

**WASTEWATER STREAM
CHARACTERIZATION FOR
TA-46-16, 17, 20, 25, 37, 58, 77, 86,
87, 105, 191, 254, 264, 265, 266,
267, 268, 269, 270, 296, 320 AND
400**

**at
Los Alamos National Laboratory**

ENVIRONMENTAL STUDY

CHARACTERIZATION REPORT # 65

| | |
|----------------|-------------|
| REVISION NO. | <u>1</u> |
| REVISION DATE: | <u>2/94</u> |
| COPY NO. | <u>12</u> |
| ISSUED TO: | _____ |
| | _____ |

Los Alamos

Los Alamos National Laboratory is operated by the Un

E1
Lc
Lc



**T DIVISION
aboratory
o 87545
Department of Energy**

WASTEWATER STREAM
CHARACTERIZATION FOR
TA-46-16, 17, 20, 25, 37, 58, 77,
86, 87, 105, 191, 254, 264, 265,
266, 267, 268, 269, 270, 296, 320
AND 400

ENVIRONMENTAL STUDY

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

under subcontract 9-XG8-2874P-1

by:
Santa Fe Engineering, Ltd.
1429 Second Street
Santa Fe, New Mexico 87501
(505) 988-7438

December, 1993

UPDATED PER ESH-8 COMMENTS FEBRUARY 1994

EXECUTIVE SUMMARY

Buildings 16, 17, 20, 25, 37, 58, 77, 86, 87, 105, 191, 254, 264, 265, 266, 267, 268, 269, 270, 296, 320 and 400 in TA-46 were visited to document all drain piping and building outflows and to make permitting recommendations. The pipes exiting the building are as follows:

1. from building 46-16: one sanitary sewer to daylight, three air exhaust vents, three emergency shower drains, one air pressure relief vent, four storm water drains, two abandoned pipes, one compressed air tank drain, two water backflow preventer drains and one condensed water drain from HVAC equipment,
2. from building 46-17: one sanitary sewer connection, one water heater pressure relief valve drain, one air compressor exhaust and one water backflow preventer drain,
3. from building 46-25: one sanitary sewer connection to a sewage holding pit, one condensed water drain from HVAC equipment, two compressed air disconnects, two sanitary sewer vents, two nitrogen gas vents, one storm water drain and one water backflow preventer drain,
5. from building 46-37: one sanitary drain to daylight and two air vents,
6. from building 46-58: one sanitary sewer connection, two abandoned pipes and one acid waste drain to seepage pits,
7. from building 46-77: two sanitary drains to daylight, one compressed air pressure relief vent, one oxygen disconnect, one acetylene disconnect, two condensed water drains from HVAC equipment, three fire line drains, one water backflow preventer drain and one abandoned pipe,
8. from building 46-86: one storm water drain,
9. from building 46-87: two abandoned pipes, two storm water drains, one water backflow preventer drain and one fire line drain,
10. from building 46-191: one sanitary sewer connection, one water heater pressure relief valve drain and one water drain from an evaporative cooler,
11. from buildings 46-254, 296, 320 and 400: no water supplies and no drains,

Structures 46-20, 264, 265, 266, 267, 268, 269 and 270 have been salvaged and are no longer at TA-46.

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 of discharge of pollutants exists.

A Waste Stream Database has been prepared listing the waste water and flow rate for each outfall.

TABLE OF CONTENTS

| | | |
|------------|--|-----------|
| 1.0 | INTRODUCTION | 1 |
| 2.0 | FIELD INVESTIGATION | 3 |
| 3.0 | RECOMMENDATIONS FOR BUILDING 46-16 | 4 |
| 3.1 | Outfall 46-16-OPN-1 | 4 |
| 3.2 | Outfalls 46-16-OPN-2 and 46-16-OPN-13 | 4 |
| 3.3 | Outfalls 46-16-OPN-3, 46-16-OPN-12 and 46-16-OPN-17 | 5 |
| 3.4 | Outfall 46-16-OPN-4 | 5 |
| 3.5 | Outfalls 46-16-OPN-5 and 46-16-OPN-8 | 5 |
| 3.6 | Outfalls 46-16-OPN-6 and 46-16-OPN-7 | 5 |
| 3.7 | Outfalls 46-16-OPN-9 and 46-16-OPN-10 | 5 |
| 3.8 | Outfall 46-16-OPN-11 | 6 |
| 3.9 | Outfall 46-16-OPN-14 | 6 |
| 3.10 | Outfall 46-16-OPN-15 | 6 |
| 3.11 | Outfall 46-16-OPN-16 | 6 |
| 3.12 | Outfall 46-16-OPN-18 | 7 |
| 4.0 | RECOMMENDATIONS FOR BUILDING 46-17 | 7 |
| 4.1 | Outfall 46-17-OPN-1 | 7 |
| 4.2 | Outfall 46-17-OPN-2 | 7 |
| 4.3 | Outfall 46-17-OPN-3 | 8 |
| 4.4 | Outfall 46-17-OPN-4 | 8 |
| 5.0 | RECOMMENDATION FOR STRUCTURES 46-20, 264, 265, 266, 267, 268, 269 AND 270 | 8 |
| 6.0 | RECOMMENDATIONS FOR BUILDING 46-25 | 8 |
| 6.1 | Outfall 46-25-OPN-1 | 9 |
| 6.2 | Outfall 46-25-OPN-2 | 9 |
| 6.3 | Outfalls 46-25-OPN-3 and 46-25-OPN-9 | 9 |
| 6.4 | Outfalls 46-25-OPN-4 and 46-25-OPN-7 | 10 |
| 6.5 | Outfalls 46-25-OPN-5 and 46-25-OPN-6 | 10 |
| 6.6 | Outfall 46-25-OPN-8 | 10 |
| 6.7 | Outfall 46-25-OPN-10 | 10 |
| 7.0 | RECOMMENDATIONS FOR BUILDING 46-37 | 10 |
| 7.1 | Outfall 46-37-OPN-1 | 11 |
| 7.2 | Outfalls 46-37-OPN-2 and 46-37-OPN-3 | 11 |
| 8.0 | RECOMMENDATIONS FOR BUILDING 46-58 | 11 |
| 8.1 | Outfalls 46-58-OPN-1 and 46-58-OPN-2 | 12 |
| 8.2 | Outfall 46-58-OPN-3 | 12 |
| 8.3 | Outfall 46-58-OPN-4 | 13 |

| | | |
|-------------|--|-----------|
| 9.0 | RECOMMENDATIONS FOR BUILDING 46-77 | 13 |
| 9.1 | Outfall 46-77-OPN-1 | 13 |
| 9.2 | Outfall 46-77-OPN-2 | 14 |
| 9.3 | Outfall 46-77-OPN-3 | 14 |
| 9.4 | Outfalls 46-77-OPN-4 and 46-77-OPN-8 | 14 |
| 9.5 | Outfalls 46-77-OPN-5, 46-77-OPN-9 and 46-77-OPN-10 | 14 |
| 9.6 | Outfalls 46-77-OPN-6 and 46-77-OPN-7 | 14 |
| 9.7 | Outfall 46-77-OPN-11 | 15 |
| 9.8 | Outfall 46-77-OPN-12 | 15 |
| 10.0 | RECOMMENDATIONS FOR BUILDING 46-86 | 15 |
| 10.1 | Outfall 46-86-OPN-1 | 16 |
| 11.0 | RECOMMENDATIONS FOR BUILDING 46-87 | 16 |
| 11.1 | Outfall 46-87-OPN-1 | 17 |
| 11.2 | Outfall 46-87-OPN-2 | 17 |
| 11.3 | Outfall 46-87-OPN-3 | 17 |
| 11.4 | Outfall 46-87-OPN-4 | 17 |
| 11.5 | Outfall 46-87-OPN-5 | 18 |
| 11.6 | Outfall 46-87-OPN-6 | 18 |
| 12.0 | RECOMMENDATIONS FOR BUILDING 46-105 | 18 |
| 13.0 | RECOMMENDATIONS FOR BUILDING 46-191 | 18 |
| 13.1 | Outfall 46-191-OPN-1 | 19 |
| 13.2 | Outfall 46-191-OPN-2 | 19 |
| 13.3 | Outfall 46-191-OPN-3 | 19 |
| 14.0 | RECOMMENDATIONS FOR BUILDINGS 46-254, 296, 320, AND 400 | 19 |
| 15.0 | CONCLUSION | 20 |

APPENDICES

- APPENDIX 1 - DRAIN SUMMARY TABLES
- APPENDIX 2 - WASTE STREAM CHARACTERIZATION DATABASE
- APPENDIX 3 - EPA FORMS
- APPENDIX 4 - DYE STUDY INFORMATION
- APPENDIX 5 - DRAIN SCHEMATICS

LIST OF FIGURES

- 1. TA-46 SITE PLAN
- 2. TA-46-16 BUILDING DRAIN SCHEMATIC
- 3. TA-46-17 BUILDING DRAIN SCHEMATIC
- 4. TA-46-25 BUILDING DRAIN SCHEMATIC
- 5. TA-46-37 BUILDING DRAIN SCHEMATIC
- 6. TA-46-58 BUILDING DRAIN SCHEMATIC
- 7. TA-46-77 BUILDING DRAIN SCHEMATIC
- 8. TA-46-86 BUILDING DRAIN SCHEMATIC
- 9. TA-46-87 BUILDING DRAIN SCHEMATIC
- 10. TA-46-191 BUILDING DRAIN SCHEMATIC

LIST OF TABLES

- 1. TA-46-16 DRAIN SUMMARY
- 2. TA-46-17 DRAIN SUMMARY
- 3. TA-46-25 DRAIN SUMMARY
- 4. TA-46-37 DRAIN SUMMARY
- 5. TA-46-58 DRAIN SUMMARY
- 6. TA-46-77 DRAIN SUMMARY
- 7. TA-46-86 DRAIN SUMMARY
- 8. TA-46-87 DRAIN SUMMARY
- 9. TA-46-191 DRAIN SUMMARY
- 10. NON-DRAIN RECOMMENDATIONS
- 11. ABBREVIATIONS

1.0 INTRODUCTION

During March and April, 1993, Mark Wendt of Santa Fe Engineering (SFE) toured buildings 16, 17, 20, 25, 37, 58, 77, 86, 87, 105, 191, 254, 264, 265, 266, 267, 268, 269, 270, 296, 320 and 400 at TA-46. 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 operations. The Waste Stream Characterization Policy of September 10, 1992 was followed for this study. The following tasks were performed for this purpose:

1. Building drains and all piping exiting the building were identified and laid out in schematic form;
2. Wastewater sources were identified at each drain and the wastewater was characterized according to the flow rate and quality. The location of outfalls and their potential sources of discharges 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 10) 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 Los Alamos National Laboratory (LANL) in September, 1990, the latest Federal Facilities Compliance Agreement (FFCA) between the Department of Energy (DOE) and the Environmental Protection Agency (EPA) and the Administrative Order (AO) Docket Number VI-92-1306 issued by EPA to the University of California were used for reference;
2. 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 waste stream 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 11). 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 9, with non-drain recommendations listed in Table 10 and abbreviations listed in Table 11. 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 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 2 through 10. A Site Plan is included in Appendix 5 as Figure 1 illustrating the locations of buildings included in this report.

3.0 RECOMMENDATIONS FOR BUILDING 46-16

Table 1 is a list of the drains to the building outfalls and Figure 2 is a schematic of the piping. The table lists the drains that connect to the outfall pipe and includes recommendations for changes to the drain piping. The discussion below gives the reasoning for the recommendations. This building is listed as Test Building No. 1 and is occupied by MEE-13 division.

3.1 Outfall 46-16-OPN-1

This outfall receives sanitary flow from thirteen floor drains, one cup drain, four sinks and one water heater and discharges to daylight into Cañada Del Buey. It is recommended all of these drains be re-routed to the sanitary sewer system and the existing outfall pipe be plugged. Floor drains BFD7 and BFD8 are supposed to be located in the pit below the DC generator on the east side of the building, according to the building manager, Lee Dalton. This was not verified due to the inaccessible location of the drains. It is recommended that the user group verify the location and destination of these drains and report their findings to EM-8 for possible corrective actions. An EPA 2D Form is enclosed in Appendix 3 for this outfall, however, permitting is not recommended.

3.2 Outfalls 46-16-OPN-2 and 46-16-OPN-13

These outfalls are air exhaust vents from test cells which discharge to the atmosphere next to the building. No permitting or piping changes are recommended for these outfalls and no EPA forms were prepared.

3.3 Outfalls 46-16-OPN-3, 46-16-OPN-12 and 46-16-OPN-17

These outfalls are emergency shower drains (one per outfall) located exterior of the building on the wall which drain to daylight next to the building. It is recommended these outfalls be covered by a Notice Of Intent (NOI) to Discharge. No piping changes are recommended for these outfalls and no EPA forms were prepared.

3.4 Outfall 46-16-OPN-4

This outfall is a compressed air tank air pressure relief valve discharging to the atmosphere next to the building. No permitting or piping changes are recommended for this outfall and no EPA forms were prepared.

3.5 Outfalls 46-16-OPN-5 and 46-16-OPN-8

These outfalls receive storm water flow from the roof of the building and drain to daylight next to the building. No permitting or piping changes are recommended for these outfalls and no EPA forms were prepared.

3.6 Outfalls 46-16-OPN-6 and 46-16-OPN-7

These outfalls receive storm water flow from two roof mounted exhaust fan drip pans and discharge to daylight next to the building. No permitting or piping changes are recommended for these outfalls and no EPA forms were prepared.

3.7 Outfalls 46-16-OPN-9 and 46-16-OPN-10

These two outfalls are abandoned pipes terminating to daylight next to the building. It is recommended these two pipes be removed and the resulting wall openings sealed

shut. No permitting is recommended for these outfalls and no EPA forms were prepared.

3.8 Outfall 46-16-OPN-11

This outfall is a drain line from a compressed air tank located next to the building which discharges to daylight. It is recommended that the liquid from this discharge be containerized at the unit. No permitting is recommended for this outfall and no EPA forms were prepared.

3.9 Outfall 46-16-OPN-14

This outfall is an air vent which discharges to the atmosphere next to the building. No permitting or piping changes are recommended for this outfall and no EPA forms were prepared.

3.10 Outfall 46-16-OPN-15

This outfall is a water backflow preventer drain which discharges to daylight next to the building. This outfall should be covered by an NOI. No piping changes are recommended for this outfall and no EPA forms were prepared.

3.11 Outfall 46-16-OPN-16

This outfall is a condensed water drain from a HVAC cooling unit and discharges to daylight next to the building. This outfall should be covered by an NOI. No piping changes are recommended for this outfall and no EPA forms were prepared.

3.12 Outfall 46-16-OPN-18

This outfall is a water backflow preventer drain which discharges to daylight next to the building. This outfall should be covered by an NOI. No piping changes are recommended for this outfall and no EPA forms were prepared.

4.0 RECOMMENDATIONS FOR BUILDING 46-17

Table 2 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 pipe and includes recommendations for changes to the drain piping. The discussion below gives the reasoning for the recommendations. There are four compressed air filter units located in this mechanical building with drain terminating in the tunnel below the floor. It is recommended this drain be containerized at the filters and the remaining piping be removed.

4.1 Outfall 46-17-OPN-1

This outfall is a water heater pressure relief valve drain which discharges to daylight next to the building. This outfall should be covered by an NOI. No piping changes are recommended for this outfall and no EPA forms were prepared.

4.2 Outfall 46-17-OPN-2

This outfall is an air compressor exhaust vent to the atmosphere next to the building. No permitting or piping changes are recommended for this outfall and no EPA forms were prepared.

4.3 Outfall 46-17-OPN-3

This outfall is a water backflow preventer drain which discharges to daylight next to the building. This outfall should be covered by an NOI. No piping changes are recommended for this outfall and no EPA forms were prepared.

4.4 Outfall 46-17-OPN-4

This outfall receives sanitary flow from one equipment drain, one lavatory, one sink, one toilet and one urinal and drains to a manhole which flows to the Sanitary Wastewater Systems Consolidation (SWSC) Plant at TA-46. There is an air compressor and an air dryer unit in the mechanical room with drain lines discharging into equipment drain 1ED1. It is recommended that the liquid from these lines be containerized at the units and the remaining piping to the equipment drain be removed. No permitting is recommended for this outfall and no EPA forms were prepared.

5.0 **RECOMMENDATIONS FOR STRUCTURES 46-20, 264, 265, 266, 267, 268, 269 AND 270**

These structures include one hose house and seven solar test cells which have been removed from the site and salvaged. This information was obtained from Joyce Martinez of EM-7 and Jim Mork of the JCI as-built section. No permitting or piping changes are required and no EPA forms were prepared.

6.0 **RECOMMENDATIONS FOR BUILDING 46-25**

Table 3 is a list of the drains to the building outfall and Figure 4 is a schematic of the piping. The table lists the drains that connect to the outfall pipe and includes recommendations for changes to the drain piping. The

discussion below gives the reasoning for the recommendations.

6.1 Outfall 46-25-OPN-1

This outfall discharges condensed water from a cooling unit to daylight next to the building. This outfall should be covered by an NOI. No piping changes are recommended for this outfall and no EPA forms were prepared.

6.2 Outfall 46-25-OPN-2

This outfall receives sanitary flow from two sinks, one water fountain and two cup drains and flows below grade into a sewage holding pit located in building TA-16-87 approximately 150 feet to the north of this building. The holding pit is periodically pumped out by SWSC Plant personnel and transported to the treatment plant. This is performed on an as-needed basis, the last time being approximately one to one and one-half years ago, according to Ramiro Marquez of SWSC plant operations. See Section 12.0 for more information concerning this sewage holding pit. It is recommended that this outfall be re-routed to the sanitary sewer system and the remaining piping to the sewage holding pit be plugged. The pit should then be decommissioned according to Laboratory policy. No permitting is recommended for this outfall and no EPA forms were prepared.

6.3 Outfalls 46-25-OPN-3 and 46-25-OPN-9

These outfalls are compressed air quick-disconnects terminating to daylight next to the building. No permitting or piping changes are recommended for these outfalls and no EPA forms were prepared.

6.4 Outfalls 46-25-OPN-4 and 46-25-OPN-7

These outfalls are sanitary sewer vents discharging to the atmosphere next to the building. No permitting or piping changes are recommended for these outfalls and no EPA forms were prepared.

6.5 Outfalls 46-25-OPN-5 and 46-25-OPN-6

These outfalls are nitrogen gas vents discharging to the atmosphere next to the building. No permitting or piping changes are required for these outfalls and no EPA forms were prepared.

6.6 Outfall 46-25-OPN-8

This outfall receives storm water flow from two roof drains on the building and discharges to daylight next to the building. No permitting or piping changes are required for this outfall and no EPA forms were prepared.

6.7 Outfall 46-25-OPN-10

This outfall is a water backflow preventer drain which discharges to daylight next to the building. This outfall should be covered by an NOI. No piping changes are recommended for this outfall and no EPA forms were prepared.

7.0 RECOMMENDATIONS FOR BUILDING 46-37

Table 4 is a list of the drains to the building outfall and Figure 5 is a schematic of the piping. The table lists the drains that connect to the outfall pipe and includes recommendations for changes to the drain piping. The discussion below gives the reasoning for the recommendations.

7.1 Outfall 46-37-OPN-1

This outfall receives flow from two floor drains and drains to daylight at the bottom of the earthen embankment immediately to the east of this building. This outfall should be temporarily covered by an NOI. Floor drain 1FD1, located in mechanical room 100, has a boiler pressure relief valve drain, a water backflow preventer drain and an expansion tank drain flowing into it. It is recommended that this outfall be connected to the sanitary sewer main adjacent to the building (see site plan). If this cannot be accomplished, it is recommended that these three sources be routed through the exterior wall and terminated to daylight next to the building. These new outfalls should then be covered by an NOI. Plugging floor drains 1FD1 and 1FD2 and eliminating the existing outfall to daylight is also recommended. No EPA forms were prepared for this outfall.

7.2 Outfalls 46-37-OPN-2 and 46-37-OPN-3

These outfalls are abandoned pipes exiting the building to daylight. It is recommended these two pipes be removed and the remaining wall openings be sealed shut. No permitting is required for these outfalls and no EPA forms were prepared.

8.0 RECOMMENDATIONS FOR BUILDING 46-58

Table 5 is a list of the drains to the building outfalls and Figure 6 is a schematic of the piping. The table lists the drains that connect to the outfall pipe and includes recommendations for changes to the drain piping. The discussion below gives the reasoning for the recommendations. There are two waste seepage pits with concrete walls and metal covers located below grade just to the north of this building that were being utilized at the

time of the site investigation. These pits receive flow from a fume hood sink and a laboratory sink (see Section 8.2). There is a possibility that some hazardous components were drained into these seepage pits from past experiments. It is recommended the liquid in these two pits be drained and the pits be decommissioned according to Laboratory policy. The inlet pipe to the pits should be permanently plugged where it exits the building. It is also recommended that the soil around and below these two seepage pits be sampled for contamination as soon as possible. A copy of the results of this soil sampling shall be forwarded to EM-8 for review and possible further action.

8.1 Outfalls 46-58-OPN-1 and 46-58-OPN-2

These two outfalls are abandoned pipes exiting the building to daylight. It is recommended these two pipes be removed and the remaining wall openings sealed shut. No permitting or piping changes are recommended for these outfalls and no EPA forms were prepared.

8.2 Outfall 46-58-OPN-3

This outfall receives flow from one fume hood sink and one hand washing sink and flows below grade to two seepage pits located just to the north of the building. It is recommended that the fume hood sink, 1SD1, be eliminated and the drain line plugged. The hand washing sink, 1SD2, should be re-routed to the sanitary sewer system in the building. No permitting is recommended for this outfall, however, an EPA Form 2D has been prepared and is contained in Appendix 3.

8.3 Outfall 46-58-OPN-4

This outfall receives sanitary flow from one cup drain, one floor drain, one floor sink, one lavatory, one urinal, one toilet, one sink, one shower and one water fountain and drains to a manhole which flows to the SWSC Plant at TA-46. It is recommended that cup drain, 1CD1, be eliminated and the drain line for the water fountain be directly connected to the sanitary sewer system at the point where the cup drain is currently located. There is an air compressor, an air dryer and a compressed air storage tank located in mechanical room 100 which have drain lines discharging into floor sink 1FS1. It is recommended that the liquid from each of these drains be containerized at the units and the remaining piping to the floor sink be removed. No permitting is recommended for this outfall and no EPA forms were prepared.

9.0 RECOMMENDATIONS FOR BUILDING 46-77

Table 6 is a list of the drains to the building outfalls and Figure 7 is a schematic of the piping. The table lists the drains that connect to the outfall pipe and includes recommendations for changes to the drain piping. The discussion below gives the reasoning for the recommendations.

9.1 Outfall 46-77-OPN-1

This outfall is a compressed air tank pressure relief valve which discharges to the atmosphere next to the building. No permitting or piping changes are recommended for this outfall and no EPA forms were prepared.

9.2 Outfall 46-77-OPN-2

This outfall is an oxygen quick disconnect terminating to daylight next to the building. No permitting or piping changes are recommended for this outfall and no EPA forms were prepared.

9.3 Outfall 46-77-OPN-3

This outfall is an acetylene quick disconnect terminating to daylight next to the building. No permitting or piping changes are recommended for this outfall and no EPA forms were prepared.

9.4 Outfalls 46-77-OPN-4 and 46-77-OPN-8

These outfalls are air conditioning unit condensed water drains discharging to daylight next to the building. These outfalls should be covered by an NOI. No piping changes are recommended for these outfalls and no EPA forms were prepared.

9.5 Outfalls 46-77-OPN-5, 46-77-OPN-9 and 46-77-OPN-10

These outfalls are fire line drains which discharge to daylight next to the building. These outfalls should be covered by an NOI. No piping changes are recommended for these outfalls and no EPA forms were prepared.

9.6 Outfalls 46-77-OPN-6 and 46-77-OPN-7

These two outfalls receive flow from a water fountain and a sink and discharge to daylight next to the building. It is recommended that water fountain, 1WF1, and sink, 1SD1, be removed and their drain lines plugged at both ends. An EPA

2D Form is enclosed in Appendix 3 for each of these two outfalls, however, permitting is not recommended.

9.7 Outfall 46-77-OPN-11

This outfall is an abandoned pipe exiting the building. It is recommended that this pipe be removed and the remaining wall opening be sealed shut. No permitting is recommended for this outfall and no EPA forms were prepared.

9.8 Outfall 46-77-OPN-12

This outfall is a water backflow preventer drain which discharges to daylight next to the building. This outfall should be covered by an NOI. No piping changes are recommended for this outfall and no EPA forms were prepared.

10.0 RECOMMENDATIONS FOR BUILDING 46-86

Table 7 is a list of the drains to the building outfalls and Figure 8 is a schematic of the piping. The table lists the drains that connect to the outfall pipe and includes recommendations for changes to the drain piping. The discussion below gives the reasoning for the recommendations. This structure is an abandoned cooling tower which has not been in operation for over five years according to Tom Brunton of ENG-6 and there is no existing EPA permit. There is an abandoned outfall at the rim of Cañada Del Buey which is believed to be associated with this cooling tower, according to Mr. Brunton. It is recommended that the responsible group verify the origin of this outfall pipe and report their findings to EM-8 for possible further action.

10.1 Outfall 46-86-OPN-1

This outfall receives storm water flow from the abandoned cooling tower basin and drains to daylight into Cañada Del Buey. It is recommended that this outfall be eliminated once the cooling tower is removed and the water basin is decommissioned and backfilled. No permitting is recommended for this outfall and no EPA forms were prepared.

11.0 RECOMMENDATIONS FOR BUILDING 46-87

Table 8 is a list of the drains to the building outfalls and Figure 9 is a schematic of the piping. The table lists the drains that connect to the outfall pipe and includes recommendations for changes to the drain piping. The discussion below gives the reasoning for the recommendations. This building is currently being used as a storage building for water treatment chemicals such as Sodium Hydroxide liquid and Ethylene Glycol. It is highly recommended that these 55-gallon drums of chemicals be provided with proper labeling and secondary containment pallets. There are a number of 55-gallon drums with unknown contents located exterior of the building on the west side. It is recommended the user group verify the contents of these drums and label them according to Laboratory Policy. If the contents are found to be hazardous, the drums should be relocated to a designated 90-day satellite storage area with adequate secondary containment. This building contains a concrete-lined sanitary sewage holding pit below the floor. It receives effluent from two cup drains, two sinks and one water fountain located in building TA-46-25. This holding pit is pumped out periodically by SWSC Plant personnel and the waste is transported to the SWSC Plant for proper treatment. It is recommended that the sanitary line from building 46-25 be re-routed to the sanitary sewer system (see Section 6.2 of this report). The inlet pipe to

the sewage holding pit can then be plugged and the pit decommissioned according to Laboratory policy.

11.1 Outfall 46-87-OPN-1

This outfall is an abandoned pipe exiting the building to daylight. It is recommended that this pipe be removed and the remaining wall opening sealed shut. No permitting or piping changes are recommended for this outfall and no EPA forms were prepared.

11.2 Outfall 46-87-OPN-2

This outfall receives storm water flow from two roof drains on the building and discharges to daylight into Cañada Del Buey. No permitting or piping changes are recommended for this outfall and no EPA forms were prepared.

11.3 Outfall 46-87-OPN-3

This outfall was once used as a drain for the sanitary sewage holding pit located in the floor of this building. It has since been plugged inside the building and is no longer used. It is recommended that this outfall pipe also be plugged at the canyon. No permitting is recommended for this outfall and no EPA forms were prepared.

11.4 Outfall 46-87-OPN-4

This outfall discharges storm water into Cañada Del Buey from an abandoned cooling tower water sump pit. The cooling tower has not been in operation for over five years and there is no existing EPA permit. No permitting or piping changes are recommended for this outfall and no EPA forms were prepared.

11.5 Outfall 46-87-OPN-5

This outfall is from a water backflow preventer drain and an emergency eye wash unit and discharges to daylight into the crawl-space below the building. This outfall should be covered by an NOI. No piping changes are recommended for this outfall and no EPA forms were prepared.

11.6 Outfall 46-87-OPN-6

This outfall is a fire line drain which discharges to daylight next to the building. This outfall should be covered by an NOI. No piping changes are recommended for this outfall and no EPA forms were prepared.

12.0 RECOMMENDATIONS FOR BUILDING 46-105

This structure is an oil-filled electrical transformer which contains PCB's. The transformer has a secondary containment berm currently in place. This existing berm does not have the capacity to contain both the oil from the transformer, in the case of a spill, and storm water at the same time. It is recommended that this transformer be provided with a roofed shelter over it to keep storm water out of the secondary containment berm. No permitting is recommended for this outfall and no EPA forms were prepared.

13.0 RECOMMENDATIONS FOR BUILDING 46-191

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

13.1 Outfall 46-191-OPN-1

This outfall is a water heater pressure relief valve drain which discharges to daylight next to the building. This outfall should be covered by an NOI. No piping changes are recommended for this outfall and no EPA forms were prepared.

13.2 Outfall 46-191-OPN-2

This outfall receives sanitary flow from one lavatory and one toilet and drains to a manhole which flows to the SWSC Plant at TA-46. No permitting or piping changes are recommended for this outfall and no EPA forms were prepared.

13.3 Outfall 46-191-OPN-3

This outfall is a water drain from an evaporative cooler which discharges to daylight next to the building. This outfall should be covered by an NOI. No piping changes are recommended for this outfall and no EPA forms were prepared.

14.0 RECOMMENDATIONS FOR BUILDINGS 46-254, 296, 320 AND 400

Office building 46-254 and transportainers 46-296, 320 and 400 were investigated and found to not have any water or drains. No permitting or piping changes are recommended for these buildings and no EPA forms were prepared.

15.0 CONCLUSION

This document provides the information to characterize buildings 16, 17, 20, 25, 37, 58, 77, 86, 87, 105, 191, 254, 264, 265, 266, 267, 268, 269, 270, 296, 320 and 400 at TA-46.

Form 2D:

1. 46-16-OPN-1
2. 46-58-OPN-3
3. 46-77-OPN-6
4. 46-77-OPN-7

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

Discharges to the SWSC Plant:

1. 46-17-OPN-4
2. 46-58-OPN-4
3. 46-191-OPN-2

Discharges to a sanitary sewage holding pit:

1. 46-25-OPN-2

Discharge from the fire system:

1. 46-77-OPN-5
2. 46-77-OPN-9
3. 46-77-OPN-10
4. 46-87-OPN-6

Discharges of condensed water:

1. 46-16-OPN-16
2. 46-25-OPN-1
3. 46-77-OPN-4
4. 46-77-OPN-8

Discharges of storm water:

1. 46-16-OPN-5
2. 46-16-OPN-6
3. 46-16-OPN-7
4. 46-16-OPN-8
5. 46-25-OPN-8
6. 46-86-OPN-1
7. 46-87-OPN-2
8. 46-87-OPN-4

Discharges from emergency showers:

1. 46-16-OPN-3
2. 46-16-OPN-12
3. 46-16-OPN-17

Discharges from water backflow preventers:

1. 46-16-OPN-15
2. 46-16-OPN-18
3. 46-17-OPN-3

4. 46-25-OPN-10 5. 46-77-OPN-12

Discharges from sanitary sewer vents:

1. 46-25-OPN-4 2. 46-25-OPN-7

Discharges from nitrogen gas vents:

1. 46-25-OPN-5 2. 46-25-OPN-6

Abandoned outfalls:

1. 46-16-OPN-9 2. 46-16-OPN-10 3. 46-58-OPN-1
4. 46-58-OPN-2 5. 46-77-OPN-11 6. 46-87-OPN-1
7. 46-87-OPN-3

Miscellaneous discharges:

1. 46-16-OPN-2 2. 46-16-OPN-4 3. 46-16-OPN-11
4. 46-16-OPN-13 5. 46-16-OPN-14 6. 46-17-OPN-1
7. 46-17-OPN-2 8. 46-25-OPN-3 9. 46-25-OPN-9
10. 46-37-OPN-1 11. 46-37-OPN-2 12. 46-37-OPN-3
13. 46-77-OPN-1 14. 46-77-OPN-2 15. 46-77-OPN-3
16. 46-87-OPN-5 17. 46-191-OPN-1 18. 46-191-OPN-3

Buildings with no drains:

1. 46-105 2. 46-254 3. 46-296 4. 46-320
5. 46-400

Buildings that have been removed from the site and salvaged:

1. 46-20 2. 46-264 3. 46-265 4. 46-266
5. 46-267 6. 46-268 7. 46-269 8. 46-270

Recommended corrective actions are outlined in Tables 1 through 10 as well as in the above text. Corrective action should be performed as soon as practical to minimize the chance of unpermitted discharge of pollutants.

TABLE 1: TA 46-16 DRAIN SUMMARY

| OUTFALL NUMBER | ID NUMBER | ROOM ACTIVITY | ROOM NUMBER | STATUS OR RECOMMENDATIONS | EPA FORM PREPARED |
|-------------------------|------------|-----------------------|--------------|---------------------------|-------------------|
| 46-16-OPN-1 DAYLIGHT | BFD1 | BASEMENT | N/A | PLUGGED | YES |
| | BFD2 | BASEMENT | N/A | PIPE TO S.S. | |
| | BFD3 | BASEMENT | N/A | PIPE TO S.S. | |
| | BFD4 | BASEMENT | N/A | PIPE TO S.S. | |
| | BFD5 | BASEMENT | N/A | PIPE TO S.S. | |
| | BFD6 | BASEMENT | N/A | PIPE TO S.S. | |
| | BFD7 | GENERATOR PIT | N/A | VERIFY | |
| | BFD8 | GENERATOR PIT | N/A | VERIFY | |
| | BSD1 | BASEMENT | N/A | PIPE TO S.S. | |
| | 1CD2 | LABORATORY | 3 | PIPE TO S.S. | |
| | 1FD1 | LABORATORY | 2 | PLUGGED | |
| | 1FD2 | LABORATORY | 4 | PIPE TO S.S. | |
| | 1FD3 | LABORATORY | 6 | PIPE TO S.S. | |
| | 1FD4 | LABORATORY | 7 | PIPE TO S.S. | |
| | 1FD5 | LABORATORY | 8 | PIPE TO S.S. | |
| | 1FD6 | LABORATORY | 8 | PIPE TO S.S. | |
| | 1SD1 | LABORATORY | 3 | PIPE TO S.S. | |
| | 1SD2 | LABORATORY | 2 | PIPE TO S.S. | |
| 1SD3 | LABORATORY | 8 | PIPE TO S.S. | | |
| 46-16-OPN-2 | N/A | AIR EXHAUST | 2 | NO CHANGE | NO |
| 46-16-OPN-3 | 1ESH2 | EMERGENCY SHOWER | EXTER. | NOI | NO |
| 46-16-OPN-4 | N/A | AIR PRESS. RELIEF | 9 | NO CHANGE | NO |
| 46-16-OPN-5 STORM | N/A | ROOF | N/A | NO CHANGE | NO |
| 46-16-OPN-6 STORM | N/A | ROOF | N/A | NO CHANGE | NO |
| 46-16-OPN-7 STORM | N/A | ROOF | N/A | NO CHANGE | NO |
| 46-16-OPN-8 STORM | N/A | ROOF | N/A | NO CHANGE | NO |
| 46-16-OPN-9 | N/A | ABANDONED PIPE | 8 | ELIMINATE | NO |
| 46-16-OPN-10 | N/A | ABANDONED PIPE | 8 | ELIMINATE | NO |
| 46-16-OPN-11 | N/A | COMPR. AIR TANK DRAIN | EXTER. | CONTAINERIZE | NO |
| 46-16-OPN-12 | 1ESH3 | EMERGENCY SHOWER | EXTER. | NOI | NO |
| 46-16-OPN-13 | N/A | AIR EXHAUST VENT | 6 | NO CHANGE | NO |
| 46-16-OPN-14 | N/A | AIR VENT | 6 | NO CHANGE | NO |
| 46-16-OPN-15 | N/A | WATER BFP DRAIN | 5A | NOI | NO |
| 46-16-OPN-16 | N/A | CONDENSED WATER | 4 | NOI | NO |
| 46-16-OPN-17 | 1ESH1 | EMERGENCY SHOWER | EXTER. | NOI | NO |
| 46-16-OPN-18 | 1CD1 | WATER BFP DRAIN | 3 | NOI | NO |

TABLE 2: TA 46-17 DRAIN SUMMARY

| OUTFALL NUMBER | ID NUMBER | ROOM ACTIVITY | ROOM NUMBER | STATUS OR RECOMMENDATIONS | EPA FORM PREPARED |
|-------------------------|-----------|---------------------|-------------|---------------------------|-------------------|
| 46-17-OPN-1 | 1WH1 | WATER HEATER DRAIN | N/A | NOI | NO |
| 46-17-OPN-2 | N/A | AIR COMPRESSOR EXH. | N/A | NO CHANGE | NO |
| 46-17-OPN-3 | N/A | WATER BFP DRAIN | N/A | NOI | NO |
| 46-17-OPN-4 SANITARY | 1ED1 | MECHANICAL ROOM | N/A | CONTAINERIZE | NO |
| | 1LV1 | MECHANICAL ROOM | N/A | NO CHANGE | |
| | 1SD1 | MECHANICAL ROOM | N/A | NO CHANGE | |
| | 1TL1 | MECHANICAL ROOM | N/A | NO CHANGE | |
| | 1UR1 | MECHANICAL ROOM | N/A | NO CHANGE | |

TABLE 3: TA 46-25 DRAIN SUMMARY

| OUTFALL NUMBER | ID NUMBER | ROOM ACTIVITY | ROOM NUMBER | STATUS OR RECOMMENDATIONS | EPA FORM PREPARED |
|--|-----------|-----------------------|-------------|---------------------------|-------------------|
| 46-25-OPN-1 | N/A | CONDENSED WATER | EXTER. | NOI | NO |
| 46-25-OPN-2 SANITARY HOLDING TANK | 1CD2 | LABORATORY | 100 | PLUGGED | NO |
| | 1CD3 | LABORATORY | 100 | PLUGGED | |
| | 1CD4 | LABORATORY | 100 | PLUGGED | |
| | 1CD5 | LABORATORY | 100 | PLUGGED | |
| | 1CD6 | LABORATORY | 100 | PLUGGED | |
| | 1CD7 | LABORATORY | 100 | PIPE TO S.S. | |
| | 1CD8 | LABORATORY | 100 | PLUGGED | |
| | 1CD9 | LABORATORY | 100 | PIPE TO S.S. | |
| | 1SD1 | METAL FABRICATN. SHOP | 104 | PIPE TO S.S. | |
| | 1SD2 | LABORATORY | 100 | PIPE TO S.S. | |
| | 1WF1 | LABORATORY | 100 | PIPE TO S.S. | |
| 46-25-OPN-3 | N/A | COMPR. AIR DISCONNECT | 100 | NO CHANGE | NO |
| 46-25-OPN-4 | N/A | SAN. SEWER VENT | 100 | NO CHANGE | NO |
| 46-25-OPN-5 | N/A | NITROGEN GAS VENT | 100 | NO CHANGE | NO |
| 46-25-OPN-6 | N/A | NITROGEN GAS VENT | 100 | NO CHANGE | NO |
| 46-25-OPN-7 | N/A | SAN. SEWER VENT | 100 | NO CHANGE | NO |
| 46-25-OPN-8 STORM | RD1 | ROOF | N/A | NO CHANGE | NO |
| | RD2 | ROOF | N/A | NO CHANGE | |
| 46-25-OPN-9 | N/A | COMPR. AIR DISCONNECT | 100 | NO CHANGE | NO |
| 46-25-OPN-10 | 1CD1 | WATER BFP DRAIN | 100 | NOI | NO |

TABLE 4: TA 46-37 DRAIN SUMMARY

| OUTFALL NUMBER | ID NUMBER | ROOM ACTIVITY | ROOM NUMBER | STATUS OR RECOMMENDATIONS | EPA FORM PREPARED |
|-------------------------|-----------|-----------------|-------------|---------------------------|-------------------|
| 46-37-OPN-1 DAYLIGHT | 1FD1 | MECHANICAL ROOM | 100 | ROUTE TO S.S. NOI | NO |
| | 1FD2 | LABORATORY | 101 | PIPE TO S.S. NOI | |
| 46-37-OPN-2 | N/A | AIR VENT | 101 | ELIMINATE | NO |
| 46-37-OPN-3 | N/A | AIR VENT | 101 | ELIMINATE | NO |

TABLE 5: TA 46-58 DRAIN SUMMARY

| OUTFALL NUMBER | ID NUMBER | ROOM ACTIVITY | ROOM NUMBER | STATUS OR RECOMMENDATIONS | EPA FORM PREPARED |
|-----------------------------------|------------|-----------------|-------------|---------------------------|-------------------|
| 46-58-OPN-1 | N/A | ABANDONED PIPE | 106 | ELIMINATE | NO |
| 46-58-OPN-2 | N/A | ABANDONED PIPE | 106 | ELIMINATE | NO |
| 46-58-OPN-3 SEEPAGE PITS(2) | 1SD1 | LABORATORY | 106 | ELIMINATE | YES |
| | 1SD2 | LABORATORY | 106 | PIPE TO S.S. | |
| 46-58-OPN-4 SANITARY | 1CD1 | LABORATORY | 106 | MODIFY | NO |
| | 1FD1 | BATHROOM | 103 | NO CHANGE | |
| | 1FS1 | MECHANICAL ROOM | 100 | CONTAINERIZE | |
| | 1LV1 | BATHROOM | 103 | NO CHANGE | |
| | 1SD3 | MECHANICAL ROOM | 100 | NO CHANGE | |
| | 1SH1 | BATHROOM | 104 | NO CHANGE | |
| | 1TL1 | BATHROOM | 105 | NO CHANGE | |
| | 1UR1 | BATHROOM | 103 | NO CHANGE | |
| 1WF1 | LABORATORY | 106 | MODIFY | | |

TABLE 6: TA 46-77 DRAIN SUMMARY

| OUTFALL NUMBER | ID NUMBER | ROOM ACTIVITY | ROOM NUMBER | STATUS OR RECOMMENDATIONS | EPA FORM PREPARED |
|-------------------------|-----------|----------------------|-------------|---------------------------|-------------------|
| 46-77-OPN-1 | N/A | COMPR. AIR VENT | N/A | NO CHANGE | NO |
| 46-77-OPN-2 | N/A | OXYGEN DISCONNECT | N/A | NO CHANGE | NO |
| 46-77-OPN-3 | N/A | ACETYLENE DISCONNECT | N/A | NO CHANGE | NO |
| 46-77-OPN-4 | N/A | CONDENSED WATER | N/A | NOI | NO |
| 46-77-OPN-5 | N/A | FIRE LINE DRAIN | N/A | NOI | NO |
| 46-77-OPN-6 DAYLIGHT | 1WF1 | METAL FAB. SHOP | N/A | ELIMINATE | YES |
| 46-77-OPN-7 DAYLIGHT | 1SD1 | METAL FAB. SHOP | N/A | ELIMINATE | YES |
| 46-77-OPN-8 | N/A | CONDENSED WATER | N/A | NOI | NO |
| 46-77-OPN-9 | N/A | FIRE LINE DRAIN | N/A | NOI | NO |
| 46-77-OPN-10 | N/A | FIRE LINE DRAIN | N/A | NOI | NO |
| 46-77-OPN-11 | N/A | ABANDONED PIPE | N/A | ELIMINATE | NO |
| 46-77-OPN-12 | N/A | WATER BFP DRAIN | N/A | NOI | NO |

TABLE 7: TA 46-86 DRAIN SUMMARY

| OUTFALL NUMBER | ID NUMBER | ROOM ACTIVITY | ROOM NUMBER | STATUS OR RECOMMENDATIONS | EPA FORM PREPARED |
|----------------------|-----------|----------------------|-------------|---------------------------|-------------------|
| 46-86-OPN-1 STORM | 1ED1 | ABAND. COOLING TOWER | N/A | ELIMINATE | NO |

TABLE 8: TA 46-87 DRAIN SUMMARY

| OUTFALL NUMBER | ID NUMBER | ROOM ACTIVITY | ROOM NUMBER | STATUS OR RECOMMENDATIONS | EPA FORM PREPARED |
|----------------|-----------|----------------------|-------------|---------------------------|-------------------|
| 46-87-OPN-1 | N/A | ABANDONED PIPE | N/A | ELIMINATE | NO |
| 46-87-OPN-2 | RD1 | ROOF | N/A | NO CHANGE | NO |
| STORM | RD2 | ROOF | N/A | NO CHANGE | |
| 46-87-OPN-3 | N/A | ABAND. PIT DISCHARGE | N/A | PLUG/ELIMIN. | NO |
| 46-87-OPN-4 | N/A | ABAND. WATER PIT | N/A | NO CHANGE | NO |
| 46-87-OPN-5 | 1BFP1 | STORAGE | N/A | NOI | NO |
| | 1EW1 | STORAGE | N/A | NOI | |
| 46-87-OPN-6 | N/A | FIRE LINE DRAIN | N/A | NOI | NO |

TABLE 9: TA 46-191 DRAIN SUMMARY

| OUTFALL NUMBER | ID NUMBER | ROOM ACTIVITY | ROOM NUMBER | STATUS OR RECOMMENDATIONS | EPA FORM PREPARED |
|--------------------------|-----------|--------------------|-------------|---------------------------|-------------------|
| 46-191-OPN-1 | 1WH1 | WATER HEATER DRAIN | 101 | NOI | NO |
| 46-191-OPN-2 SANITARY | 1LV1 | BATHROOM | 101 | NO CHANGE | NO |
| | 1TL1 | BATHROOM | 101 | NO CHANGE | |
| 46-191-OPN-3 | N/A | EVAP. COOLER DRAIN | N/A | NOI | NO |

TABLE 10: NON-DRAIN RECOMMENDATIONS

| TA # | BLDG. # | ROOM/AREA | RECOMMENDATION |
|------|---------|--|---|
| 46 | ALL | ALL SINK DRAINS | POST "NO CHEM. DN THIS DRAIN" SIGN |
| 46 | 17 | MECH. ROOM | CONTAIN. COMP. AIR FILTER DISCH. |
| 46 | 58 | SEEPAGE PITS(2) BELOW GRADE ON NORTH SIDE OF BLDG. | DECOMMISSION TANKS ACCORDING TO LANL POLICY AND PROVIDE SOIL SAMPLING OF AREA AROUND TANKS |
| 46 | 86 | NORTH SIDE OF CLG TW | VERIFY ORIGIN OF OUTFALL PIPE |
| 46 | 87 | STORAGE ROOM | LABEL & CONTAIN 55-GAL. DRUMS |
| 46 | 87 | EXTERIOR OF THE BLDG. ON THE WEST SIDE | VERIFY CONTENTS OF 55-GAL. DRUMS LABEL DRUMS AND STORE ANY HAZARD. MATERIALS ACCORDING TO LANL POLICY |
| 46 | 87 | SEWAGE PIT IN FLOOR | PLUG INLET AND DECOMMISSION |
| 46 | 105 | ELECT. TRANSFORMER | PROVIDE WITH A ROOFED SHELTER |

TABLE 11
SUMMARY OF ABBREVIATIONS

| ABBREVIATION | MEANING |
|--------------|---------------------|
| "B" | Basement |
| BFP | Backflow Preventer |
| CD | Cup Drain |
| E/C | Evaporative Cooler |
| ED | Equipment Drain |
| ESH | Emergency Shower |
| EW | Emergency Eye Wash |
| FD | Floor Drain |
| FS | Floor Sink |
| LV | Lavatory |
| MH | Manhole |
| RD | Roof Drain |
| --- SD --- | Storm Drain Pipe |
| SD | Sink |
| SH | Shower |
| --- SS --- | Sanitary Sewer Pipe |
| TL | Toilet |
| UR | Urinal |
| WF | Water Fountain |
| WH | Water Heater |

REPORT #

65

| TA | BLDG | OUTLET PIPING NO | EPA OUTFALL # | DRAIN # | ROOM # | ROOM DESCRIPTION | FLOW RATE | PERIODICITY | SEASONAL | SOURCE TYPES |
|----|------|---------------------|------------------|---------|--------|-------------------|-----------|------------------|----------|----------------------------------|
| 46 | 16 | 46-16-OPN-01 | DAYLIGHT | 1CD2 | 3 | LABORATORY | | NO FLOW | No | NONE |
| 46 | 16 | 46-16-OPN-01 | DAYLIGHT | 1FD1 | 2 | LABORATORY | | NO FLOW | No | NONE (PLUGGED) |
| 46 | 16 | 46-16-OPN-01 | DAYLIGHT | 1FD2 | 4 | LABORATORY | | 5 DAYS PER WEEK | No | FLR WASHING/DEIONIZED WTR |
| 46 | 16 | 46-16-OPN-01 | DAYLIGHT | 1FD3 | 6 | LABORATORY | | FLOW IS NIL | No | DEIONIZED WATER/FLOOR WASHINGS |
| 46 | 16 | 46-16-OPN-01 | DAYLIGHT | 1FD4 | 7 | LABORATORY | | FLOW IS NIL | No | WATER BFP DRAIN/FLOOR WASHINGS |
| 46 | 16 | 46-16-OPN-01 | DAYLIGHT | 1FD5 | 8 | LABORATORY | | FLOW IS NIL | No | FLOOR WASHING |
| 46 | 16 | 46-16-OPN-01 | DAYLIGHT | 1FD6 | 8 | LABORATORY | 5 GPD | 5 DAYS PER WEEK | No | HAND & FLR. WASH/WTR. HTR. DRAIN |
| 46 | 16 | 46-16-OPN-01 | DAYLIGHT | 1SD1 | 3 | LABORATORY | | 5 DAYS PER WEEK | No | HAND WASHING |
| 46 | 16 | 46-16-OPN-01 | DAYLIGHT | 1SD2 | 2 | LABORATORY | | 5 DAYS PER WEEK | No | HAND WASHING |
| 46 | 16 | 46-16-OPN-01 | DAYLIGHT | 1SD3 | 8 | LABORATORY | | 5 DAYS PER WEEK | No | HAND WASHING |
| 46 | 16 | 46-16-OPN-01 | DAYLIGHT | BFD1 | N/A | BASEMENT | | FLOW IS NIL | No | FLOOR WASHINGS |
| 46 | 16 | 46-16-OPN-01 | DAYLIGHT | BFD2 | N/A | BASEMENT | | FLOW IS NIL | No | FLOOR WASHINGS |
| 46 | 16 | 46-16-OPN-01 | DAYLIGHT | BFD3 | N/A | BASEMENT | | FLOW IS NIL | No | FLOOR WASHINGS/SINK DRAIN |
| 46 | 16 | 46-16-OPN-01 | DAYLIGHT | BFD4 | N/A | BASEMENT | | FLOW IS NIL | No | FLOOR WASHINGS |
| 46 | 16 | 46-16-OPN-01 | DAYLIGHT | BFD5 | N/A | BASEMENT | | FLOW IS NIL | No | FLOOR WASHINGS |
| 46 | 16 | 46-16-OPN-01 | DAYLIGHT | BFD6 | N/A | BASEMENT | | FLOW IS NIL | No | FLOOR WASHINGS |
| 46 | 16 | 46-16-OPN-01 | DAYLIGHT | BFD7 | N/A | BASEMENT | | FLOW IS NIL | No | GENERATOR PIT DRAIN |
| 46 | 16 | 46-16-OPN-01 | DAYLIGHT | BFD8 | N/A | BASEMENT | | FLOW IS NIL | No | GENERATOR PIT DRAIN |
| 46 | 16 | 46-16-OPN-01 | DAYLIGHT | BSD1 | N/A | BASEMENT | | 5 DAYS PER WEEK | No | HAND WASHING |
| 46 | 16 | 46-16-OPN-02 | ATMOSPH. | N/A | 2 | LABORATORY | | NO FLOW | No | TEST CELL AIR EXHAUST VENT |
| 46 | 16 | 46-16-OPN-03 | DAYLIGHT | 1ESH2 | N/A | EXTERIOR | | NO FLOW | No | EMERGENCY SHOWER |
| 46 | 16 | 46-16-OPN-04 | ATMOSPH. | N/A | 9 | DC GENERATOR ROOM | | NO FLOW | No | AIR PRESSURE RELIEF VALVE DRAIN |
| 46 | 16 | 46-16-OPN-05 | DAYLIGHT | N/A | N/A | ROOF | | MOSTLY IN SUMMER | Yes | STORM WATER |
| 46 | 16 | 46-16-OPN-06 | DAYLIGHT | N/A | N/A | ROOF | | MOSTLY IN SUMMER | Yes | STORM WATER |
| 46 | 16 | 46-16-OPN-07 | DAYLIGHT | N/A | N/A | ROOF | | MOSTLY IN SUMMER | Yes | STORM WATER |
| 46 | 16 | 46-16-OPN-08 | DAYLIGHT | N/A | N/A | ROOF | | MOSTLY IN SUMMER | Yes | STORM WATER |
| 46 | 16 | 46-16-OPN-09 | NONE | N/A | 8 | LABORATORY | | NO FLOW | No | NONE (ABANDONED) |
| 46 | 16 | 46-16-OPN-10 | NONE | N/A | 8 | LABORATORY | | NO FLOW | No | NONE (ABANDONED) |
| 46 | 16 | 46-16-OPN-11 | DAYLIGHT | N/A | N/A | EXTERIOR | | FLOW IS NIL | No | COMPRESSED AIR TANK BLOW DOWN |
| 46 | 16 | 46-16-OPN-12 | DAYLIGHT | 1ESH3 | N/A | EXTERIOR | | NO FLOW | No | EMERGENCY SHOWER DRAIN |
| 46 | 16 | 46-16-OPN-13 | ATMOSPH. | N/A | 6 | LABORATORY | | NO FLOW | No | TEST CELL AIR EXHAUST |
| 46 | 16 | 46-16-OPN-14 | ATMOSPH. | N/A | 6 | LABORATORY | | NO FLOW | No | AIR EXHAUST VENT |
| 46 | 16 | 46-16-OPN-15 | DAYLIGHT | N/A | 5A | LABORATORY | | FLOW IS NIL | No | WATER BFP DRAIN |

REPORT #

65

| TA | BLDG | OUTLET PIPING NO | EPA OUTFALL # | DRAIN # | ROOM # | ROOM DESCRIPTION | FLOW RATE | PERIODICITY | SEASONAL | SOURCE TYPES |
|----|------|---------------------|------------------|---------|--------|------------------------|-----------|-------------------|----------|-------------------------------|
| 46 | 16 | 46-16-OPN-16 | DAYLIGHT | N/A | N/A | LABORATORY | | 6 MONTHS PER YEAR | Yes | CONDENSED WATER |
| 46 | 16 | 46-16-OPN-17 | DAYLIGHT | 1ESH1 | N/A | EXTERIOR | | FLOW IS NIL | No | EMERGENCY SHOWER DRAIN |
| 46 | 16 | 46-16-OPN-18 | DAYLIGHT | 1CD1 | 3 | LABORATORY | | FLOW IS NIL | No | WATER BFP DRAIN |
| 46 | 17 | 46-17-OPN-1 | DAYLIGHT | 1WH1 | N/A | MECHANICAL ROOM | | FLOW IS NIL | No | WTR. HTR. PRESS. RELIEF VALVE |
| 46 | 17 | 46-17-OPN-2 | ATMOSPH. | N/A | N/A | MECHANICAL ROOM | | NO FLOW | No | AIR COMPRESSOR EXHAUST |
| 46 | 17 | 46-17-OPN-3 | DAYLIGHT | N/A | N/A | MECHANICAL ROOM | | FLOW IS NIL | No | WATER BFP DRAIN |
| 46 | 17 | 46-17-OPN-4 | 13S/SWSC | 1ED1 | N/A | MECHANICAL ROOM | | FLOW IS NIL | No | AIR COMPRESSOR BLOW-OFF |
| 46 | 17 | 46-17-OPN-4 | 13S/SWSC | 1ED1 | N/A | MECHANICAL ROOM | | FLOW IS NIL | No | FLOOR WASHINGS |
| 46 | 17 | 46-17-OPN-4 | 13S/SWSC | 1LV1 | N/A | RESTROOM | | 5 DAYS PER WEEK | No | LAVATORY |
| 46 | 17 | 46-17-OPN-4 | 13S/SWSC | 1SD1 | N/A | MECHANICAL ROOM | | 5 DAYS PER WEEK | No | HAND & FLOOR WASHINGS |
| 46 | 17 | 46-17-OPN-4 | 13S/SWSC | 1TL1 | N/A | RESTROOM | | 5 DAYS PER WEEK | No | TOILET |
| 46 | 17 | 46-17-OPN-4 | 13S/SWSC | 1UR1 | N/A | RESTROOM | | 5 DAYS PER WEEK | No | URINAL |
| 46 | 20 | TA-46-20 | ND | N/A | N/A | HOSE HOUSE | | NO FLOW | No | NONE (SALVAGED) |
| 46 | 25 | 46-25-OPN-01 | DAYLIGHT | N/A | EXTER. | OFFICE | | 6 MONTHS PER YEAR | Yes | CONDENSED WATER |
| 46 | 25 | 46-25-OPN-02 | 13S/SWSC | 1CD2 | 100 | LABORATORY | | NO FLOW | No | NONE (PLUGGED) |
| 46 | 25 | 46-25-OPN-02 | 13S/SWSC | 1CD3 | 100 | LABORATORY | | NO FLOW | No | NONE (PLUGGED) |
| 46 | 25 | 46-25-OPN-02 | 13S/SWSC | 1CD4 | 100 | LABORATORY | | NO FLOW | No | NONE (PLUGGED) |
| 46 | 25 | 46-25-OPN-02 | 13S/SWSC | 1CD5 | 100 | LABORATORY | | NO FLOW | No | NONE (PLUGGED) |
| 46 | 25 | 46-25-OPN-02 | 13S/SWSC | 1CD6 | 100 | LABORATORY | | NO FLOW | No | NONE (PLUGGED) |
| 46 | 25 | 46-25-OPN-02 | 13S/SWSC | 1CD7 | 100 | LABORATORY | | FLOW IS NIL | No | NON-POTABLE WATER |
| 46 | 25 | 46-25-OPN-02 | 13S/SWSC | 1CD8 | 100 | LABORATORY | | NO FLOW | No | NONE (PLUGGED) |
| 46 | 25 | 46-25-OPN-02 | 13S/SWSC | 1CD9 | 100 | LABORATORY | | NO FLOW | No | NONE |
| 46 | 25 | 46-25-OPN-02 | 13S/SWSC | 1SD1 | 104 | METAL FABRICATION SHOP | | 5 DAYS PER WEEK | No | HAND WASHING |
| 46 | 25 | 46-25-OPN-02 | 13S/SWSC | 1SD2 | 100 | LABORATORY | | 5 DAYS PER WEEK | No | HAND WASHING |
| 46 | 25 | 46-25-OPN-02 | 13S/SWSC | 1WF1 | 100 | LABORATORY | | 5 DAYS PER WEEK | No | WATER FOUNTAIN |
| 46 | 25 | 46-25-OPN-03 | NONE | N/A | 100 | LABORATORY | | NO FLOW | No | COMPRESSED AIR DISCONNECT |
| 46 | 25 | 46-25-OPN-04 | ATMOSPH. | N/A | 100 | LABORATORY | | NO FLOW | No | SANITARY SEWER VENT |
| 46 | 25 | 46-25-OPN-05 | ATMOSPH. | N/A | 100 | LABORATORY | | NO FLOW | No | NITROGEN GAS VENT |
| 46 | 25 | 46-25-OPN-06 | ATMOSPH. | N/A | 100 | LABORATORY | | NO FLOW | No | NITROGEN GAS VENT |
| 46 | 25 | 46-25-OPN-07 | ATMOSPH. | N/A | 100 | LABORATORY | | NO FLOW | No | SANITARY SEWER VENT |
| 46 | 25 | 46-25-OPN-08 | DAYLIGHT | RD1 | N/A | ROOF | | MOSTLY IN SUMMER | Yes | STORM WATER |
| 46 | 25 | 46-25-OPN-08 | DAYLIGHT | RD2 | N/A | ROOF | | MOSTLY IN SUMMER | Yes | STORM WATER |
| 46 | 25 | 46-25-OPN-09 | NONE | N/A | 100 | LABORATORY | | NO FLOW | No | COMPRESSED AIR DISCONNECT |

REPORT #

65

| TA | BLDG | OUTLET PIPING NO | EPA OUTFALL # | DRAIN # | ROOM # | ROOM DESCRIPTION | FLOW RATE | PERIODICITY | SEASONAL | SOURCE TYPES |
|----|------|---------------------|------------------|---------|--------|------------------------|-----------|-------------------|----------|--------------------------------|
| 46 | 25 | 46-25-OPN-10 | DAYLIGHT | 1CD1 | 100 | LABORATORY | | FLOW IS NIL | No | WATER BFP DRAIN |
| 46 | 37 | 46-37-OPN-1 | DAYLIGHT | 1FD1 | 100 | MECHANICAL ROOM | | FLOW IS NIL | No | BOILER PRESS. RELIEF/WATER BFP |
| 46 | 37 | 46-37-OPN-1 | DAYLIGHT | 1FD1 | 100 | MECHANICAL ROOM | | FLOW IS NIL | No | EXPANSION TANK DRAIN |
| 46 | 37 | 46-37-OPN-1 | DAYLIGHT | 1FD1 | 100 | MECHANICAL ROOM | | FLOW IS NIL | No | FLOOR WASHINGS |
| 46 | 37 | 46-37-OPN-1 | DAYLIGHT | 1FD2 | 101 | LABORATORY | | NO FLOW | No | NONE |
| 46 | 37 | 46-37-OPN-2 | ATMOSPH. | N/A | 101 | LABORATORY | | NO FLOW | No | AIR VENT |
| 46 | 37 | 46-37-OPN-3 | ATMOSPH. | N/A | 101 | LABORATORY | | NO FLOW | No | AIR VENT |
| 46 | 58 | 46-58-OPN-1 | NONE | N/A | 106 | LABORATORY | | NO FLOW | No | NONE (ABANDONED) |
| 46 | 58 | 46-58-OPN-2 | NONE | N/A | 106 | LABORATORY | | NO FLOW | No | NONE (ABANDONED) |
| 46 | 58 | 46-58-OPN-3 | SEEP. PIT | 1SD1 | 106 | LABORATORY | | NO FLOW | No | FUME HOOD SINK |
| 46 | 58 | 46-58-OPN-3 | SEEP. PIT | 1SD2 | 106 | LABORATORY | | 5 DAYS PER WEEK | No | HAND WASHING |
| 46 | 58 | 46-58-OPN-4 | 13S/SWSC | 1CD1 | 106 | LABORATORY | | 5 DAYS PER WEEK | No | WATER FOUNTAIN DRAIN |
| 46 | 58 | 46-58-OPN-4 | 13S/SWSC | 1FD1 | 103 | BATHROOM | | FLOW IS NIL | No | FLOOR WASHINGS |
| 46 | 58 | 46-58-OPN-4 | 13S/SWSC | 1FS1 | 100 | MECHANICAL ROOM | | FLOW IS NIL | No | AIR COMP. & STOR. TANK BLWDWN. |
| 46 | 58 | 46-58-OPN-4 | 13S/SWSC | 1FS1 | 100 | MECHANICAL ROOM | | FLOW IS NIL | No | DEIONIZED WATER |
| 46 | 58 | 46-58-OPN-4 | 13S/SWSC | 1FS1 | 100 | MECHANICAL ROOM | | FLOW IS NIL | No | AIR DRYER BLOW-OFF |
| 46 | 58 | 46-58-OPN-4 | 13S/SWSC | 1FS1 | 100 | MECHANICAL ROOM | | FLOW IS NIL | No | WTR. HTR. PRESS. RELIEF VALVE |
| 46 | 58 | 46-58-OPN-4 | 13S/SWSC | 1LV1 | 103 | BATHROOM | | 5 DAYS PER WEEK | No | LAVATORY |
| 46 | 58 | 46-58-OPN-4 | 13S/SWSC | 1SD3 | 100 | MECHANICAL ROOM | | 5 DAYS PER WEEK | No | FLOOR & HAND WASHING |
| 46 | 58 | 46-58-OPN-4 | 13S/SWSC | 1SH1 | 104 | BATHROOM | | 5 DAYS PER WEEK | No | SHOWER |
| 46 | 58 | 46-58-OPN-4 | 13S/SWSC | 1TL1 | 105 | BATHROOM | | 5 DAYS PER WEEK | No | TOILET |
| 46 | 58 | 46-58-OPN-4 | 13S/SWSC | 1UR1 | 103 | BATHROOM | | 5 DAYS PER WEEK | No | URINAL |
| 46 | 58 | 46-58-OPN-4 | 13S/SWSC | 1WF1 | 106 | LABORATORY | | 5 DAYS PER WEEK | No | WATER FOUNTAIN |
| 46 | 77 | 46-77-OPN-01 | ATMOSPH. | N/A | N/A | METAL FABRICATION SHOP | | NO FLOW | No | AIR COMP. PRESS. RELIEF VALVE |
| 46 | 77 | 46-77-OPN-02 | NONE | N/A | N/A | METAL FABRICATION SHOP | | NO FLOW | No | OXYGEN DISCONNECT |
| 46 | 77 | 46-77-OPN-03 | NONE | N/A | N/A | METAL FABRICATION SHOP | | NO FLOW | No | ACETYLENE DISCONNECT |
| 46 | 77 | 46-77-OPN-04 | DAYLIGHT | N/A | N/A | METAL FABRICATION SHOP | | 6 MONTHS PER YEAR | Yes | CONDENSED WATER |
| 46 | 77 | 46-77-OPN-05 | DAYLIGHT | N/A | N/A | METAL FABRICATION SHOP | | ONCE ANNUALLY | No | FIRE LINE DRAIN |
| 46 | 77 | 46-77-OPN-06 | DAYLIGHT | 1WF1 | N/A | METAL FABRICATION SHOP | | 5 DAYS PER WEEK | No | WATER FOUNTAIN |
| 46 | 77 | 46-77-OPN-07 | DAYLIGHT | 1SD1 | N/A | METAL FABRICATION SHOP | | 5 DAYS PER WEEK | No | HAND WASHING |
| 46 | 77 | 46-77-OPN-08 | DAYLIGHT | N/A | N/A | METAL FABRICATION SHOP | | 6 MONTHS PER YEAR | Yes | CONDENSED WATER |
| 46 | 77 | 46-77-OPN-09 | DAYLIGHT | N/A | N/A | FIRE SERVICE ROOM | | ONCE ANNUALLY | No | FIRE LINE DRAIN |
| 46 | 77 | 46-77-OPN-10 | DAYLIGHT | N/A | N/A | FIRE SERVICE ROOM | | ONCE ANNUALLY | No | FIRE LINE DRAIN |

REPORT #

65

| TA | BLDG | OUTLET PIPING NO | EPA OUTFALL # | DRAIN # | ROOM # | ROOM DESCRIPTION | FLOW RATE | PERIODICITY | SEASONAL | SOURCE TYPES |
|----|------|---------------------|------------------|---------|--------|------------------------|-----------|-------------------|----------|--------------------------------|
| 46 | 77 | 46-77-OPN-11 | NONE | N/A | N/A | FIRE SERVICE ROOM | | NO FLOW | No | NONE (ABANDONED) |
| 46 | 77 | 46-77-OPN-12 | DAYLIGHT | N/A | N/A | METAL FABRICATION SHOP | | FLOW IS NIL | No | WATER BFP DRAIN |
| 46 | 86 | 46-86-OPN-1 | DAYLIGHT | 1ED1 | N/A | ABAND. COOLING TOWER | | MOSTLY IN SUMMER | Yes | STORM WATER |
| 46 | 87 | 46-87-OPN-1 | NONE | N/A | N/A | STORAGE ROOM | | NO FLOW | No | NONE (ABANDONED) |
| 46 | 87 | 46-87-OPN-2 | DAYLIGHT | RD1 | N/A | ROOF | | MOSTLY IN SUMMER | Yes | STORM WATER |
| 46 | 87 | 46-87-OPN-2 | DAYLIGHT | RD2 | N/A | ROOF | | MOSTLY IN SUMMER | Yes | STORM WATER |
| 46 | 87 | 46-87-OPN-3 | NONE | N/A | N/A | SEWAGE HOLDING PIT | | NO FLOW | No | NONE (PLUGGED) |
| 46 | 87 | 46-87-OPN-4 | DAYLIGHT | N/A | N/A | ABAND CLG WTR SUMP PIT | | MOSTLY IN SUMMER | Yes | STORM WATER |
| 46 | 87 | 46-87-OPN-5 | DAYLIGHT | 1BFP1 | N/A | STORAGE ROOM | | FLOW IS NIL | No | WATER BFP DRAIN |
| 46 | 87 | 46-87-OPN-5 | DAYLIGHT | 1EW1 | N/A | STORAGE ROOM | | FLOW IS NIL | No | EMERGENCY EYE WASH |
| 46 | 87 | 46-87-OPN-6 | DAYLIGHT | N/A | N/A | STORAGE ROOM | | ONCE ANNUALLY | No | FIRE LINE DRAIN |
| 46 | 105 | TA-46-105 | ND | N/A | N/A | ELECTRICAL TRANSFORMER | | NO FLOW | No | NONE |
| 46 | 191 | 46-191-OPN-1 | DAYLIGHT | 1WH1 | 101 | RESTROOM | | FLOW IS NIL | No | WATER HTR PRESS. RELIEF VALVE |
| 46 | 191 | 46-191-OPN-2 | 13S/SWSC | 1LV1 | 101 | RESTROOM | | 5 DAYS PER WEEK | No | LAVATORY |
| 46 | 191 | 46-191-OPN-2 | 13S/SWSC | 1TL1 | 101 | RESTROOM | | 5 DAYS PER WEEK | No | TOILET |
| 46 | 191 | 46-191-OPN-3 | DAYLIGHT | N/A | EXTER. | ROOF | | 6 MONTHS PER YEAR | Yes | EVAPORATIVE COOLER WATER DRAIN |
| 46 | 254 | TA-46-254 | ND | N/A | N/A | OFFICE BUILDING | | NO FLOW | No | NONE |
| 46 | 264 | TA-46-264 | ND | N/A | N/A | SOLAR TEST CELL | | NO FLOW | No | NONE (SALVAGED) |
| 46 | 265 | TA-46-265 | ND | N/A | N/A | SOLAR TEST CELL | | NO FLOW | No | NONE (SALVAGED) |
| 46 | 266 | TA-46-266 | ND | N/A | N/A | SOLAR TEST CELL | | NO FLOW | No | NONE (SALVAGED) |
| 46 | 267 | TA-46-267 | ND | N/A | N/A | SOLAR TEST CELL | | NO FLOW | No | NONE (SALVAGED) |
| 46 | 268 | TA-46-268 | ND | N/A | N/A | SOLAR TEST CELL | | NO FLOW | No | NONE (SALVAGED) |
| 46 | 269 | TA-46-269 | ND | N/A | N/A | SOLAR TEST CELL | | NO FLOW | No | NONE |
| 46 | 270 | TA-46-270 | ND | N/A | N/A | SOLAR TEST CELL | | NO FLOW | No | NONE (SALVAGED) |
| 46 | 296 | TA-46-296 | ND | N/A | N/A | TRANSPORTAINER | | NO FLOW | No | NONE |
| 46 | 320 | TA-46-320 | ND | N/A | N/A | TRANSPORTAINER | | NO FLOW | No | NONE |
| 46 | 400 | TA-46-400 | ND | N/A | N/A | TRANSPORTAINER | | NO FLOW | No | NONE |

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

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

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

| Outfall Number | 1. Frequency | | 2. Flow | | |
|----------------|------------------------------------|--------------------------------------|-------------------------------------|--|-----------------------|
| | a. Days Per Week (specify average) | b. Months Per Year (specify average) | a. Maximum Daily Flow Rate (in mgd) | b. Maximum Total Volume (specify with units) | c. Duration (in days) |
| 46-16-OPN-1 | 5 | 12 | .00012 | 120 GPD | 260 |

IV. Production

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

| Year | a. Quantity Per Day | b. Units of Measure | c. Operation, Product, Material, etc (specify) |
|------|---------------------|---------------------|--|
| | | | N/A |
| | | | |
| | | | |

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

| 1. Pollutant | 2. Reason for Discharge |
|--------------|-------------------------|
| None | |

VI. Engineering Report on Wastewater Treatment

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

Report Available

No Report

Waste Stream Characterization Report #65

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

| Name | Location |
|------|----------|
| N/A | |

VII. Other Information (Optional)

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

See attached 04A datasheets and flow diagram. Discharge is consistent with potable water and hand washing activities.

VIII. Certification

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

| | |
|---|---|
| A. Name and Official Title (type or print) JERRY L. BELLOWES, AREA MANAGER, DOE ALLEN J. TIEDMAN, ASSOC. DIRECTOR FOR OPERATIONS | B. Phone No. 505-667-5105 505-667-9390 |
| C. Signature | D. Date Signed |

(4) SINKS = 120 GPD
(13) FLOOR DRAINS
(1) CUP DRAIN
(1) WATER HEATER



OUTFALL 46-16-OPN-1
TO CANADA DEL BUEY
120 GPD

OUTFALL 46-16-OPN-1 FLOW DIAGRAM

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

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

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.

V. INTAKE AND EFFLUENT CHARACTERISTICS (continued from page 3 of Form 2-C) OUTFALL NO. 04A

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

| 1. POLLUTANT | 2. EFFLUENT | | | | | | d. NO. OF ANALYSES | 3. UNITS (specify if blank) | | 4. INTAKE (optional) | | |
|------------------------------------|------------------------|--------------|--|----------|---|----------|--------------------|-----------------------------|---------|----------------------------|----------|--------------------|
| | a. MAXIMUM DAILY VALUE | | b. MAXIMUM 30 DAY VALUE (if available) | | c. LONG TERM AVRG. VALUE (if available) | | | a. CONCENTRATION | b. MASS | b. LONG TERM AVERAGE VALUE | | d. NO. OF ANALYSES |
| | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | | | | (1) CONCENTRATION | (2) MASS | |
| a. Biochemical Oxygen Demand (BOD) | < 2.0 | < 0.9 | | | | | | mg/l | g/d | | | |
| b. Chemical Oxygen Demand (COD) | < 10.0 | < 4.5 | | | | | | mg/l | g/d | | | |
| c. Total Organic Carbon (TOC) | 0.6 | 0.3 | | | | | | mg/l | g/d | | | |
| d. Total Suspended Solids (TSS) | 18.0 | 8.2 | | | | | | mg/l | g/d | | | |
| e. Ammonia (as N) | < 0.1 | < 45.420 | | | | | | mg/l | g/d | | | |
| f. Flow | VALUE 120 | | VALUE | | VALUE | | | gal/day | | VALUE | | |
| g. Temperature (winter) | VALUE 13.9 | | VALUE | | VALUE | | | °C | | VALUE | | |
| h. Temperature (summer) | VALUE N/A | | VALUE | | VALUE | | | °C | | VALUE | | |
| i. pH | MINIMUM 8.45 | MAXIMUM 8.80 | MINIMUM | MAXIMUM | X | | | STANDARD UNITS | | X | | |

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

| 1. POLLUTANT AND CAS NO. (if available) | 2. MARK 'X' | | 3. EFFLUENT | | | | | | d. NO. OF ANALYSES | 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) | | | a. CONCENTRATION | b. MASS | b. LONG TERM AVERAGE VALUE | | d. NO. OF ANALYSES |
| | | | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | | | | (1) CONCENTRATION | (2) MASS | |
| a. Bromide (24959-67-9) | | X | < 0.5 | < 0.2 | | | | | | mg/l | g/d | | | |
| b. Chlorine, Total Residual | X | | 0.05 | 0.0 | | | | | | mg/l | mg/d | | | |
| c. Color | X | | 7.0 | | | | | | | units | | | | |
| d. Fecal Coliform | | X | | | | | | | | | | | | |
| e. Fluoride (16984-48-8) | X | | 0.21 | 95.4 | | | | | | mg/l | g/d | | | |
| f. Nitrate-Nitrite (as N) | X | | 0.304 | 0.1 | | | | | | mg/l | g/d | | | |

| 1. POLLUTANT AND CAS NO. (if available) | 2. MARK 'X' | | 3. EFFLUENT | | | | | | 4. UNITS | | 5. INTAKE (optional) | | | |
|---|---------------------|--------------------|------------------------|----------|--|----------|--|----------|--------------------|------------------|----------------------|----------------------------|----------|--------------------|
| | a. RECEIVED PRESENT | b. RECEIVED ASSENT | a. MAXIMUM DAILY VALUE | | d. MAXIMUM 30 DAY VALUE (if available) | | c. LONG TERM AVG. VALUE (if available) | | d. NO. OF ANALYSES | a. CONCENTRATION | b. MASS | b. LONG TERM AVERAGE VALUE | | d. NO. OF ANALYSES |
| | | | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | | | | (1) CONCENTRATION | (2) MASS | |
| g. Nitrogen, Total Organic (as N) | | X | < 0.5 | < 0.2 | | | | | | mg/l | g/d | | | |
| h. Oil and Grease | | X | < 1.05 | < 0.5 | | | | | | mg/l | g/d | | | |
| i. Phosphorus (as P), Total (7723-14-0) | X | | 0.05 | 22.7 | | | | | | mg/l | mg/d | | | |
| j. Radioactivity | | | | | | | | | | | | | | |
| (1) Alpha, Total | X | | 0.1 | 45.4 | | | | | | pCi/l | pCi/d | | | |
| (2) Beta, Total | X | | 6.6 | 3.0 | | | | | | pCi/l | nCi/d | | | |
| (3) Radium, Total | X | | | | | | | | | | | | | |
| (4) Radium 226, Total | X | | 0.06 | 27.3 | | | | | | pCi/l | pCi/d | | | |
| k. Sulfate (as SO ₄) (14808-79-8) | X | | 3.16 | 1.4 | | | | | | mg/l | g/d | | | |
| l. Sulfide (as S) | | X | | 0.0 | | | | | | mg/l | mg/d | | | |
| m. Sulfite (as SO ₃) (14266-45-3) | | X | < 0.05 | < 22.7 | | | | | | mg/l | mg/d | | | |
| n. Surfactants | | X | < 0.1 | < 45.4 | | | | | | mg/l | mg/d | | | |
| o. Aluminum, Total (7429-90-6) | | X | < 0.04 | < 18.2 | | | | | | mg/l | mg/d | | | |
| p. Barium, Total (7440-39-3) | X | | 0.03 | 13.6 | | | | | | mg/l | mg/d | | | |
| q. Boron, Total (7440-42-8) | X | | 0.02 | 9.1 | | | | | | mg/l | mg/d | | | |
| r. Cobalt, Total (7440-48-4) | | X | < 0.1 | < 45.4 | | | | | | mg/l | mg/d | | | |
| s. Iron, Total (7439-89-6) | X | | 0.41 | 0.2 | | | | | | mg/l | g/d | | | |
| t. Magnesium, Total (7439-96-4) | X | | 2.5 | 1.1 | | | | | | mg/l | g/d | | | |
| u. Molybdenum, Total (7439-98-7) | | X | < 0.02 | < 9.1 | | | | | | mg/l | mg/d | | | |
| v. Manganese, Total (7439-96-5) | X | | 0.01 | 4.5 | | | | | | mg/l | mg/d | | | |
| w. Tin, Total (7440-31-5) | | X | < 0.050 | < 22.7 | | | | | | mg/l | mg/d | | | |
| x. Titanium, Total (7440-32-6) | | X | < 0.004 | < 1.8 | | | | | | mg/l | mg/d | | | |

NM0890010515

04A

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

CONTINUED FROM PAGE 3 OF FORM 2-C

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

| 1. POLLUTANT AND CAS NUMBER (if available) | 2. MARK 'X' | | | 3. EFFLUENT | | | | | | 4. UNITS | | 5. INTAKE (optional) | | |
|--|---------------------|---------------------|--------------------|------------------------|----------|--|----------|--|----------|--------------------|---------|----------------------------|----------|--------------------|
| | a. TESTING REQUIRED | b. BELIEVED PRESENT | c. BELIEVED ABSENT | a. MAXIMUM DAILY VALUE | | d. MAXIMUM 30 DAY VALUE (if available) | | c. LONG TERM AVG. VALUE (if available) | | d. NO. OF ANALYSES | b. MASS | a. LONG TERM AVERAGE VALUE | | b. NO. OF ANALYSES |
| | | | | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | | | (1) CONCENTRATION | (2) MASS | |
| METALS, CYANIDE, AND TOTAL PHENOLS | | | | | | | | | | | | | | |
| 1M. Antimony, Total (7440-36-0) | | | X | < 0.050 | < 22.7 | | | | | | mg/l | mg/d | | |
| 2M. Arsenic, Total (7440-38-2) | | X | | 0.002 | 0.9 | | | | | | mg/l | mg/d | | |
| 3M. Beryllium, Total, 7440-41-7) | | | X | < 0.001 | < 0.5 | | | | | | mg/l | mg/d | | |
| 4M. Cadmium, Total (7440-43-9) | | | X | < 0.010 | < 4.5 | | | | | | mg/l | mg/d | | |
| 5M. Chromium, Total (7440-47-3) | | X | | 0.040 | 18.2 | | | | | | mg/l | mg/d | | |
| 6M. Copper, Total (7440-50-8) | | X | | 0.031 | 14.1 | | | | | | mg/l | mg/d | | |
| 7M. Lead, Total (7439-92-1) | | | X | < 0.050 | < 22.7 | | | | | | mg/l | mg/d | | |
| 8M. Mercury, Total (7439-97-6) | | | X | < 0.0002 | < 0.1 | | | | | | mg/l | mg/d | | |
| 9M. Nickel, Total (7440-02-0) | | X | | 0.06 | 27.3 | | | | | | mg/l | mg/d | | |
| 10M. Selenium, Total (7782-49-2) | | | X | < 0.001 | < 0.5 | | | | | | mg/l | mg/d | | |
| 11M. Silver, Total (7440-22-4) | | | X | < 0.010 | < 4.5 | | | | | | mg/l | mg/d | | |
| 12M. Thallium, Total (7440-28-0) | | | X | < 0.4 | < 0.2 | | | | | | mg/l | g/d | | |
| 13M. Zinc, Total (7440-66-6) | | X | | 0.043 | 19.5 | | | | | | mg/l | mg/d | | |
| 14M. Cyanide, Total (57-12-5) | | | X | 0.01 | 4.5 | | | | | | mg/l | mg/d | | |
| 15M. Phenols, Total | | | X | < 0.01 | < 4.5 | | | | | | mg/l | mg/d | | |
| DIOXIN | | | | | | | | | | | | | | |
| 2,3,7,8-Tetra-chlorodibenzo-P-Dioxin (1764-01-6) | | | X | DESCRIBE RESULTS | | | | | | | | | | |

| 1. POLLUTANT AND CAS NUMBER (if available) | 2. MARK 'X' | | | 3. EFFLUENT | | | | 4. UNITS | | 5. INTAKE (optional) | | | | | |
|---|---------------------|---------------------|--------------------|------------------------|----------|--|----------|---|----------|----------------------|------------------|---------|----------------------------|----------|--------------------|
| | A. TESTING REQUIRED | B. BELIEVED PRESENT | C. BELIEVED ABSENT | B. MAXIMUM DAILY VALUE | | D. MAXIMUM 30 DAY VALUE (if available) | | C. LONG TERM AVRG. VALUE (if available) | | D. NO. OF ANALYSES | B. CONCENTRATION | b. MASS | A. LONG TERM AVERAGE VALUE | | D. NO. OF ANALYSES |
| | | | | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | | | | (1) CONCENTRATION | (2) MASS | |
| GC/MS FRACTION - VOLATILE COMPOUNDS | | | | | | | | | | | | | | | |
| 1V. Acrolein (107-02-8) | | | X | | | | | | | | | | | | |
| 2V. Acrylonitrile (107-13-1) | | | X | | | | | | | | | | | | |
| 3V. Benzene (71-43-2) | | | X | < 0.005 | < 2.3 | | | | | | mg/l | mg/d | | | |
| 4V. Bis (Chloromethyl) Ether (642-88-1) | | | X | | | | | | | | | | | | |
| 5V. Bromoform (75-25-2) | | | X | < 0.005 | < 2.3 | | | | | | mg/l | mg/d | | | |
| 6V. Carbon Tetrachloride (66-23-5) | | | X | < 0.005 | < 2.3 | | | | | | mg/l | mg/d | | | |
| 7V. Chlorobenzene (108-90-7) | | | X | < 0.005 | < 2.3 | | | | | | mg/l | mg/d | | | |
| 8V. Chlorodibromomethane (124-48-1) | | | X | < 0.005 | < 2.3 | | | | | | mg/l | mg/d | | | |
| 9V. Chloroethane (75-00-3) | | | X | < 0.010 | < 0.00 | | | | | | mg/l | mg/d | | | |
| 10V. 2-Chloroethylvinyl Ether (110-75-8) | | | X | | | | | | | | | | | | |
| 11V. Chloroform (67-66-3) | | | X | < 0.005 | < 2.3 | | | | | | mg/l | mg/d | | | |
| 12V. Dichlorobromomethane (75-27-4) | | | X | < 0.005 | < 2.3 | | | | | | mg/l | mg/d | | | |
| 13V. Dichlorodifluoromethane (75-71-8) | | | X | | | | | | | | | | | | |
| 14V. 1,1-Dichloroethane (75-34-3) | | | X | < 0.005 | < 2.3 | | | | | | mg/l | mg/d | | | |
| 15V. 1,2-Dichloroethane (107-06-2) | | | X | < 0.005 | < 2.3 | | | | | | mg/l | mg/d | | | |
| 16V. 1,1-Dichloroethylene (75-35-4) | | | X | < 0.005 | < 2.3 | | | | | | mg/l | mg/d | | | |
| 17V. 1,2-Dichloropropane (78-87-5) | | | X | < 0.005 | < 2.3 | | | | | | mg/l | kg/d | | | |
| 18V. 1,3-Dichloropropene (642-75-6) | | | X | < | < 0.0 | | | | | | mg/l | mg/d | | | |
| 19V. Ethylbenzene (100-41-4) | | | X | < 0.005 | < 2.3 | | | | | | mg/l | mg/d | | | |
| 20V. Methyl Bromide (74-83-9) | | | X | < 0.010 | < 4.5 | | | | | | mg/l | mg/d | | | |
| 21V. Methyl Chloride (74-87-3) | | | X | < 0.010 | < 4.5 | | | | | | 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. BEHAVIOR PRESENT | c. BEHAVIOR 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 | b. LONG TERM AVERAGE VALUE | | d. NO. OF ANALYSES |
| | | | | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | | | | (1) CONCENTRATION | (2) MASS | |
| GC/MS FRACTION - VOLATILE COMPOUNDS (continued) | | | | | | | | | | | | | | | |
| 22V. Methylene Chloride (75-09-2) | | | X | < 0.005 | < 2.3 | | | | | | mg/l | mg/d | | | |
| 23V. 1,1,2,2-Tetrachloroethane (79-34-5) | | | X | < 0.005 | < 2.3 | | | | | | mg/l | mg/d | | | |
| 24V. Tetrachloroethylene (127-18-4) | | | X | < 0.005 | < 2.3 | | | | | | mg/l | mg/d | | | |
| 25V. Toluene (108-88-3) | | | X | < 0.005 | < 2.3 | | | | | | mg/l | mg/d | | | |
| 26V. 1,2-Trans-Dichloroethylene (156-60-5) | | | X | < 0.005 | < 2.3 | | | | | | mg/l | mg/d | | | |
| 27V. 1,1,1-Trichloroethane (71-55-6) | | | X | < 0.005 | < 2.3 | | | | | | mg/l | mg/d | | | |
| 28V. 1,1,2-Trichloroethane (79-00-5) | | | X | < 0.005 | < 2.3 | | | | | | mg/l | mg/d | | | |
| 29V. Trichloroethylene (79-01-6) | | | X | < 0.005 | < 2.3 | | | | | | mg/l | mg/d | | | |
| 30V. Trichlorofluoromethane (75-69-4) | | | X | < 0.005 | < 2.3 | | | | | | mg/l | mg/d | | | |
| 31V. Vinyl Chloride (75-01-4) | | | X | < 0.010 | < 4.5 | | | | | | mg/l | mg/d | | | |
| GC/MS FRACTION - ACID COMPOUNDS | | | | | | | | | | | | | | | |
| 1A. 2-Chlorophenol (95-57-8) | | | X | < 0.010 | < 4.5 | | | | | | mg/l | mg/d | | | |
| 2A. 2,4-Dichlorophenol (120-83-2) | | | X | < 0.010 | < 4.5 | | | | | | mg/l | mg/d | | | |
| 3A. 2,4-Dimethylphenol (105-67-9) | | | X | < 0.010 | < 4.5 | | | | | | mg/l | mg/d | | | |
| 4A. 4,6-Dinitro-O-Cresol (534-52-1) | | | X | < 0.010 | < 4.5 | | | | | | mg/l | mg/d | | | |
| 5A. 2,4-Dinitrophenol (51-28-5) | | | X | < 0.010 | < 4.5 | | | | | | mg/l | mg/d | | | |
| 6A. 2-Nitrophenol (88-75-5) | | | X | < 0.010 | < 4.5 | | | | | | mg/l | mg/d | | | |
| 7A. 4-Nitrophenol (100-02-7) | | | X | < 0.010 | < 4.5 | | | | | | mg/l | mg/d | | | |
| 8A. P-Chloro-M-Cresol (59-50-7) | | | X | < 0.010 | < 4.5 | | | | | | mg/l | mg/d | | | |
| 9A. Pentachlorophenol (87-86-5) | | | X | < 0.010 | < 4.5 | | | | | | mg/l | mg/d | | | |
| 10A. Phenol (108-95-2) | | | X | < 0.010 | < 4.5 | | | | | | mg/l | mg/d | | | |
| 11A. 2,4,6-Trichlorophenol (88-06-2) | | | X | < 0.010 | < 4.5 | | | | | | 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 | 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 | e. LONG TERM AVERAGE VALUE | | b. NO. OF ANALYSES |
| | | | | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | | | | (1) CONCENTRATION | (1) MASS | |
| GC/MS FRACTION - BASE/NEUTRAL COMPOUNDS | | | | | | | | | | | | | | | |
| 1B. Acenaphthene (83-32-9) | | | X | < 0.010 | < 4.5 | | | | | | mg/l | mg/d | | | |
| 2B. Acenaphthylene (208-96-8) | | | X | < 0.010 | < 4.5 | | | | | | mg/l | mg/d | | | |
| 3B. Anthracene (120-12-7) | | | X | < 0.010 | < 4.5 | | | | | | mg/l | mg/d | | | |
| 4B. Benzidine (92-87-5) | | | X | < 0.010 | < 4.5 | | | | | | mg/l | mg/d | | | |
| 5B. Benzo (a) Anthracene (56-56-3) | | | X | < 0.010 | < 4.5 | | | | | | mg/l | mg/d | | | |
| 6B. Benzo (a) Pyrene (50-32-8) | | | X | < 0.010 | < 4.5 | | | | | | mg/l | mg/d | | | |
| 7B. 3,4-Benzo-fluoranthene (205-99-2) | | | X | < 0.010 | < 4.5 | | | | | | mg/l | mg/d | | | |
| 8B. Benzo (ghi) Perylene (191-24-2) | | | X | < 0.010 | < 4.5 | | | | | | mg/l | mg/d | | | |
| 9B. Benzo (h) Fluoranthene (207-08-9) | | | X | < 0.010 | < 4.5 | | | | | | mg/l | mg/d | | | |
| 10B. Bis (2-Chloroethoxy) Methane (111-91-1) | | | X | < 0.010 | < 4.5 | | | | | | mg/l | mg/d | | | |
| 11B. Bis (2-Chloroethyl) Ether (111-44-4) | | | X | < 0.010 | < 4.5 | | | | | | mg/l | mg/d | | | |
| 12B. Bis (2-Chloroisopropyl) Ether (102-60-1) | | | X | < 0.010 | < 4.5 | | | | | | mg/l | mg/d | | | |
| 13B. Bis (2-Ethylhexyl) Phthalate (117-81-7) | | | X | < 0.010 | < 4.5 | | | | | | mg/l | mg/d | | | |
| 14B. 4-Bromophenyl Phenyl Ether (101-55-3) | | | X | < 0.010 | < 4.5 | | | | | | mg/l | mg/d | | | |
| 15B. Butyl Benzyl Phthalate (85-68-7) | | | X | < 0.010 | < 4.5 | | | | | | mg/l | mg/d | | | |
| 16B. 2-Chloronaphthalene (91-58-7) | | | X | < 0.010 | < 4.5 | | | | | | mg/l | mg/d | | | |
| 17B. 4-Chlorophenyl Phenyl Ether (7005-72-3) | | | X | < 0.010 | < 4.5 | | | | | | mg/l | mg/d | | | |
| 18B. Chrysene (218-01-9) | | | X | < 0.010 | < 4.5 | | | | | | mg/l | mg/d | | | |
| 19B. Dibenzo (a,h) Anthracene (53-70-3) | | | X | < 0.010 | < 4.5 | | | | | | mg/l | mg/d | | | |
| 20B. 1,2-Dichlorobenzene (95-50-1) | | | X | < 0.010 | < 4.5 | | | | | | mg/l | mg/d | | | |
| 21B. 1,3-Dichlorobenzene (541-73-1) | | | X | < 0.010 | < 4.5 | | | | | | mg/l | mg/d | | | |

CONTINUED FROM PAGE V-6

| 1. POLLUTANT AND CAS NUMBER (if available) | 2. MARK 'X' | | | 3. EFFLUENT | | | | | | 4. UNITS | | 5. INTAKE (optional) | | | |
|--|------------------|---------------------|--------------------|------------------------|----------|--|----------|--|----------|--------------------|------------------|----------------------|----------------------------|----------|--------------------|
| | TESTING REQUIRED | D. BELIEVED PRESENT | C. BELIEVED ABSENT | B. MAXIMUM DAILY VALUE | | D. MAXIMUM 30 DAY VALUE (if available) | | C. LONG TERM AVG. VALUE (if available) | | D. NO. OF ANALYSES | B. CONCENTRATION | D. MASS | E. LONG TERM AVERAGE VALUE | | D. NO. OF ANALYSES |
| | | | | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | | | | (1) CONCENTRATION | (2) MASS | |
| GC/MS FRACTION - BASE/NEUTRAL COMPOUNDS (continued) | | | | | | | | | | | | | | | |
| 22B. 1,4-Dichlorobenzene (106-46-7) | | | X | < 0.010 | < 4.5 | | | | | | mg/l | mg/d | | | |
| 23B. 3,3'-Dichlorobenzidine (91-94-1) | | | X | < 0.010 | < 4.5 | | | | | | mg/l | mg/d | | | |
| 24B. Diethyl Phthalate (84-66-2) | | | X | < 0.010 | < 4.5 | | | | | | mg/l | mg/d | | | |
| 25B. Dimethyl Phthalate (131-11-3) | | | X | < 0.010 | < 4.5 | | | | | | mg/l | mg/d | | | |
| 26B. Di-N-Butyl Phthalate (84-74-2) | | | X | < 0.010 | < 4.5 | | | | | | mg/l | mg/d | | | |
| 27B. 2,4-Dinitrotoluene (121-14-2) | | | X | < 0.010 | < 4.5 | | | | | | mg/l | mg/d | | | |
| 28B. 2,6-Dinitrotoluene (606-20-2) | | | X | < 0.010 | < 4.5 | | | | | | mg/l | mg/d | | | |
| 29B. Di-N-Octyl Phthalate (117-84-0) | | | X | < 0.010 | < 4.5 | | | | | | mg/l | mg/d | | | |
| 30B. 1,2-Diphenylhydrazine (as Azobenzene) (122-66-7) | | | X | < 0.010 | < 4.5 | | | | | | mg/l | mg/d | | | |
| 31B. Fluorethane (206-44-0) | | | X | < 0.010 | < 4.5 | | | | | | mg/l | mg/d | | | |
| 32B. Fluorene (86-73-7) | | | X | < 0.010 | < 4.5 | | | | | | mg/l | mg/d | | | |
| 33B. Hexachlorobenzene (118-74-1) | | | X | < 0.010 | < 4.5 | | | | | | mg/l | mg/d | | | |
| 34B. Hexachlorobutadiene (87-68-3) | | | X | < 0.010 | < 4.5 | | | | | | mg/l | mg/d | | | |
| 35B. Hexachlorocyclopentadiene (77-47-4) | | | X | < 0.010 | < 4.5 | | | | | | mg/l | mg/d | | | |
| 36B. Hexachloroethane (67-72-1) | | | X | < 0.010 | < 4.5 | | | | | | mg/l | mg/d | | | |
| 37B. Indeno (1,2,3-cd) Pyrene (193-39-5) | | | X | < 0.010 | < 4.5 | | | | | | mg/l | mg/d | | | |
| 38B. Isophorone (78-59-1) | | | X | < 0.010 | < 4.5 | | | | | | mg/l | mg/d | | | |
| 39B. Naphthalene (91-20-3) | | | X | < 0.010 | < 4.5 | | | | | | mg/l | mg/d | | | |
| 40B. Nitrobenzene (98-95-3) | | | X | < 0.010 | < 4.5 | | | | | | mg/l | mg/d | | | |
| 41B. N-Nitrosodimethylamine (62-75-9) | | | X | < 0.010 | < 4.5 | | | | | | mg/l | mg/d | | | |
| 42B. N-Nitrosodi-N-Propylamine (621-64-7) | | | X | < 0.010 | < 4.5 | | | | | | 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 ASSENT | a. MAXIMUM DAILY VALUE | | b. MAXIMUM 30 DAY VALUE (if available) | | c. LONG TERM AVG. VALUE (if available) | | d. NO. OF ANALYSES | a. CONCENTRATION | b. MASS | A. LONG TERM AVERAGE VALUE | | b. NO. OF ANALYSES |
| | | | | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | | | | (1) CONCENTRATION | (2) MASS | |
| GC/MS FRACTION - BASE/NEUTRAL COMPOUNDS (continued) | | | | | | | | | | | | | | | |
| 43B. N-Nitrosodiphenylamine (86-30-6) | | | X | < 0.010 | < 4.5 | | | | | | mg/l | mg/d | | | |
| 44B. Phenanthrene (85-01-8) | | | X | < 0.010 | < 4.5 | | | | | | mg/l | mg/d | | | |
| 45B. Pyrene (129-00-0) | | | X | < 0.010 | < 4.5 | | | | | | mg/l | mg/d | | | |
| 46B. 1,2,4-Trichlorobenzene (120-82-1) | | | X | < 0.010 | < 4.5 | | | | | | mg/l | mg/d | | | |
| GC/MS FRACTION - PESTICIDES | | | | | | | | | | | | | | | |
| 1P. Aldrin (309-00-2) | | | X | < 0.06 | < 27.3 | | | | | | ug/l | ug/d | | | |
| 2P. α-BHC (319-84-6) | | | X | < 0.02 | < 9.1 | | | | | | ug/l | ug/d | | | |
| 3P. β-BHC (319-85-7) | | | X | < 0.1 | < 45.4 | | | | | | ug/l | ug/d | | | |
| 4P. γ-BHC (58-89-9) | | | X | < 0.03 | < 13.6 | | | | | | ug/l | ug/d | | | |
| 5P. δ-BHC (319-86-8) | | | X | < 0.12 | < 54.5 | | | | | | ug/l | ug/d | | | |
| 6P. Chlordane (57-74-9) | | | X | < 0.25 | < 0.1 | | | | | | ug/l | ug/d | | | |
| 7P. 4,4'-DDT (50-29-3) | | | X | < 0.06 | < 27.3 | | | | | | ug/l | ug/d | | | |
| 8P. 4,4'-DDE (72-65-9) | | | X | < 0.08 | < 36.3 | | | | | | ug/l | ug/d | | | |
| 9P. 4,4'-DDD (72-54-8) | | | X | < 0.08 | < 36.3 | | | | | | ug/l | ug/d | | | |
| 10P. Dieldrin (60-57-1) | | | X | < 0.08 | < 36.3 | | | | | | ug/l | ug/d | | | |
| 11P. α-Endosulfan (115-29-7) | | | X | < 0.05 | < 22.7 | | | | | | ug/l | ug/d | | | |
| 12P. β-Endosulfan (115-29-7) | | | X | < 0.08 | < 36.3 | | | | | | ug/l | ug/d | | | |
| 13P. Endosulfan Sulfate (1031-07-8) | | | X | < 0.09 | < 40.9 | | | | | | ug/l | ug/d | | | |
| 14P. Endrin (72-20-8) | | | X | < 0.06 | < 27.3 | | | | | | ug/l | ug/d | | | |
| 15P. Endrin Aldehyde (7421-93-4) | | | X | < 0.62 | < 0.3 | | | | | | ug/l | ug/d | | | |
| 16P. Heptachlor (76-44-8) | | | X | < 0.3 | < 0.1 | | | | | | 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 | |
| GC/MS FRACTION - PESTICIDES (continued) | | | | | | | | | | | | | | | |
| 17P. Heptachlor Epoxide (1024-57-3) | | | X | < 0.04 | < 18.2 | | | | | | | ug/l | ug/d | | |
| 18P. PCB-1242 (53469-21-9) | | | X | < 0.68 | < 0.3 | | | | | | | ug/l | ug/d | | |
| 19P. PCB-1254 (11097-69-1) | | | X | < 0.68 | < 0.3 | | | | | | | ug/l | ug/d | | |
| 20P. PCB-1221 (11104-28-2) | | | X | N.D. | | | | | | | | | | | |
| 21P. PCB-1232 (11141-16-5) | | | X | N.D. | | | | | | | | | | | |
| 22P. PCB-1248 (12672-29-6) | | | X | N.D. | | | | | | | | | | | |
| 23P. PCB-1260 (11098-82-5) | | | X | < 0.68 | < 0.3 | | | | | | | ug/l | ug/d | | |
| 24P. PCB-1016 (12674-11-2) | | | X | N.D. | | | | | | | | | | | |
| 25P. Toxaphene (8001-35-2) | | | X | < 2.5 | < 1.1 | | | | | | | ug/l | mg/d | | |

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

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

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

| Outfall Number | 1. Frequency | | 2. Flow | | |
|----------------|------------------------------------|--------------------------------------|-------------------------------------|--|-----------------------|
| | a. Days Per Week (specify average) | b. Months Per Year (specify average) | a. Maximum Daily Flow Rate (in mgd) | b. Maximum Total Volume (specify with units) | c. Duration (in days) |
| 46-58-OPN-3 | 5 | 12 | .00002 | 20 GPD | 260 |

IV. Production

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

| Year | a. Quantity Per Day | b. Units of Measure | c. Operation, Product, Material, etc (specify) |
|------|---------------------|---------------------|--|
| | | | N/A |
| | | | |
| | | | |

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

| 1. Pollutant | 2. Reason for Discharge |
|--------------|-------------------------|
| None | |

VI. Engineering Report on Wastewater Treatment

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

Report Available No Report

Waste Stream Characterization Report #65

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

| Name | Location |
|------|----------|
| N/A | |

VII. Other Information (Optional)

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

See attached 04A datasheets and flow diagram. Discharge is consistent with potable water and hand washing activities.

VIII. Certification

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

| | |
|--|---|
| A. Name and Official Title (type or print) JERRY L. BELLOWS, AREA MANAGER, DOE ALLEN J. TIEDMAN, ASSOC. DIRECTOR FOR OPERATIONS | B. Phone No. 505-667-5105 505-667-9390 |
| C. Signature | D. Date Signed |

(1) SINK = 20 GPD
(1) FUME HOOD SINK



OUTFALL 46-58-OPN-3
TO WASTE SEEPAGE PITS(2)
20 GPD

OUTFALL 46-58-OPN-3 FLOW DIAGRAM

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

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

NM0890010515

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

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

OUTFALL NO.
04A

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

| 1. POLLUTANT | 2. EFFLUENT | | | | | | 3. UNITS (specify if blank) | | 4. INTAKE (optional) | | | |
|------------------------------------|------------------------|-----------------|--|----------|--|----------|-----------------------------|------------------|----------------------|----------------------------|----------|--------------------|
| | a. MAXIMUM DAILY VALUE | | b. MAXIMUM 30 DAY VALUE (if available) | | c. LONG TERM AVG. VALUE (if available) | | d. NO. OF ANALYSES | a. CONCENTRATION | b. MASS | a. LONG TERM AVERAGE VALUE | | b. NO. OF ANALYSES |
| | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | | | | (1) CONCENTRATION | (2) MASS | |
| a. Biochemical Oxygen Demand (BOD) | < 2.0 | < 0.2 | | | | | | mg/l | g/d | | | |
| b. Chemical Oxygen Demand (COD) | < 10.0 | < 0.8 | | | | | | mg/l | g/d | | | |
| c. Total Organic Carbon (TOC) | 0.6 | 44.7 | | | | | | mg/l | g/d | | | |
| d. Total Suspended Solids (TSS) | 18.0 | 1.4 | | | | | | mg/l | g/d | | | |
| e. Ammonia (as N) | < 0.1 | < 7.570 | | | | | | mg/l | g/d | | | |
| f. Flow | VALUE 20 | | VALUE | | VALUE | | | gal/day | | VALUE | | |
| g. Temperature (winter) | VALUE 13.9 | | VALUE | | VALUE | | | °C | | VALUE | | |
| h. Temperature (summer) | VALUE N/A | | VALUE | | VALUE | | | °C | | VALUE | | |
| i. pH | MINIMUM 8.45 | MAXIMUM 8.80 | MINIMUM | MAXIMUM | X | | | STANDARD UNITS | | X | | |

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

| 1. POLLUTANT AND CAS NO. (if available) | 2. MARK 'X' | | 3. EFFLUENT | | | | | | 4. UNITS | | 5. INTAKE (optional) | | | |
|---|---------------------|--------------------|------------------------|----------|--|----------|--|----------|--------------------|------------------|----------------------|----------------------------|----------|--------------------|
| | a. BELIEVED PRESENT | b. BELIEVED ABSENT | a. MAXIMUM DAILY VALUE | | b. MAXIMUM 30 DAY VALUE (if available) | | c. LONG TERM AVG. VALUE (if available) | | d. NO. OF ANALYSES | a. CONCENTRATION | b. MASS | a. LONG TERM AVERAGE VALUE | | b. NO. OF ANALYSES |
| | | | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | | | | (1) CONCENTRATION | (2) MASS | |
| a. Bromide (24959-67-9) | | X | < 0.5 | < 37.9 | | | | | | mg/l | g/d | | | |
| b. Chlorine, Total Residual | X | | 0.05 | 0.0 | | | | | | mg/l | mg/d | | | |
| c. Color | X | | 7.0 | | | | | | | units | | | | |
| d. Fecal Coliform | | X | | | | | | | | | | | | |
| e. Fluoride (16984-48-8) | X | | 0.21 | 15.9 | | | | | | mg/l | g/d | | | |
| f. Nitrate-Nitrite (as N) | X | | 0.304 | 23.0 | | | | | | mg/l | g/d | | | |

| I. POLLUTANT AND CAS NO. (if available) | 2. MARK 'X' | | 3. EFFLUENT | | | | | | 4. UNITS | | 5. INTAKE (optional) | | | |
|---|----------------------------------|---------------------------------|------------------------|----------|---|----------|---|----------|----------------------------|------------------|----------------------|-------------------------------|----------|----------------------------|
| | a. SE- LIEVED PRE- SENT | b. SE- LIEVED AS- SENT | a. MAXIMUM DAILY VALUE | | b. MAXIMUM 30 DAY VALUE (if available) | | c. LONG TERM AVG. VALUE (if available) | | d. NO. OF ANAL- YSES | e. CONCENTRATION | f. MASS | g. LONG TERM AVERAGE VALUE | | h. NO. OF ANAL- YSES |
| | | | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | | | | (1) CONCENTRATION | (2) MASS | |
| g. Nitrogen, Total Organic (as N) | | X | < 0.5 | < 37.9 | | | | | | mg/l | mg/d | | | |
| h. Oil and Grease | | X | < 1.05 | < 79.5 | | | | | | mg/l | mg/d | | | |
| i. Phosphorus (as P), Total (7723-14-0) | X | | 0.05 | 3.8 | | | | | | mg/l | mg/d | | | |
| j. Radioactivity | | | | | | | | | | | | | | |
| (1) Alpha, Total | X | | 0.1 | 7.6 | | | | | | pCi/l | pCi/d | | | |
| (2) Beta, Total | X | | 6.6 | 0.5 | | | | | | pCi/l | nCi/d | | | |
| (3) Radium, Total | X | | | | | | | | | | | | | |
| (4) Radium 226, Total | X | | 0.06 | 4.5 | | | | | | pCi/l | pCi/d | | | |
| k. Sulfate (as SO ₄) (14806-79-8) | X | | 3.16 | 0.2 | | | | | | mg/l | g/d | | | |
| l. Sulfide (as S) | | X | | 0.0 | | | | | | mg/l | mg/d | | | |
| m. Sulfite (as SO ₃) (14266-45-3) | | X | < 0.05 | < 3.8 | | | | | | mg/l | mg/d | | | |
| n. Surfactants | | X | < 0.1 | < 7.6 | | | | | | mg/l | mg/d | | | |
| o. Aluminum, Total (7429-90-6) | | X | < 0.04 | < 3.0 | | | | | | mg/l | mg/d | | | |
| p. Barium, Total (7440-39-3) | X | | 0.03 | 2.3 | | | | | | mg/l | mg/d | | | |
| q. Boron, Total (7440-42-8) | X | | 0.02 | 1.5 | | | | | | mg/l | mg/d | | | |
| r. Cobalt, Total (7440-48-4) | | X | < 0.1 | < 7.6 | | | | | | mg/l | mg/d | | | |
| s. Iron, Total (7439-89-6) | X | | 0.41 | 31.0 | | | | | | mg/l | mg/d | | | |
| t. Magnesium, Total (7439-96-4) | X | | 2.5 | 0.2 | | | | | | mg/l | g/d | | | |
| u. Molybdenum, Total (7439-98-7) | | X | < 0.02 | < 1.5 | | | | | | mg/l | mg/d | | | |
| v. Manganese, Total (7439-96-5) | X | | 0.01 | 0.8 | | | | | | mg/l | mg/d | | | |
| w. Tin, Total (7440-31-5) | | X | < 0.050 | < 3.8 | | | | | | mg/l | mg/d | | | |
| x. Titanium, Total (7440-32-8) | | X | < 0.004 | < 0.3 | | | | | | mg/l | mg/d | | | |

NM0890010515

04A

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

CONTINUED FROM PAGE 3 OF FORM 2-C

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

| 1. POLLUTANT AND CAS NUMBER (if available) | 2. MARK 'X' | | | 3. EFFLUENT | | | | | | 4. UNITS | | 5. INTAKE (optional) | | | |
|---|---------------------|---------------------|--------------------|------------------------|----------|--|----------|--|----------|--------------------|------------------|----------------------|----------------------------|----------|--------------------|
| | A. TESTING REQUIRED | B. BELIEVED PRESENT | C. BELIEVED ABSENT | a. MAXIMUM DAILY VALUE | | b. MAXIMUM 30 DAY VALUE (if available) | | c. LONG TERM AVG. VALUE (if available) | | d. NO. OF ANALYSES | B. CONCENTRATION | b. MASS | a. LONG TERM AVERAGE VALUE | | b. NO. OF ANALYSES |
| | | | | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | | | | (1) CONCENTRATION | (2) MASS | |
| METALS, CYANIDE, AND TOTAL PHENOLS | | | | | | | | | | | | | | | |
| 1M. Antimony, Total (7440-36-0) | | | X | < 0.050 | < 3.8 | | | | | | mg/l | mg/d | | | |
| 2M. Arsenic, Total (7440-38-2) | | X | | 0.002 | 0.2 | | | | | | mg/l | mg/d | | | |
| 3M. Beryllium, Total (7440-41-7) | | | X | < 0.001 | < 0.1 | | | | | | mg/l | mg/d | | | |
| 4M. Cadmium, Total (7440-43-9) | | | X | < 0.010 | < 0.8 | | | | | | mg/l | mg/d | | | |
| 5M. Chromium, Total (7440-47-3) | | X | | 0.040 | 3.0 | | | | | | mg/l | mg/d | | | |
| 6M. Copper, Total (7440-50-8) | | X | | 0.031 | 2.3 | | | | | | mg/l | mg/d | | | |
| 7M. Lead, Total (7439-92-1) | | | X | < 0.050 | < 3.8 | | | | | | mg/l | mg/d | | | |
| 8M. Mercury, Total (7439-97-6) | | | X | < 0.0002 | < 0.0 | | | | | | mg/l | mg/d | | | |
| 9M. Nickel, Total (7440-02-0) | | X | | 0.06 | 4.5 | | | | | | mg/l | mg/d | | | |
| 10M. Selenium, Total (7782-49-2) | | | X | < 0.001 | < 0.1 | | | | | | mg/l | mg/d | | | |
| 11M. Silver, Total (7440-22-4) | | | X | < 0.010 | < 0.8 | | | | | | mg/l | mg/d | | | |
| 12M. Thallium, Total (7440-28-0) | | | X | < 0.4 | < 30.3 | | | | | | mg/l | mg/d | | | |
| 13M. Zinc, Total (7440-66-6) | | X | | 0.043 | 3.3 | | | | | | mg/l | mg/d | | | |
| 14M. Cyanide, Total (57-12-5) | | | X | 0.01 | 0.8 | | | | | | mg/l | mg/d | | | |
| 15M. Phenols, Total | | | X | < 0.01 | < 0.8 | | | | | | mg/l | mg/d | | | |
| DIOXIN | | | | | | | | | | | | | | | |
| 2,3,7,8-Tetrachlorodibenzo-P-Dioxin (1764-01-6) | | | X | DESCRIBE RESULTS | | | | | | | | | | | |

| 1. POLLUTANT AND CAS NUMBER (if available) | 2. MARK 'X' | | | 3. EFFLUENT | | | | | | 4. UNITS | | 5. INTAKE (optional) | | | |
|---|---------------------|---------------------|--------------------|------------------------|----------|---|----------|---|----------|--------------------|------------------|----------------------|----------------------------|----------|--------------------|
| | a. TESTING REQUIRED | b. BELIEVED PRESENT | c. BELIEVED ABSENT | a. MAXIMUM DAILY VALUE | | b. MAXIMUM 30 DAY VALUE (if available) | | c. LONG TERM AVG. VALUE (if available) | | d. NO. OF ANALYSES | e. CONCENTRATION | f. MASS | g. LONG TERM AVERAGE VALUE | | h. NO. OF ANALYSES |
| | | | | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | | | | (1) CONCENTRATION | (2) MASS | |
| GC/MS FRACTION - VOLATILE COMPOUNDS | | | | | | | | | | | | | | | |
| 1V. Acrolein (107-02-8) | | | X | | | | | | | | | | | | |
| 2V. Acrylonitrile (107-13-1) | | | X | | | | | | | | | | | | |
| 3V. Benzene (71-43-2) | | | X | < 0.005 | < 0.4 | | | | | | mg/l | mg/d | | | |
| 4V. Bis (Chloromethyl) Ether (642-88-1) | | | X | | | | | | | | | | | | |
| 5V. Bromoform (75-25-2) | | | X | < 0.005 | < 0.4 | | | | | | mg/l | mg/d | | | |
| 6V. Carbon Tetrachloride (66-23-5) | | | X | < 0.005 | < 0.4 | | | | | | mg/l | mg/d | | | |
| 7V. Chlorobenzene (108-90-7) | | | X | < 0.005 | < 0.4 | | | | | | mg/l | mg/d | | | |
| 8V. Chlorodibromomethane (124-48-1) | | | X | < 0.005 | < 0.4 | | | | | | mg/l | mg/d | | | |
| 9V. Chloroethane (75-00-3) | | | X | < 0.010 | < 0.000 | | | | | | mg/l | mg/d | | | |
| 10V. 2-Chloroethylvinyl Ether (110-75-3) | | | X | | | | | | | | | | | | |
| 11V. Chloroform (67-66-3) | | | X | < 0.005 | < 0.4 | | | | | | mg/l | mg/d | | | |
| 12V. Dichlorobromomethane (75-27-4) | | | X | < 0.005 | < 0.4 | | | | | | mg/l | mg/d | | | |
| 13V. Dichlorodifluoromethane (75-71-8) | | | X | | | | | | | | | | | | |
| 14V. 1,1-Dichloroethane (75-34-3) | | | X | < 0.005 | < 0.4 | | | | | | mg/l | mg/d | | | |
| 15V. 1,2-Dichloroethane (107-06-2) | | | X | < 0.005 | < 0.4 | | | | | | mg/l | mg/d | | | |
| 16V. 1,1-Dichloroethylene (75-35-4) | | | X | < 0.005 | < 0.4 | | | | | | mg/l | mg/d | | | |
| 17V. 1,2-Dichloropropane (78-87-5) | | | X | < 0.005 | < 0.4 | | | | | | mg/l | kg/d | | | |
| 18V. 1,3-Dichloropropane (542-75-6) | | | X | < | < 0.0 | | | | | | mg/l | mg/d | | | |
| 19V. Ethylbenzene (100-41-4) | | | X | < 0.005 | < 0.4 | | | | | | mg/l | mg/d | | | |
| 20V. Methyl Bromide (74-83-9) | | | X | < 0.010 | < 0.8 | | | | | | mg/l | mg/d | | | |
| 21V. Methyl Chloride (74-87-3) | | | X | < 0.010 | < 0.8 | | | | | | mg/l | mg/d | | | |

| 1. POLLUTANT AND CAS NUMBER (if available) | 2. MARK 'X' | | | 3. EFFLUENT | | | | | | 4. UNITS | | 5. INTAKE (optional) | | | |
|--|---------------------|---------------------|--------------------|------------------------|----------|--|----------|--|----------|--------------------|------------------|----------------------|----------------------------|----------|--------------------|
| | B. TESTING REQUIRED | D. BELIEVED PRESENT | C. BELIEVED ABSENT | 8. MAXIMUM DAILY VALUE | | D. MAXIMUM 30 DAY VALUE (if available) | | G. LONG TERM AVG. VALUE (if available) | | I. NO. OF ANALYSES | 3. CONCENTRATION | D. MASS | 8. LONG TERM AVERAGE VALUE | | D. NO. OF ANALYSES |
| | | | | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | | | | (1) CONCENTRATION | (2) MASS | |
| GC/MS FRACTION - VOLATILE COMPOUNDS (continued) | | | | | | | | | | | | | | | |
| 22V. Methylene Chloride (75-09-2) | | | X | < 0.005 | < 0.4 | | | | | | mg/l | mg/d | | | |
| 23V. 1,1,2,2-Tetrachloroethane (79-34-5) | | | X | < 0.005 | < 0.4 | | | | | | mg/l | mg/d | | | |
| 24V. Tetrachloroethylene (127-18-4) | | | X | < 0.005 | < 0.4 | | | | | | mg/l | mg/d | | | |
| 25V. Toluene (108-88-3) | | | X | < 0.005 | < 0.4 | | | | | | mg/l | mg/d | | | |
| 26V. 1,2-Trans-Dichloroethylene (156-60-5) | | | X | < 0.005 | < 0.4 | | | | | | mg/l | mg/d | | | |
| 27V. 1,1,1-Trichloroethane (71-55-6) | | | X | < 0.005 | < 0.4 | | | | | | mg/l | mg/d | | | |
| 28V. 1,1,2-Trichloroethane (79-00-5) | | | X | < 0.005 | < 0.4 | | | | | | mg/l | mg/d | | | |
| 29V. Trichloroethylene (79-01-6) | | | X | < 0.005 | < 0.4 | | | | | | mg/l | mg/d | | | |
| 30V. Trichlorofluoromethane (76-69-4) | | | X | < 0.005 | < 0.4 | | | | | | mg/l | mg/d | | | |
| 31V. Vinyl Chloride (75-01-4) | | | X | < 0.010 | < 0.8 | | | | | | mg/l | mg/d | | | |
| GC/MS FRACTION - ACID COMPOUNDS | | | | | | | | | | | | | | | |
| 1A. 2-Chlorophenol (95-57-8) | | | X | < 0.010 | < 0.8 | | | | | | mg/l | mg/d | | | |
| 2A. 2,4-Dichlorophenol (120-83-2) | | | X | < 0.010 | < 0.8 | | | | | | mg/l | mg/d | | | |
| 3A. 2,4-Dimethylphenol (105-67-9) | | | X | < 0.010 | < 0.8 | | | | | | mg/l | mg/d | | | |
| 4A. 4,6-Dinitro-O-Cresol (534-52-1) | | | X | < 0.010 | < 0.8 | | | | | | mg/l | mg/d | | | |
| 5A. 2,4-Dinitrophenol (51-28-5) | | | X | < 0.010 | < 0.8 | | | | | | mg/l | mg/d | | | |
| 6A. 2-Nitrophenol (88-75-5) | | | X | < 0.010 | < 0.8 | | | | | | mg/l | mg/d | | | |
| 7A. 4-Nitrophenol (100-02-7) | | | X | < 0.010 | < 0.8 | | | | | | mg/l | mg/d | | | |
| 8A. P-Chloro-M-Cresol (59-50-7) | | | X | < 0.010 | < 0.8 | | | | | | mg/l | mg/d | | | |
| 9A. Pentachlorophenol (87-86-5) | | | X | < 0.010 | < 0.8 | | | | | | mg/l | mg/d | | | |
| 10A. Phenol (108-95-2) | | | X | < 0.010 | < 0.8 | | | | | | mg/l | mg/d | | | |
| 11A. 2,4,6-Trichlorophenol (88-05-2) | | | X | < 0.010 | < 0.8 | | | | | | 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 | a. MAXIMUM DAILY VALUE | | b. MAXIMUM 30 DAY VALUE (if available) | | c. LONG TERM AVRG. VALUE (if available) | | d. NO. OF ANALYSES | a. CONCENTRATION | b. MASS | a. LONG TERM AVERAGE VALUE | | b. NO. OF ANALYSES |
| | | | | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | | | | (1) CONCENTRATION | (2) MASS | |
| GC/MS FRACTION - BASE/NEUTRAL COMPOUNDS | | | | | | | | | | | | | | | |
| 1B. Acenaphthene (83-32-9) | | | X | < 0.010 | < 0.8 | | | | | | mg/l | mg/d | | | |
| 2B. Acenaphthylene (208-96-8) | | | X | < 0.010 | < 0.8 | | | | | | mg/l | mg/d | | | |
| 3B. Anthracene (120-12-7) | | | X | < 0.010 | < 0.8 | | | | | | mg/l | mg/d | | | |
| 4B. Benzidine (92-87-5) | | | X | < 0.010 | < 0.8 | | | | | | mg/l | mg/d | | | |
| 5B. Benzo (a) Anthracene (56-55-3) | | | X | < 0.010 | < 0.8 | | | | | | mg/l | mg/d | | | |
| 6B. Benzo (a) Pyrene (50-32-8) | | | X | < 0.010 | < 0.8 | | | | | | mg/l | mg/d | | | |
| 7B. 3,4-Benzo-fluoranthene (205-99-2) | | | X | < 0.010 | < 0.8 | | | | | | mg/l | mg/d | | | |
| 8B. Benzo (ghi) Perylene (191-24-2) | | | X | < 0.010 | < 0.8 | | | | | | mg/l | mg/d | | | |
| 9B. Benzo (h) Fluoranthene (207-08-9) | | | X | < 0.010 | < 0.8 | | | | | | mg/l | mg/d | | | |
| 10B. Bis (2-Chloroethoxy) Methane (111-91-1) | | | X | < 0.010 | < 0.8 | | | | | | mg/l | mg/d | | | |
| 11B. Bis (2-Chloroethyl) Ether (111-44-4) | | | X | < 0.010 | < 0.8 | | | | | | mg/l | mg/d | | | |
| 12B. Bis (2-Chloroisopropyl) Ether (102-60-1) | | | X | < 0.010 | < 0.8 | | | | | | mg/l | mg/d | | | |
| 13B. Bis (2-Ethylhexyl) Phthalate (117-81-7) | | | X | < 0.010 | < 0.8 | | | | | | mg/l | mg/d | | | |
| 14B. 4-Bromophenyl Phenyl Ether (101-55-3) | | | X | < 0.010 | < 0.8 | | | | | | mg/l | mg/d | | | |
| 15B. Butyl Benzyl Phthalate (85-68-7) | | | X | < 0.010 | < 0.8 | | | | | | mg/l | mg/d | | | |
| 16B. 2-Chloronaphthalene (91-58-7) | | | X | < 0.010 | < 0.8 | | | | | | mg/l | mg/d | | | |
| 17B. 4-Chlorophenyl Phenyl Ether (7005-72-3) | | | X | < 0.010 | < 0.8 | | | | | | mg/l | mg/d | | | |
| 18B. Chrysene (218-01-9) | | | X | < 0.010 | < 0.8 | | | | | | mg/l | mg/d | | | |
| 19B. Dibenzo (a,h) Anthracene (53-70-3) | | | X | < 0.010 | < 0.8 | | | | | | mg/l | mg/d | | | |
| 20B. 1,2-Dichlorobenzene (95-50-1) | | | X | < 0.010 | < 0.8 | | | | | | mg/l | mg/d | | | |
| 21B. 1,3-Dichlorobenzene (541-73-1) | | | X | < 0.010 | < 0.8 | | | | | | 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 | B. CONCENTRATION | b. MASS | 3. LONG TERM AVERAGE VALUE | | b. NO. OF ANALYSES |
| | | | | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | | | | (1) CONCENTRATION | (2) MASS | |
| GC/MS FRACTION - BASE/NEUTRAL COMPOUNDS (continued) | | | | | | | | | | | | | | | |
| 22B. 1,4-Dichlorobenzene (106-46-7) | | | X | < 0.010 | < 0.8 | | | | | | mg/l | mg/d | | | |
| 23B. 3,3'-Dichlorobenzidine (91-94-1) | | | X | < 0.010 | < 0.8 | | | | | | mg/l | mg/d | | | |
| 24B. Diethyl Phthalate (84-86-2) | | | X | < 0.010 | < 0.8 | | | | | | mg/l | mg/d | | | |
| 25B. Dimethyl Phthalate (131-11-3) | | | X | < 0.010 | < 0.8 | | | | | | mg/l | mg/d | | | |
| 26B. Di-N-Butyl Phthalate (84-74-2) | | | X | < 0.010 | < 0.8 | | | | | | mg/l | mg/d | | | |
| 27B. 2,4-Dinitrotoluene (121-14-2) | | | X | < 0.010 | < 0.8 | | | | | | mg/l | mg/d | | | |
| 28B. 2,6-Dinitrotoluene (606-20-2) | | | X | < 0.010 | < 0.8 | | | | | | mg/l | mg/d | | | |
| 29B. Di-N-Octyl Phthalate (117-84-0) | | | X | < 0.010 | < 0.8 | | | | | | mg/l | mg/d | | | |
| 30B. 1,2-Diphenylhydrazine (as Azobenzene) (122-66-7) | | | X | < 0.010 | < 0.8 | | | | | | mg/l | mg/d | | | |
| 31B. Fluoranthene (206-44-0) | | | X | < 0.010 | < 0.8 | | | | | | mg/l | mg/d | | | |
| 32B. Fluorene (86-73-7) | | | X | < 0.010 | < 0.8 | | | | | | mg/l | mg/d | | | |
| 33B. Hexachlorobenzene (118-74-1) | | | X | < 0.010 | < 0.8 | | | | | | mg/l | mg/d | | | |
| 34B. Hexachlorobutadiene (87-68-3) | | | X | < 0.010 | < 0.8 | | | | | | mg/l | mg/d | | | |
| 35B. Hexachlorocyclopentadiene (77-47-4) | | | X | < 0.010 | < 0.8 | | | | | | mg/l | mg/d | | | |
| 36B. Hexachloroethane (67-72-1) | | | X | < 0.010 | < 0.8 | | | | | | mg/l | mg/d | | | |
| 37B. Indeno (1,2,3-cd) Pyrene (193-39-5) | | | X | < 0.010 | < 0.8 | | | | | | mg/l | mg/d | | | |
| 38B. Isophorone (78-69-1) | | | X | < 0.010 | < 0.8 | | | | | | mg/l | mg/d | | | |
| 39B. Naphthalene (91-20-3) | | | X | < 0.010 | < 0.8 | | | | | | mg/l | mg/d | | | |
| 40B. Nitrobenzene (98-95-3) | | | X | < 0.010 | < 0.8 | | | | | | mg/l | mg/d | | | |
| 41B. N-Nitrosodimethylamine (62-75-9) | | | X | < 0.010 | < 0.8 | | | | | | mg/l | mg/d | | | |
| 42B. N-Nitrosodi-N-Propylamine (621-54-7) | | | X | < 0.010 | < 0.8 | | | | | | 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. TESTING REQUIRED | B. SE- LECTED PRE- SENT | C. SE- LECTED AR- SENY | a. MAXIMUM DAILY VALUE | | b. MAXIMUM 30 DAY VALUE (if available) | | c. LONG TERM AVRG. VALUE (if available) | | d. NO. OF ANAL- YSES | a. CONCENTRATION | b. MASS | A. LONG TERM AVERAGE VALUE | | b. NO. OF ANAL- YSES |
| | | | | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | | | | (1) CONCENTRATION | (2) MASS | |
| GC/MS FRACTION - BASE/NEUTRAL COMPOUNDS (continued) | | | | | | | | | | | | | | | |
| 43B. N-Nitro- sodiphenylamine (86-30-6) | | | X | < 0.010 | < 0.8 | | | | | | mg/l | mg/d | | | |
| 44B. Phenanthrene (85-01-8) | | | X | < 0.010 | < 0.8 | | | | | | mg/l | mg/d | | | |
| 45B. Pyrene (129-00-0) | | | X | < 0.010 | < 0.8 | | | | | | mg/l | mg/d | | | |
| 46B. 1,2,4-Tr chlorobenzene (120-82-1) | | | X | < 0.010 | < 0.8 | | | | | | mg/l | mg/d | | | |
| GC/MS FRACTION - PESTICIDES | | | | | | | | | | | | | | | |
| 1P. Aldrin (309-00-2) | | | X | < 0.06 | < 4.5 | | | | | | ug/l | ug/d | | | |
| 2P. α-BHC (319-84-6) | | | X | < 0.02 | < 1.5 | | | | | | ug/l | ug/d | | | |
| 3P. β-BHC (319-85-7) | | | X | < 0.1 | < 7.6 | | | | | | ug/l | ug/d | | | |
| 4P. γ-BHC (68-89-8) | | | X | < 0.03 | < 2.3 | | | | | | ug/l | ug/d | | | |
| 5P. δ-BHC (319-86-8) | | | X | < 0.12 | < 9.1 | | | | | | ug/l | ug/d | | | |
| 6P. Chlordane (57-74-9) | | | X | < 0.25 | < 18.9 | | | | | | ug/l | ug/d | | | |
| 7P. 4,4'-DDT (50-29-3) | | | X | < 0.06 | < 4.5 | | | | | | ug/l | ug/d | | | |
| 8P. 4,4'-DDE (72-55-9) | | | X | < 0.08 | < 6.1 | | | | | | ug/l | ug/d | | | |
| 9P. 4,4'-DDD (72-54-8) | | | X | < 0.08 | < 6.1 | | | | | | ug/l | ug/d | | | |
| 10P. Dieldrin (60-57-1) | | | X | < 0.08 | < 6.1 | | | | | | ug/l | ug/d | | | |
| 11P. α-Endosulfan (115-29-7) | | | X | < 0.05 | < 3.8 | | | | | | ug/l | ug/d | | | |
| 12P. β-Endosulfan (115-29-7) | | | X | < 0.08 | < 6.1 | | | | | | ug/l | ug/d | | | |
| 13P. Endosulfan Sulfate (1031-07-8) | | | X | < 0.09 | < 6.8 | | | | | | ug/l | ug/d | | | |
| 14P. Endrin (72-20-8) | | | X | < 0.06 | < 4.5 | | | | | | ug/l | ug/d | | | |
| 15P. Endrin Aldehyde (7421-93-4) | | | X | < 0.62 | < 46.9 | | | | | | ug/l | ug/d | | | |
| 16P. Heptachlor (76-44-8) | | | X | < 0.3 | < 22.7 | | | | | | 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 | a. LONG TERM AVERAGE VALUE | | b. NO. OF ANALYSES |
| | | | | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | | | | (1) CONCENTRATION | (2) MASS | |
| GC/MS FRACTION - PESTICIDES (continued) | | | | | | | | | | | | | | | |
| 17P. Heptachlor Epoxide (102457-3) | | | X | < 0.04 | < 3.0 | | | | | | ug/l | ug/d | | | |
| 18P. PCB-1242 (53469-21-9) | | | X | < 0.68 | < 51.5 | | | | | | ug/l | ug/d | | | |
| 19P. PCB-1254 (11097-69-1) | | | X | < 0.68 | < 51.5 | | | | | | ug/l | ug/d | | | |
| 20P. PCB-1221 (11104-28-2) | | | X | N.D. | | | | | | | | | | | |
| 21P. PCB-1232 (11141-16-5) | | | X | N.D. | | | | | | | | | | | |
| 22P. PCB-1248 (12672-29-6) | | | X | N.D. | | | | | | | | | | | |
| 23P. PCB-1260 (11098-82-6) | | | X | < 0.68 | < 51.5 | | | | | | ug/l | ug/d | | | |
| 24P. PCB-1016 (12674-11-2) | | | X | N.D. | | | | | | | | | | | |
| 25P. Toxaphene (8001-35-2) | | | X | < 2.5 | < 0.2 | | | | | | ug/l | mg/d | | | |

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

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

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

| Outfall Number | 1. Frequency | | 2. Flow | | c. Duration (in days) |
|----------------|------------------------------------|--------------------------------------|-------------------------------------|--|-----------------------|
| | a. Days Per Week (specify average) | b. Months Per Year (specify average) | a. Maximum Daily Flow Rate (in mgd) | b. Maximum Total Volume (specify with units) | |
| 46-77-OPN-6 | 5 | 12 | .000005 | 5 GPD | 260 |

IV. Production

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

| Year | a. Quantity Per Day | b. Units of Measure | c. Operation, Product, Material, etc (specify) |
|------|---------------------|---------------------|--|
| | | | N/A |
| | | | |
| | | | |

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

| 1. Pollutant | 2. Reason for Discharge |
|--------------|-------------------------|
| None | |

VI. Engineering Report on Wastewater Treatment

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

Report Available

No Report

Waste Stream Characterization Report #65

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

| Name | Location |
|------|----------|
| N/A | |

VII. Other Information (Optional)

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

See attached 04A datasheets and flow diagram. Discharge is consistent with potable water.

VIII. Certification

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

| | |
|---|---|
| A. Name and Official Title (type or print) JERRY L. BELLOWES, AREA MANAGER, DOE ALLEN J. TIEDMAN, ASSOC. DIRECTOR FOR OPERATIONS | B. Phone No. 505-667-5105 505-667-9390 |
| C. Signature | D. Date Signed |



OUTFALL 46-77-OPN-6 FLOW DIAGRAM

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

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

NM0890010515

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

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

OUTFALL NO.
04A

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

| I. 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 | < 37.9 | | | | | | mg/l | g/d | | | |
| b. Chemical Oxygen Demand (COD) | < 10.0 | < 0.2 | | | | | | mg/l | g/d | | | |
| c. Total Organic Carbon (TOC) | 0.6 | 11.2 | | | | | | mg/l | g/d | | | |
| d. Total Suspended Solids (TSS) | 18.0 | 0.3 | | | | | | mg/l | g/d | | | |
| e. Ammonia (as N) | < 0.1 | < 1.893 | | | | | | mg/l | g/d | | | |
| f. Flow | VALUE 5 | | VALUE | | VALUE | | | gal/day | | VALUE | | |
| g. Temperature (winter) | VALUE 13.9 | | VALUE | | VALUE | | | °C | | VALUE | | |
| h. Temperature (summer) | VALUE N/A | | VALUE | | VALUE | | | °C | | VALUE | | |
| i. pH | MINIMUM 8.45 | MAXIMUM 8.80 | MINIMUM | MAXIMUM | X | | | STANDARD UNITS | | X | | |

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

| 1. POLLUTANT AND CAS NO. (if available) | 2. MARK 'X' | | 3. EFFLUENT | | | | | | 4. UNITS | | 5. INTAKE (optional) | | | |
|---|---------------------|--------------------|------------------------|----------|--|----------|--|----------|--------------------|------------------|----------------------|----------------------------|----------|--------------------|
| | a. BELIEVED PRESENT | b. BELIEVED ABSENT | a. MAXIMUM DAILY VALUE | | b. MAXIMUM 30 DAY VALUE (if available) | | c. LONG TERM AVG. VALUE (if available) | | d. NO. OF ANALYSES | a. CONCENTRATION | b. MASS | a. LONG TERM AVERAGE VALUE | | b. NO. OF ANALYSES |
| | | | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | | | | (1) CONCENTRATION | (2) MASS | |
| a. Bromide (24959-67-9) | | X | < 0.5 | < 9.5 | | | | | | mg/l | g/d | | | |
| b. Chlorine, Total Residual | X | | 0.05 | 0.0 | | | | | | mg/l | mg/d | | | |
| c. Color | X | | 7.0 | | | | | | | units | | | | |
| d. Fecal Coliform | | X | | | | | | | | | | | | |
| e. Fluoride (16984-48-8) | X | | 0.21 | 4.0 | | | | | | mg/l | g/d | | | |
| f. Nitrate-Nitrite (as N) | X | | 0.304 | 5.8 | | | | | | mg/l | g/d | | | |

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

NM0890010515

04A

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

CONTINUED FROM PAGE 3 OF FORM 2-C

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

| 1. POLLUTANT AND CAS NUMBER (if available) | 2. MARK 'X' | | | 3. EFFLUENT | | | | | | 4. UNITS | | 5. INTAKE (optional) | | | |
|--|-----------------------|-----------------------|----------------------|------------------------|----------|--|----------|--|----------|---------------------|-------------------|----------------------|----------------------------|--|---------------------|
| | A. TEST-ING RE-QUIRED | D. BE-LIEVED PRE-SENT | C. BE-LIEVED AB-SENT | a. MAXIMUM DAILY VALUE | | b. MAXIMUM 30 DAY VALUE (if available) | | c. LONG TERM AVG. VALUE (if available) | | d. NO. OF ANAL-YSES | a. CONCENT-RATION | b. MASS | b. LONG TERM AVERAGE VALUE | | d. NO. OF ANAL-YSES |
| | | | | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | | | | | | |
| METALS, CYANIDE, AND TOTAL PHENOLS | | | | | | | | | | | | | | | |
| 1M. Antimony, Total (7440-36-0) | | | X | < 0.050 | < 0.9 | | | | | | mg/l | mg/d | | | |
| 2M. Arsenic, Total (7440-38-2) | | X | | 0.002 | 0.0 | | | | | | mg/l | mg/d | | | |
| 3M. Beryllium, Total, 7440-41-7) | | | X | < 0.001 | < 0.0 | | | | | | mg/l | mg/d | | | |
| 4M. Cadmium, Total (7440-43-9) | | | X | < 0.010 | < 0.2 | | | | | | mg/l | mg/d | | | |
| 5M. Chromium, Total (7440-47-3) | | X | | 0.040 | 0.8 | | | | | | mg/l | mg/d | | | |
| 6M. Copper, Total (7440-50-8) | | X | | 0.031 | 0.6 | | | | | | mg/l | mg/d | | | |
| 7M. Lead, Total (7439-92-1) | | | X | < 0.050 | < 0.9 | | | | | | mg/l | mg/d | | | |
| 8M. Mercury, Total (7439-97-6) | | | X | < 0.0002 | < 0.00 | | | | | | mg/l | mg/d | | | |
| 9M. Nickel, Total (7440-02-0) | | X | | 0.06 | 1.1 | | | | | | mg/l | mg/d | | | |
| 10M. Selenium, Total (7782-49-2) | | | X | < 0.001 | < 0.0 | | | | | | mg/l | mg/d | | | |
| 11M. Silver, Total (7440-22-4) | | | X | < 0.010 | < 0.2 | | | | | | mg/l | mg/d | | | |
| 12M. Thallium, Total (7440-28-0) | | | X | < 0.4 | < 7.6 | | | | | | mg/l | mg/d | | | |
| 13M. Zinc, Total (7440-66-6) | | X | | 0.043 | 0.8 | | | | | | mg/l | mg/d | | | |
| 14M. Cyanide, Total (57-12-5) | | | X | 0.01 | 0.2 | | | | | | mg/l | mg/d | | | |
| 15M. Phenols, Total | | | X | < 0.01 | < 0.2 | | | | | | mg/l | mg/d | | | |
| DIOXIN | | | | | | | | | | | | | | | |
| 2,3,7,8-Tetra-chlorodibenzo-P-Dioxin (1764-01-6) | | | X | DESCRIBE RESULTS | | | | | | | | | | | |

| 1. POLLUTANT AND CAS NUMBER (if available) | 2. TESTING REQUIRED | 3. BELIEVED PRESENT | 4. BELIEVED ABSENT | 5. EFFLUENT | | | | 6. UNITS | | 7. INTAKE (optional) | | | | |
|--|---------------------|---------------------|--------------------|------------------------|----------|--|----------|--|----------|----------------------|---------|----------------------------|----------|---------------------|
| | | | | 8. MAXIMUM DAILY VALUE | | 9. MAXIMUM 30 DAY VALUE (if available) | | 10. LONG TERM AVRG. VALUE (if available) | | a. CONCEN-TRATION | b. MASS | 8. LONG TERM AVERAGE VALUE | | d. NO. OF ANAL-YSES |
| | | | | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | | | (1) CONCENTRATION | (2) MASS | |
| GC/MS FRACTION - VOLATILE COMPOUNDS | | | | | | | | | | | | | | |
| 1V. Acrolein (107-02-8) | | | X | | | | | | | | | | | |
| 2V. Acrylonitrile (107-13-1) | | | X | | | | | | | | | | | |
| 3V. Benzene (71-43-2) | | | X | < 0.005 | < 0.1 | | | | mg/l | mg/d | | | | |
| 4V. Bis (Chloro-methyl) Ether (542-88-1) | | | X | | | | | | | | | | | |
| 5V. Bromoform (75-25-2) | | | X | < 0.005 | < 0.1 | | | | mg/l | mg/d | | | | |
| 6V. Carbon Tetrachloride (56-23-5) | | | X | < 0.005 | < 0.1 | | | | mg/l | mg/d | | | | |
| 7V. Chlorobenzene (108-90-7) | | | X | < 0.005 | < 0.1 | | | | mg/l | mg/d | | | | |
| 8V. Chlorodi-bromomethane (124-48-1) | | | X | < 0.005 | < 0.1 | | | | mg/l | mg/d | | | | |
| 9V. Chloroethane (75-00-3) | | | X | < 0.010 | < 0.000 | | | | mg/l | mg/d | | | | |
| 10V. 2-Chloro-ethylvinyl Ether (110-75-8) | | | X | | | | | | | | | | | |
| 11V. Chloroform (67-66-3) | | | X | < 0.005 | < 0.1 | | | | mg/l | mg/d | | | | |
| 12V. Dichloro-bromomethane (75-27-4) | | | X | < 0.005 | < 0.1 | | | | mg/l | mg/d | | | | |
| 13V. Dichloro-difluoromethane (75-71-8) | | | X | | | | | | | | | | | |
| 14V. 1,1-Dichloro-ethane (75-34-3) | | | X | < 0.005 | < 0.1 | | | | mg/l | mg/d | | | | |
| 15V. 1,2-Dichloro-ethane (107-06-2) | | | X | < 0.005 | < 0.1 | | | | mg/l | mg/d | | | | |
| 16V. 1,1-Dichloro-ethylene (75-35-4) | | | X | < 0.005 | < 0.1 | | | | mg/l | mg/d | | | | |
| 17V. 1,2-Dichloro-propane (78-87-5) | | | X | < 0.005 | < 0.1 | | | | mg/l | kg/d | | | | |
| 18V. 1,3-Dichloro-propylene (542-75-8) | | | X | < | < 0.0 | | | | mg/l | mg/d | | | | |
| 19V. Ethylbenzene (100-41-4) | | | X | < 0.005 | < 0.1 | | | | mg/l | mg/d | | | | |
| 20V. Methyl Bromide (74-83-9) | | | X | < 0.010 | < 0.2 | | | | mg/l | mg/d | | | | |
| 21V. Methyl Chloride (74-87-3) | | | X | < 0.010 | < 0.2 | | | | mg/l | mg/d | | | | |

| 1. POLLUTANT AND CAS NUMBER (if available) | 2. MARK 'X' | | | 3. EFFLUENT | | | | | | 4. UNITS | | 5. INTAKE (optional) | | | |
|--|-------------------------------------|----------------------------------|---------------------------------|------------------------|----------|---|----------|--|----------|----------------------------|------------------|----------------------|----------------------------|----------|--------------------|
| | B TEST ING RE- QUIR- ED | D. BE- LIEVED PRE- SENT | C. BE- LIEVED AB- SENT | a. MAXIMUM DAILY VALUE | | b. MAXIMUM 30 DAY VALUE (if available) | | c. LONG TERM AVRG. VALUE (if available) | | d. NO. OF ANAL- YSES | a. CONCENTRATION | b. MASS | a. LONG TERM AVERAGE VALUE | | b. NO. OF ANALYSES |
| | | | | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | | | | (1) CONCENTRATION | (2) MASS | |
| GC/MS FRACTION - VOLATILE COMPOUNDS (continued) | | | | | | | | | | | | | | | |
| 22V. Methylene Chloride (75-09-2) | | | X | < 0.005 | < 0.1 | | | | | | mg/l | mg/d | | | |
| 23V. 1,1,2,2-Tetrachloroethane (79-34-6) | | | X | < 0.005 | < 0.1 | | | | | | mg/l | mg/d | | | |
| 24V. Tetrachloroethylene (127-18-4) | | | X | < 0.005 | < 0.1 | | | | | | mg/l | mg/d | | | |
| 25V. Toluene (108-88-3) | | | X | < 0.005 | < 0.1 | | | | | | mg/l | mg/d | | | |
| 26V. 1,2-Trans-Dichloroethylene (156-60-6) | | | X | < 0.005 | < 0.1 | | | | | | mg/l | mg/d | | | |
| 27V. 1,1,1-Trichloroethane (71-55-6) | | | X | < 0.005 | < 0.1 | | | | | | mg/l | mg/d | | | |
| 28V. 1,1,2-Trichloroethane (79-00-6) | | | X | < 0.005 | < 0.1 | | | | | | mg/l | mg/d | | | |
| 29V. Trichloroethylene (79-01-6) | | | X | < 0.005 | < 0.1 | | | | | | mg/l | mg/d | | | |
| 30V. Trichlorofluoromethane (75-69-4) | | | X | < 0.005 | < 0.1 | | | | | | mg/l | mg/d | | | |
| 31V. Vinyl Chloride (75-01-4) | | | X | < 0.010 | < 0.2 | | | | | | mg/l | mg/d | | | |
| GC/MS FRACTION - ACID COMPOUNDS | | | | | | | | | | | | | | | |
| 1A. 2-Chlorophenol (95-57-8) | | | X | < 0.010 | < 0.2 | | | | | | mg/l | mg/d | | | |
| 2A. 2,4-Dichlorophenol (120-83-2) | | | X | < 0.010 | < 0.2 | | | | | | mg/l | mg/d | | | |
| 3A. 2,4-Dimethylphenol (105-67-9) | | | X | < 0.010 | < 0.2 | | | | | | mg/l | mg/d | | | |
| 4A. 4,6-Dinitro-O-Cresol (534-52-1) | | | X | < 0.010 | < 0.2 | | | | | | mg/l | mg/d | | | |
| 5A. 2,4-Dinitrophenol (51-28-5) | | | X | < 0.010 | < 0.2 | | | | | | mg/l | mg/d | | | |
| 6A. 2-Nitrophenol (88-75-5) | | | X | < 0.010 | < 0.2 | | | | | | mg/l | mg/d | | | |
| 7A. 4-Nitrophenol (100-02-7) | | | X | < 0.010 | < 0.2 | | | | | | mg/l | mg/d | | | |
| 8A. P-Chloro-M-Cresol (59-50-7) | | | X | < 0.010 | < 0.2 | | | | | | mg/l | mg/d | | | |
| 9A. Pentachlorophenol (87-86-5) | | | X | < 0.010 | < 0.2 | | | | | | mg/l | mg/d | | | |
| 10A. Phenol (108-95-2) | | | X | < 0.010 | < 0.2 | | | | | | mg/l | mg/d | | | |
| 11A. 2,4,6-Trichlorophenol (88-06-2) | | | X | < 0.010 | < 0.2 | | | | | | mg/l | mg/d | | | |

| 1. POLLUTANT AND CAS NUMBER (if available) | 2. MARK 'X' | | | 3. EFFLUENT | | | | | | 4. UNITS | | 5. INTAKE (optional) | | | |
|---|----------------------|------------------------|----------------------|------------------------|----------|---|----------|--|----------|----------------------|------------------|----------------------|----------------------------|----------|----------------------|
| | a. TESTING RE-QUIRED | b. DEF-LECTED PRE-SENT | c. RE-LEASED AB-SENT | a. MAXIMUM DAILY VALUE | | b. MAXIMUM 30 DAY VALUE (if available) | | c. LONG TERM AVRG. VALUE (if available) | | d. NO. OF ANAL- YSES | a. CONCENTRATION | b. MASS | e. LONG TERM AVERAGE VALUE | | b. NO. OF ANAL- YSES |
| | | | | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | | | | (1) CONCENTRATION | (2) MASS | |
| GC/MS FRACTION - BASE/NEUTRAL COMPOUNDS | | | | | | | | | | | | | | | |
| 1B. Acenaphthene (83-32-9) | | | X | < 0.010 | < 0.2 | | | | | | mg/l | mg/d | | | |
| 2B. Acenaphthylene (208-96-8) | | | X | < 0.010 | < 0.2 | | | | | | mg/l | mg/d | | | |
| 3B. Anthracene (120-12-7) | | | X | < 0.010 | < 0.2 | | | | | | mg/l | mg/d | | | |
| 4B. Benzidine (92-87-8) | | | X | < 0.010 | < 0.2 | | | | | | mg/l | mg/d | | | |
| 5B. Benzo (a) Anthracene (56-55-3) | | | X | < 0.010 | < 0.2 | | | | | | mg/l | mg/d | | | |
| 6B. Benzo (a) Pyrene (50-32-8) | | | X | < 0.010 | < 0.2 | | | | | | mg/l | mg/d | | | |
| 7B. 3,4-Benzo-fluoranthene (205-99-2) | | | X | < 0.010 | < 0.2 | | | | | | mg/l | mg/d | | | |
| 8B. Benzo (ghi) Perylene (191-24-2) | | | X | < 0.010 | < 0.2 | | | | | | mg/l | mg/d | | | |
| 9B. Benzo (k) Fluoranthene (207-08-9) | | | X | < 0.010 | < 0.2 | | | | | | mg/l | mg/d | | | |
| 10B. Bis (2-Chloro-ethoxy) Methane (111-91-1) | | | X | < 0.010 | < 0.2 | | | | | | mg/l | mg/d | | | |
| 11B. Bis (2-Chloro-ethyl) Ether (111-44-4) | | | X | < 0.010 | < 0.2 | | | | | | mg/l | mg/d | | | |
| 12B. Bis (2-Chloroisopropyl) Ether (102-60-1) | | | X | < 0.010 | < 0.2 | | | | | | mg/l | mg/d | | | |
| 13B. Bis (2-Ethyl-hexyl) Phthalate (117-81-7) | | | X | < 0.010 | < 0.2 | | | | | | mg/l | mg/d | | | |
| 14B. 4-Bromo-phenyl Phenyl Ether (101-55-3) | | | X | < 0.010 | < 0.2 | | | | | | mg/l | mg/d | | | |
| 15B. Butyl Benzyl Phthalate (85-68-7) | | | X | < 0.010 | < 0.2 | | | | | | mg/l | mg/d | | | |
| 16B. 2-Chloro-naphthalene (91-58-7) | | | X | < 0.010 | < 0.2 | | | | | | mg/l | mg/d | | | |
| 17B. 4-Chloro-phenyl Phenyl Ether (7005-72-3) | | | X | < 0.010 | < 0.2 | | | | | | mg/l | mg/d | | | |
| 18B. Chrysene (218-01-9) | | | X | < 0.010 | < 0.2 | | | | | | mg/l | mg/d | | | |
| 19B. Dibenzo (a,h) Anthracene (53-70-3) | | | X | < 0.010 | < 0.2 | | | | | | mg/l | mg/d | | | |
| 20B. 1,2-Dichloro-benzene (95-50-1) | | | X | < 0.010 | < 0.2 | | | | | | mg/l | mg/d | | | |
| 21B. 1,3-Dichloro-benzene (541-73-1) | | | X | < 0.010 | < 0.2 | | | | | | mg/l | mg/d | | | |

CONTINUED FROM PAGE V-6

| 1. POLLUTANT AND CAS NUMBER (if available) | 2. MARK 'X' | | | 3. EFFLUENT | | | | | | 4. UNITS | | 5. INTAKE (optional) | | | |
|--|------------------------|-----------------------|----------------------|------------------------|----------|--|----------|--|----------|---------------------|-------------------|----------------------|----------------------------|----------|---------------------|
| | A. TEST-ING RE-QUIR-ED | B. SE-LIEVED PRE-SENT | C. SE-LIEVED AB-SENT | a. MAXIMUM DAILY VALUE | | b. MAXIMUM 30 DAY VALUE (if available) | | c. LONG TERM AVG. VALUE (if available) | | d. NO. OF ANAL-YSES | b. CONCEN-TRATION | b. MASS | b. 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 (continued) | | | | | | | | | | | | | | | |
| 22B. 1,4-Dichloro-benzene (108-46-7) | | | X | < 0.010 | < 0.2 | | | | | | mg/l | mg/d | | | |
| 23B. 3,3'-Dichloro-benzidine (91-94-1) | | | X | < 0.010 | < 0.2 | | | | | | mg/l | mg/d | | | |
| 24B. Diethyl Phthalate (84-66-2) | | | X | < 0.010 | < 0.2 | | | | | | mg/l | mg/d | | | |
| 25B. Dimethyl Phthalate (131-11-3) | | | X | < 0.010 | < 0.2 | | | | | | mg/l | mg/d | | | |
| 26B. Di-N-Butyl Phthalate (84-74-2) | | | X | < 0.010 | < 0.2 | | | | | | mg/l | mg/d | | | |
| 27B. 2,4-Dinitro-toluene (121-14-2) | | | X | < 0.010 | < 0.2 | | | | | | mg/l | mg/d | | | |
| 28B. 2,6-Dinitro-toluene (506-20-2) | | | X | < 0.010 | < 0.2 | | | | | | mg/l | mg/d | | | |
| 29B. Di-N-Octyl Phthalate (117-84-0) | | | X | < 0.010 | < 0.2 | | | | | | mg/l | mg/d | | | |
| 30B. 1,2-Diphenyl-hydrazine (as Azo-benzene) (122-66-7) | | | X | < 0.010 | < 0.2 | | | | | | mg/l | mg/d | | | |
| 31B. Fluoranthene (206-44-0) | | | X | < 0.010 | < 0.2 | | | | | | mg/l | mg/d | | | |
| 32B. Fluorene (86-73-7) | | | X | < 0.010 | < 0.2 | | | | | | mg/l | mg/d | | | |
| 33B. Hexachlorobenzene (118-74-1) | | | X | < 0.010 | < 0.2 | | | | | | mg/l | mg/d | | | |
| 34B. Hexa-chlorobutadiene (87-68-3) | | | X | < 0.010 | < 0.2 | | | | | | mg/l | mg/d | | | |
| 35B. Hexachloro-cyclopentadiene (77-47-4) | | | X | < 0.010 | < 0.2 | | | | | | mg/l | mg/d | | | |
| 36B. Hexachloro-ethane (67-72-1) | | | X | < 0.010 | < 0.2 | | | | | | mg/l | mg/d | | | |
| 37B. Indeno (1,2,3-cd) Pyrene (193-39-5) | | | X | < 0.010 | < 0.2 | | | | | | mg/l | mg/d | | | |
| 38B. Isophorone (78-59-1) | | | X | < 0.010 | < 0.2 | | | | | | mg/l | mg/d | | | |
| 39B. Naphthalene (91-20-3) | | | X | < 0.010 | < 0.2 | | | | | | mg/l | mg/d | | | |
| 40B. Nitrobenzene (98-95-3) | | | X | < 0.010 | < 0.2 | | | | | | mg/l | mg/d | | | |
| 41B. N-Nitro-sodimethylamine (62-75-9) | | | X | < 0.010 | < 0.2 | | | | | | mg/l | mg/d | | | |
| 42B. N-Nitrosodi-N-Propylamine (621-64-7) | | | X | < 0.010 | < 0.2 | | | | | | mg/l | mg/d | | | |

CONTINUED FROM THE FRONT

| 1. POLLUTANT AND CAS NUMBER (if available) | 2. MARK 'X' | | | 3. EFFLUENT | | | | | | 4. UNITS | | 5. INTAKE (optional) | | | |
|--|---------------------|---------------------|--------------------|------------------------|----------|--|----------|---|----------|--------------------|------------------|----------------------|----------------------------|----------|--------------------|
| | A. TESTING REQUIRED | B. BELIEVED PRESENT | C. BELIEVED ABSENT | a. MAXIMUM DAILY VALUE | | b. MAXIMUM 30 DAY VALUE (if available) | | c. LONG TERM AVRG. VALUE (if available) | | d. NO. OF ANALYSES | a. CONCENTRATION | b. MASS | A. LONG TERM AVERAGE VALUE | | b. NO. OF ANALYSES |
| | | | | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | | | | (1) CONCENTRATION | (2) MASS | |
| GC/MS FRACTION - BASE/NEUTRAL COMPOUNDS (continued) | | | | | | | | | | | | | | | |
| 43B. N-Nitrosodiphenylamine (86-30-6) | | | X | < 0.010 | < 0.2 | | | | | | mg/l | mg/d | | | |
| 44B. Phenanthrene (85-01-8) | | | X | < 0.010 | < 0.2 | | | | | | mg/l | mg/d | | | |
| 45B. Pyrene (129-00-0) | | | X | < 0.010 | < 0.2 | | | | | | mg/l | mg/d | | | |
| 46B. 1,2,4-Trichlorobenzene (120-82-1) | | | X | < 0.010 | < 0.2 | | | | | | mg/l | mg/d | | | |
| GC/MS FRACTION - PESTICIDES | | | | | | | | | | | | | | | |
| 1P. Aldrin (309-00-2) | | | X | < 0.06 | < 1.1 | | | | | | ug/l | ug/d | | | |
| 2P. α -BHC (319-84-6) | | | X | < 0.02 | < 0.4 | | | | | | ug/l | ug/d | | | |
| 3P. β -BHC (319-85-7) | | | X | < 0.1 | < 1.9 | | | | | | ug/l | ug/d | | | |
| 4P. γ -BHC (58-89-9) | | | X | < 0.03 | < 0.6 | | | | | | ug/l | ug/d | | | |
| 5P. δ -BHC (319-86-8) | | | X | < 0.12 | < 2.3 | | | | | | ug/l | ug/d | | | |
| 6P. Chlordane (57-74-9) | | | X | < 0.25 | < 4.7 | | | | | | ug/l | ug/d | | | |
| 7P. 4,4'-DDT (50-29-3) | | | X | < 0.06 | < 1.1 | | | | | | ug/l | ug/d | | | |
| 8P. 4,4'-DDE (72-55-9) | | | X | < 0.08 | < 1.5 | | | | | | ug/l | ug/d | | | |
| 9P. 4,4'-DDD (72-54-8) | | | X | < 0.08 | < 1.5 | | | | | | ug/l | ug/d | | | |
| 10P. Dieldrin (60-57-1) | | | X | < 0.08 | < 1.5 | | | | | | ug/l | ug/d | | | |
| 11P. α -Endosulfan (115-29-7) | | | X | < 0.05 | < 0.9 | | | | | | ug/l | ug/d | | | |
| 12P. β -Endosulfan (115-29-7) | | | X | < 0.08 | < 1.5 | | | | | | ug/l | ug/d | | | |
| 13P. Endosulfan Sulfate (1031-07-8) | | | X | < 0.09 | < 1.7 | | | | | | ug/l | ug/d | | | |
| 14P. Endrin (72-20-8) | | | X | < 0.06 | < 1.1 | | | | | | ug/l | ug/d | | | |
| 15P. Endrin Aldehyde (7421-93-4) | | | X | < 0.62 | < 11.7 | | | | | | ug/l | ug/d | | | |
| 16P. Heptachlor (76-44-8) | | | X | < 0.3 | < 5.7 | | | | | | ug/l | ug/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 AVRG. 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 | |
| GC/MS FRACTION - PESTICIDES (continued) | | | | | | | | | | | | | | | |
| 17P. Heptachlor Epoxide (1024-57-3) | | | X | < 0.04 | < 0.8 | | | | | | ug/l | ug/d | | | |
| 18P. PCB-1242 (53469-21-9) | | | X | < 0.68 | < 12.9 | | | | | | ug/l | ug/d | | | |
| 19P. PCB-1254 (11097-69-1) | | | X | < 0.68 | < 12.9 | | | | | | 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 | < 0.68 | < 12.9 | | | | | | ug/l | ug/d | | | |
| 24P. PCB-1016 (12674-11-2) | | | X | N.D. | | | | | | | | | | | |
| 25P. Toxaphene (8001-35-2) | | | X | < 2.5 | < 47.3 | | | | | | ug/l | ug/d | | | |

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

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

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

| Outfall Number | 1. Frequency | | 2. Flow | | |
|----------------|------------------------------------|--------------------------------------|-------------------------------------|--|-----------------------|
| | a. Days Per Week (specify average) | b. Months Per Year (specify average) | a. Maximum Daily Flow Rate (in mgd) | b. Maximum Total Volume (specify with units) | c. Duration (in days) |
| 46-77-OPN-7 | 5 | 12 | .00001 | 10 GPD | 260 |

IV. Production

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

| Year | a. Quantity Per Day | b. Units of Measure | c. Operation, Product, Material, etc (specify) |
|------|---------------------|---------------------|--|
| | | | N/A |
| | | | |
| | | | |

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

| 1. Pollutant | 2. Reason for Discharge |
|--------------|-------------------------|
| None | |

VI. Engineering Report on Wastewater Treatment

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

Report Available

No Report

Waste Stream Characterization Report #65

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

| Name | Location |
|------|----------|
| N/A | |

VII. Other Information (Optional)

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

See attached 04A datasheets and flow diagram. Discharge is consistent with potable water and hand washing activities.

VIII. Certification

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

| | |
|---|--|
| A. Name and Official Title (type or print) JERRY L. BELLOWS, AREA MANAGER, DOE ALLEN J. TIEDMAN, ASSOC. DIRECTOR FOR OPERATIONS | B. Phone No. 505-667-5105 505-667-9390 |
| C. Signature | D. Date Signed |



OUTFALL 46-77-OPN-7 FLOW DIAGRAM

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

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

NM0890010515

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

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

OUTFALL NO.
04A

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

| 1. POLLUTANT | 2. EFFLUENT | | | | | | d. NO. OF ANALYSES | 3. UNITS (specify if blank) | | 4. INTAKE (optional) | | |
|------------------------------------|------------------------|-----------------|--|----------|---|----------|--------------------|-----------------------------|---------|----------------------------|----------|--------------------|
| | a. MAXIMUM DAILY VALUE | | b. MAXIMUM 30 DAY VALUE (if available) | | c. LONG TERM AVRG. VALUE (if available) | | | a. CONCENTRATION | b. MASS | a. LONG TERM AVERAGE VALUE | | b. NO. OF ANALYSES |
| | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | | | | (1) CONCENTRATION | (2) MASS | |
| a. Biochemical Oxygen Demand (BOD) | < 2.0 | < 75.7 | | | | | | mg/l | g/d | | | |
| b. Chemical Oxygen Demand (COD) | < 10.0 | < 0.4 | | | | | | mg/l | g/d | | | |
| c. Total Organic Carbon (TOC) | 0.6 | 22.3 | | | | | | mg/l | g/d | | | |
| d. Total Suspended Solids (TSS) | 18.0 | 0.7 | | | | | | mg/l | g/d | | | |
| e. Ammonia (as N) | < 0.1 | < 3.785 | | | | | | mg/l | g/d | | | |
| f. Flow | VALUE 10 | | VALUE | | VALUE | | | gal/day | | VALUE | | |
| g. Temperature (winter) | VALUE 13.9 | | VALUE | | VALUE | | | °C | | VALUE | | |
| h. Temperature (summer) | VALUE N/A | | VALUE | | VALUE | | | °C | | VALUE | | |
| i. pH | MINIMUM 8.45 | MAXIMUM 8.80 | MINIMUM | MAXIMUM | X | | | STANDARD UNITS | | X | | |

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

| 1. POLLUTANT AND CAS NO. (if available) | 2. MARK 'X' | | 3. EFFLUENT | | | | | | d. NO. OF ANALYSES | 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) | | | a. CONCENTRATION | b. MASS | a. LONG TERM AVERAGE VALUE | | b. NO. OF ANALYSES |
| | | | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | | | | (1) CONCENTRATION | (2) MASS | |
| a. Bromide (24959-67-9) | | X | < 0.5 | < 18.9 | | | | | | mg/l | g/d | | | |
| b. Chlorine, Total Residual | X | | 0.05 | 0.0 | | | | | | mg/l | mg/d | | | |
| c. Color | X | | 7.0 | | | | | | | units | | | | |
| d. Fecal Coliform | | X | | | | | | | | | | | | |
| e. Fluoride (16984-48-8) | X | | 0.21 | 7.9 | | | | | | mg/l | g/d | | | |
| f. Nitrate-Nitrite (as N) | X | | 0.304 | 11.5 | | | | | | mg/l | g/d | | | |

| I. POLLUTANT AND CAS NO. (if available) | 2. MARK 'X' | | 3. EFFLUENT | | | | | | 4. UNITS | | 5. INTAKE (optional) | | | |
|---|----------------------|---------------------|------------------------|----------|---|----------|---|----------|--------------------|------------------|----------------------|----------------------------|----------|--------------------|
| | a. RECEIVED PRE-SENT | b. RECEIVED AS-SENT | c. MAXIMUM DAILY VALUE | | d. MAXIMUM 30 DAY VALUE (if available) | | e. LONG TERM AVG. VALUE (if available) | | d. NO. OF ANALYSES | a. CONCENTRATION | b. MASS | f. LONG TERM AVERAGE VALUE | | b. NO. OF ANALYSES |
| | | | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | | | | (1) CONCENTRATION | (2) MASS | |
| g. Nitrogen, Total Organic (as N) | | X | < 0.5 | < 18.9 | | | | | | mg/l | mg/d | | | |
| h. Oil and Grease | | X | < 1.05 | < 39.7 | | | | | | mg/l | mg/d | | | |
| i. Phosphorus (as P), Total (7723-14-0) | X | | 0.05 | 1.9 | | | | | | mg/l | mg/d | | | |
| j. Radioactivity | | | | | | | | | | | | | | |
| (1) Alpha, Total | X | | 0.1 | 3.8 | | | | | | pCi/l | pCi/d | | | |
| (2) Beta, Total | X | | 6.6 | 0.2 | | | | | | pCi/l | nCi/d | | | |
| (3) Radium, Total | X | | | | | | | | | | | | | |
| (4) Radium 226, Total | X | | 0.06 | 2.3 | | | | | | pCi/l | pCi/d | | | |
| k. Sulfate (as SO ₄) (14808-79-8) | X | | 3.16 | 0.1 | | | | | | mg/l | g/d | | | |
| l. Sulfide (as S) | | X | | 0.0 | | | | | | mg/l | mg/d | | | |
| m. Sulfite (as SO ₃) (14266-46-3) | | X | < 0.05 | < 1.9 | | | | | | mg/l | mg/d | | | |
| n. Surfactants | | X | < 0.1 | < 3.8 | | | | | | mg/l | mg/d | | | |
| o. Aluminum, Total (7429-90-6) | | X | < 0.04 | < 1.5 | | | | | | mg/l | mg/d | | | |
| p. Barium, Total (7440-39-3) | X | | 0.03 | 1.1 | | | | | | mg/l | mg/d | | | |
| q. Boron, Total (7440-42-8) | X | | 0.02 | 0.8 | | | | | | mg/l | mg/d | | | |
| r. Cobalt, Total (7440-48-4) | | X | < 0.1 | < 3.8 | | | | | | mg/l | mg/d | | | |
| s. Iron, Total (7439-89-6) | X | | 0.41 | 15.5 | | | | | | mg/l | mg/d | | | |
| t. Magnesium, Total (7439-95-4) | X | | 2.5 | 94.6 | | | | | | mg/l | mg/d | | | |
| u. Molybdenum, Total (7439-98-7) | | X | < 0.02 | < 0.8 | | | | | | mg/l | mg/d | | | |
| v. Manganese, Total (7439-96-6) | X | | 0.01 | 0.4 | | | | | | mg/l | mg/d | | | |
| w. Tin, Total (7440-31-5) | | X | < 0.050 | < 1.9 | | | | | | mg/l | mg/d | | | |
| x. Titanium, Total (7440-32-6) | | X | < 0.004 | < 0.2 | | | | | | mg/l | mg/d | | | |

NM0890010515

04A

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

CONTINUED FROM PAGE 3 OF FORM 2-C

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

| 1. POLLUTANT AND CAS NUMBER (if available) | 2. MARK 'X' | | | 3. EFFLUENT | | | | | | d. NO. OF ANALYSES | 4. UNITS | | 5. INTAKE (optional) | | |
|--|------------------------|-----------------------|----------------------|------------------------|----------|---|----------|--|----------|--------------------|------------------|---------|----------------------------|----------|--------------------|
| | a. TEST-ING RE-QUIR-ED | b. BE-LIEVED PRE-SENT | c. BE-LIEVED AB-SENT | a. MAXIMUM DAILY VALUE | | b. MAXIMUM 30 DAY VALUE (if available) | | c. LONG TERM AVRG. VALUE (if available) | | | a. CONCENTRATION | b. MASS | b. LONG TERM AVERAGE VALUE | | b. NO. OF ANALYSES |
| | | | | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | | | | (1) CONCENTRATION | (2) MASS | |
| METALS, CYANIDE, AND TOTAL PHENOLS | | | | | | | | | | | | | | | |
| 1M. Antimony, Total (7440-36-0) | | | X | < 0.050 | < 1.9 | | | | | | mg/l | mg/d | | | |
| 2M. Arsenic, Total (7440-38-2) | | X | | 0.002 | 0.1 | | | | | | mg/l | mg/d | | | |
| 3M. Beryllium, Total, 7440-41-7) | | | X | < 0.001 | < 0.0 | | | | | | mg/l | mg/d | | | |
| 4M. Cadmium, Total (7440-43-9) | | | X | < 0.010 | < 0.4 | | | | | | mg/l | mg/d | | | |
| 5M. Chromium, Total (7440-47-3) | | X | | 0.040 | 1.5 | | | | | | mg/l | mg/d | | | |
| 6M. Copper, Total (7440-50-8) | | X | | 0.031 | 1.2 | | | | | | mg/l | mg/d | | | |
| 7M. Lead, Total (7439-92-1) | | | X | < 0.050 | < 1.9 | | | | | | mg/l | mg/d | | | |
| 8M. Mercury, Total (7439-97-6) | | | X | < 0.0002 | < 0.00 | | | | | | mg/l | mg/d | | | |
| 9M. Nickel, Total (7440-02-0) | | X | | 0.06 | 2.3 | | | | | | mg/l | mg/d | | | |
| 10M. Selenium, Total (7782-49-2) | | | X | < 0.001 | < 0.0 | | | | | | mg/l | mg/d | | | |
| 11M. Silver, Total (7440-22-4) | | | X | < 0.010 | < 0.4 | | | | | | mg/l | mg/d | | | |
| 12M. Thallium, Total (7440-28-0) | | | X | < 0.4 | < 15.1 | | | | | | mg/l | mg/d | | | |
| 13M. Zinc, Total (7440-66-6) | | X | | 0.043 | 1.6 | | | | | | mg/l | mg/d | | | |
| 14M. Cyanide, Total (57-12-6) | | | X | 0.01 | 0.4 | | | | | | mg/l | mg/d | | | |
| 15M. Phenols, Total | | | X | < 0.01 | < 0.4 | | | | | | mg/l | mg/d | | | |
| DIOXIN | | | | | | | | | | | | | | | |
| 2,3,7,8-Tetra-chlorodibenzo-P-Dioxin (1764-01-6) | | | X | DESCRIBE RESULTS | | | | | | | | | | | |

| 1. POLLUTANT AND CAS NUMBER (if available) | 2. MARK 'X' | | | 3. EFFLUENT | | | | | | 4. UNITS | | 5. INTAKE (optional) | | | |
|---|---------------------|---------------------|-------------|------------------------|----------|--|----------|---|----------|--------------------|------------------|----------------------|----------------------------|----------|--------------------|
| | a. TESTING REQUIRED | b. BELIEVED PRESENT | c. BELIEVED | b. MAXIMUM DAILY VALUE | | d. MAXIMUM 30 DAY VALUE (if available) | | c. LONG TERM AVRG. VALUE (if available) | | d. NO. OF ANALYSES | a. CONCENTRATION | b. MASS | b. LONG TERM AVERAGE VALUE | | d. NO. OF ANALYSES |
| | | | | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | | | | (1) CONCENTRATION | (2) MASS | |
| GC/MS FRACTION - VOLATILE COMPOUNDS | | | | | | | | | | | | | | | |
| 1V. Acrolein (107-02-8) | | | X | | | | | | | | | | | | |
| 2V. Acrylonitrile (107-13-1) | | | X | | | | | | | | | | | | |
| 3V. Benzene (71-43-2) | | | X | < 0.005 | < 0.2 | | | | | | mg/l | mg/d | | | |
| 4V. Bis (Chloromethyl) Ether (542-88-1) | | | X | | | | | | | | | | | | |
| 5V. Bromoform (75-25-2) | | | X | < 0.005 | < 0.2 | | | | | | mg/l | mg/d | | | |
| 6V. Carbon Tetrachloride (56-23-5) | | | X | < 0.005 | < 0.2 | | | | | | mg/l | mg/d | | | |
| 7V. Chlorobenzene (108-90-7) | | | X | < 0.005 | < 0.2 | | | | | | mg/l | mg/d | | | |
| 8V. Chlorodibromomethane (124-48-1) | | | X | < 0.005 | < 0.2 | | | | | | mg/l | mg/d | | | |
| 9V. Chloroethane (75-00-3) | | | X | < 0.010 | < 0.000 | | | | | | mg/l | mg/d | | | |
| 10V. 2-Chloroethylnyl Ether (110-75-8) | | | X | | | | | | | | | | | | |
| 11V. Chloroform (67-66-3) | | | X | < 0.005 | < 0.2 | | | | | | mg/l | mg/d | | | |
| 12V. Dichlorobromomethane (75-27-4) | | | X | < 0.005 | < 0.2 | | | | | | mg/l | mg/d | | | |
| 13V. Dichlorodifluoromethane (75-71-8) | | | X | | | | | | | | | | | | |
| 14V. 1,1-Dichloroethane (75-34-3) | | | X | < 0.005 | < 0.2 | | | | | | mg/l | mg/d | | | |
| 15V. 1,2-Dichloroethane (107-06-2) | | | X | < 0.005 | < 0.2 | | | | | | mg/l | mg/d | | | |
| 16V. 1,1-Dichloroethylene (75-35-4) | | | X | < 0.005 | < 0.2 | | | | | | mg/l | mg/d | | | |
| 17V. 1,2-Dichloropropane (78-87-5) | | | X | < 0.005 | < 0.2 | | | | | | mg/l | kg/d | | | |
| 18V. 1,3-Dichloropropylene (542-75-6) | | | X | < | < 0.0 | | | | | | mg/l | mg/d | | | |
| 19V. Ethylbenzene (100-41-4) | | | X | < 0.005 | < 0.2 | | | | | | mg/l | mg/d | | | |
| 20V. Methyl Bromide (74-83-9) | | | X | < 0.010 | < 0.4 | | | | | | mg/l | mg/d | | | |
| 21V. Methyl Chloride (74-87-3) | | | X | < 0.010 | < 0.4 | | | | | | mg/l | mg/d | | | |

| 1. POLLUTANT AND CAS NUMBER (if available) | 2. MARK 'X' | | | 3. EFFLUENT | | | | | | 4. UNITS | | 5. INTAKE (optional) | | | |
|--|--------------------------------------|----------------------------------|---------------------------------|------------------------|----------|---|----------|--|----------|----------------------------|------------------|----------------------|----------------------------|----------|----------------------------|
| | B. TEST ING RE- QUIR- ED | D. BE- LIEVED PRE- SENT | C. BE- LIEVED AS- SENT | a. MAXIMUM DAILY VALUE | | b. MAXIMUM 30 DAY VALUE (if available) | | c. LONG TERM AVRG. VALUE (if available) | | d. NO. OF ANAL- YSES | a. CONCENTRATION | b. MASS | e. LONG TERM AVERAGE VALUE | | d. NO. OF ANAL- YSES |
| | | | | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | | | | (1) CONCENTRATION | (2) MASS | |
| GC/MS FRACTION - VOLATILE COMPOUNDS (continued) | | | | | | | | | | | | | | | |
| 22V. Methylene Chloride (75-09-2) | | | X | < 0.005 | < 0.2 | | | | | | mg/l | mg/d | | | |
| 23V. 1,1,2,2-Tetrachloroethane (79-34-5) | | | X | < 0.005 | < 0.2 | | | | | | mg/l | mg/d | | | |
| 24V. Tetrachloroethylene (127-18-4) | | | X | < 0.005 | < 0.2 | | | | | | mg/l | mg/d | | | |
| 25V. Toluene (108-88-3) | | | X | < 0.005 | < 0.2 | | | | | | mg/l | mg/d | | | |
| 26V. 1,2-Trans-Dichloroethylene (156-60-5) | | | X | < 0.005 | < 0.2 | | | | | | mg/l | mg/d | | | |
| 27V. 1,1,1-Trichloroethane (71-55-6) | | | X | < 0.005 | < 0.2 | | | | | | mg/l | mg/d | | | |
| 28V. 1,1,2-Trichloroethane (79-00-5) | | | X | < 0.005 | < 0.2 | | | | | | mg/l | mg/d | | | |
| 29V. Trichloroethylene (79-01-6) | | | X | < 0.005 | < 0.2 | | | | | | mg/l | mg/d | | | |
| 30V. Trichlorofluoromethane (75-69-4) | | | X | < 0.005 | < 0.2 | | | | | | mg/l | mg/d | | | |
| 31V. Vinyl Chloride (75-01-4) | | | X | < 0.010 | < 0.4 | | | | | | mg/l | mg/d | | | |
| GC/MS FRACTION - ACID COMPOUNDS | | | | | | | | | | | | | | | |
| 1A. 2-Chlorophenol (95-57-8) | | | X | < 0.010 | < 0.4 | | | | | | mg/l | mg/d | | | |
| 2A. 2,4-Dichlorophenol (120-83-2) | | | X | < 0.010 | < 0.4 | | | | | | mg/l | mg/d | | | |
| 3A. 2,4-Dimethylphenol (105-67-9) | | | X | < 0.010 | < 0.4 | | | | | | mg/l | mg/d | | | |
| 4A. 4,6-Dinitro-O-Cresol (534-52-1) | | | X | < 0.010 | < 0.4 | | | | | | mg/l | mg/d | | | |
| 5A. 2,4-Dinitrophenol (51-28-5) | | | X | < 0.010 | < 0.4 | | | | | | mg/l | mg/d | | | |
| 6A. 2-Nitrophenol (88-75-5) | | | X | < 0.010 | < 0.4 | | | | | | mg/l | mg/d | | | |
| 7A. 4-Nitrophenol (100-02-7) | | | X | < 0.010 | < 0.4 | | | | | | mg/l | mg/d | | | |
| 8A. P-Chloro-M-Cresol (59-50-7) | | | X | < 0.010 | < 0.4 | | | | | | mg/l | mg/d | | | |
| 9A. Pentachlorophenol (87-86-5) | | | X | < 0.010 | < 0.4 | | | | | | mg/l | mg/d | | | |
| 10A. Phenol (108-95-2) | | | X | < 0.010 | < 0.4 | | | | | | mg/l | mg/d | | | |
| 11A. 2,4,6-Trichlorophenol (88-06-2) | | | X | < 0.010 | < 0.4 | | | | | | 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 | d. MAXIMUM DAILY VALUE | | e. MAXIMUM 30 DAY VALUE (if available) | | f. LONG TERM AVRG. VALUE (if available) | | d. NO. OF ANALYSES | a. CONCENTRATION | b. MASS | g. LONG TERM AVERAGE VALUE | | b. NO. OF ANALYSES |
| | | | | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | | | | (1) CONCENTRATION | (2) MASS | |
| GC/MS FRACTION - BASE/NEUTRAL COMPOUNDS | | | | | | | | | | | | | | | |
| 1B. Acenaphthens (83-32-9) | | | X | < 0.010 | < 0.4 | | | | | | mg/l | mg/d | | | |
| 2B. Acenaphthylene (208-96-8) | | | X | < 0.010 | < 0.4 | | | | | | mg/l | mg/d | | | |
| 3B. Anthracene (120-12-7) | | | X | < 0.010 | < 0.4 | | | | | | mg/l | mg/d | | | |
| 4B. Benzidine (92-87-5) | | | X | < 0.010 | < 0.4 | | | | | | mg/l | mg/d | | | |
| 5B. Benzo (a) Anthracene (56-55-3) | | | X | < 0.010 | < 0.4 | | | | | | mg/l | mg/d | | | |
| 6B. Benzo (a) Pyrene (50-32-8) | | | X | < 0.010 | < 0.4 | | | | | | mg/l | mg/d | | | |
| 7B. 3,4-Benzo-fluoranthene (205-99-2) | | | X | < 0.010 | < 0.4 | | | | | | mg/l | mg/d | | | |
| 8B. Benzo (ghi) Perylene (191-24-2) | | | X | < 0.010 | < 0.4 | | | | | | mg/l | mg/d | | | |
| 9B. Benzo (k) Fluoranthene (207-08-9) | | | X | < 0.010 | < 0.4 | | | | | | mg/l | mg/d | | | |
| 10B. Bis (2-Chloroethoxy) Methane (111-91-1) | | | X | < 0.010 | < 0.4 | | | | | | mg/l | mg/d | | | |
| 11B. Bis (2-Chloroethyl) Ether (111-44-4) | | | X | < 0.010 | < 0.4 | | | | | | mg/l | mg/d | | | |
| 12B. Bis (2-Chloroisopropyl) Ether (102-60-1) | | | X | < 0.010 | < 0.4 | | | | | | mg/l | mg/d | | | |
| 13B. Bis (2-Ethylhexyl) Phthalate (117-81-7) | | | X | < 0.010 | < 0.4 | | | | | | mg/l | mg/d | | | |
| 14B. 4-Bromophenyl Phenyl Ether (101-55-3) | | | X | < 0.010 | < 0.4 | | | | | | mg/l | mg/d | | | |
| 15B. Butyl Benzyl Phthalate (85-68-7) | | | X | < 0.010 | < 0.4 | | | | | | mg/l | mg/d | | | |
| 16B. 2-Chloronaphthalene (91-58-7) | | | X | < 0.010 | < 0.4 | | | | | | mg/l | mg/d | | | |
| 17B. 4-Chlorophenyl Phenyl Ether (7005-72-3) | | | X | < 0.010 | < 0.4 | | | | | | mg/l | mg/d | | | |
| 18B. Chrysene (218-01-9) | | | X | < 0.010 | < 0.4 | | | | | | mg/l | mg/d | | | |
| 19B. Dibenzo (a,h) Anthracene (53-70-3) | | | X | < 0.010 | < 0.4 | | | | | | mg/l | mg/d | | | |
| 20B. 1,2-Dichlorobenzene (95-50-1) | | | X | < 0.010 | < 0.4 | | | | | | mg/l | mg/d | | | |
| 21B. 1,3-Dichlorobenzene (541-73-1) | | | X | < 0.010 | < 0.4 | | | | | | 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 | a. MAXIMUM DAILY VALUE | | b. MAXIMUM 30 DAY VALUE (if available) | | c. LONG TERM AVG. VALUE (if available) | | d. NO. OF ANALYSES | a. CONCENTRATION | b. MASS | b. LONG TERM AVERAGE VALUE | | d. NO. OF ANALYSES |
| | | | | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | | | | (1) CONCENTRATION | (2) MASS | |
| GC/MS FRACTION - BASE/NEUTRAL COMPOUNDS (continued) | | | | | | | | | | | | | | | |
| 22B. 1,4-Dichlorobenzene (106-46-7) | | | X | < 0.010 | < 0.4 | | | | | | mg/l | mg/d | | | |
| 23B. 3,3'-Dichlorobenzidine (91-94-1) | | | X | < 0.010 | < 0.4 | | | | | | mg/l | mg/d | | | |
| 24B. Diethyl Phthalate (84-66-2) | | | X | < 0.010 | < 0.4 | | | | | | mg/l | mg/d | | | |
| 25B. Dimethyl Phthalate (131-11-3) | | | X | < 0.010 | < 0.4 | | | | | | mg/l | mg/d | | | |
| 26B. DI-N-Butyl Phthalate (84-74-2) | | | X | < 0.010 | < 0.4 | | | | | | mg/l | mg/d | | | |
| 27B. 2,4-Dinitrotoluene (121-14-2) | | | X | < 0.010 | < 0.4 | | | | | | mg/l | mg/d | | | |
| 28B. 2,6-Dinitrotoluene (606-20-2) | | | X | < 0.010 | < 0.4 | | | | | | mg/l | mg/d | | | |
| 29B. DI-N-Octyl Phthalate (117-84-0) | | | X | < 0.010 | < 0.4 | | | | | | mg/l | mg/d | | | |
| 30B. 1,2-Diphenylhydrazine (as Azobenzene) (122-66-7) | | | X | < 0.010 | < 0.4 | | | | | | mg/l | mg/d | | | |
| 31B. Fluoranthene (206-44-0) | | | X | < 0.010 | < 0.4 | | | | | | mg/l | mg/d | | | |
| 32B. Fluorene (86-73-7) | | | X | < 0.010 | < 0.4 | | | | | | mg/l | mg/d | | | |
| 33B. Hexachlorobenzene (118-74-1) | | | X | < 0.010 | < 0.4 | | | | | | mg/l | mg/d | | | |
| 34B. Hexachlorobutadiene (87-68-3) | | | X | < 0.010 | < 0.4 | | | | | | mg/l | mg/d | | | |
| 35B. Hexachlorocyclopentadiene (77-47-4) | | | X | < 0.010 | < 0.4 | | | | | | mg/l | mg/d | | | |
| 36B. Hexachloroethane (67-72-1) | | | X | < 0.010 | < 0.4 | | | | | | mg/l | mg/d | | | |
| 37B. Indeno (1,2,3-cd) Pyrene (193-39-5) | | | X | < 0.010 | < 0.4 | | | | | | mg/l | mg/d | | | |
| 38B. Isophorone (78-59-1) | | | X | < 0.010 | < 0.4 | | | | | | mg/l | mg/d | | | |
| 39B. Naphthalene (91-20-3) | | | X | < 0.010 | < 0.4 | | | | | | mg/l | mg/d | | | |
| 40B. Nitrobenzene (98-95-3) | | | X | < 0.010 | < 0.4 | | | | | | mg/l | mg/d | | | |
| 41B. N-Nitrosodimethylamine (62-76-9) | | | X | < 0.010 | < 0.4 | | | | | | mg/l | mg/d | | | |
| 42B. N-Nitrosodi-N-Propylamine (621-54-7) | | | X | < 0.010 | < 0.4 | | | | | | mg/l | mg/d | | | |

CONTINUED FROM THE FRONT

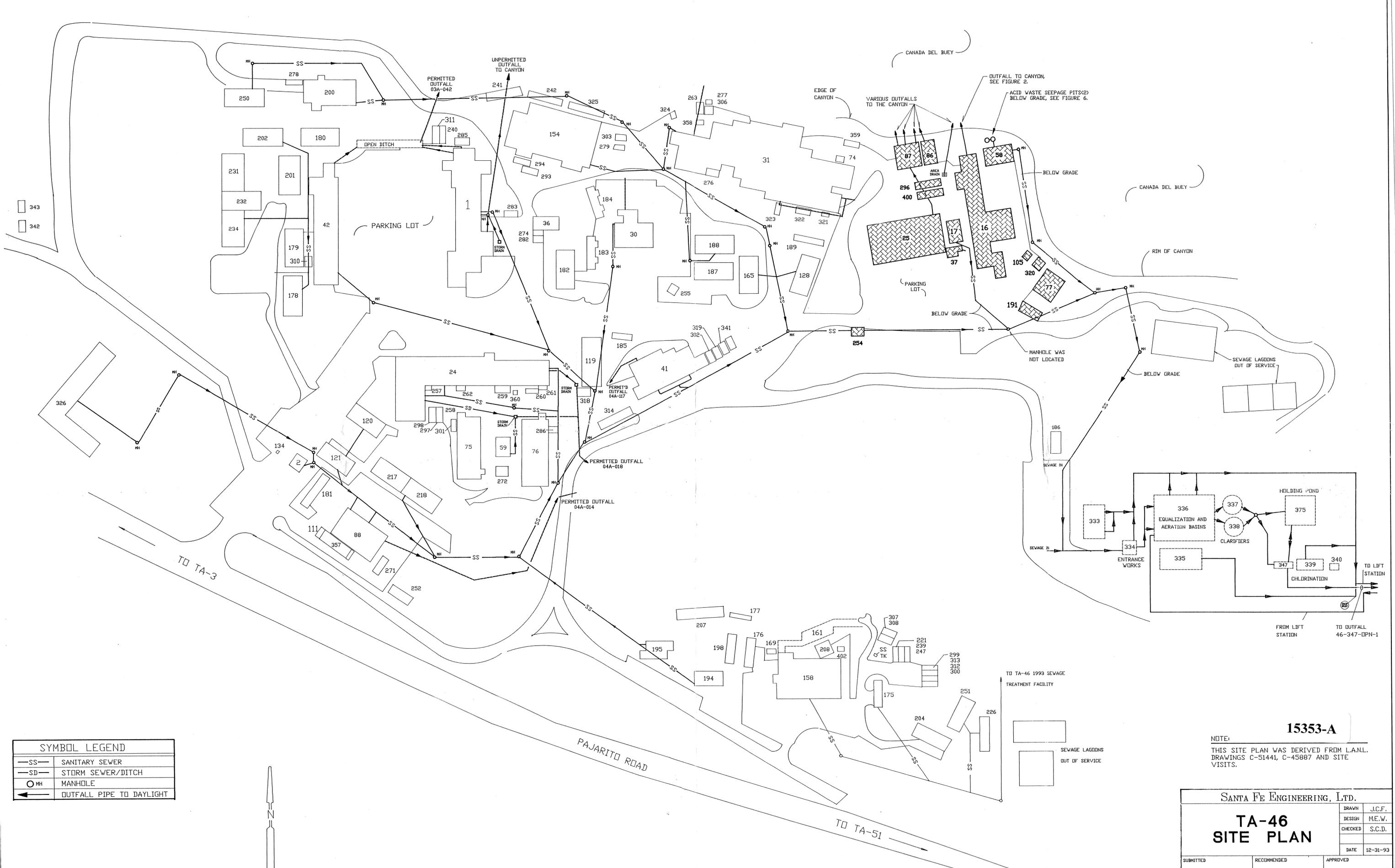
| 1. POLLUTANT AND CAS NUMBER (if available) | 2. MARK 'X' | | | 3. EFFLUENT | | | | | | 4. UNITS | | 5. INTAKE (optional) | | | |
|--|---------------------|---------------------|--------------------|------------------------|----------|---|----------|---|----------|--------------------|------------------|----------------------|----------------------------|----------|--------------------|
| | a. TESTING REQUIRED | b. BELIEVED PRESENT | c. BELIEVED ABSENT | a. MAXIMUM DAILY VALUE | | b. MAXIMUM 30 DAY VALUE (if available) | | c. LONG TERM AVG. VALUE (if available) | | d. NO. OF ANALYSES | a. CONCENTRATION | b. MASS | a. LONG TERM AVERAGE VALUE | | b. NO. OF ANALYSES |
| | | | | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | (1) CONCENTRATION | (2) MASS | | | | (1) CONCENTRATION | (2) MASS | |
| GC/MS FRACTION - BASE/NEUTRAL COMPOUNDS (continued) | | | | | | | | | | | | | | | |
| 43B. N-Nitrosodiphenylamine (86-30-6) | | | X | < 0.010 | < 0.4 | | | | | | mg/l | mg/d | | | |
| 44B. Phenanthrene (85-01-8) | | | X | < 0.010 | < 0.4 | | | | | | mg/l | mg/d | | | |
| 45B. Pyrene (129-00-0) | | | X | < 0.010 | < 0.4 | | | | | | mg/l | mg/d | | | |
| 46B. 1,2,4-Trichlorobenzene (120-82-1) | | | X | < 0.010 | < 0.4 | | | | | | mg/l | mg/d | | | |
| GC/MS FRACTION - PESTICIDES | | | | | | | | | | | | | | | |
| 1P. Aldrin (309-00-2) | | | X | < 0.06 | < 2.3 | | | | | | ug/l | ug/d | | | |
| 2P. α -BHC (319-84-6) | | | X | < 0.02 | < 0.8 | | | | | | ug/l | ug/d | | | |
| 3P. β -BHC (319-85-7) | | | X | < 0.1 | < 3.8 | | | | | | ug/l | ug/d | | | |
| 4P. γ -BHC (58-89-9) | | | X | < 0.03 | < 1.1 | | | | | | ug/l | ug/d | | | |
| 5P. δ -BHC (319-86-8) | | | X | < 0.12 | < 4.5 | | | | | | ug/l | ug/d | | | |
| 6P. Chlordane (57-74-9) | | | X | < 0.25 | < 9.5 | | | | | | ug/l | ug/d | | | |
| 7P. 4,4'-DDT (50-29-3) | | | X | < 0.06 | < 2.3 | | | | | | ug/l | ug/d | | | |
| 8P. 4,4'-DDE (72-55-9) | | | X | < 0.08 | < 3.0 | | | | | | ug/l | ug/d | | | |
| 9P. 4,4'-DDD (72-54-8) | | | X | < 0.08 | < 3.0 | | | | | | ug/l | ug/d | | | |
| 10P. Dieldrin (60-57-1) | | | X | < 0.08 | < 3.0 | | | | | | ug/l | ug/d | | | |
| 11P. α -Endosulfan (115-29-7) | | | X | < 0.05 | < 1.9 | | | | | | ug/l | ug/d | | | |
| 12P. β -Endosulfan (115-29-7) | | | X | < 0.08 | < 3.0 | | | | | | ug/l | ug/d | | | |
| 13P. Endosulfan Sulfate (1031-07-8) | | | X | < 0.09 | < 3.4 | | | | | | ug/l | ug/d | | | |
| 14P. Endrin (72-20-8) | | | X | < 0.06 | < 2.3 | | | | | | ug/l | ug/d | | | |
| 15P. Endrin Aldehyde (7421-93-4) | | | X | < 0.62 | < 23.5 | | | | | | ug/l | ug/d | | | |
| 16P. Heptachlor (76-44-8) | | | X | < 0.3 | < 11.4 | | | | | | 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 AVRG. 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 | |
| GC/MS FRACTION — PESTICIDES (continued) | | | | | | | | | | | | | | | |
| 17P. Heptachlor Epoxide (1024-57-3) | | | X | < 0.04 | < 1.5 | | | | | | ug/l | ug/d | | | |
| 18P. PCB-1242 (53469-21-9) | | | X | < 0.68 | < 25.7 | | | | | | ug/l | ug/d | | | |
| 19P. PCB-1254 (11097-69-1) | | | X | < 0.68 | < 25.7 | | | | | | ug/l | ug/d | | | |
| 20P. PCB-1221 (11104-28-2) | | | X | N.D. | | | | | | | | | | | |
| 21P. PCB-1232 (11141-16-5) | | | X | N.D. | | | | | | | | | | | |
| 22P. PCB-1248 (12672-29-6) | | | X | N.D. | | | | | | | | | | | |
| 23P. PCB-1260 (11098-82-5) | | | X | < 0.68 | < 25.7 | | | | | | ug/l | ug/d | | | |
| 24P. PCB-1016 (12674-11-2) | | | X | N.D. | | | | | | | | | | | |
| 25P. Toxaphene (8001-35-2) | | | X | < 2.5 | < 94.6 | | | | | | ug/l | ug/d | | | |

DYE STUDY INFORMATION

| BUILDING NUMBER | DRAIN NUMBER | DID DYE REACH EXPECTED DESTINATION? | COMMENTS |
|-----------------|--------------|-------------------------------------|--------------------------|
| 46-16 | BFD3 | NO | PIPE TO S.S. |
| 46-16 | BFD6 | NO | PIPE TO S.S. |
| 46-16 | 1CD2 | NO | PIPE TO S.S. |
| 46-16 | 1FD2 | NO | PIPE TO S.S. |
| 46-16 | 1FD6 | NO | PIPE TO S.S. |
| 46-16 | 1SD1 | NO | PIPE TO S.S. |
| 46-16 | 1SD2 | NO | PIPE TO S.S. |
| 46-16 | 1SD3 | NO | PIPE TO S.S. |
| 46-17 | 1ED1 | YES | NONE |
| 46-17 | 1SD1 | YES | NONE |
| 46-17 | 1TL1 | YES | NONE |
| 46-25 | 1CD1 | YES | NONE |
| 46-25 | RD2 | YES | NONE |
| 46-25 | 1SD1 | NO | PIPE TO S.S. |
| 46-25 | 1SD2 | NO | PIPE TO S.S. |
| 46-37 | 1FD1 | NO | PERMIT/PLUG |
| 46-37 | 1FD2 | NO | PERMIT/PLUG |
| 46-58 | 1FS1 | YES | NONE |
| 46-58 | 1SD1 | YES | ELIMINATE SINK |
| 46-58 | 1SD3 | YES | NONE |
| 46-58 | 1TL1 | YES | NONE |
| 46-77 | 1SD1 | NO | ELIMINATE SINK |
| 46-77 | 1WF1 | NO | ELIMINATE WATER FOUNTAIN |
| 46-87 | RD1 | YES | NONE |
| 46-87 | RD2 | YES | NONE |
| 46-191 | 1TL1 | YES | NONE |



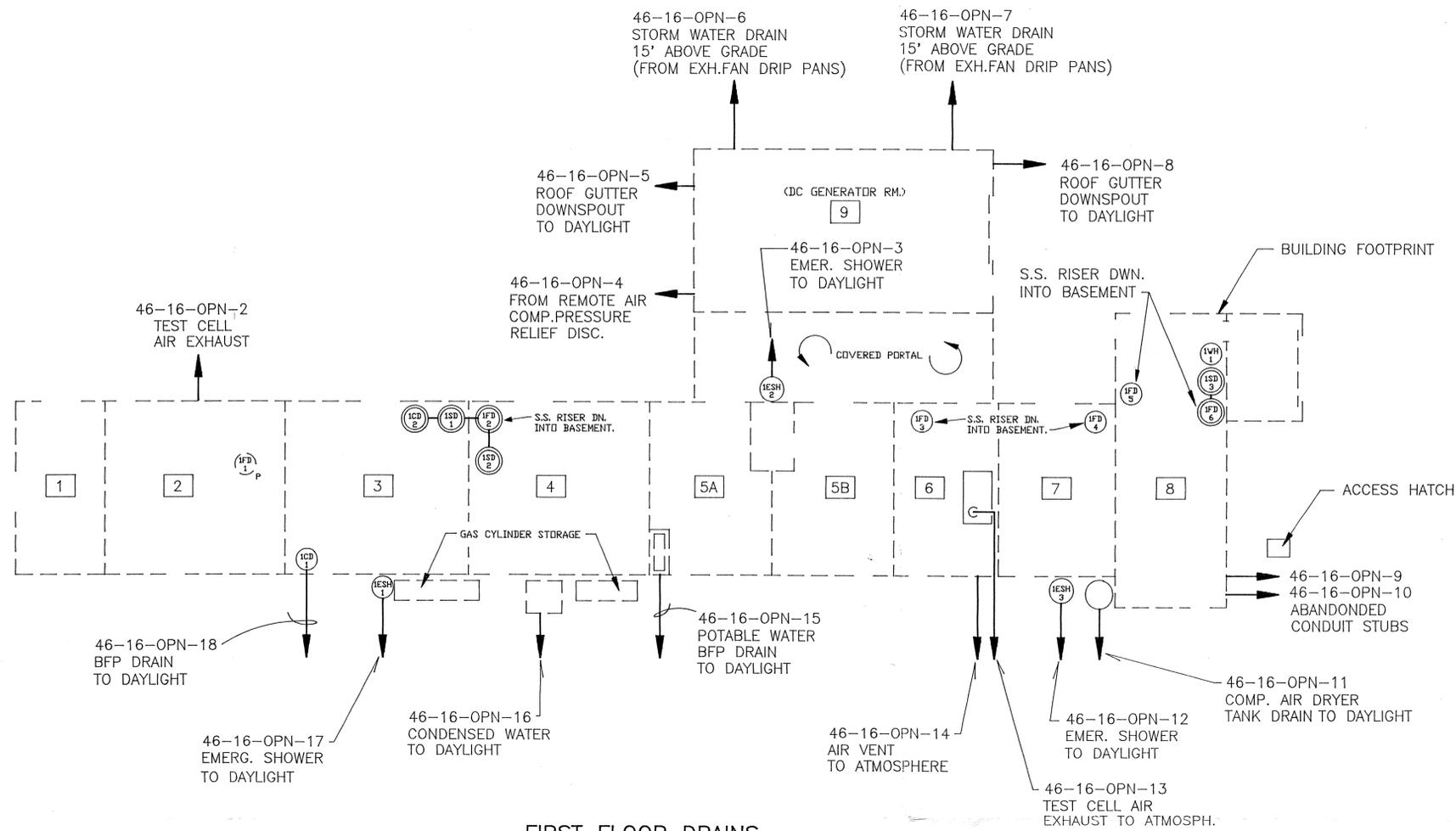
| SYMBOL LEGEND | |
|---------------|--------------------------|
| —SS— | SANITARY SEWER |
| —SD— | STORM SEWER/DITCH |
| ○ MH | MANHOLE |
| ← | OUTFALL PIPE TO DAYLIGHT |



15353-A

NOTE:
THIS SITE PLAN WAS DERIVED FROM L.A.N.L. DRAWINGS C-51441, C-45887 AND SITE VISITS.

| | | | |
|----------------------------|-------------|--------------------------------|----------|
| SANTA FE ENGINEERING, LTD. | | DRAWN | J.C.F. |
| TA-46 SITE PLAN | | DESIGN | M.E.V. |
| | | CHECKED | S.C.D. |
| | | DATE | 12-31-93 |
| SUBMITTED | RECOMMENDED | APPROVED | |
| Los Alamos | | Los Alamos National Laboratory | SHEET 1 |
| | | Los Alamos, New Mexico 87545 | OF 1 |
| CLASSIFICATION | REVIEWER | DATE | |
| REQUESTING DIVISION | LAB JOB NO. | DRAWING NO. | REV. |
| REQUESTING GROUP | EM-8 | 11056-65 | FIGURE 1 |

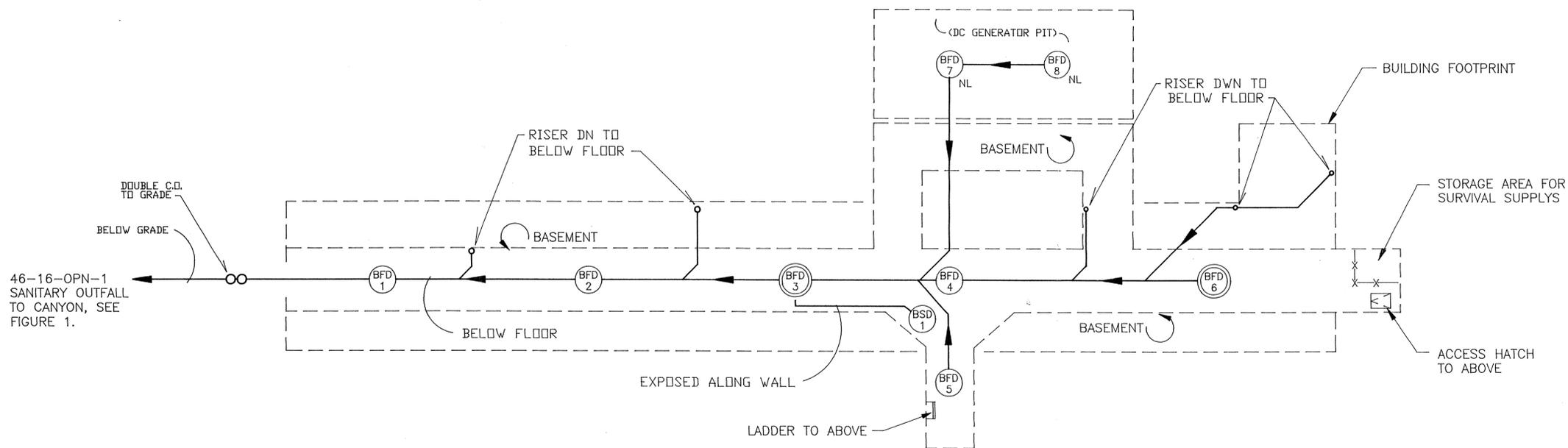


FIRST FLOOR DRAINS

NOT TO SCALE

| SYMBOL LEGEND | |
|---------------|--------------------|
| "B" | BASEMENT |
| BFP | BACKFLOW PREVENTER |
| CD | CUP DRAIN |
| ESH | EMERGENCY SHOWER |
| FD | FLOOR DRAIN |
| SD | SINK DRAIN |
| SD | SINK DRAIN |
| WH | WATER HEATER |

- DYE TESTED DRAIN
- DRAIN HAS BEEN PLUGGED
- DRAIN WAS NOT LOCATED

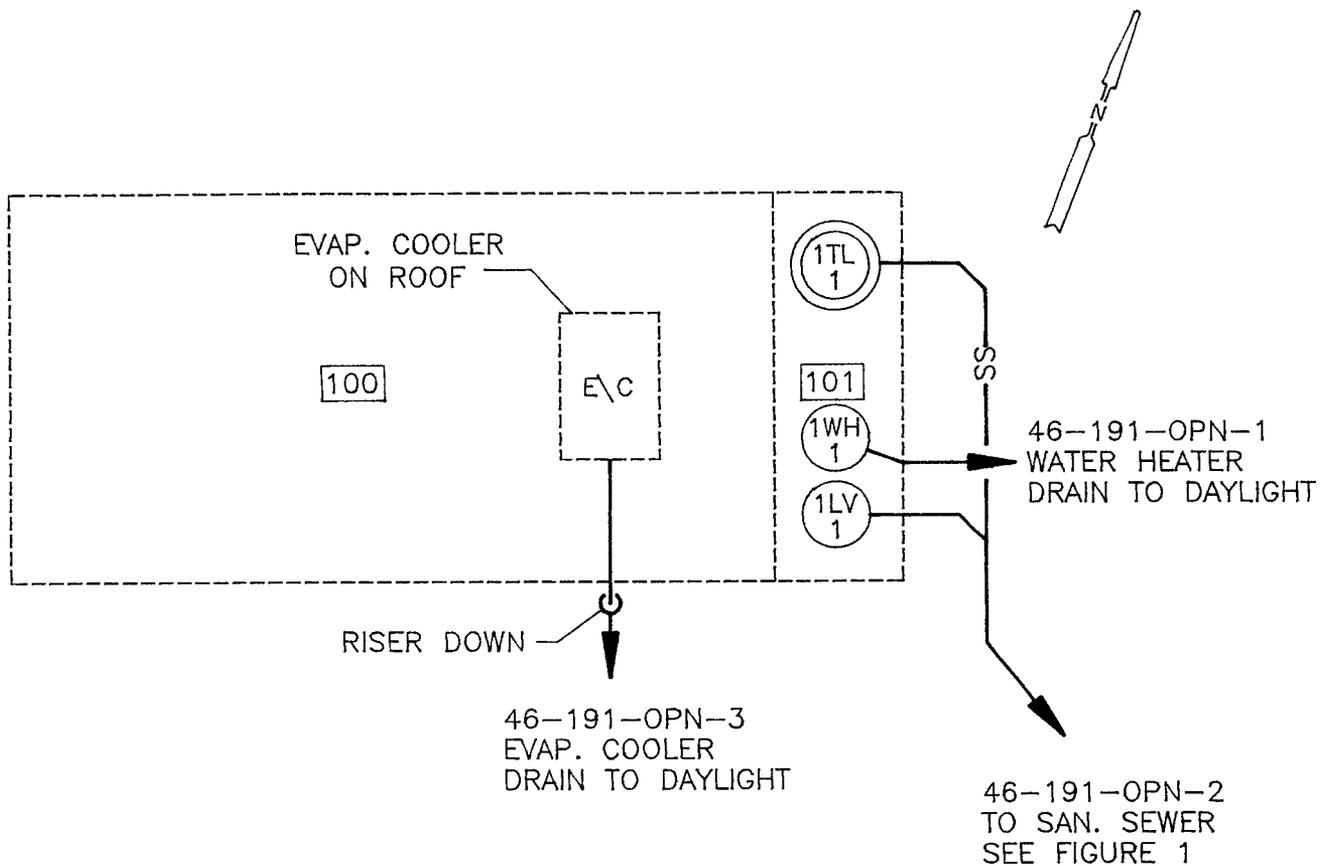


BASEMENT DRAINS

NOT TO SCALE

15353-B

| | | | |
|--|-------------|-------------|--------------|
| SANTA FE ENGINEERING, LTD. | | | |
| TA46-16 | DRAWN | M.E.W. | |
| DRAIN SCHEMATIC | DESIGN | M.E.W. | |
| | CHECKED | S.C.D. | |
| | | DATE | 12-31-93 |
| 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 | 11056-65 | FIGURE 2 | |



NOTES:

THIS DRAIN SCHEMATIC WAS DERIVED FROM SITE VISITS.

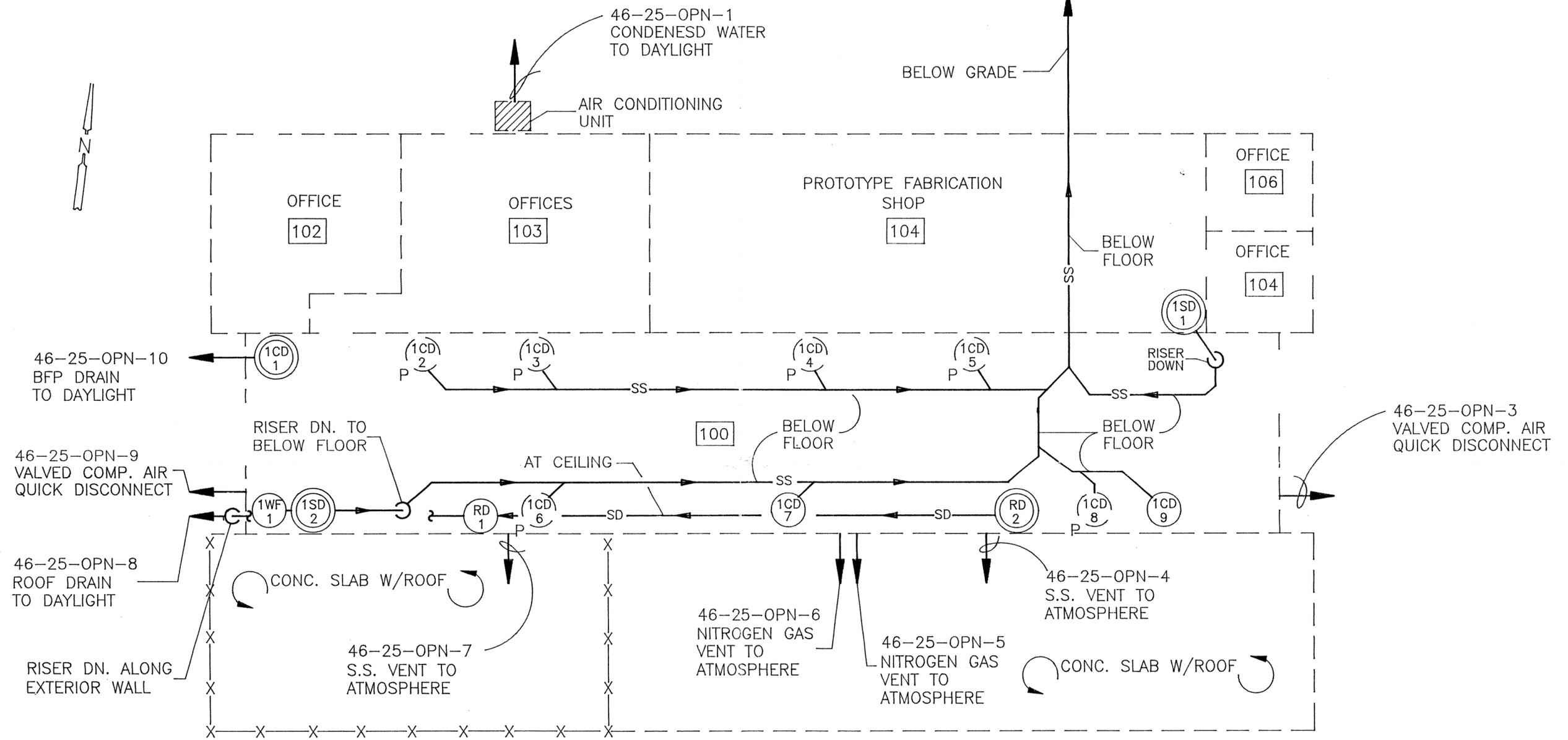
| SYMBOL LEGEND | |
|---------------|--------------------|
| E/C | EVAPORATIVE COOLER |
| LV | LAVATORY |
| —SS— | SANITARY SEWER |
| TL | TOILET |
| | |



DYE TESTED DRAIN

| SANTA FE ENGINEERING, LTD. | | | |
|--------------------------------------|-----------------|--|--------------|
| TA-46-191 DRAIN SCHEMATIC | | DRAWN | G.S. |
| | | DESIGN | M.E.W. |
| | | CHECKED | S.C.D. |
| | | DATE | 12/31/93 |
| SUBMITTED | RECOMMENDED | APPROVED | |
| Los Alamos | | 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 EM-8 | 11056-65 | FIGURE 10 | |

46-25-OPN-2
SANITARY SEWER TO
BUILDING 46-87
SEE FIGURE 9

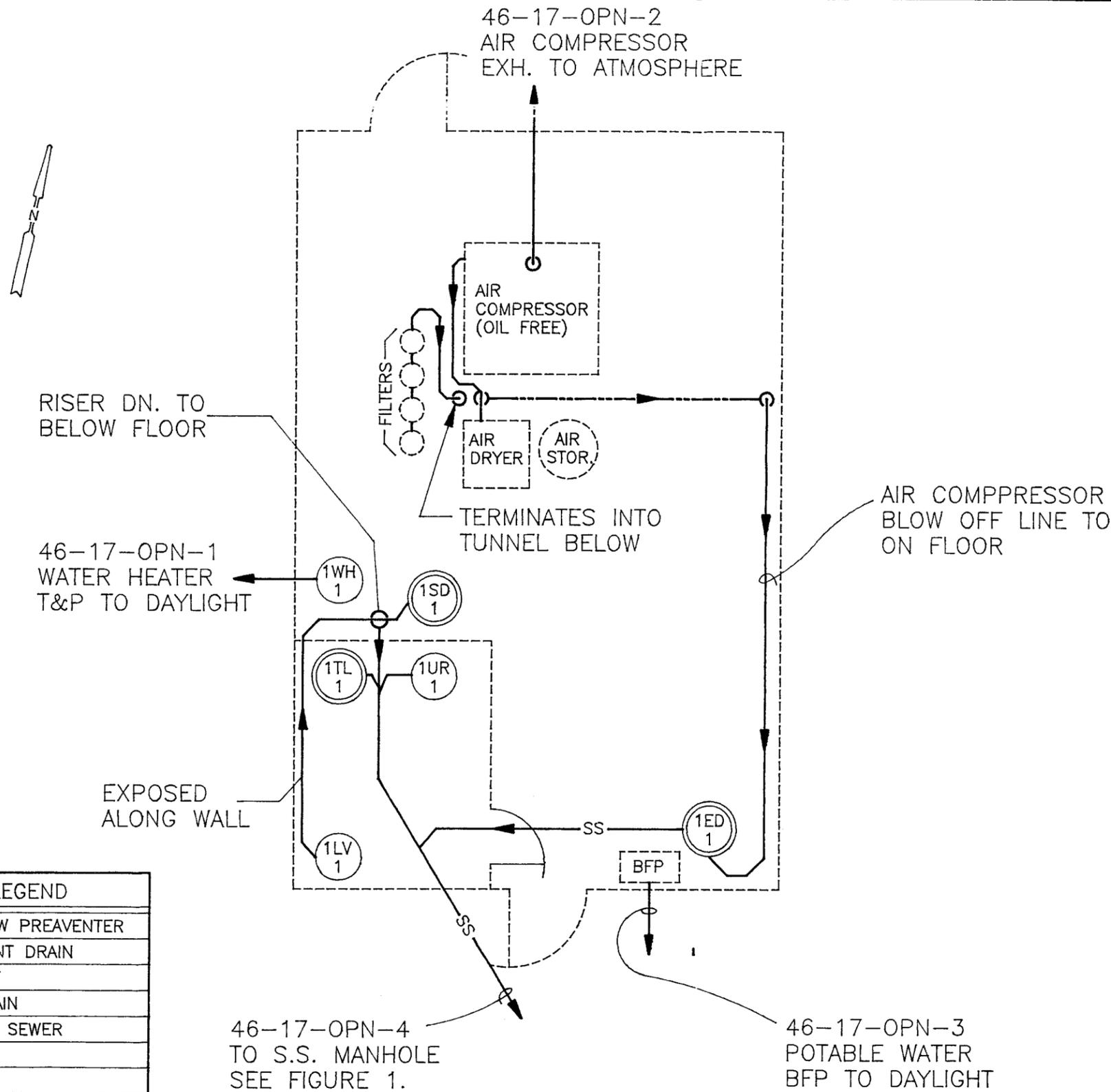


15353-C

| SYMBOL LEGEND | |
|---------------|---------------------|
| CD | CUP DRAIN |
| RD | ROOF DRAIN |
| SD | SINK DRAIN |
| SD | STORM SEWER PIPE |
| SS | SANITARY SEWER PIPE |
| WF | WATER FOUNTAIN |

- DYE TESTED DRAIN
- PLUGGED DRAIN

| | | | |
|---|-------------|--|--------------------|
| SANTA FE ENGINEERING, LTD. | | | |
| TA-46-25 FIRST FLOOR DRAIN SCHEMATIC | | DRAWN | R.L.P. |
| | | DESIGN | M.E.W. |
| | | CHECKED | S.C.D. |
| | | DATE | 12/31/93 |
| 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 | 11056-65 | FIGURE 4 | |

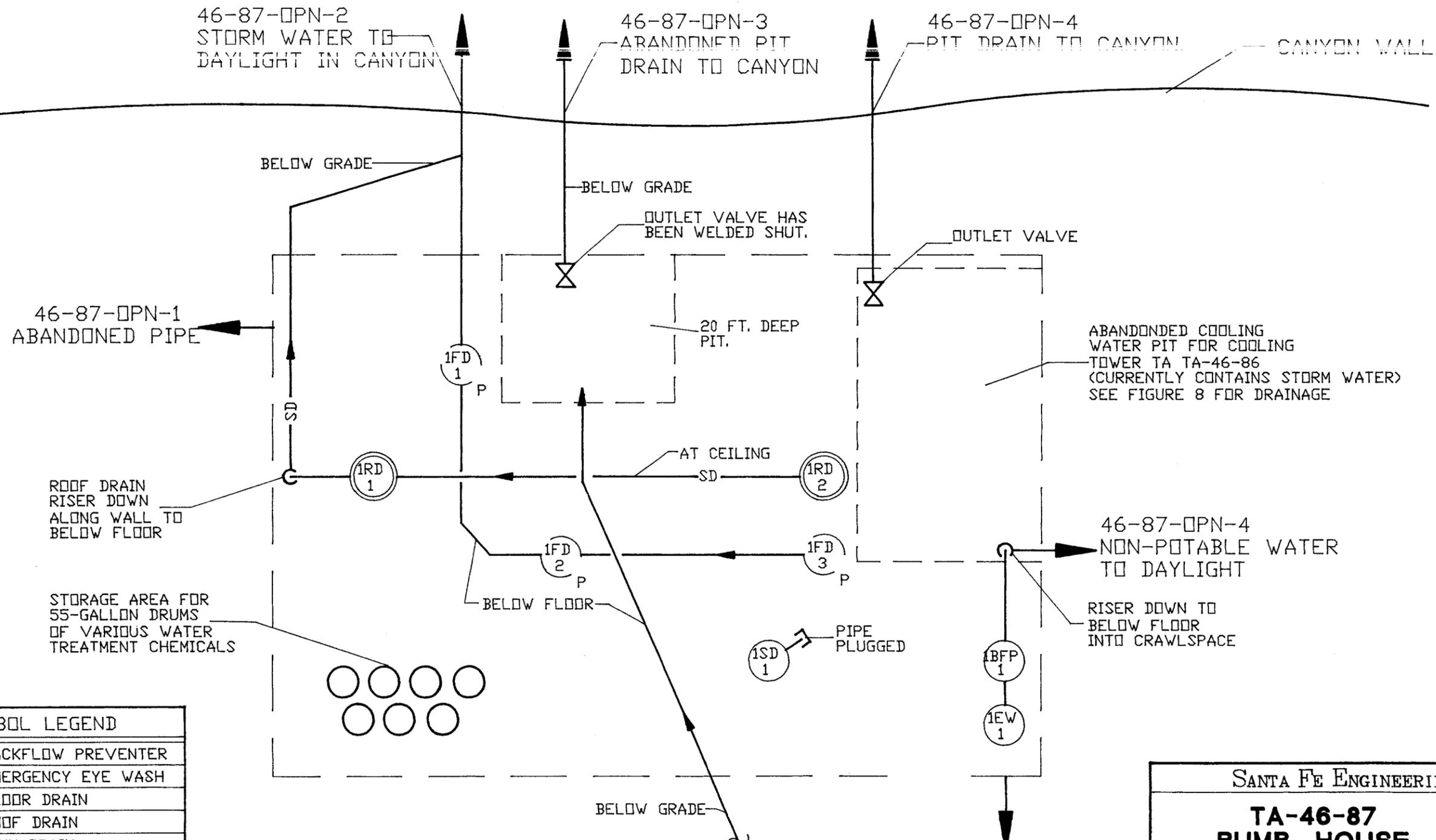
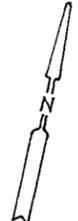


NOTES:
THIS DRAIN SCHEMATIC WAS DERIVED
FROM SITE VISITS.

| SYMBOL LEGEND | |
|---------------|--------------------|
| BFP | BACKFLOW PREVENTER |
| ED | EQUIPMENT DRAIN |
| LV | LAVATORY |
| SD | SINK DRAIN |
| SS | SANITARY SEWER |
| TL | TOILET |
| UR | URNIAL |
| WF | WATER FOUNTAIN |
| WH | WATER HEATER |

 DYE TESTED DRAIN

| SANTA FE ENGINEERING, LTD. | | | |
|--|-------------|-------------|--------------|
| TA-46-17 UTILITY BUILDING DRAIN SCHEMATIC | | DRAWN | G.S. |
| | | DESIGN | M.E.W. |
| | | CHECKED | S.C.D. |
| | | DATE | 12/31/03 |
| 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 | 11056-65 | FIGURE 3 | |



| SYMBOL LEGEND | |
|---------------|--------------------|
| BFP | BACKFLOW PREVENTER |
| EW | EMERGENCY EYE WASH |
| FD | FLOOR DRAIN |
| RD | ROOF DRAIN |
| SD | SINK DRAIN |
| SS | URNIAL |
| SD | STORM WATER |

- DYE TESTED DRAIN
- PLUGGED DRAIN

| | | | |
|--|-------------|--|-----------------------|
| SANTA FE ENGINEERING, LTD. | | | |
| TA-46-87 PUMP HOUSE DRAIN SCHEMATIC | | DRAWN | G.S. |
| | | DESIGN | M.E.W. |
| | | CHECKED | S.C.D. |
| | | DATE | 12/31/93 |
| 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 | 11056-65 | FIGURE 9 | |