31	53-31-OPN-12	DAYLIGHT	RD15	N/A	ROOF		MOSTLY SUMMER	Yes	STORM DRAIN
53	31	53-31-OPN-13	DAYLIGHT	RD12	N/A	ROOF		MOSTLY SUMMER	Yes	STORM DRAIN
53	31	53-31-OPN-14	DAYLIGHT	RD10	N/A	ROOF		MOSTLY SUMMER	Yes	STORM DRAIN
53	31	53-31-OPN-15	DAYLIGHT	N/A	N/A	EXTERIOR AREA		FLOW IS NIL	No	EQUIP. CONDENSED WATER
53	31	53-31-OPN-16	DAYLIGHT	RD9	N/A	ROOF		MOSTLY SUMMER	Yes	STORM DRAIN
53	31	53-31-OPN-17	DAYLIGHT	RD8	N/A	ROOF		MOSTLY SUMMER	Yes	STORM DRAIN
53	293	53-293-OPN-1	03A113	N/A	N/A	COOLING TOWER	17500 GPY	12 MONTHS/YEAR	No	COOLING TOWER BLOWDOWN
53	294	53-294-OPN-1	03A113	N/A	N/A	COOLING TOWER	175800 GPY	12 MONTHS/YEAR	No	COOLING TOWER BLOWDOWN
53	385	53-385	DAYLIGHT	N/A	N/A	GUARD STATION		NO FLOW	No	NONE
53	400	53-400-OPN-1	13S	1LV1	N/A	RESTROOM		5 DAYS/WEEK	No	LAVATORY
53	400	53-400-OPN-1	13S	1LV2	N/A	RESTROOM		5 DAYS/WEEK	No	LAVATORY
53	400	53-400-OPN-1	13S	1TL1	N/A	RESTROOM		5 DAYS/WEEK	No	TOILET
53	400	53-400-OPN-1	13S	1TL2	N/A	RESTROOM		5 DAYS/WEEK	No	TOILET
53	400	53-400-OPN-1	13S	1UR1	N/A	RESTROOM		5 DAYS/WEEK	No	URINAL
53	400	53-400-OPN-2	DAYLIGHT	N/A	N/A	ROOF		6 MONTHS/YEAR	Yes	CONDENSED WATER DRAIN
53	401	53-401-OPN-1	13S	1LV1	N/A	RESTROOM		5 DAYS/WEEK	No	LAVATORY
53	401	53-401-OPN-1	13S	1LV2	N/A	RESTROOM		5 DAYS/WEEK	No	LAVATORY
53	401	53-401-OPN-1	13S	1TL1	N/A	RESTROOM		5 DAYS/WEEK	No	TOILET
53	401	53-401-OPN-1	13S	1TL2	N/A	RESTROOM		5 DAYS/WEEK	No	TOILET
53	401	53-401-OPN-1	13S	1UR1	N/A	RESTROOM		5 DAYS/WEEK	No	URINAL
53	401	53-401-OPN-1	13S	1WF1	N/A	HALLWAY		5 DAYS/WEEK	No	WATER FOUNTAIN
53	401	53-401-OPN-2	DAYLIGHT	N/A	N/A	ROOF		6 MONTHS/YEAR	Yes	CONDENSED WATER DRAIN
53	402	53-402-OPN-1	13S	1LV1	N/A	RESTROOM		5 DAYS/WEEK	No	LAVATORY
53	402	53-402-OPN-1	13S	1LV2	N/A	RESTROOM		5 DAYS/WEEK	No	LAVATORY
53	402	53-402-OPN-1	13S	1TL1	N/A	RESTROOM		5 DAYS/WEEK	No	TOILET
53	402	53-402-OPN-1	13S	1TL2	N/A	RESTROOM		5 DAYS/WEEK	No	TOILET
53	402	53-402-OPN-1	13S	1WF1	N/A	HALLWAY		5 DAYS/WEEK	No	WATER FOUNTAIN

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TA	BLDG	OUTLET PIPING NO	EPA OUTFALL #	DRAIN #	ROOM #	ROOM DESCRIPTION	FLOW RATE	PERIODICITY	SEASONAL	SOURCE TYPES
53	403	53-403-OPN-1	13S	1LV1	N/A	RESTROOM		5 DAYS/WEEK	No	LAVATORY
53	403	53-403-OPN-1	13S	1LV2	N/A	RESTROOM		5 DAYS/WEEK	No	LAVATORY
53	403	53-403-OPN-1	13S	1TL1	N/A	RESTROOM		5 DAYS/WEEK	No	TOILET
53	403	53-403-OPN-1	13S	1TL2	N/A	RESTROOM		5 DAYS/WEEK	No	TOILET
53	403	53-403-OPN-1	13S	1UR1	N/A	RESTROOM		5 DAYS/WEEK	No	URINAL
53	403	53-403-OPN-2	DAYLIGHT	N/A	N/A	ROOF		6 MONTHS/YEAR	Yes	CONDENSED WATER DRAIN
53	404	53-404-OPN-1	13S	1LV1	N/A	RESTROOM		5 DAYS/WEEK	No	LAVATORY
53	404	53-404-OPN-1	13S	1LV2	N/A	RESTROOM		5 DAYS/WEEK	No	LAVATORY
53	404	53-404-OPN-1	13S	1TL1	N/A	RESTROOM		5 DAYS/WEEK	No	TOILET
53	404	53-404-OPN-1	13S	1TL2	N/A	RESTROOM		5 DAYS/WEEK	No	TOILET
53	404	53-404-OPN-1	13S	1UR1	N/A	RESTROOM		5 DAYS/WEEK	No	URINAL
53	404	53-404-OPN-2	DAYLIGHT	N/A	N/A	MECHANICAL CLOSET		FLOW IS NIL	No	WATER HEATER RELIEF VALVE
53	404	53-404-OPN-3	DAYLIGHT	N/A	N/A	ROOF		6 MONTHS/YEAR	Yes	CONDENSED WATER DRAIN
53	405	53-405-OPN-1	13S	1LV1	N/A	RESTROOM		5 DAYS/WEEK	No	LAVATORY
53	405	53-405-OPN-1	13S	1LV2	N/A	RESTROOM		5 DAYS/WEEK	No	LAVATORY
53	405	53-405-OPN-1	13S	1TL1	N/A	RESTROOM		5 DAYS/WEEK	No	TOILET
53	405	53-405-OPN-1	13S	1TL2	N/A	RESTROOM		5 DAYS/WEEK	No	TOILET
53	405	53-405-OPN-1	13S	1UR1	N/A	RESTROOM		5 DAYS/WEEK	No	URINAL
53	405	53-405-OPN-1	13S	1WF1	N/A	HALLWAY		5 DAYS/WEEK	No	WATER FOUNTAIN
53	405	53-405-OPN-2	DAYLIGHT	N/A	N/A	ROOF		6 MONTHS/YEAR	Yes	CONDENSED WATER DRAIN
53	409	53-409-OPN-1	13S	1LV1	N/A	RESTROOM		5 DAYS/WEEK	No	LAVATORY
53	409	53-409-OPN-1	13S	1LV2	N/A	RESTROOM		5 DAYS/WEEK	No	LAVATORY
53	409	53-409-OPN-1	13S	1SD1	N/A	JANITOR'S CLOSET		5 DAYS/WEEK	No	SERVICE SINK
53	409	53-409-OPN-1	13S	1SD2	N/A	HALLWAY		5 DAYS/WEEK	No	COUNTERTOP SINK
53	409	53-409-OPN-1	13S	1TL1	N/A	RESTROOM		5 DAYS/WEEK	No	TOILET
53	409	53-409-OPN-1	13S	1TL2	N/A	RESTROOM		5 DAYS/WEEK	No	TOILET
53	409	53-409-OPN-1	13S	1WF1	N/A	HALLWAY		5 DAYS/WEEK	No	WATER FOUNTAIN
53	409	53-409-OPN-2	DAYLIGHT	N/A	N/A	ROOF		6 MONTHS/YEAR	Yes	CONDENSED WATER DRAIN
53	409	53-409-OPN-3	DAYLIGHT	N/A	N/A	ROOF		6 MONTHS/YEAR	Yes	CONDENSED WATER DRAIN
53	543	53-543	DAYLIGHT	N/A	N/A	TRAILER		BUILDING REMOVED	No	NONE
53	577	53-577-OPN-1	13S	1LV1	N/A	BATHROOM		5 DAYS/WEEK	No	LAVATORY
53	577	53-577-OPN-1	13S	1SH1	N/A	BATHROOM		5 DAYS/WEEK	No	SHOWER DRAIN
53	577	53-577-OPN-1	13S	1SH2	N/A	BATHROOM		5 DAYS/WEEK	No	SHOWER DRAIN

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TA	BLDG	OUTLET PIPING NO	EPA OUTFALL #	DRAIN #	ROOM #	ROOM DESCRIPTION	FLOW RATE	PERIODICITY	SEASONAL	SOURCE TYPES	
53	577	53-577-OPN-1	13S	1TL1	N/A	BATHROOM		5 DAYS/WEEK	No	TOILET	
53	577	53-577-OPN-1	13S	1WF1	N/A	HALLWAY		5 DAYS/WEEK	No	WATER FOUNTAIN	
53	577	53-577-OPN-2	DAYLIGHT	N/A	N/A	MECHANICAL CLOSET		FLOW IS NIL	No	WATER HEATER RELIEF VALVE	
53	577	53-577-OPN-3	DAYLIGHT	N/A	N/A	ROOF		6 MONTHS/YEAR	Yes	CONDENSED WATER DRAIN	
53	577	53-577-OPN-4	DAYLIGHT	N/A	N/A	ROOF		6 MONTHS/YEAR	Yes	CONDENSED WATER DRAIN	
53	577	53-577-OPN-5	DAYLIGHT	N/A	N/A	ROOF		6 MONTHS/YEAR	Yes	CONDENSED WATER DRAIN	
53	617	53-617	NONE	N/A	N/A	STORAGE SHED		NO FLOW	No	NONE	
53	620	53-620	NONE	N/A	N/A	SHED		NO FLOW	No	NONE	
53	678	53-678	NONE	N/A	N/A	SHED		NO FLOW	No	NONE	
53	708	53-708	NONE	N/A	N/A	TRANSPORTAINER		NO FLOW	No	NONE	
53	709	53-709	NONE	N/A	N/A	TRANSPORTAINER		NO FLOW	No	NONE	
53	710	53-710	NONE	N/A	N/A	TRANSPORTAINER		NO FLOW	No	NONE	
53	764	53-764	NONE	N/A	N/A	TRANSPORTAINER		NO FLOW	No	NONE	
53	833	53-833	NONE	N/A	N/A	TRANSPORTAINER		NO FLOW	No	NONE	
53	835	53-835	NONE	N/A	N/A	TRANSPORTAINER		NO FLOW	No	NONE	
53	852	53-852	NONE	N/A	N/A	TRANSPORTAINER		NO FLOW	No	NONE	
53	874	53-874	NONE	N/A	N/A	TRANSPORTAINER		NO FLOW	No	NONE	
53	888	53-888-OPN-1	13S	1LV1	N/A	RESTROOM		5 DAYS/WEEK	No	LAVATORY	
53	888	53-888-OPN-1	13S	1TL1	N/A	RESTROOM		5 DAYS/WEEK	No	TOILET	
53	1032	53-1032-OPN-1	03A113	N/A	N/A	COOLING TOWER	219017	GPY	12 MONTHS/YEAR	No	COOLING TOWER BLOWDOWN
53	1038	53-1038	NONE	N/A	N/A	TRANSPORTAINER		NO FLOW	No	NONE	
53	1053	53-1053	NONE	N/A	N/A	TRANSPORTAINER		NO FLOW	No	NONE	



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				5. DUR- ATION (in days)
		a. DAYS PER WEEK (specify average)	b. MONTHS PER YEAR (specify average)	a. FLOW RATE (in mgd)		b. TOTAL VOLUME (specify with units)		
				1. LONG TERM AVERAGE	2. MAXIMUM DAILY	1. LONG TERM AVERAGE	2. MAXIMUM DAILY	

**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			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 waste-water 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 COM- PLIANCE DATE	
	a. NO.	b. SOURCE OF DISCHARGE		a. RE- QUIRED	b. PRO- JECTED
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
N/A			

**VI. POTENTIAL DISCHARGES NOT COVERED BY ANALYSIS**

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

YES (list all such pollutants below)

NO (go to Item VI-B)

**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	505-667-5105
ALLEN J. TIEDMAN, ASSOC. DIRECTOR FOR OPERATIONS	505-667-9390
C. SIGNATURE	D. DATE SIGNED

COOLING TOWER  
TA-53-294

COOLING TOWER  
TA-53-1032

COOLING TOWER  
TA-53-293

TREATED COOLING  
WATER DISCHARGE  
481.6 GPD

TREATED COOLING  
WATER DISCHARGE  
600 GPD

TREATED COOLING  
WATER DISCHARGE  
TO OUTFALL 03A113  
1129.6 GPD

TREATED  
COOLING  
WATER  
DISCHARGE  
48 GPD

**TA-53-293, 294 and 1032  
COOLING WATER DISCHARGE**

Data from worst case composite.

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

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

NM0890010515

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

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

OUTFALL NO.  
03A113

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	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	8.6						mg/l	g/d			
b. Chemical Oxygen Demand (COD)	42.0	179.6						mg/l	g/d			
c. Total Organic Carbon (TOC)	7.4	31.6						mg/l	g/d			
d. Total Suspended Solids (TSS)	7.0	29.9						mg/l	g/d			
e. Ammonia (as N)	< .01	< 42.755						mg/l	mg/d			
f. Flow	VALUE 1129.6		VALUE		VALUE			gal/day		VALUE		
g. Temperature (winter)	VALUE 36.9 C		VALUE		VALUE			°C		VALUE		
h. Temperature (summer)	VALUE		VALUE		VALUE			°C		VALUE		
i. pH	MINIMUM 6.8	MAXIMUM 8.8	MINIMUM 6.0	MAXIMUM 9.0	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	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		3.24	13.9						mg/l	g/d			
b. Chlorine, Total Residual		X	0.0	0.0						mg/l	mg/d			
c. Color	X		10							units				
d. Fecal Coliform		X												
e. Fluoride (16984-48-8)	X		0.52	2.2						mg/l	g/d			
f. Nitrate-Nitrite (as N)	X		1.13	4.8						mg/l	g/d			

I. POLLUTANT AND CAS NO. (if available)	2. MARK 'X'		3. EFFLUENT						4. UNITS		5. INTAKE (optional)			
	a. BELIEVED PRESENT	b. 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	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	
g. Nitrogen, Total Organic (as N)	X		2.3	9.8						mg/l	g/d			
h. Oil and Grease		X	< 1.2	< 5.1						mg/l	g/d			
i. Phosphorus (as P), Total (7723-14-0)	X		.306	1.3						mg/l	g/d			
j. Radioactivity														
(1) Alpha, Total	X		14	59.9						pCi/l	nCi/d			
(2) Beta, Total	X		6.6	28.2						pCi/l	nCi/d			
(3) Radium, Total	X													
(4) Radium 226, Total	X		0.07	0.3						pCi/l	nCi/d			
k. Sulfate (as SO <sub>4</sub> ) (14808-79-8)	X		143	611.4						mg/l	g/d			
l. Sulfide (as S)	X		70.2	300.1						mg/l	g/d			
m. Sulfite (as SO <sub>3</sub> ) (14266-45-3)	X		18.8	80.4						mg/l	g/d			
n. Surfactants	X		0.11	0.5						mg/l	g/d			
o. Aluminum, Total (7429-90-6)	X		0.06	0.3						mg/l	g/d			
p. Barium, Total (7440-39-3)	X		0.11	0.5						mg/l	g/d			
q. Boron, Total (7440-42-8)	X		0.33	1.4						mg/l	g/d			
r. Cobalt, Total (7440-48-4)		X	0.07	0.3						mg/l	g/d			
s. Iron, Total (7439-89-6)	X		1.1	4.7						mg/l	g/d			
t. Magnesium, Total (7439-98-4)	X		5.8	24.8						mg/l	g/d			
u. Molybdenum, Total (7439-98-7)	X		1.7	7.3						mg/l	g/d			
v. Manganese, Total (7439-96-5)	X		0.05	0.2						mg/l	g/d			
w. Tin, Total (7440-31-5)		X	< 0.050	< 0.2						mg/l	g/d			
x. Titanium, Total (7440-32-8)		X	< 0.004	< 17.1						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						4. UNITS		5. INTAKE (optional)			
	B. TESTING REQUIRED	C. BELIEVED PRESENT	D. 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	
<b>METALS, CYANIDE, AND TOTAL PHENOLS</b>															
1M. Antimony, Total (7440-36-0)			X	< 0.050	< 0.2						mg/l	g/d			
2M. Arsenic, Total (7440-38-2)		X		0.04	0.2						mg/l	g/d			
3M. Beryllium, Total, (7440-41-7)			X	< 0.1	< 0.4						mg/l	g/d			
4M. Cadmium, Total (7440-43-9)		X		.004	17.1						mg/l	mg/d			
5M. Chromium, Total (7440-47-3)		X		.260	1.1						mg/l	g/d			
6M. Copper, Total (7440-50-8)		X		0.1	0.4						mg/l	g/d			
7M. Lead, Total (7439-92-1)		X		.050	0.2						mg/l	g/d			
8M. Mercury, Total (7439-97-6)			X	< .0002	< 0.9						mg/l	mg/d			
9M. Nickel, Total (7440-02-0)		X		.28	1.2						mg/l	g/d			
10M. Selenium, Total (7782-49-2)			X	< .001	< 4.3						mg/l	mg/d			
11M. Silver, Total (7440-22-4)			X	< 0.01	< 42.8						mg/l	mg/d			
12M. Thallium, Total (7440-28-0)		X		0.51	2.2						mg/l	g/d			
13M. Zinc, Total (7440-66-6)		X		.071	0.3						mg/l	g/d			
14M. Cyanide, Total (57-12-6)		X		.033	0.1						mg/l	g/d			
15M. Phenols, Total			X	< .01	< 42.8						mg/l	mg/d			
<b>DIOXIN</b>															
2,3,7,8-Tetrachlorodibenzo-P-Dioxin (1764-01-6)			X	DESCRIBE RESULTS											

1. POLLUTANT AND CAS NUMBER (if available)	2. MARK 'X'			3. EFFLUENT						4. UNITS		5. INTAKE (optional)			
	a. TESTING REQUIRED	b. RECEIVED PRESENT	c. RECEIVED 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	
<b>GC/MS FRACTION - VOLATILE COMPOUNDS</b>															
1V. Acrolein (107-02-8)			X												
2V. Acrylonitrile (107-13-1)			X												
3V. Benzene (71-43-2)			X	< 0.005	< 21.4						mg/l	mg/d			
4V. Bis (Chloromethyl) Ether (542-88-1)			X												
5V. Bromoform (75-25-2)			X	< 0.005	< 21.4						mg/l	mg/d			
6V. Carbon Tetrachloride (56-23-5)			X	< 0.005	< 21.4						mg/l	mg/d			
7V. Chlorobenzene (108-90-7)			X	< 0.005	< 21.4						mg/l	mg/d			
8V. Chlorodibromomethane (124-48-1)			X	< 0.005	< 21.4						mg/l	mg/d			
9V. Chloroethane (75-00-3)			X	< 0.010	< 0.0						mg/l	mg/d			
10V. 2-Chloroethylvinyl Ether (110-75-8)			X												
11V. Chloroform (67-66-3)			X	< 0.005	< 21.4						mg/l	mg/d			
12V. Dichlorobromomethane (75-27-4)			X	< 0.005	< 21.4						mg/l	mg/d			
13V. Dichlorodifluoromethane (75-71-8)			X												
14V. 1,1-Dichloroethane (75-34-3)			X	< 0.005	< 21.4						mg/l	mg/d			
15V. 1,2-Dichloroethane (107-06-2)			X	< 0.005	< 21.4						mg/l	mg/d			
16V. 1,1-Dichloroethylene (75-35-4)			X	< 0.005	< 21.4						mg/l	mg/d			
17V. 1,2-Dichloropropane (78-87-5)			X	< 0.005	< 21.4						mg/l	kg/d			
18V. 1,3-Dichloropropylene (542-75-8)			X	< 0.005	< 21.4						mg/l	mg/d			
19V. Ethylbenzene (100-41-4)			X	< 0.005	< 21.4	X					mg/l	mg/d			
20V. Methyl Bromide (74-83-9)			X	< 0.010	< 42.8						mg/l	mg/d			
21V. Methyl Chloride (74-87-3)			X	< 0.010	< 42.8						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-REQUIRED	b. RE-EXAMINATION REQUIRED	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	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	
<b>GC/MS FRACTION - VOLATILE COMPOUNDS (continued)</b>															
22V. Methylene Chloride (75-09-2)			X	< 0.005	< 21.4						mg/l	mg/d			
23V. 1,1,2,2-Tetrachloroethane (79-34-5)			X	< 0.005	< 21.4						mg/l	mg/d			
24V. Tetrachloroethylene (127-18-4)			X	< 0.005	< 21.4						mg/l	mg/d			
25V. Toluene (108-88-3)			X	< 0.005	< 21.4						mg/l	mg/d			
26V. 1,2-Trans-Dichloroethylene (156-60-5)			X	< 0.005	< 21.4						mg/l	mg/d			
27V. 1,1,1-Trichloroethane (71-55-6)			X	< 0.005	< 21.4						mg/l	mg/d			
28V. 1,1,2-Trichloroethane (79-00-5)			X	< 0.005	< 21.4						mg/l	mg/d			
29V. Trichloroethylene (79-01-6)			X	< 0.005	< 21.4						mg/l	mg/d			
30V. Trichlorofluoromethane (75-69-4)			X	< 0.005	< 21.4						mg/l	mg/d			
31V. Vinyl Chloride (75-01-4)			X	< 0.010	< 42.8						mg/l	mg/d			
<b>GC/MS FRACTION - ACID COMPOUNDS</b>															
1A. 2-Chlorophenol (95-57-8)			X	< 0.010	< 42.8						mg/l	mg/d			
2A. 2,4-Dichlorophenol (120-83-2)			X	< 0.010	< 42.8						mg/l	mg/d			
3A. 2,4-Dimethylphenol (105-67-9)			X	< 0.010	< 42.8						mg/l	mg/d			
4A. 4,6-Dinitro-O-Cresol (534-52-1)			X	< 0.010	< 42.8						mg/l	mg/d			
5A. 2,4-Dinitrophenol (51-28-5)			X	< 0.010	< 42.8						mg/l	mg/d			
6A. 2-Nitrophenol (88-75-5)			X	< 0.010	< 42.8						mg/l	mg/d			
7A. 4-Nitrophenol (100-02-7)			X	< 0.010	< 42.8						mg/l	mg/d			
8A. P-Chloro-M-Cresol (59-50-7)			X	< 0.010	< 42.8						mg/l	mg/d			
9A. Pentachlorophenol (87-86-5)			X	< 0.010	< 42.8						mg/l	mg/d			
10A. Phenol (108-95-2)			X	< 0.010	< 42.8						mg/l	mg/d			
11A. 2,4,6-Trichlorophenol (88-06-2)			X	< 0.010	< 42.8						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. BE-LIEVED PRE-SENT	c. BE-LIEVED AB-SENT	3. MAXIMUM DAILY VALUE		d. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVRG. VALUE (if available)		d. NO. OF ANAL-YSES	a. CONCENT-RATION	b. MASS	8. 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	< 42.8						mg/l	mg/d			
2B. Acenaphthylene (208-96-8)			X	< 0.010	< 42.8						mg/l	mg/d			
3B. Anthracene (120-12-7)			X	< 0.010	< 42.8						mg/l	mg/d			
4B. Benzidine (92-87-5)			X	< 0.010	< 42.8						mg/l	mg/d			
5B. Benzo (a) Anthracene (56-55-3)			X	< 0.010	< 42.8						mg/l	mg/d			
6B. Benzo (a) Pyrene (50-32-8)			X	< 0.010	< 42.8						mg/l	mg/d			
7B. 3,4-Benzo-fluoranthene (205-99-2)			X	< 0.010	< 42.8						mg/l	mg/d			
8B. Benzo (ghi) Perylene (191-24-2)			X	< 0.010	< 42.8						mg/l	mg/d			
9B. Benzo (k) Fluoranthene (207-08-9)			X	< 0.010	< 42.8						mg/l	mg/d			
10B. Bis (2-Chloroethoxy) Methane (111-91-1)			X	< 0.010	< 42.8						mg/l	mg/d			
11B. Bis (2-Chloroethyl) Ether (111-44-4)			X	< 0.010	< 42.8						mg/l	mg/d			
12B. Bis (2-Chloroisopropyl) Ether (102-60-1)			X	< 0.010	< 42.8						mg/l	mg/d			
13B. Bis (2-Ethylhexyl) Phthalate (117-81-7)			X	< 0.010	< 42.8						mg/l	mg/d			
14B. 4-Bromophenyl Phenyl Ether (101-55-3)			X	< 0.010	< 42.8						mg/l	mg/d			
15B. Butyl Benzyl Phthalate (85-68-7)			X	< 0.010	< 42.8						mg/l	mg/d			
16B. 2-Chloronaphthalene (91-58-7)			X	< 0.010	< 42.8						mg/l	mg/d			
17B. 4-Chlorophenyl Phenyl Ether (7005-72-3)			X	< 0.010	< 42.8						mg/l	mg/d			
18B. Chrysene (218-01-9)			X	< 0.010	< 42.8						mg/l	mg/d			
19B. Dibenzo (a,h) Anthracene (53-70-3)			X	< 0.010	< 42.8						mg/l	mg/d			
20B. 1,2-Dichlorobenzene (95-50-1)			X	< 0.010	< 42.8						mg/l	mg/d			
21B. 1,3-Dichlorobenzene (541-73-1)			X	< 0.010	< 42.8						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)			
	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	
<b>GC/MS FRACTION - BASE/NEUTRAL COMPOUNDS (continued)</b>															
22B. 1,4-Dichlorobenzene (108-46-7)			X	< 0.010	< 42.8						mg/l	mg/d			
23B. 3,3'-Dichlorobenzidine (91-94-1)			X	< 0.010	< 42.8						mg/l	mg/d			
24B. Diethyl Phthalate (84-66-2)			X	< 0.010	< 42.8						mg/l	mg/d			
25B. Dimethyl Phthalate (131-11-3)			X	< 0.010	< 42.8						mg/l	mg/d			
26B. DI-N-Butyl Phthalate (84-74-2)			X	< 0.010	< 42.8						mg/l	mg/d			
27B. 2,4-Dinitrotoluene (121-14-2)			X	< 0.010	< 42.8						mg/l	mg/d			
28B. 2,6-Dinitrotoluene (606-20-2)			X	< 0.010	< 42.8						mg/l	mg/d			
29B. DI-N-Octyl Phthalate (117-84-0)			X	< 0.010	< 42.8						mg/l	mg/d			
30B. 1,2-Diphenylhydrazine (as Azobenzene) (122-66-7)			X	< 0.010	< 42.8						mg/l	mg/d			
31B. Fluoranthene (206-44-0)			X	< 0.010	< 42.8						mg/l	mg/d			
32B. Fluorene (86-73-7)			X	< 0.010	< 42.8						mg/l	mg/d			
33B. Hexachlorobenzene (118-74-1)			X	< 0.010	< 42.8						mg/l	mg/d			
34B. Hexachlorobutadiene (87-68-3)			X	< 0.010	< 42.8						mg/l	mg/d			
35B. Hexachlorocyclopentadiene (77-47-4)			X	< 0.010	< 42.8						mg/l	mg/d			
36B. Hexachloroethane (67-72-1)			X	< 0.010	< 42.8						mg/l	mg/d			
37B. Indeno (1,2,3-cd) Pyrene (193-39-5)			X	< 0.010	< 42.8						mg/l	mg/d			
38B. Isophorone (78-69-1)			X	< 0.010	< 42.8						mg/l	mg/d			
39B. Naphthalene (91-20-3)			X	< 0.010	< 42.8						mg/l	mg/d			
40B. Nitrobenzene (98-95-3)			X	< 0.010	< 42.8						mg/l	mg/d			
41B. N-Nitrosodimethylamine (62-75-9)			X	< 0.010	< 42.8						mg/l	mg/d			
42B. N-Nitrosodi-N-Propylamine (621-64-7)			X	< 0.010	< 42.8						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 METHOD	B. SE-LEVEL PRESENT	C. SE-LEVEL 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	
<b>GC/MS FRACTION - BASE/NEUTRAL COMPOUNDS (continued)</b>															
43B. N-Nitrosodiphenylamine (86-30-6)			X	< 0.010	< 0.2						mg/l	g/d			
44B. Phenanthrene (85-01-8)			X	< 0.010	< 0.2						mg/l	g/d			
45B. Pyrene (129-00-0)			X	< 0.010	< 0.2						mg/l	g/d			
46B. 1,2,4-Trichlorobenzene (120-82-1)			X	< 0.010	< 0.2						mg/l	g/d			
<b>GC/MS FRACTION - PESTICIDES</b>															
1P. Aldrin (309-00-2)			X	< 0.06	< 1.4						ug/l	mg/d			
2P. α-BHC (319-84-6)			X	< 0.04	< 0.9						ug/l	mg/d			
3P. β-BHC (319-85-7)			X	< 0.1	< 2.3						ug/l	mg/d			
4P. γ-BHC (58-89-9)			X	< 0.03	< 0.7						ug/l	mg/d			
5P. δ-BHC (319-86-8)			X	< 0.12	< 2.7						ug/l	mg/d			
6P. Chlordane (57-74-9)			X	< 0.25	< 5.7						ug/l	mg/d			
7P. 4,4'-DDT (50-29-3)			X	< 0.06	< 1.4						ug/l	mg/d			
8P. 4,4'-DDE (72-65-9)			X	< 0.08	< 1.8						ug/l	mg/d			
9P. 4,4'-DDD (72-54-8)			X	< 0.08	< 1.8						ug/l	mg/d			
10P. Dieldrin (60-57-1)			X	< 0.08	< 1.8						ug/l	mg/d			
11P. α-Endosulfan (115-29-7)			X	< 0.05	< 1.1						ug/l	mg/d			
12P. β-Endosulfan (115-29-7)			X	< 0.08	< 1.8						ug/l	mg/d			
13P. Endosulfan Sulfate (1031-07-8)			X	< 0.09	< 2.0						ug/l	mg/d			
14P. Endrin (72-20-8)			X	< 0.06	< 1.4						ug/l	mg/d			
15P. Endrin Aldehyde (7421-93-4)			X	< 0.62	< 14.1						ug/l	mg/d			
16P. Heptachlor (76-44-8)			X	< 0.03	< 0.7						ug/l	mg/d			

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	
<b>GC/MS FRACTION - PESTICIDES (continued)</b>															
17P. Heptachlor Epoxide (1024-57-3)			X	< 0.08	< 1.8						ug/l	mg/d			
18P. PCB-1242 (53469-21-9)			X	< 0.71	< 16.1						ug/l	mg/d			
19P. PCB-1254 (11097-69-1)			X	< 0.71	< 16.1						ug/l	mg/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	< 0.71	< 16.1						ug/l	mg/d			
24P. PCB-1016 (12674-11-2)			X	N.D.											
25P. Toxaphene (8001-35-2)			X	< 2.5	< 56.8						ug/l	mg/d			



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		5. FLOW RATE (in mgd)		4. TOTAL VOLUME (specify with units)		6. DUR- ATION (in days)
		a. DAYS PER WEEK (specify average)	b. MONTHS PER YEAR (specify average)	5. FLOW RATE		4. TOTAL VOLUME		
				1. LONG TERM AVERAGE	2. MAXIMUM DAILY	1. LONG TERM AVERAGE	2. MAXIMUM DAILY	
145	Cooling Tower Blowdown	7	6	0.00009 mgd	0.00009 mgd	900 gpd	900 gpd	6 H/D

**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			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 COM- PLIANCE DATE	
	a. NO.	b. SOURCE OF DISCHARGE		a. RE- QUIRED	b. PRO- JECTED
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
N/A			

**VI. POTENTIAL DISCHARGES NOT COVERED BY ANALYSIS**

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

YES (list all such pollutants below)

NO (go to Item VI-B)

CONTINUED FROM THE FRONT

**VII. BIOLOGICAL TOXICITY TESTING DATA**

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

YES (identify the test(s) and describe their purposes below)

NO (go to Section VIII)

**VIII. CONTRACT ANALYSIS INFORMATION**

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

YES (list the name, address, and telephone number of, and pollutants analyzed by, each such laboratory or firm below)

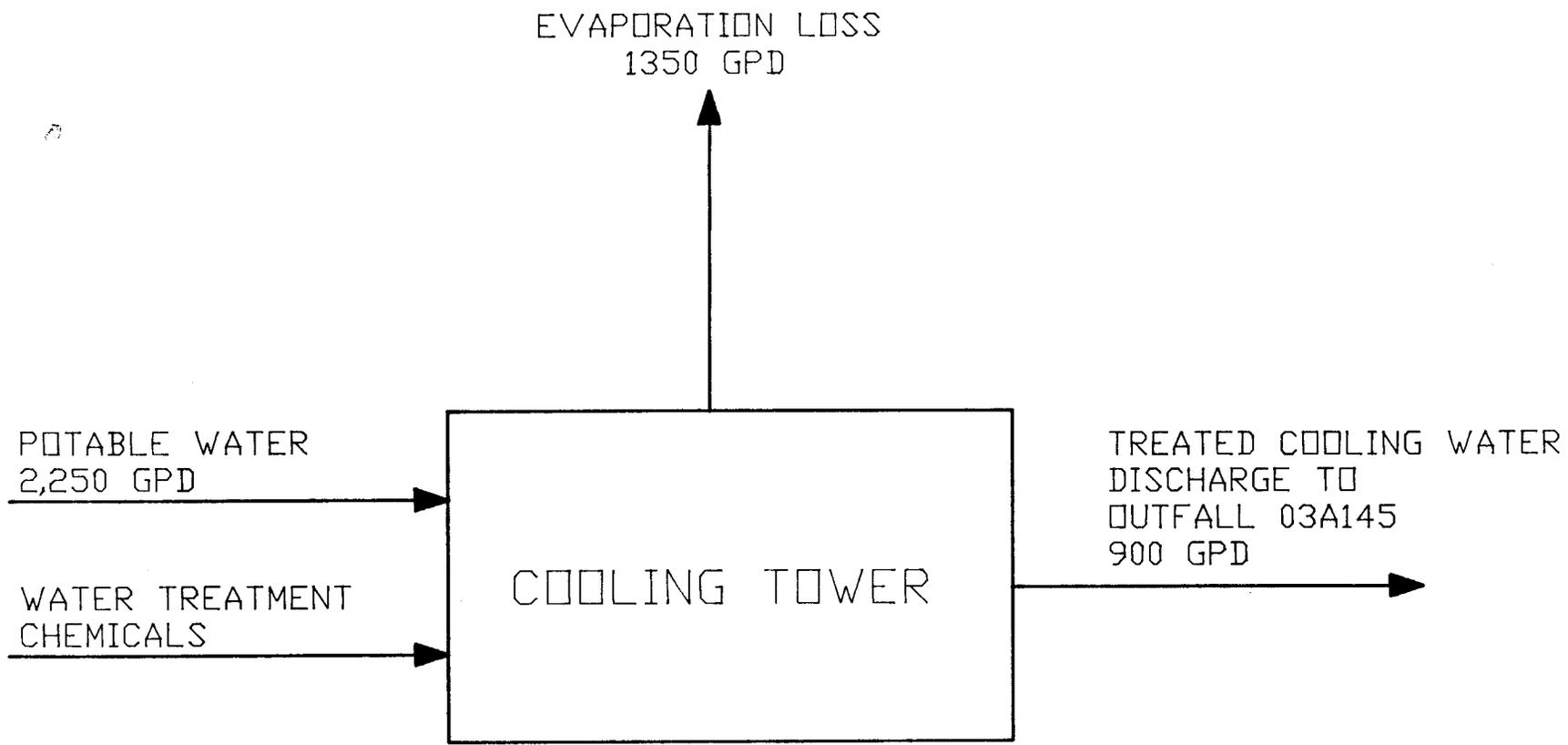
NO (go to Section IX)

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

**IX. CERTIFICATION**

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

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



TA-53-6  
COOLING TOWER

NOTE: INFORMATION WAS TAKEN FROM PREVIOUS EPA 2C PERMIT DATED 8-31-90.

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.  
**03A145**

**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 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. Biochemical Oxygen Demand (BOD)	2.0	6.8						mg/l	g/d			
b. Chemical Oxygen Demand (COD)	42.0	143.1						mg/l	g/d			
c. Total Organic Carbon (TOC)	7.4	25.2						mg/l	g/d			
d. Total Suspended Solids (TSS)	7.0	23.8						mg/l	g/d			
e. Ammonia (as N)	< .01	< 34.065						mg/l	mg/d			
f. Flow	VALUE 900		VALUE		VALUE			gal/day		VALUE		
g. Temperature (winter)	VALUE 36.9 C		VALUE		VALUE			°C		VALUE		
h. Temperature (summer)	VALUE		VALUE		VALUE			°C		VALUE		
i. pH	MINIMUM 6.8	MAXIMUM 8.8	MINIMUM 6.0	MAXIMUM 9.0	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 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 (24959-57-9)	X		3.24	11.0						mg/l	g/d			
b. Chlorine, Total Residual		X	0.0	0.0						mg/l	mg/d			
c. Color	X		10							units				
d. Fecal Coliform		X												
e. Fluoride (16984-48-8)	X		0.52	1.8						mg/l	g/d			
f. Nitrate-Nitrite (as N)	X		1.13	3.8						mg/l	g/d			

I. 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	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	
g. Nitrogen, Total Organic (as N)	X		2.3	7.8						mg/l	g/d			
h. Oil and Grease		X	< 1.2	< 4.1						mg/l	g/d			
i. Phosphorus (as P), Total (7723-14-0)	X		.306	1.0						mg/l	g/d			
j. Radioactivity														
(1) Alpha, Total	X		14	47.7						pCi/l	nCi/d			
(2) Beta, Total	X		6.6	22.5						pCi/l	nCi/d			
(3) Radium, Total	X													
(4) Radium 226, Total	X		0.07	0.2						pCi/l	nCi/d			
k. Sulfate (as SO <sub>4</sub> ) (14808-79-8)	X		143	487.1						mg/l	g/d			
l. Sulfide (as S)	X		70.2	239.1						mg/l	g/d			
m. Sulfite (as SO <sub>3</sub> ) (14265-45-3)	X		18.8	64.0						mg/l	g/d			
n. Surfactants	X		0.11	0.4						mg/l	g/d			
o. Aluminum, Total (7429-90-6)	X		0.06	0.2						mg/l	g/d			
p. Barium, Total (7440-39-3)	X		0.11	0.4						mg/l	g/d			
q. Boron, Total (7440-42-8)	X		0.33	1.1						mg/l	g/d			
r. Cobalt, Total (7440-48-4)		X	0.07	0.2						mg/l	g/d			
s. Iron, Total (7439-89-6)	X		1.1	3.7						mg/l	g/d			
t. Magnesium, Total (7439-95-4)	X		5.8	19.8						mg/l	g/d			
u. Molybdenum, Total (7439-98-7)	X		1.7	5.8						mg/l	g/d			
v. Manganese, Total (7439-96-6)	X		0.05	0.2						mg/l	g/d			
w. Tin, Total (7440-31-5)		X	< 0.050	< 0.2						mg/l	g/d			
x. Titanium, Total (7440-32-6)		X	< 0.004	< 13.6						mg/l	mg/d			

NM0890010515

03A145

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)		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	
<b>METALS, CYANIDE, AND TOTAL PHENOLS</b>															
1M. Antimony, Total (7440-36-0)			X	< 0.050	< 0.2						mg/l	g/d			
2M. Arsenic, Total (7440-38-2)		X		0.04	0.1						mg/l	g/d			
3M. Beryllium, Total, 7440-41-7)			X	< 0.1	< 0.3						mg/l	g/d			
4M. Cadmium, Total (7440-43-9)		X		.004	13.6						mg/l	mg/d			
5M. Chromium, Total (7440-47-3)		X		.260	0.9						mg/l	g/d			
6M. Copper, Total (7440-50-8)		X		0.1	0.3						mg/l	g/d			
7M. Lead, Total (7439-92-1)		X		.050	0.2						mg/l	g/d			
8M. Mercury, Total (7439-97-6)			X	< .0002	< 0.7						mg/l	mg/d			
9M. Nickel, Total (7440-02-0)		X		.28	1.0						mg/l	g/d			
10M. Selenium, Total (7782-49-2)			X	< .001	< 3.4						mg/l	mg/d			
11M. Silver, Total (7440-22-4)			X	< 0.01	< 34.1						mg/l	mg/d			
12M. Thallium, Total (7440-28-0)		X		0.51	1.7						mg/l	g/d			
13M. Zinc, Total (7440-66-6)		X		.071	0.2						mg/l	g/d			
14M. Cyanide, Total (57-12-6)		X		.033	0.1						mg/l	g/d			
15M. Phenols, Total			X	< .01	< 34.1						mg/l	mg/d			
<b>DIOXIN</b>															
2,3,7,8-Tetrachlorodibenzo-P-Dioxin (1764-01-6)			X	DESCRIBE RESULTS											

1. POLLUTANT AND CAS NUMBER (if available)	2. MARK 'X'			3. EFFLUENT						4. UNITS		5. INTAKE (optional)			
	a. TESTING REQUIRED	b. BELIEVED PRESENT	c. BELIEVED ABSENT	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM 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	
<b>GC/MS FRACTION - VOLATILE COMPOUNDS</b>															
1V. Acrolein (107-02-8)			X												
2V. Acrylonitrile (107-13-1)			X												
3V. Benzene (71-43-2)			X	< 0.005	< 17.0						mg/l	mg/d			
4V. Bis (Chloromethyl) Ether (542-88-1)			X												
5V. Bromoform (75-26-2)			X	< 0.005	< 17.0						mg/l	mg/d			
6V. Carbon Tetrachloride (56-23-5)			X	< 0.005	< 17.0						mg/l	mg/d			
7V. Chlorobenzene (108-90-7)			X	< 0.005	< 17.0						mg/l	mg/d			
8V. Chlorodibromomethane (124-48-1)			X	< 0.005	< 17.0						mg/l	mg/d			
9V. Chloroethane (75-00-3)			X	< 0.010	< 0.0						mg/l	mg/d			
10V. 2-Chloroethylvinyl Ether (110-75-8)			X												
11V. Chloroform (67-66-3)			X	< 0.005	< 17.0						mg/l	mg/d			
12V. Dichlorobromomethane (75-27-4)			X	< 0.005	< 17.0						mg/l	mg/d			
13V. Dichlorodifluoromethane (75-71-8)			X												
14V. 1,1-Dichloroethane (75-34-3)			X	< 0.005	< 17.0						mg/l	mg/d			
15V. 1,2-Dichloroethane (107-06-2)			X	< 0.005	< 17.0						mg/l	mg/d			
16V. 1,1-Dichloroethylene (75-35-4)			X	< 0.005	< 17.0						mg/l	mg/d			
17V. 1,2-Dichloropropane (78-87-5)			X	< 0.005	< 17.0						mg/l	kg/d			
18V. 1,3-Dichloropropylene (542-75-8)			X	< 0.005	< 17.0						mg/l	mg/d			
19V. Ethylbenzene (100-41-4)			X	< 0.005	< 17.0	X					mg/l	mg/d			
20V. Methyl Bromide (74-83-9)			X	< 0.010	< 34.1						mg/l	mg/d			
21V. Methyl Chloride (74-87-3)			X	< 0.010	< 34.1						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 REQUIRED	b. SCHEDULED PRESENT	c. BELIEVED ABSENT	8. MAXIMUM DAILY VALUE		d. MAXIMUM 30 DAY VALUE (if available)		g. LONG TERM AVRG. VALUE (if available)		d. NO. OF ANALYSES	a. CONCENTRATION	b. MASS	8. LONG TERM AVERAGE VALUE		b. NO. OF ANALYSES
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
<b>GC/MS FRACTION - VOLATILE COMPOUNDS (continued)</b>															
22V. Methylene Chloride (75-09-2)			X	< 0.005	< 17.0						mg/l	mg/d			
23V. 1,1,2,2-Tetrachloroethane (79-34-5)			X	< 0.005	< 17.0						mg/l	mg/d			
24V. Tetrachloroethylene (127-18-4)			X	< 0.005	< 17.0						mg/l	mg/d			
25V. Toluene (108-88-3)			X	< 0.005	< 17.0						mg/l	mg/d			
26V. 1,2-Trans-Dichloroethylene (156-60-5)			X	< 0.005	< 17.0						mg/l	mg/d			
27V. 1,1,1-Trichloroethane (71-55-6)			X	< 0.005	< 17.0						mg/l	mg/d			
28V. 1,1,2-Trichloroethane (79-00-6)			X	< 0.005	< 17.0						mg/l	mg/d			
29V. Trichloroethylene (79-01-6)			X	< 0.005	< 17.0						mg/l	mg/d			
30V. Trichlorofluoromethane (75-69-4)			X	< 0.005	< 17.0						mg/l	mg/d			
31V. Vinyl Chloride (75-01-4)			X	< 0.010	< 34.1						mg/l	mg/d			
<b>GC/MS FRACTION - ACID COMPOUNDS</b>															
1A. 2-Chlorophenol (98-57-8)			X	< 0.010	< 34.1						mg/l	mg/d			
2A. 2,4-Dichlorophenol (120-83-2)			X	< 0.010	< 34.1						mg/l	mg/d			
3A. 2,4-Dimethylphenol (105-67-9)			X	< 0.010	< 34.1						mg/l	mg/d			
4A. 4,6-Dinitro-O-Cresol (534-52-1)			X	< 0.010	< 34.1						mg/l	mg/d			
5A. 2,4-Dinitrophenol (51-28-5)			X	< 0.010	< 34.1						mg/l	mg/d			
6A. 2-Nitrophenol (88-75-5)			X	< 0.010	< 34.1						mg/l	mg/d			
7A. 4-Nitrophenol (100-02-7)			X	< 0.010	< 34.1						mg/l	mg/d			
8A. P-Chloro-M-Cresol (59-50-7)			X	< 0.010	< 34.1						mg/l	mg/d			
9A. Pentachlorophenol (87-86-5)			X	< 0.010	< 34.1						mg/l	mg/d			
10A. Phenol (108-95-2)			X	< 0.010	< 34.1						mg/l	mg/d			
11A. 2,4,6-Trichlorophenol (88-06-2)			X	< 0.010	< 34.1						mg/l	mg/d			

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	3. MAXIMUM DAILY VALUE		d. MAXIMUM 30 DAY VALUE (if available)		e. LONG TERM AVRG. VALUE (if available)		d. NO. OF ANALYSES	a. CONCENTRATION	b. MASS	6. LONG TERM AVERAGE VALUE		b. NO. OF ANALYSES
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
<b>GC/MS FRACTION - BASE/NEUTRAL COMPOUNDS</b>															
1B. Acenaphthene (83-32-9)			X	< 0.010	< 34.1						mg/l	mg/d			
2B. Acenaphthylene (208-95-8)			X	< 0.010	< 34.1						mg/l	mg/d			
3B. Anthracene (120-12-7)			X	< 0.010	< 34.1						mg/l	mg/d			
4B. Benzidine (92-87-5)			X	< 0.010	< 34.1						mg/l	mg/d			
5B. Benzo (a) Anthracene (56-55-3)			X	< 0.010	< 34.1						mg/l	mg/d			
6B. Benzo (a) Pyrene (50-32-8)			X	< 0.010	< 34.1						mg/l	mg/d			
7B. 3,4-Benzo-fluoranthene (205-99-2)			X	< 0.010	< 34.1						mg/l	mg/d			
8B. Benzo (ghi) Perylene (191-24-2)			X	< 0.010	< 34.1						mg/l	mg/d			
9B. Benzo (k) Fluoranthene (207-08-9)			X	< 0.010	< 34.1						mg/l	mg/d			
10B. Bis (2-Chloroethoxy) Methane (111-91-1)			X	< 0.010	< 34.1						mg/l	mg/d			
11B. Bis (2-Chloroethyl) Ether (111-44-4)			X	< 0.010	< 34.1						mg/l	mg/d			
12B. Bis (2-Chloroisopropyl) Ether (102-60-1)			X	< 0.010	< 34.1						mg/l	mg/d			
13B. Bis (2-Ethylhexyl) Phthalate (117-81-7)			X	< 0.010	< 34.1						mg/l	mg/d			
14B. 4-Bromophenyl Phenyl Ether (101-55-3)			X	< 0.010	< 34.1						mg/l	mg/d			
15B. Butyl Benzyl Phthalate (85-68-7)			X	< 0.010	< 34.1						mg/l	mg/d			
16B. 2-Chloronaphthalene (91-58-7)			X	< 0.010	< 34.1						mg/l	mg/d			
17B. 4-Chlorophenyl Phenyl Ether (7005-72-3)			X	< 0.010	< 34.1						mg/l	mg/d			
18B. Chrysene (218-01-9)			X	< 0.010	< 34.1						mg/l	mg/d			
19B. Dibenzo (a,h) Anthracene (53-70-3)			X	< 0.010	< 34.1						mg/l	mg/d			
20B. 1,2-Dichlorobenzene (95-50-1)			X	< 0.010	< 34.1						mg/l	mg/d			
21B. 1,3-Dichlorobenzene (541-73-1)			X	< 0.010	< 34.1						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)			
	A. TESTING REQUIRED	B. BELIEVED PRESENT	C. 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	b. MASS	3. LONG TERM AVERAGE VALUE		D. NO. OF ANALYSES
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
<b>GC/MS FRACTION - BASE/NEUTRAL COMPOUNDS (continued)</b>															
22B. 1,4-Dichlorobenzene (106-46-7)			X	< 0.010	< 34.1						mg/l	mg/d			
23B. 3,3'-Dichlorobenzidine (91-94-1)			X	< 0.010	< 34.1						mg/l	mg/d			
24B. Diethyl Phthalate (84-66-2)			X	< 0.010	< 34.1						mg/l	mg/d			
25B. Dimethyl Phthalate (131-11-3)			X	< 0.010	< 34.1						mg/l	mg/d			
26B. DI-N-Butyl Phthalate (84-74-2)			X	< 0.010	< 34.1						mg/l	mg/d			
27B. 2,4-Dinitrotoluene (121-14-2)			X	< 0.010	< 34.1						mg/l	mg/d			
28B. 2,6-Dinitrotoluene (606-20-2)			X	< 0.010	< 34.1						mg/l	mg/d			
29B. DI-N-Octyl Phthalate (117-84-0)			X	< 0.010	< 34.1						mg/l	mg/d			
30B. 1,2-Diphenylhydrazine (as Azobenzene) (122-66-7)			X	< 0.010	< 34.1						mg/l	mg/d			
31B. Fluoranthene (206-44-0)			X	< 0.010	< 34.1						mg/l	mg/d			
32B. Fluorene (86-73-7)			X	< 0.010	< 34.1						mg/l	mg/d			
33B. Hexachlorobenzene (118-74-1)			X	< 0.010	< 34.1						mg/l	mg/d			
34B. Hexachlorobutadiene (87-68-3)			X	< 0.010	< 34.1						mg/l	mg/d			
35B. Hexachlorocyclopentadiene (77-47-4)			X	< 0.010	< 34.1						mg/l	mg/d			
36B. Hexachloroethane (67-72-1)			X	< 0.010	< 34.1						mg/l	mg/d			
37B. Indeno (1,2,3-cd) Pyrene (193-39-5)			X	< 0.010	< 34.1						mg/l	mg/d			
38B. Isophorone (78-59-1)			X	< 0.010	< 34.1						mg/l	mg/d			
39B. Naphthalene (91-20-3)			X	< 0.010	< 34.1						mg/l	mg/d			
40B. Nitrobenzene (98-95-3)			X	< 0.010	< 34.1						mg/l	mg/d			
41B. N-Nitrosodimethylamine (62-75-9)			X	< 0.010	< 34.1						mg/l	mg/d			
42B. N-Nitrosodi-N-Propylamine (621-64-7)			X	< 0.010	< 34.1						mg/l	mg/d			

CONTINUED FROM THE FRONT

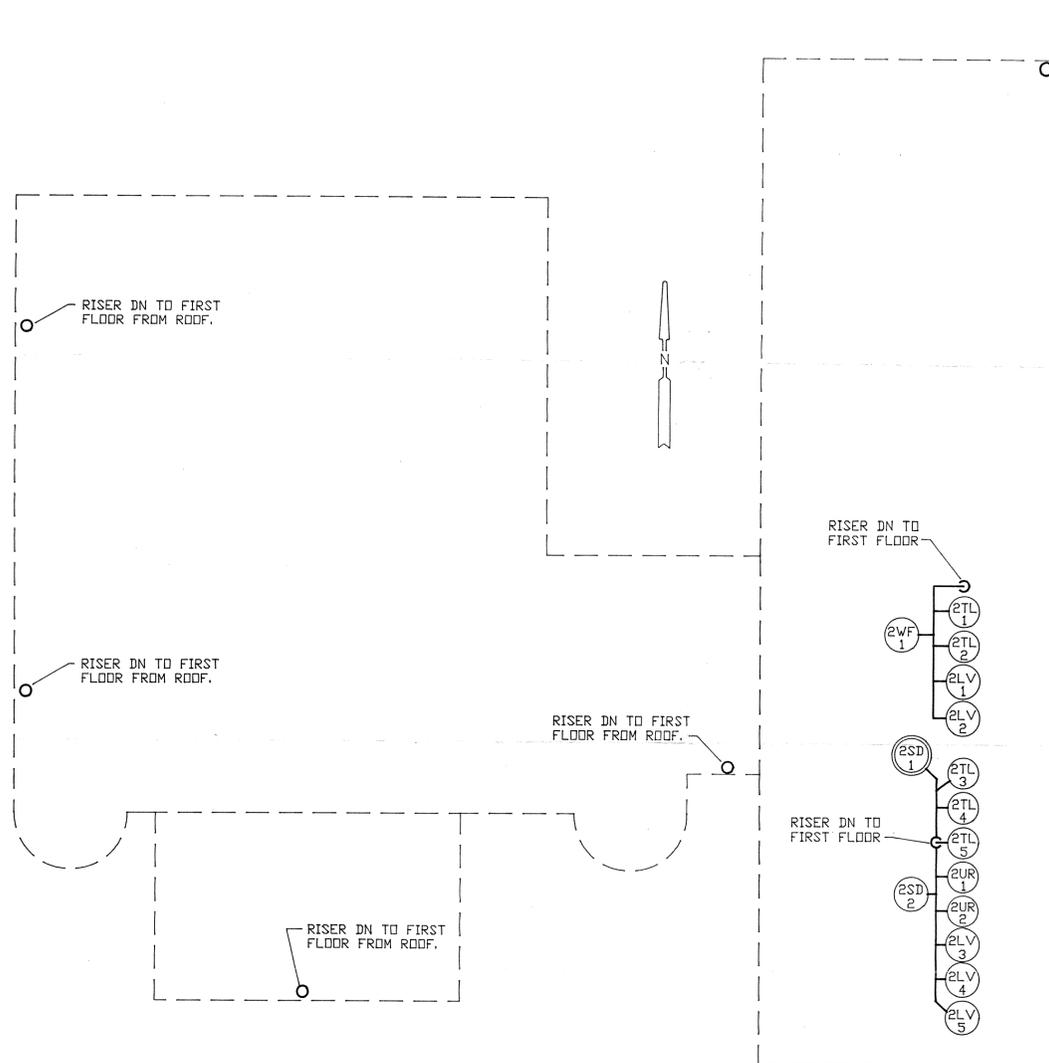
1. POLLUTANT AND CAS NUMBER (if available)	2. MARK 'X'			3. EFFLUENT						4. UNITS		5. INTAKE (optional)			
	A. TESTING REQUIRED	B. BELIEVED PRESENT	C. BELIEVED ABSENT	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVG. VALUE (if available)		d. NO. OF ANALYSES	a. CONCENTRATION	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	
<b>GC/MS FRACTION - BASE/NEUTRAL COMPOUNDS (continued)</b>															
43B. N-Nitrosodiphenylamine (86-30-6)			X	< 0.010	< 0.5						mg/l	mg/d			
44B. Phenanthrene (85-01-8)			X	< 0.010	< 0.5						mg/l	mg/d			
45B. Pyrene (129-00-0)			X	< 0.010	< 0.5						mg/l	mg/d			
46B. 1,2,4-Trichlorobenzene (120-82-1)			X	< 0.010	< 0.5						mg/l	mg/d			
<b>GC/MS FRACTION - PESTICIDES</b>															
1P. Aldrin (309-00-2)			X	< 0.06	< 2.9						ug/l	ug/d			
2P. α-BHC (319-84-6)			X	< 0.04	< 1.9						ug/l	ug/d			
3P. β-BHC (319-85-7)			X	< 0.1	< 4.8						ug/l	ug/d			
4P. γ-BHC (68-89-9)			X	< 0.03	< 1.4						ug/l	ug/d			
5P. δ-BHC (319-86-8)			X	< 0.12	< 5.7						ug/l	ug/d			
6P. Chlordane (57-74-9)			X	< 0.25	< 11.9						ug/l	ug/d			
7P. 4,4'-DDT (50-29-3)			X	< 0.06	< 2.9						ug/l	ug/d			
8P. 4,4'-DDE (72-55-9)			X	< 0.08	< 3.8						ug/l	ug/d			
9P. 4,4'-DDD (72-54-8)			X	< 0.08	< 3.8						ug/l	ug/d			
10P. Dieldrin (60-57-1)			X	< 0.08	< 3.8						ug/l	ug/d			
11P. α-Endosulfan (115-29-7)			X	< 0.05	< 2.4						ug/l	ug/d			
12P. β-Endosulfan (115-29-7)			X	< 0.08	< 3.8						ug/l	ug/d			
13P. Endosulfan Sulfate (1031-07-8)			X	< 0.09	< 4.3						ug/l	ug/d			
14P. Endrin (72-20-8)			X	< 0.06	< 2.9						ug/l	ug/d			
15P. Endrin Aldehyde (7421-93-4)			X	< 0.62	< 29.6						ug/l	ug/d			
16P. Heptachlor (76-44-8)			X	< 0.03	< 1.4						ug/l	ug/d			

CONTINUED FROM PAGE V-8

1. POLLUTANT AND CAS NUMBER (if available)	2. MARK 'X'			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	e. LONG TERM AVERAGE VALUE		b. NO. OF ANALYSES
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
<b>GC/MS FRACTION - PESTICIDES (continued)</b>															
17P. Heptachlor Epoxide (1024-57-3)			X	< 0.08	< 3.8						ug/l	ug/d			
18P. PCB-1242 (53469-21-9)			X	< 0.71	< 33.9						ug/l	ug/d			
19P. PCB-1254 (11097-69-1)			X	< 0.71	< 33.9						ug/l	ug/d			
20P. PCB-1221 (11104-28-2)			X	N.D.											
21P. PCB-1232 (11141-16-5)			X	N.D.											
22P. PCB-1248 (12672-29-6)			X	N.D.											
23P. PCB-1260 (11098-82-5)			X	< 0.71	< 33.9						ug/l	ug/d			
24P. PCB-1016 (12674-11-2)			X	N.D.											
25P. Toxaphene (8001-35-2)			X	< 2.5	< 0.1						ug/l	mg/d			

## DYE STUDY INFORMATION

BUILDING NUMBER	DRAIN NUMBER	DID DYE REACH EXPECTED DESTINATION?	COMMENTS
53-6	1ED1	YES	NONE
53-6	1FD2	YES	NONE
53-6	1LV3	YES	NONE
53-6	1SD1	YES	NONE
53-6	2SD1	YES	NONE
53-6	3SD1	YES	NONE
53-17	1ED1	YES	NONE
53-17	1LV3	YES	NONE
53-17	1SD1	YES	NONE
53-18	2ED4	YES	NONE
53-18	1FD7	YES	NONE
53-18	1SD1	YES	NONE
53-18	1SD2	YES	NONE
53-19	1ED1	YES	NONE
53-19	1SD1	YES	NONE
53-31	1SD2	YES	NONE
53-31	1SD3	YES	NONE
53-31	2SD2	YES	NONE
53-31	2SD4	YES	NONE
53-31	3SD2	YES	NONE
53-31	3SD4	YES	NONE
53-400	1LV1	YES	NONE
53-401	1LV1	YES	NONE
53-402	1LV1	YES	NONE
53-403	1LV1	YES	NONE
53-404	1LV1	YES	NONE
53-405	1LV1	YES	NONE
53-409	1SD2	YES	NONE
53-577	1LV1	YES	NONE
53-888	1LV1	YES	NONE

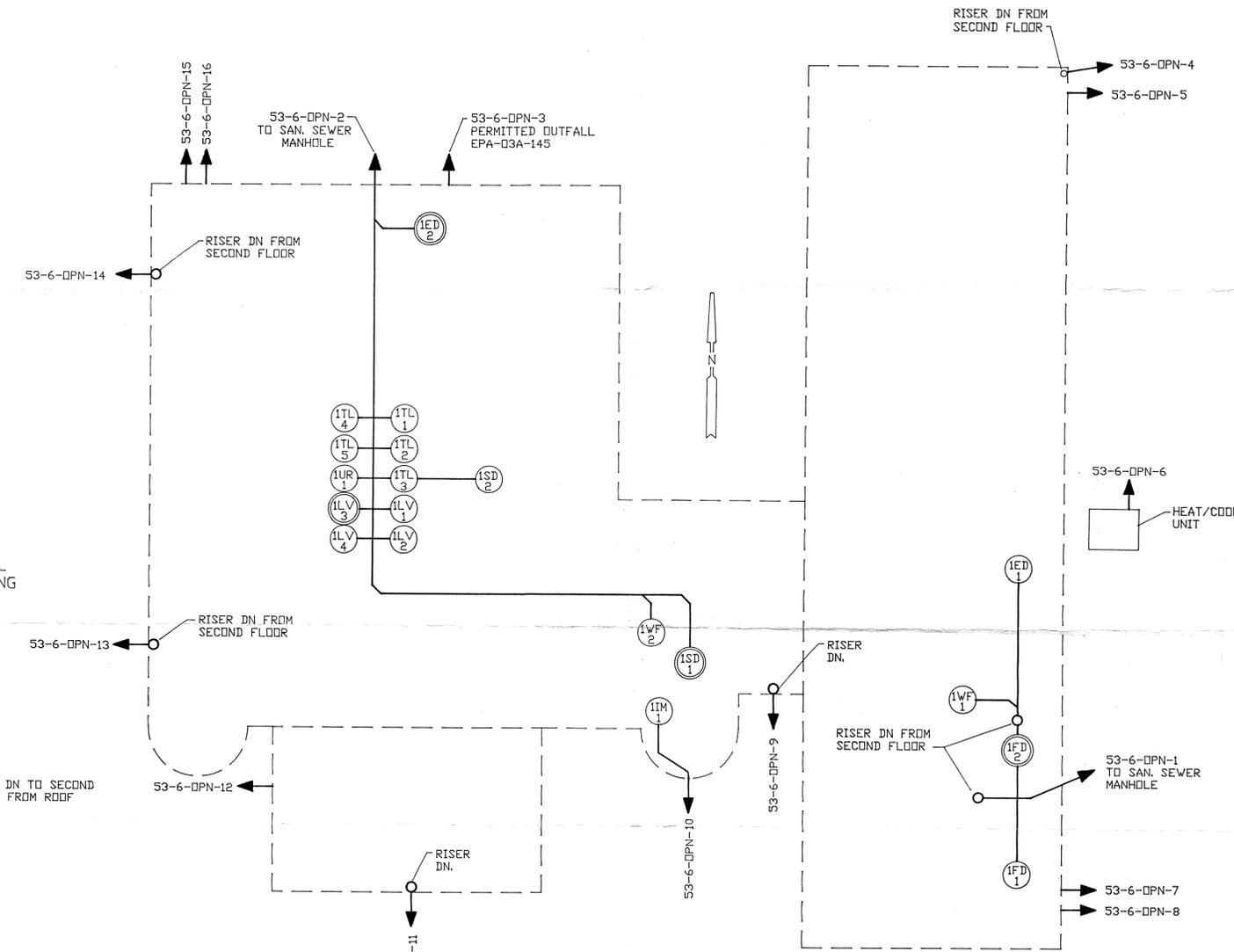


**SECOND FLOOR PLAN**

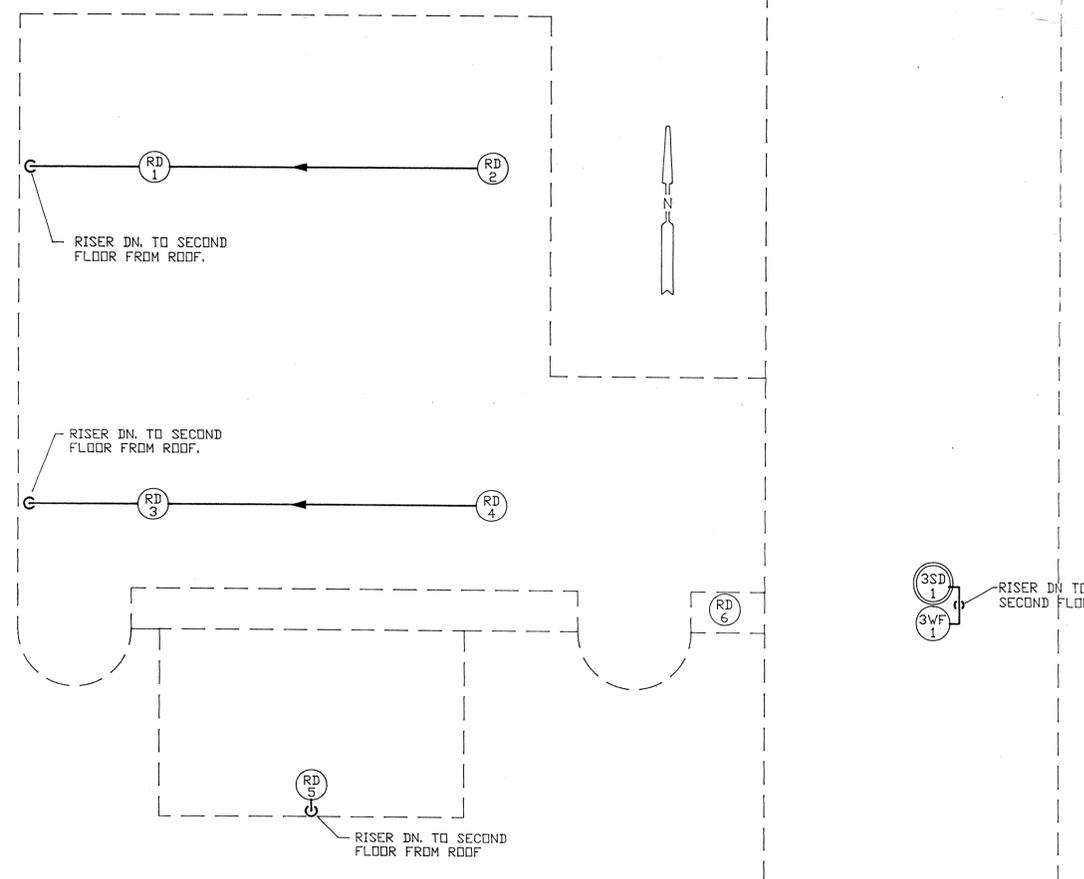
SYMBOL LEGEND	
ED	EQUIPMENT DRAIN
FD	FLOOR DRAIN
IM	ICE MACHINE
LV	LAVATORY
RD	ROOF DRAIN
SD	SINK DRAIN
TL	TOILET
UR	URINAL
WF	WATER FOUNTAIN

○ DRAIN USED FOR DYE TESTING

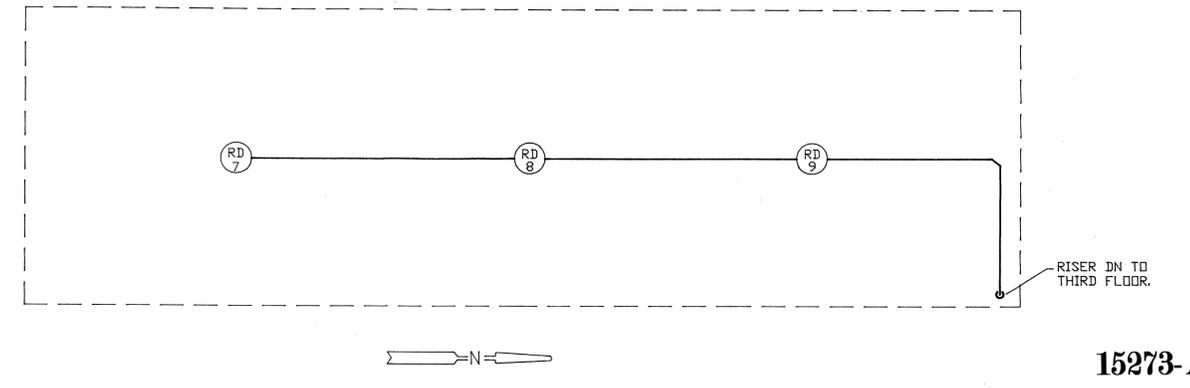
NOTES:  
 1. THIS SCHEMATIC WAS DRAWN UTILIZING THE FOLLOWING L.A.N.L. DRAWINGS: ENG-R5160, C-42988, C-70209, AND SITE VISIT.



**FIRST FLOOR PLAN**



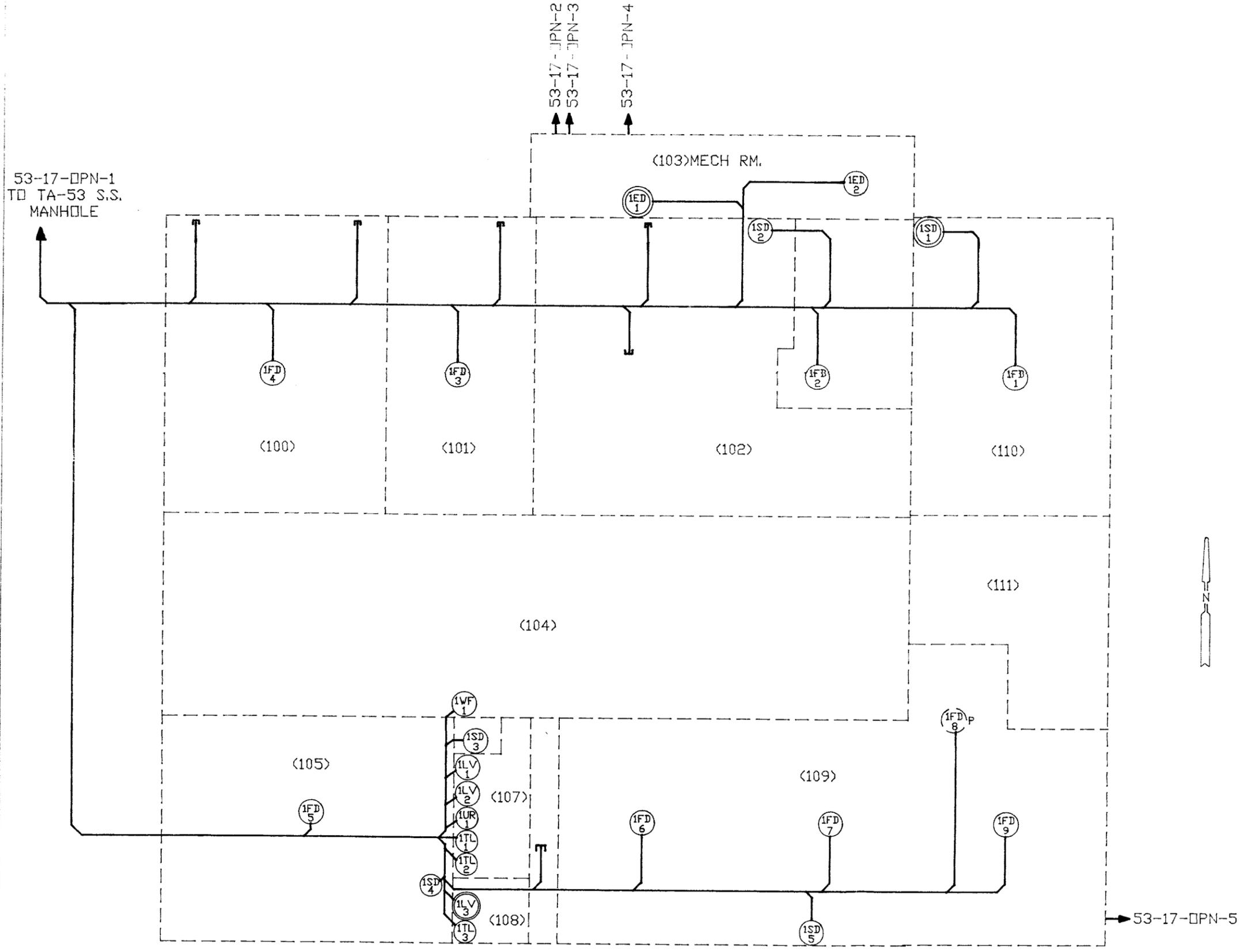
**THIRD FLOOR/PARTIAL ROOF PLAN**



**THIRD FLOOR ROOF PLAN**

15273-A

SANTA FE ENGINEERING, LTD.			
TA 53-6 DRAIN SCHEMATIC		DRAWN M.E.W.	DESIGN M.E.W.
		CHECKED P.E.B.	DATE 3-27-92
SUBMITTED	RECOMMENDED	APPROVED	
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-R	11056-30	FIGURE 1	



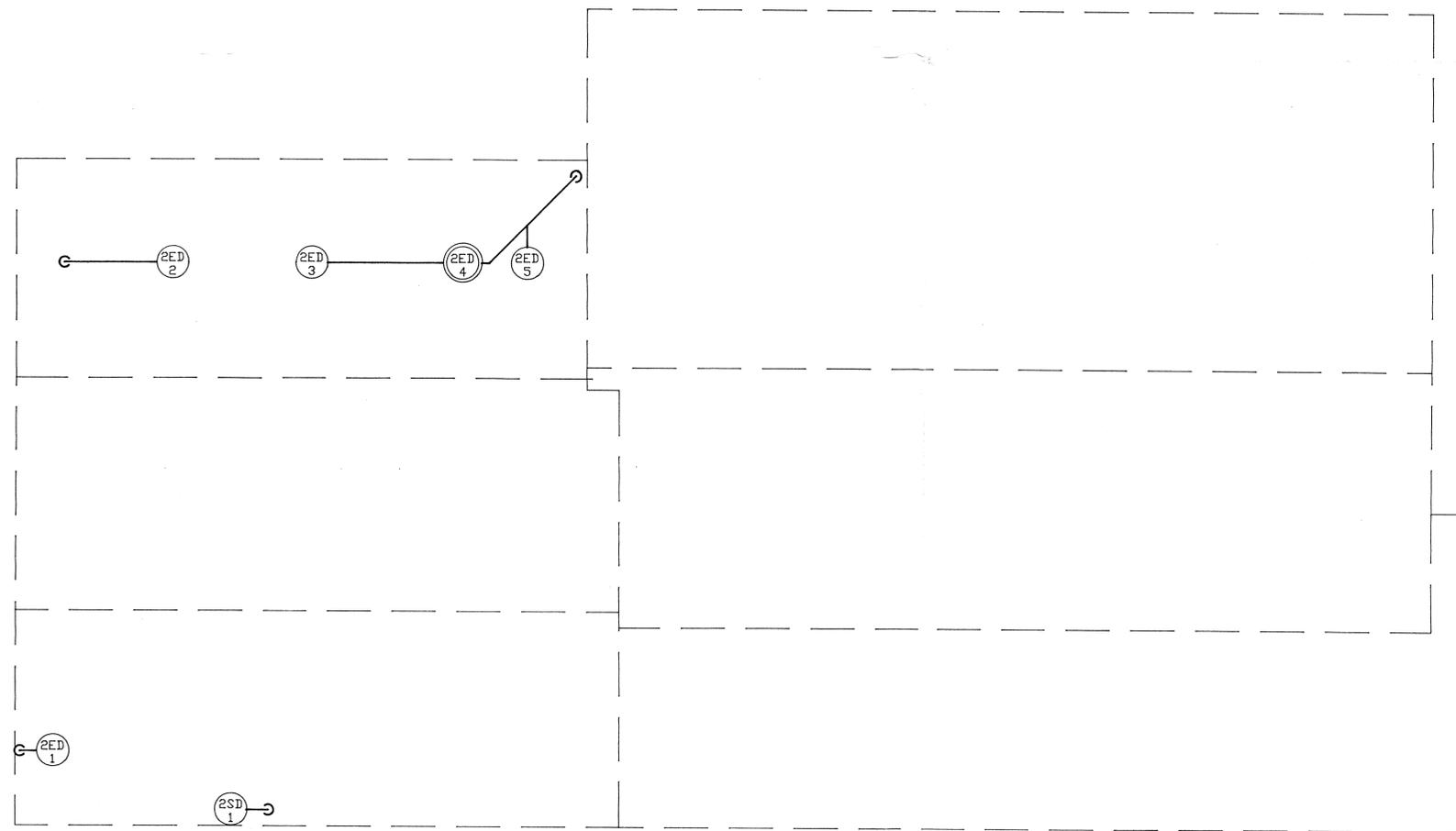
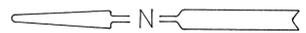
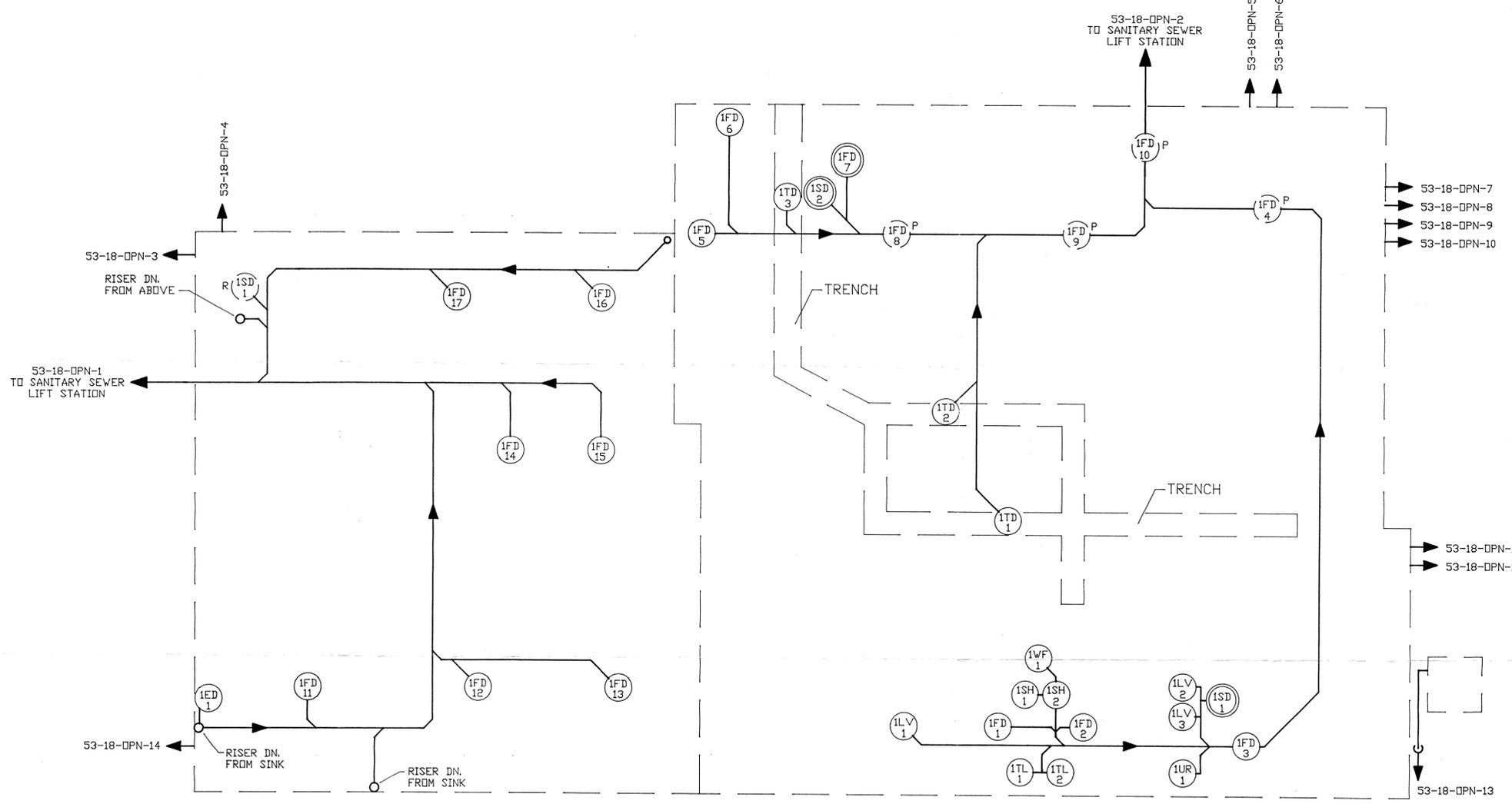
SYMBOL LEGEND	
ED	EQUIPMENT DRAIN
FD	FLOOR DRAIN
LV	LAVATORY
SD	SINK DRAIN
TL	TOILET
UR	URINAL
WF	WATER FOUNTAIN

- DYE TESTED DRAIN
- PLUGGED DRAIN

NOTE:  
 THIS DRAIN SCHEMATIC WAS DRAWN USING THE FOLLOWING LANL DWGS.:  
 C-44124, AND SITE VISIT.



SANTA FE ENGINEERING, LTD.			
<b>TA 53-17</b> <b>DRAIN SCHEMATIC</b>		DRAWN M.E.W. DESIGN M.E.W. CHECKED P.E.B. DATE 3-27-92	
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	11056-30	FIGURE 2	



SYMBOL LEGEND	
ED	EQUIPMENT DRAIN
FD	FLOOR DRAIN
LV	LAVATORY
SD	SINK DRAIN
SH	SHOWER
TD	TRENCH DRAIN
TL	TOILET
UR	URINAL
WF	WATER FOUNTAIN

-  DYE TESTED DRAIN
-  PLUGGED DRAIN
-  DRAIN REMOVED

NOTE:

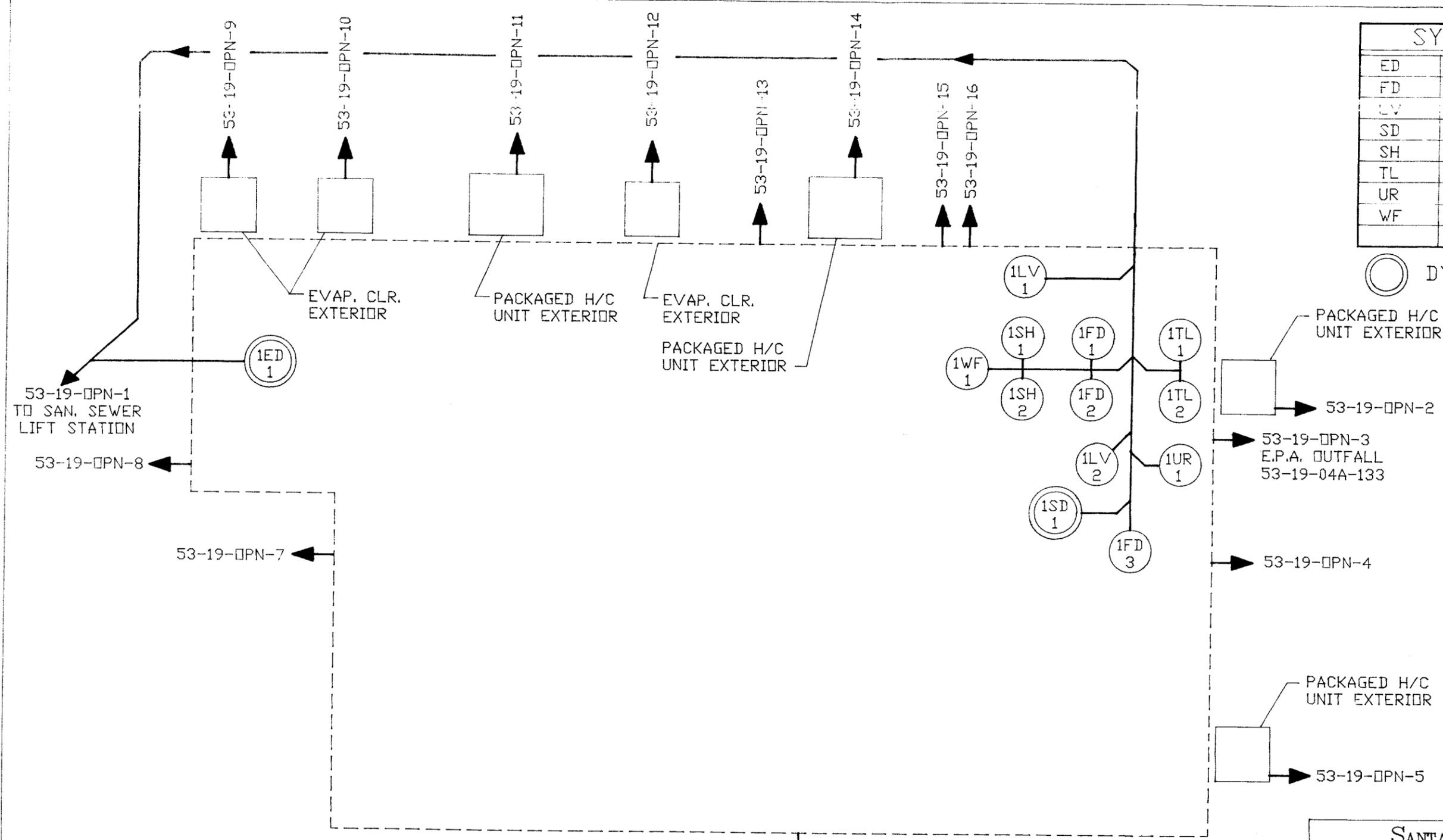
1. THIS SCHEMATIC WAS DRAWN UTILIZING L.A.N.L. DRAWINGS; C-43595, C-45119, C-45070, C-43531, C-45201, AND SITE VISIT.

15273-B

SANTA FE ENGINEERING, LTD.			
TA 53-18 DRAIN SCHEMATIC		DRAWN	M.E.W.
		DESIGN	M.E.W.
		CHECKED	P.E.B.
		DATE	3-27-92
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.
EM-8	11056-30	FIGURE 3	

SYMBOL LEGEND	
ED	EQUIPMENT DRAIN
FD	FLOOR DRAIN
LV	LAVATORY
SD	SINK DRAIN
SH	SHOWER
TL	TOILET
UR	URINAL
WF	WATER FOUNTAIN

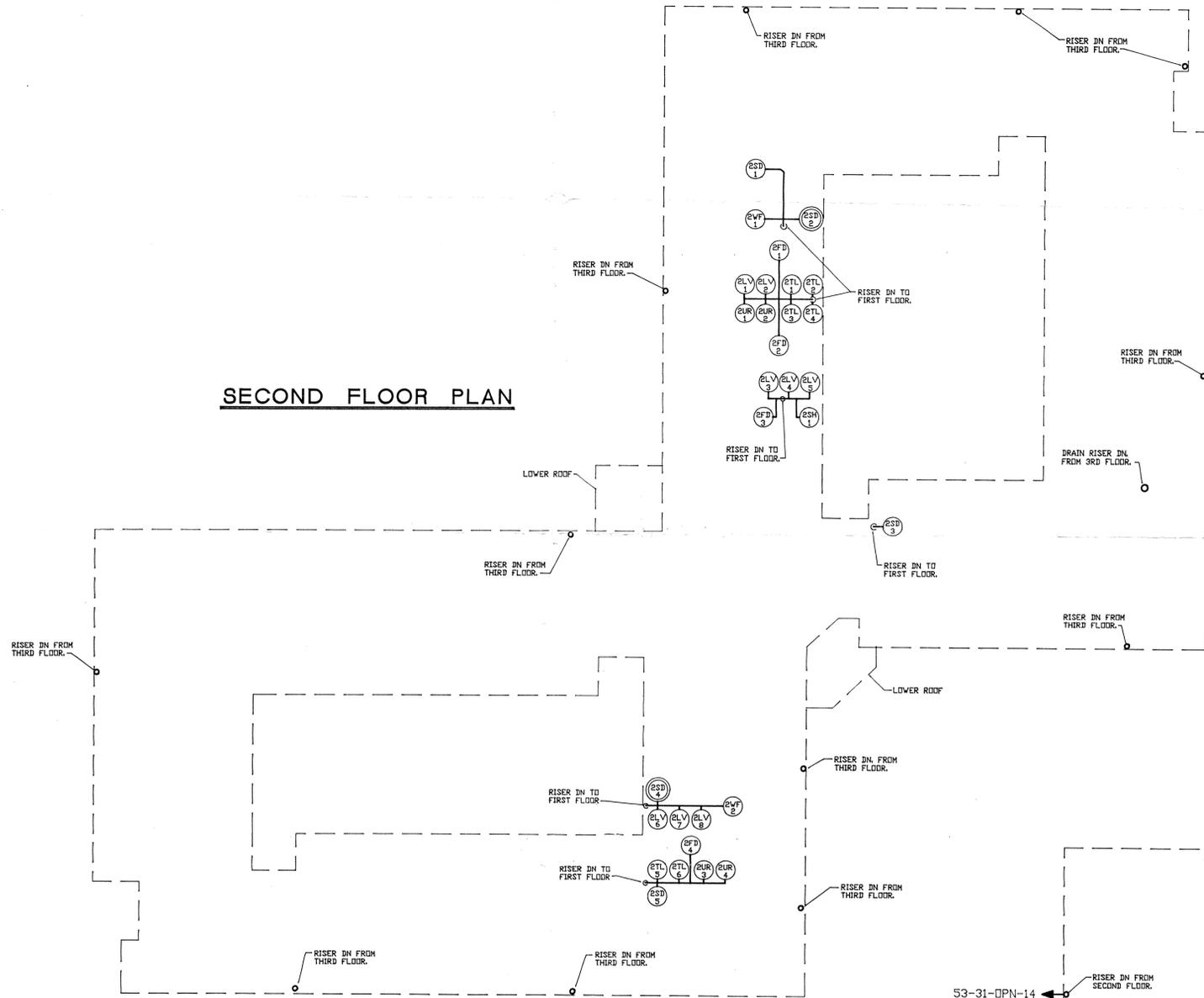
⊙ DYE TESTED DRAIN



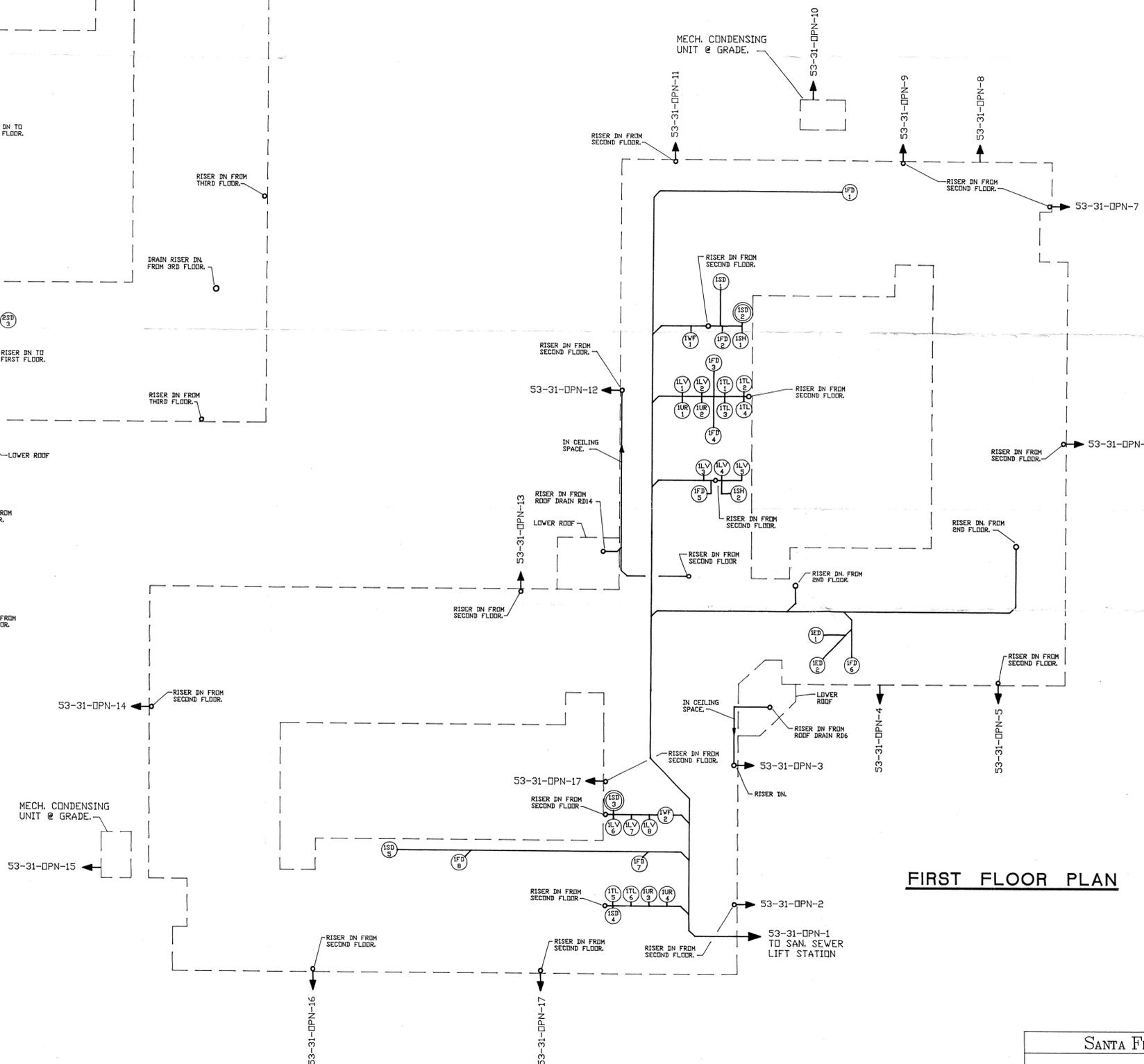
NOTE:  
 1. THIS SCHEMATIC WAS DRAWN USING L.A.N.L. DRAWINGS C-43552, SHEETS 2 & 8 AND SITE VISIT.

SANTA FE ENGINEERING, LTD.			
TA 53-19 DRAIN SCHEMATIC		DRAWN	M.E.W.
		DESIGN	M.E.W.
Los Alamos		CHECKED	P.E.B.
		DATE	3-27-92
SUBMITTED	RECOMMENDED	APPROVED	
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	11056-30	FIGURE 4	
EM-8		REV.	

**SECOND FLOOR PLAN**



**FIRST FLOOR PLAN**



SYMBOL LEGEND	
ED	EQUIPMENT DRAIN
FD	FLOOR DRAIN
LV	LAVATORY
RD	ROOF DRAIN
SD	SINK DRAIN
SH	SHOWER
TL	TOILET
UR	URINAL
WF	WATER FOUNTAIN

○ DYE TESTED DRAIN

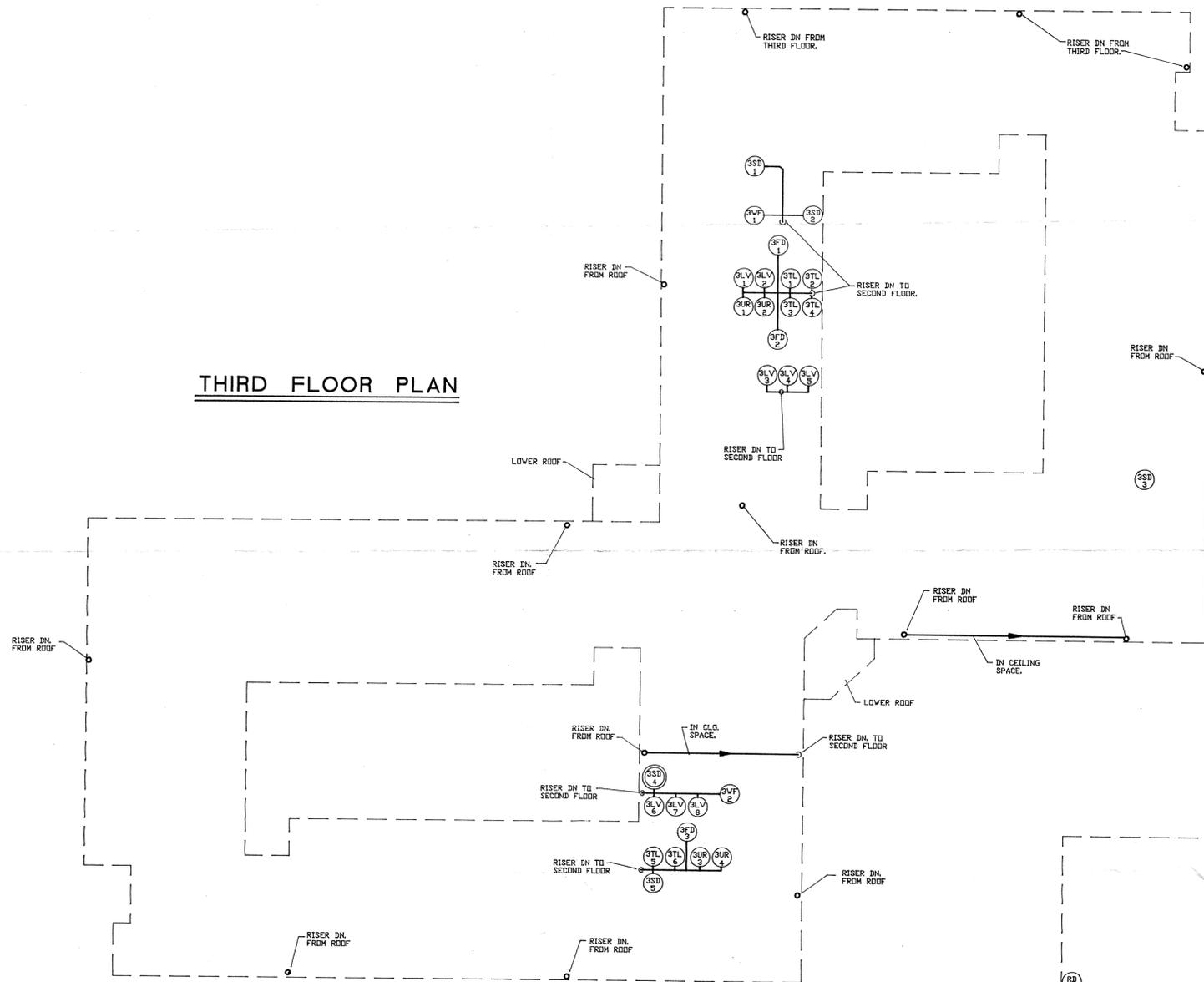
**NOTE:**

1. THIS DRAIN SCHEMATIC WAS DERIVED FROM THE FOLLOWING L.A.N.L. DRAWINGS C-45124, C-45262-66, C-45262-67, C-45262-68, C-45262-69, AND SITE VISIT.

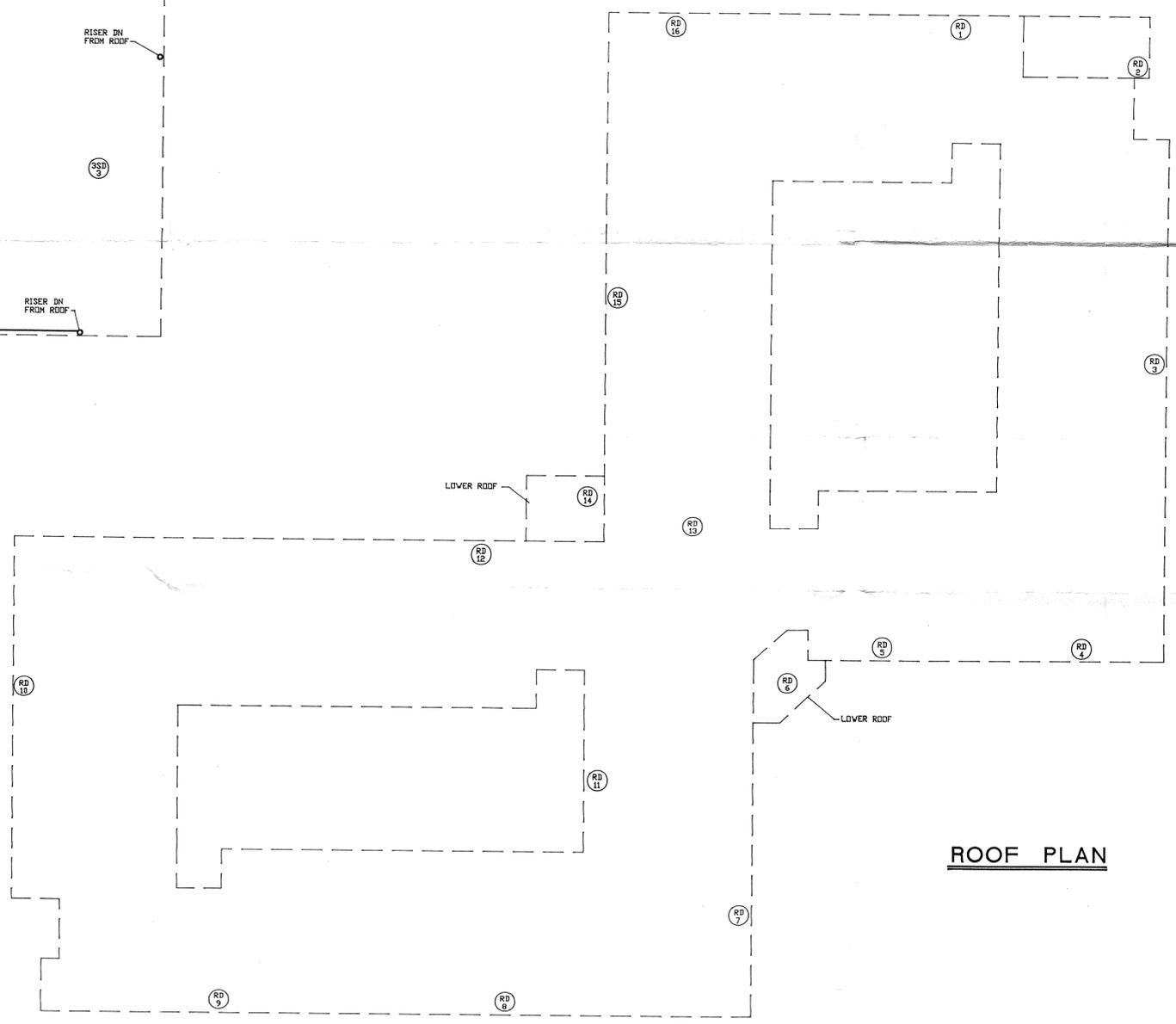
15273-C

SANTA FE ENGINEERING, LTD.			
TA 53-31		DRAWN	M.E.W.
1ST AND 2ND FLOOR		DESIGN	M.E.W.
DRAIN SCHEMATIC		CHECKED	P.E.B.
		DATE	3-27-92
SUBMITTED	RECOMMENDED	APPROVED	
Los Alamos		Los Alamos National Laboratory	SHEET 1
		Los Alamos, New Mexico 87545	OF 2
CLASSIFICATION	REVIEWER	DATE	REV.
REQUESTING DIVISION	LAB JOB NO.	DRAWING NO.	
EM-8	11056-30	FIGURE 5	

THIRD FLOOR PLAN



ROOF PLAN



SYMBOL LEGEND	
FD	FLOOR DRAIN
LV	LAVATORY
RD	ROOF DRAIN
SD	SINK DRAIN
SH	SHOWER
TL	TOILET
UR	URINAL
WF	WATER FOUNTAIN

⊙ DYE TESTED DRAIN

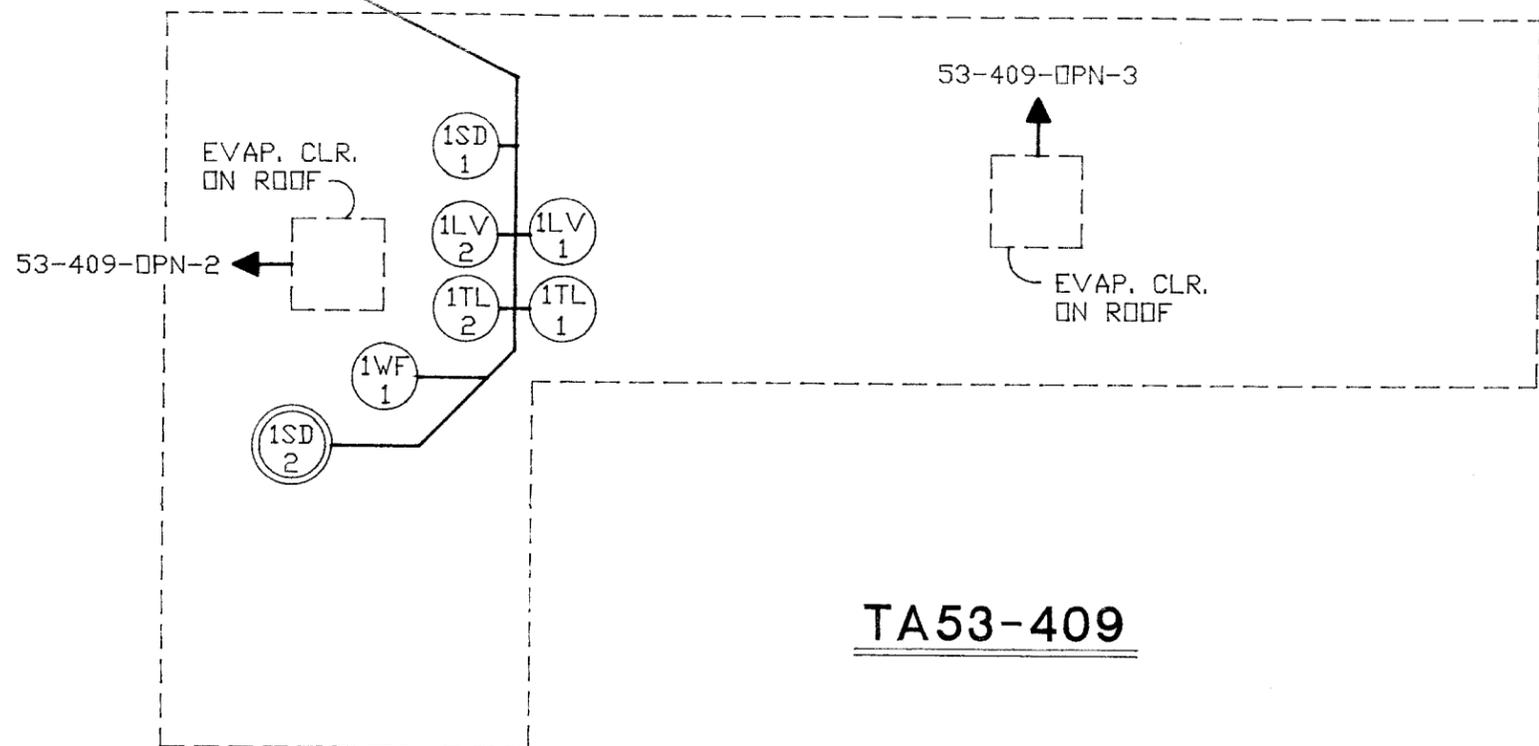
NOTE:

1. THIS DRAIN SCHEMATIC WAS DERIVED FROM THE FOLLOWING L.A.N.L. DRAWINGS C-45124, C-45262-66, C-45262-67, C-45262-68, C-45262-69, AND SITE VISIT.

15273-D

SANTA FE ENGINEERING, LTD.			
TA 53-31 ROOF AND 3RD FLOOR DRAIN SCHEMATIC		DRAWN	M.E.W.
		DESIGN	M.E.W.
		CHECKED	P.E.B.
		DATE	3-27-92
SUBMITTED	RECOMMENDED	APPROVED	
Los Alamos		Los Alamos National Laboratory Los Alamos, New Mexico 87545	
CLASSIFICATION	REVIEWER	DATE	SHEET 2 OF 2
REQUESTING DIVISION	LAB JOB NO.	DRAWING NO.	REV.
EM-8	11056-30	FIGURE 6	

53-409-OPN-1  
TO SAN. SEWER  
LIFT STATION



TA53-409

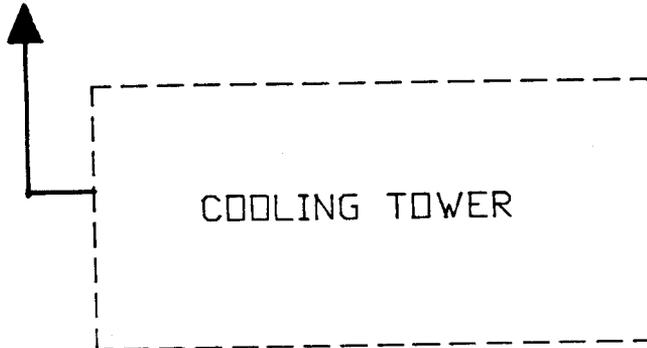
SYMBOL LEGEND	
FD	FLOOR DRAIN
LV	LAVATORY
SD	SINK DRAIN
TL	TOILET

○ DYE TESTED DRAIN

NOTES:  
THIS DRAWING WAS DERIVED FROM  
L.A.N.L. DRAWING NUMBER ENG-R5257  
AND SITE VISIT.

SANTA FE ENGINEERING, LTD.			
<b>TA 53-409 DRAIN SCHEMATIC</b>		DRAWN	M.E.W.
		DESIGN	M.E.W.
		CHECKED	P.E.B.
		DATE	3-27-92
SUBMITTED	RECOMMENDED	APPROVED	
<b>Los Alamos</b> 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	11056-30	FIGURE 15	

53-293-OPN-1  
 TO SANDIA CANYON  
 AS PERMITTED OUTFALL  
 03A113

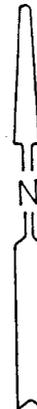
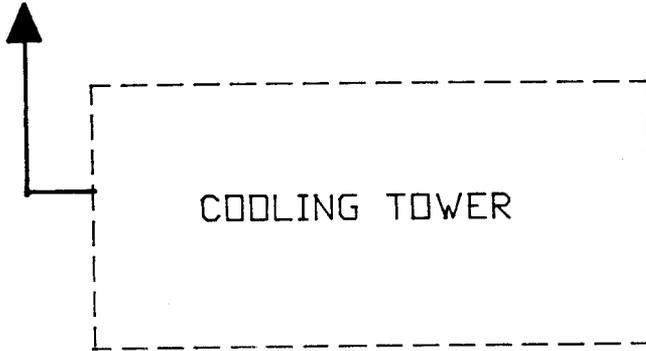


NOTES:

1. THIS DRAWING WAS DERIVED FROM A SITE VISIT.

<b>SANTA FE ENGINEERING, LTD.</b>			
<b>TA 53-293 DRAIN SCHEMATIC</b>	DRAWN	M.E.W.	
	DESIGN	M.E.W.	
	CHECKED	P.E.B.	
	DATE	3-27-92	
SUBMITTED	RECOMMENDED	APPROVED	
<b>Los Alamos</b> 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	11056-30	<b>FIGURE 7</b>	

53-294-OPN-1  
 TO SANDIA CANYON  
 AS PERMITTED OUTFALL  
 03A113



NOTES:

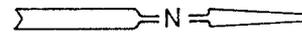
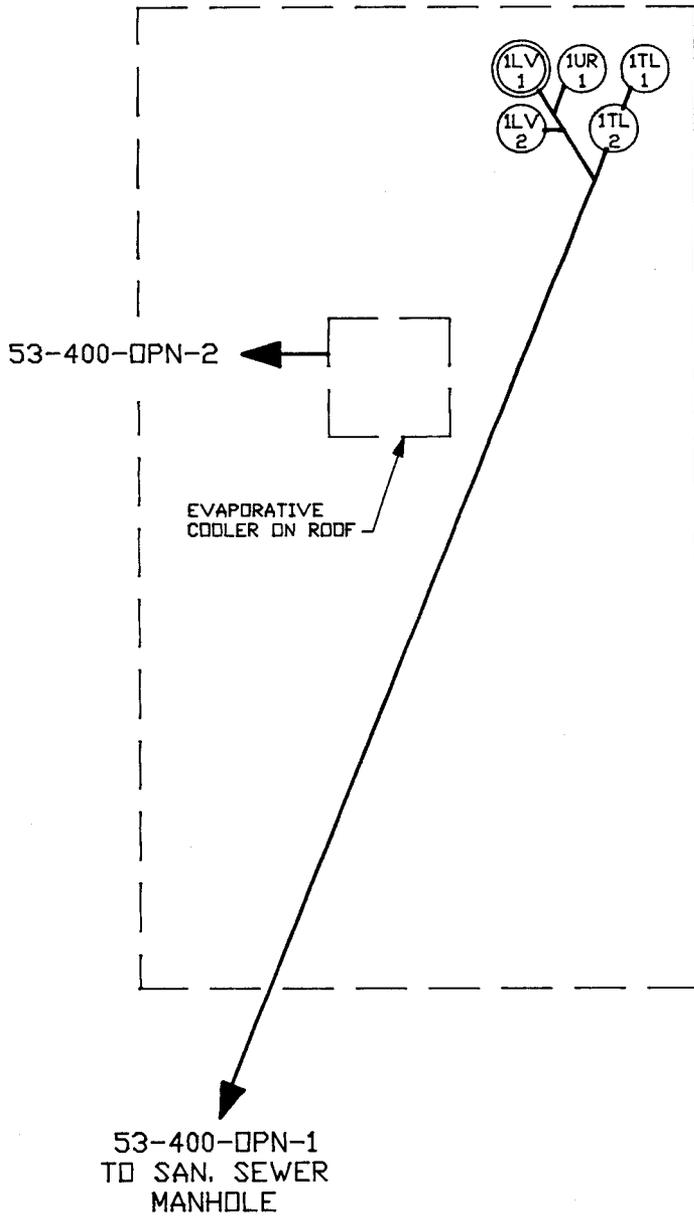
1. THIS DRAWING WAS DERIVED FROM A SITE VISIT.

**SANTA FE ENGINEERING, LTD.**

**TA 53-294  
 DRAIN SCHEMATIC**

DRAWN	M.E.W.
DESIGN	M.E.W.
CHECKED	P.E.B.
DATE	3-27-92

SUBMITTED		RECOMMENDED		APPROVED	
<b>Los Alamos</b> 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	11056-30	FIGURE 8			



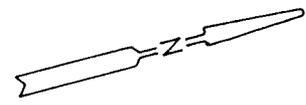
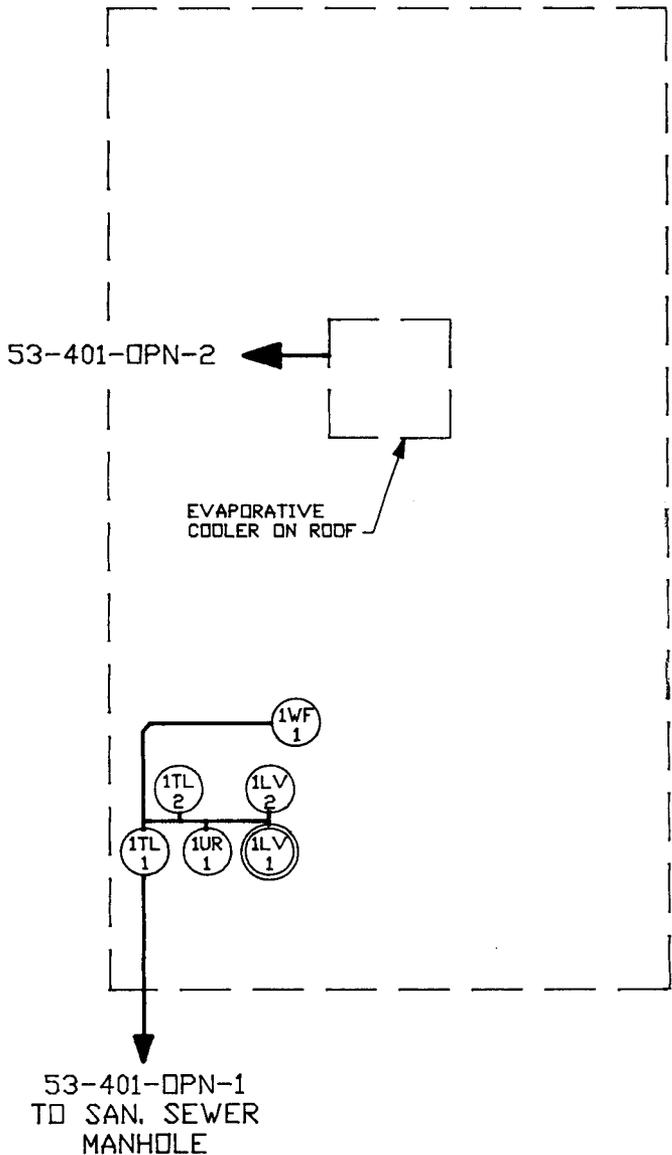
SYMBOL LEGEND	
LV	LAVATORY
TL	TOILET
UR	URINAL

○ DYE TESTED DRAIN

**NOTE:**

1. THIS SCHEMATIC WAS DERIVED FROM SITE VISIT.

<b>SANTA FE ENGINEERING, LTD.</b>			
<b>TA 53-400 DRAIN SCHEMATIC</b>		DRAWN	M.E.W.
		DESIGN	M.E.W.
		CHECKED	P.E.B.
		DATE	3-27-92
SUBMITTED	RECOMMENDED	APPROVED	
<b>Los Alamos</b>		Los Alamos National Laboratory Los Alamos, New Mexico 87545	
CLASSIFICATION		REVIEWER	DATE
REQUESTING DIVISION	LAB JOB NO.	DRAWING NO.	REV.
REQUESTING GROUP	EM-8	11056-30	<b>FIGURE 9</b>

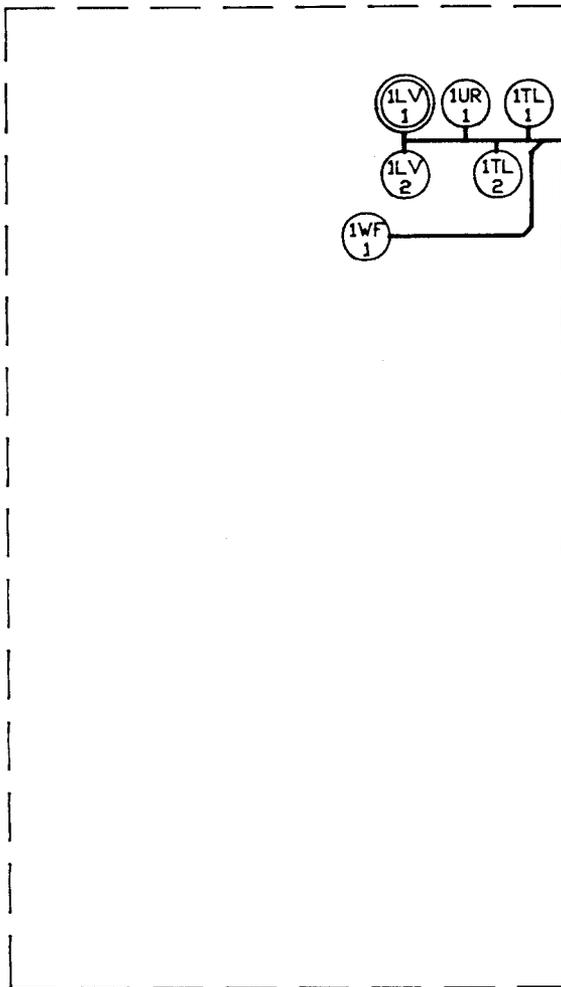


SYMBOL LEGEND	
LV	LAVATORY
TL	TOILET
UR	URINAL
WF	DRINKING FOUNTAIN

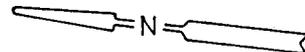
○ DYE TESTED DRAIN

- NOTE:
1. THIS SCHEMATIC WAS DERIVED FROM SITE VISIT.

SANTA FE ENGINEERING, LTD.					
<b>TA 53-401 DRAIN SCHEMATIC</b>			DRAWN	M.E.W.	
			DESIGN	M.E.W.	
			CHECKED	P.E.B.	
			DATE	3-27-92	
SUBMITTED		RECOMMENDED	APPROVED		
<b>Los Alamos</b>		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	11056-30	FIGURE 10			
EM-8					



53-402-OPN-1  
TO SAN. SEWER  
LIFT STATION



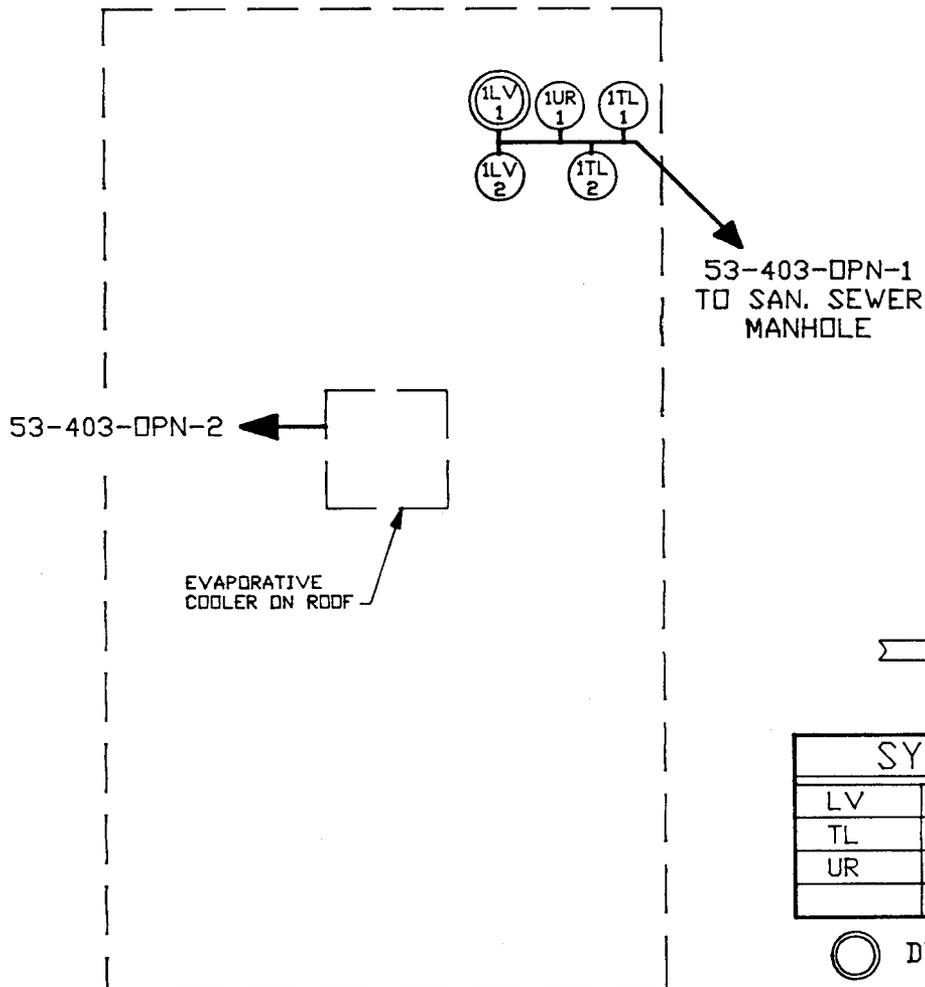
SYMBOL LEGEND	
LV	LAVATORY
TL	TOILET
UR	URINAL
WF	DRINKING FOUNTAIN

○ DYE TESTED DRAIN

**NOTE:**

1. THIS SCHEMATIC WAS DERIVED FROM SITE VISIT.

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<b>TA 53-402 DRAIN SCHEMATIC</b>		DRAWN	M.E.W.
		DESIGN	M.E.W.
		CHECKED	P.E.B.
		DATE	3-27-92
SUBMITTED	RECOMMENDED	APPROVED	
<b>Los Alamos</b>		Los Alamos National Laboratory Los Alamos, New Mexico 87545	
CLASSIFICATION		REVIEWER	DATE
REQUESTING DIVISION	LAB JOB NO.	DRAWING NO.	REV.
REQUESTING GROUP	11056-30	FIGURE 11	
		SHEET 1 OF 1	



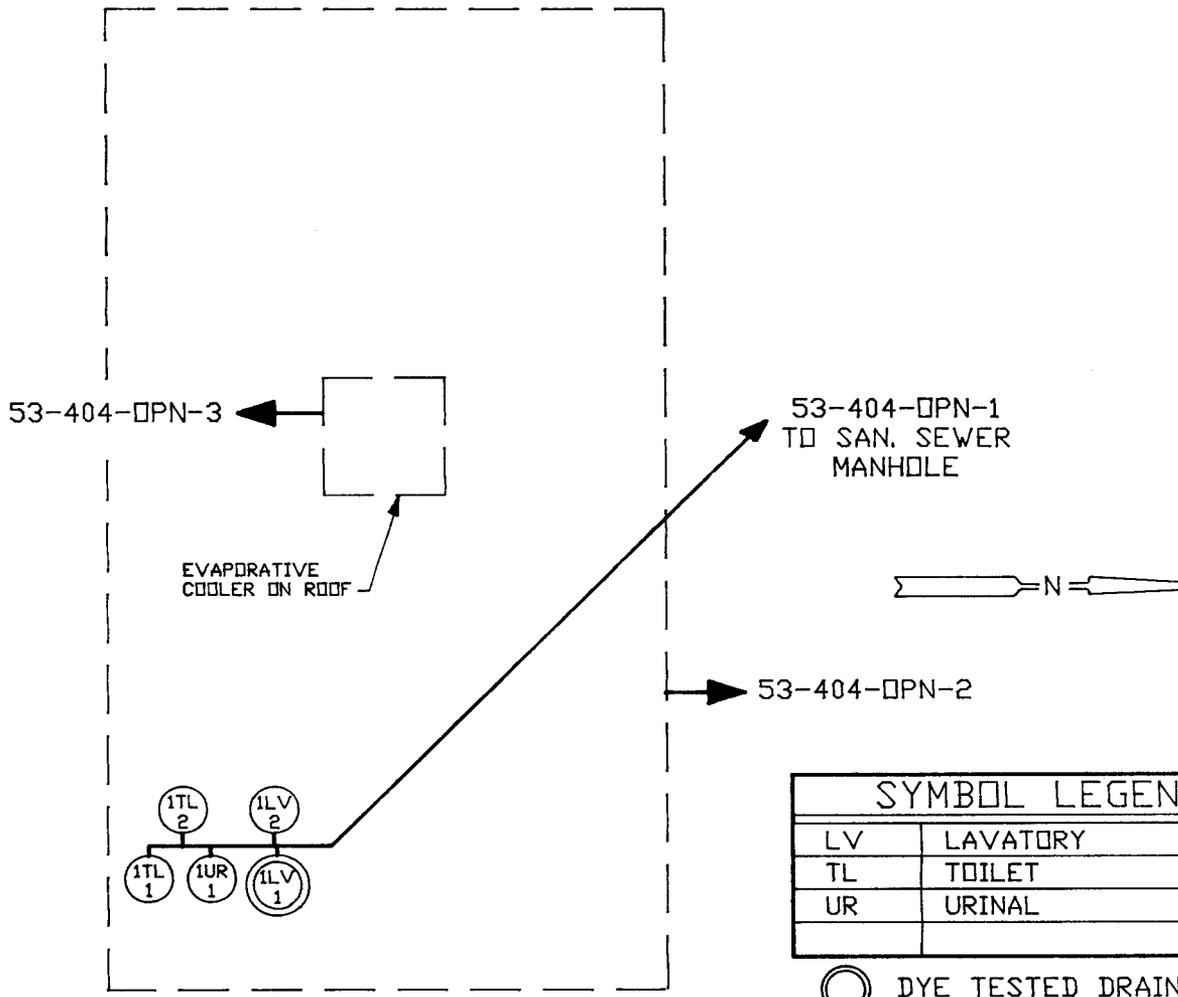
SYMBOL LEGEND	
LV	LAVATORY
TL	TOILET
UR	URINAL

○ DYE TESTED DRAIN

NOTE:

1. THIS SCHEMATIC WAS DERIVED FROM SITE VISIT.

SANTA FE ENGINEERING, LTD.			
<b>TA 53-403 DRAIN SCHEMATIC</b>	DRAWN	M.E.W.	
	DESIGN	M.E.W.	
	CHECKED	P.E.B.	
	DATE	3-27-92	
SUBMITTED	RECOMMENDED	APPROVED	
<b>Los Alamos</b>	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	11056-30	FIGURE 12	

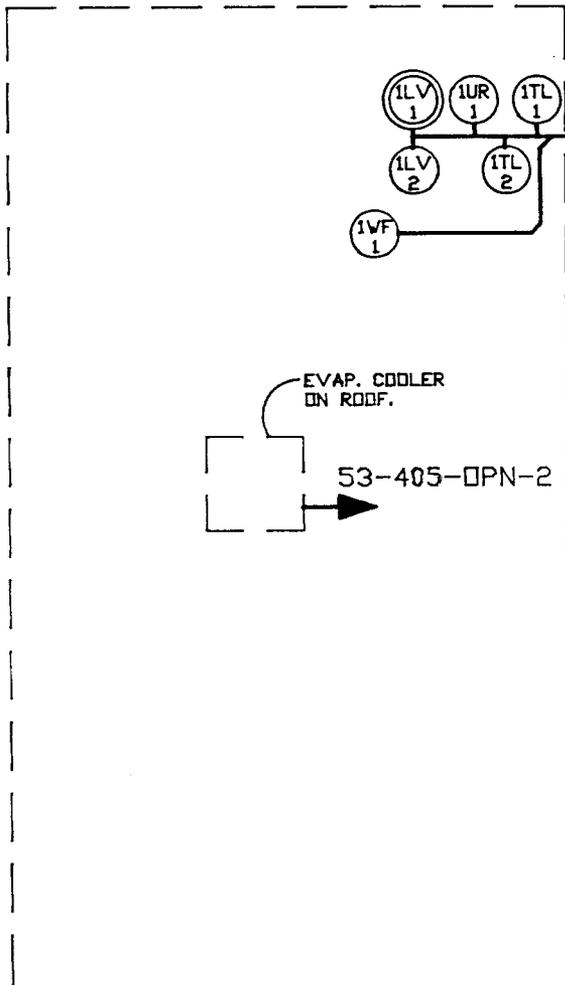


SYMBOL LEGEND	
LV	LAVATORY
TL	TOILET
UR	URINAL

○ DYE TESTED DRAIN

NOTE:  
 1. THIS SCHEMATIC WAS DERIVED FROM SITE VISIT.

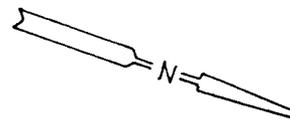
<b>SANTA FE ENGINEERING, LTD.</b>				
<b>TA 53-404 DRAIN SCHEMATIC</b>			DRAWN	M.E.W.
			DESIGN	M.E.W.
			CHECKED	P.E.B.
			DATE	3-27-92
SUBMITTED	RECOMMENDED	APPROVED		
<b>Los Alamos</b>		Los Alamos National Laboratory Los Alamos, New Mexico 87545		
		SHEET	1 OF 1	
CLASSIFICATION	REVIEWER	DATE		
REQUESTING DIVISION	LAB JOB NO.	DRAWING NO.	REV.	
REQUESTING GROUP EM-8	11056-30	<b>FIGURE 13</b>		



53-405-OPN-1  
TO SAN. SEWER  
LIFT STATION

EVAP. COOLER  
ON ROOF.

53-405-OPN-2



SYMBOL LEGEND	
LV	LAVATORY
TL	TOILET
UR	URINAL
WF	DRINKING FOUNTAIN

○ DYE TESTED DRAIN

NOTE:

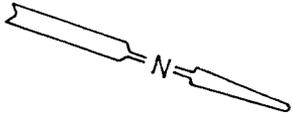
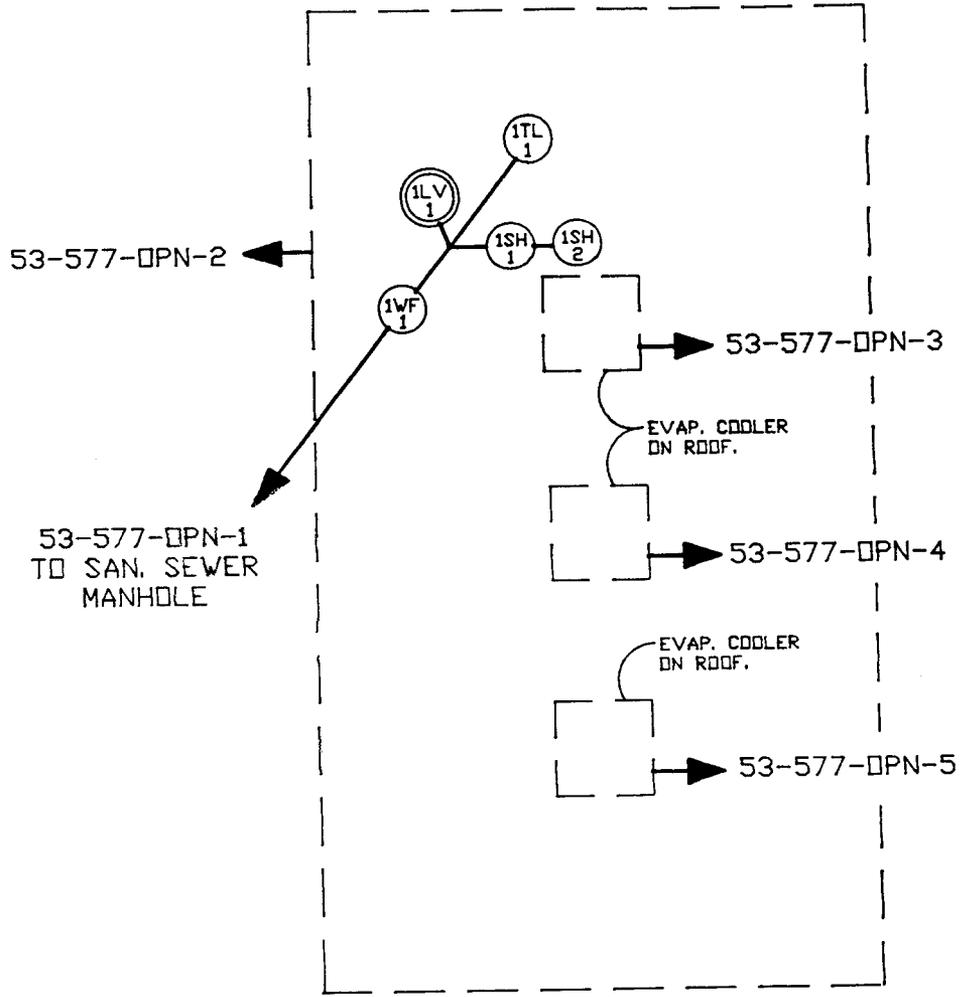
1. THIS SCHEMATIC WAS DERIVED FROM SITE VISIT.

SANTA FE ENGINEERING, LTD.

TA 53-405  
DRAIN SCHEMATIC

DRAWN	M.E.W.
DESIGN	M.E.W.
CHECKED	P.E.B.
DATE	3-27-92

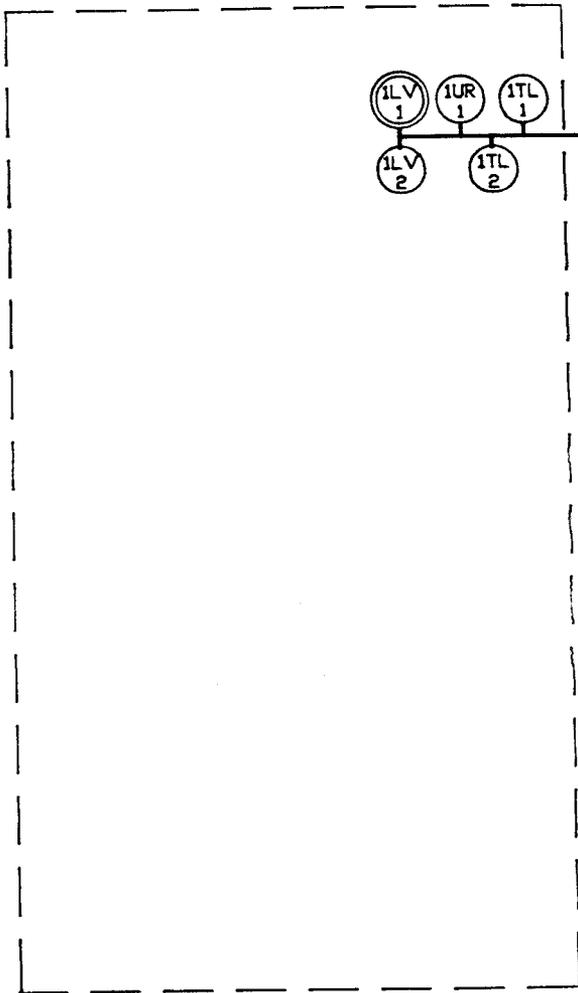
SUBMITTED	RECOMMENDED	APPROVED
<b>Los Alamos</b> Los Alamos National Laboratory Los Alamos, New Mexico 87545		SHEET 1 OF 1
CLASSIFICATION	REVIEWER	DATE
REQUESTING DIVISION	LAB JOB NO.	DRAWING NO.
REQUESTING GROUP EM-8	11056-30	FIGURE 14
		REV.



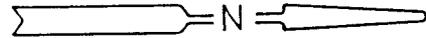
SYMBOL LEGEND	
LV	LAVATORY
TL	TOILET
UR	URINAL
WF	DRINKING FOUNTAIN

NOTE:  
 1. THIS SCHEMATIC WAS DERIVED FROM SITE VISIT.

SANTA FE ENGINEERING, LTD.			
<b>TA 53-577 DRAIN SUMMARY</b>		DRAWN	M.E.W.
		DESIGN	M.E.W.
		CHECKED	P.E.B.
		DATE	3-27-92
SUBMITTED	RECOMMENDED	APPROVED	
<b>Los Alamos</b>		Los Alamos National Laboratory Los Alamos, New Mexico 87545	
CLASSIFICATION	REVIEWER	DATE	SHEET 1 OF 1
REQUESTING DIVISION	LAB JOB NO.	DRAWING NO.	REV.
REQUESTING GROUP	11056-30	FIGURE 16	
EM-8			



53-888-OPN-1  
TO SAN. SEWER  
MANHOLE.



SYMBOL LEGEND	
LV	LAVATORY
TL	TOILET
UR	URINAL

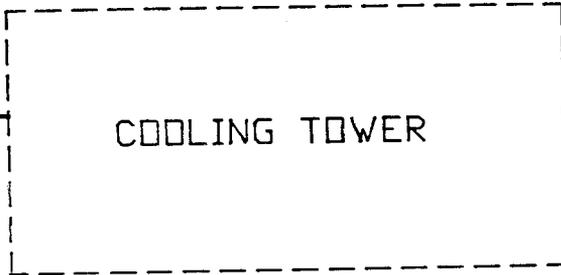
○ DYE TESTED DRAIN

**NOTES:**

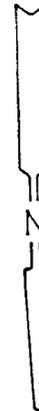
1. THIS DRAWING WAS DERIVED FROM A SITE VISIT.

<b>SANTA FE ENGINEERING, LTD.</b>			
<b>TA 53-888 DRAIN SCHEMATIC</b>		DRAWN	M.E.W.
		DESIGN	M.E.W.
		CHECKED	P.E.B.
		DATE	3-27-92
SUBMITTED	RECOMMENDED	APPROVED	
<b>Los Alamos</b> 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	11056-30	FIGURE 17	
EM-8			REV.

53-1032-DPN-1  
 TO SANDIA CANYON  
 AS PERMITTED OUTFALL  
 03A113



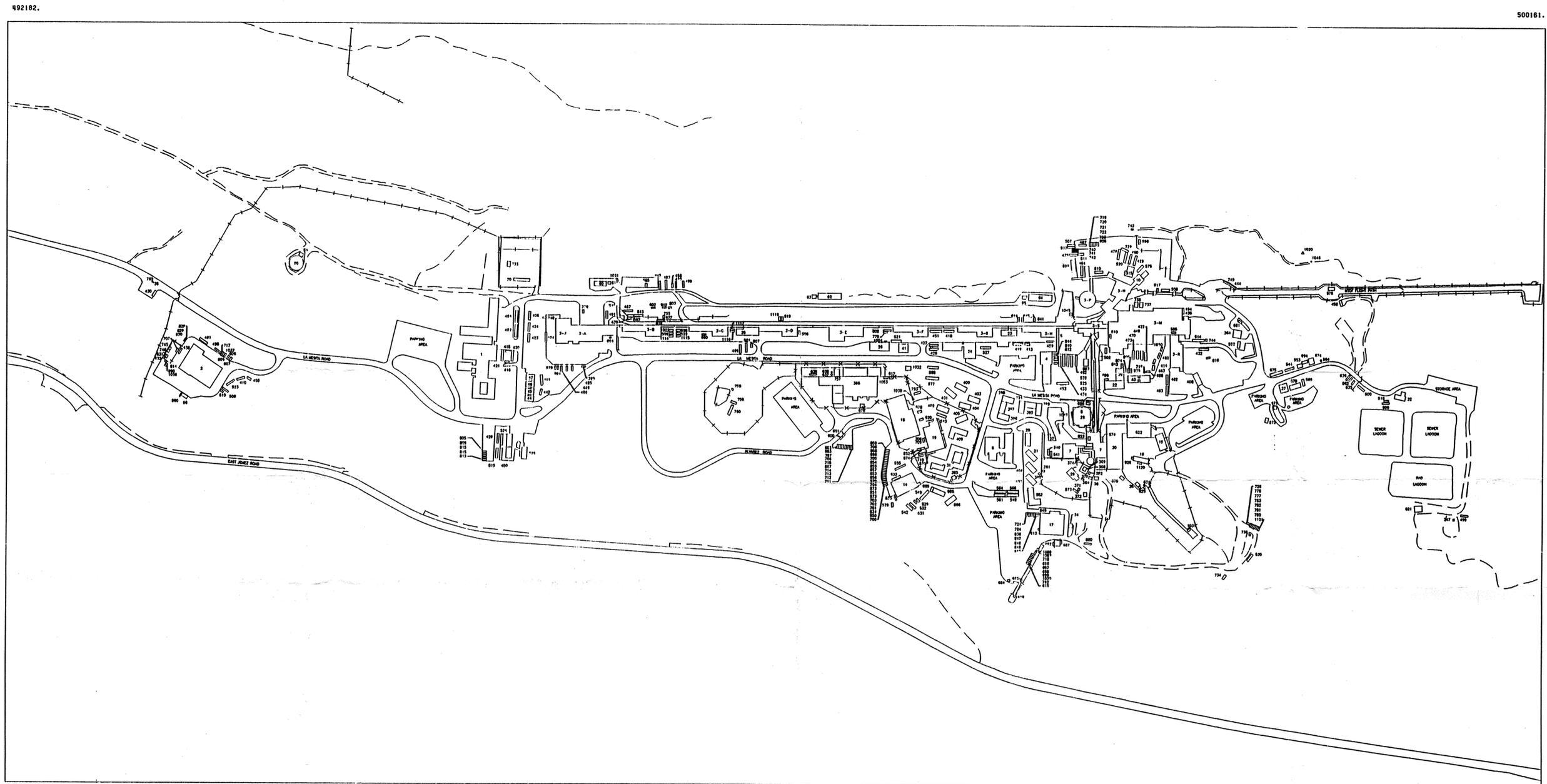
COOLING TOWER



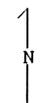
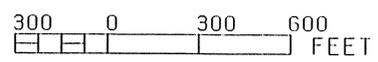
NOTES:

1. THIS DRAWING WAS DERIVED FROM A SITE VISIT.

<b>SANTA FE ENGINEERING, LTD.</b>			
<b>TA 53-1032 DRAIN SCHEMATIC</b>	<small>DRAWN</small>	M.E.W.	
	<small>DESIGN</small>	M.E.W.	
	<small>CHECKED</small>	P.E.B.	
	<small>DATE</small>	3-27-92	
<small>SUBMITTED</small>	<small>RECOMMENDED</small>	<small>APPROVED</small>	
<b>Los Alamos</b>	Los Alamos National Laboratory Los Alamos, New Mexico 87545		<small>SHEET</small> 1 OF 1
<small>CLASSIFICATION</small>	<small>REVIEWER</small>	<small>DATE</small>	
<small>REQUESTING DIVISION</small>	<small>LAB JOB NO.</small>	<small>DRAWING NO.</small>	<small>REV.</small>
<small>REQUESTING GROUP</small> EM-8	11056-30	<b>FIGURE 18</b>	



SCALE 1: 3600.



15273-E

SANTA FE ENGINEERING, LTD.			
<p><b>TA-53</b> <b>SITE PLAN</b></p>		DRAWN	M.E.W.
		DESIGN	M.E.W.
		CHECKED	P.E.B.
		DATE	4-17-91
SUBMITTED	RECOMMENDED	APPROVED	
<p><b>Los Alamos</b> Los Alamos National Laboratory Los Alamos, New Mexico 87545</p>			SHEET 1 OF 1
CLASSIFICATION	REVIEWER	DATE	
REQUESTING DIVISION	LAB JOB NO.	DRAWING NO.	
REQUESTING GROUP	11056-30	FIGURE 19	
EM-8			