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# RESPONSE TO DEFICIENCIES IDENTIFIED IN DECEMBER 9, 1993 INSPECTION OF URANYL NITRATE TANK SYSTEM AND REQUEST FOR ADDITIONAL INFORMATION

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DOE-FN/FERMCO/OEPA
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RESPONSE
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Fernald Environmental Management Project
P.O. Box 398704
Cincinnati, Ohio 45239-8704

Fernald Environmental
FERMCO
Restoration Management Corporation

JAN 28 1994

DOE-0859-94

Robin Fisher
Division of Hazardous Waste Management
Southwest District Office
40 South Main Street
Dayton, Ohio 45402-2086

Dear Ms. Fisher:

**RESPONSE TO DEFICIENCIES IDENTIFIED IN DECEMBER 9, 1993 INSPECTION OF URANYL NITRATE TANK SYSTEM AND REQUEST FOR ADDITIONAL INFORMATION**

Reference: Letter, R. Fisher (OEPA) to J. P. Hamric and K. Alkema, dated December 17, 1993.

Attached is information and schedules provided by the Fernald Environmental Management Project (FEMP) in response to three deficiencies and sixteen issues identified in a December 9, 1993 inspection of the uranyl nitrate solution (UNH) tank system by the Ohio Environmental Protection Agency (OEPA) and addressed in the above referenced letter.

If you have any questions regarding this information or require additional information, please contact Wally J. Quaider at (513) 648-3137.

Sincerely,

John A. Rasile
Executive Vice President, FERMCO

J. Phil Hamric
Manager, DOE-FN

Enclosures: As stated

c: K. L. Alkema, FERMCO
L. B. Ko, FERMCO
W. J. Quaider, DOE-FN

AR Coordinator, FERMCO
RCRA Operating Record, FERMCO

## ENCLOSURE

The following deficiencies and concerns were identified by the Ohio Environmental Protection Agency (OEPA) during a December 9, 1993 inspection of the uranyl nitrate (UNH) tank system. Responses to each item are addressed in the order identified in the referenced letter.

Violations:

1. OAC 3745-66-93(B)(2) & C(4) - Containment and Detection of Releases

   *The FEMP has removed the accumulated liquids from the secondary containment areas of the UNH tank system (Hazardous Waste Management Units #46 through 50). Daily inspections are conducted of all secondary containments in the UNH tank system. Accumulated liquids are removed within twenty-four hours using a "Supersucker" vacuum truck. This truck is equipped with a 2,500 gallon tank and a vacuum pump. After removal of the liquids from the containment area to the truck, the liquids are conveyed to the wastewater treatment system for processing.*

   *Repairs are in progress to restore the automatic pumping capability to pump accumulated liquids out of the secondary containment areas.*

2. OAC 3745-66-93(C)(3) - Containment and Detection of Releases

   *The accumulated liquids observed in all UNH tank secondary containment areas have been removed from these areas. To ensure that spills and releases can be detected and removed within the required time frame, Remedial Support Operations (RSO) personnel inspect these areas daily for the presence of liquids. Accumulated liquids are removed within twenty-four hours using the "Supersucker" vacuum truck and conveyed to the wastewater treatment system for processing. Repairs are in progress to restore the automatic pumping capability to pump accumulated liquids out of the secondary containment areas. Secondary containment areas are reinspected after removal of accumulated material for evidence of leaks.*

3. OAC 3745-66-94(C) & OAC 3745-66-96(A)(B)&(E) - Response to Leaks or Spills and Disposition of Leaking or Unfit for Use Tank Systems.

   *The entire UNH system has been inspected and all leaks have been identified and documented. A maintenance team has been assembled for repair of the leaks. Specific plans, systems and procedures are currently being developed to facilitate the safe repair of each leak in the system. Actual repairs began in January. The procedures to be used to allow safe repair of some of the leaks are not yet finalized. The time required to complete repair of all leaks is not yet certain. Dependant upon specific procedures determined to be necessary to safely repair the leaks, repairs should be completed by May 31, 1994.*

   *Four inactive groundwater monitoring wells were recently discovered within the secondary containment area of the UNH Tanks in Plant 2/3 digestion*

*area. Temporary diking has been installed around these monitoring wells and actions are being identified to provide permanent protection.*

Issues:

1. Provide the age of each tank containing UNH.

   *Tank age information is contained in Table 1.*

2. Provide information on the construction materials of the tanks and the containment areas.

   *The uranyl nitrate solution (UNH) tank storage system consists of 18 tanks. Eight (8) of the tanks are located outside in three diked areas and the remaining ten (10) tanks are located inside two buildings. The tank system was placed into service during the mid-1950s.*

   *Table 1 provides specific information on the construction materials of the tanks and containment areas. All tanks except F1-308 are made of Type 304L extra-low carbon stainless steel. Tank F1-308 is made of SS 347 which is also compatible with nitric acid and resists intergranular corrosion.*

3. Provide containment calculations for each UNH secondary containment area (including 25 year, 24 hour storm event).

   *Secondary containment calculations for the UNH tank system are provided in Attachment 2. The required volumes in Attachment 2 assume capacity of the largest tank in the secondary containment area and include allowances for volume displacement by equipment and the 25-year, 24-hour rainfall.*

   *However, most of tanks are not full; others are empty and are currently isolated by valves and or locks. Steps are underway to disconnect and blank off piping connections to UNH tanks. As described in item 11, modifications are in progress to correct defiencies in indoor containment. When these modifications are complete the FEMP will confirm actual volume of containment for HWMUs 49 and 50 to ensure adequacy. The table below summarizes the secondary containment calculations as attached for HWMUs # 46, 47 and 48 (outdoor basins).*

| HWMU NUMBER | LARGEST TANK IN SECONDARY CONTAINMENT AREA | SECONDARY CONTAINMENT VOLUME |
|---|---|---|
| HWMU 46 | 24,634 Gallons | 37,063.4 Gallons |
| HWMU 47 | 25,265 Gallons | 29,321.6 Gallons |
| HWMU 48 | 70,000 Gallons | 74,096.8 Gallons |

4. Submit copies of any written assessments of tank system integrity that are maintained on file at DOE-FEMP. If applicable, indicate how often the assessments are conducted and if they are certified by an independent, registered, professional engineer.

*Attachment 1 is a copy of the Safe Configuration Assessment of the UNH tank system. This assessment was conducted in December 1993 to assess the integrity of the UNH system and its structural components and to evaluate the safety of the current system for storage of UNH. Actions are in progress to implement all of the recommendations identified by the assessment._ Note that the secondary containment capacity listed for Hazardous Waste Management Unit #49 (Digestion Area) in the Safe Configuration Assessment Report has been revised to account for additional displacement by the UNH tank bottoms (see #3 above).*

*The FEMP intends to pursue review and certification of the tank integrity assessment.*

5. Provide copies of inspection records for each UNH area for the month of October, 1993.

*Copies of the requested inspection records are provided as Attachment 3.*

6. Provide a description of the process utilized to remove water that has accumulated within the secondary containment areas. Include the amount of time that elapses between accumulation of these liquids and removal.

*Use of permanent sumps and associated pumps in the UNH system to remove accumulated liquids was ceased following the April 1993 UNH release incident. As described in the response to Violation # 2 above, efforts are underway to restore this capability. The removal of accumulated liquids in the secondary containment areas is currently accomplished by the use of a Supersucker Tank truck. The tank truck will pump liquids directly from containment areas that are readily accessed by the vehicle. In containment areas where the tank truck cannot enter, the liquids are pumped out with portable sump pumps. The liquids are routed to the basin at Hazardous Waste Management Unit (HWMU) #48 via connecting hoses. From this basin, the Supersucker tank truck will pump the liquids and transport for treatment by the FEMP's wastewater treatment system. The removed liquids are analyzed for uranium and pH prior to discharge into the system to ensure that the liquids can be processed in compliance with the FEMP's National Pollution Discharge Elimination System (NPDES) permit.*

*Remediation Support Operations (RSO) crews have been continuously working to remove accumulated liquids from the outdoor and indoor basins. During heavy precipitation days, the crews have been working double shifts and weekends to remove the liquids within twenty-four hours. Repairs are in progress to restore the automatic pumping capability to pump accumulated liquids out of the secondary containment areas.*

7. Provide a description of the procedures for handling the material that is removed from the secondary containment area.

   ***Procedures for handling the material that is removed from the secondary containment area are described in #6.***

8. Provide calculations on the loading capacity of the foundation or base upon which the secondary containment area is built.

   ***Calculations for the loading capacity of the base are currently not available. Based on preliminary evaluation, loading capacity of the foundation is believed to be adequate. This evaluation will be confirmed by FEMP personnel in February, 1994.***

9. Provide a photograph of the UNH tanks southeast of Plant 2 which will indicate whether the tanks are set flat upon the secondary containment or if they are raised above the floor surface.

   ***Photographs of the UNH tanks southeast of Plant 2 are provided as Attachment 4. As evidenced by the photographs, the tanks are raised above the secondary containment floor. Note that only one tank in this area (F3E-223) currently contains UNH.***

10. Provide a photograph of the UNH tanks located in the Raffinate Building. The Part A indicates that there are two locations for these tanks; however, only one photograph is included in the Part A.

    ***Photographs of both locations of UNH tanks located in the Raffinate Building are provided as Attachment 5. Area 1 consists of tanks F1-301, F1-302, and F1-303. Area 2 consists of tank F1-308.***

11. Provide information to indicate if there are any UNH tanks that are lacking secondary containment.

    ***The two indoor UNH storage areas have a secondary containment arrangement consisting of a 6-inch berm, sloping to a sump system. Some areas of the HWMU #49 Digestion Area, however, were identified as not adequately pitched toward the sumps. The Digestion Area also had curbing which was discontinuous at three personnel doors and an overhead door. The Raffinate Area has discontinuous curbing at two personnel doors and an overhead door. Installation of curbing in the Digestion Area and other repairs are underway. See Attachment 1, Safe Configuration Assessment of the UNH Tank System, Section 4.5.2 for additional information.***

12. Provide information to indicate if chemically resistant water stops are used at all joints within the secondary containment area.

    ***Joint and crack upgrades were made to all of the UNH secondary containments during 1989-90 time period. The materials used for HWMUs #49 and #50 consisted of acid-resistant brick and an acid-resistant mortar base material known as "ACIDSIL". Materials used to seal joints on HWMUs***

*#46, #47, and #48 consisted of an asphalt-based material known as "SEALTIGHT #164 Rubber Asphalt Joint Sealer".*

13. Describe interior coating for each secondary containment unit including an assessment of compatibility with the waste.

*Interior secondary containment coatings for UNH HWMUs are as follows:*

*HWMU #50 & #49 - Acid-resistant brick and mortar*

*HWMU #48 & #47 - Rubberized asphalt sealer*

*HWMU #46 - Concrete with rubberized asphalt on joints only. The liner inside the secondary containment area is an acid resistant membrane. The sealant used was Ceilcrete 6400 B and Ceilcote Type H.*

*All coatings identified are considered trade-designed for acid resistance.*

14. Describe secondary containment structure. Is it compatible with the waste material?

*The secondary containment structures are compatible with UNH. Acid-resistant sealant is used to coat the interior of the secondary containment areas and to seal the joints. See Attachment 1, Safe Configuration Assessment of the UNH Tank System, Sections 4.5.1-4.5.2, and responses #11, #12, and #13 above for additional information.*

15. A) Is tank system ancillary equipment provided with secondary containment such as double-walled piping, jacketing or trench?

*All ancillary pumping equipment is contained within the secondary containment systems of the UNH Tanks. Some flanges and valves are currently outside secondary containment. However, these lines, as well as the UNH tanks themselves, have been isolated from the pumps and are under no pressure. As current plans for unit processing call for use of exclusively new pumps, valves and piping, the current ancillary equipment has no future use.*

*During the Spring of 1992, acid-indicating-sleeves were installed at nearly all pipe flange locations along the active UNH transfer lines. These flange sleeves are designed to change color on contact with acid materials, and serve as a visual control indicator (and to some extent, partial containment) for pipe flange leaks. No additional jacketing, trenching, or double-walled piping is currently employed for ancillary piping. Ultrasonic testing of the transfer lines in October 1991, showed the piping itself to be in good condition and of suitable wall thickness for UNH system operations. See Attachment 1, Safe Configuration Assessment of the UNH Tank System, Section 4.4.3 for additional information.*

B) Provide drawings of each tank unit with the ancillary equipment labelled.

***Drawings of each tank unit identifying the ancillary equipment are provided as Attachment 6.***

16. Indicate if any releases to the environment of greater than one pound have occurred. If so, have they been reported to the Director of the OEPA within 24 hours?

***On April 28, 1993 the FEMP experienced a release of approximately 30 gallons of diluted uranyl nitrate hexahydrate (UNH) solution from Plant 2/3. The amount of UNH in the solution that was released to the environment was calculated to be 8.53 pounds by Operations personnel. The release was reported to the Director of the OEPA within twenty-four hours of occurrence.***

# ATTACHMENT 1

Safe Configuration Assessment of the
UNH Tank System

Fernald Environmental
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DEC 29 1993

U. S. Department of Energy
Fernald Environmental Management Project
Letter No. C:OP:93-1799

Mr. J. Phil Hamric, Manager
Department of Energy
Fernald Field Office
P. O. Box 398705
Cincinnati, Ohio 45239-8705

Dear Mr. Hamric:

**CONTRACT DE-AC05-92OR21972, SAFE CONFIGURATION ASSESSMENT OF THE UNH TANK SYSTEM FINAL REPORT**

Reference: 1) Letter, DOE-3038-93, J. Phil Hamric (DOE-FN) to N. C. Kaufman (FERMCO), "Safe Configuration of Uranyl Nitrate Hexahydrate (UNH) Project Storage Tank System," dated September 17, 1993

2) Letter, C:OP:93-1445, N. C. Kaufman (FERMCO) to J. Phil Hamric (DOE-FN), "Safe Configuration of Uranyl Nitrate Hexahydrate (UNH) Project Storage Tank System," dated September 30, 1993

Attached is the Safe Configuration Assessment of the UNH Tank System. This assessment was requested in Reference 1 and committed to in Reference 2. As documented in the assessment, no immediate short-term problems were found which indicated that it was unsafe to continue storage of the UNH in the present configuration. Several improvements and precautionary measures, however, are recommended. Remedial Support Operations (RSO) has concurred in this report and are presently implementing all of the recommendations.

Sincerely,

J. A. Rasile
Executive Vice President

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Attachment
(1) SAFE CONFIGURATION ASSESSMENT OF THE UNH TANK SYSTEM FINAL REPORT
(2) FERMCO LETTER C:OP:93-1445
(3) DOE-FN LETTER DOE-3038-93

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# SAFE CONFIGURATION ASSESSMENT OF THE UNH TANK SYSTEM

## FINAL REPORT

December 30, 1993

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# SAFE CONFIGURATION ASSESSMENT OF THE UNH TANK SYSTEM

## 1.0 OBJECTIVE

The purpose of this analysis is to assess the configuration of the Uranyl Nitrate Hexahydrate (UNH) storage system and the integrity of its structural components, and evaluate the safety of continuing to store UNH in the current system until it can be processed at an indefinite time in the near future. This analysis was requested in letter DOE-3038-93, J. P. Hamric to N. C. Kaufman, "Safe Configuration of UNH Project Storage Tank System", dated 9-17-93 (Ref 1).

## 2.0 SCOPE

The system is defined to be the 18 UNH storage tanks, their associated piping and pumps, dikes, sumps and hardware such as flanges, valves, fittings and sample taps. Tank shell thickness measurements of Tank T-2 were added to the scope of this analysis.

## 3.0 ASSESSMENT METHODOLOGY

### 3.1 Determine Tank Contents

The contents and characteristics of each of the UNH tanks was found through research of Plant 2/3 documentation and updated through discussions with Plant 2/3 Facility Managers and Remediation Support Operations (RSO) Process Managers. The inventories of the isotopic uranium materials in each tank were calculated and compared to the hazard category threshold quantities in DOE-STD-1027-92 (Ref 14).

### 3.2 Research Tank Design

As-built drawings of the 18 UNH tanks were requested from Engineering Drafting in order to determine the tank materials, original shell thicknesses and other design specifications.

### 3.3 Measure Current Tank Shell Thicknesses

The current UNH tank shell thicknesses were measured using ultrasonic testing (UT). These measurements were compared to the specified thicknesses from the as-built tank drawings to determine the amount of tank material that has corroded away since they were put into service. Tank shell thickness measurements were also made on Tank T-2 in the Pilot Plant (Building 13-A).

3.4 Research Testing and Inspection History

The history and documentation of the tank system's testing and inspections were researched. This included hydrostatic testing of the piping which was conducted prior to the planned UNH Disposal Project commencement, ultrasonic testing of the piping, daily Hazardous Waste Management Unit (HWMU) and RSO inspections.

3.5 Determine Spill Containment Capability

The designs of the dikes, curbs, and sumps containing the 18 tanks were investigated to determine their abilities to control releases from the UNH tank system. A Fault Tree Analysis was performed to identify the failure mechanisms and events or conditions which could lead to an uncontained release of UNH.

3.6 Prepare Nuclear Criticality Analysis

A nuclear criticality review and analysis of the tank system was performed to verify that none of the stored UNH could result in a nuclear criticality event in either its currently stored configuration or during potential accident situations.

3.7 Investigate Leak Detection and Mitigation

The method of inspecting the system for leaks and the corrective actions taken to mitigate these leaks was investigated.

3.8 Perform Expert Consultations

Discussions with experts on tank construction, UNH processes, safety of tanks and piping, the history of Plant 2/3 operations, and nuclear criticality were pursued.

## 4.0 ASSESSMENT RESULTS

4.1 UNH Tank Contents

Figure 1, "UNH Disposition Project Storage Tank Information", on page 3 lists the tanks' plant locations, storage volumes, concentrations of uranium, chromium and barium, % U-235, and normality. Of the 18 UNH tanks, eight tanks are outdoors and ten tanks are inside buildings. See Figure 3 - Figure 6 in Appendix A for sketches of the tank locations. This information was taken from information provided by the Plant 2/3 Building Manager.

The weights of U-234, U-235, and U-238 in each tank were calculated based on the UNH volumes, uranium concentrations, and uranium enrichments. This inventory list is attached in Appendix B - UNH Storage Tank Uranium Inventories. Eight of the tanks

| TANK | TANK NUMBER | LOCATION | GALLONS | g U/ liter | %U-235 | Cr (ppm) | Ba (ppm) | Normality[1] |
|---|---|---|---|---|---|---|---|---|
| 1 | NE F2E-6 | CD BLEND | 16,500 | 261 | 0.951 | 90.00 | 72.28 | 0.47 |
| 2 | SW F2E-8 | CD BLEND | 18,884 | 66 | 0.998 | 64.08 | 216.60 | 1.33 |
| 3 | SE F2E-5 | CD BLEND | 17,931 | 104 | 0.989 | 19.14 | 21.76 | 0.54 |
| 4 | D1-10 | DIGEST | 2,587 | 143 | 1.290 | 404.00 | 74.72 | 4.69 |
| 5 | F1-1 | DIGEST | 2,227 | 173 | 0.951 | 69.34 | 87.80 | 0.84 |
| 6 | F1-25 | DIGEST | 21,632 | 130 | 0.998 | 44.70 | 51.55 | 1.30 |
| 7 | F1-26 | DIGEST | 1,246 | 138 | 0.955 | 59.12 | 18.69 | 3.45 |
| 8 | D1-7 | DIGEST | 3,559 | 51 | 0.990 | N/A | N/A | 0.07 |
| 9 | D1-1 | DIGEST | 3,150 | 134 | 0.956 | 82.40 | 12.18 | 4.19 |
| 10 | F1-301 | HOT RAFFIN | 2,301 | 59 | 0.990 | 68.98 | 108.34 | 0.67 |
| 11 | F1-302 | HOT RAFFIN | 1,530 | 39 | 0.990 | 42.36 | 47.18 | 0.77 |
| 12 | F1-303 | HOT RAFFIN | 1,764 | 22 | 0.990 | 46.86 | 28.24 | 2.25 |
| 13 | F1-308 | HOT RAFFIN | 2,299 | 28 | 0.990 | 71.28 | 62.24 | 2.34 |
| 14 | F2-606 | NFS TANKS | 23,975 | 102 | 1.000 | 59.90 | 92.76 | 1.12 |
| 15 | F2-608 | NFS TANKS | 20,712 | 79 | 0.990 | 118.42 | 81.46 | 1.57 |
| 16 | F2-607 | NFS TANKS | 25,590 | 62 | 1.000 | 22.58 | 42.86 | 1.06 |
| 17 | F2-605 | NFS TANKS | 24,280 | 64 | 0.990 | 69.46 | 92.54 | 1.69 |
| 18 | F3E-223 | OK LIQUOR | 12,180 | 318 | 0.990 | N/A | N/A | N/A |
| | TOTALS | | 202,347 | 110 | 1.000 | 83.3 | 69.5 | |

[1] - Equivalent weight of a dissolved substance (Nitric Acid) per liter of solution

**Figure 1 UNH Disposition Project Storage Tank Information**

individually contain uranium quantities which are above the threshold for Hazard Category 3 of DOE-STD-1027-92 (Ref 14), but, below the threshold for Hazard Category 2.

Tank T-2 in the Pilot Plant contains 60,000 pounds of thorium nitrate which is a Hazard Category 3. It has an estimated capacity of 8,500 gallons.

## 4.2 UNH Tank Design

Approved-for-Construction Drawings for the UNH tanks were obtained from Engineering Drafting. The drawings show the thicknesses of the tank sides and ends and other important design data such as material type, agitators, nozzles, heating coils, capacities, testing performed, shielding outside the tanks, and other tank hardware. The tank shell material specification is American Society of Testing Materials (ASTM) Standard A-240. Some tanks have structural steel support legs which are built to ASTM A-7. The tanks shell plates are fusion welded construction in accordance with the latest revision of the American Petroleum Institute (API)-ASME Code for Unfired Pressure Vessels. Forgings, pipes, reinforced openings, other structural steel, and bolts are all specified according to ASTM Standards.

Most of these tanks were put into service in the early 1950's except for the NFS tanks which were installed in 1967. Reference 3, "The FMPC Spill Prevention Control and Countermeasure (SPCC) Plan", FMPC-2194, Revision 1 dated 2-4-92 lists the year of tank installation, the types of level controls on the tanks, and an evaluation of the tank materials and construction. The evaluation of tank construction in Appendix D-1 of Reference 3 is that "Tank material and construction has good to excellent compatibility with the material stored" for all the UNH tanks. Original tank shell thicknesses are:

- D1-1, D1-7, D1-10: 3/8" all around
- F1-1: 3/8" all around
- F1-25, F1-26: 5/16" all around
- F1-301, F1-302, F1-303: 1/4" all around
- F1-308: sides 3/16", top and bottom 5/16"
- F2E-5(SE), F2E-6(NE), F2E-8(SW): 1/4" sides and top, 5/16" bottom
- F2-605, F2-606, F2-607, F2-608 (NFS Tanks): 1/2" all around
- F3E-223: 3/16" sides and top, 5/16" bottom

All tanks except F1-308 are made of Type 304L extra low carbon stainless steel (also known as SS 304ELC). Tank F1-308 is made of SS 347 which also has good compatibility with nitric acid and resists intergranular corrosion (Ref 4,5,13). The characteristics of SS 304L are discussed below.

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### 4.2.1 Characteristics and Properties of 304L Stainless Steel

This stainless steel is called extra low carbon since it contains a maximum of 0.030% carbon. It is a chromium-nickel alloy which is defined as being austenitic, that is, corrosion resistant. This material's chromium content is 18-20% and its nickel content is 8-11%, thus it is sometimes referred to as 18-8 stainless steel. It is non-magnetic. It does not respond to hardening by heat-treatment. SS 304L is extremely tough at all times and is dependable against shock except when corroded at the grain boundaries, which is a preventable condition. At 800° to 1500°F it tends to precipitate carbides at the grain boundaries, losing some toughness and becoming susceptible to intergranular attack by strong corrodents, but, this is controlled by very low carbon. It is highly resistant to many acids including hot and cold nitric acid. Austenitic steels are sometimes subject to embrittlement and intergranular corrosion, but, again, stainless steels made with a carbon content below 0.03% reduces the intergranular attack.

The highest nitric acid concentration is found in Tank D1-10 which contains a 4.69 N solution, or about 27% nitric acid by weight. For 18-8 stainless steel exposed to a 25% solution of nitric acid, the corrosion rates are < 0.002 inches per year at 100°F and < 0.02 in/yr at 250°F (Ref 15). Reference 16 lists corrosion rates of 0.0002 in/yr for a 25% nitric acid solution at 130°F and 0.0004 in/yr for a 100% solution of boiling UNH.

### 4.3 Measured Tank Shell Thicknesses

Eight of the 18 tanks are outdoors and ten are inside buildings. The eight tanks outdoors are:

- Tanks F2-605, F2-606, F2-607, and F2-608, also known as the Nuclear Fuel Services (NFS) Tanks just south of Plant 1
- CD Blend Tanks F2E-5, F2E-6, and F2E-8, also known as Tanks SE, NE, and SW, respectively just north of the Digestion Area of Plant 2/3
- OK Liquor Storage Tank F3E-223 southeast of the Denitration Area of Plant 2/3.

The ten indoor tanks are:

- Tanks D1-7, D1-10 and F1-26 in the Hot Side of the Plant 2/3 Digestion Area
- Tanks D1-1, F1-1, and F1-25 on the Cold Side of the Plant 2/3 Digestion Area
- Tanks F1-301, F1-302, F1-303, and F1-308 in the Hot Raffinate Building.

Ten of the 18 UNH tanks are insulated with seven inches of gunite for shielding purposes which made UT measurements difficult. UT was conducted on all eight of the unshielded UNH tanks in October - November 1993. In addition, tank shell thicknesses were measured on four other tanks containing only nitric acid (F1-401, F1-402, F1-403, F1-608). The contents of these four nitric acid tanks would have similar effects on the tank material as UNH since the nitric acid in the UNH is the component of greatest risk to tank safety.

All the shell thickness readings that were taken were close to the original design thicknesses. Reference 17 contains the report of the UT inspection which was performed by Bill Romine and Quality Control (QC) personnel from the FEMP. None of the tanks showed an amount of corrosion which is of concern. Tank T-2 shell thickness measurements were also made. While the original thickness is not available, the results of the testing are consistent with possible initial thicknesses for the size of the tank and show no unusual behavior indicating excessive corrosion. The recorded measurements for these 13 tanks are in Appendix D.

## 4.4 Testing and Inspection History

### 4.4.1 UNH Tank System Visual Inspection

A visual inspection of the UNH facilities was conducted in October 1991 by A. E. Pierce of WEMCO Engineering and documented in the letter in Reference 18, "Structural Integrity of UNH Facilities", WEMCO:PM&A(PM3):91-203 dated 10-22-91. The intent of this inspection was to locate excessive corrosion or broken components on the tanks, the tank and pump foundations, and the pipe bracing guides, hangers, anchors and supports. No serious concerns were uncovered. This inspection did result in some minor repairs to pipe hangers, brackets, and anchors.

### 4.4.2 Pressure Testing of UNH Piping and Pumps

The UNH system piping and pumps were pressure tested from 12-6-91 to 2-13-92 in preparation for the UNH Stabilization Project start-up. Results of the test are described in Reference 6, Final Test Report dated 2-24-92, System Integrity Test - Uranyl Nitrate Stabilization, Test Procedure Number TP91-2/3-010, Revision 1. The test subjected various sections of the system to 90 ± 5 psig, which is at least a 50% overpressure of all components in the system.

The test resulted in finding minor leaks at gaskets, flanges, valves and pump seals.

- There were two pinhole leaks in the piping in the Hot Raffinate Area in the sump line
- A pipe leaked under each of three tanks in the Digestion Area at the cartridge filter location

019

All external leaks were confirmed to be stopped through retesting after approximately 20 valves, numerous gaskets, and about 100 feet of pipe were replaced, and after flanges were tightened.

4.4.3 Ultrasonic Testing of the UNH System Transfer Piping

Wall thicknesses of the UNH system transfer piping were measured by QC and Bill Romine using Ultrasonic Testing (UT) in October 1991 in preparation for the UNH Stabilization Project (Ref 7, 8). The SS 304L piping was measured at over 1000 locations by a certified UT operator. The older piping, areas of weld repair, and other more susceptible locations like elbows, tees and low areas were especially targeted. The test results can be found in Reference 8, Uranyl Nitrate Stabilization Project Transfer Piping Report. After evaluation, the data showed the piping to be in good condition and provided sufficient evidence that the piping wall thicknesses were suitable for the UNH Program.

4.4.4 Dike Inspections

Since the UNH tanks are Hazardous Waste Management Units (HWMU), the tank system is visually inspected daily for leaks, the dikes are inspected for liquid, and other abnormalities are noted. The inspections are documented on forms. The inspection forms for the last six months on the three outside dikes containing UNH tanks were reviewed. The only findings noted on the forms was standing water from rainfall and recommendations for removal of the water with the Super Sucker Truck. The reports indicate some delay in the ability to remove the standing water. Remediation Support Operations (RSO) tests the dikes' holding integrities monthly by filling them with water, inspecting them for leaks, and ensuring that the water level remains the same.

4.4.5 Sump Inspections

Sumps are inspected by RSO using SOP 2-C-910, Inspecting Refinery Control Floor Areas and Sumps, and Operating Manual Sump Pumps, issued 1-31-92 (Ref 9). The sumps in the Digestion Area of Plant 2/3 tend to collect water. The sumps are being pumped out with portable sump pumps as water collects. The water is being discharged into the Dike #4 where it is then transferred to Holding Tank F3E-222 or F3E-224. Pumping by portable pumps is a temporary measure implemented until procedures and configuration control are established to ensure the sump system will run safely in its designed automatic mode. The volume of each of these sumps is 110 gallons per the sump drawing, Drawing No. 3001-F-26-B, Rev. 4 (Ref 10).

4.4.6 Ohio EPA Inspection

On December 9, 1993 representatives of The State of Ohio Environmental Protection Agency (OEPA) Division of Hazardous Waste Management (DHWM) conducted an inspection of the UNH tank system in order to assess the FEMP's compliance with applicable state and federal hazardous waste regulations. The inspection included visual inspection of Tanks NE, SE and SW north of Plant 2/3 and three tanks in the Digestion Area. Based on this inspection, three violations of the Ohio Administrative Code were documented and communicated to the U. S. DOE-FEMP and FERMCO by letter (Ref 22). The violations stemmed from the following conditions:

1. Liquid or precipitation accumulated in diked areas is not removed within 24 hours.
2. There is an inadequate leak detection system for both the tanks and dikes because liquid in the dikes affects the ability of the FEMP inspector to adequately determine if a hazardous waste has been released into the dike.
3. A leaking tank in the Digestion Area is not being emptied or repaired.

The report requests additional data in order to fully assess the FEMP's compliance with OEPA hazardous waste management standards. FERMCO was aware of these conditions prior to the inspection and had initiated corrective actions. This assessment is intended to be a technical safety evaluation of the tanks and not a compliance assessment. A separate response is being prepared by FERMCO to address the inspection concerns and present corrective actions.

4.5 Spill Containment Capability

4.5.1 Dikes

There are three dikes around the eight outdoor UNH tanks to provide secondary containment. The dikes are referred to as Dike #1, Dike #4, and Dike #7. All the dikes at the FEMP were measured and their capacities calculated in a report by A. M. Kinney, Inc., "Calculations on Volumes of Retention Required", 7-29-88 (Reference 11). The dikes' specifications require the dikes to hold the volume of the largest tank contained within the dike plus sufficient freeboard to allow for precipitation according to Resource Conservation and Recovery Act (RCRA) standards. The dike capacities are shown in Table 2 on page 9. This criteria is in accordance with 40 CFR 264.193(e)(1)(i,ii), Standards for Owners and Operators of Hazardous Waste Treatment, Storage and Disposal Facilities (Ref 12), and was judged to be appropriate in the SPCC Plan (Ref 3).

The volume of precipitation resulting from a 25-year, 24-hour rainfall in the Cincinnati area (4.9 inches) was used for the freeboard design. Capacity calculations accounted for the volumes of the tank piers and pump pads. Based on this data, Dikes #1 and #4 appear to be slightly undersized (by 0.7% and 3.2%, respectively) for the total volume of the largest tanks. However, the largest tank in Dike #1 does not contain UNH

and is not in use. Tank F3E-223 has a capacity of 25,000 gallons and contains 12,180 gal of UNH, so with inputs to the largest tank and to Tank F3E-223 isolated, there is no danger of any UNH overflowing Dike #1 even if the total volume of the tank was released. Likewise, the largest volume of UNH contained by Dike #4 is 18,884 gal in Tank SW, therefore, Dike #4 could easily contain a total release of this tank's contents. With complete isolation of these tanks this is an acceptable situation.

The dikes were constructed from acid resistant tile and grouting. Available information indicates subsequent repairs and modifications were made with materials that would provide adequate protection against attack.

4.5.2 Curbing

There is a 6-inch curb around the tanks in the buildings which would contain a spill for collection by the closest sump. The floor in the Digestion Area is not pitched toward the sumps. Transit readings performed by Romine (Ref 17) show the floor elevations in the Digestion Area to be uneven and inconsistent, with a range of 3 inches between the high and low spots. The Digestion Area has curbing which is discontinuous at three personnel doors entering the Hot Side, and there is not a curb at the roll-up overhead door on the west side of the building. There is concern that a large spill in the Digestion Area would exit the building since the sumps in that area are frequently filled with water.

| Dike # | UNH Tank #s in dike | Largest tank in dike, capacity (gal) | Largest UNH Tank in Dike, capacity (gal) | Quantity of UNH in Largest Tank (gal) | Storm water (gal) | Total retention required (gal) | Dike volume (gal) |
|---|---|---|---|---|---|---|---|
| 1 | F3E-223 | 70,000[1] | 25,000 | 12,180 | 7,353 | 77,353[3] | 76,831[4] |
| 4 | SE,NE,SW | 25,265 | 25,265 | 18,884 | 7,435 | 32,700[3] | 31,655[3] |
| 7 | F2-605<br>F2-606<br>F2-607<br>F2-608 | 24,634[2] | 24,634 | 25,590 | 10,337 | 34,971[3] | 36,832[3] |

1 - Tank does not store UNH and is out of service
2 - Tank F2-607 contains 25,590 gallons. While slightly more than the nominal design capacity, the difference is consistent with methods used for determining capacity.
3 - Ref 11
4 - Ref 3

**Figure 2 Dike Capacities**

4.5.3 Sumps

There are sumps with sump pumps at each of the tank locations which are designed to collect spills. The sumps closest to each of the UNH tanks are shown below.

| Tank # | Sump # |
|---|---|
| D1-1, D1-7, D1-10, F1-1, F1-25, F1-26 | F1-34, F1-35, F1-36, F1-37 |
| F1-301, F1-302, F1-303 | F1-327 |
| F1-308 | F1-328 |
| F2E-5, F2E-6, F2E-8 | F1S-519 |
| F2-605, F2-606, F2-607, F2-608 | F1S-515 |
| F3E-223 | F3S-526 |

4.5.4 UNH System Isolation

The UNH tank storage system is isolated from other tanks, solutions, and components by closed isolation valves which would prevent any other solution or material from being accidentally pumped into or out of the UNH system. The outlet valves are locked and tagged. The inlet valves are tagged. There are water and steam lines connected to the UNH piping which were used to flush out the UNH pipes. While isolated from the system by closed valves currently these lines have no engineered controls imposed.

4.5.5 Level Controls

According to Reference 3, some of the UNH tanks have level controls to prevent overfilling of the tanks. The eight tanks below have the following types of level controls and alarms:

| Tank | Type of Control |
|---|---|
| F2-605, F2-606, F2-607, F2-608 | A |
| F1-301, F1-302, F1-303 | |
| NE, SE, SW | B |
| F3E-223 | C |

Legend
A = Varec level detector with float

B = High pressure sensing device to activate an alarm
C = High level sensors to transmit alarm to production control system

The operability and accuracy of these sensors are indeterminant. Currently, ullage measurements are taken on a daily or weekly basis to ensure stability of tank volumes. In the current situation with no processing nor material movement and with engineering controls in place to prevent material transfers to these tanks, high level sensors, alarms, and controls will not be required. The need for level controls and alarms will be considered in the development of future disposal plans and made operational as appropriate prior to processing.

4.5.6 Portable Containment (Dumpsters)

While originally indicated as a portable containment device, dumpsters cannot be used for collection of UNH spills since the dumpsters are made of carbon steel, which is incompatible with UNH and would provide, at best, limited temporary benefit.

4.6 Nuclear Criticality Analysis

Most uranium compounds in unlimited quantities are subcritical (no chain reaction can occur) even at optimum moderation for all enrichments up to 1% (Ref 20). Uranyl Nitrate (UNH) is subcritical up to enrichments of 2% (Ref 21). All the UNH at FEMP is at or below 1% enrichment except for 2,587 gallons of 1.29% material contained in Tank D1-10.

If a caustic were to be inadvertently added to Tank D1-10 precipitation of uranium compounds with an enrichment of more than 1% would occur, and the 1% always-safe enrichment would be exceeded. Criticality safety calculations have been done for a conservative representation of tank D1-10 after precipitation using the KENO code. These calculations indicate a maximum $k_{eff}$ of 0.902 (including two standard deviations in the KENO results and a benchmark bias). This result is for optimum moderation and includes a correction to eliminate any negative reactivity contributions from sodium (assumed to be introduced as sodium hydroxide to cause the precipitation).

If UNH were to be spilled from Tank D1-10 and collected in the sump, the volume of the sump plus the additional effective volume contained by the curbed floor in the Digestion Area is less than the minimum safe volume for the 1.29% U-235 compounds.

It is concluded that under the worst possible conditions the 1.29% enriched UNH in Tank D1-10 is subcritical even if inadvertent precipitation occurs in the tank or the material is spilled on the floor.

## 4.7 Leak Detection and Mitigation

There are currently 15 leaks at pipes, flanges, and valves connected to six tanks in the UNH system which are monitored daily. The leaks are collected in buckets and the material is returned to the tank. The six tanks are D1-1, F1-1, F1-301, F1-302, F1-303, and F1-308. Appendix C contains the list of leaks with their exact locations, descriptions of the leaking component, some leak rates, and sketches of the leak locations. These leaks have been discovered by personnel observing the leaks after standing in place for some time. There may be other leaks that are only detectable by other means. A draft Leak Repair Plan was prepared by Bill Romine and submitted to RSO Operations to address these and future leaks in the UNH system. RSO has initiated a program that is scheduled to stop all know leaks by February, 1994. Leaks will be stopped by either isolating (Blanking) the leaking area or external fixes where isolation is not possible.

## 4.8 Expert Consultants

- David J. Campbell - Safety Management, Inc.

Mr. Campbell suggested analysis techniques, provided direction for tank system requirements, and identified a preliminary hazards list for the tank system.

- Cathy Glassmeyer - Process Engineer

Ms. Glassmeyer submitted UNH tank contents and building information, identified the current tank leaks, and provided tank design engineering drawings.

- Ron Greene - NFS Sampling and Studies

Mr. Greene assisted by providing information on UNH, the tank system, and the history of the production processes.

- Tim Huey - Manager, Facilities and Warehousing

Mr. Huey provided UNH leak and processing history.

- Bill Romine - Engineering Support

Mr. Romine supervised the ultrasonic testing, collected data on Plant 2/3 from his visual inspections, and performed the transit elevation readings for the Digestion Area floor.

- Dr. Y. S. Kim - Halliburton NUS

Dr. Kim performed criticality calculations for the Nuclear Criticality Analysis of Tank D1-10.

## 5.0 CONCLUSIONS

5.1 The UNH tanks' material and construction have excellent compatibility with UNH.

5.2 Tank thickness measurements completed in December 1993 show that none of the UNH tanks tested are exhibiting excessive corrosion or other inherent failure mechanisms which would cause them to fail in the near future.

5.3 A visual structural inspection conducted in October 1991 did not find any serious deficiencies.

5.4 The UNH pipes and pumps were successfully tested with 50% overpressure in February 1992.

5.5 Ultrasonic Testing of the UNH piping completed in October 1991 showed the piping to be in good condition.

5.6 There is no danger of nuclear criticality from either the current UNH storage system configuration nor potential accident conditions.

5.7 Sumps in the Digestion Area may not be capable of containing spills from tanks in that area since the sumps are sometimes full of liquid.

5.8 The capacities of all dikes providing secondary containment of outdoor UNH tanks are adequate to contain the greatest possible volume of a UNH spill from those tanks plus additional precipitation when engineering controls are implemented to ensure a static storage system.

5.9 The UNH system is isolated from other piping and tanks with isolation valves.

5.10 Curbing may be inadequate in the Digestion Area since curbs do not exist across three personnel doors and one overhead roll-up door.

5.11 The UNH tanks do not have functioning high level controls or alarms to prevent overflowing of the tanks. Considering the isolated status of the UNH tanks this situation is acceptable.

5.12 There are minor UNH leaks in 15 locations which are being collected in buckets. A draft Leak Repair Plan has been prepared and is being implemented by RSO.

## 6.0 RECOMMENDATIONS

6.1 Continue to periodically pump the liquid from the UNH tank dikes and sumps in the Digestion Area to ensure excess does not accumulate.

6.2 Install curbing across the three personnel doors and the overhead door near the Hot Side of the Digestion Area to provide containment of potential UNH releases.

6.3 Inspect the curbing in Building 2A and repair as needed to ensure these areas will function to contain UNH in the event of a spill.

6.4 Provide engineered controls to prevent material from entering test wells in the event of a spill/release of UNH in Building 2A.

6.5 Install engineered controls to isolate the UNH storage tanks to eliminate the potential for inadvertently pumping material to or from these tanks.

6.6 Further isolate process water and steam from the UNH processing system.

6.7 Finalize and implement the Leak Repair Plan, and expedite actions to stop the 15 current leaks in the UNH system.

6.8 Though no immediate short term concerns were identified with the current UNH storage configuration, a UNH treatment plan should be developed and implemented on an expedited basis.

6.9 Expedite effort to return sump operation to automatic.

## References


1. Letter DOE-3038-93, J. P. Hamric to N. C. Kaufman, "Safe Configuration of UNH Project Storage Tank System", 9-17-93.

2. Plant 2/3 UNH Disposal Safety Assessment, WEMCO:TD(NSS):91-1022, Revision 3, 3-4-92.

3. FMPC Spill Prevention Control and Countermeasure (SPCC) Plan, FMPC-2194, Revision 1, 2-4-92.

4. Stainless Steel Handbook, Allegheny Ludlum Steel Corporation.

5. Engineering Materials Handbook, McGraw-Hill Book Company, Inc.

6. Final Test Report, 2-24-92, System Integrity Test - Uranyl Nitrate Stabilization, Test Procedure Number TP91-2/3-010, Revision 1.

7. Letter WEMCO:PM&A(ESUP):91-315, W. L. Romine to B. Ledbetter, "Uranyl Nitrate Stabilization Project Transfer Piping", 11-13-91.

8. Letter WEMCO:PM&A(ESUP):91-342, W. L. Romine to B. Ledbetter, "Uranyl Nitrate Stabilization Project Transfer Piping Report", 12-19-91.

9. SOP 2-C-910, Inspecting Refinery Control Floor Areas and Sumps, and Operating Manual Sump Pumps, issued 1-31-92.

10. "Floor Sump Collector", Drawing No. 3001-F-26-B, Rev. 4, 6-27-51.

11. "Calculations on Volumes of Retention Required", A. M. Kinney, Inc., 7-29-88.

12. (EPA) 40 CFR 264.193(e), Standards for Owners and Operators of Hazardous Waste Treatment, Storage and Disposal Facilities; Containment and Detection of Releases.

13. Handbook of Engineering Materials, Miner and Seastone, ed., Wiley, 1st ed., 1955.

14. DOE-STD-1027-92, Hazard Categorization and Accident Analysis Techniques for Compliance with DOE Order 5480.23, Nuclear Safety Analysis Reports, 12/92.

15. Mechanical Engineers' Handbook, Marks, Lionel S., ed., McGraw-Hill Book Co., Inc., 5th edition, 1951.

16. Corrosion Resistant Materials Handbook, DeRenzo, D. J. ed., 4th ed., 1985.

17. QC Report - Thickness Measurements of UNH Storage Tanks from Ultrasonic Testing.

18. Letter WEMCO:PM&A(PM3):91-203, A. E. Pierce to R. J. Hiestand, "Structural Integrity of UNH Facilities", 10-22-91.

19. Criticality Calculations for Tank D1-10, Dr. Y. S. Kim, December 1, 1993.

20. H. E. Handler, "Measurement of Multiplication constant of Slightly Enriched Homogeneous $UO_3$-$H_2O$ Mixture and Minimum Enrichment for Criticality", USAEC Report, HW-70310, August, 1961.

21. S. R. Bierman and G. M. Hess, "Minimum Critical $^{235}U$ Enrichment of Homogeneous Hydrogenous Uranyl Nitrate", ORNL-CDC-5, June, 1968.

22. Letter from Robin Fisher, Ohio EPA to J. P. Hamric and K. Alkema, Subject: Ohio EPA Inspection of UNH tank system, December 17, 1993.

# APPENDIX A

## Figures Showing UNH Tank Locations

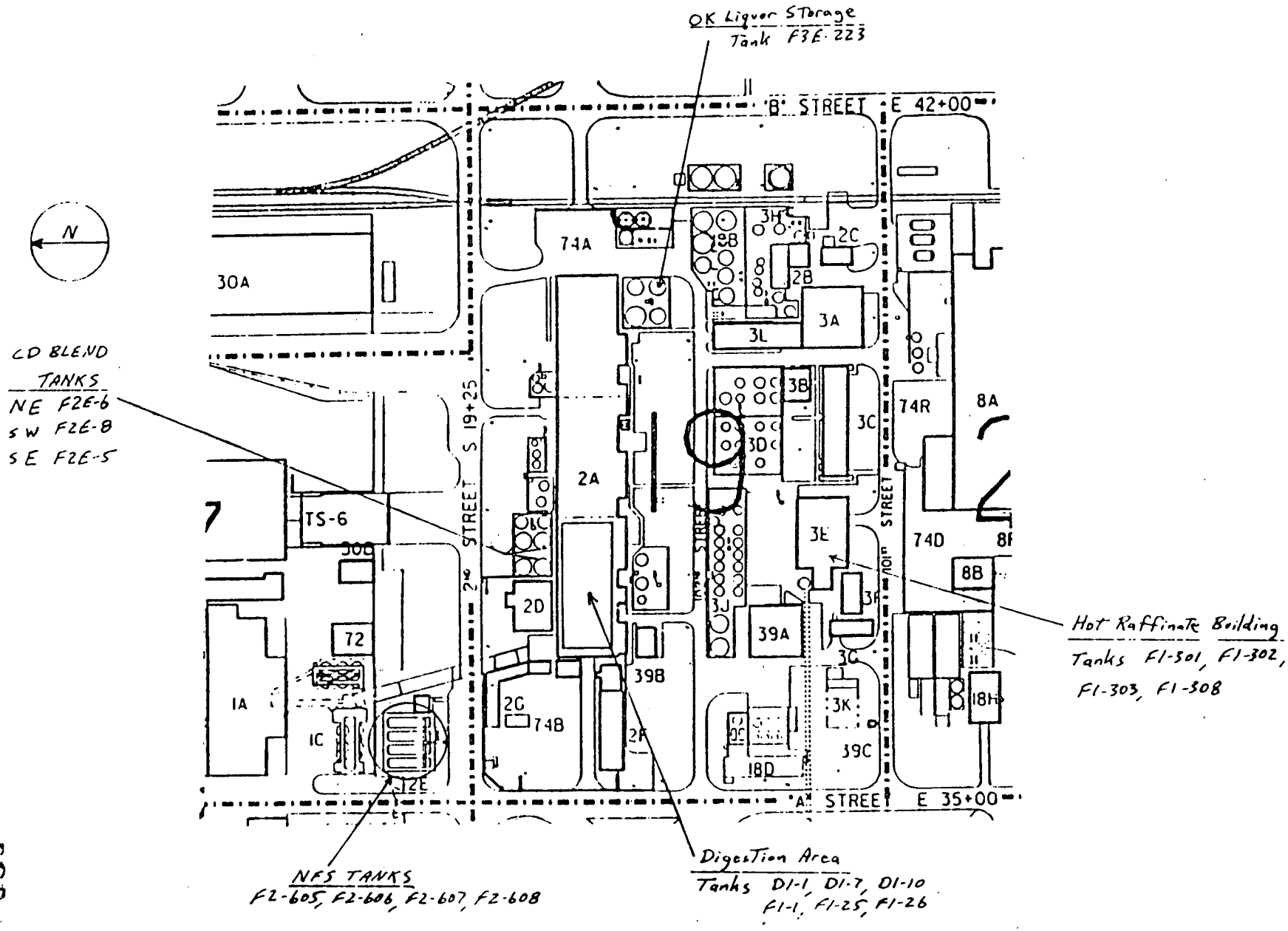



Figure 3 Plan View of UNH Tank Locations on Site

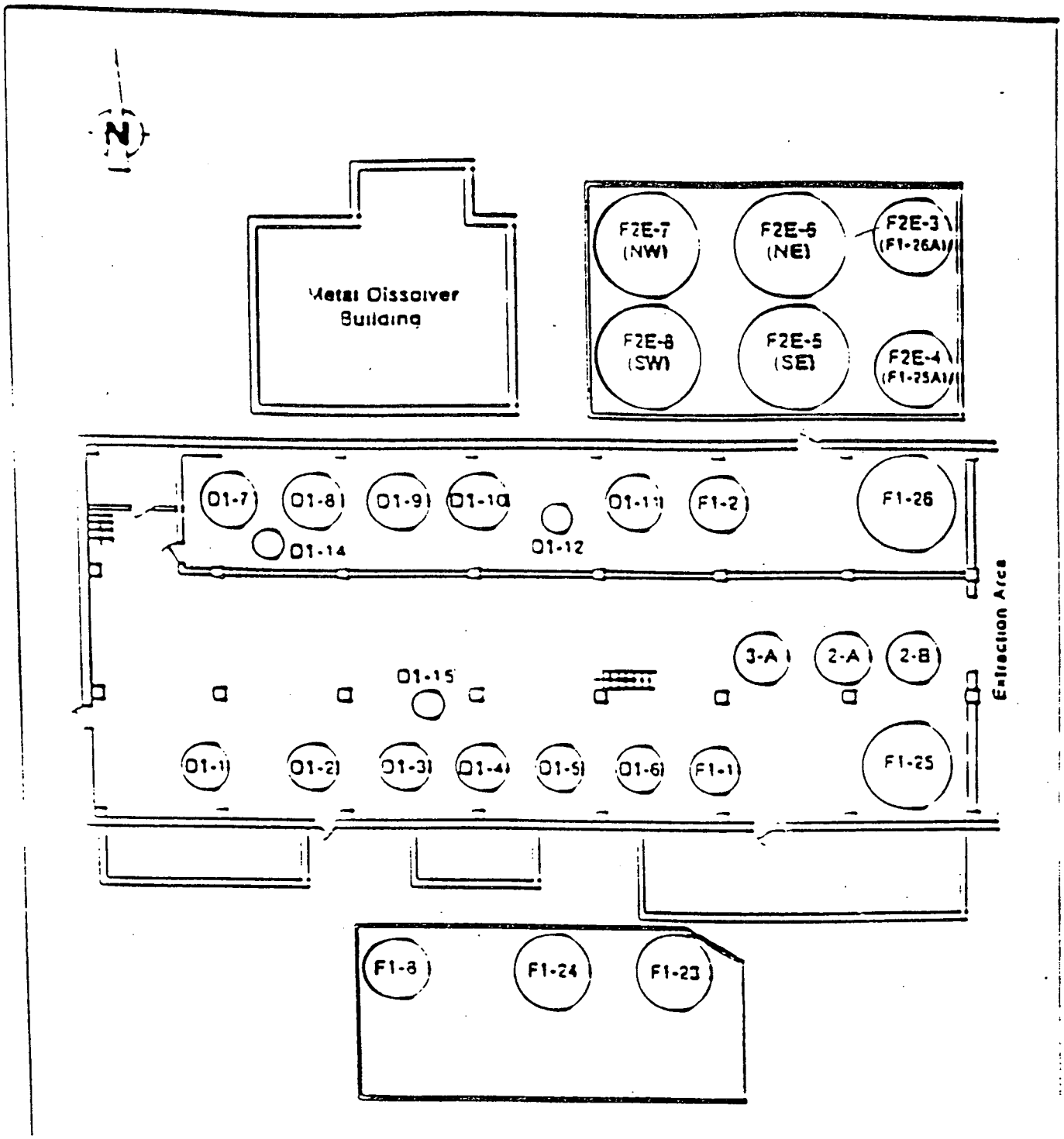



Figure 4
Digestion Area Tanks - D1-1, D1-7, D1-10, F1-1, F1-25, F1-26
CD Blend Tanks - SE (F2E-5), NE (F2E-6), SW (F2E-8)

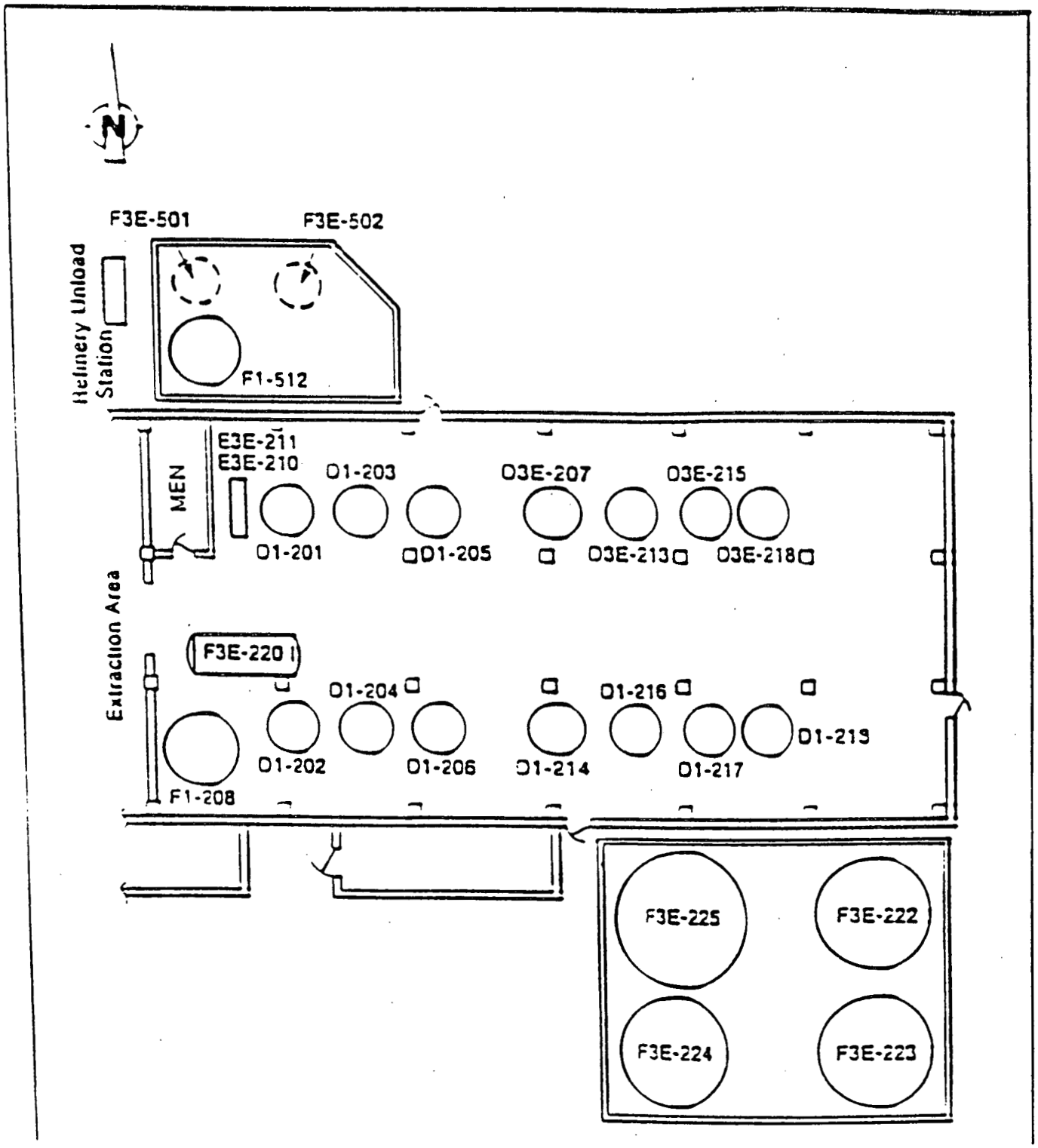



Figure 5 Denitration Area - OK Liquor Storage Tank F3E-223

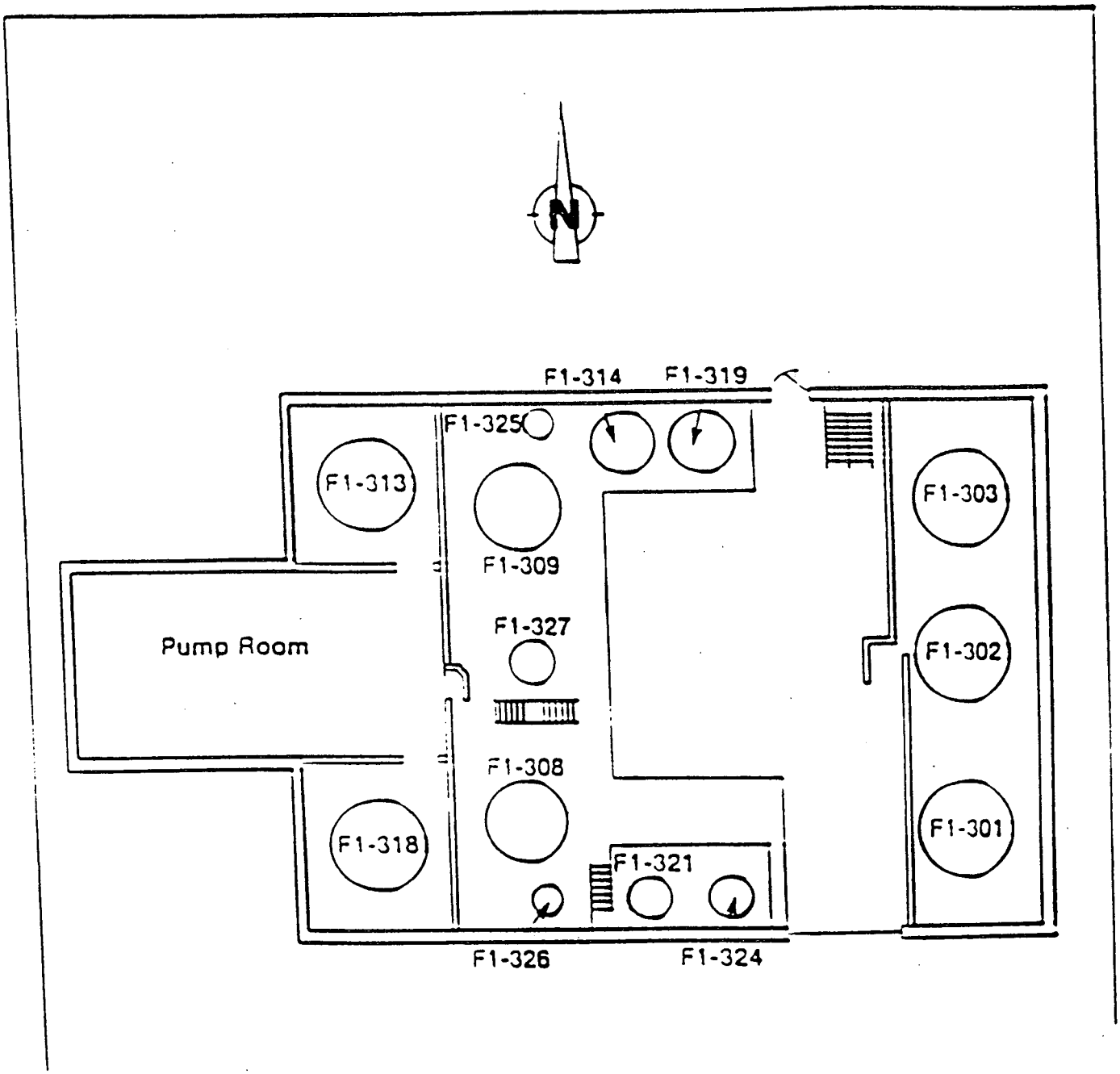



Figure 6 Hot Raffinate Building
Tanks F1-301, F1-302, F1-303, F1-308

# APPENDIX B

## UNH Storage Tank Uranium Inventories

UNH TANKS HAZARD CATEGORIZATION (individual tanks)

| | VOL (gallons) | CONC (g-U/l) | CONC (g-U/gal) | MASS U (grams) | ENRICH %U-235 | %U-234 | %U-238 | U-235 (grams) | U-234 (grams) | U-238 (grams) | % OF U-235 CAT 3 | % OF U-236 CAT 3 | % OF U-238 CAT 3 | TOTAL % OF CAT. 3 | HAZ CAT | GRP HAZ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NE (F2E-6) | 16500 | 261 | 988 | 1.63E+07 | 0.951% | 0.008% | 99.041% | 1.55E+05 | 1.32E+03 | 1.61E+07 | 8.2% | 197.3% | 124.2% | 329.6% | CAT 3 | ON |
| SE (F2E-5) | 17931 | 104 | 394 | 7.06E+06 | 0.989% | 0.009% | 99.002% | 6.98E+04 | 6.03E+02 | 6.99E+06 | 3.7% | 90.0% | 53.8% | 147.5% | CAT 3 | ON |
| SW (F2E-8) | 18884 | 66 | 250 | 4.72E+06 | 0.998% | 0.009% | 98.993% | 4.71E+04 | 4.08E+02 | 4.67E+06 | 2.5% | 60.9% | 35.9% | 99.3% | CAT 4 | ON |
| D1-1 | 3150 | 134 | 507 | 1.60E+06 | 0.956% | 0.008% | 99.036% | 1.53E+04 | 1.30E+02 | 1.58E+06 | 0.8% | 19.5% | 12.2% | 32.4% | CAT 4 | DI |
| D1-7 | 3559 | 51 | 193 | 6.87E+05 | 0.990% | 0.009% | 99.001% | 6.80E+03 | 5.88E+01 | 6.80E+05 | 0.4% | 8.8% | 5.2% | 14.4% | CAT 4 | DI |
| D1-10 | 2587 | 143 | 541 | 1.40E+06 | 1.290% | 0.012% | 98.698% | 1.81E+04 | 1.71E+02 | 1.38E+06 | 1.0% | 25.5% | 10.6% | 37.0% | CAT 4 | DI |
| F1-1 | 2227 | 173 | 655 | 1.46E+06 | 0.951% | 0.008% | 99.041% | 1.39E+04 | 1.18E+02 | 1.44E+06 | 0.7% | 17.7% | 11.1% | 29.5% | CAT 4 | DI |
| F1-25 | 21632 | 130 | 492 | 1.06E+07 | 0.998% | 0.009% | 98.993% | 1.06E+05 | 9.21E+02 | 1.05E+07 | 5.6% | 137.4% | 81.1% | 224.1% | CAT 3 | DI |
| F1-26 | 1246 | 138 | 522 | 6.51E+05 | 0.955% | 0.008% | 99.037% | 6.22E+03 | 5.31E+01 | 6.45E+05 | 0.3% | 7.9% | 5.0% | 13.2% | CAT 4 | DI |
| F1-301 | 2301 | 59 | 223 | 5.14E+05 | 0.990% | 0.009% | 99.001% | 5.09E+03 | 4.40E+01 | 5.09E+05 | 0.3% | 6.6% | 3.9% | 10.7% | CAT 4 | HR |
| F1-302 | 1530 | 39 | 148 | 2.26E+05 | 0.990% | 0.009% | 99.001% | 2.24E+03 | 1.93E+01 | 2.24E+05 | 0.1% | 2.9% | 1.7% | 4.7% | CAT 4 | HR |
| F1-303 | 1764 | 22 | 83 | 1.47E+05 | 0.990% | 0.009% | 99.001% | 1.45E+03 | 1.26E+01 | 1.45E+05 | 0.1% | 1.9% | 1.1% | 3.1% | CAT 4 | HR |
| F1-308 | 2299 | 28 | 106 | 2.44E+05 | 0.990% | 0.009% | 99.001% | 2.41E+03 | 2.08E+01 | 2.41E+05 | 0.1% | 3.1% | 1.9% | 5.1% | CAT 4 | HR |
| F2-605 | 24280 | 64 | 242 | 5.88E+06 | 0.990% | 0.009% | 99.001% | 5.82E+04 | 5.03E+02 | 5.82E+06 | 3.1% | 75.1% | 44.8% | 123.0% | CAT 3 | NFS |
| F2-606 | 23975 | 102 | 386 | 9.26E+06 | 1.000% | 0.009% | 98.991% | 9.26E+04 | 8.03E+02 | 9.16E+06 | 4.9% | 119.8% | 70.5% | 195.2% | CAT 3 | NFS |
| F2-607 | 25590 | 62 | 235 | 6.01E+06 | 1.000% | 0.009% | 98.991% | 6.01E+04 | 5.21E+02 | 5.94E+06 | 3.2% | 77.7% | 45.7% | 126.6% | CAT 3 | NFS |
| F2-608 | 20712 | 79 | 299 | 6.19E+06 | 0.990% | 0.009% | 99.001% | 6.13E+04 | 5.30E+02 | 6.13E+06 | 3.2% | 79.1% | 47.2% | 129.5% | CAT 3 | NFS |
| F3E-223 | 12180 | 318 | 1204 | 1.47E+07 | 0.990% | 0.009% | 99.001% | 1.45E+05 | 1.25E+03 | 1.45E+07 | 7.6% | 187.2% | 111.6% | 306.5% | CAT 3 | DN |
| | 202347 | | | 8.76E+07 | | | | 8.67E+05 | 7.49E+03 | 8.68E+07 | | | | | | |

ON - OUTSIDE NORTH GROUP
DI - DIGESTION GROUP
HR - HOT RAFFINATE GROUP
NFS - NFS TANKS GROUP
DN - DENITRATION GROUP

* BOLD INDICATES CATEGORY 3 HAZARD AS A GROUP

# APPENDIX C

## Current Leaks in UNH System

***UNLESS OTHERWISE NOTED ALL VALVES HAVE WRENCH HANDLES WHERE THE BOTTOM OF THE WRENCH IS EVEN WITH THE VALVE FLANGE***

***I CHECKED ALL FLANGES FOR THE TYPE (I.E. 150# etc.) BUT I COULD NOT FIND THE STAMP THAT WAS SUPPOSED TO BE ON THEM.

LEAKS ON TANK 301

LEAK #1 The leak is on a 3" pipe, it's leaking from the flanges on the valve and the bottom of the valve.

LEAK #2 The leak is at a 90 deg. elbow joint on a 3" pipe.

LEAK #3 This leak is coming from the valve on the 1" line off of the elbow and from the 90 deg elbow on the 4" line.***note: the rate is approx. 3 drops per minute.***

LEAK #4 This leak is on a 1" line. The whole line has drops all over it, the drops are coming from the connections for the valve to the pipe.**note: This valve does not have flanges, it appears to be screw fittings.**

LEAK #5 This leak is at the 90 deg. elbow on a 4" pipe. ***note: the elbow is bigger than a normal 90 deg. elbow***

LEAK #6 This leak is coming from valve UNH 380. It is leaking from the open end of the valve which is on a 1" line.

LEAKS ON TANK 302

LEAK #7 This leak is on a line with approx. a 45 deg. angle coming from valve 266. It is a 3" line and the leak is coming from the flanges for the valve and under the valve.

LEAK #8 This leak is at the 90 deg. elbow on a 3" line.

LEAK #9 This leak is coming from the flange for the elbow on the 4" line and also leaking through the opening of the valve on the 1" line coming off the elbow.

LEAK #10 This leak is on a 2" line. The bucket is hanging on the valve approx. 3' off the ground. There is no room on either side of the valve. This leak is coming from the valve, the blank after the valve and from the flanges for the valve. **note: the valve handle is at a 45 deg. angle and the bottom of the handle is 2" above the flange. Also the leak was occuring at a rate of 10 drops per minute.***

LEAK ON TANK 303

LEAK #11 This leak is on a 1" line coming from valve 271.

LEAK ON TANK 308

LEAK #12 This leak is on a 1" line coming from the valve flanges.

LEAK #13 This leak is coming from the pressure indicator system. The line coming from the main line is a 1" line but there is really no pipe between all the flanges where the leak is occuring. Drops are visible under each flange but a rate is not detectable.

LEAK ON TANK F1-1

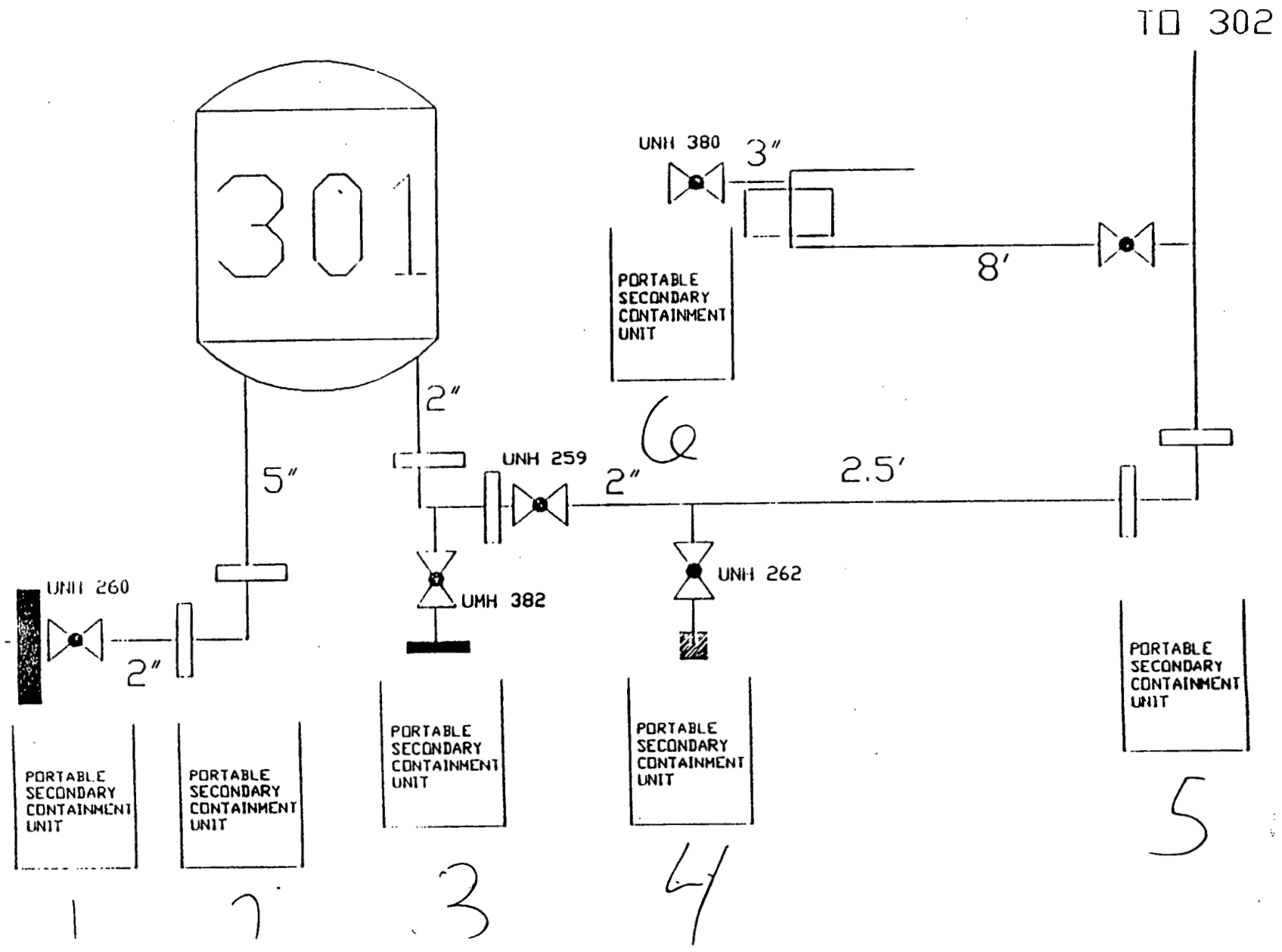
LEAK #14 This leak is on a 1.5" pipe approx. 8' off the ground. The vaive here is open at the end. ***note: an operator reported that the drips were occuring about 3 a minute***

LEAK ON TANK D1-1

LEAK #15 This leak is on a 1" pipe approx. 8' off the ground. The line is blanked at the end.

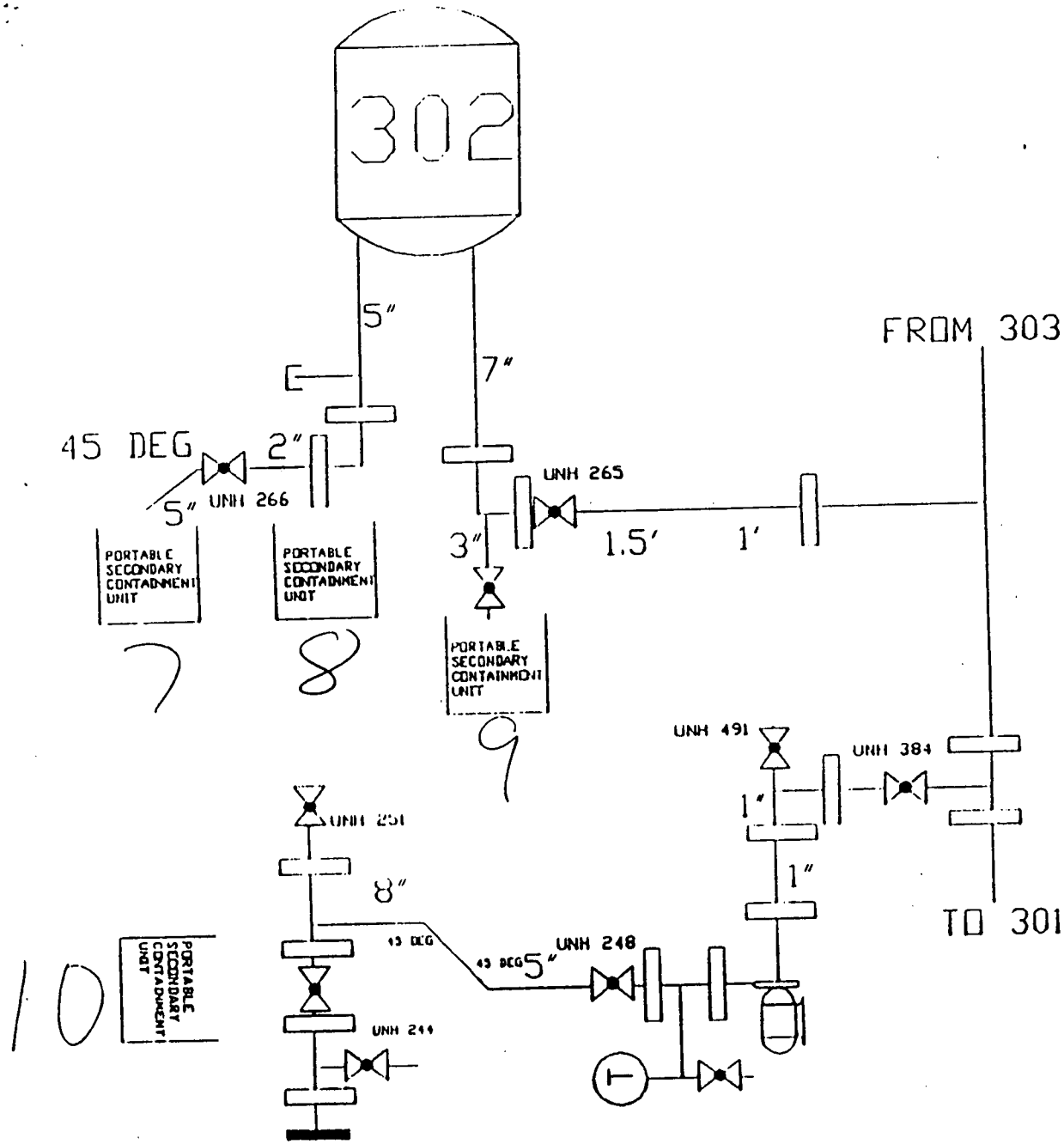
***THIS LIST ONLY SHOWS THE LEAKS WHICH HAVE BUCKETS UNDER THEM. THERE MAY BE MORE LEAKS THAT ARE NOT DETECTABLE BY STANDING AND WATCHING TO SEE IF THERE IS A LEAK.***

# Figures Showing Locations of Leaks


TO 302
301
UNH 380
3″
8′
PORTABLE SECONDARY CONTAINMENT UNIT
6
2″
UNH 259
2″
2.5′
5″
UNH 262
UNH 382
UNH 260
2″
PORTABLE SECONDARY CONTAINMENT UNIT
PORTABLE SECONDARY CONTAINMENT UNIT
PORTABLE SECONDARY CONTAINMENT UNIT
PORTABLE SECONDARY CONTAINMENT UNIT
PORTABLE SECONDARY CONTAINMENT UNIT
1
2
3
4
5

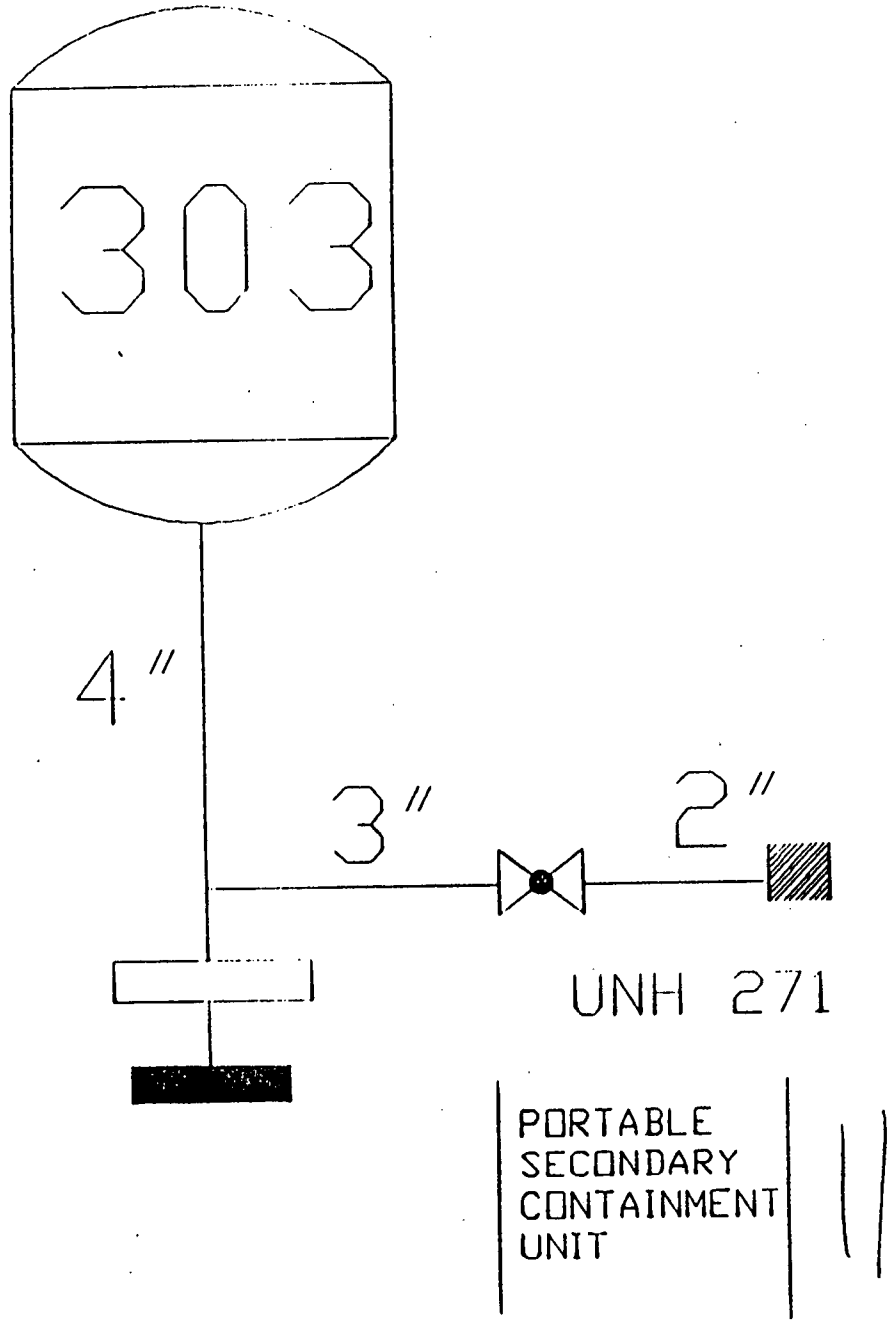
040

FIG 5 1 4


302
5"
7"
FROM 303
45 DEG
2"
5"
UNH 266
UNH 265
3"
1.5'
1'
PORTABLE SECONDARY CONTAINMENT UNIT
PORTABLE SECONDARY CONTAINMENT UNIT
PORTABLE SECONDARY CONTAINMENT UNIT
7
8
9
UNH 491
UNH 384
1"
1"
TO 301
UNH 251
8"
45 DEG
45 DEG
5"
UNH 248
UNH 244
PORTABLE SECONDARY CONTAINMENT UNIT
10

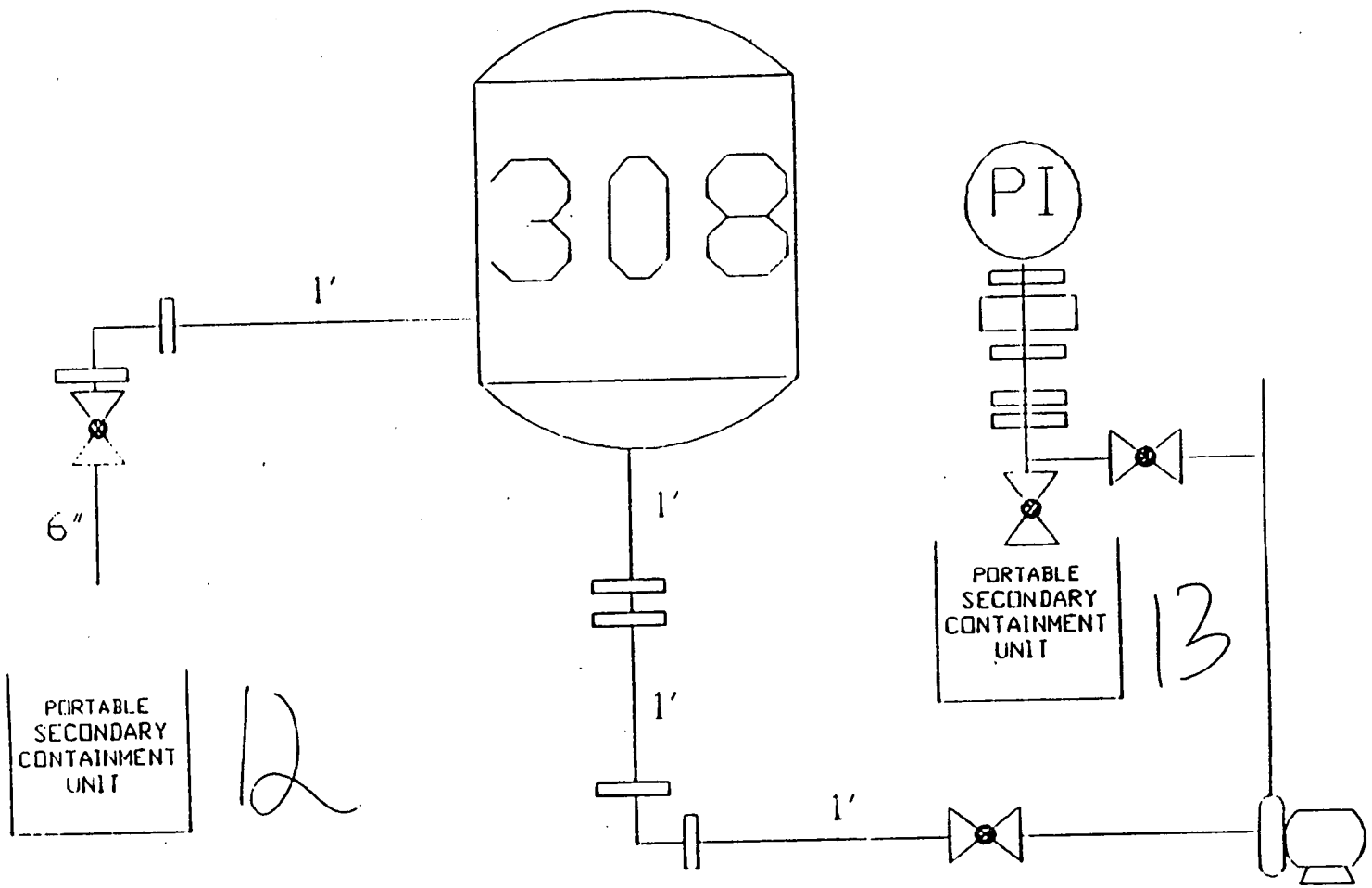
041

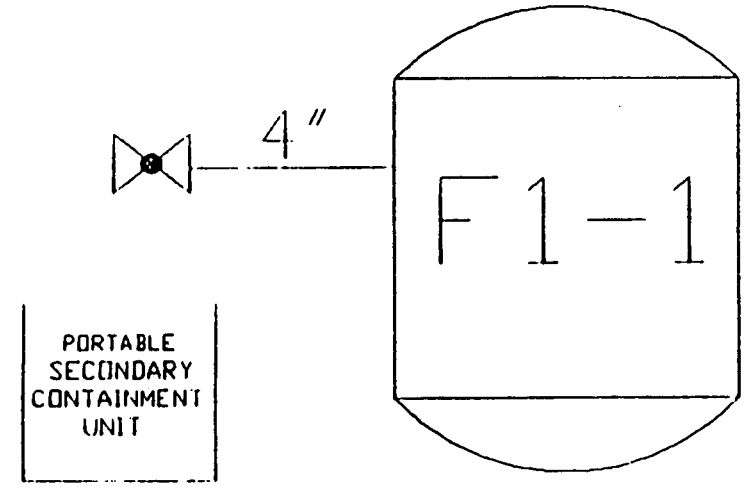
814




042

FIG 5114

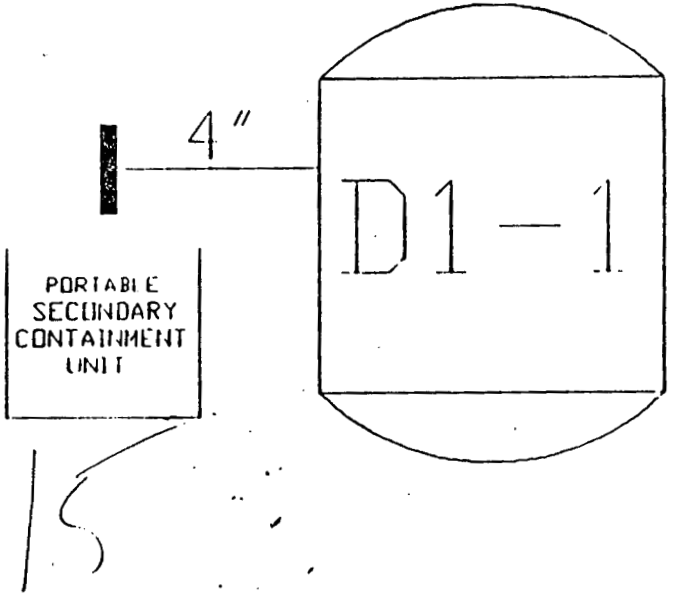

308
PI
1'
1'
1'
1'
6"
PORTABLE SECONDARY CONTAINMENT UNIT
12
PORTABLE SECONDARY CONTAINMENT UNIT
13




14

044

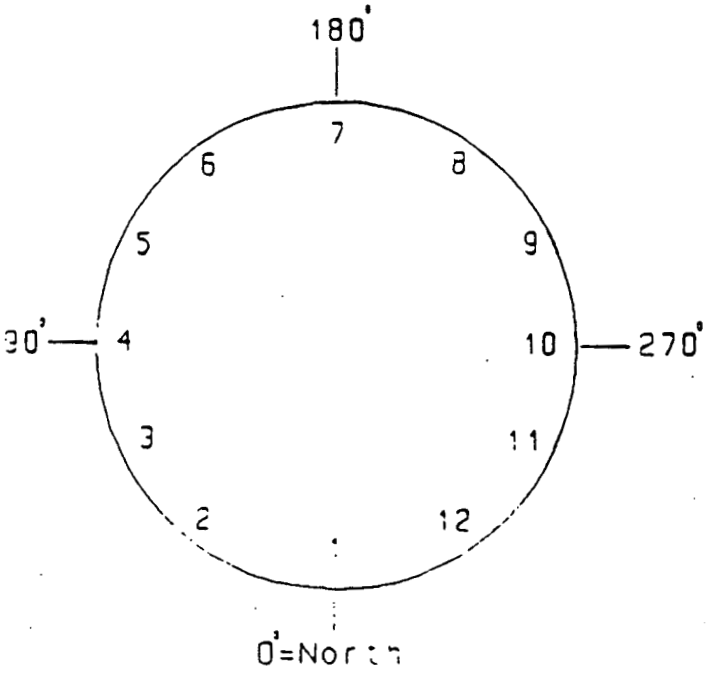
- 5114

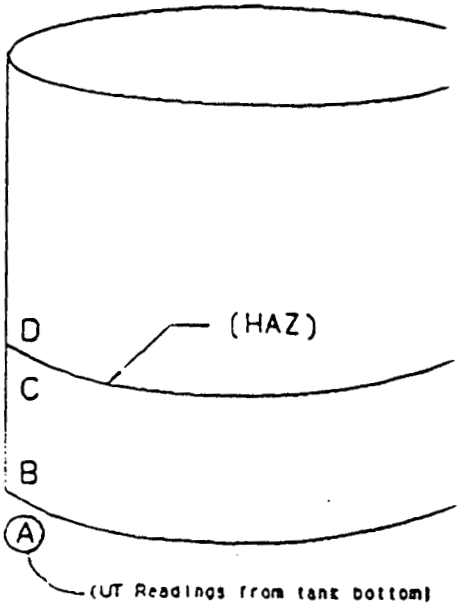

4"
D1-1
PORTABLE
SECONDARY
CONTAINMENT
UNIT

# APPENDIX D

## Tank Shell Thickness Measurements

Tank Number SE (F2E-5) 5114 Date




(Flat Bottom)

| UT Thickness Readings | | | | | | | |
|---|---|---|---|---|---|---|---|
| Location | A | B | C | D | | | |
| 1 | * | * | * | * | | | |
| 2 | 0.326 | 0.262 | 0.263 | 0.274 | | | |
| 3 | 0.319 | 0.241 | 0.239 | 0.251 | | | |
| 4 | 0.305 | 0.254 | 0.248 | 0.264 | | | |
| 5 | 0.310 | 0.261 | 0.258 | 0.257 | | | |
| 6 | 0.317 | 0.252 | 0.253 | 0.255 | | | |
| 7 | 0.324 | 0.250 | 0.258 | 0.254 | | | |
| 8 | 0.314 | 0.252 | 0.250 | 0.253 | | | |
| 9 | 0.307 | 0.250 | 0.249 | 0.251 | | | |
| 10 | 0.320 | 0.251 | 0.245 | 0.257 | | | |
| 11 | 0.321 | 0.245 | 0.246 | 0.249 | | | |
| 12 | 0.322 | 0.247 | 0.246 | * | | | |

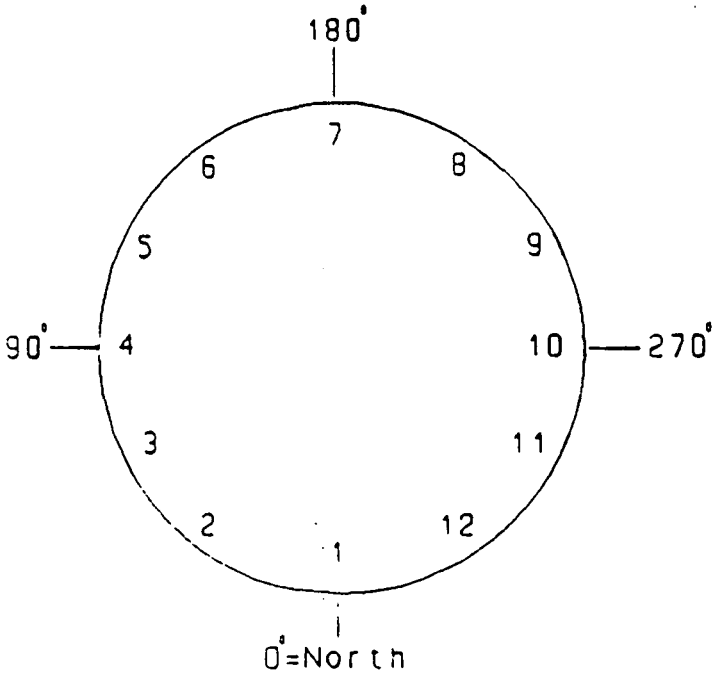
Note: * Inaccessible; (HAZ)= Discoloration from welding.

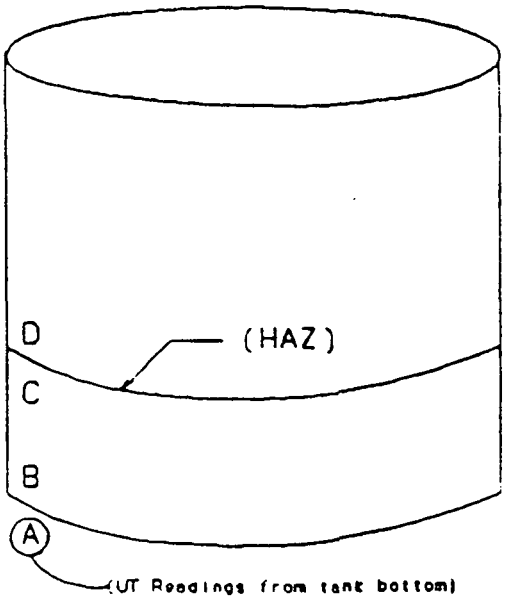
Ultrasonic Thickness Gauge, NOVA 100-D, Serial Number 550

By W.L. Romine

047 FEMP QC Dept. S.M. Hurle

- 5114 Tank Number NE (F2E-8) Date 10/2




(Flat Bottom)

| UT Thickness Readings | | | | | | | |
|---|---|---|---|---|---|---|---|
| Location | A | B | C | D | | | |
| 1 | 0.333 | 0.258 | 0.263 | 0.268 | | | |
| 2 | 0.289 | 0.242 | 0.259 | 0.258 | | | |
| 3 | 0.297 | 0.239 | 0.263 | 0.256 | | | |
| 4 | 0.313 | 0.254 | 0.257 | 0.264 | | | |
| 5 | 0.312 | 0.251 | 0.268 | 0.260 | | | |
| 6 | 0.318 | 0.251 | 0.257 | 0.267 | | | |
| 7 | * | * | * | * | | | |
| 8 | 0.304 | 0.239 | 0.247 | * | | | |
| 9 | 0.310 | 0.237 | 0.243 | 0.251 | | | |
| 10 | 0.313 | 0.239 | 0.245 | 0.246 | | | |
| 11 | 0.328 | 0.244 | 0.257 | 0.246 | | | |
| 12 | 0.323 | 0.244 | 0.245 | 0.247 | | | |

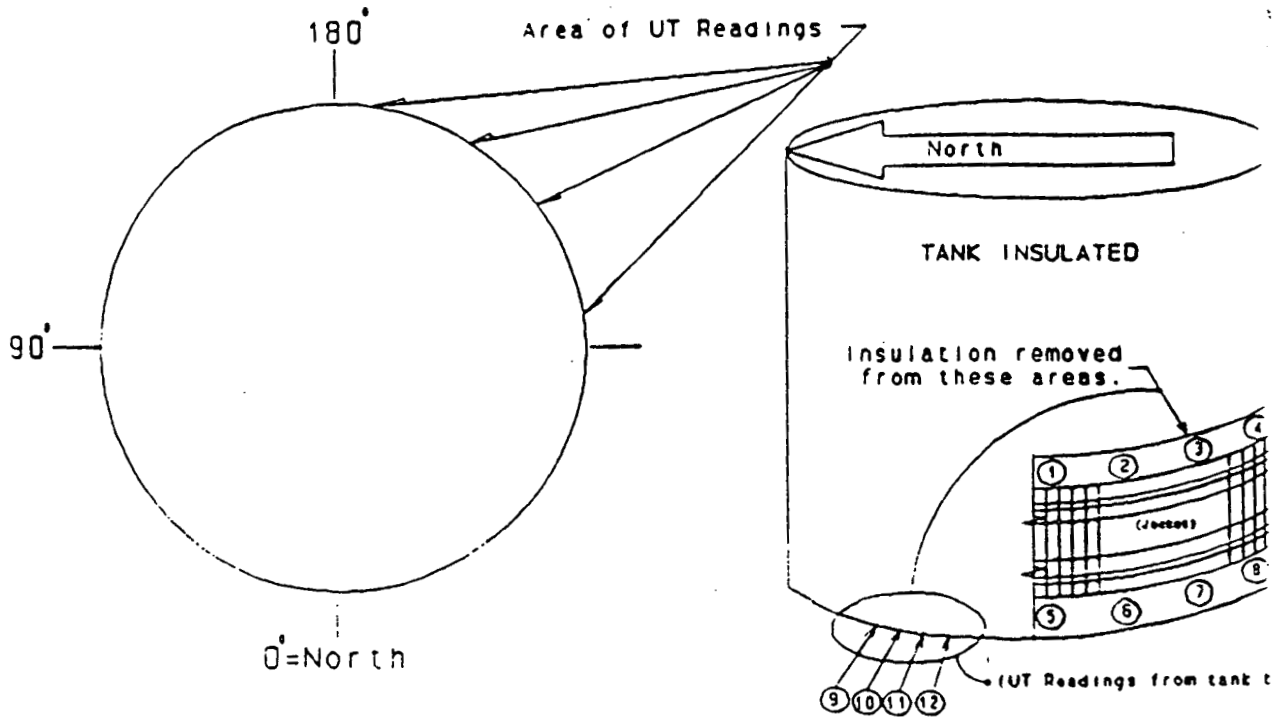
Note: * Inaccessible; (HAZ)= Discoloration from welding.

Ultrasonic Thickness Gauge, NOVA 100-D, Serial Number 550

By W.L. Romine FEMP QC Dept. S.M. Hurley

Tank Number SW (F2E-8)

Date 10/25/




| UT Thickness Readings | | | | | | | |
|---|---|---|---|---|---|---|---|
| Location | | | | | | | |
| 1 | 0.254 | | | | | | |
| 2 | 0.248 | | | | | | |
| 3 | 0.244 | | | | | | |
| 4 | 0.246 | | | | | | |
| 5 | 0.291 | | | | | | |
| 6 | 0.285 | | | | | | |
| 7 | 0.270 | | | | | | |
| 8 | 0.249 | | | | | | |
| 9 | 0.319 | | | | | | |
| 10 | 0.314 | | | | | | |
| 11 | 0.316 | | | | | | |
| 12 | 0.318 | | | | | | |

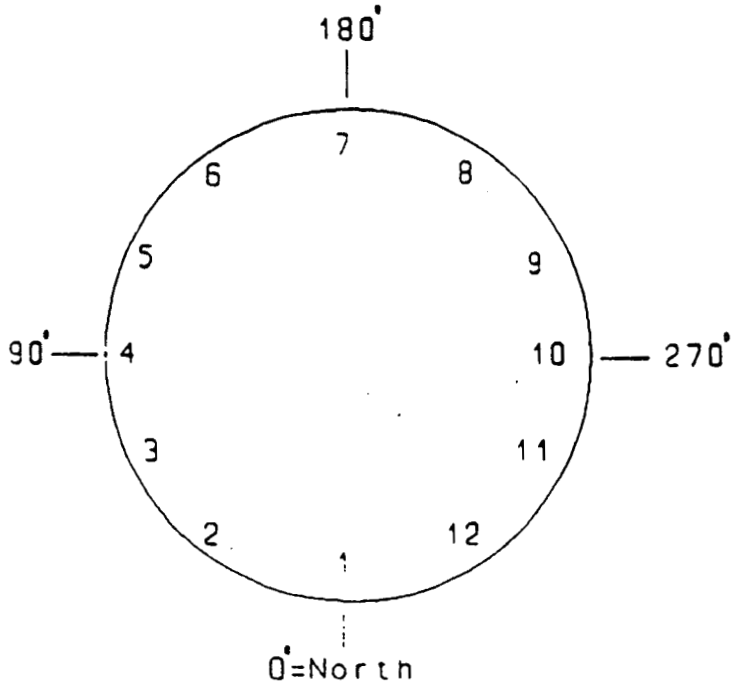
Note: Ultrasonic Thickness Gauge, NOVA 100-D, Serial Number 550

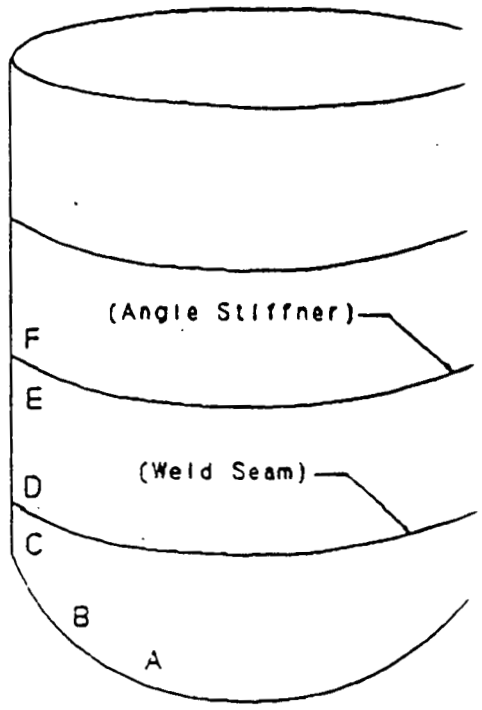
By W.L. Romine



FEMP QC Dept. S.M. Hurley

5114 Tank Number D1-1 Date 10/27




(Dished Bottom)

drawing thickness = 0.375

| UT Thickness Readings | | | | | | |
|---|---|---|---|---|---|---|
| Location | A | B | C | D | E | F |
| 1 | 0.350 | 0.369 | 0.379 | 0.356 | 0.372 | 0.377 |
| 2 | 0.350 | 0.370 | 0.371 | 0.360 | 0.369 | 0.372 |
| 3 | 0.356 | 0.365 | 0.361 | 0.359 | 0.332 | 0.371 |
| 4 | 0.362 | 0.367 | 0.362 | 0.379 | 0.376 | 0.376 |
| 5 | 0.358 | 0.376 | 0.379 | 0.371 | 0.388 | 0.374 |
| 6 | 0.344 | 0.379 | 0.361 | 0.384 | 0.384 | 0.379 |
| 7 | 0.349 | 0.381 | 0.364 | 0.386 | 0.395 | 0.382 |
| 8 | 0.340 | 0.372 | 0.367 | 0.393 | 0.393 | 0.378 |
| 9 | 0.350 | 0.379 | 0.372 | 0.373 | 0.402 | 0.381 |
| 10 | 0.360 | 0.371 | 0.387 | 0.380 | 0.399 | 0.386 |
| 11 | 0.349 | 0.378 | 0.371 | 0.390 | 0.400 | 0.384 |
| 12 | 0.346 | 0.381 | 0.398 | 0.373 | 0.396 | 0.376 |

Note: Ultrasonic Thickness Gauge, NOVA 100-D, Serial Numbe
Surface of the tank was cruddy.

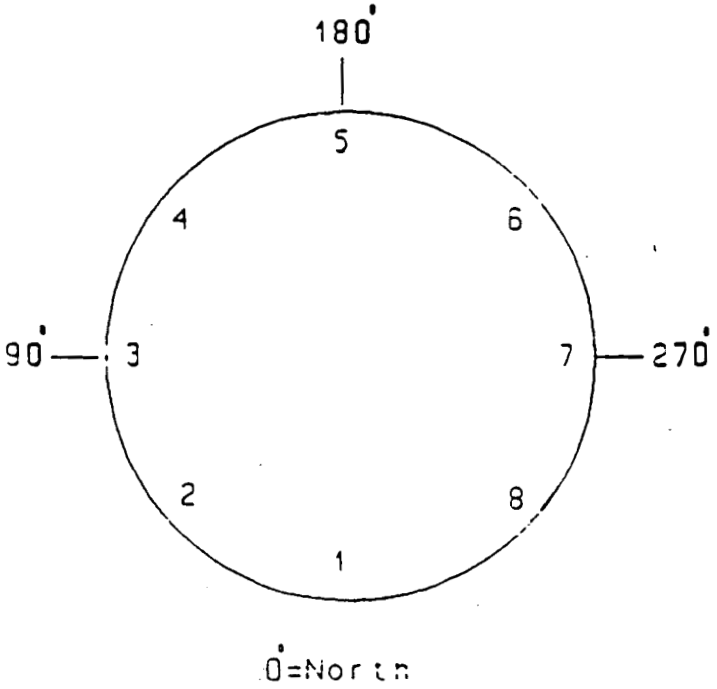
By W.L. Romine

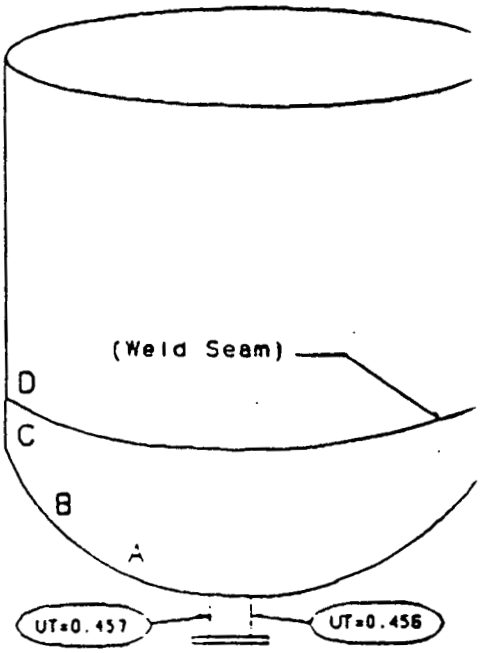


FEMP QC Dept. S.M. Hurl

Tank Number F1-1

Date 10




(Disned Bottom)

| UT Thickness Readings | | | | | | |
|---|---|---|---|---|---|---|
| Location | A | B | C | D | | |
| 1 | 0.504 | 0.501 | 0.533 | 0.379 | | |
| 2 | 0.509 | 0.513 | 0.531 | 0.383 | | |
| 3 | 0.499 | 0.499 | 0.530 | 0.382 | | |
| 4 | 0.494 | 0.506 | 0.525 | 0.388 | | |
| 5 | 0.498 | 0.489 | 0.528 | 0.385 | | |
| 6 | 0.492 | 0.516 | 0.522 | 0.389 | | |
| 7 | 0.499 | 0.514 | 0.526 | 0.386 | | |
| 8 | 0.503 | 0.499 | 0.515 | 0.385 | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |

Note: Ultrasonic Thickness Gauge, NOVA 100-D, Serial Number

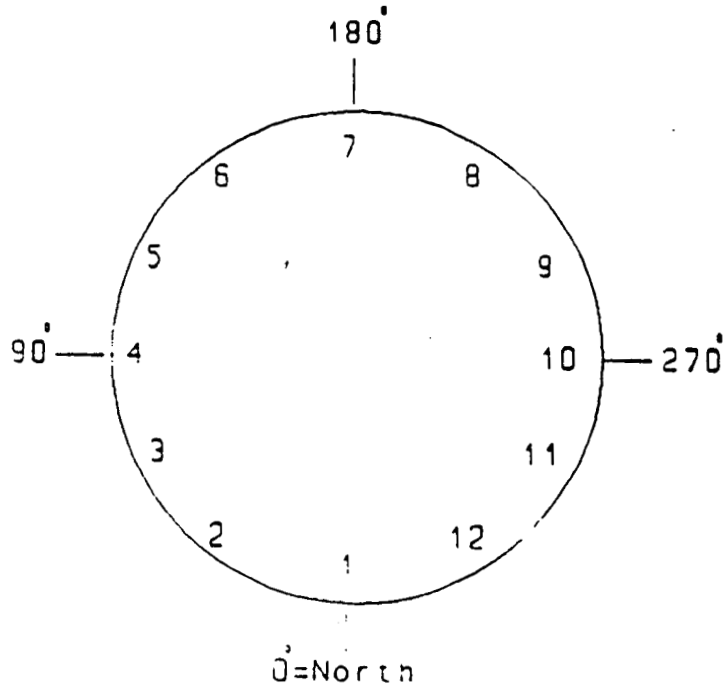
By W.L. Romine

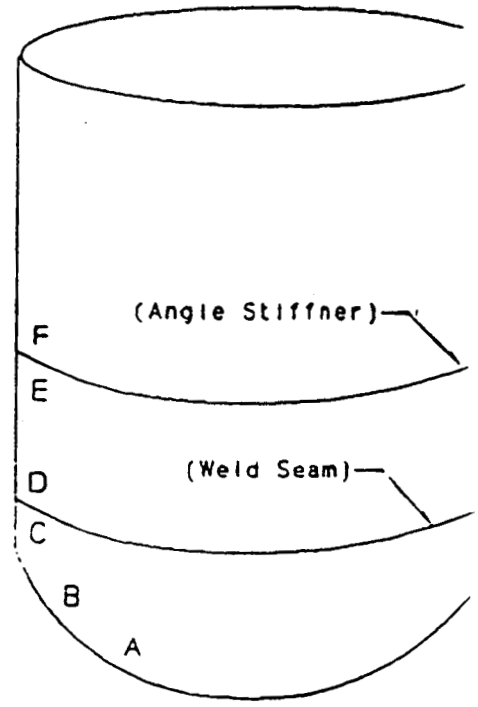
051

FEMP QC Dept. S.M. Hur

51 14 Tank Number F1-25

Date :




| UT Thickness Readings | | | | | | |
|---|---|---|---|---|---|---|
| Location | A | B | C | D | E | F |
| 1 | 0.336 | 0.351 | 0.396 | 0.320 | 0.325 | 0.336 |
| 2 | 0.338 | 0.346 | 0.391 | 0.319 | 0.331 | 0.340 |
| 3 | 0.344 | 0.348 | 0.387 | 0.325 | 0.339 | ● |
| 4 | 0.314 | 0.352 | 0.387 | 0.330 | 0.349 | ● |
| 5 | 0.322 | 0.359 | 0.400 | 0.314 | 0.330 | 0.329 |
| 6 | 0.340 | 0.351 | 0.398 | 0.322 | ● | ● |
| 7 | 0.347 | 0.355 | 0.394 | 0.312 | 0.326 | * |
| 8 | 0.344 | 0.354 | 0.392 | 0.313 | 0.331 | 0.336 |
| 9 | 0.338 | 0.358 | ● | ● | ● | ● |
| 10 | 0.337 | 0.357 | 0.398 | 0.317 | 0.346 | ● |
| 11 | 0.337 | 0.335 | ● | ● | ● | ● |
| 12 | 0.335 | 0.351 | ● | ● | ● | ● |

Note: * Inaccessible; ● Residue on metal surface.

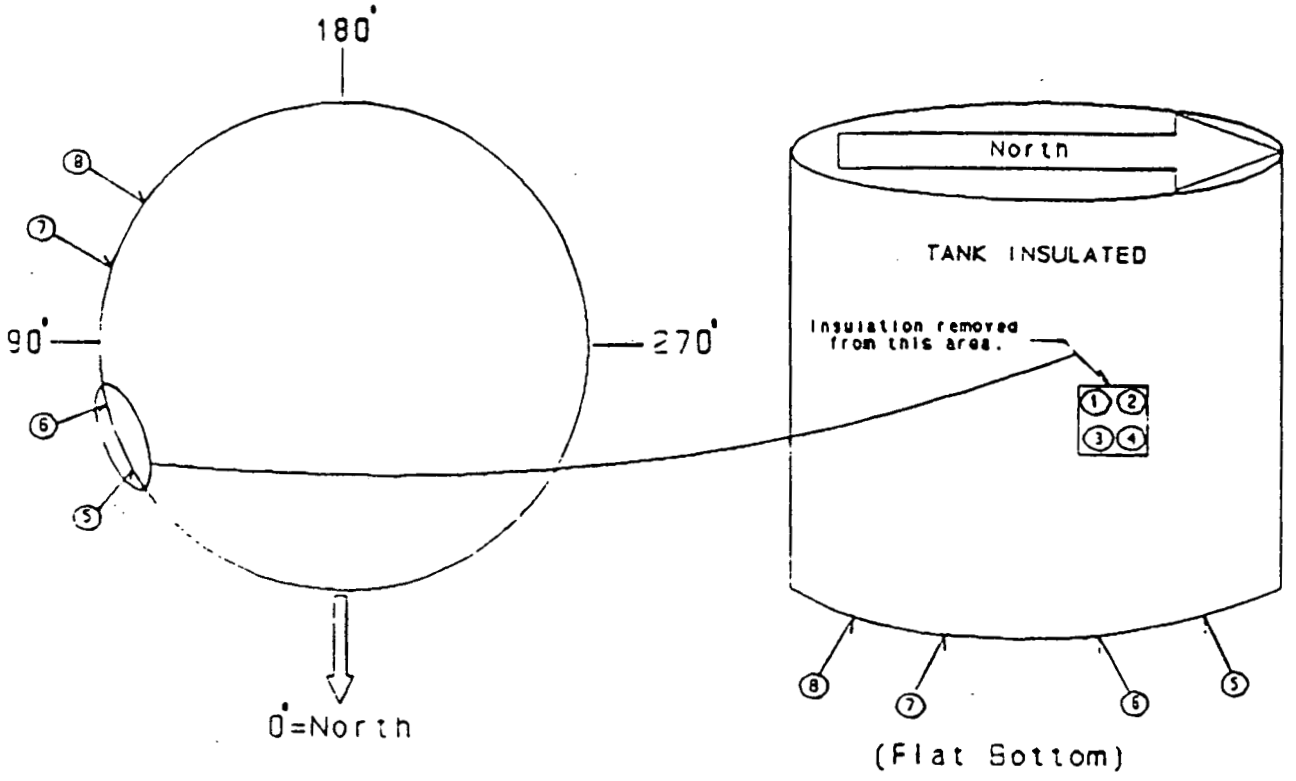
Ultrasonic Thickness Gauge, NOVA 100-D, Serial Number 5

By W.L. Romine

FEMP QC Dept. S.M. Hurl

Tank Number F3E - 223

Date 10/25/93



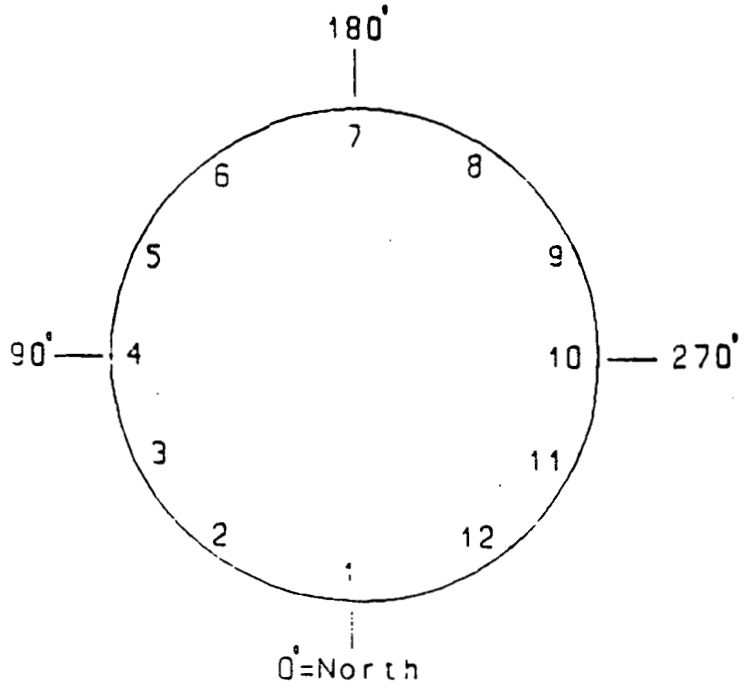

| UT Thickness Readings | | |
|---|---|---|
| Location | | |
| 1 | 0.206 | |
| 2 | 0.205 | |
| 3 | 0.203 | |
| 4 | 0.204 | |
| 5 | 0.326 | UT Readings of tank bottom |
| 6 | 0.331 | |
| 7 | 0.325 | |
| 8 | 0.324 | |
| | | |
| | | |
| | | |
| | | |

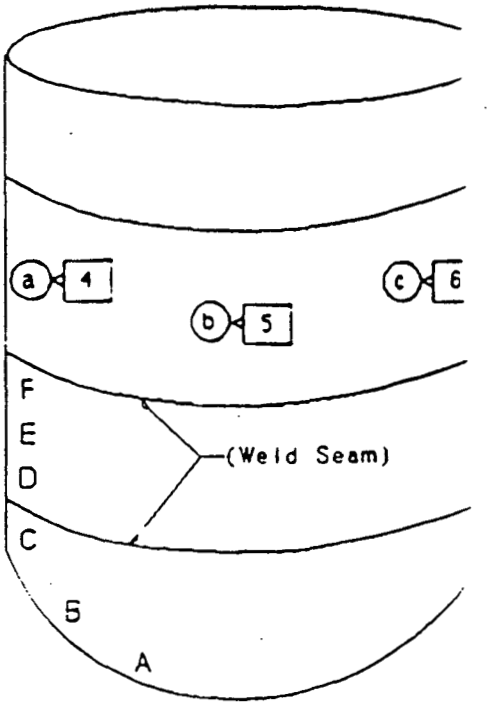
Note: Ultrasonic Thickness Gauge, NOVA 100-D, Serial Number 550

By W.L. Romine

FEMP QC Dept. S.M. Hurle

5114 Task Number F1-308 Date 10/25/




(Dished Bottom)

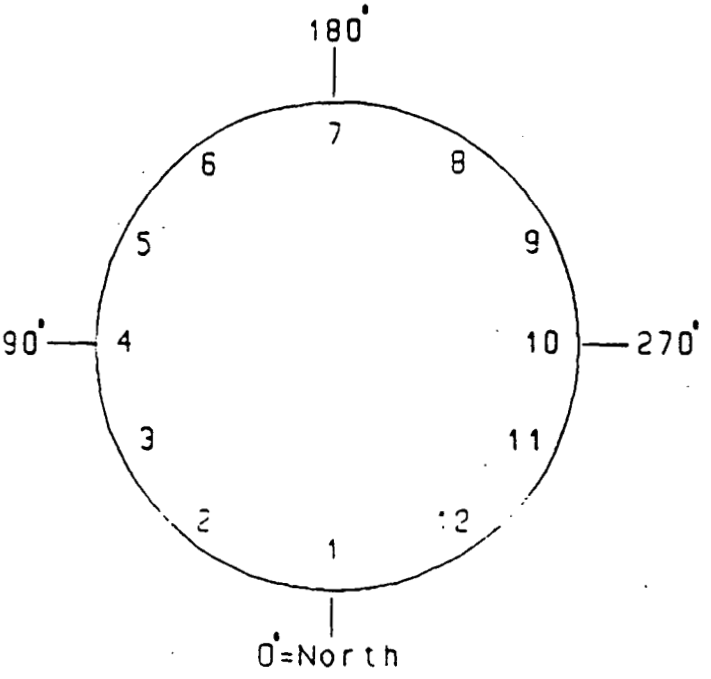
| UT Thickness Readings | | | | | | | |
|---|---|---|---|---|---|---|---|
| Location | A | B | C | D | E | F | |
| 1 | 0.287 | 0.293 | 0.299 | 0.199 | 0.196 | 0.197 | |
| 2 | 0.292 | 0.292 | 0.297 | 0.193 | 0.193 | 0.191 | a |
| 3 | 0.291 | 0.293 | 0.294 | 0.185 | 0.192 | 0.193 | |
| 4 | 0.289 | 0.291 | 0.301 | 0.192 | 0.194 | 0.192 | |
| 5 | 0.289 | 0.289 | 0.297 | 0.192 | 0.196 | 0.194 | |
| 6 | 0.292 | 0.296 | 0.309 | 0.197 | 0.194 | 0.197 | b |
| 7 | 0.292 | 0.293 | 0.300 | 0.195 | 0.192 | 0.198 | |
| 8 | 0.295 | 0.298 | 0.313 | 0.193 | 0.195 | 0.193 | |
| 9 | 0.294 | 0.299 | 0.316 | 0.193 | 0.197 | 0.196 | |
| 10 | 0.297 | 0.298 | 0.313 | 0.193 | 0.195 | 0.196 | c |
| 11 | 0.291 | 0.297 | 0.314 | 0.195 | 0.196 | 0.198 | |
| 12 | 0.295 | 0.294 | 0.303 | 0.192 | 0.195 | 0.199 | |

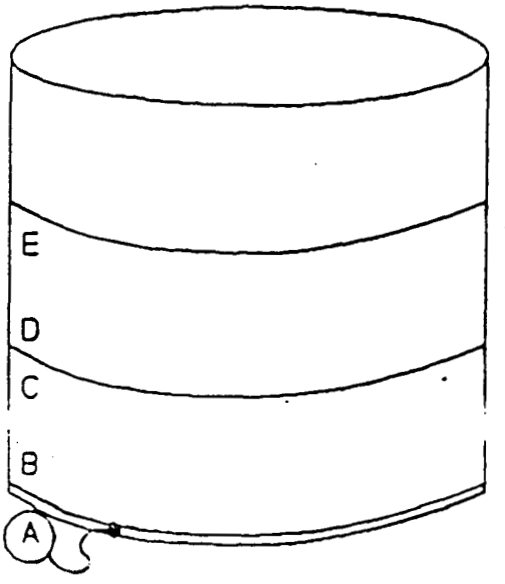
Note: Ultrasonic Thickness Gauge, NOVA 100-D, Serial Numbe

By W.L. Romine FEMP QC Dept. S.M. Hur

Tank Number T-2

Date 11/02/




(Flat Bottom)

| UT Thickness Readings | | | | | | | |
|---|---|---|---|---|---|---|---|
| Location | A | B | C | D | E | | |
| 1 | 0.138 | 0.137 | 0.140 | 0.139 | 0.132 | | |
| 2 | 0.128 | 0.133 | 0.140 | 0.139 | 0.132 | | |
| 3 | 0.130 | 0.132 | 0.139 | 0.139 | 0.132 | | |
| 4 | 0.142 | 0.143 | 0.139 | 0.138 | 0.137 | | |
| 5 | 0.142 | 0.135 | 0.143 | 0.138 | 0.131 | | |
| 6 | 0.138 | 0.136 | 0.139 | 0.138 | 0.132 | | |
| 7 | 0.137 | 0.140 | 0.145 | 0.145 | 0.138 | | |
| 8 | 0.131 | 0.135 | 0.142 | 0.140 | 0.135 | | |
| 9 | 0.134 | 0.139 | 0.140 | 0.140 | 0.137 | | |
| 10 | 0.149 | 0.142 | 0.139 | 0.137 | 0.132 | | |
| 11 | 0.141 | 0.141 | 0.142 | 0.141 | 0.135 | | |
| 12 | 0.129 | 0.135 | 0.141 | 0.140 | 0.134 | | |

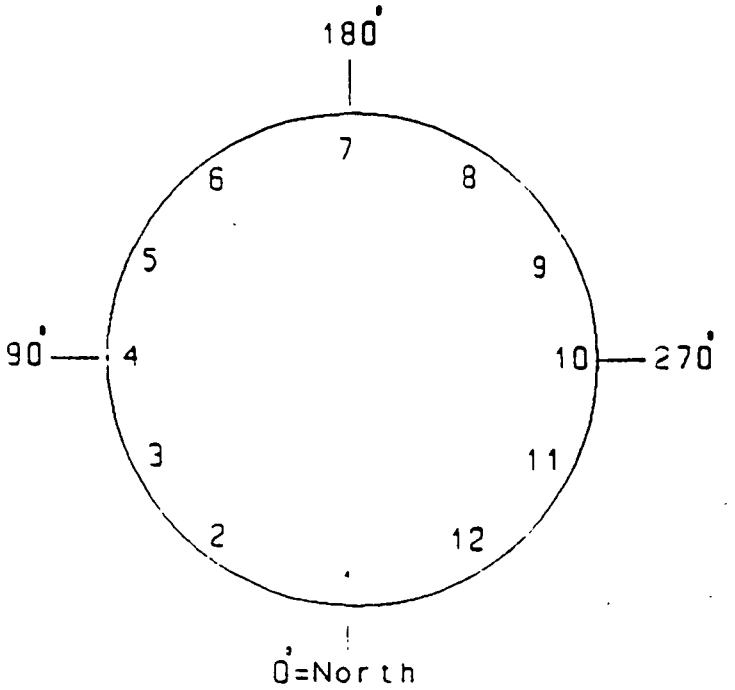
Note: Ultrasonic Thickness Gauge, NOVA 130-D, Serial Number 550

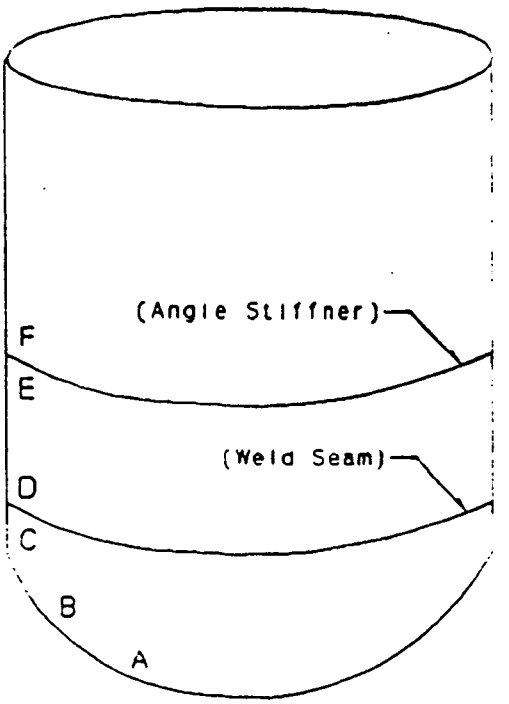


By W.L. Romine

FEMP QC Dept. S.M. Hurley

51 T4 Tank Number F1-401 Date 10/2




(Dished Bottom)

| UT Thickness Readings | | | | | | |
|---|---|---|---|---|---|---|
| Location | A | B | C | D | E | F |
| 1 | 0.371 | 0.374 | 0.394 | 0.263 | 0.272 | 0.274 |
| 2 | 0.365 | 0.375 | 0.377 | 0.258 | 0.262 | 0.264 |
| 3 | 0.378 | 0.384 | 0.409 | 0.255 | 0.259 | 0.259 |
| 4 | * | * | * | * | * | * |
| 5 | * | * | * | * | * | * |
| 6 | * | * | * | * | * | * |
| 7 | * | * | * | * | * | * |
| 8 | * | * | * | * | * | * |
| 9 | * | * | * | * | * | * |
| 10 | * | * | * | * | * | * |
| 11 | 0.381 | 0.384 | 0.408 | 0.258 | 0.258 | 0.261 |
| 12 | 0.376 | 0.375 | 0.392 | 0.261 | 0.268 | 0.266 |

Note: * Inaccessible; standing water in sump.

Ultrasonic Thickness Gauge, NOVA 100-D, Serial Number 5

By W.L. Romine

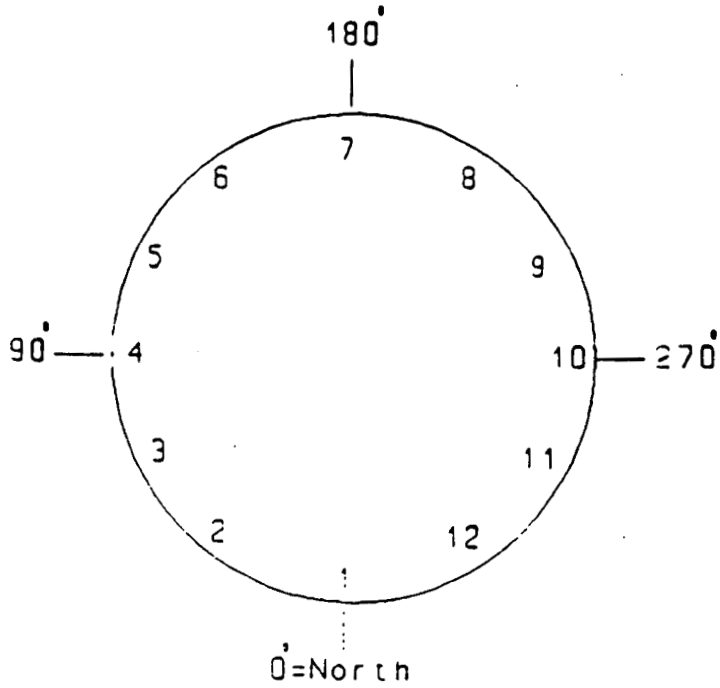


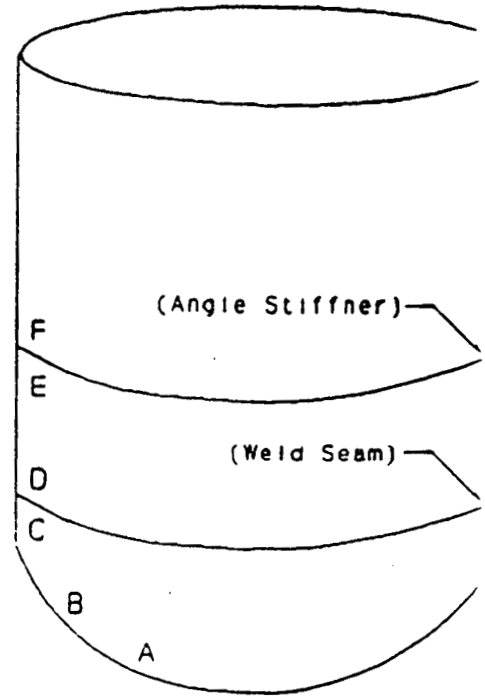
FEMP QC Dept. S.M. Hurl

Tank Number F1-402

5114

Date 1C




(Disned Bottom)

| UT Thickness Readings | | | | | | |
|---|---|---|---|---|---|---|
| Location | A | B | C | D | E | F |
| 1 | 0.381 | 0.375 | 0.399 | 0.265 | 0.273 | 0.270 |
| 2 | 0.376 | 0.374 | 0.398 | 0.266 | 0.273 | 0.270 |
| 3 | 0.372 | 0.367 | 0.387 | 0.263 | 0.269 | 0.274 |
| 4 | * | * | * | * | * | * |
| 5 | * | * | * | * | * | * |
| 6 | * | * | * | * | * | * |
| 7 | * | * | * | * | * | * |
| 8 | * | * | * | * | * | * |
| 9 | * | * | * | * | * | * |
| 10 | * | * | * | * | * | * |
| 11 | 0.380 | 0.373 | 0.366 | 0.265 | 0.271 | 0.270 |
| 12 | 0.381 | 0.370 | 0.386 | 0.270 | 0.279 | 0.270 |

Note: * Inaccessible; standing water in sump.

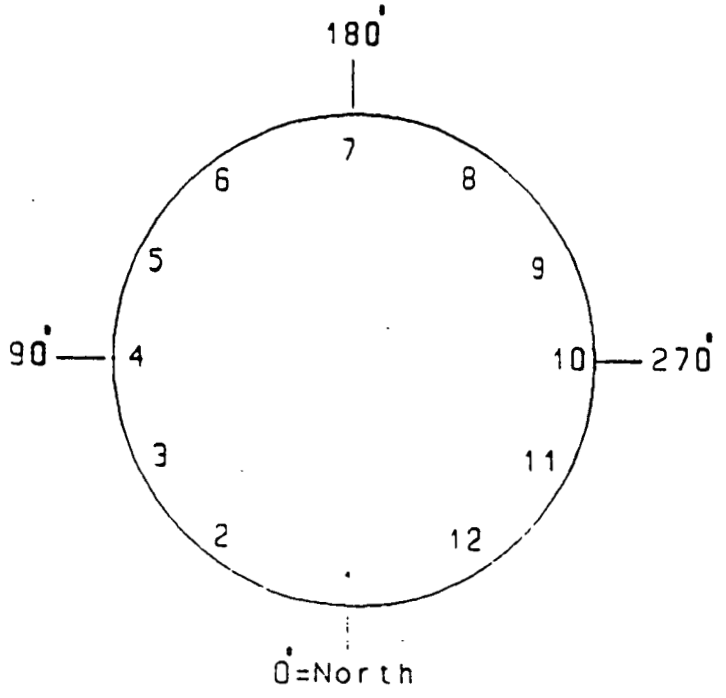
Ultrasonic Thickness Gauge, NOVA 100-D, Serial Number

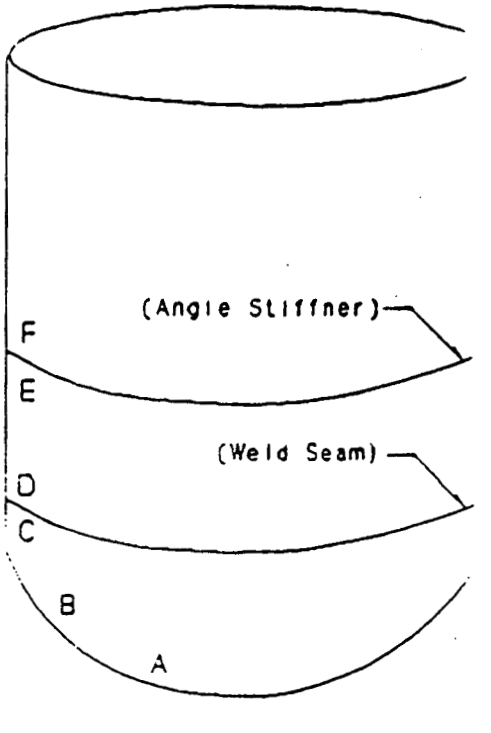
By W.L. Romine

057

FEMP QC Dept. S.M. Hur

5114 Tank Number F1-403 Date 10




| UT Thickness Readings | | | | | | |
|---|---|---|---|---|---|---|
| Location | A | B | C | D | E | F |
| 1 | 0.374 | 0.367 | 0.389 | 0.262 | 0.272 | 0.270 |
| 2 | 0.365 | 0.364 | 0.377 | 0.261 | 0.262 | 0.267 |
| 3 | 0.364 | 0.359 | 0.380 | 0.257 | 0.261 | 0.265 |
| 4 | * | * | * | * | * | * |
| 5 | * | * | * | * | * | * |
| 6 | * | * | * | * | * | * |
| 7 | * | * | * | * | * | * |
| 8 | * | * | * | * | * | * |
| 9 | * | * | * | * | * | * |
| 10 | * | * | * | * | * | * |
| 11 | 0.374 | 0.363 | 0.381 | 0.261 | 0.265 | 0.268 |
| 12 | 0.375 | 0.366 | 0.383 | 0.264 | 0.272 | 0.270 |

Note: * Inaccessible; standing water in sump.

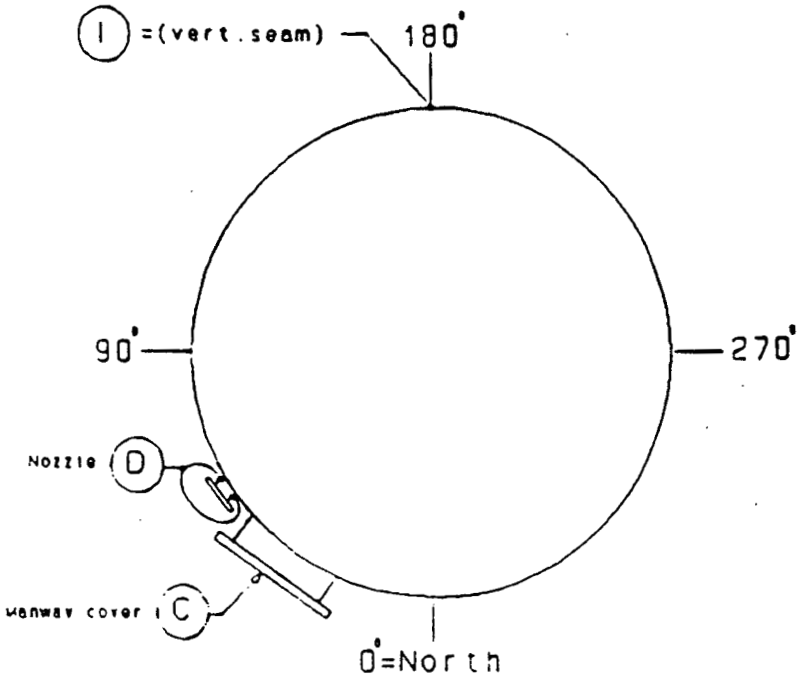
Ultrasonic Thickness Gauge, NOVA 100-D, Serial Number 5

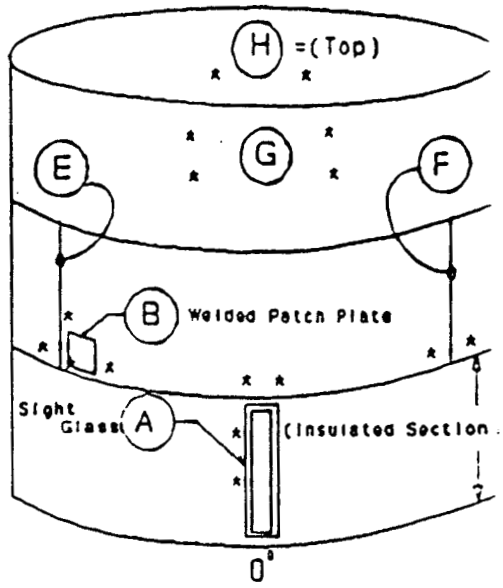
058

By W.L. Romine FEMP QC Dept. S.M. Hurl

Tank Number F1-608

Date 10/25/93




(Flat Bottom)

| UT Thickness Readings | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Location | A | B | C | D | E | F | G | H |
| 1 | 0.210 | 0.197 | 0.381 | 0.154 | 0.204 | 0.198 | 0.206 | 0.212 |
| 2 | 0.200 | 0.206 | 0.382 | 0.150 | 0.210 | 0.199 | 0.220 | 0.215 |
| 3 | 0.204 | | | | | | 0.198 | |
| 4 | 0.210 | | | | | | 0.205 | |

Notes: (*)=Approximate area of UT reading.

Ultrasonic Thickness Gauge, NOVA 100-D, Number 550



By W.L. Romine

FEMP QC Dept. S.M. Hurle

# ATTACHMENT 2

Outdoor Secondary Containment Calculations

FORM 110

Job USDE
Location
Subject RET. BASINS

A. M. KINNEY, INC.
CONSULTING ENGINEERS
CINCINNATI, OHIO

File No. 2903-35 Sheet No. 1
Checked by Date
Computed by Date 12/17/9

BASIN NO. 1 (DWG. 00X-4445-S-01726 S-1
53'-3" x 44'-0" x 3'-9"± INSIDE DIM.
BOT. OF VERT. TKS. 8"± BELOW TOP
4-16' ϕ TKS., 1@ 70,000g, 3@29,000g = 157000 g
BASIN CAPACITY REQ'D. —

a. $\frac{0.1 \times 157000}{7.48}$ = 2099 c.F

OR

b. 70000/7.48 = 9358 CF

c. STORM WATER = 53.25 x 44 x 0.33 = 773

TOTAL CAP. REQ'D = 9358 + 773 = 10131 CF

BASIN CAPACITY —

53.25 x 44.0 x 3.75 + $\frac{44}{2}$ x 0.42 x 53.25 = 9278 CF

— PIERS 10' x 1' x 3' x 8 = — 240
— Pumps (INCL. PADS) 5' x 5' x 1.33' x 1 = — 33
— TANKS $\frac{3.14 \times T6^2}{4}$ x 0.67 x 3 = — 404
NET CAPACITY = 8601 c

10131 - 8601 / 53.25 x 44 = 0.65'

BASIN SIDES RAISED 9" (DWG. 00X-4445-S-01726

MODIFIED CAPACITY = 53.25 x 44 x 4.5 + $\frac{44}{2}$ x 0.42 x 53.25 = 11,035 c
— PIERS AND PUMPS = — 273
— TKS $\frac{3.14 \times T6^2}{4}$ x 1.42 x 3 856
9906 c

$\frac{10131 - 9906}{53.25 \times 44.0}$ = 0.096 = 1"18" (DEFICIT)

FORM 110

Job USDE
Location
Subject RET. BASINS

A. M. KINNEY, INC.
CONSULTING ENGINEERS
CINCINNATI, OHIO

File No 2903-35 Sheet No. 2
Checked by _____ Date _____
Computed by _____ Date 12/15/79

BASIN NO.4 (DWG. 00X-4445-S-01726 S1)
61'-6" x 38'-6" x 2'-1"
BOT. OF VERT. 2'-6" ABOVE TOP OF WALL
6TKS, 4 x 25,265g + 2 x 14203g = 129,466g

BASIN CAP. REQ'D —
a. 0.1 x 129466 / 7.48 = 1731 CF

b. 25265 / 7.48 = 3378 CF

c. STORM WATER
61.5 x 38.5 x 0.33 = 781 CF

TOT. CAP. REQ'D = 3378 + 781 = 4159 CF

BASIN CAPACITY —

| | |
|---|---|
| 61.5 x 38.5 x 2.08 | = 4925 CF |
| − PUMPS, (6 x 2 x 4 x 0.7) | = − 34 |
| 4 x 1 x 1.7 x 3 + 1 x 0.7 x 3 | = − 23 |
| − PIERS, 4 x 1.75 x 2.58 x 15.0 | = − 271 |
| − WALLS, 4 x 1.75 x 2.58 x 37.5 | = − 677 |
| NET CAPACITY | = 3920 CF |

$$\frac{4159 - 3920}{61.5 \times 38.5} = 0.10'$$

BASIN WALLS RAISED 6 IN.

FORM 110

Job US DE
Location
Subject RET. BASINS

A. M. KINNEY, INC.
CONSULTING ENGINEERS
CINCINNATI, OHIO

File No. 2903-35 Sheet No. 3
Checked by Date
Computed by Date 12/15/71

BASIN NO. 7 (DWG. 00X-4445-S01727 S2
61'-4" X 53'-8" X 1'-7"
4 HORIZ. TKS. WITH BOT. 2'-8" ABOVE BASE
BASIN SET INTO HILL, SIDE WALLS SLOPE
UPWARD 2'-9"± FROM MID-WIDTH
4 HORIZ TKS., 10'-6"ϕ @ 24,634g EACH

BASIN CAPACITY REQ'D

a. 0.1 x 4 x 24634 / 7.48 = 1318 CF

b. 24634 / 7.48 = 3294

c. STORM WATER = 61.33 x 53.67 x 0.33 = 1086

TOTAL CAPACITY REQ'D = 3294 + 1086 = 4380 CF

BASIN CAPACITY —

| | |
|---|---|
| 61.33 x 53.67 x 1.58 | = +5201 CF |
| + 10.0 x 61.33 x 0.55 | = +337 |
| − PIERS 8 x 1.0 x 1.58 x 10.5 | = −133 |
| NET CAPACITY | = 5405 CF |

BASIN CAPACITY IF TILE LINING IS ADDED —

| | |
|---|---|
| 61.08 x 53.42 x 1.47 | = 4797 |
| + 9.75 x 61.08 x 0.55 | = + 328 |
| − 8 x 1.25 x 1.58 x 10.75 | = − 170 |
| | 4955 CF |

4955 > 4380 ∴
BASIN HT. IS SATISFACTORY

5114

RCRA UST
Storage Tank

HWMU 46
UNH Tanks (NFS Storage Area)
(Tanks F2-605, 606, 608, & 02-E004A-Tnk)

| | | | |
|---|---|---|---|
| pector's Name: Steve Middleton | | Date: 10-1-93 | Time: 1330 |
| ility Owner's Signature: [illegible] | | Date: 10/1/93 | Time: 14:15 |

| em | Item Description | Acceptable | Unacceptable | Observations/Corrective Actions To Be Completed | Date Action Completed |
|---|---|---|---|---|---|
| | Signs: Danger-Authorized Personnel Only | | | | |
| | No Smoking or Open Flame | ✓ | | | |
| 3 | Emergency Contact & Prior To Entry | ✓ | | | |
| 4 | Overfill/Spill Control Equipment | ✓ | | | |
| 5 | Corrosion Or Release Of Waste | ✓ | | | |
| 6 | Monitoring Equip. In Place (Content Level) | ✓ | | | |
| 7 | Surrounding Area And Unit Intergity | ✓ | | | |
| 8 | Secondary Containment Condition | ✓ | | see note | |
| 9 | Emergency & Spill Response Equipment | ✓ | | | |
| 10 | Manway Seal Unbroken | ✓ | | | |
| 11 | Boundary Markers (Chains, Rope, etc.) | ✓ | | | |

ments: Material Hold Up: F2-605= 24280, F2-606= 23975, F2-607= 25590, F2-608= 20712.
Water in Dike

ribution:
Facility Owner: Facility owner reviews, signs and distributes log to:
RCRA Field Implementation

| | |
|---|---|
| CRA Field Implementation Signature: Susan Hoskins | Date: 10/15/93 |

HWMU 46
UNH TANKS (NFS Storage Area)
Figure 46

5114

HWMU 46
UNH Tanks (NFS Storage Area)
(Tanks F2-605, 606, 607, 608, & 02-E004A-Tnk)

RCRA UST
Storage Tank

| | | | |
|---|---|---|---|
| Inspector's Name: Stanley Bippus | | Date: 10/2/93 | Time: 14:0 |
| Facility Owner's Signature: | RO | Date: 10-2-93 | Time: 1515 |

| Item No. | Item Description | Acceptable | Unacceptable | Observations/Corrective Actions To Be Completed | Date Ac Complet |
|---|---|---|---|---|---|
| 1 | Signs: Danger-Authorized Personnel Only | ✓ | | | |
| 2 | No Smoking or Open Flame | ✓ | | | |
| 3 | Emergency Contact & Prior To Entry | ✓ | | | |
| 4 | Overfill/Spill Control Equipment | ✓ | | | |
| 5 | Corrosion Or Release Of Waste | ✓ | | | |
| 6 | Monitoring Equip. In Place (Content Level) | ✓ | | | |
| 7 | Surrounding Area And Unit Intergity | ✓ | | | |
| 8 | Secondary Containment Condition | ✓ | | See Comments | |
| 9 | Emergency & Spill Response Equipment | ✓ | | | |
| 10 | Manway Seal Unbroken | ✓ | | | |
| 11 | Boundary Markers (Chains, Rope, etc.) | ✓ | | | |

Comments: Material Hold Up: F2-605= 24280, F2-606= 23975, F2-607= 25590, F2-608= 20712.
#8 Standing Water in Dike

Distribution:
Facility Owner: Facility owner reviews, signs and distributes log to:
RCRA Field Implementation

| | |
|---|---|
| RCRA Field Implementation Signature: Susan Hasker | Date: 10/15/93 |

HWMU 46
UNH TANKS (NFS Storage Area)
Figure 46

065

5114

HWMU 46
UNH Tanks (NFS Storage Area)
(Tanks F2-605, 606, 608, & 02-E004A-Tnk)

RCRA UST
Storage Tank

| | | | |
|---|---|---|---|
| Inspector's Name: [redacted] 1419 | Date: 10-3-93 | Time: 1100 |
| Facility Owner's Signature: T. Mitchell | Date: 10/3/93 | Time: 14:30 |

| Item No. | Item Description | Acceptable | Unacceptable | Observations/Corrective Actions To Be Completed | Date Action Completed |
|---|---|---|---|---|---|
| 1 | Signs: Danger-Authorized Personnel Only | ✓ | | | |
| 2 | No Smoking or Open Flame | ✓ | | | |
| 3 | Emergency Contact & Prior To Entry | ✓ | | | |
| 4 | Overfill/Spill Control Equipment | ✓ | | | |
| 5 | Corrosion Or Release Of Waste | ✓ | | | |
| 6 | Monitoring Equip. In Place (Content Level) | ✓ | | | |
| 7 | Surrounding Area And Unit Intergity | ✓ | | | |
| 8 | Secondary Containment Condition | ✓ | | See note | |
| 9 | Emergency & Spill Response Equipment | ✓ | | | |
| 10 | Manway Seal Unbroken | ✓ | | | |
| 11 | Boundary Markers (Chains, Rope, etc.) | ✓ | | | |

Comments: Material Hold Up: F2-605= 24280, F2-606= 23975, F2-607= 25590, F2-608= 20712.
✓ = Water in Dike

Distribution:
Facility Owner: Facility owner reviews, signs and distributes log to:
RCRA Field Implementation

| | |
|---|---|
| RCRA Field Implementation Signature: Susan Hoskins | Date: 10/15/93 |

HWMU 46
UNH TANKS (NFS Storage Area)
Figure 46

- 5114

HWMU 46
UNH Tanks (NFS Storage Area)
(Tanks F2-605, 606, 607, 608, & 02-E004A-Tnk)

RCRA UST
Storage Tank

| | | | |
|---|---|---|---|
| spector's Name: Stanley Cippus | | Date: 10/4/93 | Time: 12:00 |
| cility Owner's Signature: [illegible] | | Date: 10/4/93 | Time: 14:15 |

| Item No. | Item Description | Acceptable | Unacceptable | Observations/Corrective Actions To Be Completed | Date Action Completed |
|---|---|---|---|---|---|
| 1 | Signs: Danger-Authorized Personnel Only | ✓ | | | |
| 2 | No Smoking or Open Flame | ✓ | | | |
| 3 | Emergency Contact & Prior To Entry | ✓ | | | |
| 4 | Overfill/Spill Control Equipment | ✓ | | | |
| 5 | Corrosion Or Release Of Waste | ✓ | | | |
| 6 | Monitoring Equip. In Place (Content Level) | ✓ | | | |
| 7 | Surrounding Area And Unit Intergity | ✓ | | | |
| 8 | Secondary Containment Condition | ✓ | | See Comments | |
| 9 | Emergency & Spill Response Equipment | ✓ | | | |
| 10 | Manway Seal Unbroken | ✓ | | | |
| 11 | Boundary Markers (Chains, Rope, etc.) | ✓ | | | |

mments: Material Hold Up:F2-605= 24280, F2-606= 23975, F2-607= 25590, F2-608= 20712.
#8 Standing Water in Dike

tribution:
Facility Owner: Facility owner reviews, signs and distributes log to:
RCRA Field Implementation

| | |
|---|---|
| RCRA Field Implementation Signature: Susan Hoskins | Date: 10/15/93 |

HWMU 46
UNH TANKS (NFS Storage Area)
Figure 46

067

5114

HWMU 46
UNH Tanks (NFS Storage Area)
(Tanks F2-605, 606, 607, 608, & 02-E004A-Tnk)

RCRA UST
Storage Tank

| | | |
|---|---|---|
| Inspector's Name: Stanley Bippus | Date: 10/5/93 | Time: 13:00 |
| Facility Owner's Signature: Ron Birchett | Date: 10/5/93 | Time: 15:00 |

| Item No. | Item Description | Acceptable | Unacceptable | Observations/Corrective Actions To Be Completed | Date Action Completed |
|---|---|---|---|---|---|
| 1 | Signs: Danger-Authorized Personnel Only | ✓ | | | |
| 2 | No Smoking or Open Flame | ✓ | | | |
| 3 | Emergency Contact & Prior To Entry | ✓ | | | |
| 4 | Overfill/Spill Control Equipment | ✓ | | | |
| 5 | Corrosion Or Release Of Waste | ✓ | | | |
| 6 | Monitoring Equip. In Place (Content Level) | ✓ | | | |
| 7 | Surrounding Area And Unit Intergity | ✓ | | | |
| 8 | Secondary Containment Condition | ✓ | | See Comments | |
| 9 | Emergency & Spill Response Equipment | ✓ | | | |
| 10 | Manway Seal Unbroken | ✓ | | | |
| 11 | Boundary Markers (Chains, Rope, etc.) | ✓ | | | |

Comments: Material Hold Up:F2-605= 24280, F2-606= 23975, F2-607= 25590, F2-608= 20712.
#8 Standing Water in Dike

Distribution:
Facility Owner: Facility owner reviews, signs and distributes log to:
RCRA Field Implementation

| | |
|---|---|
| RCRA Field Implementation Signature: Susan Hoskins | Date: 10/15/93 |

HWMU 46
UNH TANKS (NFS Storage Area)
Figure 46

5114

HWMU 46
UNH Tanks (NFS Storage Area)
(Tanks F2-605, 606, 607, 608, & 02-E004A-Tnk)

RCRA UST
Storage Tank

| | | | |
|---|---|---|---|
| Inspector's Name: Stanley Bippus | | Date: 10/6/93 | Time: 09:15 |
| Facility Owner's Signature: [illegible] | | Date: 10/6/93 | Time: 14:15 |

| Item No. | Item Description | Acceptable | Unacceptable | Observations/Corrective Actions To Be Completed | Date Action Completed |
|---|---|---|---|---|---|
| 1 | Signs: Danger-Authorized Personnel Only | ✓ | | | |
| 2 | No Smoking or Open Flame | ✓ | | | |
| 3 | Emergency Contact & Prior To Entry | ✓ | | | |
| 4 | Overfill/Spill Control Equipment | ✓ | | | |
| 5 | Corrosion Or Release Of Waste | ✓ | | | |
| 6 | Monitoring Equip. In Place (Content Level) | ✓ | | | |
| 7 | Surrounding Area And Unit Intergity | ✓ | | | |
| 8 | Secondary Containment Condition | ✓ | | See Comments | |
| 9 | Emergency & Spill Response Equipment | ✓ | | | |
| 10 | Manway Seal Unbroken | ✓ | | | |
| 11 | Boundary Markers (Chains, Rope, etc.) | ✓ | | | |

Comments: Material Hold Up: F2-605= 24280, F2-606= 23975, F2-607= 25590, F2-608= 20712.
#8 Standing Water in Dike

Distribution:
Facility Owner: Facility owner reviews, signs and distributes log to:
RCRA Field Implementation

| | |
|---|---|
| RCRA Field Implementation Signature: Susan Hoskins | Date: 10/15/93 |

HWMU 46
UNH TANKS (NFS Storage Area)
Figure 46

5114

RCRA UST
Storage Tank

HWMU 46
UNH Tanks (NFS Storage Area)
(Tanks F2-605, 606, 607, 608, & 02-E004A-Tnk)

| | | | |
|---|---|---|---|
| Inspector's Name: Stanley Bjeper | | Date: 10/7/93 | Time: 13:00 |
| Facility Owner's Signature: R. Wisdat | | Date: 10/7/93 | Time: 14:30 |

| Item No. | Item Description | Acceptable | Unacceptable | Observations/Corrective Actions To Be Completed | Date Action Completed |
|---|---|---|---|---|---|
| 1 | Signs: Danger-Authorized Personnel Only | ✓ | | | |
| 2 | No Smoking or Open Flame | ✓ | | | |
| 3 | Emergency Contact & Prior To Entry | ✓ | | | |
| 4 | Overfill/Spill Control Equipment | ✓ | | | |
| 5 | Corrosion Or Release Of Waste | ✓ | | | |
| 6 | Monitoring Equip. In Place (Content Level) | ✓ | | | |
| 7 | Surrounding Area And Unit Intergity | ✓ | | | |
| 8 | Secondary Containment Condition | ✓ | | See Comments | |
| 9 | Emergency & Spill Response Equipment | ✓ | | | |
| 10 | Manway Seal Unbroken | ✓ | | | |
| 11 | Boundary Markers (Chains, Rope, etc.) | ✓ | | | |

Comments: Material Hold Up: F2-605= 24280, F2-606= 23975, F2-607= 25590, F2-608= 20712.
#8 Standing Water in Dike

Distribution:
Facility Owner: Facility owner reviews, signs and distributes log to: RCRA Field Implementation

| | |
|---|---|
| RCRA Field Implementation Signature: Susan Hoskin | Date: 10/15/93 |

HWMU 46
UNH TANKS (NFS Storage Area)
Figure 46

5114

HWMU 46
UNH Tanks (NFS Storage Area)
(Tanks F2-605, 606, 608, & 02-E004A-Tnk)
1607

RCRA UST
Storage Tank

| | | | |
|---|---|---|---|
| spector's Name: Stanley Bippus | | Date: 10/8/93 | Time: 13:00 |
| cility Owner's Signature: Thomas Bischoff | | Date: 10/8/93 | Time: 14:00 |

| em . | Item Description | Accept-able | Unaccept-able | Observations/Corrective Actions To Be Completed | Date Action Completed |
|---|---|---|---|---|---|
| 1 | Signs: Danger-Authorized Personnel Only | ✓ | | | |
| 2 | No Smoking or Open Flame | ✓ | | | |
| 3 | Emergency Contact & Prior To Entry | ✓ | | | |
| 4 | Overfill/Spill Control Equipment | ✓ | | | |
| 5 | Corrosion Or Release Of Waste | ✓ | | | |
| 6 | Monitoring Equip. In Place (Content Level) | ✓ | | | |
| 7 | Surrounding Area And Unit Intergity | ✓ | | | |
| 8 | Secondary Containment Condition | ✓ | | See Comments | |
| 9 | Emergency & Spill Response Equipment | ✓ | | | |
| 10 | Manway Seal Unbroken | ✓ | | | |
| 11 | Boundary Markers (Chains, Rope, etc.) | ✓ | | | |

mments: Material Hold Up:F2-605= 24280, F2-606= 23975, F2-607= 25590, F2-608= 20712.
#8 Standing Water in Dike

tribution:
Facility Owner: Facility owner reviews, signs and distributes log to:
RCRA Field Implementation

| | |
|---|---|
| RCRA Field Implementation Signature: Susan Hoskins | Date: 10/15/93 |

HWMU 46
UNH TANKS (NFS Storage Area)
Figure 46

5114

RCRA UST
Storage Tank

HWMU 46
UNH Tanks (NFS Storage Area)
(Tanks F2-605, 606, 607, 608, & 02-E004A-Tnk)

| | | | |
|---|---|---|---|
| nspector's Name: William Winston | | Date: 10-9-93 | Time: 0830 |
| acility Owner's Signature: Van Buschott | | Date: 10/9/93 | Time: 1411 |

| tem o. | Item Description | Accept-able | Unaccept-able | Observations/Corrective Actions To Be Completed | Date Action Completed |
|---|---|---|---|---|---|
| 1 | Signs: Danger-Authorized Personnel Only | ✓ | | | |
| 2 | No Smoking or Open Flame | ✓ | | | |
| 3 | Emergency Contact & Prior To Entry | ✓ | | | |
| 4 | Overfill/Spill Control Equipment | ✓ | | | |
| 5 | Corrosion Or Release Of Waste | ✓ | | | |
| 6 | Monitoring Equip. In Place (Content Level) | ✓ | | | |
| 7 | Surrounding Area And Unit Intergity | ✓ | | | |
| 8 | Secondary Containment Condition | ✓ | | See Comments | |
| 9 | Emergency & Spill Response Equipment | ✓ | | | |
| 10 | Manway Seal Unbroken | ✓ | | | |
| 11 | Boundary Markers (Chains, Rope, etc.) | ✓ | | | |

:mments: Material Hold Up: F2-605= 24280, F2-606= 23975, F2-607= 25590, F2-608= 20712.
#8 Standing Water in Dike

:tribution:
Facility Owner; Facility owner reviews, signs and distributes log to:
RCRA Field Implementation

| | |
|---|---|
| RCRA Field Implementation Signature: Susan Hoskin | Date: 10/15/93 |

HWMU 46
UNH TANKS (NFS Storage Area)
Figure 46

072

5114

HWMU 46
UNH Tanks (NFS Storage Area)
(Tanks F2-605, 606, 608, & 02-E004A-Tnk)

RCRA UST
Storage Tank

| | | | |
|---|---|---|---|
| Inspector's Name: | | Date: | Time: |
| Facility Owner's Signature: | | Date: 10/10/93 | Time: 14:15 |

| Item No. | Item Description | Acceptable | Unacceptable | Observations/Corrective Actions To Be Completed | Date Action Completed |
|---|---|---|---|---|---|
| 1 | Signs: Danger-Authorized Personnel Only | ✓ | | | |
| 2 | No Smoking or Open Flame | ✓ | | | |
| 3 | Emergency Contact & Prior To Entry | ✓ | | | |
| 4 | Overfill/Spill Control Equipment | ✓ | | | |
| 5 | Corrosion Or Release Of Waste | ✓ | | | |
| 6 | Monitoring Equip. In Place (Content Level) | ✓ | | | |
| 7 | Surrounding Area And Unit Intergity | ✓ | | | |
| 8 | Secondary Containment Condition | ✓ | | see comment | |
| 9 | Emergency & Spill Response Equipment | ✓ | | | |
| 10 | Manway Seal Unbroken | ✓ | | | |
| 11 | Boundary Markers (Chains, Rope, etc.) | ✓ | | | |

Comments: Material Hold Up: F2-605= 24280, F2-606= 23975, F2-607= 25590, F2-608= 20712.
# standing water in dike

Distribution:
Facility Owner: Facility owner reviews, signs and distributes log to:
RCRA Field Implementation

| | |
|---|---|
| RCRA Field Implementation Signature: | Date: 10/15/93 |

HWMU 46
UNH TANKS (NFS Storage Area)
Figure 46

5114

RCRA UST
Storage Tank

HWMU 46
UNH Tanks (NFS Storage Area)
(Tanks F2-605, 606, 608, & 02-E004A-Tnk)

| | | | |
|---|---|---|---|
| Inspector's Name: [redacted] 1419 | Date: 10-11-93 | Time: 1300 |
| Facility Owner's Signature: [signature] | Date: 10/11/93 | Time: 14:[illegible] |

| Item No. | Item Description | Acceptable | Unacceptable | Observations/Corrective Actions To Be Completed | Date Act Complete |
|---|---|---|---|---|---|
| 1 | Signs: Danger-Authorized Personnel Only | ✓ | | | |
| 2 | No Smoking or Open Flame | ✓ | | | |
| 3 | Emergency Contact & Prior To Entry | ✓ | | | |
| 4 | Overfill/Spill Control Equipment | ✓ | | | |
| 5 | Corrosion Or Release Of Waste | ✓ | | | |
| 6 | Monitoring Equip. In Place (Content Level) | ✓ | | | |
| 7 | Surrounding Area And Unit Intergity | ✓ | | | |
| 8 | Secondary Containment Condition | ✓ | | See note | |
| 9 | Emergency & Spill Response Equipment | ✓ | | | |
| 10 | Manway Seal Unbroken | ✓ | | | |
| 11 | Boundary Markers (Chains, Rope, etc.) | ✓ | | | |

Comments: Material Hold Up: F2-605= 24280, F2-606= 23975, F2-607= 25590, F2-608= 20712.
#4 Water in Secondary Containment

Distribution:
Facility Owner; Facility owner reviews, signs and distributes log to:
RCRA Field Implementation

| | |
|---|---|
| RCRA Field Implementation Signature: Susan Haskin | Date: 10/15/93 |

HWMU 46
UNH TANKS (NFS Storage Area)
Figure 46

-5114

HWMU 46
UNH Tanks (NFS Storage Area)
(Tanks F2-605, 606, 607, 608, & 02-E004A-Tnk)

RCRA UST
Storage Tank

| | | | |
|---|---|---|---|
| Inspector's Name: Stanley Bippus | | Date: 10/12/93 | Time: 10:00 |
| Facility Owner's Signature: Ron Burchoff | | Date: 10/12/93 | Time: 14:50 |

| Item No. | Item Description | Acceptable | Unacceptable | Observations/Corrective Actions To Be Completed | Date Action Completed |
|---|---|---|---|---|---|
| 1 | Signs: Danger-Authorized Personnel Only | ✓ | | | |
| 2 | No Smoking or Open Flame | ✓ | | | |
| 3 | Emergency Contact & Prior To Entry | ✓ | | | |
| 4 | Overfill/Spill Control Equipment | ✓ | | | |
| 5 | Corrosion Or Release Of Waste | ✓ | | | |
| 6 | Monitoring Equip. In Place (Content Level) | ✓ | | | |
| 7 | Surrounding Area And Unit Intergity | ✓ | | | |
| 8 | Secondary Containment Condition | ✓ | | See Comments | |
| 9 | Emergency & Spill Response Equipment | ✓ | | | |
| 10 | Manway Seal Unbroken | ✓ | | | |
| 11 | Boundary Markers (Chains, Rope, etc.) | ✓ | | | |

Comments: Material Hold Up: F2-605= 24280, F2-606= 23975, F2-607= 25590, F2-608= 20712.
#8 Standing Water in Dike

Distribution:
Facility Owner; Facility owner reviews, signs and distributes log to:
RCRA Field Implementation

| | |
|---|---|
| RCRA Field Implementation Signature: Susan Hasler | Date: 10/15/93 |

HWMU 46
UNH TANKS (NFS Storage Area)
Figure 46

5114

RCRA UST
Storage Tank

**HWMU 46**
**UNH Tanks (NFS Storage Area)**
**(Tanks F2-605, 606, 608, & 02-E004A-Tnk)**

| | | | |
|---|---|---|---|
| Inspector's Name: [redacted] 1419 | | Date: 10-13-93 | Time: 1000 |
| Facility Owner's Signature: | | Date: 10/13/93 | Time: 14:00 |

| Item No. | Item Description | Acceptable | Unacceptable | Observations/Corrective Actions To Be Completed | Date Action Completed |
|---|---|---|---|---|---|
| 1 | Signs: Danger-Authorized Personnel Only | X | | | |
| 2 | No Smoking or Open Flame | X | | | |
| 3 | Emergency Contact & Prior To Entry | X | | | |
| 4 | Overfill/Spill Control Equipment | X | | | |
| 5 | Corrosion Or Release Of Waste | X | | | |
| 6 | Monitoring Equip. In Place (Content Level) | X | | | |
| 7 | Surrounding Area And Unit Intergity | X | | | |
| 8 | Secondary Containment Condition | X | | See note | |
| 9 | Emergency & Spill Response Equipment | X | | | |
| 10 | Manway Seal Unbroken | X | | | |
| 11 | Boundary Markers (Chains, Rope, etc.) | X | | | |

Comments: Material Hold Up: F2-605= 24280, F2-606= 23975, F2-607= 25590, F2-608= 20712.
# Water in Secondary Containment

Distribution:
Facility Owner; Facility owner reviews, signs and distributes log to:
RCRA Field Implementation

| | |
|---|---|
| RCRA Field Implementation Signature: Susan Hoskin | Date: 10/15/93 |

**HWMU 46**
**UNH TANKS (NFS Storage Area)**
**Figure 46**

076

5114

HWMU 46
UNH Tanks (NFS Storage Area)
(Tanks F2-605, 606, 607, 608, & 02-E004A-Tnk)

RCRA UST
Storage Tank

| | | | |
|---|---|---|---|
| Inspector's Name: Stanley Bippus | | Date: 10/14/93 | Time: 13:00 |
| Facility Owner's Signature: [illegible] | | Date: 10/14/93 | Time: 14:15 |

| Item No. | Item Description | Acceptable | Unacceptable | Observations/Corrective Actions To Be Completed | Date Action Completed |
|---|---|---|---|---|---|
| 1 | Signs: Danger-Authorized Personnel Only | ✓ | | | |
| 2 | No Smoking or Open Flame | ✓ | | | |
| 3 | Emergency Contact & Prior To Entry | ✓ | | | |
| 4 | Overfill/Spill Control Equipment | ✓ | | | |
| 5 | Corrosion Or Release Of Waste | ✓ | | | |
| 6 | Monitoring Equip. In Place (Content Level) | ✓ | | | |
| 7 | Surrounding Area And Unit Intergity | ✓ | | | |
| 8 | Secondary Containment Condition | ✓ | | See Comments | |
| 9 | Emergency & Spill Response Equipment | ✓ | | | |
| 10 | Manway Seal Unbroken | ✓ | | | |
| 11 | Boundary Markers (Chains, Rope, etc.) | ✓ | | | |

Comments: Material Hold Up: F2-605= 24280, F2-606= 23975, F2-607= 25590, F2-608= 20712.
#8 Standing Water in Dike

Distribution:
Facility Owner: Facility owner reviews, signs and distributes log to:
RCRA Field Implementation

| | |
|---|---|
| RCRA Field Implementation Signature: [illegible] | Date: 10/20/93 |

HWMU 46
UNH TANKS (NFS Storage Area)
Figure 46

077

5114

HWMU 46
UNH Tanks (NFS Storage Area)
(Tanks F2-605, 606, 608, & 02-E004A-Tnk)
607

RCRA UST
Storage Tank

| | | | |
|---|---|---|---|
| Inspector's Name: Stanley Bippus | | Date: 10/15/93 | Time: 11:00 |
| Facility Owner's Signature: [illegible] | | Date: 10/15/93 | Time: 14:15 |

| Item No. | Item Description | Acceptable | Unacceptable | Observations/Corrective Actions To Be Completed | Date Action Completed |
|---|---|---|---|---|---|
| 1 | Signs: Danger-Authorized Personnel Only | ✓ | | | |
| 2 | No Smoking or Open Flame | ✓ | | | |
| 3 | Emergency Contact & Prior To Entry | ✓ | | | |
| 4 | Overfill/Spill Control Equipment | ✓ | | | |
| 5 | Corrosion Or Release Of Waste | ✓ | | | |
| 6 | Monitoring Equip. In Place (Content Level) | ✓ | | | |
| 7 | Surrounding Area And Unit Intergity | ✓ | | | |
| 8 | Secondary Containment Condition | ✓ | | See Comments | |
| 9 | Emergency & Spill Response Equipment | ✓ | | | |
| 10 | Manway Seal Unbroken | ✓ | | | |
| 11 | Boundary Markers (Chains, Rope, etc.) | ✓ | | | |

Comments: Material Hold Up: F2-605= 24280, F2-606= 23975, F2-607= 25590, F2-608= 20712.
#8 Standing Water in Dike

Distribution:
Facility Owner: Facility owner reviews, signs and distributes log to:
RCRA Field Implementation

| | |
|---|---|
| RCRA Field Implementation Signature: [illegible] | Date: 10/26/93 |

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HWMU 46
UNH TANKS (NFS Storage Area)
Figure 46

5114

HWMU 46
UNH Tanks (NFS Storage Area)
(Tanks F2-605, 606, 608, & 02-E004A-Tnk)
1/607

RCRA UST
Storage Tank

| | | | |
|---|---|---|---|
| Inspector's Name: Stanley Bippus | | Date: 10/18/93 | Time: 13:00 |
| Facility Owner's Signature: Brenda S. Perkins | CB | Date: 10/18/93 | Time: 14:00 |

| Item No. | Item Description | Acceptable | Unacceptable | Observations/Corrective Actions To Be Completed | Date Action Completed |
|---|---|---|---|---|---|
| 1 | Signs: Danger-Authorized Personnel Only | ✓ | | | |
| 2 | No Smoking or Open Flame | ✓ | | | |
| 3 | Emergency Contact & Prior To Entry | ✓ | | | |
| 4 | Overfill/Spill Control Equipment | ✓ | | | |
| 5 | Corrosion Or Release Of Waste | ✓ | | | |
| 6 | Monitoring Equip. In Place (Content Level) | ✓ | | | |
| 7 | Surrounding Area And Unit Intergity | ✓ | | | |
| 8 | Secondary Containment Condition | ✓ | | See Comments | |
| 9 | Emergency & Spill Response Equipment | ✓ | | | |
| 10 | Manway Seal Unbroken | ✓ | | | |
| 11 | Boundary Markers (Chains, Rope, etc.) | ✓ | | | |

Comments: Material Hold Up: F2-605= 24280, F2-606= 23975, F2-607= 25590, F2-608= 20712.
#8 Standing Water in Dike
Started removing Water on 10/18/93 Brenda Perkins 10/19/93

Distribution:
Facility Owner: Facility owner reviews, signs and distributes log to:
RCRA Field Implementation

| | |
|---|---|
| RCRA Field Implementation Signature: [illegible] | Date: 10/26/93 |

HWMU 46
UNH TANKS (NFS Storage Area)
Figure 46

5114

RCRA UST
Storage Tank

HWMU 46
UNH Tanks (NFS Storage Area)
(Tanks F2-605, 606, 608, & 02-E004A-Tnk)

| | | | |
|---|---|---|---|
| Inspector's Name: Jerry W. Hayes | | Date: 10-18-93 | Time: 07:30 |
| Facility Owner's Signature: Brenda S. Perkins | | Date: 10/18/93 | Time: 14:15 |

| Item No. | Item Description | Acceptable | Unacceptable | Observations/Corrective Actions To Be Completed | Date Action Completed |
|---|---|---|---|---|---|
| 1 | Signs: Danger-Authorized Personnel Only | ✓ | | | |
| 2 | No Smoking or Open Flame | ✓ | | | |
| 3 | Emergency Contact & Prior To Entry | ✓ | | | |
| 4 | Overfill/Spill Control Equipment | ✓ | | | |
| 5 | Corrosion Or Release Of Waste | ✓ | | | |
| 6 | Monitoring Equip. In Place (Content Level) | ✓ | | | |
| 7 | Surrounding Area And Unit Intergity | ✓ | | | |
| 8 | Secondary Containment Condition | ✓ | | See Comments | |
| 9 | Emergency & Spill Response Equipment | ✓ | | | |
| 10 | Manway Seal Unbroken | ✓ | | | |
| 11 | Boundary Markers (Chains, Rope, etc.) | ✓ | | | |

Comments: Material Hold Up: F2-605= 24280, F2-606= 23975, F2-607= 25590, F2-608= 20712.
Pit has water in it cannot pump due to Unit problem

Distribution:
Facility Owner: Facility owner reviews, signs and distributes log to:
RCRA Field Implementation

| | |
|---|---|
| RCRA Field Implementation Signature: Brian Lisher | Date: 10/26/93 |

HWMU 46
UNH TANKS (NFS Storage Area)
Figure 46

HWMU 46
UNH Tanks (NFS Storage Area)
(Tanks F2-605, 606, 607, 608, & 02-E004A-Tnk)

RCRA UST
Storage Tank

| | | | |
|---|---|---|---|
| Inspector's Name: Stanley Bippus | | Date: 10/18/93 | Time: 08:4 |
| Facility Owner's Signature: Rev Bischoff | | Date: 10/18/93 | Time: 14:00 |

| Item No. | Item Description | Acceptable | Unacceptable | Observations/Corrective Actions To Be Completed | Date Acti Complete |
|---|---|---|---|---|---|
| 1 | Signs: Danger-Authorized Personnel Only | ✓ | | | |
| 2 | No Smoking or Open Flame | ✓ | | | |
| 3 | Emergency Contact & Prior To Entry | ✓ | | | |
| 4 | Overfill/Spill Control Equipment | ✓ | | | |
| 5 | Corrosion Or Release Of Waste | ✓ | | | |
| 6 | Monitoring Equip. In Place (Content Level) | ✓ | | | |
| 7 | Surrounding Area And Unit Intergity | ✓ | | | |
| 8 | Secondary Containment Condition | ✓ | | See Comments | |
| 9 | Emergency & Spill Response Equipment | ✓ | | | |
| 10 | Manway Seal Unbroken | ✓ | | | |
| 11 | Boundary Markers (Chains, Rope, etc.) | ✓ | | | |

Comments: Material Hold Up:F2-605= 24280, F2-606= 23975, F2-607= 25590, F2-608= 20712.
#8 Standing Water in Dike

Distribution:
Facility Owner: Facility owner reviews, signs and distributes log to:
RCRA Field Implementation

| | |
|---|---|
| RCRA Field Implementation Signature: Simon Shaken | Date: 10/26/93 |

HWMU 46
UNH TANKS (NFS Storage Area)
Figure 46

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HWMU 46
UNH Tanks (NFS Storage Area)
(Tanks F2-605, 606, 608, & 02-E004A-Tnk)
11007

RCRA UST
Storage Tank

| | | | |
|---|---|---|---|
| Inspector's Name: Stanley Bizzers | | Date: 10/19/93 | Time: 10:00 |
| Facility Owner's Signature: Brenda S. Perkins | | Date: 10/19/93 | Time: 14:45 |

| Item No. | Item Description | Acceptable | Unacceptable | Observations/Corrective Actions To Be Completed | Date Action Completed |
|---|---|---|---|---|---|
| 1 | Signs: Danger-Authorized Personnel Only | ✓ | | | |
| 2 | No Smoking or Open Flame | ✓ | | | |
| 3 | Emergency Contact & Prior To Entry | ✓ | | | |
| 4 | Overfill/Spill Control Equipment | ✓ | | | |
| 5 | Corrosion Or Release Of Waste | ✓ | | | |
| 6 | Monitoring Equip. In Place (Content Level) | ✓ | | | |
| 7 | Surrounding Area And Unit Intergity | ✓ | | | |
| 8 | Secondary Containment Condition | ✓ | | See Comments | |
| 9 | Emergency & Spill Response Equipment | ✓ | | | |
| 10 | Manway Seal Unbroken | ✓ | | | |
| 11 | Boundary Markers (Chains, Rope, etc.) | ✓ | | | |

Comments: Material Hold Up: F2-605= 24280, F2-606= 23975, F2-607= 25590, F2-608= 20712.
#8 Standing Water in Dike

Distribution:
Facility Owner: Facility owner reviews, signs and distributes log to:
RCRA Field Implementation

| | |
|---|---|
| RCRA Field Implementation Signature: [signature] | Date: 10/26/93 |

6114

HWMU 46
UNH Tanks (NFS Storage Area)
(Tanks F2-605, 606, 608, & 02-E004A-Tnk)
607

RCRA UST
Storage Tank

| | | | |
|---|---|---|---|
| Inspector's Name: Stanley Bippus | | Date: 10/20/93 | Time: 12:00 |
| Facility Owner's Signature: Brenda S. Perkins | | Date: 10/20/93 | Time: 14:00 |

| Item No. | Item Description | Acceptable | Unacceptable | Observations/Corrective Actions To Be Completed | Date Action Completed |
|---|---|---|---|---|---|
| 1 | Signs: Danger-Authorized Personnel Only | ✓ | | | |
| 2 | No Smoking or Open Flame | ✓ | | | |
| 3 | Emergency Contact & Prior To Entry | ✓ | | | |
| 4 | Overfill/Spill Control Equipment | ✓ | | | |
| 5 | Corrosion Or Release Of Waste | ✓ | | | |
| 6 | Monitoring Equip. In Place (Content Level) | ✓ | | | |
| 7 | Surrounding Area And Unit Intergity | ✓ | | | |
| 8 | Secondary Containment Condition | ✓ | | See Comments | |
| 9 | Emergency & Spill Response Equipment | ✓ | | | |
| 10 | Manway Seal Unbroken | ✓ | | | |
| 11 | Boundary Markers (Chains, Rope, etc.) | ✓ | | | |

Comments: Material Hold Up: F2-605= 24280, F2-606= 23975, F2-607= 25590, F2-608= 20712.
#8 Standing Water in Dike. Water scheduled to be pumped using SUPERSUCKER on 10/27/93 Brenda S. Perkins 10/21/93

Distribution:
Facility Owner: Facility owner reviews, signs and distributes log to:
RCRA Field Implementation

| | |
|---|---|
| RCRA Field Implementation Signature: [illegible] | Date: 10/20/93 |

HWMU 46
UNH TANKS (NFS Storage Area)
Figure 46

5114

RCRA UST
Storage Tank

HWMU 46
UNH Tanks (NFS Storage Area)
(Tanks F2-605, 606, 608, & 02-E004A-Tnk)
607

| | | | |
|---|---|---|---|
| Inspector's Name: Stanley Bippus | | Date: 10/21/93 | Time: 12:00 |
| Facility Owner's Signature: Brenda S. Perkins | | Date: 10/21/93 | Time: 14:30 |

| Item No. | Item Description | Acceptable | Unacceptable | Observations/Corrective Actions To Be Completed | Date Action Completed |
|---|---|---|---|---|---|
| 1 | Signs: Danger-Authorized Personnel Only | ✓ | | | |
| 2 | No Smoking or Open Flame | ✓ | | | |
| 3 | Emergency Contact & Prior To Entry | ✓ | | | |
| 4 | Overfill/Spill Control Equipment | ✓ | | | |
| 5 | Corrosion Or Release Of Waste | ✓ | | | |
| 6 | Monitoring Equip. In Place (Content Level) | ✓ | | | |
| 7 | Surrounding Area And Unit Intergity | ✓ | | | |
| 8 | Secondary Containment Condition | ✓ | | See Comments | |
| 9 | Emergency & Spill Response Equipment | ✓ | | | |
| 10 | Manway Seal Unbroken | ✓ | | | |
| 11 | Boundary Markers (Chains, Rope, etc.) | ✓ | | | |

Comments: Material Hold Up: F2-605= 24280, F2-606= 23975, F2-607= 25590, F2-608= 20712.
#8 Standing Water in Dike Scheduled to be pumped 10/27/93.

Distribution:
Facility Owner: Facility owner reviews, signs and distributes log to:
RCRA Field Implementation

| | |
|---|---|
| RCRA Field Implementation Signature: [illegible] | Date: 10/29/93 |

HWMU 46
UNH TANKS (NFS Storage Area)
Figure 46



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5114

HWMU 46
UNH Tanks (NFS Storage Area)
(Tanks F2-605, 606, 607, 608, & 02-E004A-Tnk)

RCRA UST
Storage Tank

Inspector's Name: Stanley Bippus | Date: 10/22/93 | Time: 13:00

Facility Owner's Signature: Brenda S. Perkins | Date: 10/22/93 | Time: 14:30

| Item No. | Item Description | Acceptable | Unacceptable | Observations/Corrective Actions To Be Completed | Date Action Completed |
|---|---|---|---|---|---|
| 1 | Signs: Danger-Authorized Personnel Only | ✓ | | | |
| 2 | No Smoking or Open Flame | ✓ | | | |
| 3 | Emergency Contact & Prior To Entry | ✓ | | | |
| 4 | Overfill/Spill Control Equipment | ✓ | | | |
| 5 | Corrosion Or Release Of Waste | ✓ | | | |
| 6 | Monitoring Equip. In Place (Content Level) | ✓ | | | |
| 7 | Surrounding Area And Unit Intergity | ✓ | | | |
| 8 | Secondary Containment Condition | ✓ | | See Comments | |
| 9 | Emergency & Spill Response Equipment | ✓ | | | |
| 10 | Manway Seal Unbroken | ✓ | | | |
| 11 | Boundary Markers (Chains, Rope, etc.) | ✓ | | | |

Comments: Material Hold Up: F2-605= 24280, F2-606= 23975, F2-607= 25590, F2-608= 20712.
#8 Standing Water in Dike Scheduled to be pumped 10/27/93

Distribution:
Facility Owner; Facility owner reviews, signs and distributes log to:
RCRA Field Implementation

RCRA Field Implementation Signature: [illegible] | Date: 10/27/93

085

HWMU 46
UNH TANKS (NFS Storage Area)
Figure 46

5114

RCRA UST
Storage Tank

HWMU 46
UNH Tanks (NFS Storage Area)
(Tanks F2-605, 606, 608, & 02-E004A-Tnk)

| | | | |
|---|---|---|---|
| spector's Name: [redacted] 1419 | Date: 10-24-93 | Time: 1030 |
| cility Owner's Signature: Brenda S. Perkins | Date: 10/24/93 | Time: 1400 |

| em . | Item Description | Accept-able | Unaccept-able | Observations/Corrective Actions To Be Completed | Date Action Completed |
|---|---|---|---|---|---|
| 1 | Signs: Danger-Authorized Personnel Only | ✓ | | | |
| 2 | No Smoking or Open Flame | ✓ | | | |
| 3 | Emergency Contact & Prior To Entry | ✓ | | | |
| 4 | Overfill/Spill Control Equipment | ✓ | | | |
| 5 | Corrosion Or Release Of Waste | ✓ | | | |
| 6 | Monitoring Equip. In Place (Content Level) | ✓ | | | |
| 7 | Surrounding Area And Unit Intergity | ✓ | | | |
| 8 | Secondary Containment Condition | ✓ | | See note | |
| 9 | Emergency & Spill Response Equipment | ✓ | | | |
| 10 | Manway Seal Unbroken | ✓ | | | |
| 11 | Boundary Markers (Chains, Rope, etc.) | ✓ | | | |

mments: Material Hold Up:F2-605= 24280, F2-606= 23975, F2-607= 25590, F2-608= 20712.
SEE Water in secondary containment scheduled to be pumped 10/27/93 B. Perkins

ribution:
Facility Owner: Facility owner reviews, signs and distributes log to:
RCRA Field Implementation

| | |
|---|---|
| CRA Field Implementation Signature: [illegible] | Date: 10/27/93 |

086

HWMU 46
UNH TANKS (NFS Storage Area)
Figure 46

- 5114

HWMU 46
UNH Tanks (NFS Storage Area)
(Tanks F2-605, 606, 607, 608, & 02-E004A-Tnk)

RCRA UST
Storage Tank

| | | | |
|---|---|---|---|
| Inspector's Name: [illegible] | | Date: 10/23/93 | Time: 0910 |
| Facility Owner's Signature: Brenda S. Perkins BAB | | Date: 10/23/93 | Time: 1500 |

| Item No. | Item Description | Acceptable | Unacceptable | Observations/Corrective Actions To Be Completed | Date Action Completed |
|---|---|---|---|---|---|
| 1 | Signs: Danger-Authorized Personnel Only | ✓ | | | |
| 2 | No Smoking or Open Flame | ✓ | | | |
| 3 | Emergency Contact & Prior To Entry | ✓ | | | |
| 4 | Overfill/Spill Control Equipment | ✓ | | | |
| 5 | Corrosion Or Release Of Waste | ✓ | | | |
| 6 | Monitoring Equip. In Place (Content Level) | ✓ | | | |
| 7 | Surrounding Area And Unit Intergity | ✓ | | | |
| 8 | Secondary Containment Condition | ✓ | | See Comments | |
| 9 | Emergency & Spill Response Equipment | ✓ | | | |
| 10 | Manway Seal Unbroken | ✓ | | | |
| 11 | Boundary Markers (Chains, Rope, etc.) | ✓ | | | |

Comments: Material Hold Up:F2-605= 24280, F2-606= 23975, F2-607= 25590, F2-608= 20712.
#8 Standing water in Dike Scheduled to be pumped 10/27/93

Distribution:
Facility Owner: Facility owner reviews, signs and distributes log to:
RCRA Field Implementation

| | |
|---|---|
| RCRA Field Implementation Signature: [illegible] | Date: [illegible] |

HWMU 46
UNH TANKS (NFS Storage Area)
Figure 46

5114

HWMU 46
UNH Tanks (NFS Storage Area)
(Tanks F2-605, 606, 608, & 02-E004A-Tnk)

RCRA UST
Storage Tank

| | | | |
|---|---|---|---|
| Inspector's Name: Stanley Biggers | | Date: 10/25/93 | Time: 13:45 |
| Facility Owner's Signature: Brenda S. Perkins | | Date: 10/25/93 | Time: 14:30 |

| Item No. | Item Description | Acceptable | Unacceptable | Observations/Corrective Actions To Be Completed | Date Action Completed |
|---|---|---|---|---|---|
| 1 | Signs: Danger-Authorized Personnel Only | ✓ | | | |
| 2 | No Smoking or Open Flame | ✓ | | | |
| 3 | Emergency Contact & Prior To Entry | ✓ | | | |
| 4 | Overfill/Spill Control Equipment | ✓ | | | |
| 5 | Corrosion Or Release Of Waste | ✓ | | | |
| 6 | Monitoring Equip. In Place (Content Level) | ✓ | | | |
| 7 | Surrounding Area And Unit Intergity | ✓ | | | |
| 8 | Secondary Containment Condition | ✓ | | See Comments | |
| 9 | Emergency & Spill Response Equipment | ✓ | | | |
| 10 | Manway Seal Unbroken | ✓ | | | |
| 11 | Boundary Markers (Chains, Rope, etc.) | ✓ | | | |

Comments: Material Hold Up: F2-605= 24280, F2-606= 23975, F2-607= 25590, F2-608= 20712.
#8 Standing Water in Dike. Pumping 10/28/93

Distribution:
Facility Owner: Facility owner reviews, signs and distributes log to:
RCRA Field Implementation

| | |
|---|---|
| RCRA Field Implementation Signature: Susan Hassler | Date: 11/2/93 |

HWMU 46
UNH TANKS (NFS Storage Area)
Figure 46

5114

HWMU 46
UNH Tanks (NFS Storage Area)
(Tanks F2-605, 606, 607, 608, & 02-E004A-Tnk)

RCRA UST
Storage Tank

Inspector's Name: Stanley Bippus | Date: 10/26/93 | Time: 13:15

Facility Owner's Signature: Brenda S. Perkins | Date: 10/26/93 | Time: 15:00

| Item No. | Item Description | Acceptable | Unacceptable | Observations/Corrective Actions To Be Completed | Date Action Completed |
|---|---|---|---|---|---|
| 1 | Signs: Danger-Authorized Personnel Only | ✓ | | | |
| 2 | No Smoking or Open Flame | ✓ | | | |
| 3 | Emergency Contact & Prior To Entry | ✓ | | | |
| 4 | Overfill/Spill Control Equipment | ✓ | | | |
| 5 | Corrosion Or Release Of Waste | ✓ | | | |
| 6 | Monitoring Equip. In Place (Content Level) | ✓ | | | |
| 7 | Surrounding Area And Unit Intergity | ✓ | | | |
| 8 | Secondary Containment Condition | ✓ | | See Comments | |
| 9 | Emergency & Spill Response Equipment | ✓ | | | |
| 10 | Manway Seal Unbroken | ✓ | | | |
| 11 | Boundary Markers (Chains, Rope, etc.) | ✓ | | | |

Comments: Material Hold Up: F2-605= 24280, F2-606= 23975, F2-607= 25590, F2-608= 20712.
#8 Standing Water in Dike Pumping 10/28/93

Distribution:
Facility Owner; Facility owner reviews, signs and distributes log to:
RCRA Field Implementation

RCRA Field Implementation Signature: Susan Chesser | Date: 11/2/93

HWMU 46
UNH TANKS (NFS Storage Area)
Figure 46

HWMU 46
UNH Tanks (NFS Storage Area)
(Tanks F2-605, 606, 607, 608, & 02-E004A-Tnk)

RCRA UST
Storage Tank

Inspector's Name: Stanley Bippus | Date: 10/27/93 | Time: 13:00

Facility Owner's Signature: Brenda S. Perkins | Date: 10/27/93 | Time: 14:00

| Item No. | Item Description | Acceptable | Unacceptable | Observations/Corrective Actions To Be Completed | Date Action Completed |
|---|---|---|---|---|---|
| 1 | Signs: Danger-Authorized Personnel Only | ✓ | | | |
| 2 | No Smoking or Open Flame | ✓ | | | |
| 3 | Emergency Contact & Prior To Entry | ✓ | | | |
| 4 | Overfill/Spill Control Equipment | ✓ | | | |
| 5 | Corrosion Or Release Of Waste | ✓ | | | |
| 6 | Monitoring Equip. In Place (Content Level) | ✓ | | | |
| 7 | Surrounding Area And Unit Intergity | ✓ | | | |
| 8 | Secondary Containment Condition | ✓ | | See Comments | |
| 9 | Emergency & Spill Response Equipment | ✓ | | | |
| 10 | Manway Seal Unbroken | ✓ | | | |
| 11 | Boundary Markers (Chains, Rope, etc.) | ✓ | | | |

Comments: Material Hold Up: F2-605= 24280, F2-606= 23975, F2-607= 25590, F2-608= 20712.
#8 Standing Water in Dike Pumping 10/28/93

Distribution:
Facility Owner; Facility owner reviews, signs and distributes log to:
RCRA Field Implementation

RCRA Field Implementation Signature: Susan Chatin | Date: 11/2/93

HWMU 46
UNH TANKS (NFS Storage Area)
Figure 46

5114

HWMU 46
UNH Tanks (NFS Storage Area)
(Tanks F2-605, 606, 608, & 02-E004A-Tnk)
607

RCRA UST
Storage Tank

| | | | |
|---|---|---|---|
| Inspector's Name: Stanley Bippus | Date: 10/28/93 | Time: 11 30 | |
| Facility Owner's Signature: Brenda S Perkins | Date: 10/28/93 | Time: 14:00 | |

| Item No. | Item Description | Acceptable | Unacceptable | Observations/Corrective Actions To Be Completed | Date Action Completed |
|---|---|---|---|---|---|
| 1 | Signs: Danger-Authorized Personnel Only | ✓ | | | |
| 2 | No Smoking or Open Flame | ✓ | | | |
| 3 | Emergency Contact & Prior To Entry | ✓ | | | |
| 4 | Overfill/Spill Control Equipment | ✓ | | | |
| 5 | Corrosion Or Release Of Waste | ✓ | | | |
| 6 | Monitoring Equip. In Place (Content Level) | ✓ | | | |
| 7 | Surrounding Area And Unit Intergity | ✓ | | | |
| 8 | Secondary Containment Condition | ✓ | | See Comments | |
| 9 | Emergency & Spill Response Equipment | ✓ | | | |
| 10 | Manway Seal Unbroken | ✓ | | | |
| 11 | Boundary Markers (Chains, Rope, etc.) | ✓ | | | |

Comments: Material Hold Up: F2-605= 24280, F2-606= 23975, F2-607= 25590, F2-608= 20712.
#8 Standing Water in Dike Water being pumped on 10/28/93.

Distribution:
Facility Owner: Facility owner reviews, signs and distributes log to:
RCRA Field Implementation

RCRA Field Implementation Signature: [signature] | Date: 11/2/93

5114

HWMU 46
UNH Tanks (NFS Storage Area)
(Tanks F2-605, 606, 608, & 02-E004A-Tnk)
N1007

RCRA UST
Storage Tank

| | | | |
|---|---|---|---|
| Inspector's Name: Stanley Cipparo | | Date: 10/29/93 | Time: 10:00 |
| Facility Owner's Signature: Brenda S. Perkins | | Date: 10/29/93 | Time: 14:00 |

| Item No. | Item Description | Acceptable | Unacceptable | Observations/Corrective Actions To Be Completed | Date Action Completed |
|---|---|---|---|---|---|
| 1 | Signs: Danger-Authorized Personnel Only | ✓ | | | |
| 2 | No Smoking or Open Flame | ✓ | | | |
| 3 | Emergency Contact & Prior To Entry | ✓ | | | |
| 4 | Overfill/Spill Control Equipment | ✓ | | | |
| 5 | Corrosion Or Release Of Waste | ✓ | | | |
| 6 | Monitoring Equip. In Place (Content Level) | ✓ | | | |
| 7 | Surrounding Area And Unit Intergity | ✓ | | | |
| 8 | Secondary Containment Condition | ✓ | | See Comments | |
| 9 | Emergency & Spill Response Equipment | ✓ | | | |
| 10 | Manway Seal Unbroken | ✓ | | | |
| 11 | Boundary Markers (Chains, Rope, etc.) | ✓ | | | |

Comments: Material Hold Up: F2-605= 24280, F2-606= 23975, F2-607= 25590, F2-608= 20712.
#8 Standing water in dike. Supervisor scheduled to pump water week of 11/1/93. per conversation with Brenda Perkins

Distribution:
Facility Owner: Facility owner reviews, signs and distributes leg to:
RCRA Field Implementation

| | |
|---|---|
| RCRA Field Implementation Signature: Susan Haskin | Date: 11/4/93 |

HWMU 46
UNH TANKS (NFS Storage Area)
Figure 46

092

55114

HWMU 46
UNH Tanks (NFS Storage Area)
(Tanks F2-605, 606, 607, 608, & 02-E004A-Tnk)

RCRA UST
Storage Tank

| | | | |
|---|---|---|---|
| Inspector's Name: Darryl [illegible] | | Date: 10/30/93 | Time: 0830 |
| Facility Owner's Signature: Brenda S. Perkins | | Date: 10/30/93 | Time: 1300 |

| Item No. | Item Description | Acceptable | Unacceptable | Observations/Corrective Actions To Be Completed | Date Action Completed |
|---|---|---|---|---|---|
| 1 | Signs: Danger-Authorized Personnel Only | ✓ | | | |
| 2 | No Smoking or Open Flame | ✓ | | | |
| 3 | Emergency Contact & Prior To Entry | ✓ | | | |
| 4 | Overfill/Spill Control Equipment | ✓ | | | |
| 5 | Corrosion Or Release Of Waste | ✓ | | | |
| 6 | Monitoring Equip. In Place (Content Level) | ✓ | | | |
| 7 | Surrounding Area And Unit Intergity | ✓ | | | |
| 8 | Secondary Containment Condition | ✓ | | See Comments | |
| 9 | Emergency & Spill Response Equipment | ✓ | | | |
| 10 | Manway Seal Unbroken | ✓ | | | |
| 11 | Boundary Markers (Chains, Rope, etc.) | ✓ | | | |

Comments: Material Hold Up: F2-605= 24280, F2-606= 23975, F2-607= 25590, F2-608= 20712.
#8 Standing water in dike. Supervisor scheduled to pump water week of 11/1/93 per phone conversation with Brenda Perkins

Distribution:
Facility Owner: Facility owner reviews, signs and distributes log to:
RCRA Field Implementation

| | |
|---|---|
| RCRA Field Implementation Signature: [signature] | Date: 11/4/93 |

HWMU 46
UNH TANKS (NFS Storage Area)
Figure 46

RCRA UST
Storage Tank
5114

HWMU 46
UNH Tanks (NFS Storage Area)
(Tanks F2-605, 606, 608, & 02-E004A-Tnk)

| | | | |
|---|---|---|---|
| spector's Name: [illegible] | | Date: 10/31/93 | Time: 1230 |
| cility Owner's Signature: Brenda S. Perkins RFL | | Date: 10/31/93 | Time: 1300 |

| em . | Item Description | Accept-able | Unaccept-able | Observations/Corrective Actions To Be Completed | Date Action Completed |
|---|---|---|---|---|---|
| 1 | Signs: Danger-Authorized Personnel Only | ✓ | | | |
| 2 | No Smoking or Open Flame | ✓ | | | |
| 3 | Emergency Contact & Prior To Entry | ✓ | | | |
| 4 | Overfill/Spill Control Equipment | ✓ | | | |
| 5 | Corrosion Or Release Of Waste | ✓ | | | |
| 6 | Monitoring Equip. In Place (Content Level) | ✓ | | | |
| 7 | Surrounding Area And Unit Intergity | ✓ | | | |
| 8 | Secondary Containment Condition | ✓ | | See comments | |
| 9 | Emergency & Spill Response Equipment | ✓ | | | |
| 10 | Manway Seal Unbroken | ✓ | | | |
| 11 | Boundary Markers (Chains, Rope, etc.) | ✓ | | | |

ments: Material Hold Up:F2-605= 24280, F2-606= 23975, F2-607= 25590, F2-608= 20712.
#8 standing water on dike. Supervisor scheduled to pump water week of 11/1/93 per phone conversation with Lonnie Parker (BT)

ribution:
Facility Owner: Facility owner reviews, signs and distributes log to:
RCRA Field Implementation

| | |
|---|---|
| CRA Field Implementation Signature: Susan Hoskins | Date: 11/4/93 |

HWMU 46
UNH TANKS (NFS Storage Area)
Figure 46

5114

RCRA Storage Tank

HWMU 47
UNH Tanks (North Of Plt 2)
(Tanks F2E-5, F2E-6, & F2E-8)

| | | | |
|---|---|---|---|
| -'s Name: [redacted] 1419 | | Date: 10-1-93 | Time: 1630 |
| Owner's Signature: [signature] | | Date: 10/1/93 | Time: 14:15 |

| Item Description | Accept-able | Unaccept-able | Observations/Corrective Actions To Be Completed | Date Action Completed |
|---|---|---|---|---|
| igns: nger-Authorized rsonnel ly | ✓ | | | ✓ |
| Smoking or Open Flame | ✓ | | | |
| ergency & Prior To Entry ntact | ✓ | | | |
| verfill/Spill Control quipment | ✓ | | | |
| orrosion Or Release Of aste | ✓ | | | |
| onitoring Equip. In lace (Content Level) | ✓ | | | |
| urrounding Area And nit Intergity | ✓ | | | |
| Secondary Containment Condition | ✓ | | see note | |
| Emergency & Spill Response Equipment | ✓ | | | |
| Manway Seal Unbroken | ✓ | | | |
| Boundary Markers: (Chains, Rope, etc.) | ✓ | | | |

: Material Hold Up; F2E-5= 16500, F2E-6= 17931, F2E-7= Empty, F2E-8= 18884.
Water in Dike

n:
Facility Owner: Facility owner reviews, signs and distributes log to:
RCRA Field Implementation

| | |
|---|---|
| ield Implementation Signature: Susan Haskins | Date: 10/15/93 |

HWMU 47
UNH TANKS (North Of Plt 2)
Figure 47

5114

HWMU 47
UNH Tanks (North Of Plt 2)
(Tanks F2E-5, F2E-6, & F2E-8)

RCRA Storage Tank

| | | | |
|---|---|---|---|
| Inspector's Name: Stanley Bippus | | Date: 10/2/93 | Time: 08:50 |
| Facility Owner's Signature: RW Bischoff | | Date: 10-2-93 | Time: 1515 |

| Item | Item Description | Acceptable | Unacceptable | Observations/Corrective Actions To Be Completed | Date Action Completed |
|---|---|---|---|---|---|
| | Signs: Danger-Authorized Personnel Only | ✓ | | | |
| | No Smoking or Open Flame | ✓ | | | |
| | Emergency & Prior To Entry Contact | ✓ | | | |
| | Overfill/Spill Control Equipment | ✓ | | | |
| | Corrosion Or Release Of Waste | ✓ | | | |
| 5 | Monitoring Equip. In Place (Content Level) | ✓ | | | |
| 7 | Surrounding Area And Unit Intergity | ✓ | | | |
| 8 | Secondary Containment Condition | ✓ | | See Comments | |
| 9 | Emergency & Spill Response Equipment | ✓ | | | |
| 10 | Manway Seal Unbroken | ✓ | | | |
| 11 | Boundary Markers: (Chains, Rope, etc.) | ✓ | | | |

Comments: Material Hold Up; F2E-5= 16500, F2E-6= 17931, F2E-7= Empty, F2E-8= 18884.
#8 Standing Water in Dike

Distribution:
Facility Owner: Facility owner reviews, signs and distributes log to:
RCRA Field Implementation

| | |
|---|---|
| RCRA Field Implementation Signature: Susan Hoskins | Date: 10/15/93 |

HWMU 47
UNH TANKS (North Of Plt 2)
Figure 47

5114

RCRA Storage Tank

HWMU 47
UNH Tanks (North Of Pit 2)
(Tanks F2E-5, F2E-6, & F2E-8)

| | | |
|---|---|---|
| Inspector's Name: Steve McCollum | Date: 11-3-93 | Time: 1210 |
| Facility Owner's Signature: RW Bischoff | Date: 10/3/93 | Time: 14:30 |

| Item Description | Acceptable | Unacceptable | Observations/Corrective Actions To Be Completed | Date Action Completed |
|---|---|---|---|---|
| Signs: Danger-Authorized Personnel Only | ✓ | | | ✓ |
| No Smoking or Open Flame | ✓ | | | |
| Emergency & Prior To Entry Contact | ✓ | | | |
| Overfill/Spill Control Equipment | ✓ | | | |
| Corrosion Or Release Of Waste | ✓ | | | |
| Monitoring Equip. In Place (Content Level) | ✓ | | | |
| Surrounding Area And Unit Intergity | ✓ | | | |
| Secondary Containment Condition | ✓ | | See note | |
| Emergency & Spill Response Equipment | ✓ | | | |
| Manway Seal Unbroken | ✓ | | | |
| Boundary Markers: (Chains, Rope, etc.) | ✓ | | | |

Comments: Material Hold Up; F2E-5= 16500, F2E-6= 17931, F2E-7= Empty, F2E-8= 18884.
#8 Water in Dike

Distribution:
Facility Owner: Facility owner reviews, signs and distributes log to:
RCRA Field Implementation

| | |
|---|---|
| RCRA Field Implementation Signature: Susan Hoskins | Date: 10/15/93 |

HWMU 47
UNH TANKS (North Of Pit 2)
Figure 47

5114

HWMU 47
UNH Tanks (North Of Pit 2)
(Tanks F2E-5, F2E-6, & F2E-8)

RCRA Storage Tank

| | | | |
|---|---|---|---|
| ector's Name: Stanley Bippus | | Date: 10/4/93 | Time: 08:30 |
| ility Owner's Signature: SW Birchall | | Date: 10/4/93 | Time: 14:15 |

| | Item Description | Acceptable | Unacceptable | Observations/Corrective Actions To Be Completed | Date Action Completed |
|---|---|---|---|---|---|
| | Signs: Danger-Authorized Personnel Only | ✓ | | | ✓ |
| | No Smoking or Open Flame | ✓ | | | |
| | Emergency & Prior To Entry Contact | ✓ | | | |
| | Overfill/Spill Control Equipment | ✓ | | | |
| | Corrosion Or Release Of Waste | ✓ | | | |
| | Monitoring Equip. In Place (Content Level) | ✓ | | | |
| | Surrounding Area And Unit Intergity | ✓ | | | |
| | Secondary Containment Condition | ✓ | | See Comments | |
| | Emergency & Spill Response Equipment | ✓ | | | |
| 0 | Manway Seal Unbroken | ✓ | | | |
| 1 | Boundary Markers: (Chains, Rope, etc.) | ✓ | | | |

ents: Material Hold Up; F2E-5= 16500, F2E-6= 17931, F2E-7= Empty, F2E-8= 18884.
#8 Standing Water in Dike

ibution:
Facility Owner: Facility owner reviews, signs and distributes log to:
RCRA Field Implementation

| | |
|---|---|
| RA Field Implementation Signature: Susan Hoskins | Date: 10/15/93 |

HWMU 47
UNH TANKS (North Of Pit 2)
Figure 47

3114

HWMU 47
UNH Tanks (North Of Plt 2)
(Tanks F2E-5, F2E-6, & F2E-8)

RCRA Storage Tank

| | | | |
|---|---|---|---|
| Inspector's Name: Stanley Beppers | | Date: 10/5/93 | Time: 08:30 |
| Facility Owner's Signature: [illegible] | | Date: 10/5/93 | Time: 15:00 |

| Item | Item Description | Acceptable | Unacceptable | Observations/Corrective Actions To Be Completed | Date Action Completed |
|---|---|---|---|---|---|
| 1 | Signs: Danger-Authorized Personnel Only | ✓ | | | |
| 2 | No Smoking or Open Flame | ✓ | | | |
| 3 | Emergency & Prior To Entry Contact | ✓ | | | |
| 4 | Overfill/Spill Control Equipment | ✓ | | | |
| 5 | Corrosion Or Release Of Waste | ✓ | | | |
| 6 | Monitoring Equip. In Place (Content Level) | ✓ | | | |
| 7 | Surrounding Area And Unit Intergity | ✓ | | | |
| 8 | Secondary Containment Condition | ✓ | | See note | |
| 9 | Emergency & Spill Response Equipment | ✓ | | | |
| 10 | Manway Seal Unbroken | ✓ | | | |
| 11 | Boundary Markers: (Chains, Rope, etc.) | ✓ | | | |

Comments: Material Hold Up; F2E-5= 16500, F2E-6= 17931, F2E-7= Empty, F2E-8= 18884.
#8 Water + Dike

Distribution:
Facility Owner: Facility owner reviews, signs and distributes log to:
RCRA Field Implementation

| | |
|---|---|
| RCRA Field Implementation Signature: Susan Hoskins | Date: 10/15/93 |

HWMU 47
UNH TANKS (North Of Plt 2)
Figure 47

5114

HWMU 47
UNH Tanks (North Of Pit 2)
(Tanks F2E-5, F2E-6, & F2E-8)

RCRA Storage Tank

| | | | |
|---|---|---|---|
| ector's Name: Stanley Bipper | | Date: 10/6/93 | Time: 13:30 |
| ility Owner's Signature: W Bischoff | | Date: 10/6/93 | Time: 14:15 |

| n | Item Description | Acceptable | Unacceptable | Observations/Corrective Actions To Be Completed | Date Action Completed |
|---|---|---|---|---|---|
| | Signs: Danger-Authorized Personnel Only | ✓ | | | ✓ |
| | No Smoking or Open Flame | ✓ | | | |
| | Emergency & Prior To Entry Contact | ✓ | | | |
| | Overfill/Spill Control Equipment | ✓ | | | |
| | Corrosion Or Release Of Waste | ✓ | | | |
| | Monitoring Equip. In Place (Content Level) | ✓ | | | |
| | Surrounding Area And Unit Intergity | ✓ | | | |
| 3 | Secondary Containment Condition | ✓ | | See Comments | |
| 9 | Emergency & Spill Response Equipment | ✓ | | | |
| 0 | Manway Seal Unbroken | ✓ | | | |
| 1 | Boundary Markers: (Chains, Rope, etc.) | ✓ | | | |

ments: Material Hold Up; F2E-5= 16500, F2E-6= 17931, F2E-7= Empty, F2E-8= 18884.
-8 Standing Water in Dike

ribution:
Facility Owner: Facility owner reviews, signs and distributes log to:
RCRA Field Implementation

| | |
|---|---|
| CRA Field Implementation Signature: Susan Hoskins | Date: 10/15/93 |

HWMU 47
UNH TANKS (North Of Pit 2)
Figure 47

5114

RCRA Storage Tank

HWMU 47
UNH Tanks (North Of Plt 2)
(Tanks F2E-5, F2E-6, & F2E-8)

| | | | | |
|---|---|---|---|---|
| Inspector's Name: Stanley Bippus | | | Date: 10/7/93 | Time: 12:30 |
| Facility Owner's Signature: RW Bischoff | | | Date: 10/7/93 | Time: 14:30 |
| **Item Description** | **Acceptable** | **Unacceptable** | **Observations/Corrective Actions To Be Completed** | **Date Action Completed** |
| Signs: Danger-Authorized Personnel Only | ✓ | | | ✓ |
| No Smoking or Open Flame | ✓ | | | |
| Emergency & Prior To Entry Contact | ✓ | | | |
| Overfill/Spill Control Equipment | ✓ | | | |
| Corrosion Or Release Of Waste | ✓ | | | |
| Monitoring Equip. In Place (Content Level) | ✓ | | | |
| Surrounding Area And Unit Intergity | ✓ | | | |
| Secondary Containment Condition | ✓ | | See Comments | |
| Emergency & Spill Response Equipment | ✓ | | | |
| Manway Seal Unbroken | ✓ | | | |
| Boundary Markers: (Chains, Rope, etc.) | ✓ | | | |

Comments: Material Hold Up; F2E-5= 16500, F2E-6= 17931, F2E-7= Empty, F2E-8= 18884.
Standing Water in Dike

Distribution:
Facility Owner: Facility owner reviews, signs and distributes log to:
RCRA Field Implementation

| | |
|---|---|
| Field Implementation Signature: Susan Hoskins | Date: 10/15/93 |



HWMU 47
UNH TANKS (North Of Plt 2)
Figure 47

5114

HWMU 47
UNH Tanks (North Of Plt 2)
(Tanks F2E-5, F2E-6, & F2E-8)

RCRA Storage Tank

| | | | |
|---|---|---|---|
| Inspector's Name: Stanley Bipus | | Date: 10/8/93 | Time: 08:30 |
| Facility Owner's Signature: [illegible] | | Date: 10/8/93 | Time: 14:00 |

| | Item Description | Acceptable | Unacceptable | Observations/Corrective Actions To Be Completed | Date Action Completed |
|---|---|---|---|---|---|
| | Signs: Danger-Authorized Personnel Only | ✓ | | | ✓ |
| | No Smoking or Open Flame | ✓ | | | |
| | Emergency & Prior To Entry Contact | ✓ | | | |
| | Overfill/Spill Control Equipment | ✓ | | | |
| | Corrosion Or Release Of Waste | ✓ | | | |
| | Monitoring Equip. In Place (Content Level) | ✓ | | | |
| | Surrounding Area And Unit Intergity | ✓ | | | |
| 8 | Secondary Containment Condition | ✓ | | See Comments | |
| 9 | Emergency & Spill Response Equipment | ✓ | | | |
| 10 | Manway Seal Unbroken | ✓ | | | |
| 11 | Boundary Markers: (Chains, Rope, etc.) | ✓ | | | |

Comments: Material Hold Up; F2E-5= 16500, F2E-6= 17931, F2E-7= Empty, F2E-8= 18884.
#8 Standing Water in Dike

Distribution:
Facility Owner: Facility owner reviews, signs and distributes log to:
RCRA Field Implementation

| | |
|---|---|
| RCRA Field Implementation Signature: Susan Hoskin | Date: 10/15/93 |

HWMU 47
UNH TANKS (North Of Plt 2)
Figure 47

5114

RCRA Storage Tank

HWMU 47
UNH Tanks (North Of Plt 2)
(Tanks F2E-5, F2E-6, & F2E-8)

| | | | |
|---|---|---|---|
| Inspector's Name: William Winston | | Date: 10-9-93 | Time: 0845 |
| Facility Owner's Signature: [illegible] | | Date: 10/9/93 | Time: 1410 |

| Item Description | Acceptable | Unacceptable | Observations/Corrective Actions To Be Completed | Date Action Completed |
|---|---|---|---|---|
| Signs: Danger-Authorized Personnel Only | ✓ | | | ✓ |
| No Smoking or Open Flame | ✓ | | | |
| Emergency & Prior To Entry Contact | ✓ | | | |
| Overfill/Spill Control Equipment | ✓ | | | |
| Corrosion Or Release Of Waste | ✓ | | | |
| Monitoring Equip. In Place (Content Level) | ✓ | | | |
| Surrounding Area And Unit Intergity | ✓ | | | |
| Secondary Containment Condition | ✓ | | See Comments | |
| Emergency & Spill Response Equipment | ✓ | | | |
| Manway Seal Unbroken | ✓ | | | |
| Boundary Markers: (Chains, Rope, etc.) | ✓ | | | |

Comments: Material Hold Up; F2E-5= 16500, F2E-6= 17931, F2E-7= Empty, F2E-8= 18884.
Standing Water in Dike

Distribution:
Facility Owner: Facility owner reviews, signs and distributes log to:
RCRA Field Implementation

| | |
|---|---|
| Field Implementation Signature: Susan Arskin | Date: 10/15/93 |

HWMU 47
UNH TANKS (North Of Plt 2)
Figure 47

5114

HWMU 47
UNH Tanks (North Of Plt 2)
(Tanks F2E-5, F2E-6, & F2E-8)

RCRA Storage Tank

| | | | |
|---|---|---|---|
| Inspector's Name: [illegible] | | Date: 10/10/93 | Time: 10 7m |
| Facility Owner's Signature: [illegible] | | Date: 10/10/93 | Time: 14:15 |

| Item | Item Description | Acceptable | Unacceptable | Observations/Corrective Actions To Be Completed | Date Action Completed |
|---|---|---|---|---|---|
| 1 | Signs: Danger-Authorized Personnel Only | ✓ | | | |
| 2 | No Smoking or Open Flame | ✓ | | | |
| 3 | Emergency & Prior To Entry Contact | ✓ | | | |
| 4 | Overfill/Spill Control Equipment | ✓ | | | |
| 5 | Corrosion Or Release Of Waste | ✓ | | | |
| 6 | Monitoring Equip. In Place (Content Level) | ✓ | | | |
| 7 | Surrounding Area And Unit Intergity | ✓ | | | |
| 8 | Secondary Containment Condition | ✓ | | See comment | |
| 9 | Emergency & Spill Response Equipment | ✓ | | | |
| 10 | Manway Seal Unbroken | ✓ | | | |
| 11 | Boundary Markers: (Chains, Rope, etc.) | ✓ | | | |

Comments: Material Hold Up; F2E-5= 16500, F2E-6= 17931, F2E-7= Empty, F2E-8= 18884.
#8 standing water in dike

Distribution:
Facility Owner: Facility owner reviews, signs and distributes log to:
RCRA Field Implementation

| | |
|---|---|
| RCRA Field Implementation Signature: Susan Hoskins | Date: 10/15/93 |

HWMU 47
UNH TANKS (North Of Plt 2)
Figure 47

5114

RCRA Storage
1001

HWMU 47
UNH Tanks (North Of Plt 2)
(Tanks F2E-5, F2E-6, & F2E-8)

| Inspector's Name: [redacted] 1019 | Date: 10-11-93 | Time: 1315 |
|---|---|---|
| Facility Owner's Signature: [illegible] | Date: 10/11/93 | Time: 1425 |

| Item No. | Item Description | Acceptable | Unacceptable | Observations/Corrective Actions To Be Completed | Date Action Completed |
|---|---|---|---|---|---|
| 1 | Signs: Danger-Authorized Personnel Only | ✓ | | | |
| 2 | No Smoking or Open Flame | ✓ | | | |
| 3 | Emergency & Prior To Entry Contact | ✓ | | | |
| 4 | Overfill/Spill Control Equipment | ✓ | | | |
| 5 | Corrosion Or Release Of Waste | ✓ | | | |
| 6 | Monitoring Equip. In Place (Content Level) | ✓ | | | |
| 7 | Surrounding Area And Unit Intergity | ✓ | | | |
| 8 | Secondary Containment Condition | ✓ | | See note | |
| 9 | Emergency & Spill Response Equipment | ✓ | | | |
| 10 | Manway Seal Unbroken | ✓ | | | |
| 11 | Boundary Markers: (Chains, Rope, etc.) | ✓ | | | |

Comments: Material Hold Up; F2E-5= 16500, F2E-6= 17931, F2E-7= Empty, F2E-8= 18884, #8 Water in Secondary Containment

Distribution:
Facility Owner: Facility owner reviews, signs and distributes log to:
RCRA Field Implementation

| RCRA Field Implementation Signature: Susan Hoskins | Date: 10/15/93 |
|---|---|



HWMU 47
UNH TANKS (North Of Plt 2)
Figure 47

5114

RCRA Storage
1991

HWMU 47
UNH Tanks (North Of Plt 2)
(Tanks F2E-5, F2E-6, & F2E-8)

| | | | |
|---|---|---|---|
| Inspector's Name: Stanley Bippus | | Date: 10/12/93 | Time: 09:00 |
| Facility Owner's Signature: Ron Birchoff | | Date: 10/12/93 | Time: 14:30 |

| Item No. | Item Description | Acceptable | Unacceptable | Observations/Corrective Actions To Be Completed | Date Action Completed |
|---|---|---|---|---|---|
| 1 | Signs: Danger-Authorized Personnel Only | ✓ | | | |
| 2 | No Smoking or Open Flame | ✓ | | | |
| 3 | Emergency & Prior To Entry Contact | ✓ | | | |
| 4 | Overfill/Spill Control Equipment | ✓ | | | |
| 5 | Corrosion Or Release Of Waste | ✓ | | | |
| 6 | Monitoring Equip. In Place (Content Level) | ✓ | | | |
| 7 | Surrounding Area And Unit Intergity | ✓ | | | |
| 8 | Secondary Containment Condition | ✓ | | See Comments | |
| 9 | Emergency & Spill Response Equipment | ✓ | | | |
| 10 | Manway Seal Unbroken | ✓ | | | |
| 11 | Boundary Markers: (Chains, Rope, etc.) | ✓ | | | |

Comments: Material Hold Up; F2E-5= 16500, F2E-6= 17931, F2E-7= Empty, F2E-8= 18884, #8 Standing Water in Dike

Distribution:
Facility Owner: Facility owner reviews, signs and distributes log to:
RCRA Field Implementation

| | |
|---|---|
| RCRA Field Implementation Signature: Susan Hoskins | Date: 10/15/93 |

HWMU 47
UNH TANKS (North Of Plt 2)
Figure 47

5114

HWMU 47
UNH Tanks (North Of Plt 2)
(Tanks F2E-5, F2E-6, & F2E-8)

RCRA Storage Tank

| Inspector's Name: [redacted] 1419 | Date: 10-12-93 | Time: 1030 |
|---|---|---|
| Facility Owner's Signature: [signature] | Date: 10/13/93 | Time: 14:00 |

| Item No. | Item Description | Acceptable | Unacceptable | Observations/Corrective Actions To Be Completed | Date Action Completed |
|---|---|---|---|---|---|
| 1 | Signs: Danger-Authorized Personnel Only | X | | | |
| 2 | No Smoking or Open Flame | X | | | |
| 3 | Emergency & Prior To Entry Contact | X | | | |
| 4 | Overfill/Spill Control Equipment | X | | | |
| 5 | Corrosion Or Release Of Waste | X | | | |
| 6 | Monitoring Equip. In Place (Content Level) | X | | | |
| 7 | Surrounding Area And Unit Intergity | X | | | |
| 8 | Secondary Containment Condition | X | | See note | |
| 9 | Emergency & Spill Response Equipment | X | | | |
| 10 | Manway Seal Unbroken | X | | | |
| 11 | Boundary Markers: (Chains, Rope, etc.) | X | | | |

Comments: Material Hold Up; F2E-5= 16500, F2E-6= 17931, F2E-7= Empty, F2E-8= 18884,
#8 Water in Secondary Containment

Distribution:
Facility Owner: Facility owner reviews, signs and distributes log to:
RCRA Field Implementation

| RCRA Field Implementation Signature: [signature] | Date: 10/15/93 |
|---|---|

HWMU 47
UNH TANKS (North Of Plt 2)
Figure 47

F 5114

RCRA Storage Tank

HWMU 47
UNH Tanks (North Of Plt 2)
(Tanks F2E-5, F2E-6, & F2E-8)

| | | | |
|---|---|---|---|
| Inspector's Name: Stanley Bippus | | Date: 10/14/93 | Time: 09:00 |
| Facility Owner's Signature: R. Birchfield | | Date: 10/14/93 | Time: 14:15 |

| Item No. | Item Description | Acceptable | Unacceptable | Observations/Corrective Actions To Be Completed | Date Action Completed |
|---|---|---|---|---|---|
| 1 | Signs: Danger-Authorized Personnel Only | ✓ | | | |
| 2 | No Smoking or Open Flame | ✓ | | | |
| 3 | Emergency & Prior To Entry Contact | ✓ | | | |
| 4 | Overfill/Spill Control Equipment | ✓ | | | |
| 5 | Corrosion Or Release Of Waste | ✓ | | | |
| 6 | Monitoring Equip. In Place (Content Level) | ✓ | | | |
| 7 | Surrounding Area And Unit Intergity | ✓ | | | |
| 8 | Secondary Containment Condition | ✓ | | See Comments | |
| 9 | Emergency & Spill Response Equipment | ✓ | | | |
| 10 | Manway Seal Unbroken | ✓ | | | |
| 11 | Boundary Markers: (Chains, Rope, etc.) | ✓ | | | |

Comments: Material Hold Up; F2E-5= 16500, F2E-6= 17931, F2E-7= Empty, F2E-8= 18884, #8 Standing Water in Dike

Distribution:
Facility Owner; Facility owner reviews, signs and distributes log to: RCRA Field Implementation

| | |
|---|---|
| RCRA Field Implementation Signature: [illegible] | Date: 10/20/92 |

HWMU 47
UNH TANKS (North Of Plt 2)
Figure 47

5114

RCRA Storage Test

HWMU 47
UNH Tanks (North Of Plt 2)
(Tanks F2E-5, F2E-6, & F2E-8)

ector's Name: Stanley Bippus | Date: 10/15/93 | Time: 10:50

ility Owner's Signature: [signature] | Date: 10/15/93 | Time: 14:15

| | Item Description | Acceptable | Unacceptable | Observations/Corrective Actions To Be Completed | Date Action Completed |
|---|---|---|---|---|---|
| | Signs: Danger-Authorized Personnel Only | ✓ | | | |
| | No Smoking or Open Flame | ✓ | | | |
| | Emergency & Prior To Entry Contact | ✓ | | | |
| | Overfill/Spill Control Equipment | ✓ | | | |
| | Corrosion Or Release Of Waste | ✓ | | | |
| | Monitoring Equip. In Place (Content Level) | ✓ | | | |
| | Surrounding Area And Unit Intergity | ✓ | | | |
| 8 | Secondary Containment Condition | ✓ | | See Comments | |
| 9 | Emergency & Spill Response Equipment | ✓ | | | |
| 0 | Manway Seal Unbroken | ✓ | | | |
| 1 | Boundary Markers: (Chains, Rope, etc.) | ✓ | | | |

ments: Material Hold Up; F2E-5= 16500, F2E-6= 17931, F2E-7= Empty, F2E-8= 18884.
8 Standing Water in Dike

ribution:
Facility Owner: Facility owner reviews, signs and distributes log to:
RCRA Field Implementation

| | |
|---|---|
| CRA Field Implementation Signature: [signature] | Date: 10/26/93 |

HWMU 47
UNH TANKS (North Of Plt 2)
Figure 47

5114

RCRA Storage Tank

HWMU 47
UNH Tanks (North Of Plt 2)
(Tanks F2E-5, F2E-6, & F2E-8)

| | | | |
|---|---|---|---|
| Inspector's Name: Stanley Bippus | | Date: 10/16/93 | Time: 09:30 |
| Facility Owner's Signature: Brenda S. Perkins | | Date: 10/18/93 | Time: 14:00 |

| Item No. | Item Description | Acceptable | Unacceptable | Observations/Corrective Actions To Be Completed | Date Action Completed |
|---|---|---|---|---|---|
| 1 | Signs: Danger-Authorized Personnel Only | ✓ | | | |
| 2 | No Smoking or Open Flame | ✓ | | | |
| 3 | Emergency & Prior To Entry Contact | ✓ | | | |
| 4 | Overfill/Spill Control Equipment | ✓ | | | |
| 5 | Corrosion Or Release Of Waste | ✓ | | | |
| 6 | Monitoring Equip. In Place (Content Level) | ✓ | | | |
| 7 | Surrounding Area And Unit Intergity | ✓ | | | |
| 8 | Secondary Containment Condition | ✓ | | See Comments | |
| 9 | Emergency & Spill Response Equipment | ✓ | | | |
| 10 | Manway Seal Unbroken | ✓ | | | |
| 11 | Boundary Markers: (Chains, Rope, etc.) | ✓ | | | |

Comments: Material Hold Up; F2E-5= 16500, F2E-6= 17931, F2E-7= Empty, F2E-8= 18884,
#8 Standing Water in Dike
Started Removing Water on 10/18/93 Brenda Perkins 10/19/93

Distribution:
Facility Owner: Facility owner reviews, signs and distributes log to:
RCRA Field Implementation

| | |
|---|---|
| RCRA Field Implementation Signature: [signature] | Date: 10/19/93 |

6114

HWMU 47
UNH Tanks (North Of Pit 2)
(Tanks F2E-5, F2E-6, & F2E-8)

RCRA Storage Tank

| | | | |
|---|---|---|---|
| Inspector's Name: Jerry W. Hayes | | Date: 10-12-93 | Time: 12:00 |
| Facility Owner's Signature: Brenda S. Perkins | | Date: 10/12/93 | Time: 14:15 |

| Item | Item Description | Acceptable | Unacceptable | Observations/Corrective Actions To Be Completed | Date Action Completed |
|---|---|---|---|---|---|
| | Signs: Danger-Authorized Personnel Only | ✓ | | | |
| | No Smoking or Open Flame | ✓ | | | |
| | Emergency & Prior To Entry Contact | ✓ | | | |
| | Overfill/Spill Control Equipment | ✓ | | | |
| | Corrosion Or Release Of Waste | ✓ | | | |
| | Monitoring Equip. In Place (Content Level) | ✓ | | | |
| | Surrounding Area And Unit Intergity | ✓ | | | |
| 8 | Secondary Containment Condition | ✓ | | See Comments | |
| 9 | Emergency & Spill Response Equipment | ✓ | | | |
| 10 | Manway Seal Unbroken | ✓ | | | |
| 11 | Boundary Markers: (Chains, Rope, etc.) | ✓ | | | |

Comments: Material Hold Up; F2E-5= 16500, F2E-6= 17931, F2E-7= Empty, F2E-8= 18884.
F8 pit has water in it cannot pump due to tank problem.

Distribution:
Facility Owner: Facility owner reviews, signs and distributes log to:
RCRA Field Implementation

| | |
|---|---|
| RCRA Field Implementation Signature: [illegible] | Date: 10-26-93 |

HWMU 47
UNH TANKS (North Of Pit 2)
Figure 47

5114
RCRA Storage
1001

HWMU 47
UNH Tanks (North Of Plt 2)
(Tanks F2E-5, F2E-6, & F2E-8)

| | | | |
|---|---|---|---|
| Inspector's Name: Stanley Bippus | | Date: 10/18/93 | Time: 12:45 |
| Facility Owner's Signature: R.W. Bischoff | | Date: 10/18/93 | Time: 14:00 |

| Item No. | Item Description | Acceptable | Unacceptable | Observations/Corrective Actions To Be Completed | Date Action Completed |
|---|---|---|---|---|---|
| 1 | Signs: Danger-Authorized Personnel Only | ✓ | | | |
| 2 | No Smoking or Open Flame | ✓ | | | |
| 3 | Emergency & Prior To Entry Contact | ✓ | | | |
| 4 | Overfill/Spill Control Equipment | ✓ | | | |
| 5 | Corrosion Or Release Of Waste | ✓ | | | |
| 6 | Monitoring Equip. In Place (Content Level) | ✓ | | | |
| 7 | Surrounding Area And Unit Intergity | ✓ | | | |
| 8 | Secondary Containment Condition | ✓ | | See Comments | |
| 9 | Emergency & Spill Response Equipment | ✓ | | | |
| 10 | Manway Seal Unbroken | ✓ | | | |
| 11 | Boundary Markers: (Chains, Rope, etc.) | ✓ | | | |

Comments: Material Hold Up; F2E-5= 16500, F2E-6= 17931, F2E-7= Empty, F2E-8= 18884, #8 Standing Water in Dike

Distribution:
Facility Owner: Facility owner reviews, signs and distributes log to:
RCRA Field Implementation

| | |
|---|---|
| RCRA Field Implementation Signature: Susan Vastin | Date: 10/20/93 |



HWMU 47
UNH TANKS (North Of Plt 2)
Figure 47

5114

HWMU 47
UNH Tanks (North Of Plt 2)
(Tanks F2E-5, F2E-6, & F2E-8)

RCRA Storage

| | | | |
|---|---|---|---|
| Inspector's Name: Stanley Bippus | | Date: 10/19/93 | Time: 11:00 |
| Facility Owner's Signature: Brenda S. Perkins | | Date: 10/19/93 | Time: 14:45 |

| Item No. | Item Description | Acceptable | Unacceptable | Observations/Corrective Actions To Be Completed | Date Action Completed |
|---|---|---|---|---|---|
| 1 | Signs: Danger-Authorized Personnel Only | ✓ | | | |
| 2 | No Smoking or Open Flame | ✓ | | | |
| 3 | Emergency & Prior To Entry Contact | ✓ | | | |
| 4 | Overfill/Spill Control Equipment | ✓ | | | |
| 5 | Corrosion Or Release Of Waste | ✓ | | | |
| 6 | Monitoring Equip. In Place (Content Level) | ✓ | | | |
| 7 | Surrounding Area And Unit Intergity | ✓ | | | |
| 8 | Secondary Containment Condition | ✓ | | | |
| 9 | Emergency & Spill Response Equipment | ✓ | | | |
| 10 | Manway Seal Unbroken | ✓ | | | |
| 11 | Boundary Markers: (Chains, Rope, etc.) | ✓ | | | |

Comments: Material Hold Up; F2E-5= 16500, F2E-6= 17931, F2E-7= Empty, F2E-8= 18884.

Distribution:
Facility Owner: Facility owner reviews, signs and distributes log to:
RCRA Field Implementation

| | |
|---|---|
| RCRA Field Implementation Signature: Susan Chaffin | Date: 10/20/93 |

HWMU 47
UNH TANKS (North Of Plt 2)
Figure 47

5114
RCRA Storage Tank

HWMU 47
UNH Tanks (North Of Plt 2)
(Tanks F2E-5, F2E-6, & F2E-8)

| | | | |
|---|---|---|---|
| Inspector's Name: Stanley Bippus | | Date: 10/20/93 | Time: 08:45 |
| Facility Owner's Signature: Brenda S. Perkins | | Date: 10/20/93 | Time: 14:00 |

| Item No. | Item Description | Acceptable | Unacceptable | Observations/Corrective Actions To Be Completed | Date Action Completed |
|---|---|---|---|---|---|
| 1 | Signs: Danger-Authorized Personnel Only | ✓ | | | |
| 2 | No Smoking or Open Flame | ✓ | | | |
| 3 | Emergency & Prior To Entry Contact | ✓ | | | |
| 4 | Overfill/Spill Control Equipment | ✓ | | | |
| 5 | Corrosion Or Release Of Waste | ✓ | | | |
| 6 | Monitoring Equip. In Place (Content Level) | ✓ | | | |
| 7 | Surrounding Area And Unit Intergity | ✓ | | | |
| 8 | Secondary Containment Condition | ✓ | | See Comments | |
| 9 | Emergency & Spill Response Equipment | ✓ | | | |
| 10 | Manway Seal Unbroken | ✓ | | | |
| 11 | Boundary Markers: (Chains, Rope, etc.) | ✓ | | | |

Comments: Material Hold Up; F2E-5= 16500, F2E-6= 17931, F2E-7= Empty, F2E-8= 18884.
#8 Standing Water in Dike Water scheduled to be pumped using Supersucker on 10/21/93 Brenda S. Perkins 10/21/93

Distribution:
Facility Owner; Facility owner reviews, signs and distributes log to:
RCRA Field Implementation

| | |
|---|---|
| RCRA Field Implementation Signature: [illegible] | Date: 10-20-93 |

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RCRA Storage Tank

HWMU 47
UNH Tanks (North Of Plt 2)
(Tanks F2E-5, F2E-6, & F2E-8)

| | | | |
|---|---|---|---|
| Inspector's Name: Stanley Bippus | | Date: 10/21/93 | Time: 10:30 |
| Facility Owner's Signature: Brenda S. Perkins CB | | Date: 10/21/93 | Time: 14:30 |

| Item No. | Item Description | Acceptable | Unacceptable | Observations/Corrective Actions To Be Completed | Date Action Completed |
|---|---|---|---|---|---|
| 1 | Signs: Danger-Authorized Personnel Only | ✓ | | | |
| 2 | No Smoking or Open Flame | ✓ | | | |
| 3 | Emergency & Prior To Entry Contact | ✓ | | | |
| 4 | Overfill/Spill Control Equipment | ✓ | | | |
| 5 | Corrosion Or Release Of Waste | ✓ | | | |
| 6 | Monitoring Equip. In Place (Content Level) | ✓ | | | |
| 7 | Surrounding Area And Unit Intergity | ✓ | | | |
| 8 | Secondary Containment Condition | ✓ | | See Comments | |
| 9 | Emergency & Spill Response Equipment | ✓ | | | |
| 10 | Manway Seal Unbroken | ✓ | | | |
| 11 | Boundary Markers: (Chains, Rope, etc.) | ✓ | | | |

Comments: Material Hold Up; F2E-5= 16500, F2E-6= 17931, F2E-7= Empty, F2E-8= 18884, #8 Standing Water in Dike Scheduled to be pumped 10/27/93.

Distribution:
Facility Owner: Facility owner reviews, signs and distributes log to:
RCRA Field Implementation

| | |
|---|---|
| RCRA Field Implementation Signature: [illegible] | Date: 10/27/93 |

HWMU 47
UNH TANKS (North Of Plt 2)
Figure 47

5114

RCRA Storage

HWMU 47
UNH Tanks (North Of Plt 2)
(Tanks F2E-5, F2E-6, & F2E-8)

Inspector's Name: Stanley Bippus | Date: 10/22/93 | Time: 12:50

Facility Owner's Signature: Brenda S. Perkins | Date: 10/22/93 | Time: 14:30

| Item No. | Item Description | Acceptable | Unacceptable | Observations/Corrective Actions To Be Completed | Date Action Completed |
|---|---|---|---|---|---|
| 1 | Signs: Danger-Authorized Personnel Only | ✓ | | | |
| 2 | No Smoking or Open Flame | ✓ | | | |
| 3 | Emergency & Prior To Entry Contact | ✓ | | | |
| 4 | Overfill/Spill Control Equipment | ✓ | | | |
| 5 | Corrosion Or Release Of Waste | ✓ | | | |
| 6 | Monitoring Equip. In Place (Content Level) | ✓ | | | |
| 7 | Surrounding Area And Unit Intergity | ✓ | | | |
| 8 | Secondary Containment Condition | ✓ | | See Comments | |
| 9 | Emergency & Spill Response Equipment | ✓ | | | |
| 10 | Manway Seal Unbroken | ✓ | | | |
| 11 | Boundary Markers: (Chains, Rope, etc.) | ✓ | | | |

Comments: Material Hold Up; F2E-5= 16500, F2E-6= 17931, F2E-7= Empty, F2E-8= 18884,
#8 Standing Water in Dike Scheduled to be pumped 10/27/93.

Distribution:
Facility Owner: Facility owner reviews, signs and distributes log to:
RCRA Field Implementation

RCRA Field Implementation Signature: Steve Alfaro | Date: 10/27/93

5114

HWMU 47
UNH Tanks (North Of Plt 2)
(Tanks F2E-5, F2E-6, & F2E-8)

RCRA Storage Tank

| | | | |
|---|---|---|---|
| Inspector's Name: Daryl Grant | | Date: 10/23/93 | Time: 0930 |
| Facility Owner's Signature: Brenda S. Perkins -BAB | | Date: 10/23/93 | Time: 1500 |

| | Item Description | Acceptable | Unacceptable | Observations/Corrective Actions To Be Completed | Date Action Completed |
|---|---|---|---|---|---|
| | Signs: Danger-Authorized Personnel Only | ✓ | | | ✓ |
| | No Smoking or Open Flame | ✓ | | | |
| | Emergency & Prior To Entry Contact | ✓ | | | |
| | Overfill/Spill Control Equipment | ✓ | | | |
| | Corrosion Or Release Of Waste | ✓ | | | |
| | Monitoring Equip. In Place (Content Level) | ✓ | | | |
| | Surrounding Area And Unit Intergity | ✓ | | | |
| | Secondary Containment Condition | ✓ | | See Comments | |
| | Emergency & Spill Response Equipment | ✓ | | | |
| 0 | Manway Seal Unbroken | ✓ | | | |
| 1 | Boundary Markers: (Chains, Rope, etc.) | ✓ | | | |

Comments: Material Hold Up; F2E-5= 16500, F2E-6= 17931, F2E-7= Empty, F2E-8= 18884.
#8 Standing water in Dike Scheduled to be pumped 10/27/93.

Distribution:
Facility Owner: Facility owner reviews, signs and distributes log to:
RCRA Field Implementation

| | |
|---|---|
| RCRA Field Implementation Signature: [illegible] | Date: [illegible] |

HWMU 47
UNH TANKS (North Of Plt 2)
Figure 47

5114

RCRA Storage Tank

HWMU 47
UNH Tanks (North Of Plt 2)
(Tanks F2E-5, F2E-6, & F2E-8)

| | | | |
|---|---|---|---|
| Inspector's Name: [redacted] 1419 | Date: 10-24-93 | Time: 1230 | |
| Facility Owner's Signature: Brenda S. Perkins | Date: 10/24/93 | Time: 14:00 | |

| | Item Description | Acceptable | Unacceptable | Observations/Corrective Actions To Be Completed | Date Action Completed |
|---|---|---|---|---|---|
| | Signs: Danger-Authorized Personnel Only | ✓ | | | ✓ |
| | No Smoking or Open Flame | ✓ | | | |
| | Emergency & Prior To Entry Contact | ✓ | | | |
| | Overfill/Spill Control Equipment | ✓ | | | |
| | Corrosion Or Release Of Waste | ✓ | | | |
| | Monitoring Equip. In Place (Content Level) | ✓ | | | |
| | Surrounding Area And Unit Intergity | ✓ | | | |
| 8 | Secondary Containment Condition | ✓ | | 5 Tank F2E-5 Freq. 7 days | |
| 9 | Emergency & Spill Response Equipment | ✓ | | | |
| 10 | Manway Seal Unbroken | ✓ | | Tank F2E-6 Freq 16,500 | |
| 11 | Boundary Markers: (Chains, Rope, etc.) | ✓ | | | |

Comments: Material Hold Up; F2E-5= 16500, F2E-6= 17931, F2E-7
#8 Water in secondary Containment
to be pumped on 10/27/93

Distribution:
Facility Owner: Facility owner reviews, signs and distributes log to:
RCRA Field Implementation

| | |
|---|---|
| RCRA Field Implementation Signature: [illegible] | Date: [illegible] |

HWMU 47
UNH TANKS (North Of Plt 2)
Figure 47

5114

RCRA Storage
1001

HWMU 47
UNH Tanks (North Of Plt 2)
(Tanks F2E-5, F2E-6, & F2E-8)

Inspector's Name: Stanley Biggers | Date: 10/25/93 | Time: 09:00

Facility Owner's Signature: Brenda S. Perkins | Date: 10/25/93 | Time: 14:30

| Item No. | Item Description | Acceptable | Unacceptable | Observations/Corrective Actions To Be Completed | Date Action Completed |
|---|---|---|---|---|---|
| 1 | Signs: Danger-Authorized Personnel Only | ✓ | | | |
| 2 | No Smoking or Open Flame | ✓ | | | |
| 3 | Emergency & Prior To Entry Contact | ✓ | | | |
| 4 | Overfill/Spill Control Equipment | ✓ | | | |
| 5 | Corrosion Or Release Of Waste | ✓ | | | |
| 6 | Monitoring Equip. In Place (Content Level) | ✓ | | | |
| 7 | Surrounding Area And Unit Intergity | ✓ | | | |
| 8 | Secondary Containment Condition | ✓ | | See Comments | |
| 9 | Emergency & Spill Response Equipment | ✓ | | | |
| 10 | Manway Seal Unbroken | ✓ | | | |
| 11 | Boundary Markers: (Chains, Rope, etc.) | ✓ | | | |

Comments: Material Hold Up; F2E-5= 16500, F2E-6= 17931, F2E-7= Empty, F2E-8= 18884,
#8 Standing Water in Dike Pumping 10/28/93

Distribution:
Facility Owner: Facility owner reviews, signs and distributes log to:
RCRA Field Implementation

RCRA Field Implementation Signature: Susan Haskin | Date: 11/2/93

HWMU 47
UNH TANKS (North Of Plt 2)
Figure 47

5114

RCRA Storage Tank

HWMU 47
UNH Tanks (North Of Plt 2)
(Tanks F2E-5, F2E-6, & F2E-8)

Inspector's Name: Stanley Bippus | Date: 10/26/93 | Time: 08:35

Facility Owner's Signature: Brenda S. Perkins | Date: 10/26/93 | Time: 15:00

| Item No. | Item Description | Acceptable | Unacceptable | Observations/Corrective Actions To Be Completed | Date Action Completed |
|---|---|---|---|---|---|
| 1 | Signs: Danger-Authorized Personnel Only | ✓ | | | |
| 2 | No Smoking or Open Flame | ✓ | | | |
| 3 | Emergency & Prior To Entry Contact | ✓ | | | |
| 4 | Overfill/Spill Control Equipment | ✓ | | | |
| 5 | Corrosion Or Release Of Waste | ✓ | | | |
| 6 | Monitoring Equip. In Place (Content Level) | ✓ | | | |
| 7 | Surrounding Area And Unit Intergity | ✓ | | | |
| 8 | Secondary Containment Condition | ✓ | | See Comments | |
| 9 | Emergency & Spill Response Equipment | ✓ | | | |
| 10 | Manway Seal Unbroken | ✓ | | | |
| 11 | Boundary Markers: (Chains, Rope, etc.) | ✓ | | | |

Comments: Material Hold Up; F2E-5= 16500, F2E-6= 17931, F2E-7= Empty, F2E-8= 18884, #8 Standing Water in Dike Pumping 10/28/93

Distribution:
Facility Owner; Facility owner reviews, signs and distributes log to:
RCRA Field Implementation

RCRA Field Implementation Signature: Susan Hooker | Date: 11/2/93

HWMU 47
UNH TANKS (North Of Plt 2)
Figure 47

6114

RCRA Storage Tank

HWMU 47
UNH Tanks (North Of Plt 2)
(Tanks F2E-5, F2E-6, & F2E-8)

| | | | |
|---|---|---|---|
| Inspector's Name: Stanley Bippus | | Date: 10/27/93 | Time: 09:00 |
| Facility Owner's Signature: Brenda S. Perkins | | Date: 10/27/93 | Time: 14:00 |

| Item No. | Item Description | Acceptable | Unacceptable | Observations/Corrective Actions To Be Completed | Date Action Completed |
|---|---|---|---|---|---|
| 1 | Signs: Danger-Authorized Personnel Only | ✓ | | | |
| 2 | No Smoking or Open Flame | ✓ | | | |
| 3 | Emergency & Prior To Entry Contact | ✓ | | | |
| 4 | Overfill/Spill Control Equipment | ✓ | | | |
| 5 | Corrosion Or Release Of Waste | ✓ | | | |
| 6 | Monitoring Equip. In Place (Content Level) | ✓ | | | |
| 7 | Surrounding Area And Unit Intergity | ✓ | | | |
| 8 | Secondary Containment Condition | ✓ | | See Comments | |
| 9 | Emergency & Spill Response Equipment | ✓ | | | |
| 10 | Manway Seal Unbroken | ✓ | | | |
| 11 | Boundary Markers: (Chains, Rope, etc.) | ✓ | | | |

Comments: Material Hold Up; F2E-5= 16500, F2E-6= 17931, F2E-7= Empty, F2E-8= 18884, #8 Standing Water in Dike Pumping 10/28/93

Distribution:
Facility Owner; Facility owner reviews, signs and distributes log to:
RCRA Field Implementation

| | |
|---|---|
| RCRA Field Implementation Signature: Susan Hawkins | Date: 11/2/93 |

HWMU 47
UNH TANKS (North Of Plt 2)
Figure 47

5114

RCRA Storage

HWMU 47
UNH Tanks (North Of Plt 2)
(Tanks F2E-5, F2E-6, & F2E-8)

| | | | |
|---|---|---|---|
| Inspector's Name: Stanley Bippus | | Date: 10/28/93 | Time: 08:30 |
| Facility Owner's Signature: Brenda S. Perkins | | Date: 10/28/93 | Time: 14:00 |

| Item No. | Item Description | Acceptable | Unacceptable | Observations/Corrective Actions To Be Completed | Date Action Completed |
|---|---|---|---|---|---|
| 1 | Signs: Danger-Authorized Personnel Only | ✓ | | | |
| 2 | No Smoking or Open Flame | ✓ | | | |
| 3 | Emergency & Prior To Entry Contact | ✓ | | | |
| 4 | Overfill/Spill Control Equipment | ✓ | | | |
| 5 | Corrosion Or Release Of Waste | ✓ | | | |
| 6 | Monitoring Equip. In Place (Content Level) | ✓ | | | |
| 7 | Surrounding Area And Unit Intergity | ✓ | | | |
| 8 | Secondary Containment Condition | ✓ | | See Comments | |
| 9 | Emergency & Spill Response Equipment | ✓ | | | |
| 10 | Manway Seal Unbroken | ✓ | | | |
| 11 | Boundary Markers: (Chains, Rope, etc.) | ✓ | | | |

Comments: Material Hold Up; F2E-5= 16500, F2E-6= 17931, F2E-7= Empty, F2E-8= 18884,
#8 Standing Water in Dike Water being pumped 10/28/93

Distribution:
Facility Owner: Facility owner reviews, signs and distributes log to:
RCRA Field Implementation

| | |
|---|---|
| RCRA Field Implementation Signature: Swanson Hassan | Date: 11/2/93 |

HWMU 47
UNH TANKS (North Of Plt 2)
Figure 47

5114

HWMU 47
UNH Tanks (North Of Plt 2)
(Tanks F2E-5, F2E-6, & F2E-8)

RCRA Storage
1991

| | | | |
|---|---|---|---|
| Inspector's Name: Stanley Bippus | | Date: 10/29/93 | Time: 08:30 |
| Facility Owner's Signature: Brenda S. Perkins CB | | Date: 10/29/93 | Time: 14:00 |

| Item | Item Description | Acceptable | Unacceptable | Observations/Corrective Actions To Be Completed | Date Action Completed |
|---|---|---|---|---|---|
| 1 | Signs: Danger-Authorized Personnel Only | ✓ | | | |
| 2 | No Smoking or Open Flame | ✓ | | | |
| 3 | Emergency & Prior To Entry Contact | ✓ | | | |
| 4 | Overfill/Spill Control Equipment | ✓ | | | |
| 5 | Corrosion Or Release Of Waste | ✓ | | | |
| 6 | Monitoring Equip. In Place (Content Level) | ✓ | | | |
| 7 | Surrounding Area And Unit Intergity | ✓ | | | |
| 8 | Secondary Containment Condition | ✓ | | See Comments | |
| 9 | Emergency & Spill Response Equipment | ✓ | | | |
| 10 | Manway Seal Unbroken | ✓ | | | |
| 11 | Boundary Markers: (Chains, Rope, etc.) | ✓ | | | |

Comments: Material Hold Up; F2E-5= 16500, F2E-6= 17931, F2E-7= Empty, F2E-8= 18884,
#8 Standing Water in Dike Scheduling Supervisor
week of 11/1/93

Distribution:
Facility Owner; Facility owner reviews, signs and distributes log to:
RCRA Field Implementation

| | |
|---|---|
| RCRA Field Implementation Signature: Susan Hoskin | Date: 11/4/93 |

HWMU 47
UNH TANKS (North Of Plt 2)
Figure 47

5114

RCRA Storage Tank

HWMU 47
UNH Tanks (North Of Plt 2)
(Tanks F2E-5, F2E-6, & F2E-8)

| | | | |
|---|---|---|---|
| Inspector's Name: Daryl Evans | | Date: 10-30-93 | Time: 0940 |
| Facility Owner's Signature: Brenda S. Perkins | | Date: 10/30/93 | Time: 1300 |

| | Item Description | Acceptable | Unacceptable | Observations/Corrective Actions To Be Completed | Date Action Completed |
|---|---|---|---|---|---|
| | Signs: Danger-Authorized Personnel Only | ✓ | | | ✓ |
| | No Smoking or Open Flame | ✓ | | | |
| | Emergency & Prior To Entry Contact | ✓ | | | |
| | Overfill/Spill Control Equipment | ✓ | | | |
| | Corrosion Or Release Of Waste | ✓ | | | |
| | Monitoring Equip. In Place (Content Level) | ✓ | | | |
| | Surrounding Area And Unit Intergity | ✓ | | | |
| | Secondary Containment Condition | ✓ | | See Comments | |
| | Emergency & Spill Response Equipment | ✓ | | | |
| 0 | Manway Seal Unbroken | ✓ | | | |
| 1 | Boundary Markers: (Chains, Rope, etc.) | ✓ | | | |

Comments: Material Hold Up; F2E-5= 16500, F2E-6= 17931, F2E-7= Empty, F2E-8= 18884.
HS standing water in dike Scheduling Superwacker work of 11/1/93

Distribution:
Facility Owner: Facility owner reviews, signs and distributes log to:
RCRA Field Implementation

| | |
|---|---|
| RCRA Field Implementation Signature: Susan Hoskins | Date: 11/4/93 |

HWMU 47
UNH TANKS (North Of Plt 2)
Figure 47

5114

HWMU 47
UNH Tanks (North Of Plt 2)
(Tanks F2E-5, F2E-6, & F2E-8)

RCRA Storage Tank

| | | | |
|---|---|---|---|
| Inspector's Name: James Fortson | Date: 10/31/93 | Time: 1300 | |
| Facility Owner's Signature: Brenda S. Parkin BSP | Date: 10/31/93 | Time: 1300 | |

| | Item Description | Acceptable | Unacceptable | Observations/Corrective Actions To Be Completed | Date Action Completed |
|---|---|---|---|---|---|
| | Signs: Danger-Authorized Personnel Only | ✓ | | | ✓ |
| | No Smoking or Open Flame | ✓ | | | |
| | Emergency & Prior To Entry Contact | ✓ | | | |
| | Overfill/Spill Control Equipment | ✓ | | | |
| | Corrosion Or Release Of Waste | ✓ | | | |
| | Monitoring Equip. In Place (Content Level) | ✓ | | | |
| | Surrounding Area And Unit Intergity | ✓ | | | |
| 8 | Secondary Containment Condition | ✓ | | See Comments | |
| 9 | Emergency & Spill Response Equipment | ✓ | | | |
| 0 | Manway Seal Unbroken | ✓ | | | |
| 1 | Boundary Markers: (Chains, Rope, etc.) | ✓ | | | |

Comments: Material Hold Up; F2E-5= 16500, F2E-6= 17931, F2E-7= Empty, F2E-8= 18884.
F8 Starting water in tubes Scheduling Supervisor week of 11/1/93

Distribution:
Facility Owner: Facility owner reviews, signs and distributes log to:
RCRA Field Implementation

| | |
|---|---|
| RCRA Field Implementation Signature: Susan Hoskins | Date: 11/4/93 |

HWMU 47
UNH TANKS (North Of Plt 2)
Figure 47

5114

RCRA Storage Tank

HWMU 48
UNH Tanks (S.E. Of Plt 2)
(Tanks F3E-223)

| | | | |
|---|---|---|---|
| r's Name: [redacted] 1419 | | Date: 10-1-93 | Time: 0945 |
| Owner's Signature: Ron Bischoff 08 | | Date: 10/1/93 | Time: 14:15 |

| Item Description | Acceptable | Unacceptable | Observations/Corrective Actions To Be Completed | Date Action Completed |
|---|---|---|---|---|
| Signs: anger-Authorized ersonnel nly | ✓ | | | |
| o Smoking or Open Flame | ✓ | | | |
| mergency & Prior To Entry ontact | ✓ | | | |
| Overfill/Spill Control Equipment | ✓ | | | |
| Corrosion Or Release Of Waste | ✓ | | | |
| Monitoring Equip. In Place (Content Level) | ✓ | | | |
| Surrounding Area And Unit Intergity | ✓ | | | |
| Secondary Containment Condition | ✓ | | See note | |
| Emergency & Spill Response Equipment | ✓ | | | |
| Manway Seal Unbroken | ✓ | | | |
| Boundary Markers (Chains, Rope, etc.) | ✓ | | | |

s: Material Hold Up: F3E-223= 12180
#5 Small amount of water in dike

on:
Facility Owner: Facility owner reviews, signs and distributes log to:
RCRA Field Implementation

| | |
|---|---|
| Field Implementation Signature: Susan Hankins | Date: 10/15/93 |

HWMU 48
UNH TANKS (SE Of Plt 2)
Figure 48

5114

HWMU 48
UNH Tanks (S.E. Of Plt 2)
(Tanks F3E-223)

RCRA Storage Tank

| | | |
|---|---|---|
| r's Name: Stanley Bippus | Date: 10/2/93 | Time: 08:40 |
| Owner's Signature: [signature] | Date: 10-2-93 | Time: 1545 |

| Item Description | Acceptable | Unacceptable | Observations/Corrective Actions To Be Completed | Date Action Completed |
|---|---|---|---|---|
| igns: anger-Authorized ersonnel nly | ✓ | | | |
| o Smoking or Open Flame | ✓ | | | |
| mergency & Prior To Entry ontact | ✓ | | | |
| verfill/Spill Control quipment | ✓ | | | |
| orrosion Or Release Of aste | ✓ | | | |
| onitoring Equip. In Place (Content Level) | ✓ | | | |
| Surrounding Area And Unit Intergity | ✓ | | | |
| Secondary Containment Condition | ✓ | | See Comments | |
| Emergency & Spill Response Equipment | ✓ | | | |
| Manway Seal Unbroken | ✓ | | | |
| Boundary Markers (Chains, Rope, etc.) | ✓ | | | |

: Material Hold Up: F3E-223= 12180
Standing Water in Dike

n:
Facility Owner: Facility owner reviews, signs and distributes log to:
RCRA Field Implementation

| | |
|---|---|
| ield Implementation Signature: [signature] | Date: 10/15/93 |

HWMU 48
UNH TANKS (SE Of Plt 2)
Figure 48

5114

HWMU 48
UNH Tanks (S.E. Of Plt 2)
(Tanks F3E-223)

RCRA Storage Tank

| | | | |
|---|---|---|---|
| or's Name: [redacted] 1419 | | Date: 10-3-93 | Time: 1730 |
| y Owner's Signature: FW Bischoff | | Date: 10/3/93 | Time: 14:30 |

| Item Description | Accept-able | Unaccept-able | Observations/Corrective Actions To Be Completed | Date Action Completed |
|---|---|---|---|---|
| Signs: Danger-Authorized Personnel Only | ✓ | | | |
| No Smoking or Open Flame | ✓ | | | |
| Emergency & Prior To Entry Contact | ✓ | | | |
| Overfill/Spill Control Equipment | ✓ | | | |
| Corrosion Or Release Of Waste | ✓ | | | |
| Monitoring Equip. In Place (Content Level) | ✓ | | | |
| Surrounding Area And Unit Intergity | ✓ | | | |
| Secondary Containment Condition | ✓ | | See note | |
| Emergency & Spill Response Equipment | ✓ | | | |
| Manway Seal Unbroken | ✓ | | | |
| Boundary Markers (Chains, Rope, etc.) | ✓ | | | |

s: Material Hold Up: F3E-223= 12180
#9 Water in Dike

on:
Facility Owner: Facility owner reviews, signs and distributes log to:
RCRA Field Implementation

| | |
|---|---|
| Field Implementation Signature: Susan Hoskin | Date: 10/15/93 |

HWMU 48
UNH TANKS (SE Of Plt 2)
Figure 48

5114

HWMU 48
UNH Tanks (S.E. Of Plt 2)
(Tanks F3E-223)

RCRA Storage Tank

| | | | |
|---|---|---|---|
| ector's Name: Stanley Bippus | | Date: 10/4/93 | Time: 08 20 |
| lity Owner's Signature: [illegible] | | Date: 10/4/93 | Time: 14:15 |

| | Item Description | Acceptable | Unacceptable | Observations/Corrective Actions To Be Completed | Date Action Completed |
|---|---|---|---|---|---|
| | Signs: Danger-Authorized Personnel Only | ✓ | | | |
| | No Smoking or Open Flame | ✓ | | | |
| | Emergency & Prior To Entry Contact | ✓ | | | |
| | Overfill/Spill Control Equipment | ✓ | | | |
| | Corrosion Or Release Of Waste | ✓ | | | |
| | Monitoring Equip. In Place (Content Level) | ✓ | | | |
| | Surrounding Area And Unit Intergity | ✓ | | | |
| 8 | Secondary Containment Condition | — | | See Comments | |
| 9 | Emergency & Spill Response Equipment | ✓ | | | |
| 0 | Manway Seal Unbroken | ✓ | | | |
| 1 | Boundary Markers (Chains, Rope, etc.) | ✓ | | | |

ents: Material Hold Up: F3E-223= 12180
#8 Standing Water in Dike

ibution:
Facility Owner: Facility owner reviews, signs and distributes log to:
RCRA Field Implementation

| | |
|---|---|
| CRA Field Implementation Signature: [illegible] | Date: 10/15/93 |

HWMU 48
UNH TANKS (SE Of Plt 2)
Figure 48

55114

RCRA Storage Tank

HWMU 48
UNH Tanks (S.E. Of Plt 2)
(Tanks F3E-223)

| | | | |
|---|---|---|---|
| pector's Name: Stanley Bippus | | Date: 10/5/93 | Time: 08:15 |
| ility Owner's Signature: Ron Buschhoff | | Date: 10/5/93 | Time: 15:00 |

| m | Item Description | Acceptable | Unacceptable | Observations/Corrective Actions To Be Completed | Date Action Completed |
|---|---|---|---|---|---|
| | Signs: Danger-Authorized Personnel Only | ✓ | | | |
| | No Smoking or Open Flame | ✓ | | | |
| | Emergency & Prior To Entry Contact | ✓ | | | |
| | Overfill/Spill Control Equipment | ✓ | | | |
| 5 | Corrosion Or Release Of Waste | ✓ | | | |
| 6 | Monitoring Equip. In Place (Content Level) | ✓ | | | |
| 7 | Surrounding Area And Unit Intergity | ✓ | | | |
| 8 | Secondary Containment Condition | ✓ | | See Comments | |
| 9 | Emergency & Spill Response Equipment | ✓ | | | |
| 10 | Manway Seal Unbroken | ✓ | | | |
| 11 | Boundary Markers (Chains, Rope, etc.) | ✓ | | | |

ments: Material Hold Up: F3E-223= 12180
#8 Standing Water in Dike

ribution:
Facility Owner: Facility owner reviews, signs and distributes log to:
RCRA Field Implementation

| | |
|---|---|
| CRA Field Implementation Signature: Susan Hoskins | Date: 10/15/93 |

HWMU 48
UNH TANKS (SE Of Plt 2)
Figure 48

5114

HWMU 48
UNH Tanks (S.E. Of Plt 2)
(Tanks F3E-223)

RCRA Storage Tank

| | | | |
|---|---|---|---|
| pector's Name: Stanley Bippus | | Date: 10/6/93 | Time: 08:15 |
| ility Owner's Signature: Kevin Burchell | | Date: 10/6/93 | Time: 14:15 |

| m | Item Description | Acceptable | Unacceptable | Observations/Corrective Actions To Be Completed | Date Action Completed |
|---|---|---|---|---|---|
| | Signs: Danger-Authorized Personnel Only | ✓ | | | |
| | No Smoking or Open Flame | ✓ | | | |
| | Emergency & Prior To Entry Contact | ✓ | | | |
| | Overfill/Spill Control Equipment | ✓ | | | |
| 5 | Corrosion Or Release Of Waste | ✓ | | | |
| 6 | Monitoring Equip. In Place (Content Level) | ✓ | | | |
| 7 | Surrounding Area And Unit Intergity | ✓ | | | |
| 8 | Secondary Containment Condition | ✓ | | See Comments | |
| 9 | Emergency & Spill Response Equipment | ✓ | | | |
| 10 | Manway Seal Unbroken | ✓ | | | |
| 11 | Boundary Markers (Chains, Rope, etc.) | ✓ | | | |

ments: Material Hold Up: F3E-223= 12180
8 Standing Water in Dike

ribution:
Facility Owner: Facility owner reviews, signs and distributes log to:
RCRA Field Implementation

| | |
|---|---|
| CRA Field Implementation Signature: Susan Hosker | Date: 10/15/93 |

HWMU 48
UNH TANKS (SE Of Plt 2)
Figure 48

5114

RCRA Storage Tank

HWMU 48
UNH Tanks (S.E. Of Plt 2)
(Tanks F3E-223)

| | | | |
|---|---|---|---|
| pector's Name: Stanley Bippus | | Date: 10/7/93 | Time: 08:15 |
| cility Owner's Signature: Ron Birchall CB | | Date: 10/7/93 | Time: 14:30 |

| em | Item Description | Acceptable | Unacceptable | Observations/Corrective Actions To Be Completed | Date Action Completed |
|---|---|---|---|---|---|
| | Signs: Danger-Authorized Personnel Only | ✓ | | | |
| 2 | No Smoking or Open Flame | ✓ | | | |
| 3 | Emergency & Prior To Entry Contact | ✓ | | | |
| 4 | Overfill/Spill Control Equipment | ✓ | | | |
| 5 | Corrosion Or Release Of Waste | ✓ | | | |
| 6 | Monitoring Equip. In Place (Content Level) | ✓ | | | |
| 7 | Surrounding Area And Unit Intergity | ✓ | | | |
| 8 | Secondary Containment Condition | ✓ | | See Comments | |
| 9 | Emergency & Spill Response Equipment | ✓ | | | |
| 10 | Manway Seal Unbroken | ✓ | | | |
| 11 | Boundary Markers (Chains, Rope, etc.) | ✓ | | | |

mments: Material Hold Up: F3E-223= 12180
#8 Standing Water in Dike

tribution:
Facility Owner: Facility owner reviews, signs and distributes log to:
RCRA Field Implementation

| | |
|---|---|
| CRA Field Implementation Signature: Susan Hoskins | Date: 10/15/93 |

HWMU 48
UNH TANKS (SE Of Plt 2)
Figure 48

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HWMU 48
UNH Tanks (S.E. Of Plt 2)
(Tanks F3E-223)

RCRA Storage Tank

| | | | |
|---|---|---|---|
| ector's Name: Stanley Bibbus | | Date: 10/8/93 | Time: 09:15 |
| ility Owner's Signature: [signature] | | Date: 10/8/93 | Time: 14:00 |

| n | Item Description | Acceptable | Unacceptable | Observations/Corrective Actions To Be Completed | Date Action Completed |
|---|---|---|---|---|---|
| | Signs: Danger-Authorized Personnel Only | ✓ | | | |
| | No Smoking or Open Flame | ✓ | | | |
| | Emergency & Prior To Entry Contact | ✓ | | | |
| | Overfill/Spill Control Equipment | ✓ | | | |
| | Corrosion Or Release Of Waste | ✓ | | | |
| | Monitoring Equip. In Place (Content Level) | ✓ | | | |
| | Surrounding Area And Unit Intergity | ✓ | | | |
| 8 | Secondary Containment Condition | ✓ | | See Comments | |
| 9 | Emergency & Spill Response Equipment | ✓ | | | |
| 0 | Manway Seal Unbroken | ✓ | | | |
| 1 | Boundary Markers (Chains, Rope, etc.) | ✓ | | | |

ments: Material Hold Up: F3E-223= 12180
#8 Standing Water in Dike

ribution:
Facility Owner: Facility owner reviews, signs and distributes log to:
RCRA Field Implementation

| | |
|---|---|
| CRA Field Implementation Signature: Susan Hoskin | Date: 10/15/93 |

HWMU 48
UNH TANKS (SE Of Plt 2)
Figure 48

RCRA Storage Tank

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HWMU 48
UNH Tanks (S.E. Of Plt 2)
(Tanks F3E-223)

| | | | |
|---|---|---|---|
| pector's Name: William Vinson | | Date: 10-9-93 | Time: 1300 |
| ility Owner's Signature: [signature] | | Date: 10/9/93 | Time: 1410 |

| em | Item Description | Accept-able | Unaccept-able | Observations/Corrective Actions To Be Completed | Date Action Completed |
|---|---|---|---|---|---|
| | Signs: Danger-Authorized Personnel Only | ✓ | | | |
| 2 | No Smoking or Open Flame | ✓ | | | |
| 3 | Emergency & Prior To Entry Contact | ✓ | | | |
| 4 | Overfill/Spill Control Equipment | ✓ | | | |
| 5 | Corrosion Or Release Of Waste | ✓ | | | |
| 6 | Monitoring Equip. In Place (Content Level) | ✓ | | | |
| 7 | Surrounding Area And Unit Intergity | ✓ | | | |
| 8 | Secondary Containment Condition | ✓ | | See Comments | |
| 9 | Emergency & Spill Response Equipment | ✓ | | | |
| 10 | Manway Seal Unbroken | ✓ | | | |
| 11 | Boundary Markers (Chains, Rope, etc.) | ✓ | | | |

ments: Material Hold Up: F3E-223= 12180
=8 Standing Water in Dike

ribution:
Facility Owner: Facility owner reviews, signs and distributes log to:
RCRA Field Implementation

| | |
|---|---|
| CRA Field Implementation Signature: Susan Hosker | Date: 10/15/93 |

HWMU 48
UNH TANKS (SE Of Plt 2)
Figure 48

-5114

HWMU 48
UNH Tanks (S.E. Of Plt 2)
(Tanks F3E-223)

RCRA Storage Tank

| | | | |
|---|---|---|---|
| pector's Name: [illegible] | | Date: 10/10/93 | Time: 1300 |
| ility Owner's Signature: [illegible] | | Date: 10/10/93 | Time: 14:15 |

| m | Item Description | Acceptable | Unacceptable | Observations/Corrective Actions To Be Completed | Date Action Completed |
|---|---|---|---|---|---|
| | Signs: Danger-Authorized Personnel Only | ✓ | | | |
| | No Smoking or Open Flame | ✓ | | | |
| | Emergency & Prior To Entry Contact | ✓ | | | |
| | Overfill/Spill Control Equipment | ✓ | | | |
| 5 | Corrosion Or Release Of Waste | ✓ | | | |
| 6 | Monitoring Equip. In Place (Content Level) | ✓ | | | |
| 7 | Surrounding Area And Unit Intergity | ✓ | | | |
| 8 | Secondary Containment Condition | ✓ | | see comment | |
| 9 | Emergency & Spill Response Equipment | ✓ | | | |
| 10 | Manway Seal Unbroken | ✓ | | | |
| 11 | Boundary Markers (Chains, Rope, etc.) | ✓ | | | |

ments: Material Hold Up: F3E-223= 12180
#5 standing water in dike

ribution:
Facility Owner: Facility owner reviews, signs and distributes log to:
RCRA Field Implementation

| | |
|---|---|
| CRA Field Implementation Signature: Susan Hoskins | Date: 10/15/93 |

HWMU 48
UNH TANKS (SE Of Plt 2)
Figure 48

5114

HWMU 48
UNH Tanks (S.E. Of Plt 2)
(Tanks F3E-223)

RCRA Storage Tank

| | | | |
|---|---|---|---|
| Inspector's Name: [redacted] 1419 | | Date: 10-11-93 | Time: 1015 |
| Facility Owner's Signature: Robert Scholl | | Date: 10/11/93 | Time: 14:15 |

| Item No. | Item Description | Acceptable | Unacceptable | Observations/Corrective Actions To Be Completed | Date Action Completed |
|---|---|---|---|---|---|
| 1 | Signs: Danger-Authorized Personnel Only | ✓ | | | |
| 2 | No Smoking or Open Flame | ✓ | | | |
| 3 | Emergency & Prior To Entry Contact | ✓ | | | |
| 4 | Overfill/Spill Control Equipment | ✓ | | | |
| 5 | Corrosion Or Release Of Waste | ✓ | | | |
| 6 | Monitoring Equip. In Place (Content Level) | ✓ | | | |
| 7 | Surrounding Area And Unit Intergity | ✓ | | | |
| 8 | Secondary Containment Condition | ✓ | | See note | |
| 9 | Emergency & Spill Response Equipment | ✓ | | | |
| 10 | Manway Seal Unbroken | ✓ | | | |
| 11 | Boundary Markers (Chains, Rope, etc.) | ✓ | | | |

Comments: Material Hold Up: F3E-223= 12180
#8 Water in secondary Containment

Distribution:
Facility Owner; Facility owner reviews, signs and distributes log to:
RCRA Field Implementation

| | |
|---|---|
| RCRA Field Implementation Signature: Susan Hasken | Date: 10/15/93 |



HWMU 48
UNH TANKS (SE Of Plt 2)
Figure 48

5114

HWMU 48
UNH Tanks (S.E. Of Plt 2)
(Tanks F3E-223)

RCRA Storage Tank

| Inspector's Name: Stanley Bissus | Date: 10/12/93 | Time: 08:20 |
|---|---|---|
| Facility Owner's Signature: Ron Bischoff | Date: 10/12/93 | Time: 14:30 |

| Item No. | Item Description | Acceptable | Unacceptable | Observations/Corrective Actions To Be Completed | Date Action Completed |
|---|---|---|---|---|---|
| 1 | Signs: Danger-Authorized Personnel Only | ✓ | | | |
| 2 | No Smoking or Open Flame | ✓ | | | |
| 3 | Emergency & Prior To Entry Contact | ✓ | | | |
| 4 | Overfill/Spill Control Equipment | ✓ | | | |
| 5 | Corrosion Or Release Of Waste | ✓ | | | |
| 6 | Monitoring Equip. In Place (Content Level) | ✓ | | | |
| 7 | Surrounding Area And Unit Intergity | ✓ | | | |
| 8 | Secondary Containment Condition | ✓ | | See Comments | |
| 9 | Emergency & Spill Response Equipment | ✓ | | | |
| 10 | Manway Seal Unbroken | ✓ | | | |
| 11 | Boundary Markers (Chains, Rope, etc.) | ✓ | | | |

Comments: Material Hold Up: F3E-223= 12180
#8 Standing Water in Dike

Distribution:
Facility Owner: Facility owner reviews, signs and distributes log to:
RCRA Field Implementation

| RCRA Field Implementation Signature: Susan Hankins | Date: 10/15/93 |
|---|---|

HWMU 48
UNH TANKS (SE Of Plt 2)
Figure 48

55114

RCRA Storage Tank

HWMU 48
UNH Tanks (S.E. Of Plt 2)
(Tanks F3E-223)

| | | | |
|---|---|---|---|
| ctor's Name: [redacted] 1419 | | Date: 10/13/93 | Time: 0930 |
| ity Owner's Signature: RW Bischoff | | Date: 10/13/93 | Time: 14:00 |

| Item Description | Acceptable | Unacceptable | Observations/Corrective Actions To Be Completed | Date Action Completed |
|---|---|---|---|---|
| Signs: Danger-Authorized Personnel Only | X | | | |
| No Smoking or Open Flame | X | | | |
| Emergency & Prior To Entry Contact | X | | | |
| Overfill/Spill Control Equipment | X | | | |
| Corrosion Or Release Of Waste | X | | | |
| Monitoring Equip. In Place (Content Level) | X | | | |
| Surrounding Area And Unit Intergity | X | | | |
| Secondary Containment Condition | X | | See Note | |
| Emergency & Spill Response Equipment | X | | | |
| Manway Seal Unbroken | X | | | |
| Boundary Markers (Chains, Rope, etc.) | X | | | |

ents: Material Hold Up: F3E-223= 12180
# Water IN Secondary Containment

bution:
Facility Owner: Facility owner reviews, signs and distributes log to:
RCRA Field Implementation

| | |
|---|---|
| RA Field Implementation Signature: Susan Hoskins | Date: 10/15/93 |



HWMU 48
UNH TANKS (SE Of Plt 2)
Figure 48

5114

HWMU 48
UNH Tanks (S.E. Of Plt 2)
(Tanks F3E-223)

RCRA Storage Tank

| | | | |
|---|---|---|---|
| ector's Name: Stanley Bippus | | Date: 10/14/93 | Time: 08:15 |
| lity Owner's Signature: Ruth Buschold | | Date: 10/14/93 | Time: 14:00 |

| Item Description | Acceptable | Unacceptable | Observations/Corrective Actions To Be Completed | Date Action Completed |
|---|---|---|---|---|
| Signs: Danger-Authorized Personnel Only | ✓ | | | |
| No Smoking or Open Flame | ✓ | | | |
| Emergency & Prior To Entry Contact | ✓ | | | |
| Overfill/Spill Control Equipment | ✓ | | | |
| Corrosion Or Release Of Waste | ✓ | | | |
| Monitoring Equip. In Place (Content Level) | ✓ | | | |
| Surrounding Area And Unit Intergity | ✓ | | | |
| Secondary Containment Condition | ✓ | | See Comments | |
| Emergency & Spill Response Equipment | ✓ | | | |
| Manway Seal Unbroken | ✓ | | | |
| Boundary Markers (Chains, Rope, etc.) | ✓ | | | |

ents: Material Hold Up: F3E-223= 12180
Standing Water in Dike

ibution:
Facility Owner: Facility owner reviews, signs and distributes log to:
RCRA Field Implementation

| | |
|---|---|
| RA Field Implementation Signature: Susan Hesselman | Date: 10/20/93 |

HWMU 48
UNH TANKS (SE Of Plt 2)
Figure 48

5114

HWMU 48
UNH Tanks (S.E. Of Plt 2)
(Tanks F3E-223)

RCRA Storage Tank

| | | |
|---|---|---|
| ctor's Name: Stanley Bippus | Date: 10/15/93 | Time: 08:15 |
| ity Owner's Signature: [illegible] | Date: 10/15/93 | Time: 14:15 |

| Item Description | Acceptable | Unacceptable | Observations/Corrective Actions To Be Completed | Date Action Completed |
|---|---|---|---|---|
| Signs: Danger-Authorized Personnel Only | ✓ | | | |
| No Smoking or Open Flame | ✓ | | | |
| Emergency & Prior To Entry Contact | ✓ | | | |
| Overfill/Spill Control Equipment | ✓ | | | |
| Corrosion Or Release Of Waste | ✓ | | | |
| Monitoring Equip. In Place (Content Level) | ✓ | | | |
| Surrounding Area And Unit Intergity | ✓ | | | |
| Secondary Containment Condition | ✓ | | See Comments | |
| Emergency & Spill Response Equipment | ✓ | | | |
| Manway Seal Unbroken | ✓ | | | |
| Boundary Markers (Chains, Rope, etc.) | ✓ | | | |

nts: Material Hold Up: F3E-223= 12180
-8 Standing Water in Dike

bution:
Facility Owner; Facility owner reviews, signs and distributes log to:
RCRA Field Implementation

| | |
|---|---|
| A Field Implementation Signature: Susan [illegible] | Date: 10/26/93 |

HWMU 48
UNH TANKS (SE Of Plt 2)
Figure 48

5114

HWMU 48
UNH Tanks (S.E. Of Plt 2)
(Tanks F3E-223)

RCRA Storage Tank

| | | |
|---|---|---|
| Inspector's Name: Stanley Bippus | Date: 10/16/93 | Time: 10:00 |
| Facility Owner's Signature: Brenda S. Perkins | Date: 10/18/93 | Time: 14:00 |

| Item No. | Item Description | Acceptable | Unacceptable | Observations/Corrective Actions To Be Completed | Date Action Completed |
|---|---|---|---|---|---|
| 1 | Signs: Danger-Authorized Personnel Only | ✓ | | | |
| 2 | No Smoking or Open Flame | ✓ | | | |
| 3 | Emergency & Prior To Entry Contact | ✓ | | | |
| 4 | Overfill/Spill Control Equipment | ✓ | | | |
| 5 | Corrosion Or Release Of Waste | ✓ | | | |
| 6 | Monitoring Equip. In Place (Content Level) | ✓ | | | |
| 7 | Surrounding Area And Unit Intergity | ✓ | | | |
| 8 | Secondary Containment Condition | ✓ | | See Comments | |
| 9 | Emergency & Spill Response Equipment | ✓ | | | |
| 10 | Manway Seal Unbroken | ✓ | | | |
| 11 | Boundary Markers (Chains, Rope, etc.) | ✓ | | | |

Comments: Material Hold Up: F3E-223= 12180
#8 Standing Water in Dike
Started removing water on 10/18/93 Brenda Perkins 10/19/93

Distribution:
Facility Owner: Facility owner reviews, signs and distributes log to:
RCRA Field Implementation

| | |
|---|---|
| RCRA Field Implementation Signature: Brian Weber | Date: 10/20/93 |

HWMU 48
UNH TANKS (SE Of Plt 2)
Figure 48

511

RCRA Storage Tank

HWMU 48
UNH Tanks (S.E. Of Plt 2)
(Tanks F3E-223)

| | | | |
|---|---|---|---|
| ector's Name: Jerry W. Hayes | | Date: 10-16-93 | Time: 13:00 |
| lity Owner's Signature: Linda S. Perkins | | Date: 10/18/93 | Time: 14:15 |

| n | Item Description | Acceptable | Unacceptable | Observations/Corrective Actions To Be Completed | Date Action Completed |
|---|---|---|---|---|---|
| | Signs: Danger-Authorized Personnel Only | ✓ | | | |
| | No Smoking or Open Flame | ✓ | | | |
| | Emergency & Prior To Entry Contact | ✓ | | | |
| | Overfill/Spill Control Equipment | ✓ | | | |
| | Corrosion Or Release Of Waste | ✓ | | | |
| | Monitoring Equip. In Place (Content Level) | ✓ | | | |
| | Surrounding Area And Unit Intergity | ✓ | | | |
| | Secondary Containment Condition | ✓ | | See Comments | |
| | Emergency & Spill Response Equipment | ✓ | | | |
| 0 | Manway Seal Unbroken | ✓ | | | |
| 1 | Boundary Markers (Chains, Rope, etc.) | ✓ | | | |

ents: Material Hold Up: F3E-223= 12180 #8 pit has water in it. cannot pump due to Utils problem.

ibution:
Facility Owner: Facility owner reviews, signs and distributes log to:
RCRA Field Implementation

| | |
|---|---|
| RA Field Implementation Signature: Mary Carter | Date: 10-26-93 |

HWMU 48
UNH TANKS (SE Of Plt 2)
Figure 48

5114

HWMU 48
UNH Tanks (S.E. Of Plt 2)
(Tanks F3E-223)

RCRA Storage Tank

| | | | |
|---|---|---|---|
| Inspector's Name: Stanley Bippus | | Date: 10/19/93 | Time: 12.30 |
| Facility Owner's Signature: Ron Bischoff | | Date: 10/18/93 | Time: 1400 |

| Item No. | Item Description | Acceptable | Unacceptable | Observations/Corrective Actions To Be Completed | Date Action Completed |
|---|---|---|---|---|---|
| 1 | Signs: Danger-Authorized Personnel Only | ✓ | | | |
| 2 | No Smoking or Open Flame | ✓ | | | |
| 3 | Emergency & Prior To Entry Contact | ✓ | | | |
| 4 | Overfill/Spill Control Equipment | ✓ | | | |
| 5 | Corrosion Or Release Of Waste | ✓ | | | |
| 6 | Monitoring Equip. In Place (Content Level) | ✓ | | | |
| 7 | Surrounding Area And Unit Intergity | ✓ | | | |
| 8 | Secondary Containment Condition | ✓ | | See Comments | |
| 9 | Emergency & Spill Response Equipment | ✓ | | | |
| 10 | Manway Seal Unbroken | ✓ | | | |
| 11 | Boundary Markers (Chains, Rope, etc.) | ✓ | | | |

Comments: Material Hold Up: F3E-223= 12180
#8 Standing Water in Dike

Distribution:
Facility Owner; Facility owner reviews, signs and distributes log to:
RCRA Field Implementation

| | |
|---|---|
| RCRA Field Implementation Signature: [illegible] | Date: [illegible]/93 |

HWMU 48
UNH Tanks (S.E. Of Plt 2)
(Tanks F3E-223)

RCRA Storage Tank

| | | | |
|---|---|---|---|
| Inspector's Name: Stanley Bippus | | Date: 10/19/93 | Time: 10:30 |
| Facility Owner's Signature: Brenda S. Perkins | | Date: 10/19/93 | Time: 14:45 |

| Item No. | Item Description | Acceptable | Unacceptable | Observations/Corrective Actions To Be Completed | Date Action Completed |
|---|---|---|---|---|---|
| 1 | Signs: Danger-Authorized Personnel Only | ✓ | | | |
| 2 | No Smoking or Open Flame | ✓ | | | |
| 3 | Emergency & Prior To Entry Contact | ✓ | | | |
| 4 | Overfill/Spill Control Equipment | ✓ | | | |
| 5 | Corrosion Or Release Of Waste | ✓ | | | |
| 6 | Monitoring Equip. In Place (Content Level) | ✓ | | | |
| 7 | Surrounding Area And Unit Intergity | ✓ | | | |
| 8 | Secondary Containment Condition | ✓ | | See Comments | |
| 9 | Emergency & Spill Response Equipment | ✓ | | | |
| 10 | Manway Seal Unbroken | ✓ | | | |
| 11 | Boundary Markers (Chains, Rope, etc.) | ✓ | | | |

Comments: Material Hold Up: F3E-223= 12180
#8 Standing Water in Dike

Distribution:
Facility Owner: Facility owner reviews, signs and distributes log to:
RCRA Field Implementation

| | |
|---|---|
| RCRA Field Implementation Signature: [illegible] | Date: 10/20/93 |

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HWMU 48
UNH Tanks (S.E. Of Plt 2)
(Tanks F3E-223)

RCRA Storage Tank

| | | | |
|---|---|---|---|
| Inspector's Name: Stanley Bizzpus | | Date: 10/20/93 | Time: 08:30 |
| Facility Owner's Signature: Brenda S. Perkins | | Date: 10/20/93 | Time: 14:00 |

| Item No. | Item Description | Acceptable | Unacceptable | Observations/Corrective Actions To Be Completed | Date Action Completed |
|---|---|---|---|---|---|
| 1 | Signs: Danger-Authorized Personnel Only | ✓ | | | |
| 2 | No Smoking or Open Flame | ✓ | | | |
| 3 | Emergency & Prior To Entry Contact | ✓ | | | |
| 4 | Overfill/Spill Control Equipment | ✓ | | | |
| 5 | Corrosion Or Release Of Waste | ✓ | | | |
| 6 | Monitoring Equip. In Place (Content Level) | ✓ | | | |
| 7 | Surrounding Area And Unit Intergity | ✓ | | | |
| 8 | Secondary Containment Condition | ✓ | | See Comments | |
| 9 | Emergency & Spill Response Equipment | ✓ | | | |
| 10 | Manway Seal Unbroken | ✓ | | | |
| 11 | Boundary Markers (Chains, Rope, etc.) | ✓ | | | |

Comments: Material Hold Up: F3E-223= 12180
#8 Standing Water in Dike Water scheduled to be pumped into hold tank using work plan on 10/22/93 Brenda S. Perkins 10/21/93.

Distribution:
Facility Owner: Facility owner reviews, signs and distributes log to:
RCRA Field Implementation

| | |
|---|---|
| RCRA Field Implementation Signature: [illegible] | Date: [illegible] |

HWMU 48
UNH TANKS (SE Of Plt 2)
Figure 48

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HWMU 48
UNH Tanks (S.E. Of Plt 2)
(Tanks F3E-223)

RCRA Storage Tank

| | | | |
|---|---|---|---|
| Inspector's Name: Stanley Bippus | | Date: 10/21/93 | Time: 10:15 |
| Facility Owner's Signature: Brenda S. Perkins | | Date: 10/21/93 | Time: 14:30 |

| Item No. | Item Description | Acceptable | Unacceptable | Observations/Corrective Actions To Be Completed | Date Action Completed |
|---|---|---|---|---|---|
| 1 | Signs: Danger-Authorized Personnel Only | ✓ | | | |
| 2 | No Smoking or Open Flame | ✓ | | | |
| 3 | Emergency & Prior To Entry Contact | ✓ | | | |
| 4 | Overfill/Spill Control Equipment | ✓ | | | |
| 5 | Corrosion Or Release Of Waste | ✓ | | | |
| 6 | Monitoring Equip. In Place (Content Level) | ✓ | | | |
| 7 | Surrounding Area And Unit Intergity | ✓ | | | |
| 8 | Secondary Containment Condition | ✓ | | See Comments | |
| 9 | Emergency & Spill Response Equipment | ✓ | | | |
| 10 | Manway Seal Unbroken | ✓ | | | |
| 11 | Boundary Markers (Chains, Rope, etc.) | ✓ | | | |

Comments: Material Hold Up: F3E-223= 12180
#8 Standing Water in Dike Scheduled to be pumped 10/27/93.

Distribution:
Facility Owner; Facility owner reviews, signs and distributes log to:
RCRA Field Implementation

| | |
|---|---|
| RCRA Field Implementation Signature: | Date: |



HWMU 48
UNH TANKS (SE Of Plt 2)
Figure 48

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HWMU 48
UNH Tanks (S.E. Of Plt 2)
(Tanks F3E-223)

RCRA Storage Tank

| | | |
|---|---|---|
| Inspector's Name: Stanley Bippus | Date: 10/22/93 | Time: 12:15 |
| Facility Owner's Signature: Brenda S. Perkins | Date: 10/22/93 | Time: 14:30 |

| Item No. | Item Description | Acceptable | Unacceptable | Observations/Corrective Actions To Be Completed | Date Action Completed |
|---|---|---|---|---|---|
| 1 | Signs: Danger-Authorized Personnel Only | ✓ | | | |
| 2 | No Smoking or Open Flame | ✓ | | | |
| 3 | Emergency & Prior To Entry Contact | ✓ | | | |
| 4 | Overfill/Spill Control Equipment | ✓ | | | |
| 5 | Corrosion Or Release Of Waste | ✓ | | | |
| 6 | Monitoring Equip. In Place (Content Level) | ✓ | | | |
| 7 | Surrounding Area And Unit Intergity | ✓ | | | |
| 8 | Secondary Containment Condition | ✓ | | See Comments | |
| 9 | Emergency & Spill Response Equipment | ✓ | | | |
| 10 | Manway Seal Unbroken | ✓ | | | |
| 11 | Boundary Markers (Chains, Rope, etc.) | ✓ | | | |

Comments: Material Hold Up: F3E-223= 12180
#8 Standing Water in Dike Scheduled to be pumped 10/22/93

Distribution:
Facility Owner; Facility owner reviews, signs and distributes log to:
RCRA Field Implementation

| | |
|---|---|
| RCRA Field Implementation Signature: [illegible] | Date: 10/27/93 |



HWMU 48
UNH TANKS (SE Of Plt 2)
Figure 48

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RCRA Storage Tank

HWMU 48
UNH Tanks (S.E. Of Plt 2)
(Tanks F3E-223)

| | | | |
|---|---|---|---|
| ctor's Name: Darryl Ewen | | Date: 10/23/93 | Time: 1020 |
| ity Owner's Signature: Brenda S. Perkins BSB | | Date: 10/23/93 | Time: 1500 |

| Item Description | Acceptable | Unacceptable | Observations/Corrective Actions To Be Completed | Date Action Completed |
|---|---|---|---|---|
| Signs: Danger-Authorized Personnel Only | ✓ | | | |
| No Smoking or Open Flame | ✓ | | | |
| Emergency & Prior To Entry Contact | ✓ | | | |
| Overfill/Spill Control Equipment | ✓ | | | |
| Corrosion Or Release Of Waste | ✓ | | | |
| Monitoring Equip. In Place (Content Level) | ✓ | | | |
| Surrounding Area And Unit Intergity | ✓ | | | |
| Secondary Containment Condition | ✓ | | See Comments | |
| Emergency & Spill Response Equipment | ✓ | | | |
| Manway Seal Unbroken | ✓ | | | |
| Boundary Markers (Chains, Rope, etc.) | ✓ | | | |

ents: Material Hold Up: F3E-223= 12180
AB standing water in Dike Scheduled to be pumped 10/27/93

ibution:
Facility Owner: Facility owner reviews, signs and distributes log to:
RCRA Field Implementation

| | |
|---|---|
| RA Field Implementation Signature: [illegible] | Date: [illegible] |

HWMU 48
UNH TANKS (SE Of Plt 2)
Figure 48

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HWMU 48
UNH Tanks (S.E. Of Plt 2)
(Tanks F3E-223)

RCRA Storage Tank

| | | | |
|---|---|---|---|
| ctor's Name: [redacted] 149 | | Date: 10-24-93 | Time: 1245 |
| ity Owner's Signature: Brenda S. Perkins | | Date: 10/24/93 | Time: 1408 |

| Item Description | Acceptable | Unacceptable | Observations/Corrective Actions To Be Completed | Date Action Completed |
|---|---|---|---|---|
| Signs: Danger-Authorized Personnel Only | ✓ | | | |
| No Smoking or Open Flame | ✓ | | | |
| Emergency & Prior To Entry Contact | ✓ | | | |
| Overfill/Spill Control Equipment | ✓ | | | |
| Corrosion Or Release Of Waste | ✓ | | | |
| Monitoring Equip. In Place (Content Level) | ✓ | | | |
| Surrounding Area And Unit Intergity | ✓ | | | |
| Secondary Containment Condition | ✓ | | see note | |
| Emergency & Spill Response Equipment | ✓ | | | |
| Manway Seal Unbroken | ✓ | | | |
| Boundary Markers (Chains, Rope, etc.) | ✓ | | | |

nts: Material Hold Up: F3E-223= 12180
#1 Water in Secondary Containment
Scheduled to be pumped 10/27/93

bution:
Facility Owner: Facility owner reviews, signs and distributes log to:
RCRA Field Implementation

| | |
|---|---|
| A Field Implementation Signature: [illegible] | Date: [illegible] |

HWMU 48
UNH TANKS (SE Of Plt 2)
Figure 48

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RCRA Storage Tank

HWMU 48
UNH Tanks (S.E. Of Plt 2)
(Tanks F3E-223)

| | | | |
|---|---|---|---|
| Inspector's Name: Stanley Bippus | | Date: 10/25/93 | Time: 10:15 |
| Facility Owner's Signature: Brenda S. Perkins | | Date: 10/25/93 | Time: 14:30 |

| Item No. | Item Description | Acceptable | Unacceptable | Observations/Corrective Actions To Be Completed | Date Action Completed |
|---|---|---|---|---|---|
| 1 | Signs: Danger-Authorized Personnel Only | ✓ | | | |
| 2 | No Smoking or Open Flame | ✓ | | | |
| 3 | Emergency & Prior To Entry Contact | ✓ | | | |
| 4 | Overfill/Spill Control Equipment | ✓ | | | |
| 5 | Corrosion Or Release Of Waste | ✓ | | | |
| 6 | Monitoring Equip. In Place (Content Level) | ✓ | | | |
| 7 | Surrounding Area And Unit Intergity | ✓ | | | |
| 8 | Secondary Containment Condition | ✓ | | See Comments | |
| 9 | Emergency & Spill Response Equipment | ✓ | | | |
| 10 | Manway Seal Unbroken | ✓ | | | |
| 11 | Boundary Markers (Chains, Rope, etc.) | ✓ | | | |

Comments: Material Hold Up: F3E-223= 12180
#8 Standing Water in Dike Pumping water 10/28/93.

Distribution:
Facility Owner: Facility owner reviews, signs and distributes log to:
RCRA Field Implementation

| | |
|---|---|
| RCRA Field Implementation Signature: Susan Hoskins | Date: 11/2/93 |



HWMU 48
UNH TANKS (SE Of Plt 2)
Figure 48

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HWMU 48
UNH Tanks (S.E. Of Plt 2)
(Tanks F3E-223)

RCRA Storage Tank

| | | | |
|---|---|---|---|
| Inspector's Name: Stanley Bippus | | Date: 10/26/93 | Time: 08:15 |
| Facility Owner's Signature: Brenda S. Perkins | | Date: 10/26/93 | Time: 15:00 |

| Item No. | Item Description | Acceptable | Unacceptable | Observations/Corrective Actions To Be Completed | Date Action Completed |
|---|---|---|---|---|---|
| 1 | Signs: Danger-Authorized Personnel Only | ✓ | | | |
| 2 | No Smoking or Open Flame | ✓ | | | |
| 3 | Emergency & Prior To Entry Contact | ✓ | | | |
| 4 | Overfill/Spill Control Equipment | ✓ | | | |
| 5 | Corrosion Or Release Of Waste | ✓ | | | |
| 6 | Monitoring Equip. In Place (Content Level) | ✓ | | | |
| 7 | Surrounding Area And Unit Intergity | ✓ | | | |
| 8 | Secondary Containment Condition | ✓ | | See Comments | |
| 9 | Emergency & Spill Response Equipment | ✓ | | | |
| 10 | Manway Seal Unbroken | ✓ | | | |
| 11 | Boundary Markers (Chains, Rope, etc.) | ✓ | | | |

Comments: Material Hold Up: F3E-223= 12180
#8 Standing Water in Dike Pumping 10/28/93

Distribution:
Facility Owner; Facility owner reviews, signs and distributes log to:
RCRA Field Implementation

| | |
|---|---|
| RCRA Field Implementation Signature: Susan Harrison | Date: 11/2/93 |

HWMU 48
UNH TANKS (SE Of Plt 2)
Figure 48

| Issue Date: 12-15-92 | Rev. No. 0 | Document No. SOP 20-C-616 | Page 69 of 77 |
|---|---|---|---|

HWMU 48
UNH Tanks (S.E. Of Plt 2)
(Tanks F3E-223)

RCRA Storage Tank

| | | | |
|---|---|---|---|
| Inspector's Name: Stanley Bippus | | Date: 10/27/93 | Time: 8:20 |
| Facility Owner's Signature: Brenda S. Perkins | | Date: 10/27/93 | Time: 14:00 |

| Item No. | Item Description | Acceptable | Unacceptable | Observations/Corrective Actions To Be Completed | Date Action Completed |
|---|---|---|---|---|---|
| 1 | Signs: Danger-Authorized Personnel Only | ✓ | | | |
| 2 | No Smoking or Open Flame | ✓ | | | |
| 3 | Emergency & Prior To Entry Contact | ✓ | | | |
| 4 | Overfill/Spill Control Equipment | ✓ | | | |
| 5 | Corrosion Or Release Of Waste | ✓ | | | |
| 6 | Monitoring Equip. In Place (Content Level) | ✓ | | | |
| 7 | Surrounding Area And Unit Intergity | ✓ | | | |
| 8 | Secondary Containment Condition | ✓ | | See Comments | |
| 9 | Emergency & Spill Response Equipment | ✓ | | | |
| 10 | Manway Seal Unbroken | ✓ | | | |
| 11 | Boundary Markers (Chains, Rope, etc.) | ✓ | | | |

Comments: Material Hold Up: F3E-223= 12180
#8 Standing Water in Dike Pumping 10/28/93

Distribution:
Facility Owner: Facility owner reviews, signs and distributes log to:
RCRA Field Implementation

| | |
|---|---|
| RCRA Field Implementation Signature: [signature] | Date: 11/2/93 |



HWMU 48
UNH TANKS (SE Of Plt 2)
Figure 48

- 5114

RCRA Storage Tank

HWMU 48
UNH Tanks (S.E. Of Plt 2)
(Tanks F3E-223)

| | | | |
|---|---|---|---|
| Inspector's Name: Stanley Bippus | | Date: 10/28/93 | Time: 08:15 |
| Facility Owner's Signature: Brenda S. Perkins | | Date: 10/28/93 | Time: 14:00 |

| Item No. | Item Description | Acceptable | Unacceptable | Observations/Corrective Actions To Be Completed | Date Action Completed |
|---|---|---|---|---|---|
| 1 | Signs: Danger-Authorized Personnel Only | ✓ | | | |
| 2 | No Smoking or Open Flame | ✓ | | | |
| 3 | Emergency & Prior To Entry Contact | ✓ | | | |
| 4 | Overfill/Spill Control Equipment | ✓ | | | |
| 5 | Corrosion Or Release Of Waste | ✓ | | | |
| 6 | Monitoring Equip. In Place (Content Level) | ✓ | | | |
| 7 | Surrounding Area And Unit Intergity | ✓ | | | |
| 8 | Secondary Containment Condition | ✓ | | See Comments | |
| 9 | Emergency & Spill Response Equipment | ✓ | | | |
| 10 | Manway Seal Unbroken | ✓ | | | |
| 11 | Boundary Markers (Chains, Rope, etc.) | ✓ | | | |

Comments: Material Hold Up: F3E-223= 12180
#8 Standing Water in Dike Water being Pumped 10/28/93

Distribution:
Facility Owner; Facility owner reviews, signs and distributes log to:
RCRA Field Implementation

| | |
|---|---|
| RCRA Field Implementation Signature: Susan Haskins | Date: 11/2/93 |

HWMU 48
UNH TANKS (SE Of Plt 2)
Figure 48

5114

RCRA Storage Tank

HWMU 48
UNH Tanks (S.E. Of Plt 2)
(Tanks F3E-223)

| | | | |
|---|---|---|---|
| Inspector's Name: Stanley B Jeffries | | Date: 10/29/93 | Time: 08:15 |
| Facility Owner's Signature: Brenda S. Perkins | | Date: 10/29/93 | Time: 14:08 |

| Item No. | Item Description | Acceptable | Unacceptable | Observations/Corrective Actions To Be Completed | Date Action Completed |
|---|---|---|---|---|---|
| 1 | Signs: Danger-Authorized Personnel Only | ✓ | | | |
| 2 | No Smoking or Open Flame | ✓ | | | |
| 3 | Emergency & Prior To Entry Contact | ✓ | | | |
| 4 | Overfill/Spill Control Equipment | ✓ | | | |
| 5 | Corrosion Or Release Of Waste | ✓ | | | |
| 6 | Monitoring Equip. In Place (Content Level) | ✓ | | | |
| 7 | Surrounding Area And Unit Intergity | ✓ | | | |
| 8 | Secondary Containment Condition | ✓ | | See Comments | |
| 9 | Emergency & Spill Response Equipment | ✓ | | | |
| 10 | Manway Seal Unbroken | ✓ | | | |
| 11 | Boundary Markers (Chains, Rope, etc.) | ✓ | | | |

Comments: Material Hold Up: F3E-223= 12180
#8 Standing Water in Dike Scheduling Supersucker week of 11/1/93.

Distribution:
Facility Owner; Facility owner reviews, signs and distributes log to:
RCRA Field Implementation

| | |
|---|---|
| RCRA Field Implementation Signature: Susan Hoskins | Date: 11/4/93 |



HWMU 48
UNH TANKS (SE Of Plt 2)
Figure 48

5114

HWMU 48
UNH Tanks (S.E. Of Plt 2)
(Tanks F3E-223)

RCRA Storage Tank

| | | | |
|---|---|---|---|
| ctor's Name: Darryl Evans | | Date: 10-30-93 | Time: 1020 |
| ity Owner's Signature: Brenda S. Perkins PKL | | Date: 10/30/93 | Time: 1300 |

| Item Description | Acceptable | Unacceptable | Observations/Corrective Actions To Be Completed | Date Action Completed |
|---|---|---|---|---|
| Signs: Danger-Authorized Personnel Only | ✓ | | | |
| No Smoking or Open Flame | ✓ | | | |
| Emergency & Prior To Entry Contact | ✓ | | | |
| Overfill/Spill Control Equipment | ✓ | | | |
| Corrosion Or Release Of Waste | ✓ | | | |
| Monitoring Equip. In Place (Content Level) | ✓ | | | |
| Surrounding Area And Unit Intergity | ✓ | | | |
| Secondary Containment Condition | ✓ | | See Comments | |
| Emergency & Spill Response Equipment | ✓ | | | |
| Manway Seal Unbroken | ✓ | | | |
| Boundary Markers (Chains, Rope, etc.) | ✓ | | | |

ents: Material Hold Up: F3E-223= 12180
#8 Standing water in tube Scheduling Supersucker week of 11/1/93.

ibution:
Facility Owner: Facility owner reviews, signs and distributes log to:
RCRA Field Implementation

| | |
|---|---|
| RA Field Implementation Signature: Susan Haskin | Date: 11/4/93 |

HWMU 48
UNH TANKS (SE Of Plt 2)
Figure 48

5114

RCRA Storage Tank

HWMU 48
UNH Tanks (S.E. Of Plt 2)
(Tanks F3E-223)

| | | | |
|---|---|---|---|
| ctor's Name: James Gustine | | Date: 10/31/93 | Time: 1:30 |
| ity Owner's Signature: Brenda S. Perkins PEI | | Date: 10/31/93 | Time: 1300 |

| Item Description | Acceptable | Unacceptable | Observations/Corrective Actions To Be Completed | Date Action Completed |
|---|---|---|---|---|
| Signs: Danger-Authorized Personnel Only | ✓ | | | |
| No Smoking or Open Flame | ✓ | | | |
| Emergency & Prior To Entry Contact | ✓ | | | |
| Overfill/Spill Control Equipment | ✓ | | | |
| Corrosion Or Release Of Waste | ✓ | | | |
| Monitoring Equip. In Place (Content Level) | ✓ | | | |
| Surrounding Area And Unit Intergity | ✓ | | | |
| Secondary Containment Condition | ✓ | | See Comments | |
| Emergency & Spill Response Equipment | ✓ | | | |
| Manway Seal Unbroken | ✓ | | | |
| Boundary Markers (Chains, Rope, etc.) | ✓ | | | |

ents: Material Hold Up: F3E-223= 12180
ES Standing water in Dike Scheduling Supersucker
Week of 11/1/93.

bution:
Facility Owner: Facility owner reviews, signs and distributes log to:
RCRA Field Implementation

| | |
|---|---|
| RA Field Implementation Signature: Susan Hoskins | Date: 11/4/93 |

HWMU 48
UNH TANKS (SE Of Plt 2)
Figure 48

5114
RCRA Storage Tank

HWMU 49
UNH Tanks (Digestion Area, 2 Locations)
(Tanks D1-1,2,4,7,10 F1-1,25,26)

| | | | |
|---|---|---|---|
| Inspector's Name: [redacted] 1149 | Date: 10-1-93 | Time: 1545 |
| Facility Owner's Signature: R. Buchholz 08 | Date: 10/1/93 | Time: 14:15 |

| Item | Item Description | Acceptable | Unacceptable | Observations/Corrective Actions To Be Completed | Date Action Completed |
|---|---|---|---|---|---|
| 1 | Signs: Danger-Authorized Personnel Only | ✓ | | | ✓ |
| 2 | No Smoking or Open Flame | ✓ | | | |
| 3 | Emergency Contact & Prior To Entry | ✓ | | | |
| 4 | Overfill/Spill Control Equipment | ✓ | | | |
| 5 | Corrosion Or Release Of Waste | ✓ | | | |
| 6 | Monitoring Equip. In Place (Content Level) | ✓ | | See note | |
| 7 | Surrounding Area And Unit Intergity | ✓ | | | |
| 8 | Secondary Containment Condition | ✓ | | ~~See note~~ SM | |
| 9 | Emergency & Spill Response Equipment | ✓ | | | |
| 10 | Manway Seal Unbroken | ✓ | | | |
| 11 | Boundary Markers (Chains, Rope, etc.) | ✓ | | | |

Comments: Material Hold Up: D1-1= 1350, D1-2= Empty, D1-4= Empty, D1-7= 3559, D1-10= 2587 F1-1= 2227, F1-25= 22538, F1-26= 1300.
~~#2 unlock~~ SM
#6 Not any monitoring equipment on D1-1, D1-7, D1-10, F1-1

Distribution:
Facility Owner: Facility owner reviews, signs and distributes log to:
RCRA Field Implementation

| | |
|---|---|
| RCRA Field Implementation Signature: Susan Hoskins | Date: 10/15/93 |

HWMU 49
UNH TANKS (Digestion Area, 2 Locations)
Figure 49

5114

HWMU 49
UNH Tanks (Digestion Area, 2 Locations)
(Tanks D1-1,2,4,7,10 F1-1,25,26)

RCRA Storage Tank

| | | | |
|---|---|---|---|
| r's Name: Stanley Bippus | | Date: 10/2/93 | Time: 09:00 |
| Owner's Signature: Ruth Bischoff | | Date: 10-2-93 | Time: 1515 |

| Item Description | Acceptable | Unacceptable | Observations/Corrective Actions To Be Completed | Date Action Completed |
|---|---|---|---|---|
| igns: nger-Authorized rsonnel ly | ✓ | | | ✓ |
| Smoking or Open Flame | ✓ | | | |
| ergency Contact & Prior To try | ✓ | | | |
| verfill/Spill Control quipment | ✓ | | | |
| orrosion Or Release Of aste | ✓ | | | |
| onitoring Equip. In lace (Content Level) | ✓ | | See Comments | |
| urrounding Area And nit Intergity | ✓ | | | |
| econdary Containment ondition | ✓ | | | |
| mergency & Spill esponse Equipment | ✓ | | | |
| anway Seal Unbroken | ✓ | | | |
| oundary Markers (Chains, Rope, etc.) | ✓ | | | |

. Material Hold Up: D1-1= 1350, D1-2= Empty, D1-4= Empty, D1-7= 3559, D1-10= 2587
= 2227, F1-25= 22538, F1-26= 1300.
No Monitoring Equip on Tanks D1-1, D1-7, D1-10, F1-1

n:
Facility Owner: Facility owner reviews, signs and distributes log to:
RCRA Field Implementation

| | |
|---|---|
| ield Implementation Signature: Susan Hockin | Date: 10/15/93 |

HWMU 49
UNH TANKS (Digestion Area, 2 Locations)
Figure 49

- 5114

RCRA Storage Tank

HWMU 49
UNH Tanks (Digestion Area, 2 Locations)
(Tanks D1-1,2,4,7,10 F1-1,25,26)

| | | | |
|---|---|---|---|
| tor's Name: [redacted] 1419 | | Date: 10-5-93 | Time: 1245 |
| ty Owner's Signature: Ron Bischoff | | Date: 10/3/93 | Time: 14:30 |

| Item Description | Acceptable | Unacceptable | Observations/Corrective Actions To Be Completed | Date Action Completed |
|---|---|---|---|---|
| Signs: Danger-Authorized Personnel Only | ✓ | | | ✓ |
| No Smoking or Open Flame | ✓ | | | |
| Emergency Contact & Prior To Entry | ✓ | | | |
| Overfill/Spill Control Equipment | ✓ | | | |
| Corrosion Or Release Of Waste | ✓ | | | |
| Monitoring Equip. In Place (Content Level) | ✓ | | See note | |
| Surrounding Area And Unit Intergity | ✓ | | | |
| Secondary Containment Condition | ✓ | | | |
| Emergency & Spill Response Equipment | ✓ | | | |
| Manway Seal Unbroken | ✓ | | | |
| Boundary Markers (Chains, Rope, etc.) | ✓ | | | |

ıts: Material Hold Up: D1-1= 1350, D1-2= Empty, D1-4= Empty, D1-7= 3559, D1-10= 2587
1-1= 2227, F1-25= 22538, F1-26= 1300.
D1-4, D1-7, D1-10, F1-1 no monitoring Equipment

ıtion:
Facility Owner: Facility owner reviews, signs and distributes log to:
RCRA Field Implementation

| | |
|---|---|
| Field Implementation Signature: Susan Hoskins | Date: 10/15/93 |

HWMU 49
UNH TANKS (Digestion Area, 2 Locations)
Figure 49

5114

RCRA Storage Tank

HWMU 49
UNH Tanks (Digestion Area, 2 Locations)
(Tanks D1-1,2,4,7,10 F1-1,25,26)

| | | |
|---|---|---|
| tor's Name: Stanley Bippus | Date: 10/4/93 | Time: 09:00 |
| ty Owner's Signature: [illegible] | Date: 10/4/93 | Time: 14:15 |

| Item Description | Acceptable | Unacceptable | Observations/Corrective Actions To Be Completed | Date Action Completed |
|---|---|---|---|---|
| Signs: Danger-Authorized Personnel Only | ✓ | | | ✓ |
| No Smoking or Open Flame | ✓ | | | |
| Emergency Contact & Prior To Entry | ✓ | | | |
| Overfill/Spill Control Equipment | ✓ | | | |
| Corrosion Or Release Of Waste | ✓ | | | |
| Monitoring Equip. In Place (Content Level) | ✓ | | See Comments | |
| Surrounding Area And Unit Intergity | ✓ | | | |
| Secondary Containment Condition | ✓ | | | |
| Emergency & Spill Response Equipment | ✓ | | | |
| Manway Seal Unbroken | ✓ | | | |
| Boundary Markers (Chains, Rope, etc.) | ✓ | | | |

ts: Material Hold Up: D1-1= 1350, D1-2= Empty, D1-4= Empty, D1-7= 3559, D1-10= 2587
1-1= 2227, F1-25= 22538, F1-26= 1300.
/s No Monitoring Equip on Tanks - D1-1, D1-7, D1-10, F1-1

tion:
Facility Owner: Facility owner reviews, signs and distributes log to:
RCRA Field Implementation

| | |
|---|---|
| Field Implementation Signature: Susan Hoskins | Date: 10/15/93 |

HWMU 49
UNH TANKS (Digestion Area, 2 Locations)
Figure 49

5114

RCRA Storage Tank

HWMU 49
UNH Tanks (Digestion Area, 2 Locations)
(Tanks D1-1,2,4,7,10 F1-1,25,26)

| | | | |
|---|---|---|---|
| tor's Name: Stanley Bippus | | Date: 10/5/93 | Time: 08:40 |
| ty Owner's Signature: Robert Bischoff | | Date: 10/5/93 | Time: 15:00 |

| Item Description | Acceptable | Unacceptable | Observations/Corrective Actions To Be Completed | Date Action Completed |
|---|---|---|---|---|
| Signs: Danger-Authorized Personnel Only | ✓ | | | ✓ |
| No Smoking or Open Flame | ✓ | | | |
| Emergency Contact & Prior To Entry | ✓ | | | |
| Overfill/Spill Control Equipment | ✓ | | | |
| Corrosion Or Release Of Waste | ✓ | | | |
| Monitoring Equip. In Place (Content Level) | ✓ | | See Comments | |
| Surrounding Area And Unit Intergity | ✓ | | | |
| Secondary Containment Condition | ✓ | | | |
| Emergency & Spill Response Equipment | ✓ | | | |
| Manway Seal Unbroken | ✓ | | | |
| Boundary Markers (Chains, Rope, etc.) | ✓ | | | |

ts: Material Hold Up: D1-1= 1350, D1-2= Empty, D1-4= Empty, D1-7= 3559, D1-10= 2587
1-1= 2227, F1-25= 22538, F1-26= 1300.
o No Monitoring Equip. on tanks- D1-1, D1-7, D1-10, F1-1

tion:
Facility Owner: Facility owner reviews, signs and distributes log to:
RCRA Field Implementation

| | |
|---|---|
| Field Implementation Signature: Susan Hoskins | Date: 10/15/93 |

HWMU 49
UNH TANKS (Digestion Area, 2 Locations)
Figure 49

5114

HWMU 49
UNH Tanks (Digestion Area, 2 Locations)
(Tanks D1-1,2,4,7,10 F1-1,25,26)

RCRA Storage Tank

| | | |
|---|---|---|
| tor's Name: Stanley Bippus | Date: 10/6/93 | Time: 13:40 |
| ty Owner's Signature: [illegible] | Date: 10/6/93 | Time: 1415 |

| Item Description | Acceptable | Unacceptable | Observations/Corrective Actions To Be Completed | Date Action Completed |
|---|---|---|---|---|
| Signs: Danger-Authorized Personnel Only | ✓ | | | |
| No Smoking or Open Flame | ✓ | | | |
| Emergency Contact & Prior To Entry | ✓ | | | |
| Overfill/Spill Control Equipment | ✓ | | | |
| Corrosion Or Release Of Waste | ✓ | | | |
| Monitoring Equip. In Place (Content Level) | ✓ | | See Comments | |
| Surrounding Area And Unit Intergity | ✓ | | | |
| Secondary Containment Condition | ✓ | | | |
| Emergency & Spill Response Equipment | ✓ | | | |
| Manway Seal Unbroken | ✓ | | | |
| Boundary Markers (Chains, Rope, etc.) | ✓ | | | |

its: Material Hold Up: D1-1= 1350, D1-2= Empty, D1-4= Empty, D1-7= 3559, D1-10= 2587
1-1= 2227, F1-25= 22538, F1-26= 1300.
No Monitoring Equip. on Tanks - D1-1, D1-7, D1-10, F1-1

ution:
Facility Owner: Facility owner reviews, signs and distributes log to:
RCRA Field Implementation

| | |
|---|---|
| Field Implementation Signature: Susan Haskins | Date: 10/15/93 |

HWMU 49
UNH TANKS (Digestion Area, 2 Locations)
Figure 49

HWMU 49
UNH Tanks (Digestion Area, 2 Locations)
(Tanks D1-1,2,4,7,10 F1-1,25,26)

RCRA Storage Tank

| | | |
|---|---|---|
| ctor's Name: Stanley Bippers | Date: 10/7/93 | Time: 12:00 |
| ity Owner's Signature: R W Bischoff | Date: 10/7/93 | Time: 14:30 |

| Item Description | Acceptable | Unacceptable | Observations/Corrective Actions To Be Completed | Date Action Completed |
|---|---|---|---|---|
| Signs: Danger-Authorized Personnel Only | ✓ | | | |
| No Smoking or Open Flame | ✓ | | | |
| Emergency Contact & Prior To Entry | ✓ | | | |
| Overfill/Spill Control Equipment | ✓ | | | |
| Corrosion Or Release Of Waste | ✓ | | | |
| Monitoring Equip. In Place (Content Level) | ✓ | | See Comments | |
| Surrounding Area And Unit Intergity | ✓ | | | |
| Secondary Containment Condition | ✓ | | | |
| Emergency & Spill Response Equipment | ✓ | | | |
| Manway Seal Unbroken | ✓ | | | |
| Boundary Markers (Chains, Rope, etc.) | ✓ | | | |

nts: Material Hold Up: D1-1= 1350, D1-2= Empty, D1-4= Empty, D1-7= 3559, D1-10= 2587
F1-1= 2227, F1-25= 22538, F1-26= 1300.
2 No Monitoring Equip. on Tanks D1-1, D1-7, D1-10, F1-1

ution:
Facility Owner: Facility owner reviews, signs and distributes log to:
RCRA Field Implementation

| | |
|---|---|
| A Field Implementation Signature: Susan Hoskins | Date: 10/15/93 |

HWMU 49
UNH TANKS (Digestion Area, 2 Locations)
Figure 49

5114

HWMU 49
UNH Tanks (Digestion Area, 2 Locations)
(Tanks D1-1,2,4,7,10 F1-1,25,26)

RCRA Storage Tank

| | | | |
|---|---|---|---|
| Inspector's Name: Stanley Bippus | | Date: 10/8/93 | Time: 08:00 |
| Facility Owner's Signature: Rick Bischoff | | Date: 10/8/93 | Time: 14:00 |

| Item Description | Acceptable | Unacceptable | Observations/Corrective Actions To Be Completed | Date Action Completed |
|---|---|---|---|---|
| Signs: Danger-Authorized Personnel Only | ✓ | | | ✓ |
| No Smoking or Open Flame | ✓ | | | |
| Emergency Contact & Prior To Entry | ✓ | | | |
| Overfill/Spill Control Equipment | ✓ | | | |
| Corrosion Or Release Of Waste | ✓ | | | |
| Monitoring Equip. In Place (Content Level) | ✓ | | See Comments | |
| Surrounding Area And Unit Intergity | ✓ | | | |
| Secondary Containment Condition | ✓ | | | |
| Emergency & Spill Response Equipment | ✓ | | | |
| Manway Seal Unbroken | ✓ | | | |
| Boundary Markers (Chains, Rope, etc.) | ✓ | | | |

Comments: Material Hold Up: D1-1= 1350, D1-2= Empty, D1-4= Empty, D1-7= 3559, D1-10= 2587
F1-1= 2227, F1-25= 22538, F1-26= 1300.
No Monitoring Equip. on Tanks D1-1, D1-7, D1-10, F1-1

Distribution:
Facility Owner; Facility owner reviews, signs and distributes log to:
RCRA Field Implementation

| | |
|---|---|
| Field Implementation Signature: Susan Hoskins | Date: 10/15/93 |

HWMU 49
UNH TANKS (Digestion Area, 2 Locations)
Figure 49

5114

HWMU 49
UNH Tanks (Digestion Area, 2 Locations)
(Tanks D1-1,2,4,7,10 F1-1,25,26)

RCRA Storage Tank

| | | | |
|---|---|---|---|
| tor's Name: William Clinton | | Date: 10-9-93 | Time: 13:20 |
| ty Owner's Signature: [illegible] | | Date: 10/9/93 | Time: 1410 |

| Item Description | Acceptable | Unacceptable | Observations/Corrective Actions To Be Completed | Date Action Completed |
|---|---|---|---|---|
| Signs: Danger-Authorized Personnel Only | ✓ | | | |
| No Smoking or Open Flame | ✓ | | | |
| Emergency Contact & Prior To Entry | ✓ | | | |
| Overfill/Spill Control Equipment | ✓ | | | |
| Corrosion Or Release Of Waste | ✓ | | | |
| Monitoring Equip. In Place (Content Level) | ✓ | | See Comments | |
| Surrounding Area And Unit Intergity | ✓ | | | |
| Secondary Containment Condition | ✓ | | | |
| Emergency & Spill Response Equipment | ✓ | | | |
| Manway Seal Unbroken | ✓ | | | |
| Boundary Markers (Chains, Rope, etc.) | ✓ | | | |

ts: Material Hold Up: D1-1= 1350, D1-2= Empty, D1-4= Empty, D1-7= 3559, D1-10= 2587
1-1= 2227, F1-25= 22538, F1-26= 1300.
= no monitoring equipments on tank D1-4, D1-7,
D1-10, F-1-1

tion:
Facility Owner: Facility owner reviews, signs and distributes log to:
RCRA Field Implementation

| | |
|---|---|
| Field Implementation Signature: Susan Hosler | Date: 10/15/93 |

HWMU 49
UNH TANKS (Digestion Area, 2 Locations)
Figure 49

5114

HWMU 49
UNH Tanks (Digestion Area, 2 Locations)
(Tanks D1-1,2,4,7,10 F1-1,25,26)

RCRA Storage Tank

| | | |
|---|---|---|
| tor's Name: John Sexton | Date: 10/10/93 | Time: 1330 |
| ty Owner's Signature: M Burchell | Date: 10/10/93 | Time: 14:15 |

| Item Description | Acceptable | Unacceptable | Observations/Corrective Actions To Be Completed | Date Action Completed |
|---|---|---|---|---|
| Signs: Danger-Authorized Personnel Only | ✓ | | | ✓ |
| No Smoking or Open Flame | ✓ | | | |
| Emergency Contact & Prior To Entry | ✓ | | | |
| Overfill/Spill Control Equipment | ✓ | | | |
| Corrosion Or Release Of Waste | ✓ | | | |
| Monitoring Equip. In Place (Content Level) | ✓ | | | |
| Surrounding Area And Unit Intergity | ✓ | | | |
| Secondary Containment Condition | ✓ | | | |
| Emergency & Spill Response Equipment | ✓ | | | |
| Manway Seal Unbroken | ✓ | | | |
| Boundary Markers (Chains, Rope, etc.) | ✓ | | | |

ıts: Material Hold Up: D1-1= 1350, D1-2= Empty, D1-4= Empty, D1-7= 3559, D1-10= 2587
1-1= 2227, F1-25= 22538, F1-26= 1300.

ıtion:
Facility Owner: Facility owner reviews, signs and distributes log to:
RCRA Field Implementation

| | |
|---|---|
| Field Implementation Signature: Susan Hoskin | Date: 10/15/93 |

HWMU 49
UNH TANKS (Digestion Area, 2 Locations)
Figure 49

5114

RCRA Storage Tank

HWMU 49
UNH Tanks (Digestion Area, 2 Locations)
(Tanks D1-1,2,4,7,10 F1-1,25,26)

| | | | |
|---|---|---|---|
| ctor's Name: [redacted] 1419 | Date: 10-11-93 | Time: 0930 |
| ity Owner's Signature: R.W. Bischoff | Date: 10/11/93 | Time: 14:15 |

| | Item Description | Acceptable | Unacceptable | Observations/Corrective Actions To Be Completed | Date Action Completed |
|---|---|---|---|---|---|
| | Signs: Danger-Authorized Personnel Only | ✓ | | | |
| | No Smoking or Open Flame | ✓ | | | |
| | Emergency Contact & Prior To Entry | ✓ | | | |
| | Overfill/Spill Control Equipment | ✓ | | | |
| | Corrosion Or Release Of Waste | ✓ | | | |
| | Monitoring Equip. In Place (Content Level) | ✓ | | See note | |
| | Surrounding Area And Unit Intergity | ✓ | | | |
| | Secondary Containment Condition | ✓ | | | |
| | Emergency & Spill Response Equipment | ✓ | | | |
| ) | Manway Seal Unbroken | ✓ | | | |
| 1 | Boundary Markers (Chains, Rope, etc.) | ✓ | | | |

ents: Material Hold Up: D1-1= 1350, D1-2= Empty, D1-4= Empty, D1-7= 3559, D1-10= 2587
F1-1= 2227, F1-25= 22538, F1-26= 1300.
#6 No monitoring Equipment on D1-1, D1-7, D1-10, F1-1

ibution:
Facility Owner: Facility owner reviews, signs and distributes log to:
RCRA Field Implementation

| | |
|---|---|
| RA Field Implementation Signature: Susan Hoskins | Date: 10/15/93 |

HWMU 49
UNH TANKS (Digestion Area, 2 Locations)
Figure 49

HWMU 49
UNH Tanks (Digestion Area, 2 Locations)
(Tanks D1-1,2,4,7,10 F1-1,25,26)

RCRA Storage Tank

| | | | |
|---|---|---|---|
| ctor's Name: Stanley Bibbins | | Date: 10/12/93 | Time: 09:30 |
| ity Owner's Signature: Ray Bischoff | | Date: 10/12/93 | Time: 14:30 |

| | Item Description | Acceptable | Unacceptable | Observations/Corrective Actions To Be Completed | Date Action Completed |
|---|---|---|---|---|---|
| | Signs: Danger-Authorized Personnel Only | ✓ | | | |
| | No Smoking or Open Flame | ✓ | | | |
| | Emergency Contact & Prior To Entry | ✓ | | | |
| | Overfill/Spill Control Equipment | ✓ | | | |
| | Corrosion Or Release Of Waste | ✓ | | | |
| | Monitoring Equip. In Place (Content Level) | ✓ | | See Comments | |
| | Surrounding Area And Unit Intergity | ✓ | | | |
| | Secondary Containment Condition | ✓ | | | |
| | Emergency & Spill Response Equipment | ✓ | | | |
| 0 | Manway Seal Unbroken | ✓ | | | |
| 1 | Boundary Markers (Chains, Rope, etc.) | ✓ | | | |

ents: Material Hold Up: D1-1= 1350, D1-2= Empty, D1-4= Empty, D1-7= 3559, D1-10= 2587 F1-1= 2227, F1-25= 22538, F1-26= 1300.
To No Monitoring Equip on Tanks D1-1, D1-7, D1-10, F1-1

ibution:
Facility Owner: Facility owner reviews, signs and distributes log to:
RCRA Field Implementation

| | |
|---|---|
| RA Field Implementation Signature: Susan Hoskem | Date: 10/15/93 |

HWMU 49
UNH TANKS (Digestion Area, 2 Locations)
Figure 49

HWMU 49
UNH Tanks (Digestion Area, 2 Locations)
(Tanks D1-1,2,4,7,10 F1-1,25,26)

RCRA Storage Tank

| | | | |
|---|---|---|---|
| ector's Name: [redacted] 1419 | | Date: 10-13-93 ~~0845~~ | Time: 0845 |
| ility Owner's Signature: RW Buschoff | | Date: 10/13/93 | Time: 14:00 |

| | Item Description | Acceptable | Unacceptable | Observations/Corrective Actions To Be Completed | Date Action Completed |
|---|---|---|---|---|---|
| | Signs: Danger-Authorized Personnel Only | X | | | |
| | No Smoking or Open Flame | X | | | |
| | Emergency Contact & Prior To Entry | X | | | |
| | Overfill/Spill Control Equipment | X | | | |
| | Corrosion Or Release Of Waste | X | | | |
| | Monitoring Equip. In Place (Content Level) | X | | See note | |
| | Surrounding Area And Unit Intergity | X | | | |
| | Secondary Containment Condition | X | | | |
| | Emergency & Spill Response Equipment | X | | | |
| ) | Manway Seal Unbroken | X | | | |
| 1 | Boundary Markers (Chains, Rope, etc.) | X | | | |

ents: Material Hold Up: D1-1= 1350, D1-2= Empty, D1-4= Empty, D1-7= 3559, D1-10= 2587
F1-1= 2227, F1-25= 22538, F1-26= 1300.
#6 D1-4, D1-7, D1-10, F1-1 have no monitoring equipment

ibution:
Facility Owner: Facility owner reviews, signs and distributes log to:
RCRA Field Implementation

| | |
|---|---|
| RA Field Implementation Signature: Susan Hoskins | Date: 10/15/93 |



HWMU 49
UNH TANKS (Digestion Area, 2 Locations)
Figure 49

5114

HWMU 49
UNH Tanks (Digestion Area, 2 Locations)
(Tanks D1-1,2,4,7,10 F1-1,25,26)

RCRA Storage Tank

| | | | |
|---|---|---|---|
| ector's Name: Stanley Bippus | | Date: 10/14/93 | Time: 08:30 |
| ility Owner's Signature: Robert Schroll | | Date: 10/14/93 | Time: 14:15 |

| n | Item Description | Accept-able | Unaccept-able | Observations/Corrective Actions To Be Completed | Date Action Completed |
|---|---|---|---|---|---|
| | Signs: Danger-Authorized Personnel Only | ✓ | | | |
| | No Smoking or Open Flame | ✓ | | | |
| | Emergency Contact & Prior To Entry | ✓ | | | |
| | Overfill/Spill Control Equipment | ✓ | | | |
| | Corrosion Or Release Of Waste | ✓ | | | |
| | Monitoring Equip. In Place (Content Level) | ✓ | | See Comments | |
| 7 | Surrounding Area And Unit Intergity | ✓ | | | |
| 8 | Secondary Containment Condition | ✓ | | | |
| 9 | Emergency & Spill Response Equipment | ✓ | | | |
| 10 | Manway Seal Unbroken | ✓ | | | |
| 11 | Boundary Markers (Chains, Rope, etc.) | ✓ | | | |

ments: Material Hold Up: D1-1= 1350, D1-2= Empty, D1-4= Empty, D1-7= 3559, D1-10= 2587
F1-1= 2227, F1-25= 22538, F1-26= 1300.
6 No Monitoring Equip. on Tanks-D1-1, D1-7, D1-10, F1-1

ribution:
Facility Owner: Facility owner reviews, signs and distributes log to:
RCRA Field Implementation

| | |
|---|---|
| CRA Field Implementation Signature: Susan Hackman | Date: 10/20/93 |

HWMU 49
UNH TANKS (Digestion Area, 2 Locations)
Figure 49

HWMU 49
UNH Tanks (Digestion Area, 2 Locations)
(Tanks D1-1,2,4,7,10 F1-1,25,26)

RCRA Storage Tank

| | | | |
|---|---|---|---|
| ector's Name: Stanley Bippus | Date: 10/15/93 | Time: 10:30 | |
| lity Owner's Signature: [signature] OB | Date: 10/15/93 | Time: 14:15 | |

| 1 | Item Description | Accept-able | Unaccept-able | Observations/Corrective Actions To Be Completed | Date Action Completed |
|---|---|---|---|---|---|
| | Signs: Danger-Authorized Personnel Only | ✓ | | | |
| | No Smoking or Open Flame | ✓ | | | |
| | Emergency Contact & Prior To Entry | ✓ | | | |
| | Overfill/Spill Control Equipment | ✓ | | | |
| | Corrosion Or Release Of Waste | ✓ | | | |
| | Monitoring Equip. In Place (Content Level) | ✓ | | See Comments | |
| | Surrounding Area And Unit Intergity | ✓ | | | |
| 8 | Secondary Containment Condition | ✓ | | | |
| 9 | Emergency & Spill Response Equipment | ✓ | | | |
| 0 | Manway Seal Unbroken | ✓ | | | |
| 1 | Boundary Markers (Chains, Rope, etc.) | ✓ | | | |

ments: Material Hold Up: D1-1= 1350, D1-2= Empty, D1-4= Empty, D1-7= 3559, D1-10= 2587
F1-1= 2227, F1-25= 22538, F1-26= 1300.
6 No Monitoring Equip. on Tanks - D1-1, D1-7, D1-10, F1-1

ribution:
Facility Owner: Facility owner reviews, signs and distributes log to:
RCRA Field Implementation

| | |
|---|---|
| CRA Field Implementation Signature: [signature] | Date: 10/26/93 |



HWMU 49
UNH TANKS (Digestion Area, 2 Locations)
Figure 49

HWMU 49
UNH Tanks (Digestion Area, 2 Locations)
(Tanks D1-1,2,4,7,10 F1-1,25,26)

RCRA Storage Tank

| | | | |
|---|---|---|---|
| ector's Name: Stanley Bippus | | Date: 10/16/93 | Time: 10:15 |
| lity Owner's Signature: Brenda S. Perkins | | Date: 10/18/93 | Time: 14:00 |

| | Item Description | Acceptable | Unacceptable | Observations/Corrective Actions To Be Completed | Date Action Completed |
|---|---|---|---|---|---|
| | Signs: Danger-Authorized Personnel Only | ✓ | | | |
| | No Smoking or Open Flame | ✓ | | | |
| | Emergency Contact & Prior To Entry | ✓ | | | |
| | Overfill/Spill Control Equipment | ✓ | | | |
| | Corrosion Or Release Of Waste | ✓ | | | |
| | Monitoring Equip. In Place (Content Level) | ✓ | | See Comments | |
| | Surrounding Area And Unit Intergity | ✓ | | | |
| | Secondary Containment Condition | ✓ | | | |
| | Emergency & Spill Response Equipment | ✓ | | | |
| 0 | Manway Seal Unbroken | ✓ | | | |
| .1 | Boundary Markers (Chains, Rope, etc.) | ✓ | | | |

ments: Material Hold Up: D1-1= 1350, D1-2= Empty, D1-4= Empty, D1-7= 3559, D1-10= 2587
F1-1= 2227, F1-25= 22538, F1-26= 1300.
6 No Monitoring Equip. on Tanks D1-1, D1-7, D1-10, F1-1
Tanks are monitored Daily Brenda Perkins 10/19/93

ribution:
Facility Owner: Facility owner reviews, signs and distributes log to:
RCRA Field Implementation

| | |
|---|---|
| CRA Field Implementation Signature: Shawn Dick | Date: 10/20/93 |

HWMU 49
UNH TANKS (Digestion Area, 2 Locations)
Figure 49

HWMU 49
UNH Tanks (Digestion Area, 2 Locations)
(Tanks D1-1,2,4,7,10 F1-1,25,26)

RCRA Storage Tank

| | | |
|---|---|---|
| :or's Name: Jerry W. Hayes | Date: 10-16-93 | Time: 11:30 |
| ty Owner's Signature: Brenda S. Perkins | Date: 10/18/93 | Time: 14:15 |

| Item Description | Acceptable | Unacceptable | Observations/Corrective Actions To Be Completed | Date Action Completed |
|---|---|---|---|---|
| Signs: Danger-Authorized Personnel Only | ✓ | | | |
| No Smoking or Open Flame | ✓ | | | |
| Emergency Contact & Prior To Entry | ✓ | | | |
| Overfill/Spill Control Equipment | ✓ | | | |
| Corrosion Or Release Of Waste | ✓ | | | |
| Monitoring Equip. In Place (Content Level) | ✓ | | See Comments | |
| Surrounding Area And Unit Intergity | ✓ | | | |
| Secondary Containment Condition | ✓ | | See Comments | |
| Emergency & Spill Response Equipment | ✓ | | | |
| Manway Seal Unbroken | ✓ | | | |
| Boundary Markers (Chains, Rope, etc.) | ✓ | | | |

ts: Material Hold Up: D1-1= 1350, D1-2= Empty, D1-4= Empty, D1-7= 3559, D1-10= 2587
1-1= 2227, F1-25= 22538, F1-26= 1300. HEP D1-1,2,4,7,10 has no Monitoring equipment
Sumps are full and leaking in pit area.

:tion:
Facility Owner: Facility owner reviews, signs and distributes log to:
RCRA Field Implementation

| | |
|---|---|
| Field Implementation Signature: [illegible] | Date: [illegible] |

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HWMU 49
UNH TANKS (Digestion Area, 2 Locations)
Figure 49

HWMU 49
UNH Tanks (Digestion Area, 2 Locations)
(Tanks D1-1,2,4,7,10 F1-1,25,26)

RCRA Storage Tank

| | | | |
|---|---|---|---|
| ector's Name: Stanley Bippus | | Date: 10/18/93 | Time: 12:00 |
| ility Owner's Signature: R W Bischoff | | Date: 10/18/93 | Time: 14:00 |

| 1 | Item Description | Acceptable | Unacceptable | Observations/Corrective Actions To Be Completed | Date Action Completed |
|---|---|---|---|---|---|
| | Signs: Danger-Authorized Personnel Only | ✓ | | | |
| | No Smoking or Open Flame | ✓ | | | |
| | Emergency Contact & Prior To Entry | ✓ | | | |
| | Overfill/Spill Control Equipment | ✓ | | | |
| | Corrosion Or Release Of Waste | ✓ | | | |
| 5 | Monitoring Equip. In Place (Content Level) | ✓ | | See Comments | |
| 7 | Surrounding Area And Unit Intergity | ✓ | | | |
| 8 | Secondary Containment Condition | ✓ | | | |
| 9 | Emergency & Spill Response Equipment | ✓ | | | |
| 10 | Manway Seal Unbroken | ✓ | | | |
| 11 | Boundary Markers (Chains, Rope, etc.) | ✓ | | | |

ments: Material Hold Up: D1-1= 1350, D1-2= Empty, D1-4= Empty, D1-7= 3559, D1-10= 2587
F1-1= 2227, F1-25= 22538, F1-26= 1300.
6 No Monitoring Equip. on Tanks- D1-1, D1-7, D1-10, F1-1

ribution:
Facility Owner: Facility owner reviews, signs and distributes log to:
RCRA Field Implementation

| | |
|---|---|
| CRA Field Implementation Signature: [signature] | Date: 10/20/93 |

HWMU 49
UNH TANKS (Digestion Area, 2 Locations)
Figure 49

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HWMU 49
UNH Tanks (Digestion Area, 2 Locations)
(Tanks D1-1,2,4,7,10 F1-1,25,26)

RCRA Storage
Tank

| | | | |
|---|---|---|---|
| r's Name: Stanley Bippus | | Date: 10/19/93 | Time: 12:30 |
| Owner's Signature: Brenda S. Perkins | | Date: 10/19/93 | Time: 14:45 |

| Item Description | Acceptable | Unacceptable | Observations/Corrective Actions To Be Completed | Date Action Completed |
|---|---|---|---|---|
| Signs: anger-Authorized ersonnel nly | ✓ | | | |
| o Smoking or Open Flame | ✓ | | | |
| mergency Contact & Prior To ntry | ✓ | | | |
| Overfill/Spill Control Equipment | ✓ | | | |
| Corrosion Or Release Of Waste | ✓ | | | |
| Monitoring Equip. In Place (Content Level) | ✓ | | See Comments | |
| Surrounding Area And Unit Intergity | ✓ | | | |
| Secondary Containment Condition | ✓ | | | |
| Emergency & Spill Response Equipment | ✓ | | | |
| Manway Seal Unbroken | ✓ | | | |
| Boundary Markers (Chains, Rope, etc.) | ✓ | | | |

s: Material Hold Up: D1-1= 1350, D1-2= Empty, D1-4= Empty, D1-7= 3559, D1-10= 2587
-1= 2227, F1-25= 22538, F1-26= 1300.
No Monitoring Equip on Tanks- D1-1, D1-7, D1-10, F1-1

ion:
Facility Owner: Facility owner reviews, signs and distributes log to:
RCRA Field Implementation

| | |
|---|---|
| Field Implementation Signature: [illegible] | Date: 10/26/93 |

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HWMU 49
UNH TANKS (Digestion Area, 2 Locations)
Figure 49

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RCRA Storage Tank

HWMU 49
UNH Tanks (Digestion Area, 2 Locations)
(Tanks D1-1,2,4,7,10 F1-1,25,26)

| | | | |
|---|---|---|---|
| Inspector's Name: Stanley Bippus | | Date: 10/20/93 | Time: 08:05 |
| Facility Owner's Signature: Brenda S. Perkins | | Date: 10/20/93 | Time: 14:00 |

| Item No. | Item Description | Acceptable | Unacceptable | Observations/Corrective Actions To Be Completed | Date Action Completed |
|---|---|---|---|---|---|
| 1 | Signs: Danger-Authorized Personnel Only | ✓ | | | |
| 2 | No Smoking or Open Flame | ✓ | | | |
| 3 | Emergency Contact & Prior To Entry | ✓ | | | |
| 4 | Overfill/Spill Control Equipment | ✓ | | | |
| 5 | Corrosion Or Release Of Waste | ✓ | | | |
| 6 | Monitoring Equip. In Place (Content Level) | ✓ | | See Comments | |
| 7 | Surrounding Area And Unit Intergity | ✓ | | | |
| 8 | Secondary Containment Condition | ✓ | | | |
| 9 | Emergency & Spill Response Equipment | ✓ | | | |
| 10 | Manway Seal Unbroken | ✓ | | | |
| 11 | Boundary Markers (Chains, Rope, etc.) | ✓ | | | |

Comments: Material Hold Up: D1-1= 1350, D1-2= Empty, D1-4= Empty, D1-7= 3559, D1-10= 2587
F1-1= 2227, F1-25= 22538, F1-26= 1300.
#6 No Monitoring Equip. on Tanks - D1-1, D1-7, D1-10, F1-1

Distribution:
Facility Owner: Facility owner reviews, signs and distributes log to:
RCRA Field Implementation

| | |
|---|---|
| RCRA Field Implementation Signature: [illegible] | Date: 10/20/93 |

HWMU 49
UNH TANKS (Digestion Area, 2 Locations)
Figure 49

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HWMU 49
UNH Tanks (Digestion Area, 2 Locations)
(Tanks D1-1,2,4,7,10 F1-1,25,26)

RCRA Storage Tank

| | | | |
|---|---|---|---|
| Inspector's Name: Stanley Dijapers | | Date: 10/21/93 | Time: 10:30 |
| Facility Owner's Signature: Brenda S. Perkins | | Date: 10/21/93 | Time: 14:30 |

| Item Description | Acceptable | Unacceptable | Observations/Corrective Actions To Be Completed | Date Action Completed |
|---|---|---|---|---|
| Signs: Danger-Authorized Personnel Only | ✓ | | | |
| No Smoking or Open Flame | ✓ | | | |
| Emergency Contact & Prior To Entry | ✓ | | | |
| Overfill/Spill Control Equipment | ✓ | | | |
| Corrosion Or Release Of Waste | ✓ | | | |
| Monitoring Equip. In Place (Content Level) | ✓ | | See Comments | |
| Surrounding Area And Unit Intergity | ✓ | | | |
| Secondary Containment Condition | ✓ | | | |
| Emergency & Spill Response Equipment | ✓ | | | |
| Manway Seal Unbroken | ✓ | | | |
| Boundary Markers (Chains, Rope, etc.) | ✓ | | | |

Comments: Material Hold Up: D1-1= 1350, D1-2= Empty, D1-4= Empty, D1-7= 3559, D1-10= 2587
F1-1= 2227, F1-25= 22538, F1-26= 1300.
No Monitoring Equip. on tanks-D1-1, D1-7, D1-10, F1-1

Distribution:
Facility Owner: Facility owner reviews, signs and distributes log to:
RCRA Field Implementation

| | |
|---|---|
| RCRA Field Implementation Signature: [illegible] | Date: 10/21/93 |

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RCRA Storage Tank

HWMU 49
UNH Tanks (Digestion Area, 2 Locations)
(Tanks D1-1,2,4,7,10 F1-1,25,26)

Inspector's Name: Stanley Bippus | Date: 10/22/93 | Time: 12:45

Facility Owner's Signature: Brenda S. Perkins | Date: 10/22/93 | Time: 14:30

| Item No. | Item Description | Acceptable | Unacceptable | Observations/Corrective Actions To Be Completed | Date Action Completed |
|---|---|---|---|---|---|
| 1 | Signs: Danger-Authorized Personnel Only | ✓ | | | |
| 2 | No Smoking or Open Flame | ✓ | | | |
| 3 | Emergency Contact & Prior To Entry | ✓ | | | |
| 4 | Overfill/Spill Control Equipment | ✓ | | | |
| 5 | Corrosion Or Release Of Waste | ✓ | | | |
| 6 | Monitoring Equip. In Place (Content Level) | ✓ | | See Comments | |
| 7 | Surrounding Area And Unit Intergity | ✓ | | | |
| 8 | Secondary Containment Condition | ✓ | | | |
| 9 | Emergency & Spill Response Equipment | ✓ | | | |
| 10 | Manway Seal Unbroken | ✓ | | | |
| 11 | Boundary Markers (Chains, Rope, etc.) | ✓ | | | |

Comments: Material Hold Up: D1-1= 1350, D1-2= Empty, D1-4= Empty, D1-7= 3559, D1-10= 2587 F1-1= 2227, F1-25= 22538, F1-26= 1300.
#6 No Monitoring Equip. on Tanks D1-1, D1-7, D1-10, F1-1

Distribution:
Facility Owner: Facility owner reviews, signs and distributes log to:
RCRA Field Implementation

RCRA Field Implementation Signature: [signature] | Date: 10/27/93

HWMU 49
UNH TANKS (Digestion Area, 2 Locations)
Figure 49

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RCRA Storage Tank

HWMU 49
UNH Tanks (Digestion Area, 2 Locations)
(Tanks D1-1,2,4,7,10 F1-1,25,26)

| | | | |
|---|---|---|---|
| ector's Name: Darryl Evans | | Date: 10/23/93 | Time: 1050 |
| ity Owner's Signature: Brenda S. Perkins - BJB | | Date: 10/23/93 | Time: 1500 |

| Item Description | Acceptable | Unacceptable | Observations/Corrective Actions To Be Completed | Date Action Completed |
|---|---|---|---|---|
| Signs: Danger-Authorized Personnel Only | ✓ | | | ✓ |
| No Smoking or Open Flame | ✓ | | | |
| Emergency Contact & Prior To Entry | ✓ | | | |
| Overfill/Spill Control Equipment | ✓ | | | |
| Corrosion Or Release Of Waste | ✓ | | | |
| Monitoring Equip. In Place (Content Level) | ✓ | | See Comments | |
| Surrounding Area And Unit Intergity | ✓ | | | |
| Secondary Containment Condition | ✓ | | | |
| Emergency & Spill Response Equipment | ✓ | | | |
| Manway Seal Unbroken | ✓ | | | |
| Boundary Markers (Chains, Rope, etc.) | — | | | |

ents: Material Hold Up: D1-1= 1350, D1-2= Empty, D1-4= Empty, D1-7= 3559, D1-10= 2587
F1-1= 2227, F1-25= 22538, F1-26= 1300.
FC No Monitoring Equip on Tanks D1-1, D1-7 D1-10 F1-1

ibution:
Facility Owner: Facility owner reviews, signs and distributes log to:
RCRA Field Implementation

| | |
|---|---|
| RA Field Implementation Signature: Susan Hacker | Date: 10/28/93 |

HWMU 49
UNH TANKS (Digestion Area, 2 Locations)
Figure 49

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RCRA Storage Tank

HWMU 49
UNH Tanks (Digestion Area, 2 Locations)
(Tanks D1-1,2,4,7,10 F1-1,25,26)

| | | | |
|---|---|---|---|
| ector's Name: | T.S[redacted]419 | Date: 10-24-93 | Time: 1300 |
| lity Owner's Signature: Brenda S. Perkins | | Date: 10/24/93 | Time: 1400 |

| | Item Description | Acceptable | Unacceptable | Observations/Corrective Actions To Be Completed | Date Action Completed |
|---|---|---|---|---|---|
| | Signs: Danger-Authorized Personnel Only | ✓ | | | ✓ |
| | No Smoking or Open Flame | ✓ | | | |
| | Emergency Contact & Prior To Entry | ✓ | | | |
| | Overfill/Spill Control Equipment | ✓ | | | |
| | Corrosion Or Release Of Waste | ✓ | | | |
| | Monitoring Equip. In Place (Content Level) | ✓ | | See note | |
| | Surrounding Area And Unit Intergity | ✓ | | | |
| | Secondary Containment Condition | ✓ | | | |
| | Emergency & Spill Response Equipment | ✓ | | | |
| 0 | Manway Seal Unbroken | ✓ | | | |
| 1 | Boundary Markers (Chains, Rope, etc.) | ✓ | | | |

ents: Material Hold Up: D1-1= 1350, D1-2= Empty, D1-4= Empty, D1-7= 3559, D1-10= 2587
F1-1= 2227, F1-25= 22538, F1-26= 1300. #6 F1-1 D4 D1-7 D1-10
has no monitoring Equipment

ibution:
Facility Owner: Facility owner reviews, signs and distributes log to:
RCRA Field Implementation

| | |
|---|---|
| RA Field Implementation Signature: [illegible] | Date: [illegible] |

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RCRA Storage Tank

HWMU 49
UNH Tanks (Digestion Area, 2 Locations)
(Tanks D1-1,2,4,7,10 F1-1,25,26)

| | | | |
|---|---|---|---|
| Inspector's Name: Stanley Boppera | | Date: 10/25/93 | Time: 08:30 |
| Facility Owner's Signature: Brenda S. Perkins | | Date: 10/25/93 | Time: 14:30 |

| Item No. | Item Description | Acceptable | Unacceptable | Observations/Corrective Actions To Be Completed | Date Action Completed |
|---|---|---|---|---|---|
| 1 | Signs: Danger-Authorized Personnel Only | ✓ | | | |
| 2 | No Smoking or Open Flame | ✓ | | | |
| 3 | Emergency Contact & Prior To Entry | ✓ | | | |
| 4 | Overfill/Spill Control Equipment | ✓ | | | |
| 5 | Corrosion Or Release Of Waste | ✓ | | | |
| 6 | Monitoring Equip. In Place (Content Level) | ✓ | | See Comments | |
| 7 | Surrounding Area And Unit Intergity | ✓ | | | |
| 8 | Secondary Containment Condition | ✓ | | | |
| 9 | Emergency & Spill Response Equipment | ✓ | | | |
| 10 | Manway Seal Unbroken | ✓ | | | |
| 11 | Boundary Markers (Chains, Rope, etc.) | ✓ | | | |

Comments: Material Hold Up: D1-1= 1350, D1-2= Empty, D1-4= Empty, D1-7= 3559, D1-10= 2587 F1-1= 2227, F1-25= 22538, F1-26= 1300.
#6 No Monitoring Equip on Tanks-D1-1, D1-7, D1-10, F1-1

Distribution:
Facility Owner: Facility owner reviews, signs and distributes log to:
RCRA Field Implementation

| | |
|---|---|
| RCRA Field Implementation Signature: Susan Hoskin | Date: 11/2/93 |

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RCRA Storage Tank

HWMU 49
UNH Tanks (Digestion Area, 2 Locations)
(Tanks D1-1,2,4,7,10 F1-1,25,26)

| | | | |
|---|---|---|---|
| Inspector's Name: Stanley Bippers | | Date: 10/26/93 | Time: 09:00 |
| Facility Owner's Signature: Brenda S. Perkins | | Date: 10/26/93 | Time: 15:00 |

| Item No. | Item Description | Acceptable | Unacceptable | Observations/Corrective Actions To Be Completed | Date Action Completed |
|---|---|---|---|---|---|
| 1 | Signs: Danger-Authorized Personnel Only | ✓ | | | |
| 2 | No Smoking or Open Flame | ✓ | | | |
| 3 | Emergency Contact & Prior To Entry | ✓ | | | |
| 4 | Overfill/Spill Control Equipment | ✓ | | | |
| 5 | Corrosion Or Release Of Waste | ✓ | | | |
| 6 | Monitoring Equip. In Place (Content Level) | ✓ | | See Comments | |
| 7 | Surrounding Area And Unit Intergity | ✓ | | | |
| 8 | Secondary Containment Condition | ✓ | | | |
| 9 | Emergency & Spill Response Equipment | ✓ | | | |
| 10 | Manway Seal Unbroken | ✓ | | | |
| 11 | Boundary Markers (Chains, Rope, etc.) | ✓ | | | |

Comments: Material Hold Up: D1-1= 1350, D1-2= Empty, D1-4= Empty, D1-7= 3559, D1-10= 2587 F1-1= 2227, F1-25= 22538, F1-26= 1300.
#6 No Monitoring Equip. on Tanks-D1-1, D1-7 D1-10, F1-1

Distribution:
Facility Owner: Facility owner reviews, signs and distributes log to:
RCRA Field Implementation

| | |
|---|---|
| RCRA Field Implementation Signature: Susan Hudson | Date: 11/2/93 |

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RCRA Storage Tank

HWMU 49
UNH Tanks (Digestion Area, 2 Locations)
(Tanks D1-1,2,4,7,10 F1-1,25,26)

| | | | |
|---|---|---|---|
| Inspector's Name: Stanley Bippus | | Date: 10/27/93 | Time: 09:30 |
| Facility Owner's Signature: Brenda S. Perkins | | Date: 10/27/93 | Time: 14:00 |

| Item No. | Item Description | Acceptable | Unacceptable | Observations/Corrective Actions To Be Completed | Date Action Completed |
|---|---|---|---|---|---|
| 1 | Signs: Danger-Authorized Personnel Only | ✓ | | | |
| 2 | No Smoking or Open Flame | ✓ | | | |
| 3 | Emergency Contact & Prior To Entry | ✓ | | | |
| 4 | Overfill/Spill Control Equipment | ✓ | | | |
| 5 | Corrosion Or Release Of Waste | ✓ | | | |
| 6 | Monitoring Equip. In Place (Content Level) | ✓ | | See Comments | |
| 7 | Surrounding Area And Unit Intergity | ✓ | | | |
| 8 | Secondary Containment Condition | ✓ | | | |
| 9 | Emergency & Spill Response Equipment | ✓ | | | |
| 10 | Manway Seal Unbroken | ✓ | | | |
| 11 | Boundary Markers (Chains, Rope, etc.) | ✓ | | | |

Comments: Material Hold Up: D1-1= 1350, D1-2= Empty, D1-4= Empty, D1-7= 3559, D1-10= 2587
F1-1= 2227, F1-25= 22538, F1-26= 1300.
#6 No Monitoring Equip on Tanks - D1-1, D1-7, D1-10, F1-1

Distribution:
Facility Owner: Facility owner reviews, signs and distributes log to:
RCRA Field Implementation

| | |
|---|---|
| RCRA Field Implementation Signature: Susan Hakim | Date: 11/2/93 |

HWMU 49
UNH Tanks (Digestion Area, 2 Locations)
(Tanks D1-1,2,4,7,10 F1-1,25,26)

RCRA Storage Tank

| | | | |
|---|---|---|---|
| Inspector's Name: Stanley Bippus | | Date: 10/28/93 | Time: 09:00 |
| Facility Owner's Signature: Brenda S. Perkins | | Date: 10/28/93 | Time: 14:00 |

| Item No. | Item Description | Acceptable | Unacceptable | Observations/Corrective Actions To Be Completed | Date Action Completed |
|---|---|---|---|---|---|
| 1 | Signs: Danger-Authorized Personnel Only | ✓ | | | |
| 2 | No Smoking or Open Flame | ✓ | | | |
| 3 | Emergency Contact & Prior To Entry | ✓ | | | |
| 4 | Overfill/Spill Control Equipment | ✓ | | | |
| 5 | Corrosion Or Release Of Waste | ✓ | | | |
| 6 | Monitoring Equip. In Place (Content Level) | ✓ | | See Comments | |
| 7 | Surrounding Area And Unit Intergity | ✓ | | | |
| 8 | Secondary Containment Condition | ✓ | | | |
| 9 | Emergency & Spill Response Equipment | ✓ | | | |
| 10 | Manway Seal Unbroken | ✓ | | | |
| 11 | Boundary Markers (Chains, Rope, etc.) | ✓ | | | |

Comments: Material Hold Up: D1-1= 1350, D1-2= Empty, D1-4= Empty, D1-7= 3559, D1-10= 2587 F1-1= 2227, F1-25= 22538, F1-26= 1300.
#6 No Monitoring Equip on Tanks D1-1, D1-7, D1-10, F1-1

Distribution:
Facility Owner: Facility owner reviews, signs and distributes log to:
RCRA Field Implementation

| | |
|---|---|
| RCRA Field Implementation Signature: Susan Harris | Date: 11/2/93 |



HWMU 49
UNH TANKS (Digestion Area, 2 Locations)
Figure 49

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HWMU 49
UNH Tanks (Digestion Area, 2 Locations)
(Tanks D1-1,2,4,7,10 F1-1,25,26)

RCRA Storage Tank

| | | | |
|---|---|---|---|
| Inspector's Name: Stanley Bippus | | Date: 10/29/93 | Time: 09:00 |
| Facility Owner's Signature: Brenda S. Perkins CB | | Date: 10/29/93 | Time: 14:00 |

| Item No. | Item Description | Acceptable | Unacceptable | Observations/Corrective Actions To Be Completed | Date Action Completed |
|---|---|---|---|---|---|
| 1 | Signs: Danger-Authorized Personnel Only | ✓ | | | |
| 2 | No Smoking or Open Flame | ✓ | | | |
| 3 | Emergency Contact & Prior To Entry | ✓ | | | |
| 4 | Overfill/Spill Control Equipment | ✓ | | | |
| 5 | Corrosion Or Release Of Waste | ✓ | | | |
| 6 | Monitoring Equip. In Place (Content Level) | ✓ | | See Comments | |
| 7 | Surrounding Area And Unit Intergity | ✓ | | | |
| 8 | Secondary Containment Condition | ✓ | | | |
| 9 | Emergency & Spill Response Equipment | ✓ | | | |
| 10 | Manway Seal Unbroken | ✓ | | | |
| 11 | Boundary Markers (Chains, Rope, etc.) | ✓ | | | |

Comments: Material Hold Up: D1-1= 1350, D1-2= Empty, D1-4= Empty, D1-7= 3559, D1-10= 2587
F1-1= 2227, F1-25= 22538, F1-26= 1300.
-to No Monitoring Equip on Tanks - D1-1, D1-7, D1-10, F1-1

Distribution:
Facility Owner: Facility owner reviews, signs and distributes log to:
RCRA Field Implementation

| | |
|---|---|
| RCRA Field Implementation Signature: Susan Hakeem | Date: 11/4/93 |

HWMU 49
UNH TANKS (Digestion Area, 2 Locations)
Figure 49

5114

HWMU 49
UNH Tanks (Digestion Area, 2 Locations)
(Tanks D1-1,2,4,7,10 F1-1,25,26)

RCRA Storage Tank

| | | | |
|---|---|---|---|
| ector's Name: Darryl Ewing | | Date: 10-30-93 | Time: 1030 |
| ility Owner's Signature: Brenda S. Pukins BKL | | Date: 10/30/93 | Time: 1300 |

| | Item Description | Acceptable | Unacceptable | Observations/Corrective Actions To Be Completed | Date Action Completed |
|---|---|---|---|---|---|
| | Signs: Danger-Authorized Personnel Only | ✓ | | | ✓ |
| | No Smoking or Open Flame | ✓ | | | |
| | Emergency Contact & Prior To Entry | ✓ | | | |
| | Overfill/Spill Control Equipment | ✓ | | | |
| | Corrosion Or Release Of Waste | ✓ | | | |
| | Monitoring Equip. In Place (Content Level) | ✓ | | | |
| | Surrounding Area And Unit Intergity | ✓ | | | |
| | Secondary Containment Condition | ✓ | | | |
| | Emergency & Spill Response Equipment | ✓ | | | |
| ) | Manway Seal Unbroken | ✓ | | | |
| 1 | Boundary Markers (Chains, Rope, etc.) | ✓ | | | |

ents: Material Hold Up: D1-1= 1350, D1-2= Empty, D1-4= Empty, D1-7= 3559, D1-10= 2587
F1-1= 2227, F1-25= 2253B, F1-26= 1300.
F6 No monitoring equip on tank D1-1 D1-7 D1-10 F1-1

ibution:
Facility Owner: Facility owner reviews, signs and distributes log to:
RCRA Field Implementation

| | |
|---|---|
| RA Field Implementation Signature: Susan Hoskins | Date: 11/4/93 |

HWMU 49
UNH TANKS (Digestion Area, 2 Locations)
Figure 49

5114

HWMU 49
UNH Tanks (Digestion Area, 2 Locations)
(Tanks D1-1,2,4,7,10 F1-1,25,26)

RCRA Storage Tank

| | | | |
|---|---|---|---|
| ector's Name: James E. Stone | Date: 10/31/93 | Time: 12:00 | |
| lity Owner's Signature: Brenda E. Perkins REL | Date: 10/31/93 | Time: 1300 | |

| | Item Description | Acceptable | Unacceptable | Observations/Corrective Actions To Be Completed | Date Action Completed |
|---|---|---|---|---|---|
| | Signs: Danger-Authorized Personnel Only | ✓ | | | ✓ |
| | No Smoking or Open Flame | ✓ | | | |
| | Emergency Contact & Prior To Entry | ✓ | | | |
| | Overfill/Spill Control Equipment | ✓ | | | |
| | Corrosion Or Release Of Waste | ✓ | | | |
| | Monitoring Equip. In Place (Content Level) | ✓ | | | |
| | Surrounding Area And Unit Intergity | ✓ | | | |
| | Secondary Containment Condition | ✓ | | | |
| | Emergency & Spill Response Equipment | ✓ | | | |
| 0 | Manway Seal Unbroken | ✓ | | | |
| 1 | Boundary Markers (Chains, Rope, etc.) | ✓ | | | |

ents: Material Hold Up: D1-1= 1350, D1-2= Empty, D1-4= Empty, D1-7= 3559, D1-10= 2587
F1-1= 2227, F1-25= 22538, F1-26= 1300.
Eg. no monitoring equip on tank D1-1 D1-7 D1-10 F1-1 " " "

ibution:
Facility Owner: Facility owner reviews, signs and distributes log to:
RCRA Field Implementation

| | |
|---|---|
| RA Field Implementation Signature: Susan Hoskins | Date: 11/4/93 |

HWMU 49
UNH TANKS (Digestion Area, 2 Locations)
Figure 49

5114

RCRA Storage Tank

HWMU 50
UNH Tanks (Raffinate Bldg, 2 Locations)
(Tanks F1-301, 302, 303 & 308)

| | | | |
|---|---|---|---|
| Inspector's Name: [redacted] 1419 | | Date: 10-1-93 | Time: 1245 |
| Facility Owner's Signature: Rick Birchoff | | Date: 10/1/93 | Time: 14:15 |

| Item | Item Description | Acceptable | Unacceptable | Observations/Corrective Actions To Be Completed | Date Action Completed |
|---|---|---|---|---|---|
| 1 | Signs: Danger-Authorized Personnel Only | ✓ | | | |
| 2 | No Smoking or Open Flame | ✓ | | | |
| 3 | Emergency Contact & Prior To Entry | ✓ | | | |
| 4 | Overfill/Spill Control Equipment | ✓ | | | |
| 5 | Corrosion Or Release Of Waste | ✓ | | | |
| 6 | Monitoring Equip. In Place (Content Level) | ✓ | | | |
| 7 | Surrounding Area And Unit Intergity | ✓ | | | |
| 8 | Secondary Containment Condition | ✓ | | | |
| 9 | Emergency & Spill Response Equipment | ✓ | | | |
| 10 | Manway Seal Unbroken | ✓ | | | |
| 11 | Boundary Markers (Chains, Rope, etc.) | ✓ | | | |

Comments: Material Hold Up: F1-301= 2301, F1-302= 1530, F1-303= 1764, F1308= 2299.

Distributions
Facility Owner; Facility owner reviews, signs and distributes log to:
RCRA Field Implementation

| | |
|---|---|
| RCRA Field Implementation Signature: Susan Hoskin | Date: 10/15/93 |

HWMU 50
UNH TANKS (Raffinate Bldg, 2 Locations)
Figure 50

5114

HWMU 50
UNH Tanks (Raffinate Bldg, 2 Locations)
(Tanks F1-301, 302, 303 & 308)

RCRA Storage Tank

| | | | |
|---|---|---|---|
| ctor's Name: Stanley Bippers | | Date: 10/2/93 | Time: 12:40 |
| ity Owner's Signature: RW Buschoff RD | | Date: 10-2-93 | Time: 1515 |

| Item Description | Acceptable | Unacceptable | Observations/Corrective Actions To Be Completed | Date Action Completed |
|---|---|---|---|---|
| Signs: Danger-Authorized Personnel Only | ✓ | | | |
| No Smoking or Open Flame | ✓ | | | |
| Emergency Contact & Prior To Entry | ✓ | | | |
| Overfill/Spill Control Equipment | ✓ | | | |
| Corrosion Or Release Of Waste | ✓ | | | |
| Monitoring Equip. In Place (Content Level) | ✓ | | | |
| Surrounding Area And Unit Intergity | ✓ | | | |
| Secondary Containment Condition | ✓ | | | |
| Emergency & Spill Response Equipment | ✓ | | | |
| Manway Seal Unbroken | ✓ | | | |
| Boundary Markers (Chains, Rope, etc.) | ✓ | | | |

ts: Material Hold Up: F1-301= 2301, F1-302= 1530, F1-303= 1764, F1308= 2299.

rtions
Facility Owner: Facility owner reviews, signs and distributes log to:
RCRA Field Implementation

| | |
|---|---|
| Field Implementation Signature: Susan Hoskins | Date: 10/15/93 |

HWMU 50
UNH TANKS (Raffinate Bldg, 2 Locations)
Figure 50

5114

RCRA Storage Tank

HWMU 50
UNH Tanks (Raffinate Bldg, 2 Locations)
(Tanks F1-301, 302, 303 & 308)

| Inspector's Name: [redacted] 1414 | Date: 10-3-93 | Time: 1500 |
|---|---|---|
| Facility Owner's Signature: R.W. Bischoff | Date: 10/3/93 | Time: 14:30 |

| Item No. | Item Description | Acceptable | Unacceptable | Observations/Corrective Actions To Be Completed | Date Action Completed |
|---|---|---|---|---|---|
| 1 | Signs: Danger-Authorized Personnel Only | ✓ | | | |
| 2 | No Smoking or Open Flame | ✓ | | | |
| 3 | Emergency Contact & Prior To Entry | ✓ | | | |
| 4 | Overfill/Spill Control Equipment | ✓ | | | |
| 5 | Corrosion Or Release Of Waste | ✓ | | | |
| 6 | Monitoring Equip. In Place (Content Level) | ✓ | | | |
| 7 | Surrounding Area And Unit Intergity | ✓ | | | |
| 8 | Secondary Containment Condition | ✓ | | | |
| 9 | Emergency & Spill Response Equipment | ✓ | | | |
| 10 | Manway Seal Unbroken | ✓ | | | |
| 11 | Boundary Markers (Chains, Rope, etc.) | ✓ | | | |

Comments: Material Hold Up: F1-301= 2301, F1-302= 1530, F1-303= 1764, F1308= 2299.

Distributions
Facility Owner: Facility owner reviews, signs and distributes log to:
RCRA Field Implementation

| RCRA Field Implementation Signature: Susan Hoskins | Date: 10/15/93 |
|---|---|

HWMU 50
UNH TANKS (Raffinate Bldg, 2 Locations)
Figure 50

5114

RCRA Storage Tank

HWMU 50
UNH Tanks (Raffinate Bldg, 2 Locations)
(Tanks F1-301, 302, 303 & 308)

| | | |
|---|---|---|
| ector's Name: Stanley Bippus | Date: 10/4/93 | Time: 13:30 |
| lity Owner's Signature: [illegible] CB | Date: 10/4/93 | Time: 14:15 |

| Item Description | Acceptable | Unacceptable | Observations/Corrective Actions To Be Completed | Date Actio: Completed |
|---|---|---|---|---|
| Signs: Danger-Authorized Personnel Only | ✓ | | | |
| No Smoking or Open Flame | ✓ | | | |
| Emergency Contact & Prior To Entry | ✓ | | | |
| Overfill/Spill Control Equipment | ✓ | | | |
| Corrosion Or Release Of Waste | ✓ | | | |
| Monitoring Equip. In Place (Content Level) | ✓ | | | |
| Surrounding Area And Unit Intergity | ✓ | | | |
| Secondary Containment Condition | ✓ | | | |
| Emergency & Spill Response Equipment | ✓ | | | |
| Manway Seal Unbroken | ✓ | | | |
| Boundary Markers (Chains, Rope, etc.) | ✓ | | | |

:nts: Material Hold Up: F1-301= 2301, F1-302= 1530, F1-303= 1764, F1308= 2299.

:utions
Facility Owner: Facility owner reviews, signs and distributes log to: RCRA Field Implementation

| | |
|---|---|
| A Field Implementation Signature: Susan Hoskin | Date: 10/15/93 |

HWMU 50
UNH TANKS (Raffinate Bldg, 2 Locations)
Figure 50

5114

RCRA Storage Tank

HWMU 50
UNH Tanks (Raffinate Bldg, 2 Locations)
(Tanks F1-301, 302, 303 & 308)

| | | |
|---|---|---|
| Inspector's Name: Stanley Bippens | Date: 10/5/93 | Time: 12:30 |
| Facility Owner's Signature: R W B Inchoff | Date: 10/5/93 | Time: 15:00 |

| Item No. | Item Description | Acceptable | Unacceptable | Observations/Corrective Actions To Be Completed | Date Action Completed |
|---|---|---|---|---|---|
| 1 | Signs: Danger-Authorized Personnel Only | ✓ | | | |
| 2 | No Smoking or Open Flame | ✓ | | | |
| 3 | Emergency Contact & Prior To Entry | ✓ | | | |
| 4 | Overfill/Spill Control Equipment | ✓ | | | |
| 5 | Corrosion Or Release Of Waste | ✓ | | | |
| 6 | Monitoring Equip. In Place (Content Level) | ✓ | | | |
| 7 | Surrounding Area And Unit Intergity | ✓ | | | |
| 8 | Secondary Containment Condition | ✓ | | | |
| 9 | Emergency & Spill Response Equipment | ✓ | | | |
| 10 | Manway Seal Unbroken | ✓ | | | |
| 11 | Boundary Markers (Chains, Rope, etc.) | ✓ | | | |

Comments: Material Hold Up: F1-301= 2301, F1-302= 1530, F1-303= 1764, F1308= 2299.

Distribution:
Facility Owner: Facility owner reviews, signs and distributes log to:
RCRA Field Implementation

| | |
|---|---|
| RCRA Field Implementation Signature: Susan Hoskin | Date: 10/15/93 |

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HWMU 50
UNH TANKS (Raffinate Bldg, 2 Locations)
Figure 50

5114

HWMU 50
UNH Tanks (Raffinate Bldg, 2 Locations)
(Tanks F1-301, 302, 303 & 308)

RCRA Storage Tank

pector's Name: Stanley Bippus | Date: 10/6/93 | Time: 12:15

ility Owner's Signature: [illegible] | Date: 10/6/93 | Time: 14:15

| m | Item Description | Acceptable | Unacceptable | Observations/Corrective Actions To Be Completed | Date Actio Completed |
|---|---|---|---|---|---|
| | Signs: Danger-Authorized Personnel Only | ✓ | | | |
| | No Smoking or Open Flame | ✓ | | | |
| | Emergency Contact & Prior To Entry | ✓ | | | |
| | Overfill/Spill Control Equipment | ✓ | | | |
| | Corrosion Or Release Of Waste | ✓ | | | |
| | Monitoring Equip. In Place (Content Level) | ✓ | | | |
| | Surrounding Area And Unit Intergity | ✓ | | | |
| | Secondary Containment Condition | ✓ | | | |
| | Emergency & Spill Response Equipment | ✓ | | | |
| 0 | Manway Seal Unbroken | ✓ | | | |
| 1 | Boundary Markers (Chains, Rope, etc.) | ✓ | | | |

ents: Material Hold Up: F1-301= 2301, F1-302= 1530, F1-303= 1764, F1308= 2299.

ibution:
Facility Owner: Facility owner reviews, signs and distributes log to:
RCRA Field Implementation

RA Field Implementation Signature: Susan Haskin | Date: 10/15/93

HWMU 50
UNH TANKS (Raffinate Bldg, 2 Locations)
Figure 50

5114

RCRA Storage Tank

HWMU 50
UNH Tanks (Raffinate Bldg, 2 Locations)
(Tanks F1-301, 302, 303 & 308)

| | | |
|---|---|---|
| pector's Name: Stanley Bippus | Date: 10/7/93 | Time: 09:30 |
| ility Owner's Signature: Rev Bischoff | Date: 10/7/93 | Time: 14:30 |

| m | Item Description | Acceptable | Unacceptable | Observations/Corrective Actions To Be Completed | Date Actio Completed |
|---|---|---|---|---|---|
| | Signs: Danger-Authorized Personnel Only | ✓ | | | |
| | No Smoking or Open Flame | ✓ | | | |
| | Emergency Contact & Prior To Entry | ✓ | | | |
| | Overfill/Spill Control Equipment | ✓ | | | |
| | Corrosion Or Release Of Waste | ✓ | | | |
| | Monitoring Equip. In Place (Content Level) | ✓ | | | |
| | Surrounding Area And Unit Intergity | ✓ | | | |
| | Secondary Containment Condition | ✓ | | | |
| | Emergency & Spill Response Equipment | ✓ | | | |
| ) | Manway Seal Unbroken | ✓ | | | |
| | Boundary Markers (Chains, Rope, etc.) | ✓ | | | |

ents: Material Hold Up: F1-301= 2301, F1-302= 1530, F1-303= 1764, F1308= 2299.

butions:
Facility Owner: Facility owner reviews, signs and distributes log to:
RCRA Field Implementation

| | |
|---|---|
| A Field Implementation Signature: Susan Hoskins | Date: 10/15/93 |

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HWMU 50
UNH Tanks (Raffinate Bldg, 2 Locations)
(Tanks F1-301, 302, 303 & 308)

RCRA Storage Tank

| | | | |
|---|---|---|---|
| pector's Name: Stanley Bippus | | Date: 10/8/93 | Time: 12:00 |
| ility Owner's Signature: E W Bischoff | | Date: 10/8/93 | Time: 14:00 |

| n | Item Description | Acceptable | Unacceptable | Observations/Corrective Actions To Be Completed | Date Action Completed |
|---|---|---|---|---|---|
| | Signs: Danger-Authorized Personnel Only | ✓ | | | |
| | No Smoking or Open Flame | ✓ | | | |
| | Emergency Contact & Prior To Entry | ✓ | | | |
| | Overfill/Spill Control Equipment | ✓ | | | |
| | Corrosion Or Release Of Waste | ✓ | | | |
| | Monitoring Equip. In Place (Content Level) | ✓ | | | |
| | Surrounding Area And Unit Intergity | ✓ | | | |
| | Secondary Containment Condition | ✓ | | | |
| | Emergency & Spill Response Equipment | ✓ | | | |
| J | Manway Seal Unbroken | ✓ | | | |
| 1 | Boundary Markers (Chains, Rope, etc.) | ✓ | | | |

ents: Material Hold Up: F1-301= 2301, F1-302= 1530, F1-303= 1764, F1308= 2299.

ibutions
Facility Owner: Facility owner reviews, signs and distributes log to:
RCRA Field Implementation

| | |
|---|---|
| RA Field Implementation Signature: Susan Hoskin | Date: 10/15/93 |

HWMU 50
UNH TANKS (Raffinate Bldg, 2 Locations)
Figure 50

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HWMU 50
UNH Tanks (Raffinate Bldg, 2 Locations)
(Tanks F1-301, 302, 303 & 308)

RCRA Storage Tank

| | | |
|---|---|---|
| Inspector's Name: William Denson | Date: 10-4-93 | Time: 1340 |
| Facility Owner's Signature: W Bischoff | Date: 10/9/93 | Time: 1415 |

| Item | Item Description | Acceptable | Unacceptable | Observations/Corrective Actions To Be Completed | Date Action Completed |
|---|---|---|---|---|---|
| | Signs: Danger-Authorized Personnel Only | ✓ | | | |
| | No Smoking or Open Flame | ✓ | | | |
| | Emergency Contact & Prior To Entry | ✓ | | | |
| | Overfill/Spill Control Equipment | ✓ | | | |
| | Corrosion Or Release Of Waste | ✓ | | | |
| | Monitoring Equip. In Place (Content Level) | ✓ | | | |
| | Surrounding Area And Unit Intergity | ✓ | | | |
| 8 | Secondary Containment Condition | ✓ | | | |
| 9 | Emergency & Spill Response Equipment | ✓ | | | |
| 0 | Manway Seal Unbroken | ✓ | | | |
| 1 | Boundary Markers (Chains, Rope, etc.) | ✓ | | | |

Comments: Material Hold Up: F1-301= 2301, F1-302= 1530, F1-303= 1764, F1308= 2299.

Distributions:
Facility Owner: Facility owner reviews, signs and distributes log to:
RCRA Field Implementation

| | |
|---|---|
| RCRA Field Implementation Signature: Susan Hoskin | Date: 10/15/93 |

HWMU 50
UNH TANKS (Raffinate Bldg, 2 Locations)
Figure 50

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RCRA Storage Tank

HWMU 50
UNH Tanks (Raffinate Bldg, 2 Locations)
(Tanks F1-301, 302, 303 & 308)

| | | | |
|---|---|---|---|
| pector's Name: John Sutton | Date: 10/10/93 | Time: 1415 | |
| ility Owner's Signature: Ron Bischoff | Date: 10/10/93 | Time: 14:15 | |

| m | Item Description | Acceptable | Unacceptable | Observations/Corrective Actions To Be Completed | Date Actio: Completed |
|---|---|---|---|---|---|
| | Signs: Danger-Authorized Personnel Only | ✓ | | | |
| | No Smoking or Open Flame | ✓ | | | |
| | Emergency Contact & Prior To Entry | ✓ | | | |
| | Overfill/Spill Control Equipment | ✓ | | | |
| | Corrosion Or Release Of Waste | ✓ | | | |
| | Monitoring Equip. In Place (Content Level) | | | | |
| | Surrounding Area And Unit Intergity | ✓ | | | |
| ) | Secondary Containment Condition | ✓ | | | |
| ) | Emergency & Spill Response Equipment | ✓ | | | |
| 0 | Manway Seal Unbroken | ✓ | | | |
| 1 | Boundary Markers (Chains, Rope, etc.) | ✓ | | | |

ents: Material Hold Up: F1-301= 2301, F1-302= 1530, F1-303= 1764, F1308= 2299.

ibution:
Facility Owner: Facility owner reviews, signs and distributes log to:
RCRA Field Implementation

| | |
|---|---|
| RA Field Implementation Signature: Susan Hoskin | Date: 10/15/93 |

HWMU 50
UNH TANKS (Raffinate Bldg, 2 Locations)
Figure 50

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RCRA Storage Tank

HWMU 50
UNH Tanks (Raffinate Bldg, 2 Locations)
(Tanks F1-301, 302, 303 & 308)

| | | | |
|---|---|---|---|
| Inspector's Name: [redacted] 1019 | Date: 10-11-93 | Time: 1400 |
| Facility Owner's Signature: KW Buschoff | Date: 10/11/93 | Time: 14:15 |

| Item No. | Item Description | Acceptable | Unacceptable | Observations/Corrective Actions To Be Completed | Date Action Completed |
|---|---|---|---|---|---|
| 1 | Signs: Danger-Authorized Personnel Only | ✓ | | | |
| 2 | No Smoking or Open Flame | ✓ | | | |
| 3 | Emergency Contact & Prior To Entry | ✓ | | | |
| 4 | Overfill/Spill Control Equipment | ✓ | | | |
| 5 | Corrosion Or Release Of Waste | ✓ | | | |
| 6 | Monitoring Equip. In Place (Content Level) | ✓ | | | |
| 7 | Surrounding Area And Unit Intergity | ✓ | | | |
| 8 | Secondary Containment Condition | ✓ | | | |
| 9 | Emergency & Spill Response Equipment | ✓ | | | |
| 10 | Manway Seal Unbroken | ✓ | | | |
| 11 | Boundary Markers (Chains, Rope, etc.) | ✓ | | | |

Comments: Material Hold Up: F1-301= 2301, F1-302= 1530, F1-303= 1764, F1308= 2299.

Distribution:
Facility Owner; Facility owner reviews, signs and distributes log to:
RCRA Field Implementation

| | |
|---|---|
| RCRA Field Implementation Signature: Susan Hoskins | Date: 10/15/93 |

HWMU 50
UNH TANKS (Raffinate Bldg, 2 Locations)
Figure 50

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RCRA Storage Tank

HWMU 50
UNH Tanks (Raffinate Bldg, 2 Locations)
(Tanks F1-301, 302, 303 & 308)

| | | | |
|---|---|---|---|
| Inspector's Name: Stanley Bippus | | Date: 10/12/93 | Time: 12:30 |
| Facility Owner's Signature: Fred Bischoff | | Date: 10/12/93 | Time: 14:30 |

| Item No. | Item Description | Acceptable | Unacceptable | Observations/Corrective Actions To Be Completed | Date Action Completed |
|---|---|---|---|---|---|
| 1 | Signs: Danger-Authorized Personnel Only | ✓ | | | |
| 2 | No Smoking or Open Flame | ✓ | | | |
| 3 | Emergency Contact & Prior To Entry | ✓ | | | |
| 4 | Overfill/Spill Control Equipment | ✓ | | | |
| 5 | Corrosion Or Release Of Waste | ✓ | | | |
| 6 | Monitoring Equip. In Place (Content Level) | ✓ | | | |
| 7 | Surrounding Area And Unit Intergity | ✓ | | | |
| 8 | Secondary Containment Condition | ✓ | | | |
| 9 | Emergency & Spill Response Equipment | ✓ | | | |
| 10 | Manway Seal Unbroken | ✓ | | | |
| 11 | Boundary Markers (Chains, Rope, etc.) | ✓ | | | |

Comments: Material Hold Up: F1-301= 2301, F1-302= 1530, F1-303= 1764, F1308= 2299.

Distributions
Facility Owner; Facility owner reviews, signs and distributes log to:
RCRA Field Implementation

| | |
|---|---|
| RCRA Field Implementation Signature: Susan Hoskin | Date: 10/15/93 |

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RCRA Storage Tank

HWMU 50
UNH Tanks (Raffinate Bldg, 2 Locations)
(Tanks F1-301, 302, 303 & 308)

| | | | |
|---|---|---|---|
| Inspector's Name: [redacted] 1419 | | Date: 10-13-93 | Time: 1230 |
| Facility Owner's Signature: RW Bischoff | | Date: 10/13/93 | Time: 14:00 |

| Item No. | Item Description | Acceptable | Unacceptable | Observations/Corrective Actions To Be Completed | Date Action Completed |
|---|---|---|---|---|---|
| 1 | Signs: Danger-Authorized Personnel Only | X | | | |
| 2 | No Smoking or Open Flame | X | | | |
| 3 | Emergency Contact & Prior To Entry | X | | | |
| 4 | Overfill/Spill Control Equipment | X | | | |
| 5 | Corrosion Or Release Of Waste | X | | | |
| 6 | Monitoring Equip. In Place (Content Level) | X | | | |
| 7 | Surrounding Area And Unit Intergity | X | | | |
| 8 | Secondary Containment Condition | X | | | |
| 9 | Emergency & Spill Response Equipment | X | | | |
| 10 | Manway Seal Unbroken | X | | | |
| 11 | Boundary Markers (Chains, Rope, etc.) | X | | | |

Comments: Material Hold Up: F1-301= 2301, F1-302= 1530, F1-303= 1764, F1308= 2299.

Distributions:
Facility Owner; Facility owner reviews, signs and distributes log to:
RCRA Field Implementation

| | |
|---|---|
| RCRA Field Implementation Signature: Susan Hoskins | Date: 10/15/93 |

HWMU 50
UNH TANKS (Raffinate Bldg, 2 Locations)
Figure 50

5114

HWMU 50
UNH Tanks (Raffinate Bldg, 2 Locations)
(Tanks F1-301, 302, 303 & 308)

RCRA Storage Tank

| | | | |
|---|---|---|---|
| Inspector's Name: Stanley Bippus | | Date: 10/14/93 | Time: 10:00 |
| Facility Owner's Signature: Ken Bischoff | | Date: 10/14/93 | Time: 14:15 |

| Item No. | Item Description | Acceptable | Unacceptable | Observations/Corrective Actions To Be Completed | Date Action Completed |
|---|---|---|---|---|---|
| 1 | Signs: Danger-Authorized Personnel Only | ✓ | | | |
| 2 | No Smoking or Open Flame | ✓ | | | |
| 3 | Emergency Contact & Prior To Entry | ✓ | | | |
| 4 | Overfill/Spill Control Equipment | ✓ | | | |
| 5 | Corrosion Or Release Of Waste | ✓ | | | |
| 6 | Monitoring Equip. In Place (Content Level) | ✓ | | | |
| 7 | Surrounding Area And Unit Intergity | ✓ | | | |
| 8 | Secondary Containment Condition | ✓ | | | |
| 9 | Emergency & Spill Response Equipment | ✓ | | | |
| 10 | Manway Seal Unbroken | ✓ | | | |
| 11 | Boundary Markers (Chains, Rope, etc.) | ✓ | | | |

Comments: Material Hold Up: F1-301= 2301, F1-302= 1530, F1-303= 1764, F1308= 2299.

Distribution:
Facility Owner; Facility owner reviews, signs and distributes log to:
RCRA Field Implementation

| | |
|---|---|
| RCRA Field Implementation Signature: [illegible] | Date: [illegible] |

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HWMU 50
UNH TANKS (Raffinate Bldg, 2 Locations)
Figure 50

5114

RCRA Storage Tank

HWMU 50
UNH Tanks (Raffinate Bldg, 2 Locations)
(Tanks F1-301, 302, 303 & 308)

| | | | |
|---|---|---|---|
| Inspector's Name: Stanley Bippus | | Date: 10/15/93 | Time: 09:45 |
| Facility Owner's Signature: [illegible] | | Date: 10/15/93 | Time: 14:15 |

| Item No. | Item Description | Acceptable | Unacceptable | Observations/Corrective Actions To Be Completed | Date Action Completed |
|---|---|---|---|---|---|
| 1 | Signs: Danger-Authorized Personnel Only | ✓ | | | |
| 2 | No Smoking or Open Flame | ✓ | | | |
| 3 | Emergency Contact & Prior To Entry | ✓ | | | |
| 4 | Overfill/Spill Control Equipment | ✓ | | | |
| 5 | Corrosion Or Release Of Waste | ✓ | | | |
| 6 | Monitoring Equip. In Place (Content Level) | ✓ | | | |
| 7 | Surrounding Area And Unit Intergity | ✓ | | | |
| 8 | Secondary Containment Condition | ✓ | | | |
| 9 | Emergency & Spill Response Equipment | ✓ | | | |
| 10 | Manway Seal Unbroken | ✓ | | | |
| 11 | Boundary Markers (Chains, Rope, etc.) | ✓ | | | |

Comments: Material Hold Up: F1-301= 2301, F1-302= 1530, F1-303= 1764, F1308= 2299.

Distribution:
Facility Owner; Facility owner reviews, signs and distributes log to:
RCRA Field Implementation

| | |
|---|---|
| RCRA Field Implementation Signature: [illegible] | Date: 10/15/93 |

HWMU 50
UNH TANKS (Raffinate Bldg, 2 Locations)
Figure 50

HWMU 50
UNH Tanks (Raffinate Bldg, 2 Locations)
(Tanks F1-301, 302, 303 & 308)

RCRA Storage Tank

| | | | |
|---|---|---|---|
| Inspector's Name: Stanley Bippus | | Date: 10/16/93 | Time: 12:00 |
| Facility Owner's Signature: Brenda S. Perkins | | Date: 10/18/93 | Time: 14:00 |

| Item No. | Item Description | Acceptable | Unacceptable | Observations/Corrective Actions To Be Completed | Date Action Completed |
|---|---|---|---|---|---|
| 1 | Signs: Danger-Authorized Personnel Only | ✓ | | | |
| 2 | No Smoking or Open Flame | ✓ | | | |
| 3 | Emergency Contact & Prior To Entry | ✓ | | | |
| 4 | Overfill/Spill Control Equipment | ✓ | | | |
| 5 | Corrosion Or Release Of Waste | ✓ | | | |
| 6 | Monitoring Equip. In Place (Content Level) | ✓ | | | |
| 7 | Surrounding Area And Unit Intergity | ✓ | | | |
| 8 | Secondary Containment Condition | ✓ | | | |
| 9 | Emergency & Spill Response Equipment | ✓ | | | |
| 10 | Manway Seal Unbroken | ✓ | | | |
| 11 | Boundary Markers (Chains, Rope, etc.) | ✓ | | | |

Comments: Material Hold Up: F1-301= 2301, F1-302= 1530, F1-303= 1764, F1308= 2299.

Distribution:
Facility Owner; Facility owner reviews, signs and distributes log to:
RCRA Field Implementation

| | |
|---|---|
| RCRA Field Implementation Signature: [illegible] | Date: [illegible] |

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RCRA Storage Tank

HWMU 50
UNH Tanks (Raffinate Bldg, 2 Locations)
(Tanks F1-301, 302, 303 & 308)

| | | | |
|---|---|---|---|
| pector's Name: Jeffrey W. Hayes | Date: 10-18-93 | Time: 08:30 |
| ility Owner's Signature: Brenda S. Perkins | Date: 10/18/93 | Time: 14:15 |

| m | Item Description | Acceptable | Unacceptable | Observations/Corrective Actions To Be Completed | Date Actio Completed |
|---|---|---|---|---|---|
| | Signs: Danger-Authorized Personnel Only | ✓ | | | |
| | No Smoking or Open Flame | ✓ | | | |
| | Emergency Contact & Prior To Entry | ✓ | | | |
| | Overfill/Spill Control Equipment | ✓ | | | |
| | Corrosion Or Release Of Waste | ✓ | | | |
| | Monitoring Equip. In Place (Content Level) | ✓ | | | |
| | Surrounding Area And Unit Intergity | ✓ | | | |
| 3 | Secondary Containment Condition | ✓ | | See Comments | |
| 9 | Emergency & Spill Response Equipment | ✓ | | | |
| 0 | Manway Seal Unbroken | ✓ | | | |
| 1 | Boundary Markers (Chains, Rope, etc.) | ✓ | | | |

ents: Material Hold Up: F1-301= 2301, F1-302= 1530, F1-303= 1764, F1308= 2299. Signs in area are full cannot prop them to sh problems.

ibutions
Facility Owner: Facility owner reviews, signs and distributes log to:
RCRA Field Implementation

| | |
|---|---|
| RA Field Implementation Signature: Susan Hudson | Date: 10-26-93 |

HWMU 50
UNH TANKS (Raffinate Bldg, 2 Locations)
Figure 50

HWMU 50
UNH Tanks (Raffinate Bldg, 2 Locations)
(Tanks F1-301, 302, 303 & 308)

RCRA Storage Tank

| | | | |
|---|---|---|---|
| nspector's Name: Stanley Bippus | | Date: 10/18/93 | Time: 10:45 |
| acility Owner's Signature: R W Bischoff | | Date: 10/18/93 | Time: 14:00 |

| tem o. | Item Description | Accept-able | Unaccept-able | Observations/Corrective Actions To Be Completed | Date Actio: Completed |
|---|---|---|---|---|---|
| 1 | Signs: Danger-Authorized Personnel Only | ✓ | | | |
| 2 | No Smoking or Open Flame | ✓ | | | |
| 3 | Emergency Contact & Prior To Entry | ✓ | | | |
| 4 | Overfill/Spill Control Equipment | ✓ | | | |
| 5 | Corrosion Or Release Of Waste | ✓ | | | |
| 6 | Monitoring Equip. In Place (Content Level) | ✓ | | | |
| 7 | Surrounding Area And Unit Intergity | ✓ | | | |
| 8 | Secondary Containment Condition | ✓ | | | |
| 9 | Emergency & Spill Response Equipment | ✓ | | | |
| 10 | Manway Seal Unbroken | ✓ | | | |
| 11 | Boundary Markers (Chains, Rope, etc.) | ✓ | | | |

omments: Material Hold Up: F1-301= 2301, F1-302= 1530, F1-303= 1764, F1308= 2299.

istribution:
Facility Owner: Facility owner reviews, signs and distributes log to:
RCRA Field Implementation

| | |
|---|---|
| RCRA Field Implementation Signature: [illegible] | Date: 10/20/93 |

HWMU 50
UNH TANKS (Raffinate Bldg, 2 Locations)
Figure 50

HWMU 50
UNH Tanks (Raffinate Bldg, 2 Locations)
(Tanks F1-301, 302, 303 & 308)

RCRA Storage Tank

| | | | |
|---|---|---|---|
| Inspector's Name: Stanley Bippes | | Date: 10/19/93 | Time: 13:00 |
| Facility Owner's Signature: Brenda S. Perkins | | Date: 10/19/93 | Time: 14:45 |

| Item No. | Item Description | Acceptable | Unacceptable | Observations/Corrective Actions To Be Completed | Date Action Completed |
|---|---|---|---|---|---|
| 1 | Signs: Danger-Authorized Personnel Only | ✓ | | | |
| 2 | No Smoking or Open Flame | ✓ | | | |
| 3 | Emergency Contact & Prior To Entry | ✓ | | | |
| 4 | Overfill/Spill Control Equipment | ✓ | | | |
| 5 | Corrosion Or Release Of Waste | ✓ | | | |
| 6 | Monitoring Equip. In Place (Content Level) | ✓ | | | |
| 7 | Surrounding Area And Unit Intergity | ✓ | | | |
| 8 | Secondary Containment Condition | ✓ | | | |
| 9 | Emergency & Spill Response Equipment | ✓ | | | |
| 10 | Manway Seal Unbroken | ✓ | | | |
| 11 | Boundary Markers (Chains, Rope, etc.) | ✓ | | | |

Comments: Material Hold Up: F1-301= 2301, F1-302= 1530, F1-303= 1764, F1308= 2299.

Distribution:
Facility Owner; Facility owner reviews, signs and distributes log to:
RCRA Field Implementation

| | |
|---|---|
| RCRA Field Implementation Signature: [illegible] | Date: 10-20-93 |



HWMU 50
UNH TANKS (Raffinate Bldg, 2 Locations)
Figure 50

HWMU 50
UNH Tanks (Raffinate Bldg, 2 Locations)
(Tanks F1-301, 302, 303 & 308)

RCRA Storage Tank

| | | | |
|---|---|---|---|
| Inspector's Name: Stanley Bippers | | Date: 10/20/93 | Time: 13:00 |
| Facility Owner's Signature: Brenda S. Perkins | | Date: 10/20/93 | Time: 14:00 |

| Item No. | Item Description | Acceptable | Unacceptable | Observations/Corrective Actions To Be Completed | Date Action Completed |
|---|---|---|---|---|---|
| 1 | Signs: Danger-Authorized Personnel Only | ✓ | | | |
| 2 | No Smoking or Open Flame | ✓ | | | |
| 3 | Emergency Contact & Prior To Entry | ✓ | | | |
| 4 | Overfill/Spill Control Equipment | ✓ | | | |
| 5 | Corrosion Or Release Of Waste | ✓ | | | |
| 6 | Monitoring Equip. In Place (Content Level) | ✓ | | | |
| 7 | Surrounding Area And Unit Intergity | ✓ | | | |
| 8 | Secondary Containment Condition | ✓ | | | |
| 9 | Emergency & Spill Response Equipment | ✓ | | | |
| 10 | Manway Seal Unbroken | ✓ | | | |
| 11 | Boundary Markers (Chains, Rope, etc.) | ✓ | | | |

Comments: Material Hold Up: F1-301= 2301, F1-302= 1530, F1-303= 1764, F1308= 2299.

Distribution:
Facility Owner; Facility owner reviews, signs and distributes log to:
RCRA Field Implementation

| | |
|---|---|
| RCRA Field Implementation Signature: Susan Nelson | Date: 10-20-93 |

HWMU 50
UNH Tanks (Raffinate Bldg, 2 Locations)
(Tanks F1-301, 302, 303 & 308)

RCRA Storage Tank

| | | | |
|---|---|---|---|
| Inspector's Name: Stanley Bippus | | Date: 10/21/93 | Time: 08:00 |
| Facility Owner's Signature: Brenda S. Perkins | | Date: 10/21/93 | Time: 14:30 |

| Item No. | Item Description | Acceptable | Unacceptable | Observations/Corrective Actions To Be Completed | Date Action Completed |
|---|---|---|---|---|---|
| 1 | Signs: Danger-Authorized Personnel Only | ✓ | | | |
| 2 | No Smoking or Open Flame | ✓ | | | |
| 3 | Emergency Contact & Prior To Entry | ✓ | | | |
| 4 | Overfill/Spill Control Equipment | ✓ | | | |
| 5 | Corrosion Or Release Of Waste | ✓ | | | |
| 6 | Monitoring Equip. In Place (Content Level) | ✓ | | | |
| 7 | Surrounding Area And Unit Intergity | ✓ | | | |
| 8 | Secondary Containment Condition | ✓ | | | |
| 9 | Emergency & Spill Response Equipment | ✓ | | | |
| 10 | Manway Seal Unbroken | ✓ | | | |
| 11 | Boundary Markers (Chains, Rope, etc.) | ✓ | | | |

Comments: Material Hold Up: F1-301= 2301, F1-302= 1530, F1-303= 1764, F1308= 2299.

Distribution:
Facility Owner; Facility owner reviews, signs and distributes log to:
RCRA Field Implementation

| | |
|---|---|
| RCRA Field Implementation Signature: [illegible] | Date: [illegible] |

HWMU 50
UNH Tanks (Raffinate Bldg, 2 Locations)
(Tanks F1-301, 302, 303 & 308)

RCRA Storage Tank

| | | | |
|---|---|---|---|
| Inspector's Name: Stanley Bippus | | Date: 10/22/93 | Time: 08:00 |
| Facility Owner's Signature: Brenda S. Perkins | | Date: 10/22/93 | Time: 14:30 |

| Item No. | Item Description | Acceptable | Unacceptable | Observations/Corrective Actions To Be Completed | Date Action Completed |
|---|---|---|---|---|---|
| 1 | Signs: Danger-Authorized Personnel Only | ✓ | | | |
| 2 | No Smoking or Open Flame | ✓ | | | |
| 3 | Emergency Contact & Prior To Entry | ✓ | | | |
| 4 | Overfill/Spill Control Equipment | ✓ | | | |
| 5 | Corrosion Or Release Of Waste | ✓ | | | |
| 6 | Monitoring Equip. In Place (Content Level) | ✓ | | | |
| 7 | Surrounding Area And Unit Intergity | ✓ | | | |
| 8 | Secondary Containment Condition | ✓ | | | |
| 9 | Emergency & Spill Response Equipment | ✓ | | | |
| 10 | Manway Seal Unbroken | ✓ | | | |
| 11 | Boundary Markers (Chains, Rope, etc.) | ✓ | | | |

Comments: Material Hold Up: F1-301= 2301, F1-302= 1530, F1-303= 1764, F1308= 2299.

Distribution:
Facility Owner; Facility owner reviews, signs and distributes log to:
RCRA Field Implementation

| | |
|---|---|
| RCRA Field Implementation Signature: | Date: |



HWMU 50
UNH TANKS (Raffinate Bldg, 2 Locations)
Figure 50

HWMU 50
UNH Tanks (Raffinate Bldg, 2 Locations)
(Tanks F1-301, 302, 303 & 308)

RCRA Storage Tank

| | | | |
|---|---|---|---|
| pector's Name: Amy Evans | | Date: 10/23/93 | Time: 11 45 |
| ility Owner's Signature: Brenda S. Perkins BJB | | Date: 10/23/93 | Time: 1500 |

| m | Item Description | Acceptable | Unacceptable | Observations/Corrective Actions To Be Completed | Date Actio Completed |
|---|---|---|---|---|---|
| | Signs: Danger-Authorized Personnel Only | ✓ | | | |
| | No Smoking or Open Flame | ✓ | | | |
| | Emergency Contact & Prior To Entry | ✓ | | | |
| | Overfill/Spill Control Equipment | ✓ | | | |
| | Corrosion Or Release Of Waste | ✓ | | | |
| | Monitoring Equip. In Place (Content Level) | ✓ | | | |
| | Surrounding Area And Unit Intergity | ✓ | | | |
| | Secondary Containment Condition | ✓ | | | |
| | Emergency & Spill Response Equipment | ✓ | | | |
| 0 | Manway Seal Unbroken | ✓ | | | |
| 1 | Boundary Markers (Chains, Rope, etc.) | ✓ | | | |

ents: Material Hold Up: F1-301= 2301, F1-302= 1530, F1-303= 1764, F1308= 2299.

ibution:
Facility Owner: Facility owner reviews, signs and distributes log to:
RCRA Field Implementation

| | |
|---|---|
| RA Field Implementation Signature: | Date: |

HWMU 50
UNH Tanks (Raffinate Bldg, 2 Locations)
(Tanks F1-301, 302, 303 & 308)

RCRA Storage Tank

| | | | |
|---|---|---|---|
| ector's Name: [redacted] 1419 | Date: 10-26-93 | Time: 1400 |
| lity Owner's Signature: Brenda S. Perkins CB | Date: 10/24/93 | Time: 1400 |

| | Item Description | Acceptable | Unacceptable | Observations/Corrective Actions To Be Completed | Date Actio: Completed |
|---|---|---|---|---|---|
| | Signs: Danger-Authorized Personnel Only | ✓ | | | |
| | No Smoking or Open Flame | ✓ | | | |
| | Emergency Contact & Prior To Entry | ✓ | | | |
| | Overfill/Spill Control Equipment | ✓ | | | |
| | Corrosion Or Release Of Waste | ✓ | | | |
| | Monitoring Equip. In Place (Content Level) | ✓ | | | |
| | Surrounding Area And Unit Intergity | ✓ | | | |
| | Secondary Containment Condition | ✓ | | | |
| | Emergency & Spill Response Equipment | ✓ | | | |
| ) | Manway Seal Unbroken | ✓ | | | |
| l | Boundary Markers (Chains, Rope, etc.) | ✓ | | | |

ents: Material Hold Up: F1-301= 2301, F1-302= 1530, F1-303= 1764, F1308= 2299.

ibutions
Facility Owner: Facility owner reviews, signs and distributes log to:
RCRA Field Implementation

| | |
|---|---|
| RA Field Implementation Signature: [illegible] | Date: [illegible] |

HWMU 50
UNH TANKS (Raffinate Bldg, 2 Locations)
Figure 50

HWMU 50
UNH Tanks (Raffinate Bldg, 2 Locations)
(Tanks F1-301, 302, 303 & 308)

RCRA Storage Tank

| | | | |
|---|---|---|---|
| Inspector's Name: Stanley Bippus | | Date: 10/25/93 | Time: 13:30 |
| Facility Owner's Signature: Brenda S. Perkins | | Date: 10/25/93 | Time: 14:30 |

| Item No. | Item Description | Acceptable | Unacceptable | Observations/Corrective Actions To Be Completed | Date Action Completed |
|---|---|---|---|---|---|
| 1 | Signs: Danger-Authorized Personnel Only | ✓ | | | |
| 2 | No Smoking or Open Flame | ✓ | | | |
| 3 | Emergency Contact & Prior To Entry | ✓ | | | |
| 4 | Overfill/Spill Control Equipment | ✓ | | | |
| 5 | Corrosion Or Release Of Waste | ✓ | | | |
| 6 | Monitoring Equip. In Place (Content Level) | ✓ | | | |
| 7 | Surrounding Area And Unit Intergity | ✓ | | | |
| 8 | Secondary Containment Condition | ✓ | | | |
| 9 | Emergency & Spill Response Equipment | ✓ | | | |
| 10 | Manway Seal Unbroken | ✓ | | | |
| 11 | Boundary Markers (Chains, Rope, etc.) | ✓ | | | |

Comments: Material Hold Up: F1-301= 2301, F1-302= 1530, F1-303= 1764, F1308= 2299.

Distribution:
Facility Owner; Facility owner reviews, signs and distributes log to:
RCRA Field Implementation

| | |
|---|---|
| RCRA Field Implementation Signature: Susan Christian | Date: 11/2/93 |

HWMU 50
UNH TANKS (Raffinate Bldg, 2 Locations)
Figure 50

HWMU 50
UNH Tanks (Raffinate Bldg, 2 Locations)
(Tanks F1-301, 302, 303 & 308)

RCRA Storage Tank

| | | | |
|---|---|---|---|
| Inspector's Name: Stanley Beppus | | Date: 10/26/93 | Time: 12:15 |
| Facility Owner's Signature: Brenda S. Perkins | | Date: 10/26/93 | Time: 15:00 |

| Item No. | Item Description | Acceptable | Unacceptable | Observations/Corrective Actions To Be Completed | Date Action Completed |
|---|---|---|---|---|---|
| 1 | Signs: Danger-Authorized Personnel Only | ✓ | | | |
| 2 | No Smoking or Open Flame | ✓ | | | |
| 3 | Emergency Contact & Prior To Entry | ✓ | | | |
| 4 | Overfill/Spill Control Equipment | ✓ | | | |
| 5 | Corrosion Or Release Of Waste | ✓ | | | |
| 6 | Monitoring Equip. In Place (Content Level) | ✓ | | | |
| 7 | Surrounding Area And Unit Intergity | ✓ | | | |
| 8 | Secondary Containment Condition | ✓ | | | |
| 9 | Emergency & Spill Response Equipment | ✓ | | | |
| 10 | Manway Seal Unbroken | ✓ | | | |
| 11 | Boundary Markers (Chains, Rope, etc.) | ✓ | | | |

Comments: Material Hold Up: F1-301= 2301, F1-302= 1530, F1-303= 1764, F1308= 2299.

Distribution:
Facility Owner; Facility owner reviews, signs and distributes log to:
RCRA Field Implementation

| | |
|---|---|
| RCRA Field Implementation Signature: Susan Hoskins | Date: 11/2/93 |

HWMU 50
UNH TANKS (Raffinate Bldg, 2 Locations)
Figure 50

HWMU 50
UNH Tanks (Raffinate Bldg, 2 Locations)
(Tanks F1-301, 302, 303 & 308)

RCRA Storage Tank

| | | | |
|---|---|---|---|
| nspector's Name: Stanley Bippus | | Date: 10/27/93 | Time: 10:45 |
| acility Owner's Signature: Brenda E. Perkins | | Date: 10/27/93 | Time: 14:00 |

| tem o. | Item Description | Accept-able | Unaccept-able | Observations/Corrective Actions To Be Completed | Date Actio: Completed |
|---|---|---|---|---|---|
| 1 | Signs: Danger-Authorized Personnel Only | ✓ | | | |
| 2 | No Smoking or Open Flame | ✓ | | | |
| 3 | Emergency Contact & Prior To Entry | ✓ | | | |
| 4 | Overfill/Spill Control Equipment | ✓ | | | |
| 5 | Corrosion Or Release Of Waste | ✓ | | | |
| 6 | Monitoring Equip. In Place (Content Level) | ✓ | | | |
| 7 | Surrounding Area And Unit Intergity | ✓ | | | |
| 8 | Secondary Containment Condition | ✓ | | | |
| 9 | Emergency & Spill Response Equipment | ✓ | | | |
| 10 | Manway Seal Unbroken | ✓ | | | |
| 11 | Boundary Markers (Chains, Rope, etc.) | ✓ | | | |

omments: Material Hold Up: F1-301= 2301, F1-302= 1530, F1-303= 1764, F1308= 2299.

stributions
Facility Owner; Facility owner reviews, signs and distributes log to:
RCRA Field Implementation

| | |
|---|---|
| RCRA Field Implementation Signature: Susan Hoskins | Date: 11/2/93 |



HWMU 50
UNH TANKS (Raffinate Bldg, 2 Locations)
Figure 50

HWMU 50
UNH Tanks (Raffinate Bldg, 2 Locations)
(Tanks F1-301, 302, 303 & 308)

RCRA Storage Tank

| | | | |
|---|---|---|---|
| Inspector's Name: Stanley Bippus | | Date: 10/28/93 | Time: 12:30 |
| Facility Owner's Signature: Brenda S. Perkins | | Date: 10/28/93 | Time: 14:00 |

| Item No. | Item Description | Acceptable | Unacceptable | Observations/Corrective Actions To Be Completed | Date Action Completed |
|---|---|---|---|---|---|
| 1 | Signs: Danger-Authorized Personnel Only | ✓ | | | |
| 2 | No Smoking or Open Flame | ✓ | | | |
| 3 | Emergency Contact & Prior To Entry | ✓ | | | |
| 4 | Overfill/Spill Control Equipment | ✓ | | | |
| 5 | Corrosion Or Release Of Waste | ✓ | | | |
| 6 | Monitoring Equip. In Place (Content Level) | ✓ | | | |
| 7 | Surrounding Area And Unit Intergity | ✓ | | | |
| 8 | Secondary Containment Condition | ✓ | | | |
| 9 | Emergency & Spill Response Equipment | ✓ | | | |
| 10 | Manway Seal Unbroken | ✓ | | | |
| 11 | Boundary Markers (Chains, Rope, etc.) | ✓ | | | |

Comments: Material Hold Up: F1-301= 2301, F1-302= 1530, F1-303= 1764, F1308= 2299.

Distribution:
Facility Owner; Facility owner reviews, signs and distributes log to:
RCRA Field Implementation

| | |
|---|---|
| RCRA Field Implementation Signature: Susan Hazen | Date: 11/2/93 |



HWMU 50
UNH TANKS (Raffinate Bldg, 2 Locations)
Figure 50

HWMU 50
UNH Tanks (Raffinate Bldg, 2 Locations)
(Tanks F1-301, 302, 303 & 308)

RCRA Storage Tank

| | | |
|---|---|---|
| Inspector's Name: Stanley Bippus | Date: 10/29/93 | Time: 14:30 |
| Facility Owner's Signature: Brenda S. Perkins | Date: 10/29/93 | Time: 14:00 |

| Item No. | Item Description | Acceptable | Unacceptable | Observations/Corrective Actions To Be Completed | Date Action Completed |
|---|---|---|---|---|---|
| 1 | Signs: Danger-Authorized Personnel Only | ✓ | | | |
| 2 | No Smoking or Open Flame | ✓ | | | |
| 3 | Emergency Contact & Prior To Entry | ✓ | | | |
| 4 | Overfill/Spill Control Equipment | ✓ | | | |
| 5 | Corrosion Or Release Of Waste | ✓ | | | |
| 6 | Monitoring Equip. In Place (Content Level) | ✓ | | | |
| 7 | Surrounding Area And Unit Intergity | ✓ | | | |
| 8 | Secondary Containment Condition | ✓ | | | |
| 9 | Emergency & Spill Response Equipment | ✓ | | | |
| 10 | Manway Seal Unbroken | ✓ | | | |
| 11 | Boundary Markers (Chains, Rope, etc.) | ✓ | | | |

Comments: Material Hold Up: F1-301= 2301, F1-302= 1530, F1-303= 1764, F1308= 2299.

Distribution:
Facility Owner; Facility owner reviews, signs and distributes log to:
RCRA Field Implementation

| | |
|---|---|
| RCRA Field Implementation Signature: Susan Hoskins | Date: 11/4/93 |



HWMU 50
UNH TANKS (Raffinate Bldg, 2 Locations)
Figure 50

5114

RCRA Storage Tank

HWMU 50
UNH Tanks (Raffinate Bldg, 2 Locations)
(Tanks F1-301, 302, 303 & 308)

ector's Name: Darryl Evans | Date: 10-30-93 | Time: 1045

lity Owner's Signature: Brenda S Perkins BEC | Date: 10/30/93 | Time: 1300

| Item Description | Acceptable | Unacceptable | Observations/Corrective Actions To Be Completed | Date Action Completed |
|---|---|---|---|---|
| Signs: Danger-Authorized Personnel Only | ✓ | | | |
| No Smoking or Open Flame | ✓ | | | |
| Emergency Contact & Prior To Entry | ✓ | | | |
| Overfill/Spill Control Equipment | ✓ | | | |
| Corrosion Or Release Of Waste | ✓ | | | |
| Monitoring Equip. In Place (Content Level) | ✓ | | | |
| Surrounding Area And Unit Intergity | ✓ | | | |
| Secondary Containment Condition | ✓ | | | |
| Emergency & Spill Response Equipment | ✓ | | | |
| Manway Seal Unbroken | ✓ | | | |
| Boundary Markers (Chains, Rope, etc.) | ✓ | | | |

ents: Material Hold Up: F1-301= 2301, F1-302= 1530, F1-303= 1764, F1308= 2299.

butions
Facility Owner; Facility owner reviews, signs and distributes log to:
RCRA Field Implementation

A Field Implementation Signature: Susan Hoskins | Date: 11/4/93

HWMU 50
UNH TANKS (Raffinate Bldg, 2 Locations)
Figure 50

5114

RCRA Storage Tank

HWMU 50
UNH Tanks (Raffinate Bldg, 2 Locations)
(Tanks F1-301, 302, 303 & 308)

| | | | |
|---|---|---|---|
| Inspector's Name: James E. Stone | | Date: 10/31/93 | Time: 2:30 |
| Facility Owner's Signature: Brenda S. Perkins RSL | | Date: 10/31/93 | Time: 1300 |

| Item No. | Item Description | Acceptable | Unacceptable | Observations/Corrective Actions To Be Completed | Date Action Completed |
|---|---|---|---|---|---|
| 1 | Signs: Danger-Authorized Personnel Only | ✓ | | | |
| 2 | No Smoking or Open Flame | ✓ | | | |
| 3 | Emergency Contact & Prior To Entry | ✓ | | | |
| 4 | Overfill/Spill Control Equipment | ✓ | | | |
| 5 | Corrosion Or Release Of Waste | ✓ | | | |
| 6 | Monitoring Equip. In Place (Content Level) | ✓ | | | |
| 7 | Surrounding Area And Unit Intergity | ✓ | | | |
| 8 | Secondary Containment Condition | ✓ | | | |
| 9 | Emergency & Spill Response Equipment | ✓ | | | |
| 10 | Manway Seal Unbroken | ✓ | | | |
| 11 | Boundary Markers (Chains, Rope, etc.) | ✓ | | | |

Comments: Material Hold Up: F1-301= 2301, F1-302= 1530, F1-303= 1764, F1308= 2299.

Distribution:
Facility Owner: Facility owner reviews, signs and distributes log to:
RCRA Field Implementation

| | |
|---|---|
| RCRA Field Implementation Signature: Susan Hoskins | Date: 11/4/93 |

HWMU 50
UNH TANKS (Raffinate Bldg, 2 Locations)
Figure 50

# ATTACHMENT 3

Inspection Records

# ENCLOSURE

The following deficiencies and concerns were identified by the Ohio Environmental Protection Agency (OEPA) during a December 9, 1993 inspection of the uranyl nitrate (UNH) tank system. Responses to each item are addressed in the order identified in the referenced letter.

Violations:

1. OAC 3745-66-93(B)(2) & C(4) - Containment and Detection of Releases

   *The FEMP has removed the accumulated liquids from the secondary containment areas of the UNH tank system (Hazardous Waste Management Units #46 through 50). Daily inspections are conducted of all secondary containments in the UNH tank system. Accumulated liquids are removed within twenty-four hours using a "Supersucker" vacuum truck. This truck is equipped with a 2,500 gallon tank and a vacuum pump. After removal of the liquids from the containment area to the truck, the liquids are conveyed to the wastewater treatment system for processing.*

   *Repairs are in progress to restore the automatic pumping capability to pump accumulated liquids out of the secondary containment areas.*

2. OAC 3745-66-93(C)(3) - Containment and Detection of Releases

   *The accumulated liquids observed in all UNH tank secondary containment areas have been removed from these areas. To ensure that spills and releases can be detected and removed within the required time frame, Remedial Support Operations (RSO) personnel inspect these areas daily for the presence of liquids. Accumulated liquids are removed within twenty-four hours using the "Supersucker" vacuum truck and conveyed to the wastewater treatment system for processing. Repairs are in progress to restore the automatic pumping capability to pump accumulated liquids out of the secondary containment areas. Secondary containment areas are reinspected after removal of accumulated material for evidence of leaks.*

3. OAC 3745-66-94(C) & OAC 3745-66-96(A)(B)&(E) - Response to Leaks or Spills and Disposition of Leaking or Unfit for Use Tank Systems.

   *The entire UNH system has been inspected and all leaks have been identified and documented. A maintenance team has been assembled for repair of the leaks. Specific plans, systems and procedures are currently being developed to facilitate the safe repair of each leak in the system. Actual repairs began in January. The procedures to be used to allow safe repair of some of the leaks are not yet finalized. The time required to complete repair of all leaks is not yet certain. Dependant upon specific procedures determined to be necessary to safely repair the leaks, repairs should be completed by May 31, 1994.*

   *Four inactive groundwater monitoring wells were recently discovered within the secondary containment area of the UNH Tanks in Plant 2/3 digestion*

*area. Temporary diking has been installed around these monitoring wells and actions are being identified to provide permanent protection.*

Issues:

1. Provide the age of each tank containing UNH.

   *Tank age information is contained in Table 1.*

2. Provide information on the construction materials of the tanks and the containment areas.

   *The uranyl nitrate solution (UNH) tank storage system consists of 18 tanks. Eight (8) of the tanks are located outside in three diked areas and the remaining ten (10) tanks are located inside two buildings. The tank system was placed into service during the mid-1950s.*

   *Table 1 provides specific information on the construction materials of the tanks and containment areas. All tanks except F1-308 are made of Type 304L extra-low carbon stainless steel. Tank F1-308 is made of SS 347 which is also compatible with nitric acid and resists intergranular corrosion.*

3. Provide containment calculations for each UNH secondary containment area (including 25 year, 24 hour storm event).

   *Secondary containment calculations for the UNH tank system are provided in Attachment 2. The required volumes in Attachment 2 assume capacity of the largest tank in the secondary containment area and include allowances for volume displacement by equipment and the 25-year, 24-hour rainfall.*

   *However, most of tanks are not full; others are empty and are currently isolated by valves and or locks. Steps are underway to disconnect and blank off piping connections to UNH tanks. As described in item 11, modifications are in progress to correct defiencies in indoor containment. When these modifications are complete the FEMP will confirm actual volume of containment for HWMUs 49 and 50 to ensure adequacy. The table below summarizes the secondary containment calculations as attached for HWMUs # 46, 47 and 48 (outdoor basins).*

| HWMU NUMBER | LARGEST TANK IN SECONDARY CONTAINMENT AREA | SECONDARY CONTAINMENT VOLUME |
|---|---|---|
| HWMU 46 | 24,634 Gallons | 37,063.4 Gallons |
| HWMU 47 | 25,265 Gallons | 29,321.6 Gallons |
| HWMU 48 | 70,000 Gallons | 74,096.8 Gallons |

4. Submit copies of any written assessments of tank system integrity that are maintained on file at DOE-FEMP. If applicable, indicate how often the assessments are conducted and if they are certified by an independent, registered, professional engineer.

*Attachment 1 is a copy of the Safe Configuration Assessment of the UNH tank system. This assessment was conducted in December 1993 to assess the integrity of the UNH system and its structural components and to evaluate the safety of the current system for storage of UNH. Actions are in progress to implement all of the recommendations identified by the assessment. Note that the secondary containment capacity listed for Hazardous Waste Management Unit #49 (Digestion Area) in the Safe Configuration Assessment Report has been revised to account for additional displacement by the UNH tank bottoms (see #3 above).*

*The FEMP intends to pursue review and certification of the tank integrity assessment.*

5. Provide copies of inspection records for each UNH area for the month of October, 1993.

*Copies of the requested inspection records are provided as Attachment 3.*

6. Provide a description of the process utilized to remove water that has accumulated within the secondary containment areas. Include the amount of time that elapses between accumulation of these liquids and removal.

*Use of permanent sumps and associated pumps in the UNH system to remove accumulated liquids was ceased following the April 1993 UNH release incident. As described in the response to Violation # 2 above, efforts are underway to restore this capability. The removal of accumulated liquids in the secondary containment areas is currently accomplished by the use of a Supersucker Tank truck. The tank truck will pump liquids directly from containment areas that are readily accessed by the vehicle. In containment areas where the tank truck cannot enter, the liquids are pumped out with portable sump pumps. The liquids are routed to the basin at Hazardous Waste Management Unit (HWMU) #48 via connecting hoses. From this basin, the Supersucker tank truck will pump the liquids and transport for treatment by the FEMP's wastewater treatment system. The removed liquids are analyzed for uranium and pH prior to discharge into the system to ensure that the liquids can be processed in compliance with the FEMP's National Pollution Discharge Elimination System (NPDES) permit.*

*Remediation Support Operations (RSO) crews have been continuously working to remove accumulated liquids from the outdoor and indoor basins. During heavy precipitation days, the crews have been working double shifts and weekends to remove the liquids within twenty-four hours. Repairs are in progress to restore the automatic pumping capability to pump accumulated liquids out of the secondary containment areas.*

7. Provide a description of the procedures for handling the material that is removed from the secondary containment area.

*Procedures for handling the material that is removed from the secondary containment area are described in #6.*

8. Provide calculations on the loading capacity of the foundation or base upon which the secondary containment area is built.

***Calculations for the loading capacity of the base are currently not available. Based on preliminary evaluation, loading capacity of the foundation is believed to be adequate. This evaluation will be confirmed by FEMP personnel in February, 1994.***

9. Provide a photograph of the UNH tanks southeast of Plant 2 which will indicate whether the tanks are set flat upon the secondary containment or if they are raised above the floor surface.

***Photographs of the UNH tanks southeast of Plant 2 are provided as Attachment 4. As evidenced by the photographs, the tanks are raised above the secondary containment floor. Note that only one tank in this area (F3E-223) currently contains UNH.***

10. Provide a photograph of the UNH tanks located in the Raffinate Building. The Part A indicates that there are two locations for these tanks; however, only one photograph is included in the Part A.

***Photographs of both locations of UNH tanks located in the Raffinate Building are provided as Attachment 5. Area 1 consists of tanks F1-301, F1-302, and F1-303. Area 2 consists of tank F1-308.***

11. Provide information to indicate if there are any UNH tanks that are lacking secondary containment.

***The two indoor UNH storage areas have a secondary containment arrangement consisting of a 6-inch berm, sloping to a sump system. Some areas of the HWMU #49 Digestion Area, however, were identified as not adequately pitched toward the sumps. The Digestion Area also had curbing which was discontinuous at three personnel doors and an overhead door. The Raffinate Area has discontinuous curbing at two personnel doors and an overhead door. Installation of curbing in the Digestion Area and other repairs are underway. See Attachment 1, Safe Configuration Assessment of the UNH Tank System, Section 4.5.2 for additional information.***

12. Provide information to indicate if chemically resistant water stops are used at all joints within the secondary containment area.

*Joint and crack upgrades were made to all of the UNH secondary containments during 1989-90 time period. The materials used for HWMUs #49 and #50 consisted of acid-resistant brick and an acid-resistant mortar base material known as "ACIDSIL". Materials used to seal joints on HWMUs*

*#46, #47, and #48 consisted of an asphalt-based material known as "SEALTIGHT #164 Rubber Asphalt Joint Sealer".*

13. Describe interior coating for each secondary containment unit including an assessment of compatibility with the waste.

*Interior secondary containment coatings for UNH HWMUs are as follows:*

*HWMU #50 & #49 - Acid-resistant brick and mortar*

*HWMU #48 & #47 - Rubberized asphalt sealer*

*HWMU #46 - Concrete with rubberized asphalt on joints only. The liner inside the secondary containment area is an acid resistant membrane. The sealant used was Ceilcrete 6400 B and Ceilcote Type H.*

*All coatings identified are considered trade-designed for acid resistance.*

14. Describe secondary containment structure. Is it compatible with the waste material?

*The secondary containment structures are compatible with UNH. Acid-resistant sealant is used to coat the interior of the secondary containment areas and to seal the joints. See Attachment 1, Safe Configuration Assessment of the UNH Tank System, Sections 4.5.1-4.5.2, and responses #11, #12, and #13 above for additional information.*

15. A) Is tank system ancillary equipment provided with secondary containment such as double-walled piping, jacketing or trench?

*All ancillary pumping equipment is contained within the secondary containment systems of the UNH Tanks. Some flanges and valves are currently outside secondary containment. However, these lines, as well as the UNH tanks themselves, have been isolated from the pumps and are under no pressure. As current plans for unit processing call for use of exclusively new pumps, valves and piping, the current ancillary equipment has no future use.*

*During the Spring of 1992, acid-indicating-sleeves were installed at nearly all pipe flange locations along the active UNH transfer lines. These flange sleeves are designed to change color on contact with acid materials, and serve as a visual control indicator (and to some extent, partial containment) for pipe flange leaks. No additional jacketing, trenching, or double-walled piping is currently employed for ancillary piping. Ultrasonic testing of the transfer lines in October 1991, showed the piping itself to be in good condition and of suitable wall thickness for UNH system operations. See Attachment 1, Safe Configuration Assessment of the UNH Tank System, Section 4.4.3 for additional information.*

B) Provide drawings of each tank unit with the ancillary equipment labelled.

*Drawings of each tank unit identifying the ancillary equipment are provided as Attachment 6.*

16. Indicate if any releases to the environment of greater than one pound have occurred. If so, have they been reported to the Director of the OEPA within 24 hours?

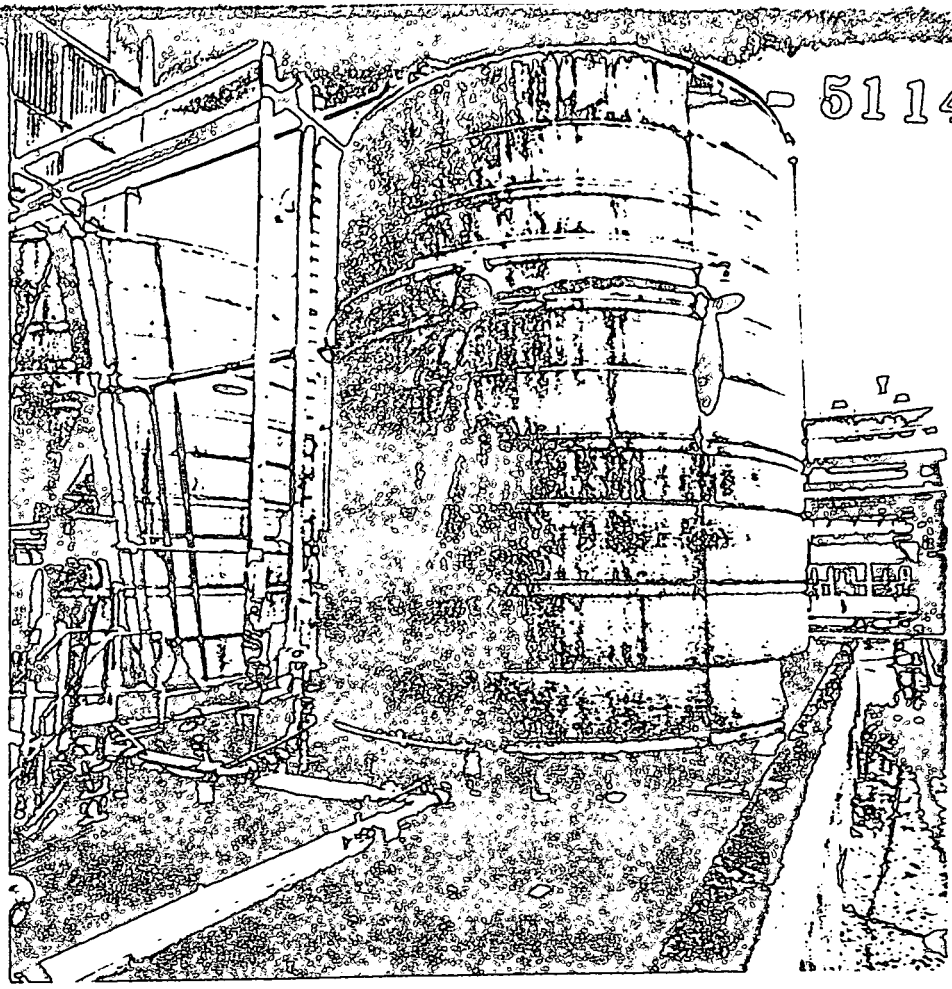
*On April 28, 1993 the FEMP experienced a release of approximately 30 gallons of diluted uranyl nitrate hexahydrate (UNH) solution from Plant 2/3. The amount of UNH in the solution that was released to the environment was calculated to be 8.53 pounds by Operations personnel. The release was reported to the Director of the OEPA within twenty-four hours of occurrence.*

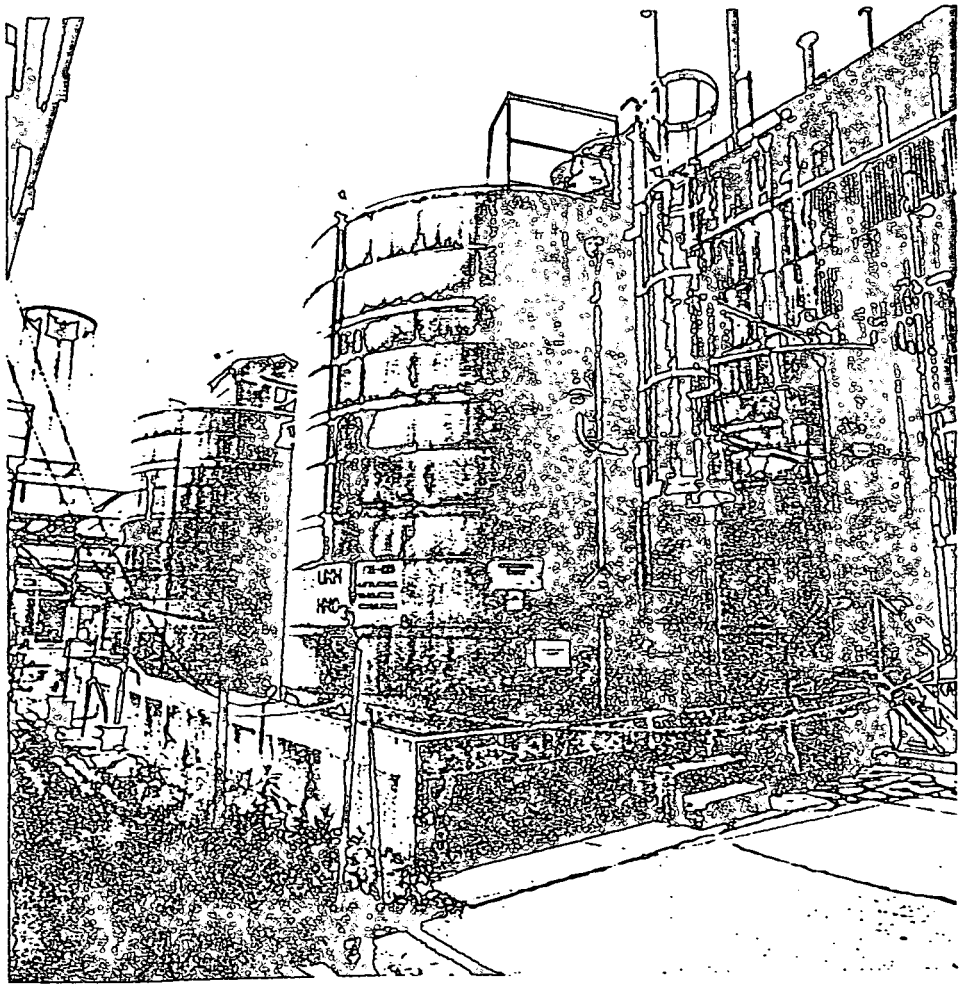
TABLE 1

| HWMU Number | Tank Numbers | Location | Secondary Containment Construction | Tank Construction | Tank Age (Aquisition Date) |
|---|---|---|---|---|---|
| HWMU # 48 | F3E-223 | Southeast of Plant 2/3 (Outdoors) | Area is concrete coated with tar | Aboveground, cylindrical, stainless steel (SS304L) tanks | 12/01/58 |
| HWMU # 47 | SE F2E-5 | North of Plant 2/3 (Outdoors) | Floor and dike are constructed of concrete and acid brick and coated with tar | Aboveground, cylindrical, stainless steel (304L) tanks | 03/01/65 |
| | NE F2E-6 | | | | 03/01/65 |
| | SW F2E-8 | | | | 03/01/65 |
| HWMU # 46 | F2-605 | NFS Storage Area (Outdoors) | Area paved with concrete and is surrounded by a concrete dike | Aboveground, horizontally-mounted, insulated, stainless steel (304L) tanks | 09/01/68 |
| | F2-606 | | | | 08/01/68 |
| | F2-607 | | | | 08/01/68 |
| | F2-608 | | | | 08/01/68 |
| HWMU # 50 | F1-301 | Raffinate Building - 2 Locations Inside | Area 1 is surrounded by concrete walls on all sides. Area 2 is surrounded by concrete walls on all sides and has a concrete dike. The floors in both areas are lined with acid brick. | Aboveground, cylindrical, stainless steel (304L) tanks Tank F1-308 is made of SS 347. | 08/01/59 |
| | F1-302 | | | | 12/01/59 |
| | F1-303 | | | | 09/01/55 |
| | F1-308 | | | | 06/01/54 |
| HWMU # 49 | D1-1 | Digestion Area - 2 Locations Inside | Floor in both areas is lined with acid brick and sloped | Aboveground, cylindrical, stainless steel (304L) tanks | 11/01/65 |
| | D1-7 | | | | 06/01/54 |
| | D1-10 | | | | 12/01/58 |
| | F1-1 | | | | 06/01/54 |
| | F1-25 | | | | 09/01/55 |
| | F1-26 | | | | 06/01/54 |

# ATTACHMENT 4

Photograph of Hazardous Waste
Management Unit #48
(Southeast of Plant 2/3)



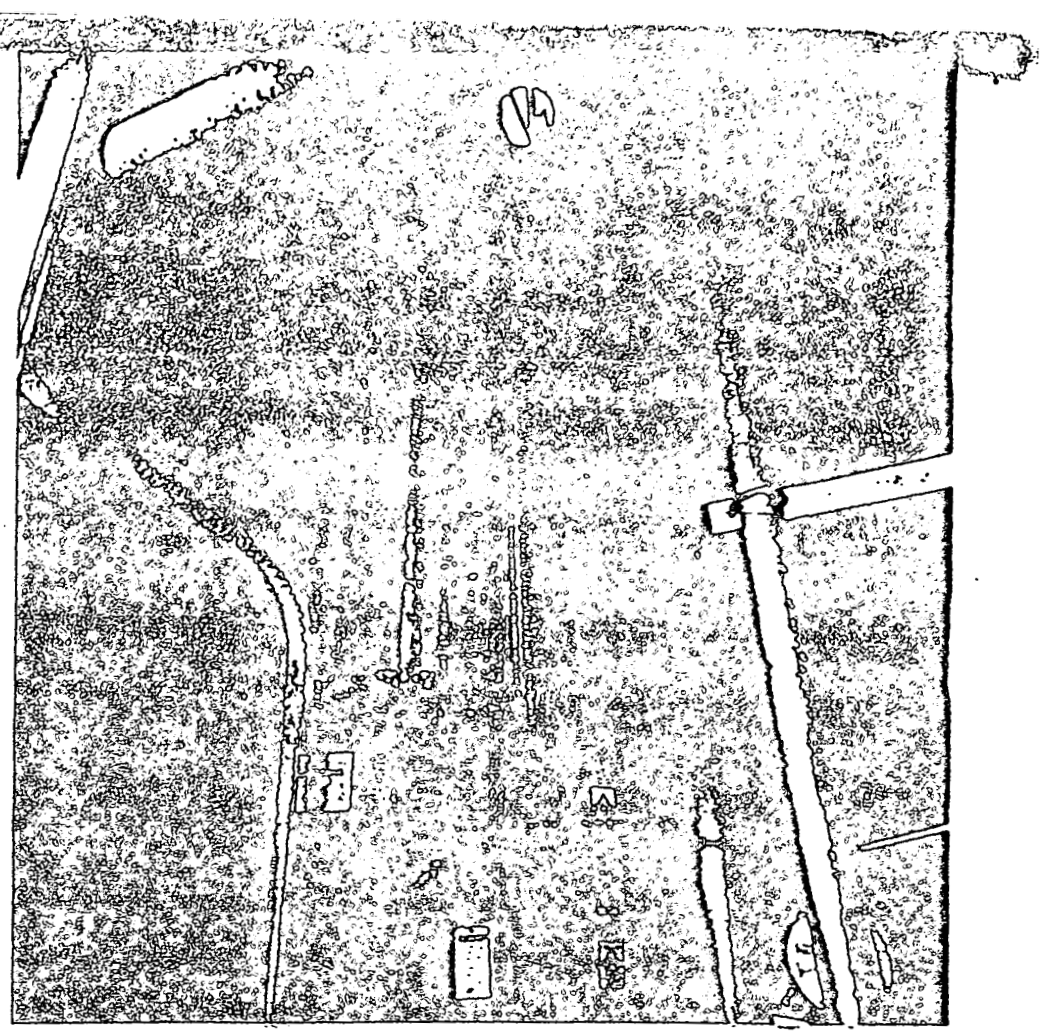



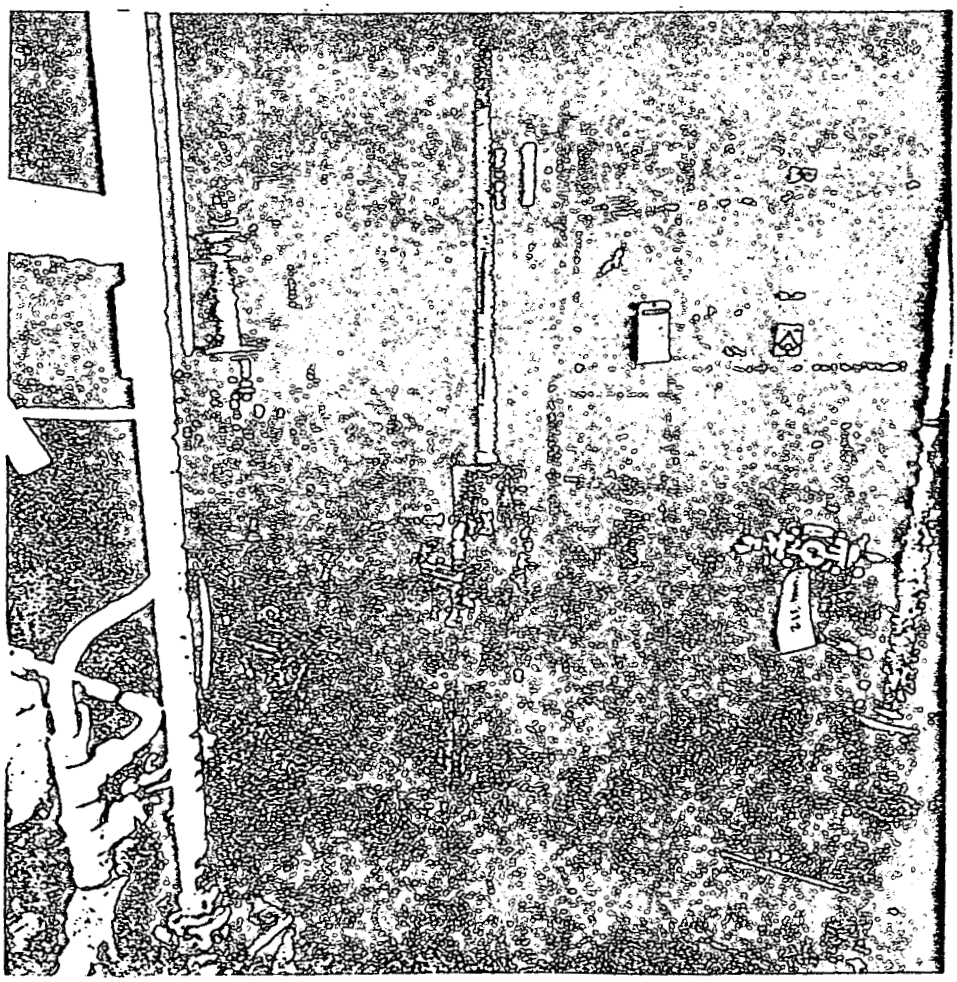
PHOTOGRAPH OF HWMU #48
SOUTHEAST OF PLANT 2/3

# ATTACHMENT 5

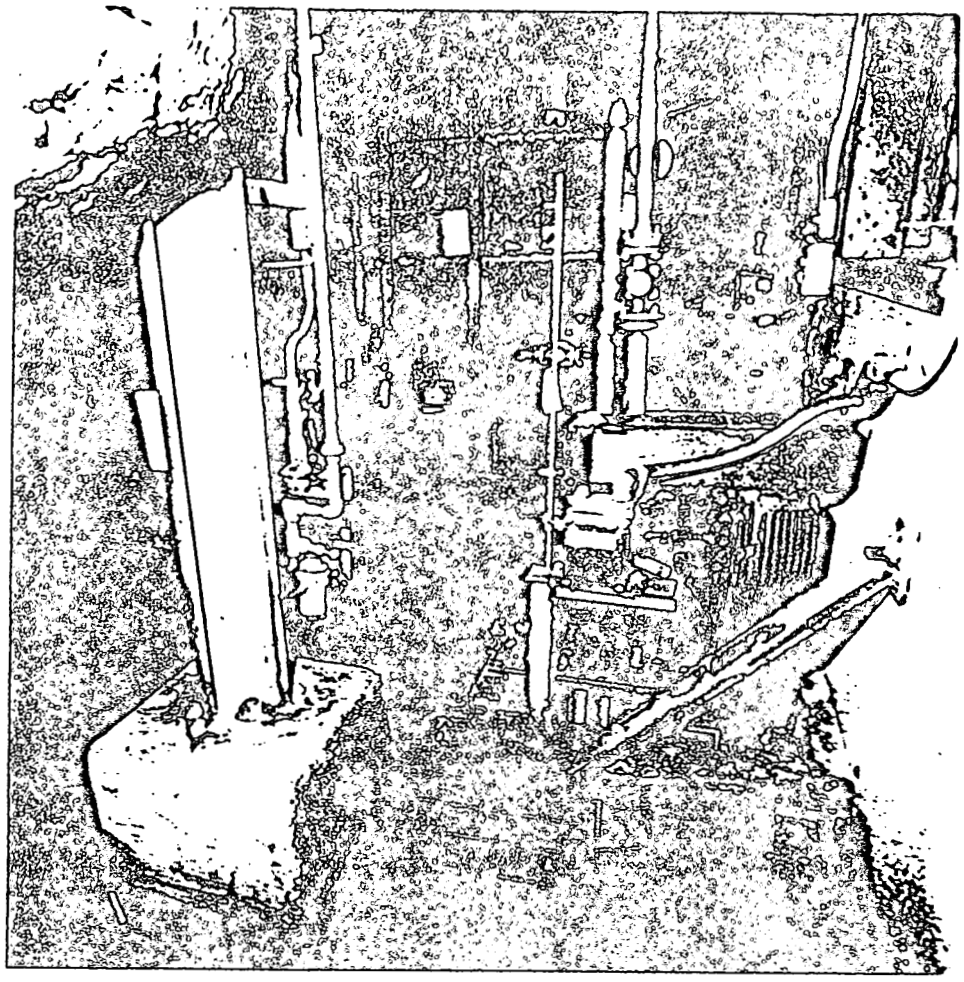
Photograph of Hazardous Waste
Management Unit #50
(2 Locations)

5114



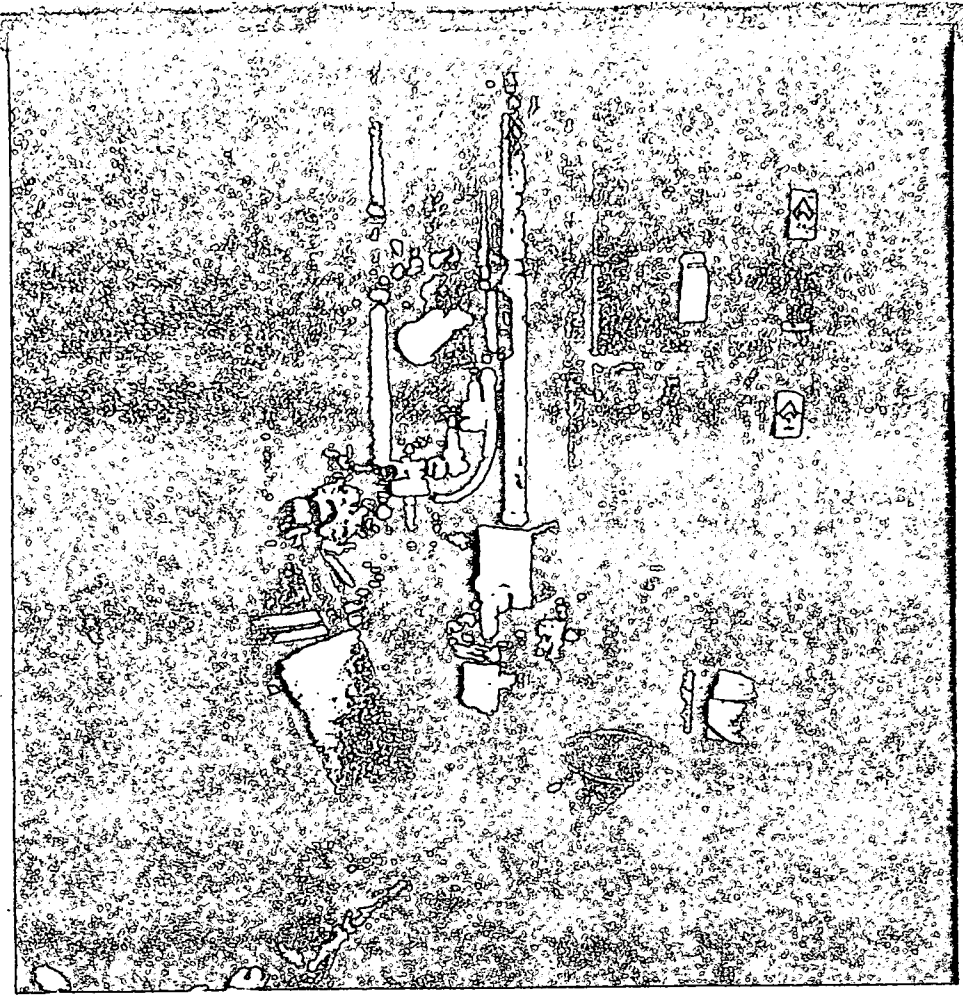


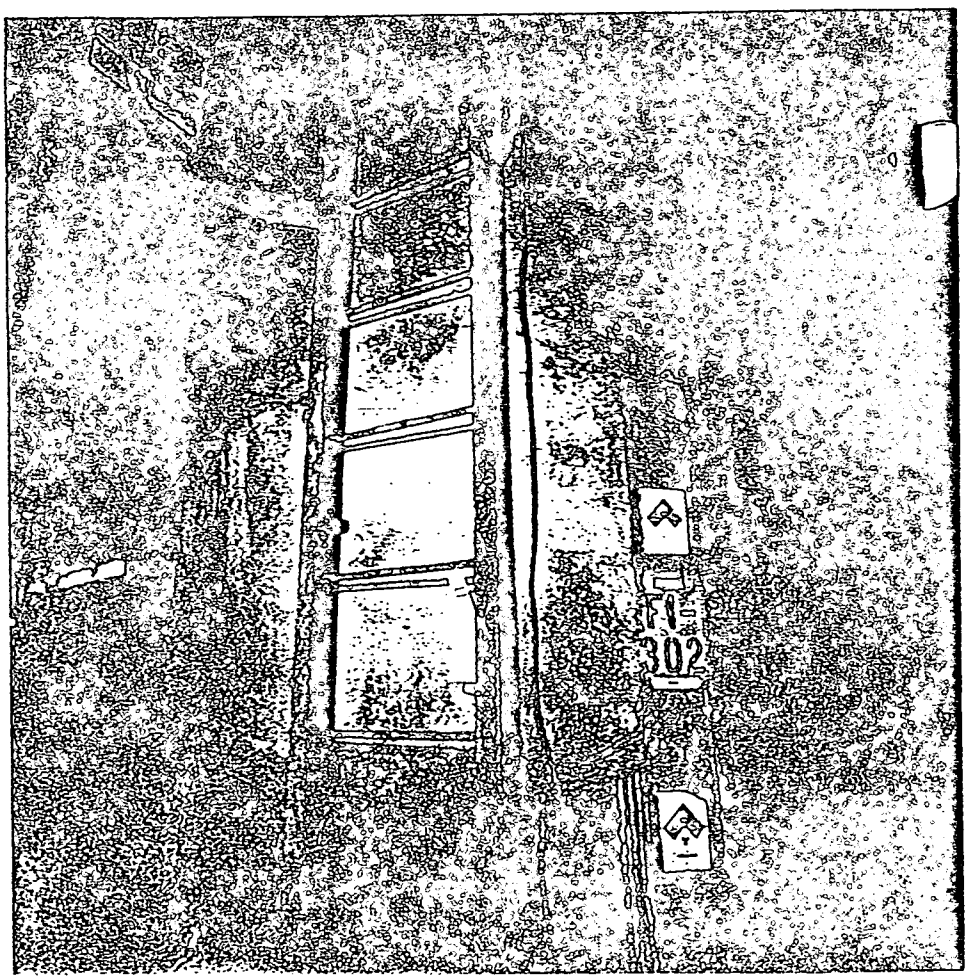
PHOTOGRAPH OF HWMU #50
AREA #1
TANKS F1-301



PHOTOGRAPH OF HWMU #50
AREA #1
TANKS F1-301

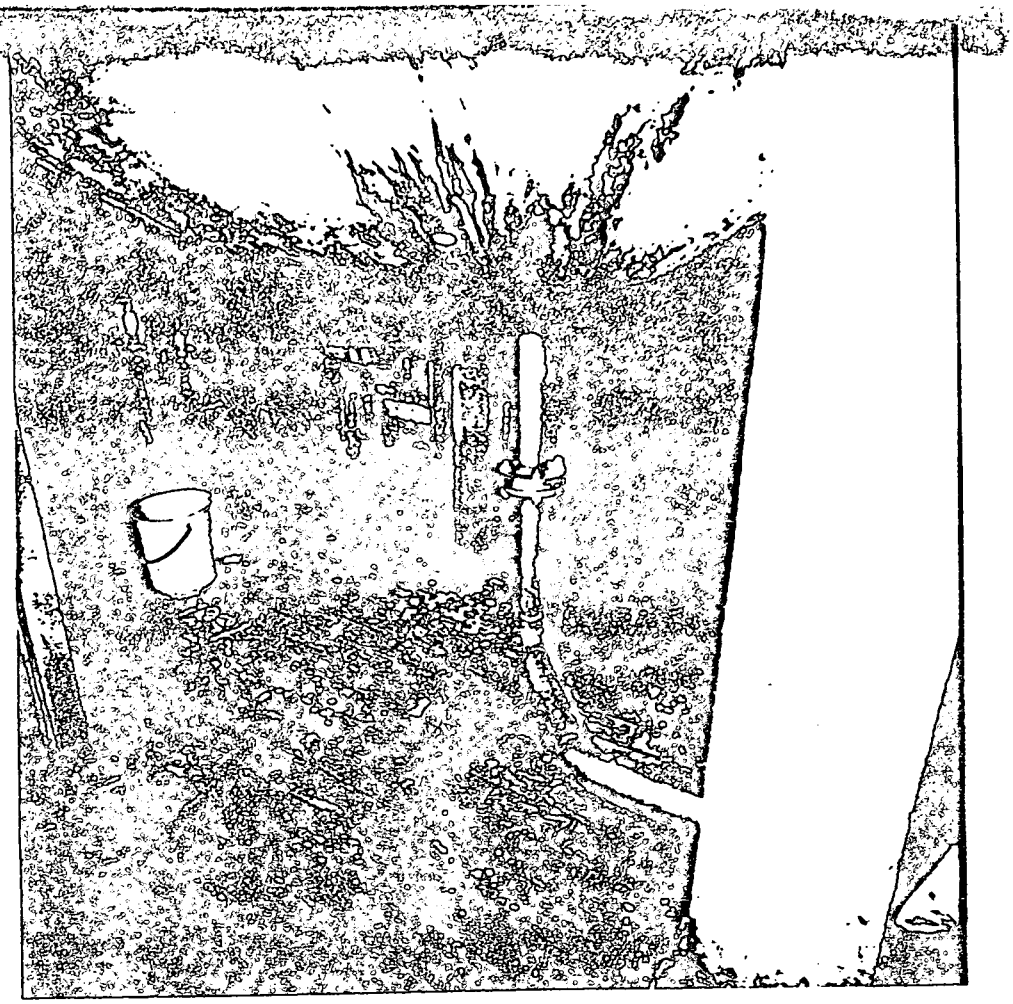
5114

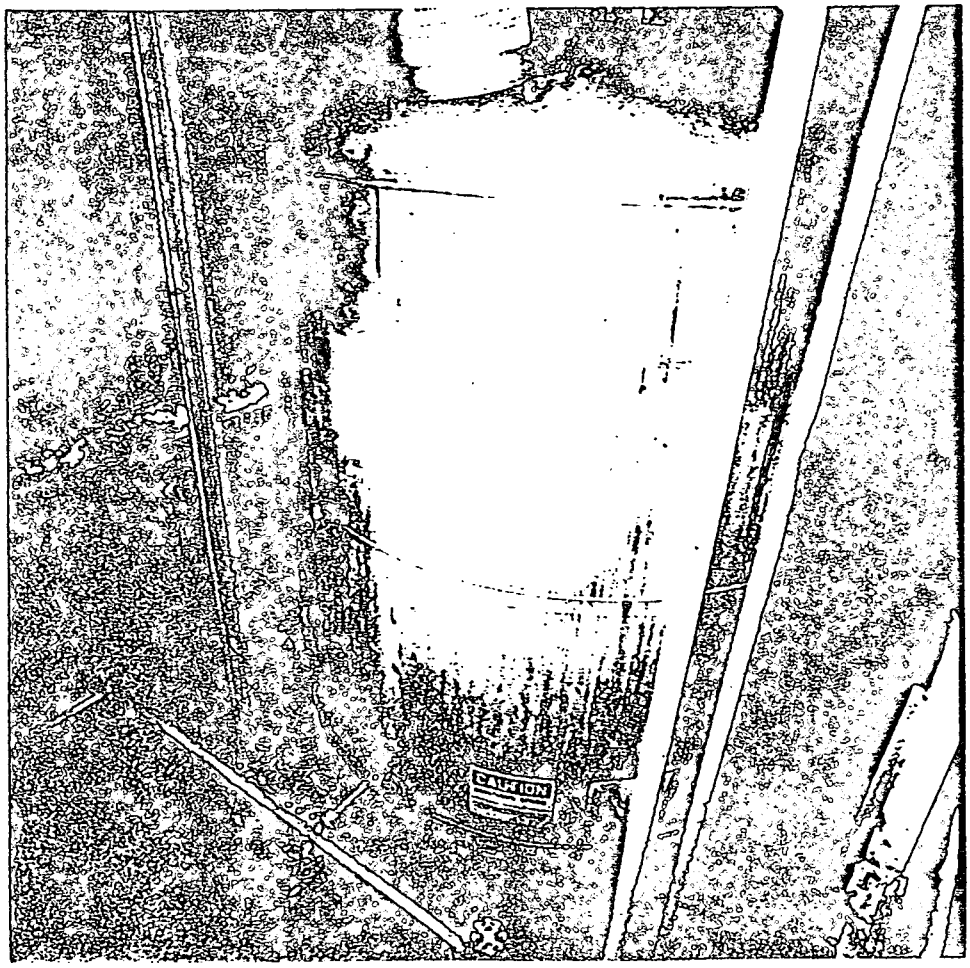




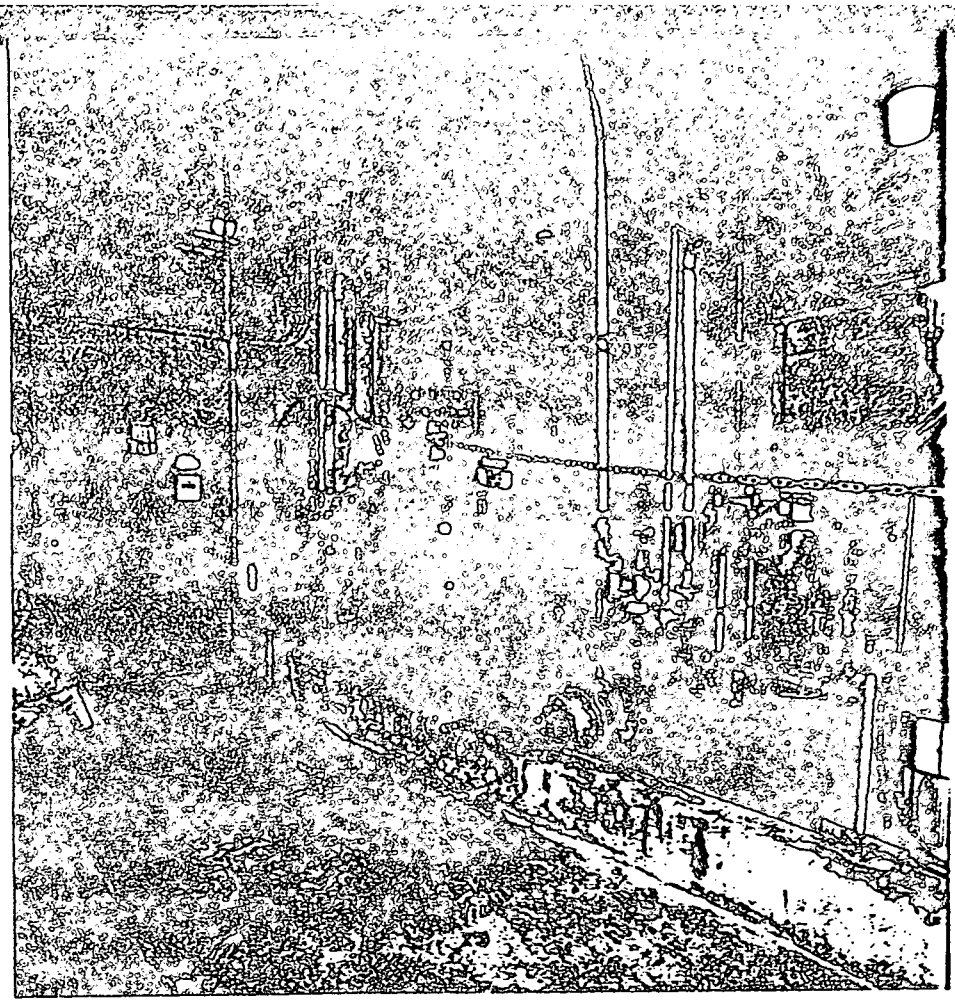

PHOTOGRAPH OF HWMU #50
AREA #1
TANKS F1-302

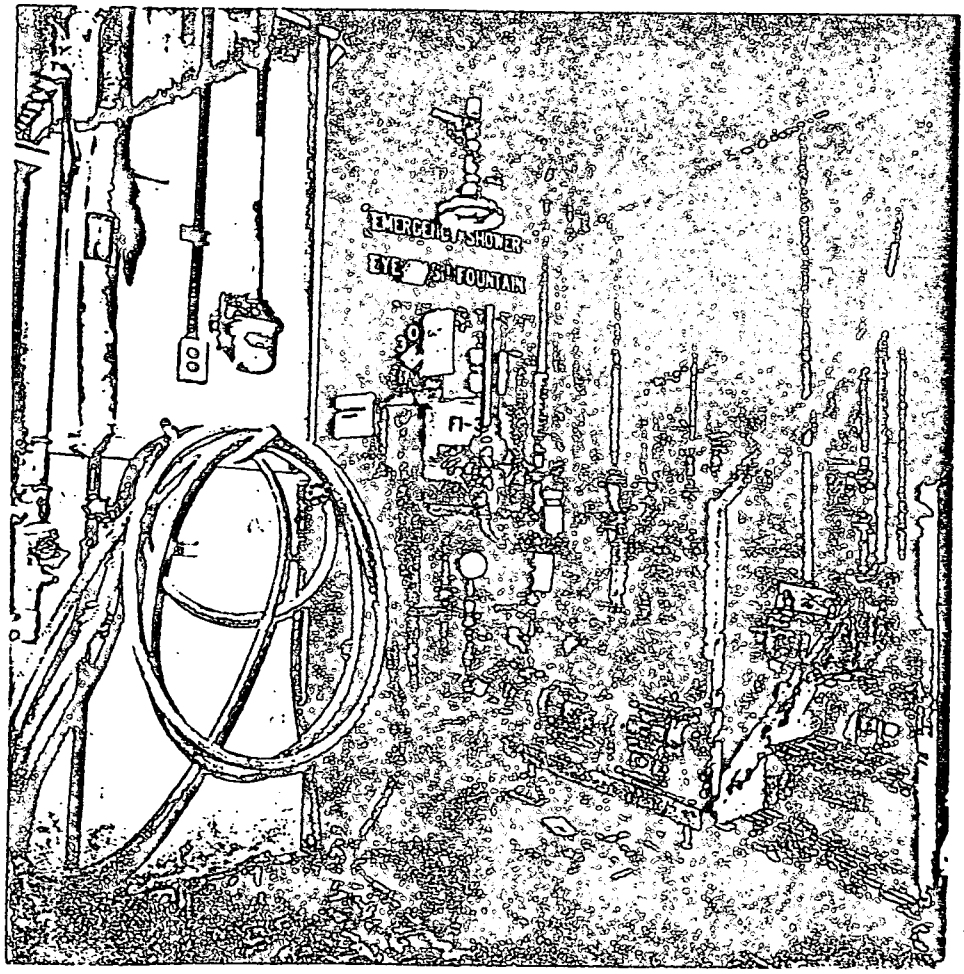
5114



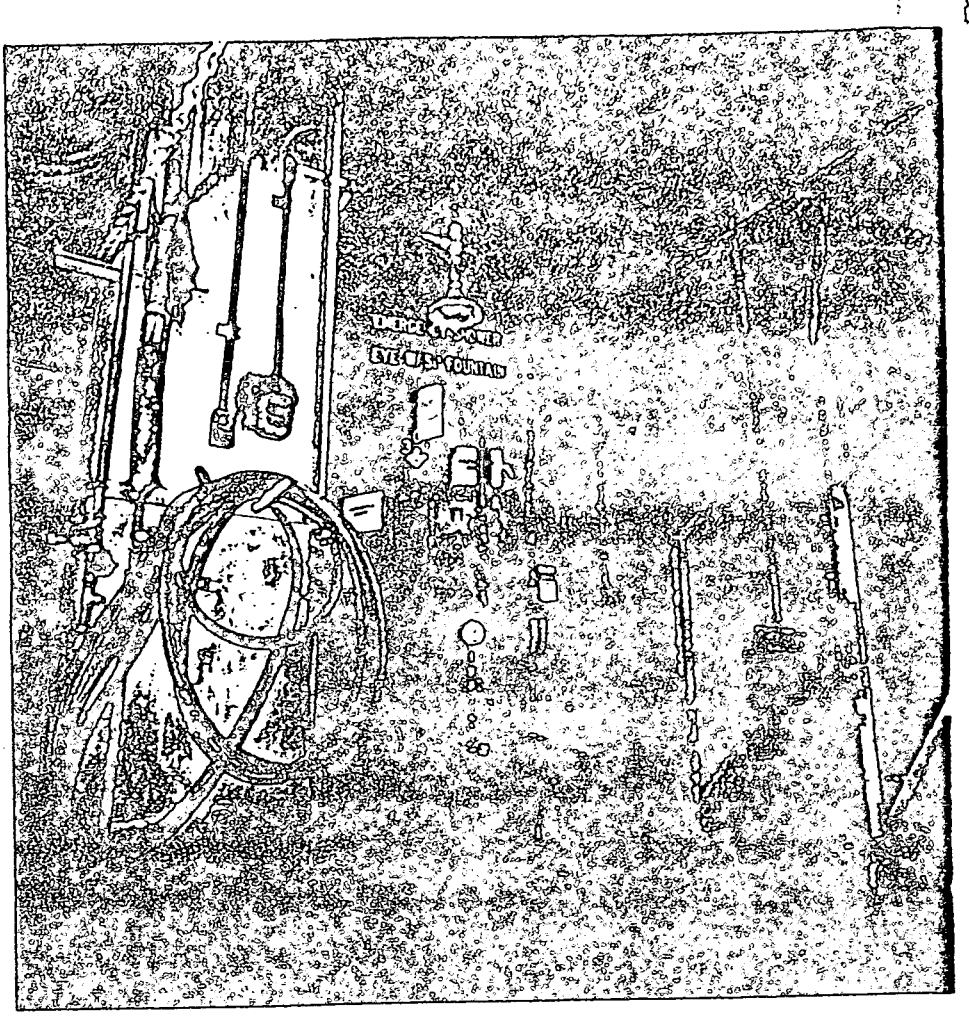


PHOTOGRAPH OF HWMU #50
AREA #1
TANKS F1-303






PHOTOGRAPH OF HWMU #50
AREA #2
TANKS F1-308

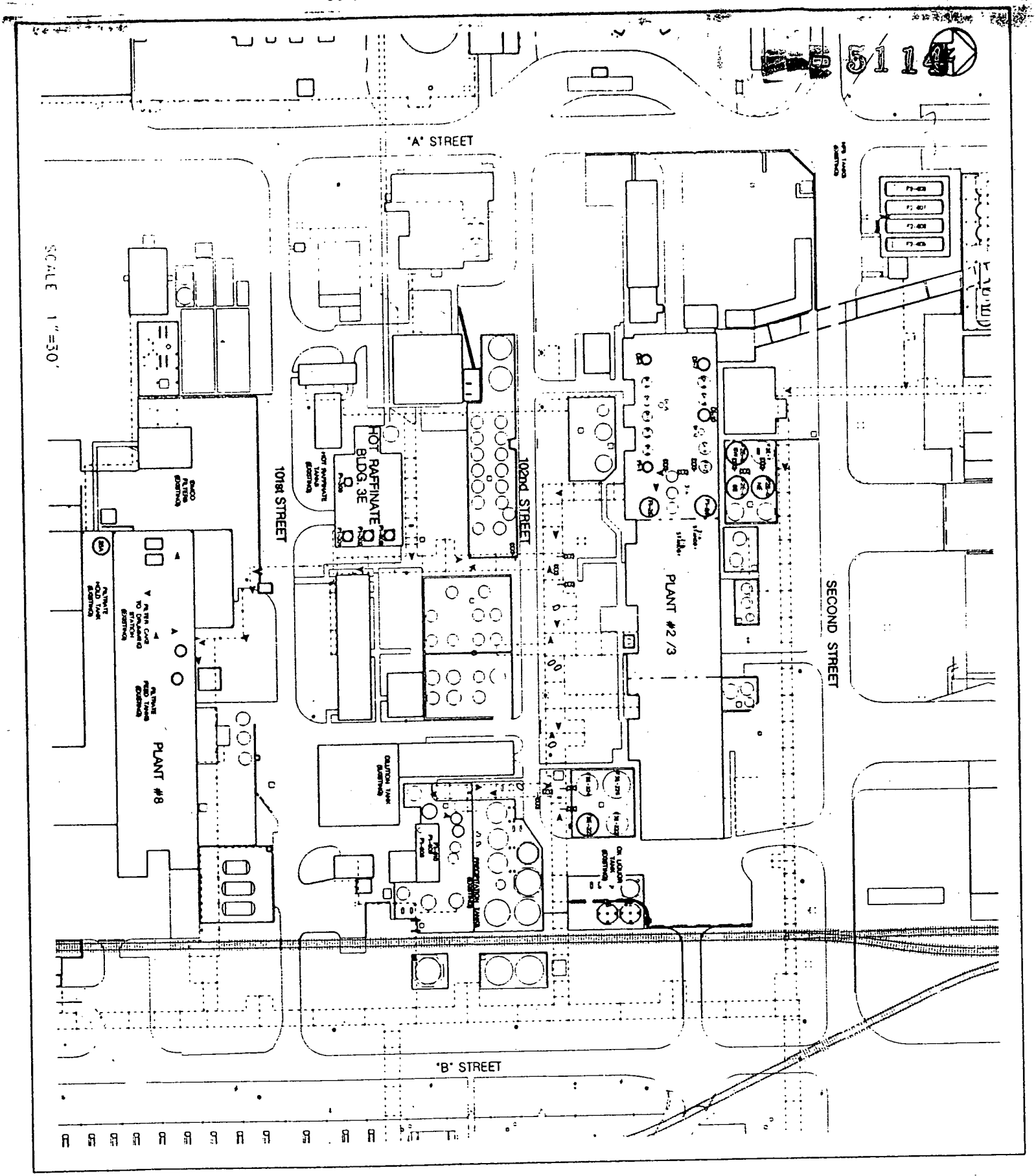


PHOTOGRAPH OF HWMU #50
AREA #2
TANKS F1-308

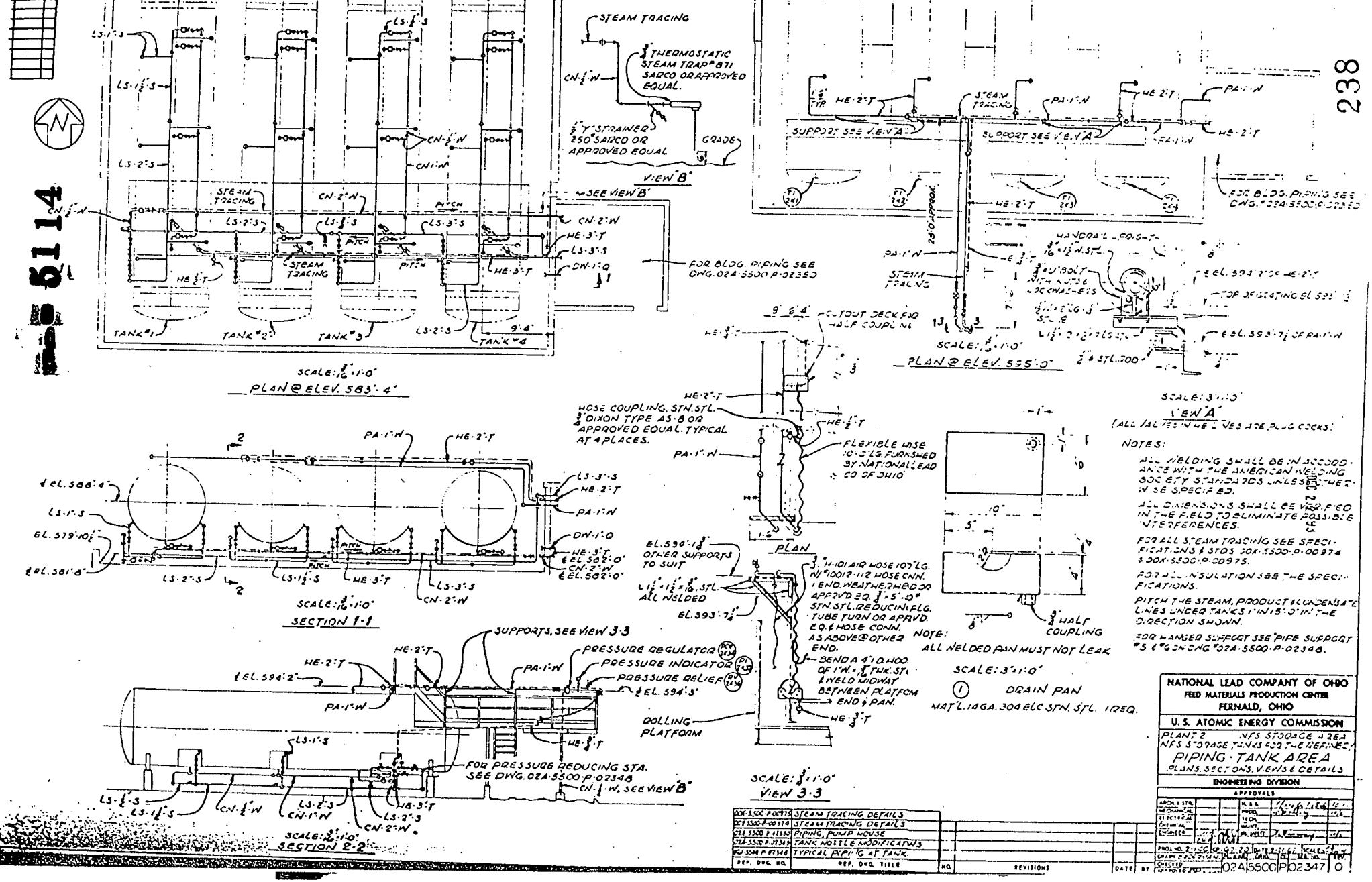
5114

# ATTACHMENT 6

Drawings

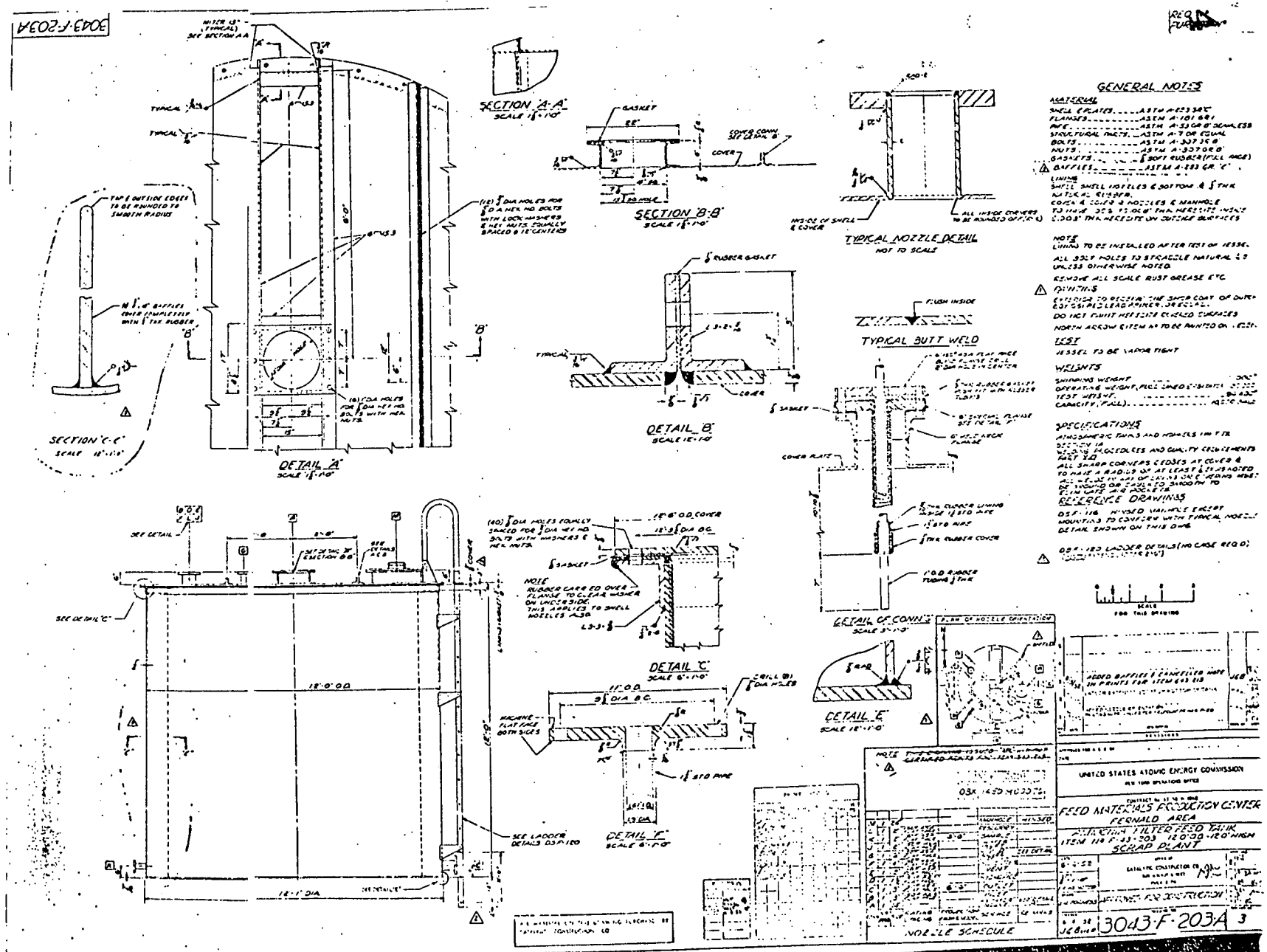

SCALE 1"=30'
"A" STREET
"B" STREET
101st STREET
102nd STREET
SECOND STREET
HOT RAFFINATE BLDG. 3E
PLANT #2 /3
PLANT #8
DILUTION TANK EXISTING
OIL LIQUOR TANK EXISTING
FILTRATE HOLD TANK EXISTING
FILTRATE FEED TANKS EXISTING
FILTER CAKE TO DRAINING STATION EXISTING
DACO FILTER EXISTING
HOT RAFFINATE TANK EXISTING

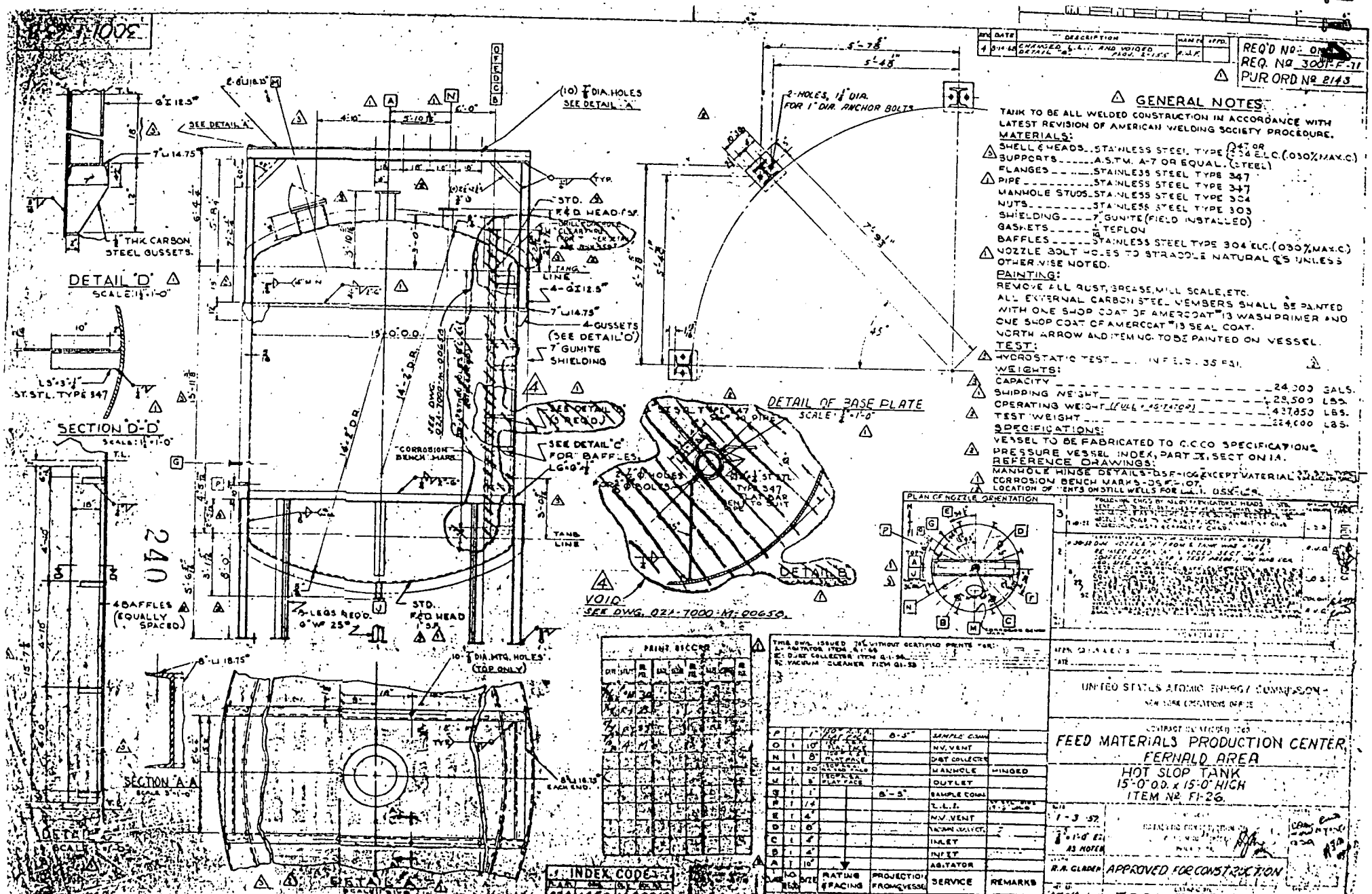
UNH TANKS

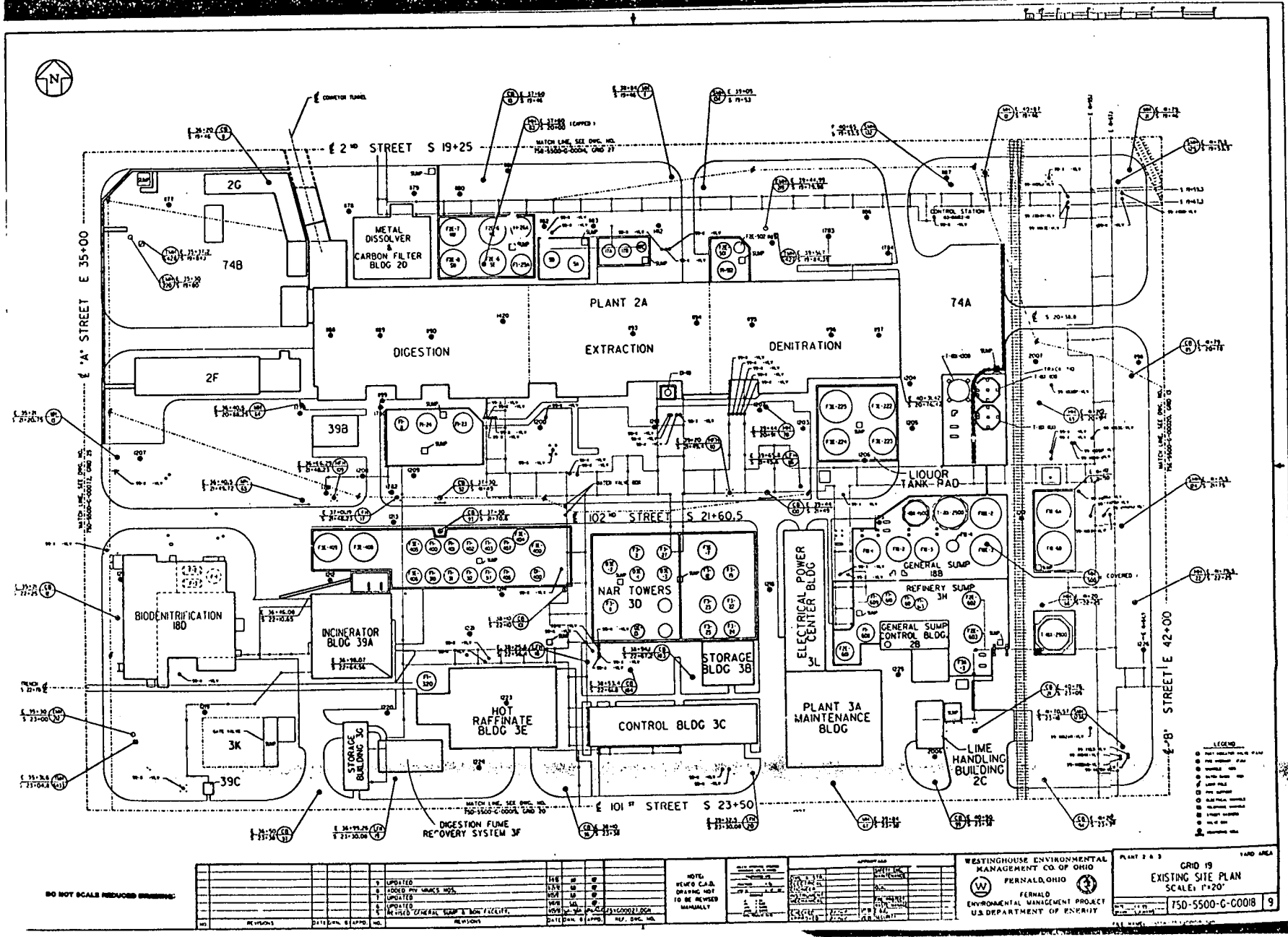

PLAN @ ELEV. 583'-4"
SCALE: 3/16" = 1'-0"
SECTION 1-1
SCALE: 3/16" = 1'-0"
SECTION 2-2
SCALE: 3/16" = 1'-0"
VIEW 3-3
SCALE: 3/16" = 1'-0"
PLAN
PLAN @ ELEV. 595'-0"
SCALE: 3/16" = 1'-0"
VIEW "A"
(ALL VALVES IN HE LINES ARE PLUG COCKS.)
VIEW "B"
SCALE: 3" = 1'-0"
DRAIN PAN
MAT'L. 14GA. 304 ELC STN. STL. 1 REQ.
NOTE: ALL WELDED PAN MUST NOT LEAK
NOTES:
ALL WELDING SHALL BE IN ACCORDANCE WITH THE AMERICAN WELDING SOCIETY STANDARDS UNLESS OTHERWISE SPECIFIED.
ALL DIMENSIONS SHALL BE VERIFIED IN THE FIELD TO ELIMINATE POSSIBLE INTERFERENCES.
FOR ALL STEAM TRACING SEE SPECIFICATIONS # 3TDS 20X-5500-P-00974 & 20X-5500-P-00975.
FOR ALL INSULATION SEE THE SPECIFICATIONS.
PITCH THE STEAM, PRODUCT & CONDENSATE LINES UNDER TANKS 1" IN 15'-0" IN THE DIRECTION SHOWN.
FOR HANGER SUPPORT SEE PIPE SUPPORT #5 & #6 ON DWG. #02A-5500-P-02348.
NATIONAL LEAD COMPANY OF OHIO
FEED MATERIALS PRODUCTION CENTER
FERNALD, OHIO
U. S. ATOMIC ENERGY COMMISSION
PLANT 2 NFS STORAGE AREA
NFS STORAGE TANKS FOR THE DEFINED
PIPING · TANK AREA
PLANS, SECTIONS, VIEWS & DETAILS
ENGINEERING DIVISION
APPROVALS
02A5500P02347 0
REVISIONS
DATE BY
STEAM TRACING DETAILS
STEAM TRACING DETAILS
PIPING, PUMP HOUSE
TANK NOZZLE MODIFICATIONS
TYPICAL PIPING AT TANK
REF. DWG. NO.
REF. DWG. TITLE
NO.

238

61 14

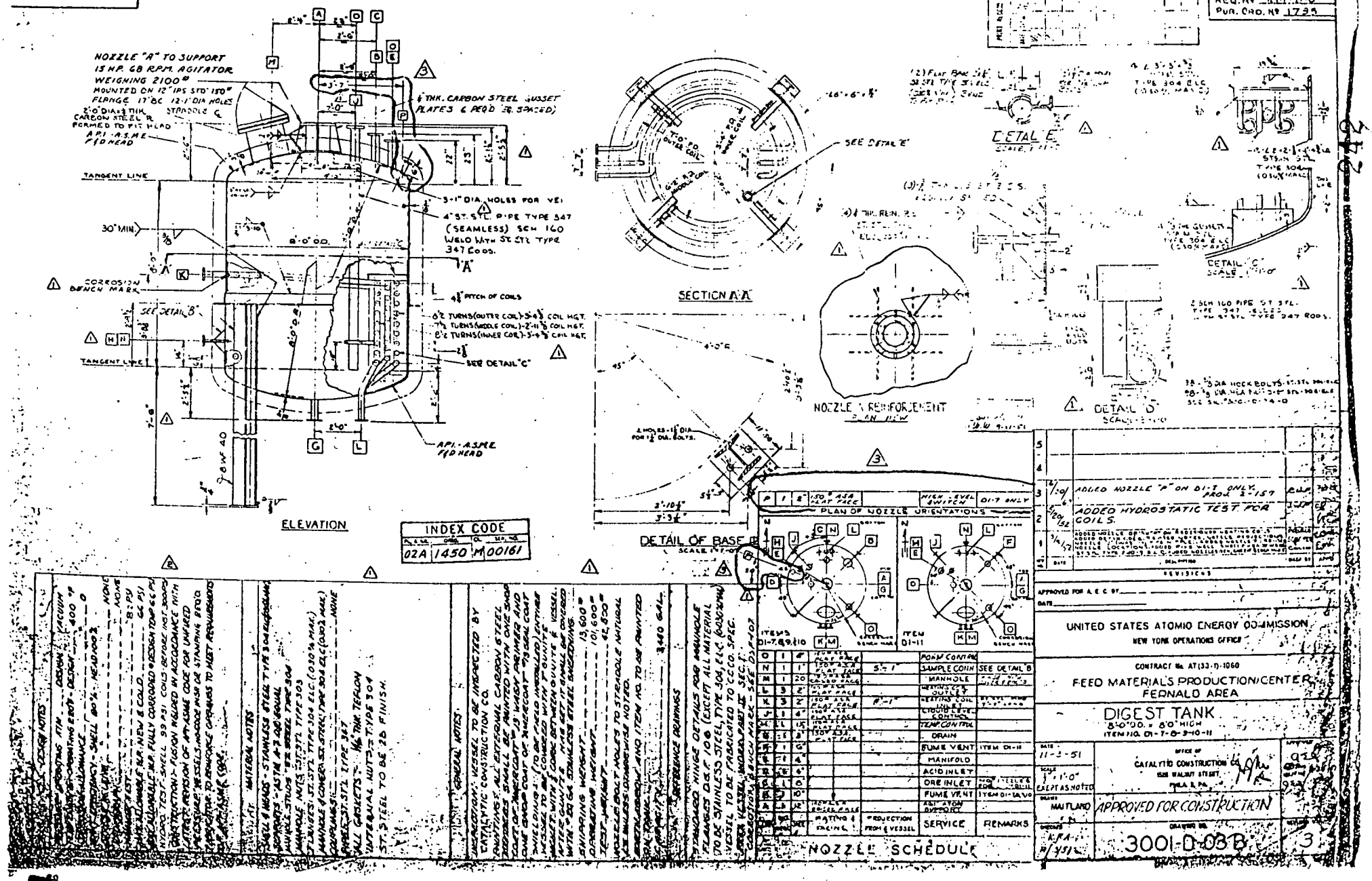

3043-F-203A
SECTION 'A-A'
SCALE 1/4"=1'-0"
SECTION 'B-B'
SCALE 1/4"=1'-0"
TYPICAL NOZZLE DETAIL
NOT TO SCALE
TYPICAL BUTT WELD
DETAIL 'A'
SCALE 1/4"=1'-0"
DETAIL 'B'
SCALE 1/2"=1'-0"
SECTION 'C-C'
SCALE 1/2"=1'-0"
DETAIL 'C'
SCALE 3/4"=1'-0"
DETAIL 'D'
SCALE 3/4"=1'-0"
DETAIL 'E'
SCALE 1/2"=1'-0"
DETAIL OF CONN'S
SCALE 3/4"=1'-0"
GENERAL NOTES
MATERIAL
SHELL & PLATES ..... ASTM A-283 GR C
FLANGES ..... ASTM A-181 GR I
PIPE ..... ASTM A-53 GR B SEAMLESS
STRUCTURAL PARTS ..... ASTM A-7 OR EQUAL
BOLTS ..... ASTM A-307 GR B
NUTS ..... ASTM A-307 GR B
GASKETS ..... 1/8" SOFT RUBBER (FULL FACE)
BAFFLES ..... ASTM A-283 GR 'C'
LINING
SHELL, SHELL NOZZLES & BOTTOM 1/8" THK
NOTICE AL 61S-SEP.
COVER & COVER & NOZZLES & MANHOLE
TO HAVE .203 TO .125" THK MEASURE INSIDE
0.203" THK MEASURE ON OUTSIDE SURFACES
NOTE
LINING TO BE INSTALLED AFTER TEST OF VESSEL
ALL 3/4" HOLES TO STRADDLE NATURAL C.L.
UNLESS OTHERWISE NOTED
REMOVE ALL SCALE RUST GREASE ETC
PAINTING
EXTERIOR TO RECEIVE ONE SHOP COAT OF OUTSIDE
DO NOT PAINT MEASURE CONTACT SURFACES
NORTH ARROW (ITEM 14) TO BE PAINTED ON VESSEL
TEST
VESSEL TO BE VAPOR TIGHT
WEIGHTS
SHIPPING WEIGHT
OPERATING WEIGHT, FULL LINED
TEST WEIGHT
CAPACITY, (FULL)
SPECIFICATIONS
ATMOSPHERIC TANKS AND HOPPERS
SECTION IX
WELDING PROCEDURES AND QUALITY REQUIREMENTS
MEET 3.0
ALL SHARP CORNERS & EDGES AT COVER &
TO HAVE A RADIUS OF AT LEAST 1/8" AS NOTED
ALL WELDS IN ANY OF SHELL ONE JOINING MUST
BE GROUND OR FILED TO SMOOTH TO
FLUSH WITH ADJACENT
REFERENCE DRAWINGS
03-F-116 REVISED MANHOLE & REST
MOUNTING TO CONFORM WITH TYPICAL NOZZLE
DETAIL SHOWN ON THIS DWG
03-F-123 LADDER DETAILS (NO CASE REQ'D)
SCALE
FOR THIS DRAWING
NOZZLE SCHEDULE
UNITED STATES ATOMIC ENERGY COMMISSION
FEED MATERIALS PRODUCTION CENTER
FERNALD AREA
FILTER FEED TANK
ITEM 114 F-43-203 12'0"OD x 12'0" HIGH
SCRAP PLANT
3043-F-203A
3

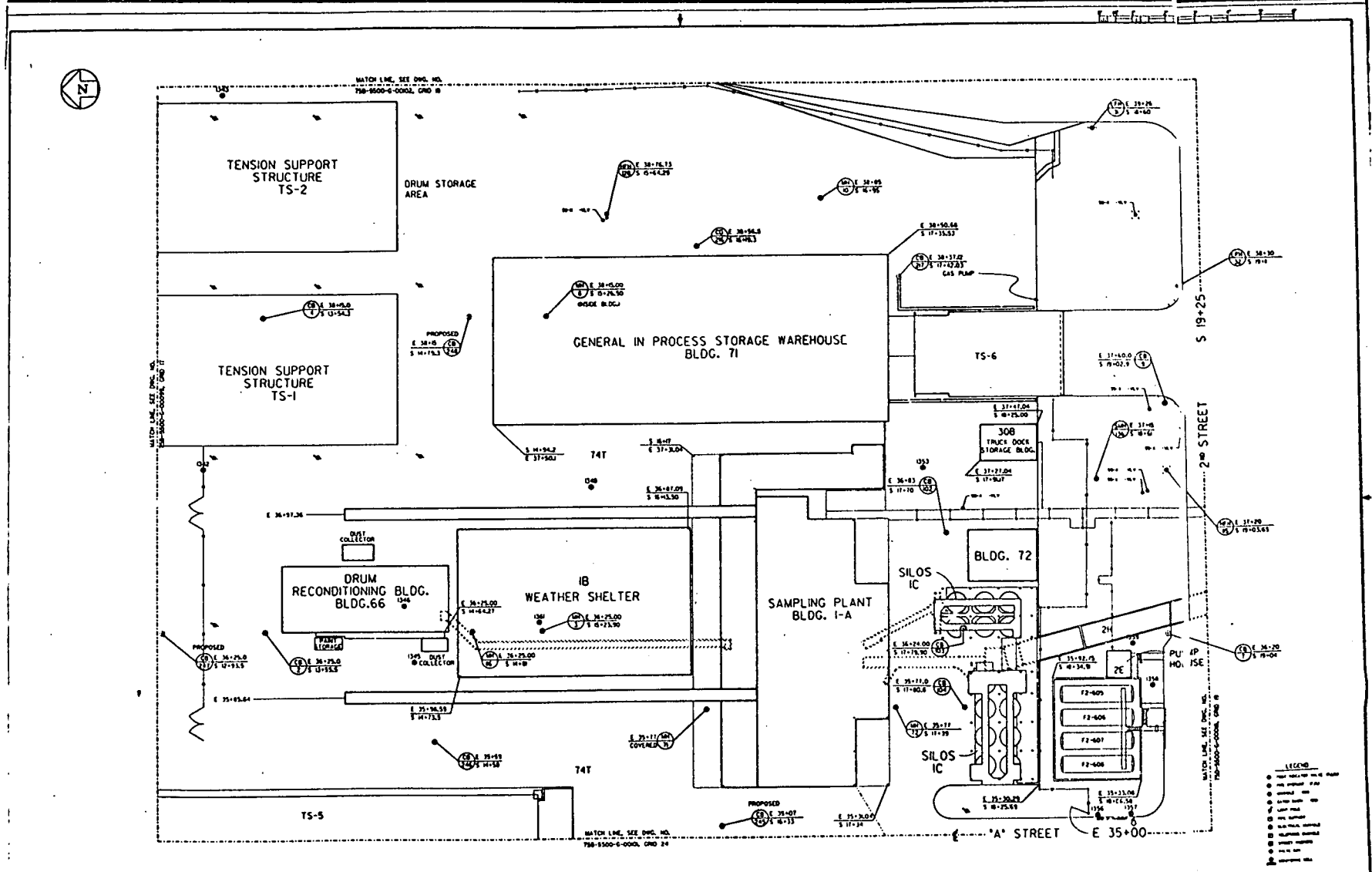

DETAIL "D"
SECTION "D-D"
SECTION "A-A"
DETAIL "A"
DETAIL OF BASE PLATE
DETAIL "B"
PLAN OF NOZZLE ORIENTATION
GENERAL NOTES
TANK TO BE ALL WELDED CONSTRUCTION IN ACCORDANCE WITH LATEST REVISION OF AMERICAN WELDING SOCIETY PROCEDURE.
MATERIALS:
SHELL & HEADS..STAINLESS STEEL TYPE 347 OR 304 ELC.(.030% MAX.C)
SUPPORTS.....A.S.T.M. A-7 OR EQUAL.(STEEL)
FLANGES.....STAINLESS STEEL TYPE 347
PIPE.....STAINLESS STEEL TYPE 347
MANHOLE STUDS..STAINLESS STEEL TYPE 304
NUTS.....STAINLESS STEEL TYPE 303
SHIELDING.....7" GUNITE (FIELD INSTALLED)
GASKETS.....1/8" TEFLON
BAFFLES.....STAINLESS STEEL TYPE 304 ELC.(.030% MAX.C)
NOZZLE BOLT HOLES TO STRADDLE NATURAL ℄'S UNLESS OTHERWISE NOTED.
PAINTING:
REMOVE ALL RUST, GREASE, MILL SCALE, ETC.
ALL EXTERNAL CARBON STEEL MEMBERS SHALL BE PAINTED WITH ONE SHOP COAT OF AMERCOAT #13 WASH PRIMER AND ONE SHOP COAT OF AMERCOAT #13 SEAL COAT.
NORTH ARROW AND ITEM NO. TO BE PAINTED ON VESSEL.
TEST:
HYDROSTATIC TEST.....IN FIELD - 35 PSI.
WEIGHTS:
CAPACITY.....24,000 GALS.
SHIPPING WEIGHT.....+28,500 LBS.
OPERATING WEIGHT.....437,850 LBS.
TEST WEIGHT.....224,000 LBS.
SPECIFICATIONS:
VESSEL TO BE FABRICATED TO G.C.C.O. SPECIFICATIONS
PRESSURE VESSEL INDEX, PART IX, SECTION IA.
REFERENCE DRAWINGS:
MANHOLE HINGE DETAILS - D5F-106 EXCEPT MATERIAL
CORROSION BENCH MARKS - D5F-107.
LOCATION OF VENTS ON STILL WELLS FOR L.L.I. D5F-
REQ'D NO. 01
REQ. NO. 3001-F-11
PUR ORD NO. 2143
UNITED STATES ATOMIC ENERGY COMMISSION
NEW YORK OPERATIONS OFFICE
FEED MATERIALS PRODUCTION CENTER
FERNALD AREA
HOT SLOP TANK
15'-0" O.D. x 15'-0" HIGH
ITEM NO. F1-26.
APPROVED FOR CONSTRUCTION
INDEX CODE
SERVICE
REMARKS
RATING & FACING
PROJECTION FROM VESSEL
SAMPLE CONN.
N.V. VENT
DIST COLLECTOR
MANHOLE
HINGED
OUTLET
INLET
AGITATOR
L.L.I.
2240


2ND STREET S 19+25
"A" STREET E 35+00
"B" STREET E 42+00
102ND STREET S 21+60.5
101ST STREET S 23+50
CONVEYOR TUNNEL
2G
74B
METAL DISSOLVER & CARBON FILTER BLDG 2D
PLANT 2A
DIGESTION
EXTRACTION
DENITRATION
74A
CONTROL STATION
2F
39B
LIQUOR TANK PAD
BIODENITRIFICATION 18D
INCINERATOR BLDG 39A
NAR TOWERS 3D
ELECTRICAL POWER CENTER BLDG 3L
GENERAL SUMP 18B
REFINERY SUMP 3H
GENERAL SUMP CONTROL BLDG 2B
STORAGE BLDG 3B
HOT RAFFINATE BLDG 3E
CONTROL BLDG 3C
PLANT 3A MAINTENANCE BLDG
LIME HANDLING BUILDING 2C
3K
39C
STORAGE BUILDING 3G
DIGESTION FUME RECOVERY SYSTEM 3F
COVERED
LEGEND
DO NOT SCALE REDUCED DRAWING
WESTINGHOUSE ENVIRONMENTAL MANAGEMENT CO. OF OHIO
FERNALD, OHIO
FERNALD ENVIRONMENTAL MANAGEMENT PROJECT
U.S. DEPARTMENT OF ENERGY
PLANT 2 & 3
YARD AREA
GRID 19
EXISTING SITE PLAN
SCALE: 1"=20'
75D-5500-G-00018
9
REVISIONS
NOTE: REVISE C.A.D. DRAWING NOT TO BE REVISED MANUALLY

3001-D-03-E

REQ'D 5
REQ. Nº 3001-D-6
PUR. ORD. Nº 1735






DO NOT SCALE REDUCED DRAWINGS

| NO. | REVISIONS | DATE | DFN. | CHK. | APPD. | NO. | REVISIONS | DATE | DFN. | CHK. | APPD. | REF. DWG. NO. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | 6 | UPDATED (ADDED PROPOSED STORM SEWERS) | 3-8 | JM | | JB | |
| | | | | | | 5 | ADDED PIV WARCE NOS. | 3-5 | LJ | | JB | |
| | | | | | | 4 | UPDATED AND ADDED MONITORING WELLS | 5-15 | LJ | | JB | |
| | | | | | | 3 | UPDATED | 5-15 | SC | | DV | 151C000037.DGN |

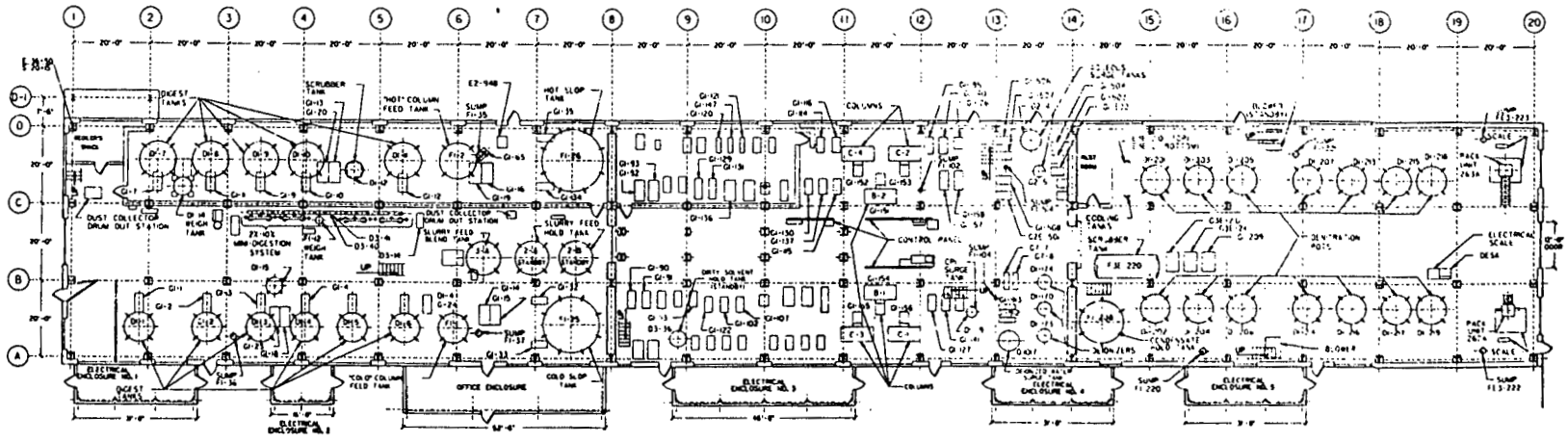
NOTE: REMCO C.A.D. DRAWING NOT TO BE REVISED MANUALLY

APPROVALS

WESTINGHOUSE ENVIRONMENTAL MANAGEMENT CO. OF OHIO
FERNALD, OHIO
FERNALD ENVIRONMENTAL MANAGEMENT PROJECT
U.S. DEPARTMENT OF ENERGY

BLDG.66,70,72 YARD AREA
GRID 27
EXISTING SITE PLAN
SCALE: 1"=20'

758-5500-G-00014 | 6




FLOOR PLAN @ EL. 580'-0"

DO NOT SCALE REDUCED DRAWING

| NO. | REVISIONS | DATE | DWN. BY | APPD. | NO. | REVISIONS | DATE | DWN. BY | APPD. |
|---|---|---|---|---|---|---|---|---|---|

NOTE: INCO C.A.D. DRAWING NOT TO BE REVISED MANUALLY

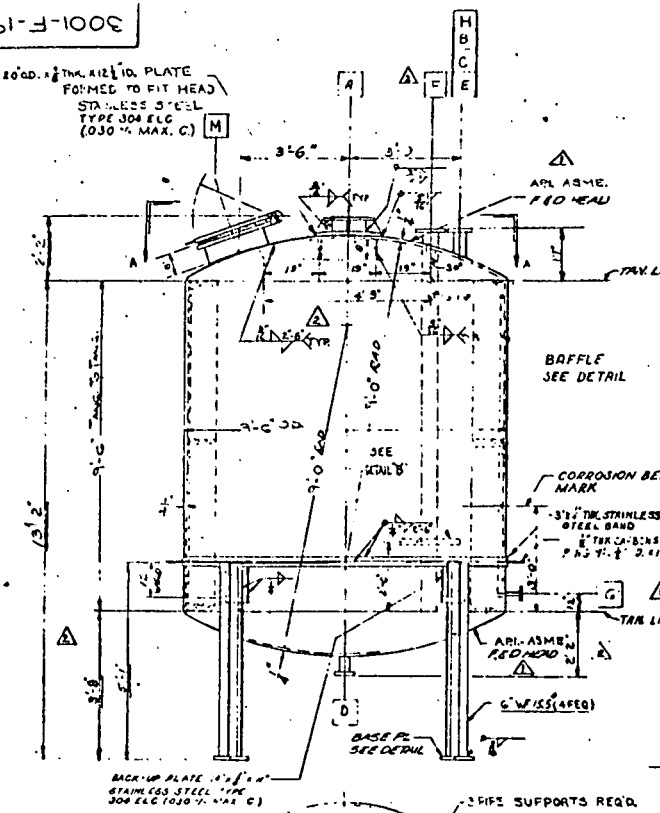
WESTINGHOUSE ENVIRONMENTAL MANAGEMENT CO. OF OHIO
FERNALD, OHIO
FERNALD
ENVIRONMENTAL MANAGEMENT PROJECT
U.S. DEPARTMENT OF ENERGY

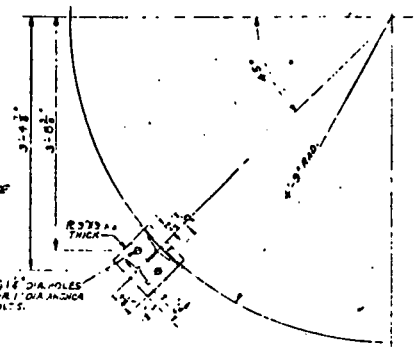
PLANT 26 — FIRST FLOOR, EL. 580'-0"
ORE REFINERY PLANT
FLOOR PLAN
1/20" = 1'-0"

245

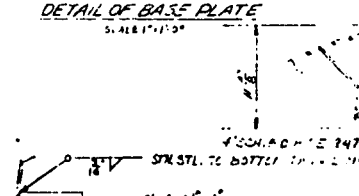
3001-F-19-B

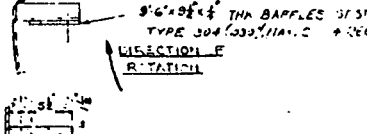
REQ'D No. 2
REQ. No. 3001-F-5
PUR. ORD No. 1882



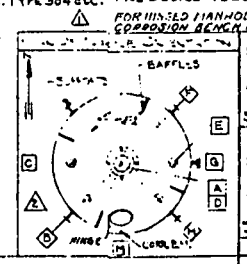



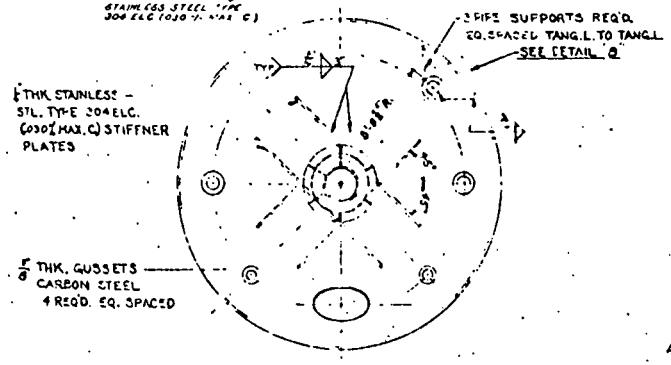

DETAIL OF BASE PLATE
SCALE 1"=1'-0"



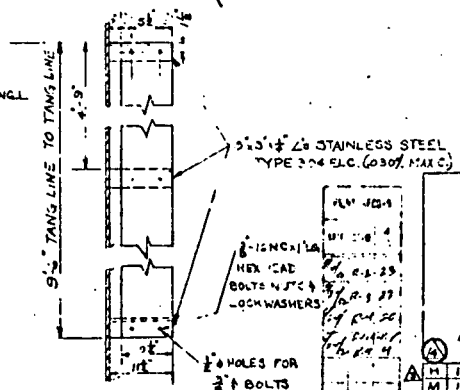




SECTION 'F' ROTATION




VIEW 'A-A'




DETAIL OF BAFFLE
(4-REQ'D.- EQUALLY SPACED OFF NOZZLES
SCALE: 1"=1'-0"

## GENERAL NOTES

TANK TO BE ALL WELDED FABRICATION IN ACCORDANCE WITH LATEST REVISION OF ASME BOILER & PRESSURE VESSEL CODE.

MATERIALS

SHELL & HEADS — S.S. TYPE 304, E.L.C. (.030% MAX. C)
BAFFLES & INTERNAL ℄ — S.S. TYPE 304, E.L.C. (.030% MAX. C)
STUDS - BOLTS — S.S. TYPE 304
NUTS — S.S.
SUPPORTS — ASTM A-7 OR EQUAL
FLANGES — S.S. TYPE 304, E.L.C. (.030% MAX. C)
COUPLINGS — S.S. TYPE 304, E.L.C. (.030% MAX. C)
GASKETS — TEFLON
PIPE - SEAMLESS — S.S. TYPE 304, E.L.C. (.030% MAX. C) AS PER SPEC.

ALL STAINLESS STEEL TO BE #1 FINISH.
REMOVE ALL ROUGH, GREASE, FLUX, SCALE, ETC.
ALL MATERIAL, CARBON STEEL MEMBERS, SHALL BE PAINTED PAINTED WITH ONE SHOP COAT OF AMERCOAT #13 WASH PRIMER AND ONE FINISH COAT OF AMERCOAT #13 SEAL COAT.
NORTH ARROW & ITEM NO. TO BE PAINTED ON VESSEL.
HYDROSTATIC TEST — 351 PSI.

SHIPPING WEIGHT — 7500 LBS.
OPERATING WEIGHT (FULL LAGITATOR) — 59,200 LBS.
TEST WEIGHT — 58,000 LBS.
CAPACITY — 6050 GALS.
REFERENCE DRAWINGS:
VESSEL TO BE FABRICATED TO C.C.C.O. SPEC.
PRESSURE VESSEL INDEX PART IX SECTION I.
FOR HINGED MANHOLE DETAILS - SEE C.C.C.O. STD. DSF 1106 STL. TYPE 304 ELC. (.030% MAX. C) EXCEPT MATERIAL TO BE ST. STL. TYPE 304 ELC. (.030% MAX. C)
CORROSION BENCH MARK DETAIL - SEE C.C.C.O. DSF-1102.

| Nozzle Schedule | | | | | | | |
|---|---|---|---|---|---|---|---|
| H | 1 | 2" | | | PRESSURE GAUGE | | |
| M | 1 | 10" | | | MANHOLE | HINGED | |
| G | 1 | 3/4" | 3'-0" | | SAMPLE | BLIND FLANGE | |
| F | 1 | 4" | | | [illegible] | | |
| E | 1 | 3" | | | [illegible] | | |
| D | 1 | 4" | | | INLET | | |
| C | 1 | 3" | | | FLOW LINE | | |
| B | 1 | 2" | | | VENT | | |
| A | 1 | 10" | | | [illegible] | | |
| Code | No. Req'd | Size | Service & Fasteners | Connection Flange Rating | Service | Remarks | |

| REV. | DATE | DESCRIPTION | MADE BY | APPD |
|---|---|---|---|---|
| 5 | | | | |
| 4 | 4-19-57 | REMOVED RING FLANGE FROM NOZZLE "H" & CHANGED FROM SPARE TO PRECOOLED WATER | L.B.S. | |
| 3 | 3/1/57 | NOZZLE "H" WAS PR METER. 3" STL. PIPE WAS "SP" | | |
| 2 | 3/1/57 | DIMENS. SHOWN ADDED. NOZZLE "G" & "F" ELEV. & LOCATION CHANGED. NOZZLE "M" ADDED. PIPE SUPPORTS REMOVED. NOZZLE "E" ADDED. DIMENS. ADDED. NOZZLE "D" & "C" ELEV. CHANGED. NOZZLE "B" ADDED. | | |
| 1 | 11-7-56 | ADDED & NOTES REMOVED. REVISED DIMENS. ADDED. NOZZLE "B" WAS 3/4" COUPL. NO. REVISED PAINT NOTE. | L.B.S. | |

REVISIONS

APPROVED FOR A.E.C. BY
DATE

UNITED STATES ATOMIC ENERGY COMMISSION
NEW YORK OPERATIONS OFFICE

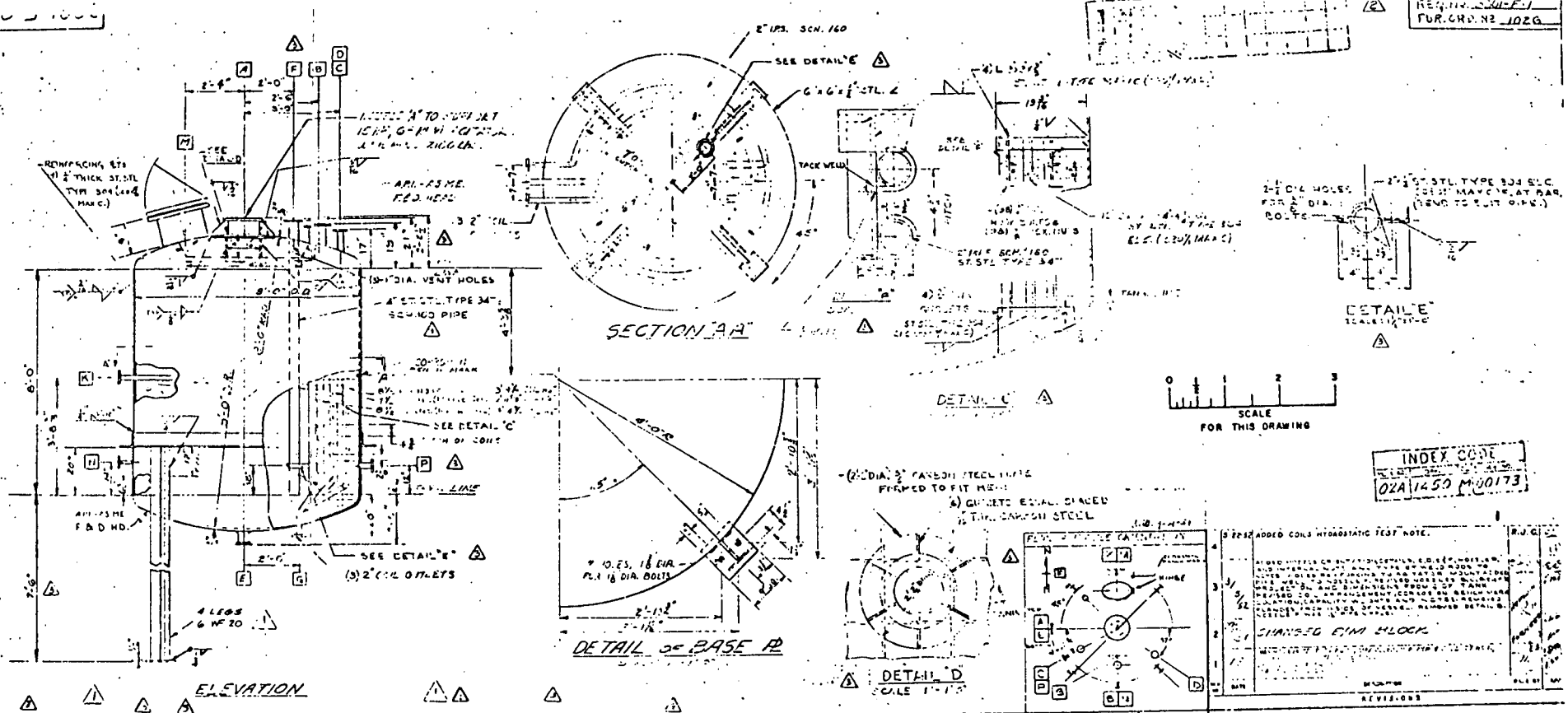
CONTRACT No. AT(30-1)-1060
FEED MATERIALS PRODUCTION CENTER
FERNALD AREA

PRE-LAGITATOR TANK
9'-6" O.D. x 9'-6" HIGH
ITEM [illegible]

DATE 11-7-56
SCALE 1"=1'-0" EXCEPT AS NOTED
DRAWN DYGUEE
CHECKED
OFFICE OF CATALYTIC CONSTRUCTION CO. 1528 WALNUT STREET PHILA. 2, PA.
APPROVED
DRAWING NO. 3001-F-19-B
REVISION NO. 4

INDEX CODE
026 1450 M00184

5114




## DESIGN NOTES

PRESSURE: OPERATING: — DESIGN: —
TEMPERATURE: OPERATING: 72°F DESIGN: 200°F
CORROSION ALLOWANCE: — — — NONE
JOINT EFFICIENCY: — SHELL: 85% HEAD: 100%
STRESS RELIEVE: — — — — — NONE
RADIOGRAPH: — — — — — NONE
HALVER TEST: — — — — — NONE
MAX. ALLOWABLE W.P. NEW & COLD: — — 30 PSIG
MAX. ALLOWABLE FULLY CORRODED STRESS: — — — 20 PSIG
HYDROSTATIC TEST: — — — — — — — 30 PSIG
CONSTRUCTION: FUSION WELDED IN ACCORDANCE WITH LATEST REVISION OF API-ASME CODE FOR UNFIRED PRESSURE VESSELS, NO CODE STAMP, INSPECTION, OR FACSIMILE REQD.
FABRICATOR TO REVISE OPENINGS TO MEET REQUIREMENTS OF API-ASME CODE.
COIL HYDROSTATIC TEST — — — — — 300 PSIG BEFORE INSTALLING

## MATERIAL NOTES

SHELL, HEADS: STAINLESS STEEL TYPE 304 ELC (0.03% MAX.)
SUPPORTS: ASTM A-7 OR EQUAL.
INTERNAL BOLTS: STAINLESS STEEL TYPE 304.
MANWAY STUDS: STAINLESS STEEL TYPE 304.
FLANGES: STAINLESS STEEL TYPE 304 ELC (0.03% MAX.)
MANWAY AND COVER: STAINLESS STEEL TYPE 304 ELC (0.03% MAX.).
PIPE: AS NOTED.
GASKETS: TEFLON.
NUTS: STAINLESS STEEL TYPE 303.
INTERNAL NUTS: STAINLESS STEEL TYPE 304.
WELD PIPE WITH STSL TYPE 347 WELD RODS.

## GENERAL NOTES

INSPECTION TO BE INSPECTED BY CATALYTIC CONSTRUCTION COMPANY ONLY.
PAINTING: ALL EXTERNAL CARBON STEEL VESSELS TO BE PAINTED WITH ONE SHOP COAT OF AMERCOAT #13 WASH PRIMER AND ONE SHOP COAT OF AMERCOAT #13 SEAL COAT.
INSULATION: TO BE FIELD INSTALLED, 85% MAGNESIA 2" THK. BLOCKS.

| | |
|---|---|
| SHIPPING WEIGHT: | 12,000 LBS. |
| OPERATING WEIGHT: | 73,200 LBS. |
| TEST WEIGHT: | 85,200 LBS. |
| CAPACITY: | 3,460 GALS. |

NOZZLE ARRANGEMENT ITEM NO. TO BE PAINTED ON VESSEL.
NOZZLE BOLT HOLES TO STRADDLE NATURAL CENTERLINES UNLESS OTHERWISE NOTED.

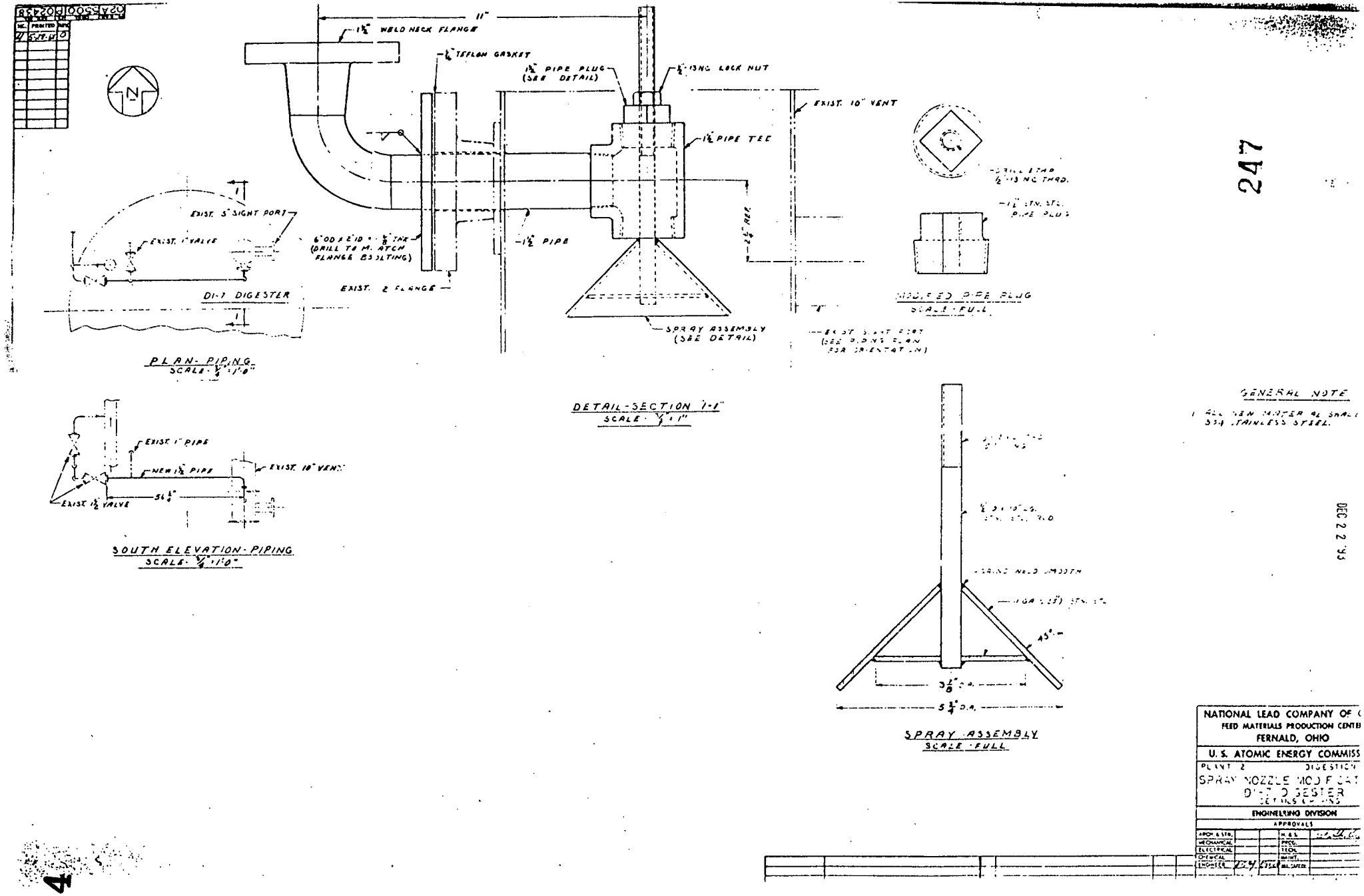
## REFERENCE DRAWINGS

STANDARD HINGE DETAILS OF MANHOLE FLANGE ELC (0.03% EXCEPT MATERIAL TO BE STSL TYPE 304
BLOCK INSULATION SUPPORTS - D.S.L.-115.
COMPRESSION RING MARK - D.S.F.-107.
VESSEL TO BE FABRICATED TO CC. CO. SPECS
PRESSURE VESSEL INDEX PART II, SECTION I.

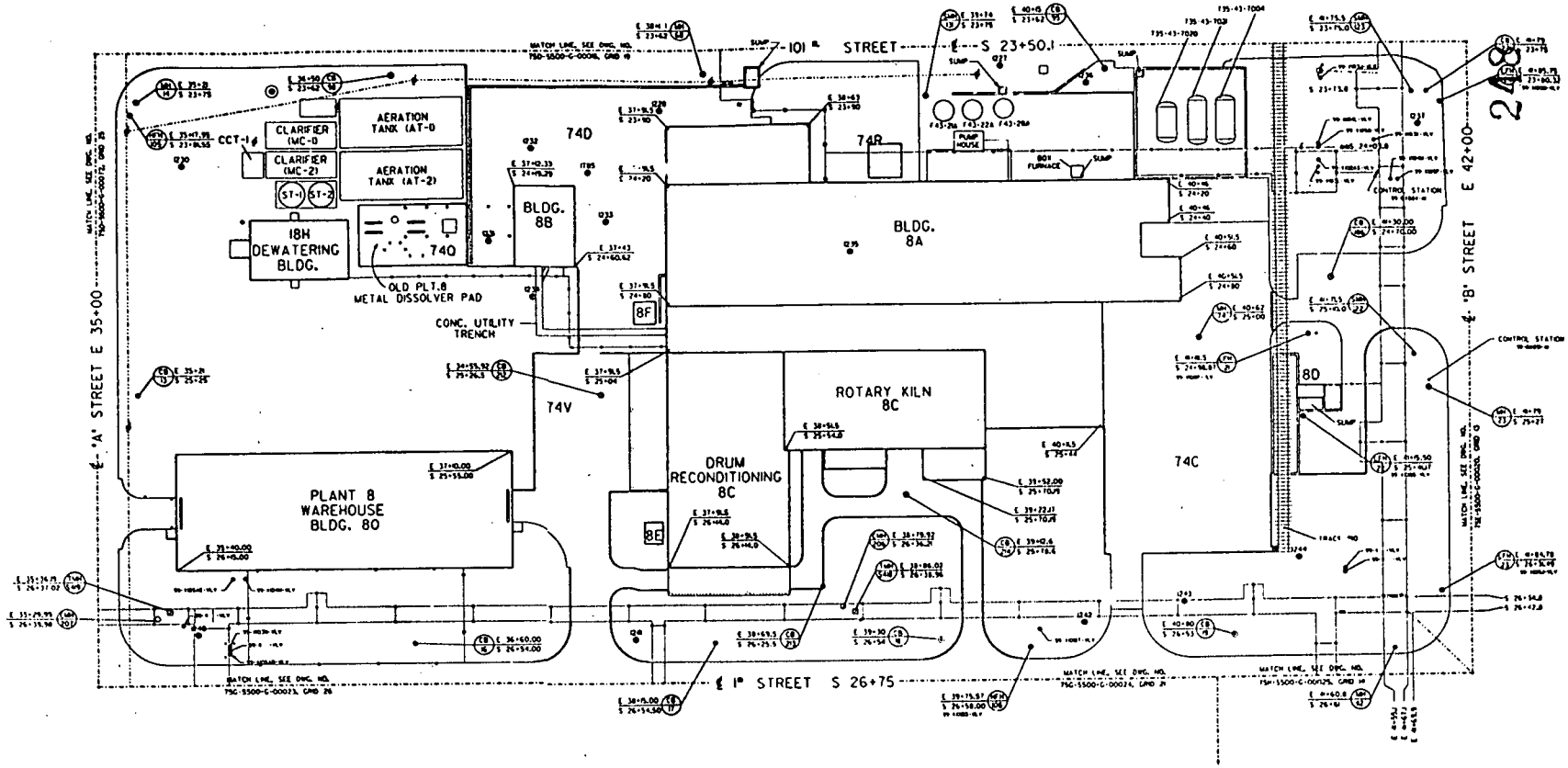
## NOZZLE SCHEDULE

| SYMBOL | NO. REQD | SIZE | RATING & FACING | | SERVICE | REMARKS |
|---|---|---|---|---|---|---|
| D | 1 | 2" | 150# ASA FLAT FACE | 4'-0" | TEMP. CONTROL | |
| N | 1 | 1" | | 3'-0" | SAMPLE COIL | |
| M | 1 | 20" | 150# ASA FLAT FACE | | MANHOLE | REVISED |
| K | 3 | 2" | | 4'-0" | TEMPERATURE COIL INLET | |
| G | 3 | 2" | 150# ASA FLAT FACE | | TEMPERATURE COIL OUTLET | |
| F | 1 | 4" | | | L.L.C. | 4" STL PIPE 8'-0" LONG |
| E | 1 | 3" | | | DRAIN | |
| C | 1 | 4" | | | MANIFOLD | |
| B | 1 | 3" | | | MANIFOLD | |
| A | 1 | 12" | 150# ASA FLAT FACE | | VENT | |
| | | | | | AGITATOR | |

246


11"
1½" WELD NECK FLANGE
½" TEFLON GASKET
1½" PIPE PLUG (SEE DETAIL)
½"-13NC LOCK NUT
EXIST. 10" VENT
1½" PIPE TEE
EXIST. 5" SIGHT PORT
EXIST. 1" VALVE
DI-7 DIGESTER
6" OD x 2" ID x ½" THK (DRILL TO MATCH FLANGE BOLTING)
EXIST. 2" FLANGE
1½" PIPE
SPRAY ASSEMBLY (SEE DETAIL)
PLAN-PIPING
SCALE: ½" = 1'-0"
DETAIL-SECTION 1-1
SCALE: ½" = 1"
MODIFIED PIPE PLUG
SCALE: FULL
EXIST. 1" PIPE
NEW 1½" PIPE
EXIST. 10" VENT
EXIST. 1½" VALVE
SOUTH ELEVATION-PIPING
SCALE: ½" = 1'-0"
45°
SPRAY ASSEMBLY
SCALE: FULL
GENERAL NOTE
1. ALL SPRAY NOZZLE MATERIAL SHALL BE 304 STAINLESS STEEL.
NATIONAL LEAD COMPANY OF OHIO
FEED MATERIALS PRODUCTION CENTER
FERNALD, OHIO
U. S. ATOMIC ENERGY COMMISSION
PLANT 2 DIGESTION
SPRAY NOZZLE MODIFICATION
DI-7 DIGESTER
SETTING & PIPING
ENGINEERING DIVISION
APPROVALS
DEC 22 '55
247

51145




| NO. | REVISIONS | DATE | DRN. BY | APPD. |
|---|---|---|---|---|
| 7 | UPDATED | | | |
| 6 | UPDATED | | | |
| 5 | ADDED PW MARKS N.S. | | | |
| 4 | UPDATED | | | |
| 3 | UPDATED | | | |
| 2 | REDRAWN ON CAD | | | |

NOTE: REMCO C.A.D. DRAWING NOT TO BE REVISED MANUALLY

WESTINGHOUSE ENVIRONMENTAL MANAGEMENT CO. OF OHIO
FERNALD, OHIO
FERNALD ENVIRONMENTAL MANAGEMENT PROJECT
US DEPARTMENT OF ENERGY

PLANT 8 — YARD AREA

GRID 20
EXISTING SITE PLAN
SCALE: 1"=20'

750-5500-G-00019 | 7

DO NOT SCALE REDUCED DRAWING

248

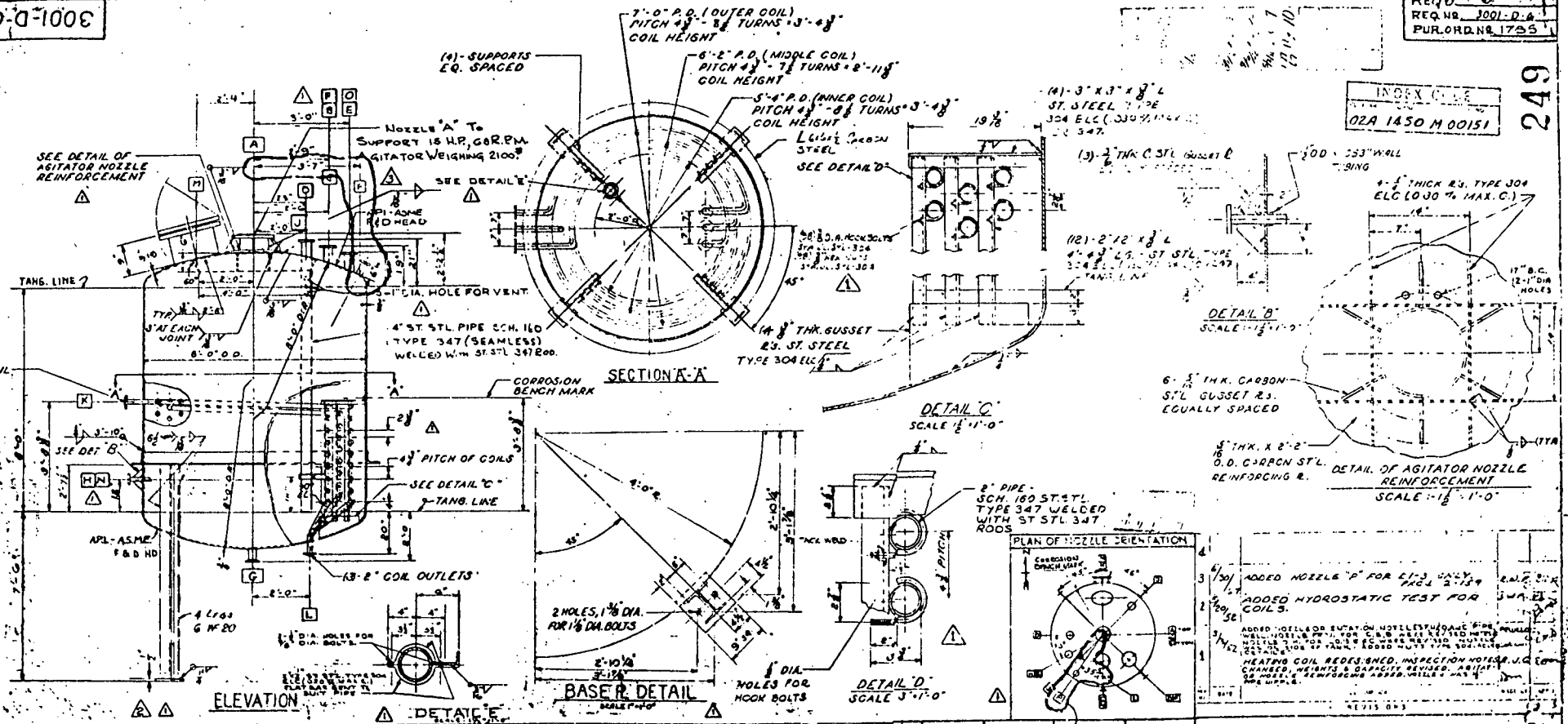
5114

3001-D-02-B

REQ'D 6
REQ. NO. 3001-D-6
PUR. ORD. NO. 1755

249

INDEX CODE
02A 1450 M 00151




| | | | | | | |
|---|---|---|---|---|---|---|
| 4 | | | | | | |
| 3 | 6/30/51 | | ADDED NOZZLE "P" FOR LI-3 ONLY PAGE 2-154 | | | |
| 2 | 5/30/51 | | ADDED HYDROSTATIC TEST FOR COIL 3. | | | |
| 1 | 3/14/51 | | ADDED NOZZLES OR SUPPORTS ON NOZZLES TO AVOID WELD NOZZLES PER ISSUE FOR C.R.R. AREA 2-157 ADDED NOZZLE "N" FOR 10'-0" EC WAS REVISED NOZZLE "O" FOR 10'-0" EC WAS REVISED NOZZLE "G" FOR 10'-0" EC WAS REVISED. ADDED LOCATION OF TANG. ADDED NUTS TYPE 304 STAINLESS. HEATING COIL REDESIGNED, INSPECTION NOTES & U.C. CHANGED, WEIGHTS & CAPACITY REVISED. ADDED 1" DIA. HOLE FOR ADDED THERMOCOUPLE. ADDED NOZZLE "P" FOR LI-3 ONLY. | | | |
| | DATE | | REVISIONS | | | |

| P | 1 | 2" | 150# ANSI FLAT FACE | | HIGH LEVEL SWITCH | LI-3 ONLY |
|---|---|---|---|---|---|---|
| N | 1 | 1" | 150# ANSI FLAT FACE | 4'-0" | SAMPLE CONN. | SEE DETAIL B |
| M | 1 | 2½" | 150# ANSI FLAT FACE | | MANHOLE | |
| L | 3 | 3" | 150# ANSI FLAT FACE | | HEATING COIL INLET | |
| K | 3 | 3" | 150# ANSI FLAT FACE | 4'-0" | | |
| J | 1 | 4" | 150# ANSI FLAT FACE | | LIQUID LEVEL CONTROL | |
| H | 1 | 1½" | 150# ANSI FLAT FACE | 4'-0" | TEMP. CONTROL | |
| G | 1 | 3" | 150# ANSI FLAT FACE | | DRAIN | |
| F | 1 | 6" | 150# ANSI FLAT FACE | | FUME VENT | ITEMS D1-4, 5, 6 |
| E | 1 | 4" | 150# ANSI FLAT FACE | | MANIFOLD | |
| D | 1 | 4" | | | ACID INLET | |
| C | 1 | 6" | | | ORE INLET | |
| B | 1 | 10" | | | FUME VENT | ITEMS D1-4, 5, 6 |
| A | 1 | 12" | 150# ANSI FLAT FACE | | AGITATOR NOZZLE | |
| QTY. EACH | NO. REQ'D | SIZE | RATING & FACING | PROJECTION FROM ℄ VESSEL | SERVICE | REMARKS |

NOZZLE SCHEDULE

APPROVED FOR A.E.C. BY
DATE

UNITED STATES ATOMIC ENERGY COMMISSION

FEED MATERIALS PRODUCTION CENTER
FERNALD AREA

DIGEST TANK
8'-0" OD x 8'-0" HIGH
ITEM NO. D1-1, 2, 3, 4, 5 & 6

| | | |
|---|---|---|
| DATE 11-2-51 | | |
| SCALE 1/2" = 1'-0" EX AS NOTED | | |
| DRAWN W.A.K. | APPROVED FOR CONSTRUCTION | |
| CHECKED K.F.A. 11/9/51 | LAYOUT NO. 3001-D-02-B | 3 |

DESIGN NOTES

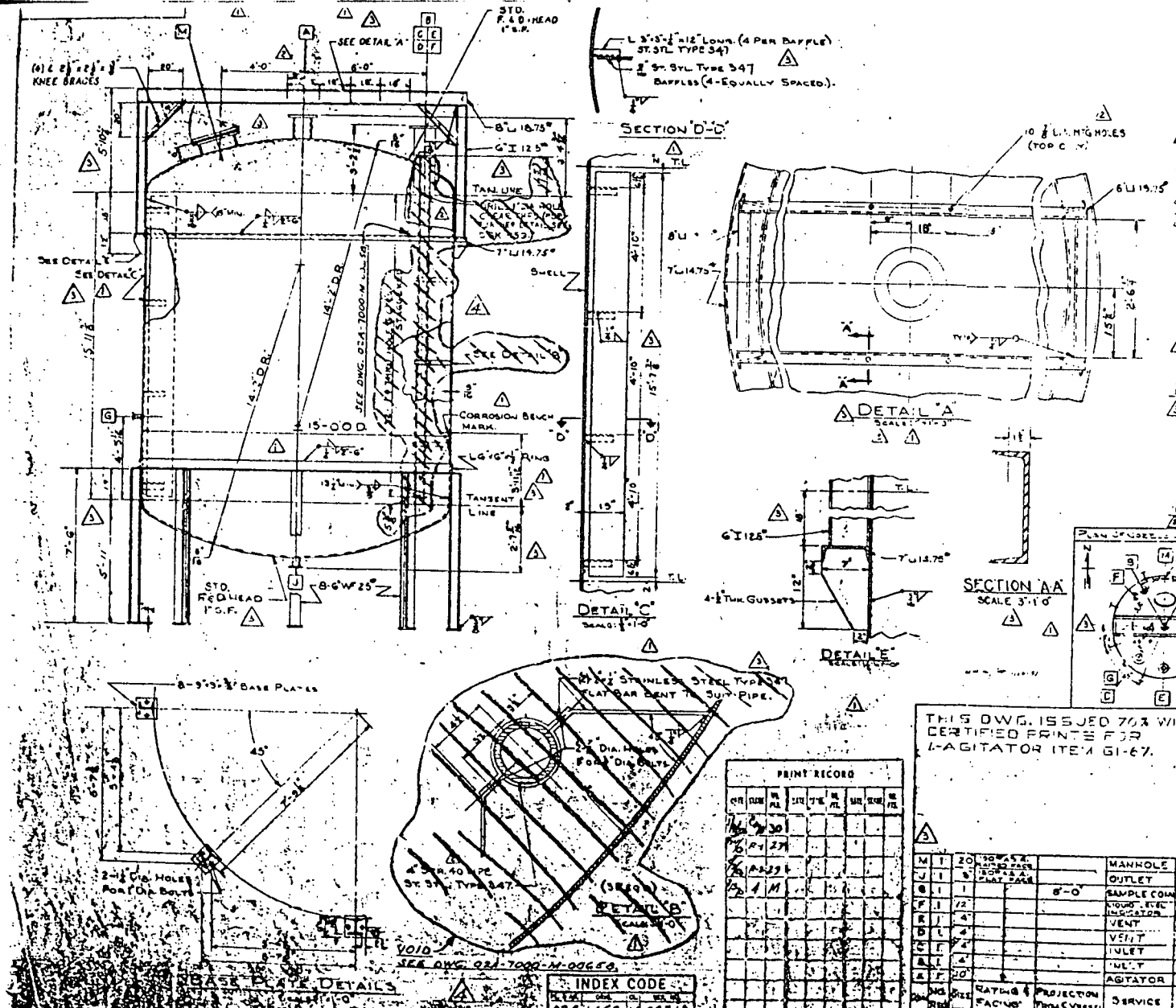
PROCEDURE: OPERATING - ATM. DESIGN - AMBIENT
CAPACITY: OPERATING - 2600# DESIGN - 400#
CORROSION ALLOWANCE: 0
JOINT EFFICIENCY: SHELL - 80% HEAD - 100%
RADIOGRAPHY: NO
RADIOGRAPHY: NO
HYDROSTATIC TEST: 82 PSI
MAX. ALLOWABLE W.P. NEW & COLD: 64 PSI
MAX. ALLOWABLE W.P. PULL CORRODED DESIGN WELL: 101
PROOF TEST - SHELL 99 PSI - COILS BEFORE HOT 300 PSI
CONSTRUCTION: FUSION WELDED IN ACCORDANCE WITH LATEST REVISION OF API-ASME CODE FOR UNFIRED PRESSURE VESSELS.
FABRICATOR TO REINFORCE OPENINGS TO MEET REQUIREMENTS OF API-ASME CODE.
NOZZLE STANDARD INDUSTRIAL, VACUUM & PROD.

MATERIAL NOTES

SHELL & HEADS: ST. STEEL TYPE 304 BC (.030% MAX. C.)
BRACKETS: ASTM A-7 OR EQUAL
MANHOLE BALTS: ST. STEEL TYPE 304
MANHOLE NUTS: ST. STEEL TYPE 303
FLANGES: ST. STEEL TYPE 304 ELC (.030% MAX. C.)
MANHOLE & COVER: ST. STEEL TYPE 304 ELC (.030% MAX. C.)
COUPLINGS: NONE
PIPE: ST. STEEL TYPE 347
ALL GASKETS: ½" TEFLON
INTERNAL NUTS: ST. STL. TYPE 304
SUPPORTS INSIDE VESSEL - ST. STL. TYPE 304 E.L.C. (.030% MAX. C.) OR TYPE 347.
TANG: ST. STEEL TO HAVE 2B FINISH

1-5114

Issued No. ONE
Req. No. 3001-E-11
Pur. Req. No. 2143




## GENERAL NOTES

TANK TO BE ALL WELDED CONSTRUCTION IN ACCORDANCE WITH LATEST REVISION OF THE AMERICAN WELDING SOCIETY PROCEDURE.

MATERIAL:

SHELL & HEADS — STAINLESS STEEL TYPE 347 OR 304 ELC (.030% MAX. C).
SUPPORTS — A.S.T.M. A-7 OR EQUAL (STEEL)
GASKETS — TEFLON
FLANGES — STAINLESS STEEL TYPE 347
DISC — STAINLESS STEEL TYPE 347
BOLTS & STUDS — STAINLESS STEEL TYPE 304
NUTS — STAINLESS STEEL TYPE 303

ALL STAINLESS STEEL TO HAVE #1 FINISH.
ALL BOLT HOLES TO STRADDLE NATURAL ℄ UNLESS OTHERWISE NOTED.

PAINTING:

REMOVE RUST, GREASE, MILL SCALE, ETC.
ALL EXTERNAL CARBON STEEL SHALL BE PAINTED WITH ONE SHOP COAT OF AMERCOAT #1 STEEL PRIMER AND ONE FIELD COAT OF AMERCOAT #10 SEAL COAT.
NORTH ARROW AND HEIGHT TO BE PAINTED ON VESSEL.

TEST:

HYDROSTATIC TEST — 35 PSI. [illegible]

WEIGHTS:

SUPPORTS — 13,100 LBS.
OPERATING WEIGHT FULL — 321,800 LBS.
TEST WEIGHT — 224,000 LBS.
CAPACITY (FULL) — 24,000 GALS.

SPECIFICATIONS:

VESSEL TO BE FABRICATED TO A.S.M.E. SPECIFICATIONS PRESSURE VESSELS INDEX, PART IV, SECTION IA.

REFERENCE DRAWINGS:

STANDARD MANHOLE DETAILS — D.S.F. 102. (EXCEPT MATERIAL TO BE STAINLESS STEEL TYPE 304 ELC (.030% MAX. C)).
CORROSION BENCH MARK — D.S.F. 107.
LOCATION OF VENTS ON STILL WELLS FOR L.L.L. D&X159.

THIS DWG. ISSUED 70% WITHOUT CERTIFIED PRINTS FOR 1-AGITATOR ITEM G1-67.

PRINT RECORD

| CTR | CLEAR | ML FIL | CTR | CLEAR | ML FIL | CTR | CLEAR | ML FIL |
|---|---|---|---|---|---|---|---|---|
| 1/16 | 3/4 | 30 | | | | | | |
| 1/16 | R-1 | 27 | | | | | | |
| 1/16 | R-2 | 33 | | | | | | |
| 1/16 | 1 | M | | | | | | |

NOZZLE SCHEDULE

| MARK | NO. | SIZE | RATING & FACING | PROJECTION FROM VESSEL | SERVICE | REMARKS |
|---|---|---|---|---|---|---|
| M | 1 | 20" | 150# R.F. FLAT BAR BOTH & A.F. FLAT BAR | 8'-0" | MANHOLE | HINGED |
| J | 1 | 8" | | | OUTLET | |
| G | 1 | 1" | | | SAMPLE CONN. | |
| F | 1 | 12" | | | LIQUID LEVEL INDICATOR | [illegible] |
| E | 1 | 4" | | | VENT | |
| D | 1 | 4" | | | VENT | |
| C | 1 | 4" | | | INLET | |
| B | 1 | 4" | | | INLET | |
| A | 1 | 10" | | | AGITATOR | |

UNITED STATES ATOMIC ENERGY COMMISSION
N.Y. OPERATIONS OFFICE

FEED MATERIALS PRODUCTION CENTER
FERNALD AREA

COLD SLOP TANK
15'-0" DIA. x 5'-0" HIGH
ITEM NO. F-35

DATE 1-23-52
DRAWN BY
REVISED BY
REVISED
CATALYTIC CONSTRUCTION CO.
APPROVED FOR CONSTRUCTION
DATE 11-3-51
DRAWING 3001-F-C2-3
4

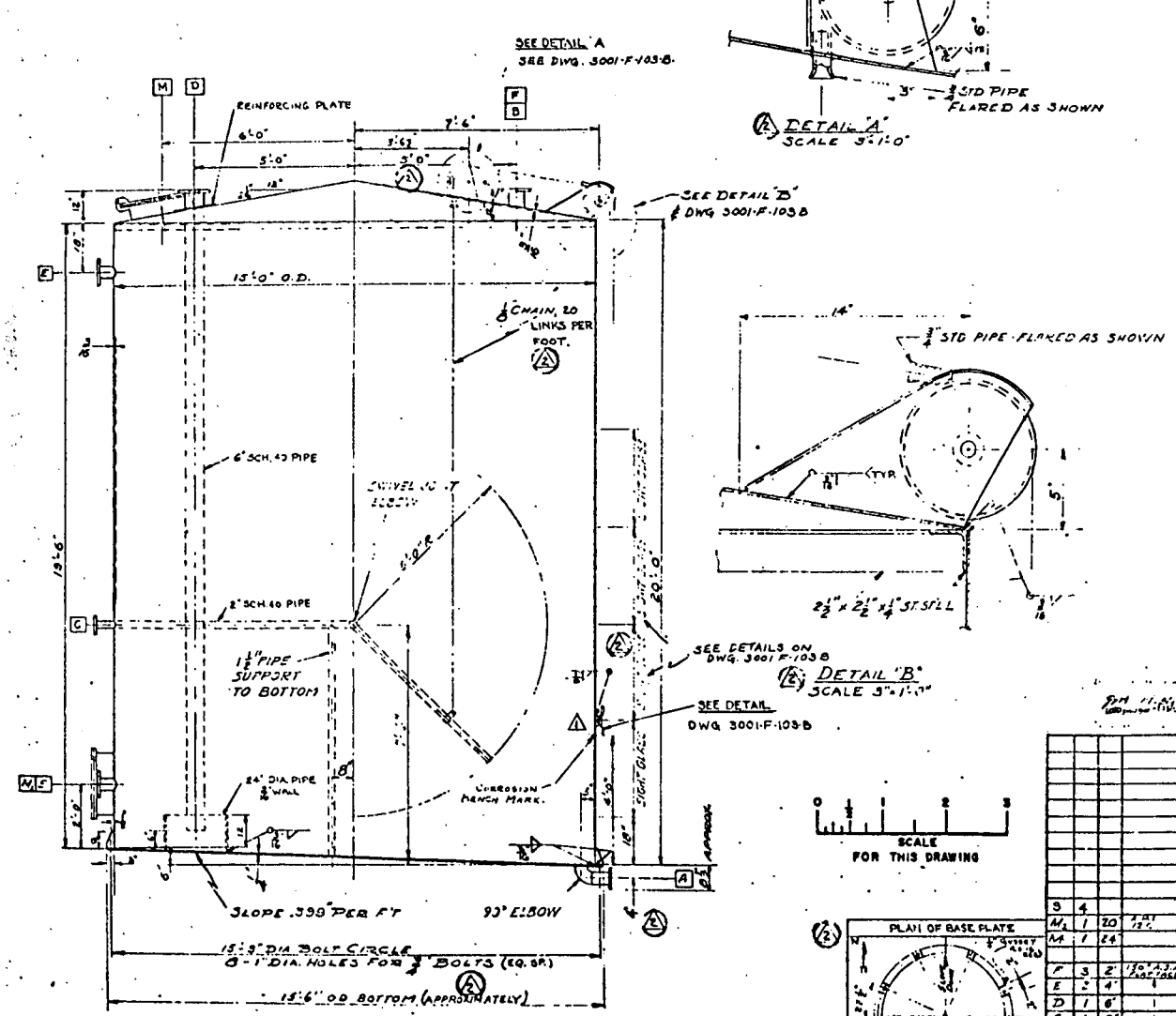
251

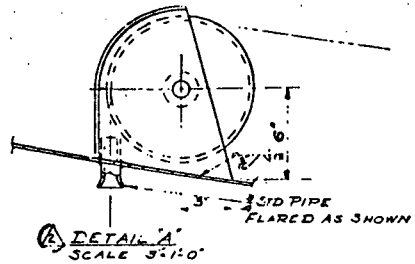
5114

3001-F-65-B

REQ'D No. ONE
REQ No. 3001-F-13
PUR. ORD. No. 2258

251




DETAIL 'A'
SCALE 3"=1'-0"




DETAIL 'B'
SCALE 3"=1'-0"

## GENERAL NOTES

TANK TO BE ALL WELDED CONSTRUCTION IN ACCORDANCE WITH LATEST REVISION OF AMERICAN WELDING SOCIETY PROCEDURE.

**MATERIAL:**

SHELL, HEADS & BASE PLATE — STAINLESS STEEL TYPE 304 ELC. (0.03% MAX. C)
FLANGES — STAINLESS STEEL TYPE 304 ELC. (0.030% MAX. C)
COUPLINGS — STAINLESS STEEL TYPE 304 ELC. (0.03% MAX. C)
PIPE — STAINLESS STEEL TYPE 304 ELC. (0.030% MAX. C)
SHEAVE AND CHAIN — STAINLESS STEEL TYPE 304
STUDS & BOLTS — STAINLESS STEEL TYPE 304
NUTS — STAINLESS STEEL TYPE 308
GASKETS — TEFLON EXCEPT AS NOTED

ALL STAINLESS STEEL TO BE N.P.I. FINISH — WELDS WIRE BRUSHED
ALL BOLT HOLES TO STRADDLE NATURAL ℄'S UNLESS OTHERWISE NOTED.
REMOVE ALL SCALE, RUST, GREASE ETC.

**PAINTING:**

NONE

NORTH ARROW AND ITEM NO. TO BE PAINTED ON VESSEL

**TEST:**

VESSEL TO BE WATERTIGHT

**WEIGHTS:**

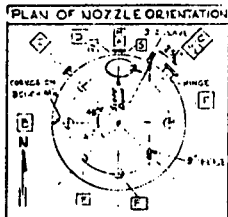
| | | |
|---|---|---|
| SHIPPING WEIGHT | 12,300 | LBS |
| OPERATING WEIGHT | 256,810 | LBS |
| TEST WEIGHT | 294,810 | LBS |
| CAPACITY | 26,550 | GALS |

**SPECIFICATIONS:**

TANK TO BE FABRICATED TO G.C.D. SPECIFICATIONS FOR ATMOSPHERIC TANKS & HOPPERS PART IX SECTION IA.
VESSEL TO BE CONSTRUCTED TO LATEST REVISION OF A.P.I. STD. 620 FOR WELDED STORAGE TANKS (EXCEPT AS NOTED)

**REFERENCE DRAWINGS:** 3001-F-103-B DETAILS OF SUMP RECEIVER TANK
CORROSION BENCH MARK DSF-107
MANHOLE DETAILS DSF-110 EXCEPT MATERIAL TO BE STAINLESS ST. TYPE 304 (0.03% MAX)

PLAN OF NOZZLE ORIENTATION




| REV. NO. | DATE | DESCRIPTION | DRAWN BY | APPD. |
|---|---|---|---|---|
| 5 | | | | |
| 4 | | | | |
| 3 | | | | |
| 2 | 6-3-52 | CHG'D. LOCATION OF NOZZLE "F & B", ADDED EXAM NOTE, ADDED PLAN OF BASE PL., CHGD. DESIGNS OF DETAILS A & B, NOTE DETAIL DWG. 3001-F-103-B CHG'D NOTE B, REMOVED 3001-F-103-B DETAIL (PAS) ADDED NOTE E "A" DIMENSION ADDED SEP. 1 WORK | L.B.S. | |
| 1 | 3-1-52 | ADDED CORROSION BENCH MARK, ADDED CLEAT FOR SYPHON SIDEWALL, SPEC. ADDED NOZZLE ORIENTATION, REVISED LB PLAN | L.B.S. J.P.D. | |

REVISIONS

APPROVED FOR A. E. C. BY _____
DATE _____

UNITED STATES ATOMIC ENERGY COMMISSION
NEW YORK OPERATIONS OFFICE

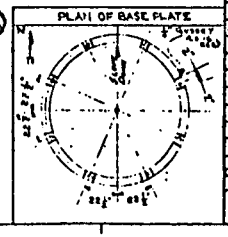
CONTRACT No. AT(30-1)-1060
FEED MATERIALS PRODUCTION CENTER
FERNALD AREA

# SUMP RECEIVER TANK
15'-0" O.D. x 20'-0" HIGH
ITEM F1-608

| | | | | | | |
|---|---|---|---|---|---|---|
| S | 4 | | | | BIGHT GLASS | SEE DETAIL |
| M₂ | 1 | 20" | 8 PI 125 | | STAIR ANGLE | SLIP ON COVER |
| M | 1 | 24" | | | BASE ANCHOR | WITH MINIMUM WELD |
| F | 3 | 2" | 150# ASA FLAT FACE | | STAIRS | |
| E | 2 | 4" | | 4'-0" | | |
| D | 1 | 6" | | | SUMP CONN | |
| C | 1 | 2" | | 8'-0" | SYPHON | |
| B | 1 | 6" | | | VENT | |
| A | 1 | 4" | 150# ASA FLAT FACE | 8'-0" | DRAIN | |
| COUPLING | NO. DROP | SIZE | RATING & FACING | PROJECTION FROM ℄ VESSEL | SERVICE | REMARKS |

NOZZLE SCHEDULE

PLAN OF BASE PLATE




SCALE FOR THIS DRAWING
0 1 2 3

INDEX CODE

| PLANT | UNIT | C | MR. NO. |
|---|---|---|---|
| 026 | 1450 | M | 00214 |

DATE 12-18-51
SCALE ½"=1'-0"
DRAWN R. MELLINI
LAYOUT J. BOYER 12-18-51

OFFICE OF
CATALYTIC CONSTRUCTION CO.
1528 WALNUT STREET
PHILA. 2, PA.

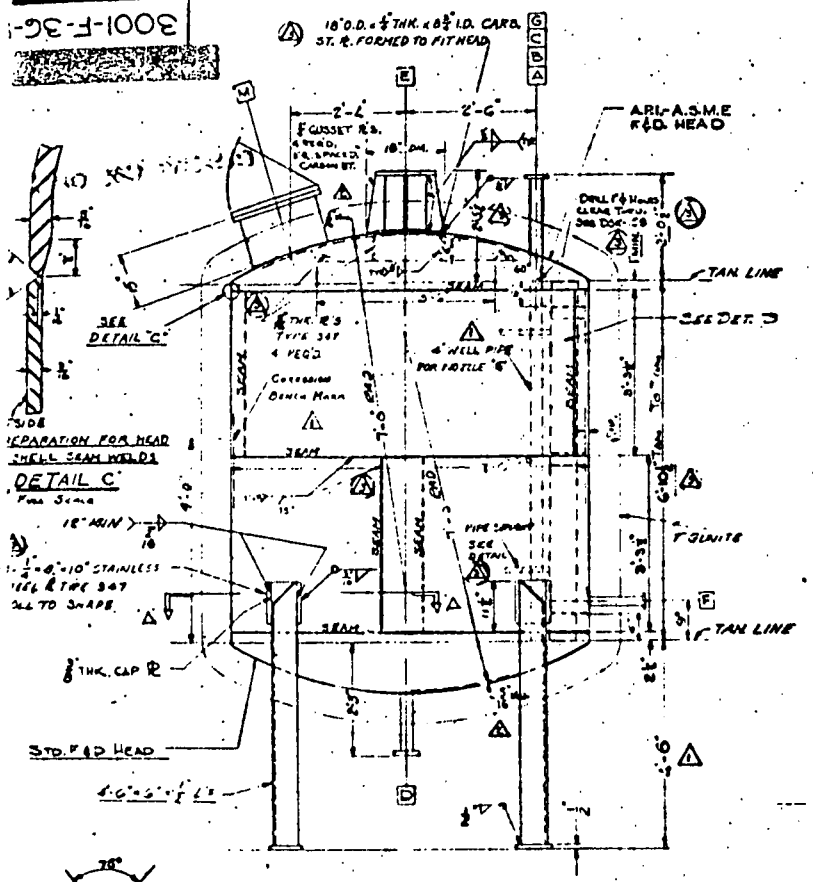
APPROVED FOR CONSTRUCTION

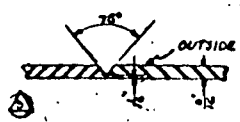
DRAWING NO. 3001-F-65-B
REVISION NO. 2

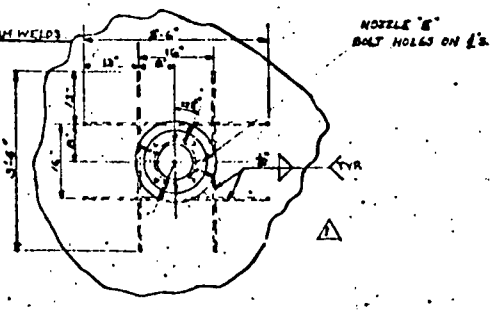
APPROVED
O.S.A. 12-18-51

3001-F-36-B

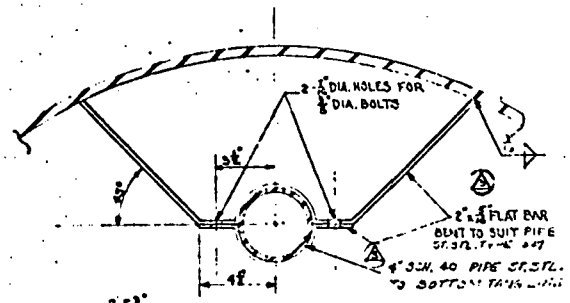
REQ'D. NO. 2
REQ. NO. 3001-F-9
PUR. ORD. NO. 2309




PLAN VIEW OF AGITATOR REINFORCEMENT




PIPE SUPPORT (2 REQ'D.)
SCALE 3"=1'-0"

SECTION A-A

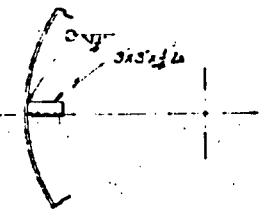
SCALE FOR THIS DRAWING

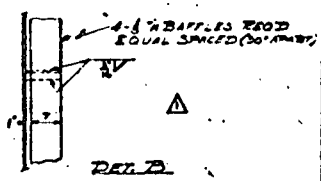
## GENERAL NOTES

VESSEL TO BE ALL WELDED CONSTRUCTION IN ACCORDANCE WITH LATEST EDITION OF THE AMERICAN WELDING SOCIETY PROCEDURE

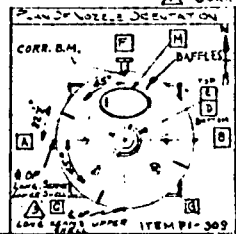
TEST -
HYDROSTATIC . 35 PSI

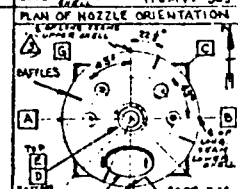
REFERENCE -
FOR LOCATION OF VENTS ON STILL WELLS - SEE DSK-159
MANHOLE HINGE DETAILS USF 106, EXCEPT
MAT. TO BE STAINLESS STEEL TYPE 347
CORROSION BENCH MARK DETAILS - DSK-107




DET. D




| INDEX CODE | | | |
|---|---|---|---|
| 026 | 1450 | M | 00193 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| M | 1 | 18" | 150# R.F. BLIND FLANGE | | MANHOLE | HINGED | |
| G | 1 | 4" | 150# R.F. FLAT FACE | | LIQUID LEVEL INDICATOR | | |
| F | 1 | 1" | 150# R.F. FLAT FACE | 4'-7" | SAMPLE CONN | | |
| E | 1 | 5" | 150# R.F. RAISED FACE | | AGITATOR MOUNT | | |
| D | 1 | 2" | 150# R.F. FLAT FACE | | OUTLET | | |
| C | 1 | 2" | 150# R.F. FLAT FACE | | VENT | | |
| B | 1 | 2" | | | INLET | | |
| A | 1 | 2" | | | INLET | | |
| CODE | No. REQ'D | SIZE | RATING & FACING | PROJECTION FROM VESSEL | SERVICE | REMARKS | |

NOZZLE SCHEDULE

| REVISIONS | | | | |
|---|---|---|---|---|
| 4 | | | | |
| 3 | 5/32 | REPLACED ALL ST. STL. TYPE 304 BY C (0.30% MAX. C.); ADDED REMOVAL FOSK-159 & CHANGED TO SUIT; INT. AGITATOR REMOVAL & PIPE SUPPORTS WERE 8' THK. SHELL WAS 7'-0" TAN TO TAN; NOZZLES A, B, C & G WERE 23" TO TAN & NOZZLE E WAS 2'-4" TO TAN; ADDED BEAM LOCATIONS & DETAILS OF WELD PREPARATIONS. | J.J.M. | |
| 2 | 1/14/52 | HEAD THK. VESSEL WAS 3/8" | J.P. | |
| 1 | 1/15/52 | NOZZLE G IS NOW INT. FLT. CONN. WAS CONN. B.M. ELIMINATED. CONNECT. OF AGITATOR REMOVAL & PIPE SUPPORT ADDED. NOZZLES ADDED TO SHEET 2 & DIM. FOR 4" WELL PIPE ADDED. EXPOSED FINISH NOTE. DELETED DIM. OF WELL PIPE ADDED. | | |
| REV. NO. | DATE | DESCRIPTION | DRAWN BY | APPD. |

APPROVED FOR A.E.C. BY _____
DATE _____

UNITED STATES ATOMIC ENERGY COMMISSION
NEW YORK OPERATIONS OFFICE

CONTRACT No. AT(30-1)-1060

FEED MATERIALS PRODUCTION CENTER
FERNALD AREA

FILTRATE RECEIVER
7'-0" O.D. - 6'10 1/2" HIGH
ITEM F1-308 & F1-309

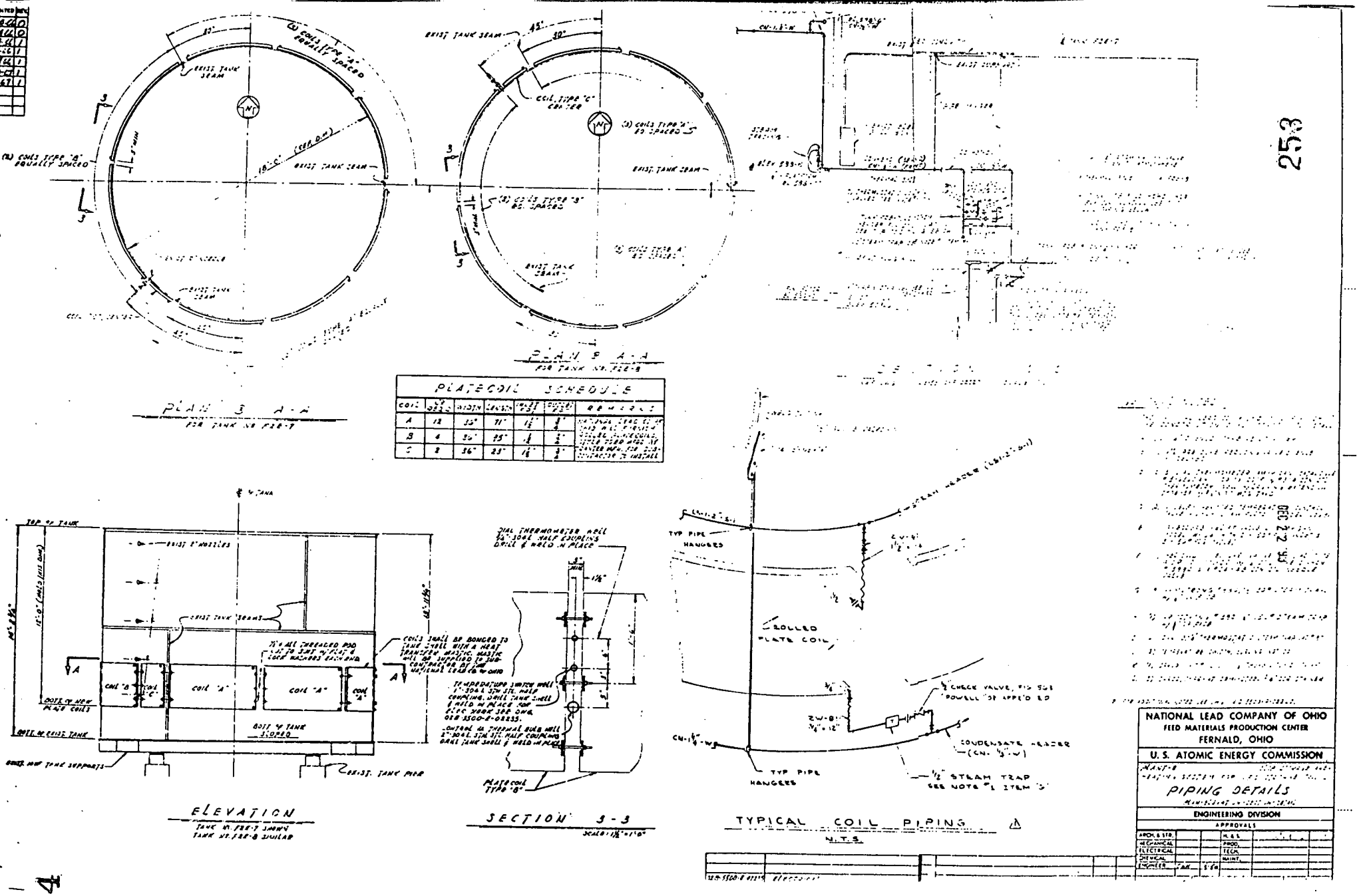
DATE 11-16-51
SCALE 3/4" = 1'-0" EL. AS NOTED
DRAWN D. YOUKE
CHECKED 11-3-51
OFFICE OF CATALYTIC CONSTRUCTION CO.
1520 WALNUT STREET PHILA. 2, PA.

APPROVED FOR CONSTRUCTION

DRAWING NO. 3001-F-36-B
REVISION NO. 3

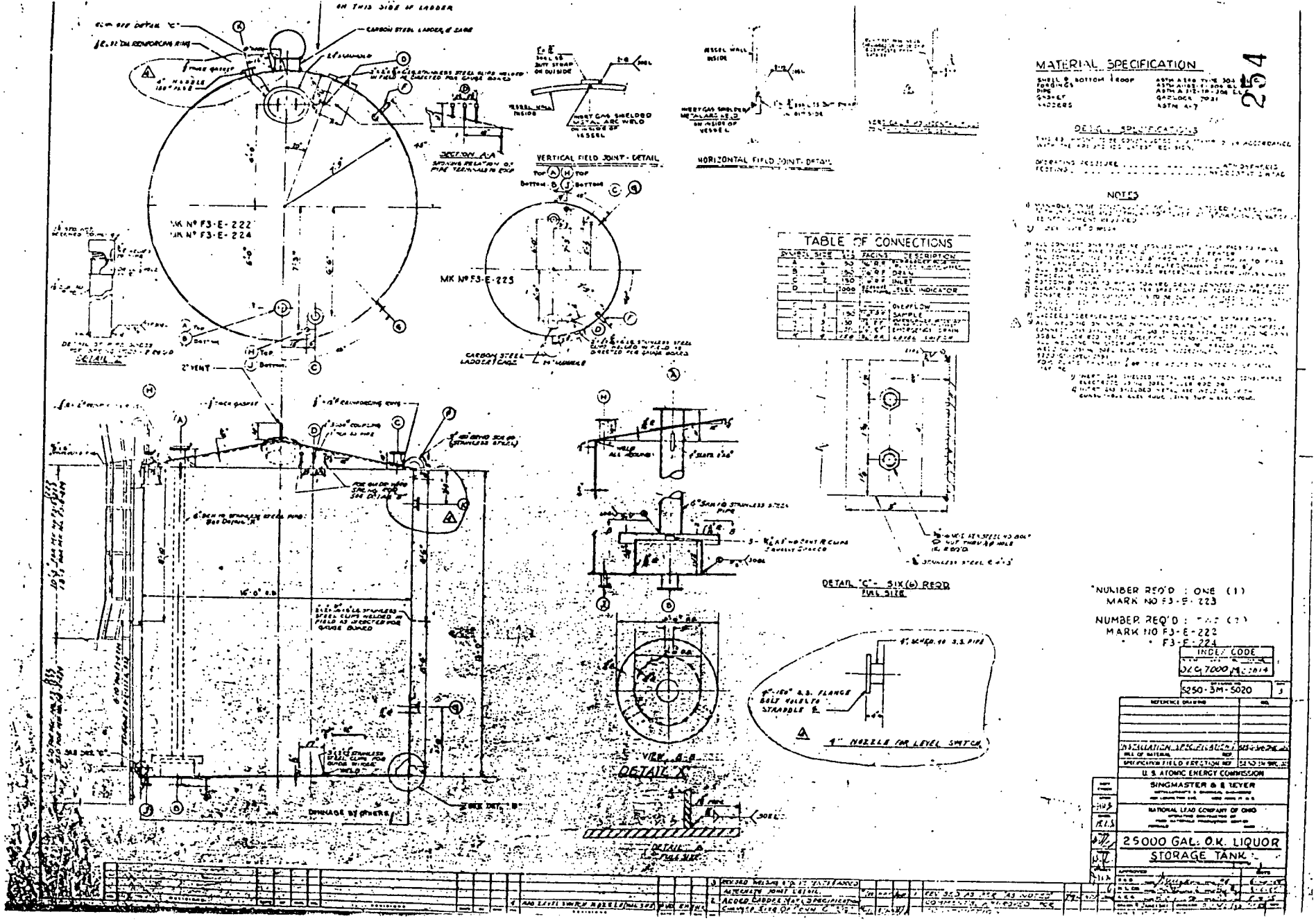
5114

252

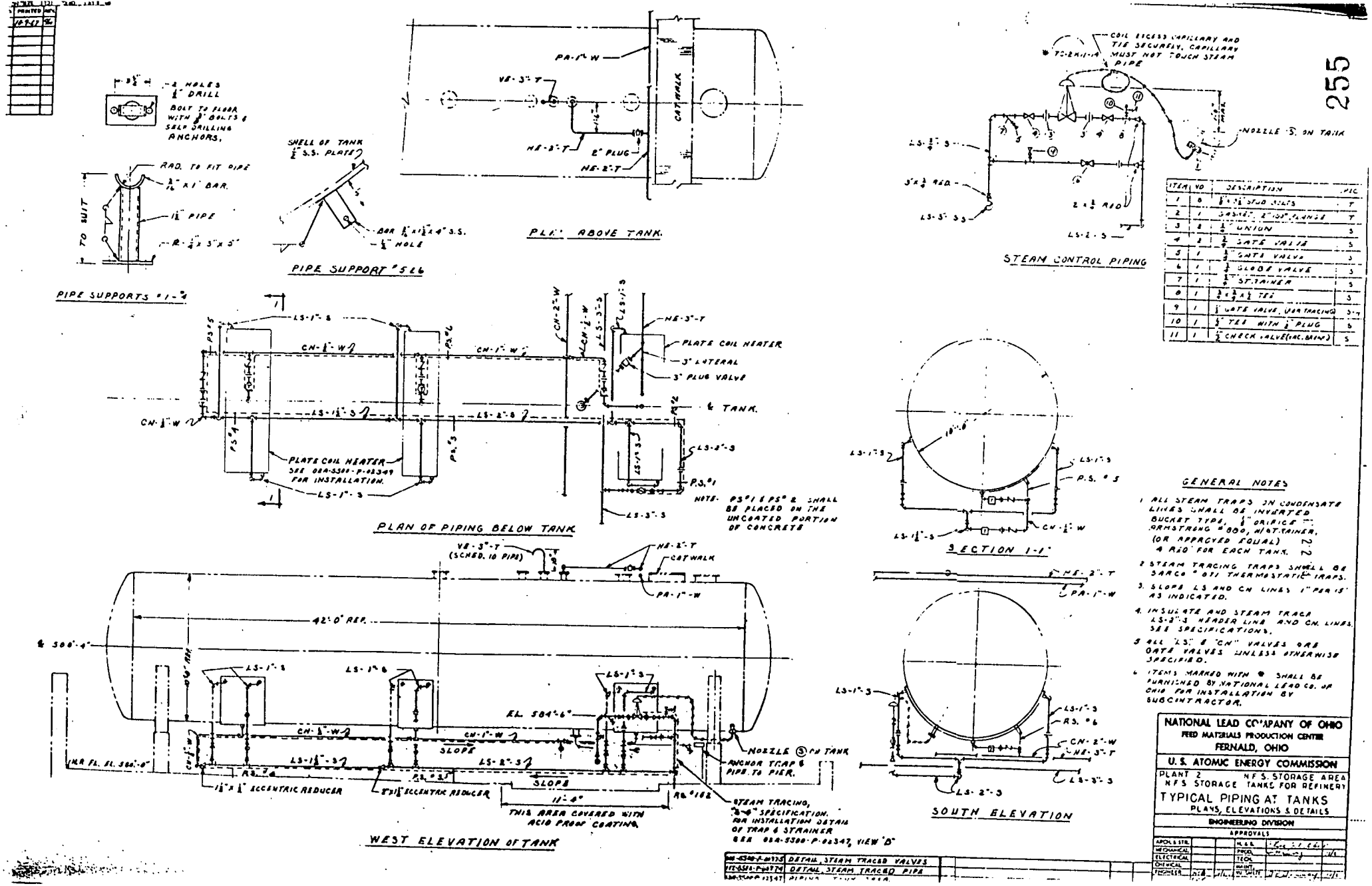

PLAN 3 A-A
FOR TANK NO. F26-7
PLAN 3 A-A
FOR TANK NO. F26-8
ELEVATION
TANK NO. F26-7 SHOWN
TANK NO. F26-8 SIMILAR
SECTION 3-3
TYPICAL COIL PIPING
N.T.S.
PLATECOIL SCHEDULE
NATIONAL LEAD COMPANY OF OHIO
FEED MATERIALS PRODUCTION CENTER
FERNALD, OHIO
U. S. ATOMIC ENERGY COMMISSION
PIPING DETAILS
ENGINEERING DIVISION
APPROVALS

253

5114


MATERIAL SPECIFICATION
254
TABLE OF CONNECTIONS
NOTES
MK Nº F3-E-222
MK Nº F3-E-224
MK Nº F3-E-223
VERTICAL FIELD JOINT - DETAIL
HORIZONTAL FIELD JOINT - DETAIL
SECTION A-A
DETAIL "C" - SIX(6) REQD
FULL SIZE
DETAIL "X"
VIEW B-B
4" NOZZLE FOR LEVEL SWITCH
NUMBER REQ'D : ONE (1)
MARK NO F3-E-223
NUMBER REQ'D : TWO (2)
MARK NO F3-E-222
F3-E-224
INDEX CODE
5250-3M-5020
U. S. ATOMIC ENERGY COMMISSION
SINGMASTER & BREYER
NATIONAL LEAD COMPANY OF OHIO
25000 GAL. O.K. LIQUOR
STORAGE TANK

-5114




| ITEM | NO | DESCRIPTION | MTL |
|---|---|---|---|
| 1 | 8 | ½"x½" STUD BOLTS | T |
| 2 | 1 | GASKET, 2" 150# FLANGE | T |
| 3 | 2 | ½" UNION | S |
| 4 | 2 | ½" GATE VALVE | S |
| 5 | 1 | ½" GATE VALVE | S |
| 6 | 1 | ½" GLOBE VALVE | S |
| 7 | 1 | ½" STRAINER | S |
| 8 | 1 | ½"x½"x½" TEE | S |
| 9 | 1 | ½" GATE VALVE, USE TRACING | S-T |
| 10 | 1 | ½" TEE WITH ½" PLUG | S |
| 11 | 1 | ½" CHECK VALVE (VERT. BRINE) | S |

## GENERAL NOTES

1. ALL STEAM TRAPS ON CONDENSATE LINES SHALL BE INVERTED BUCKET TYPE, ⅛" ORIFICE ARMSTRONG #800, HI-STRAINER, (OR APPROVED EQUAL) 4 REQ'D FOR EACH TANK.
2. STEAM TRACING TRAPS SHALL BE SARCO #871 THERMOSTATIC TRAPS.
3. SLOPE LS AND CN LINES 1" PER 15' AS INDICATED.
4. INSULATE AND STEAM TRACE LS-4"-S HEADER LINE AND CN LINES. SEE SPECIFICATIONS.
5. ALL "LS" & "CN" VALVES ARE GATE VALVES UNLESS OTHERWISE SPECIFIED.
6. ITEMS MARKED WITH * SHALL BE FURNISHED BY NATIONAL LEAD CO. OF OHIO FOR INSTALLATION BY SUBCONTRACTOR.

NATIONAL LEAD COMPANY OF OHIO
FEED MATERIALS PRODUCTION CENTER
FERNALD, OHIO

U. S. ATOMIC ENERGY COMMISSION

PLANT 2 — N.F.S. STORAGE AREA
N.F.S. STORAGE TANKS FOR REFINERY

TYPICAL PIPING AT TANKS
PLANS, ELEVATIONS & DETAILS

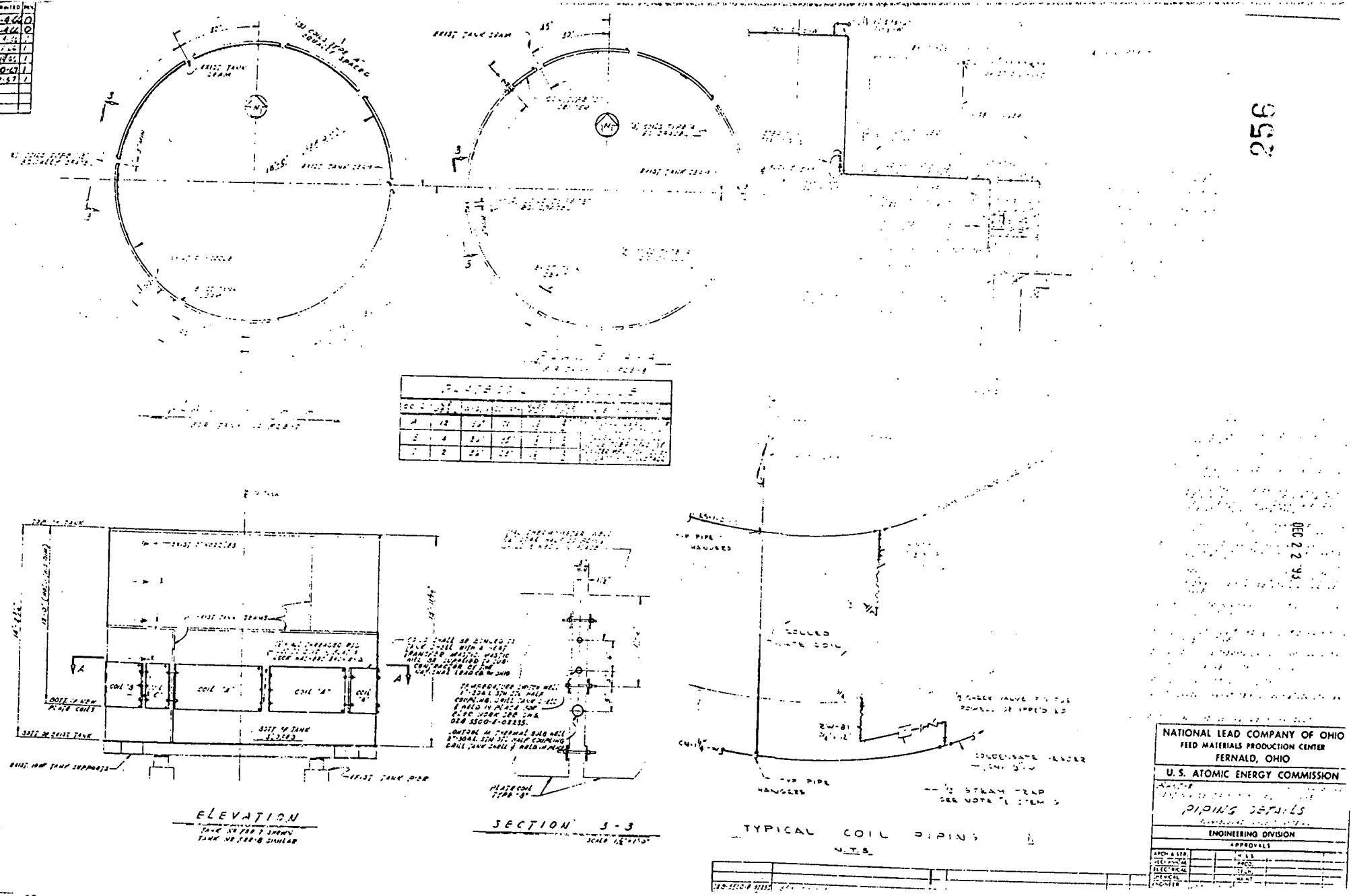
ENGINEERING DIVISION

APPROVALS

| | | | |
|---|---|---|---|
| APPL. & STR. | | M.E.B. | |
| MECHANICAL | | PROD. | |
| ELECTRICAL | | TECH. | |
| CHEMICAL | | INSPECT. | |
| ENGINEER | | M. SAFETY | |

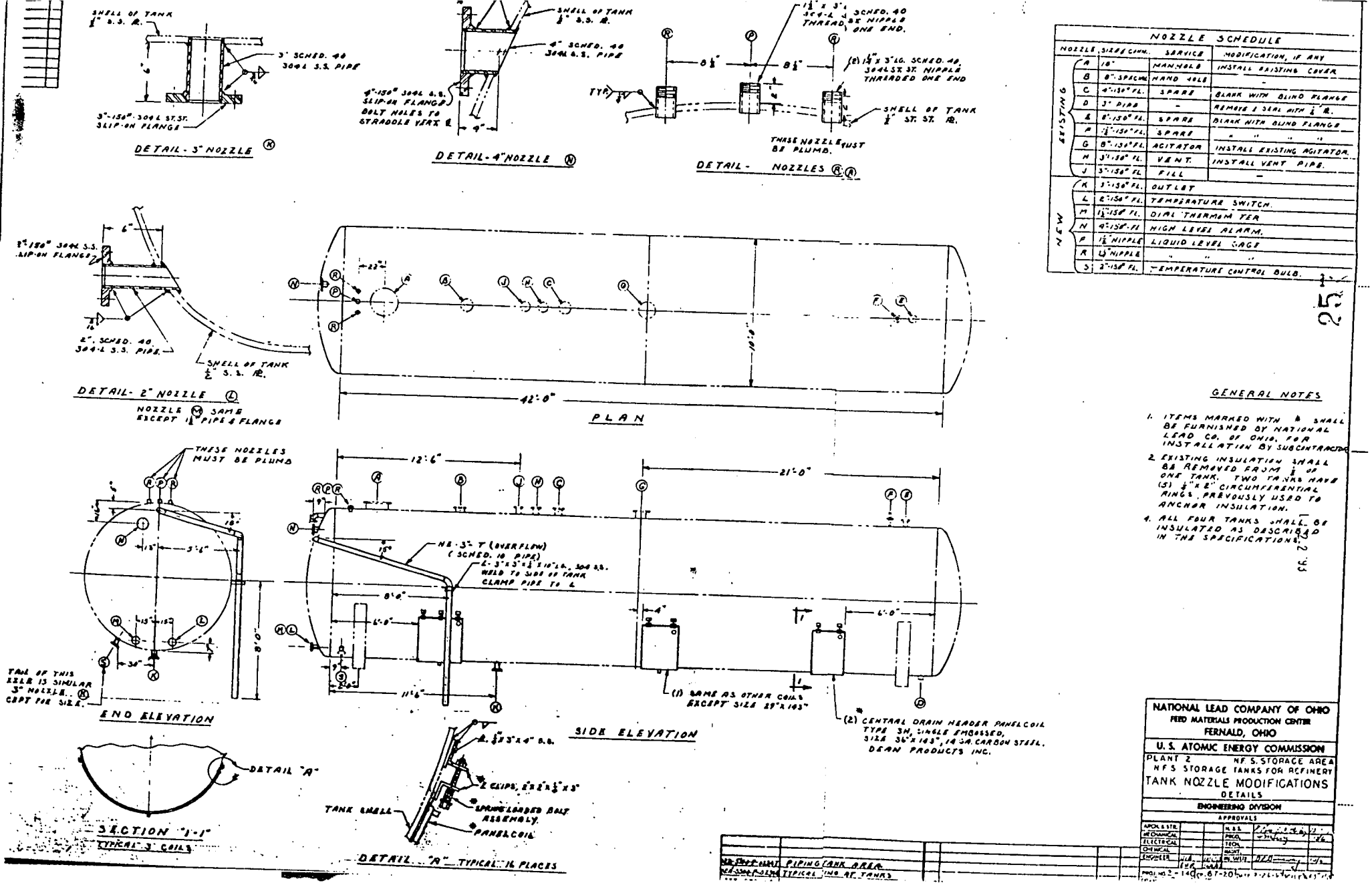
| | |
|---|---|
| 084-5300-P-00735 | DETAIL, STEAM TRACED VALVES |
| 084-5300-P-00734 | DETAIL, STEAM TRACED PIPE |
| 084-5300-P-02347 | PIPING PLAN TANK |

F-5114


ELEVATION
SECTION 3-3
TYPICAL COIL PIPING
N.T.S.
NATIONAL LEAD COMPANY OF OHIO
FEED MATERIALS PRODUCTION CENTER
FERNALD, OHIO
U.S. ATOMIC ENERGY COMMISSION
PIPING DETAILS
ENGINEERING DIVISION
APPROVALS
OCT 22 '59

956

6114




## NOZZLE SCHEDULE

| | NOZZLE | SIZE & CONN. | SERVICE | MODIFICATION, IF ANY |
|---|---|---|---|---|
| EXISTING | A | 18" | MANHOLE | INSTALL EXISTING COVER |
| | B | 8"-SPECIAL | HAND HOLE | – |
| | C | 4"-150# FL. | SPARE | BLANK WITH BLIND FLANGE |
| | D | 3" PIPE | – | REMOVE & SEAL WITH ½" PL. |
| | E | 8"-150# FL. | SPARE | BLANK WITH BLIND FLANGE |
| | F | 1½"-150# FL. | SPARE | " " " " |
| | G | 8"-150# FL. | AGITATOR | INSTALL EXISTING AGITATOR. |
| | H | 3"-150# FL. | VENT. | INSTALL VENT PIPE. |
| | J | 3"-150# FL. | FILL | – |
| NEW | K | 3"-150# FL. | OUTLET | |
| | L | 2"-150# FL. | TEMPERATURE SWITCH. | |
| | M | 1½"-150# FL. | DIAL THERMOMETER | |
| | N | 4"-150# FL. | HIGH LEVEL ALARM. | |
| | P | 1½" NIPPLE | LIQUID LEVEL GAGE | |
| | R | 1½" NIPPLE | " " " | |
| | S | 2"-150# FL. | TEMPERATURE CONTROL BULB. | |

## GENERAL NOTES

1. ITEMS MARKED WITH * SHALL BE FURNISHED BY NATIONAL LEAD CO. OF OHIO, FOR INSTALLATION BY SUBCONTRACTOR.
2. EXISTING INSULATION SHALL BE REMOVED FROM ½ OF ONE TANK. TWO TANKS HAVE (3) ½"x 2" CIRCUMFERENTIAL RINGS, PREVIOUSLY USED TO ANCHOR INSULATION.
4. ALL FOUR TANKS SHALL BE INSULATED AS DESCRIBED IN THE SPECIFICATION.

NATIONAL LEAD COMPANY OF OHIO
FEED MATERIALS PRODUCTION CENTER
FERNALD, OHIO

U. S. ATOMIC ENERGY COMMISSION

PLANT 2 NF S. STORAGE AREA
NF S STORAGE TANKS FOR REFINERY
TANK NOZZLE MODIFICATIONS
DETAILS

ENGINEERING DIVISION

APPROVALS

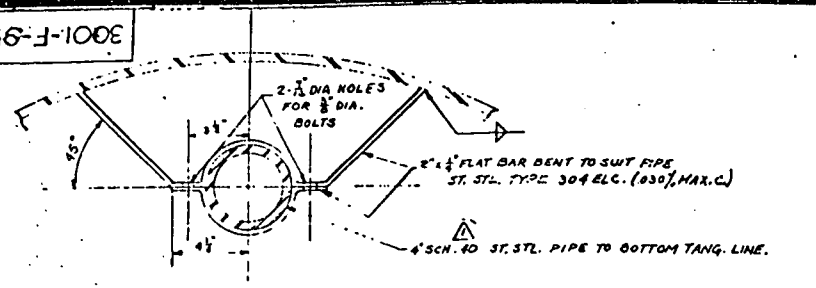
| | | | | | |
|---|---|---|---|---|---|
| ARCH. & STR. | | | | N.S.S. | |
| MECHANICAL | | | | PROJ. | |
| ELECTRICAL | | | | TECH. | |
| CHEMICAL | | | | MGMT. | |
| ENGINEER | | | | ENGINEER | |
| PROJ. NO. 2-140 | | | | | |

NF SHEET-LIST PIPING TANK AREA
NF SHEET-DETAIL TYPICAL ING AT TANKS

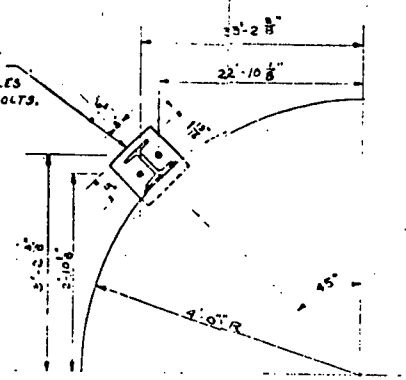
25

-5114

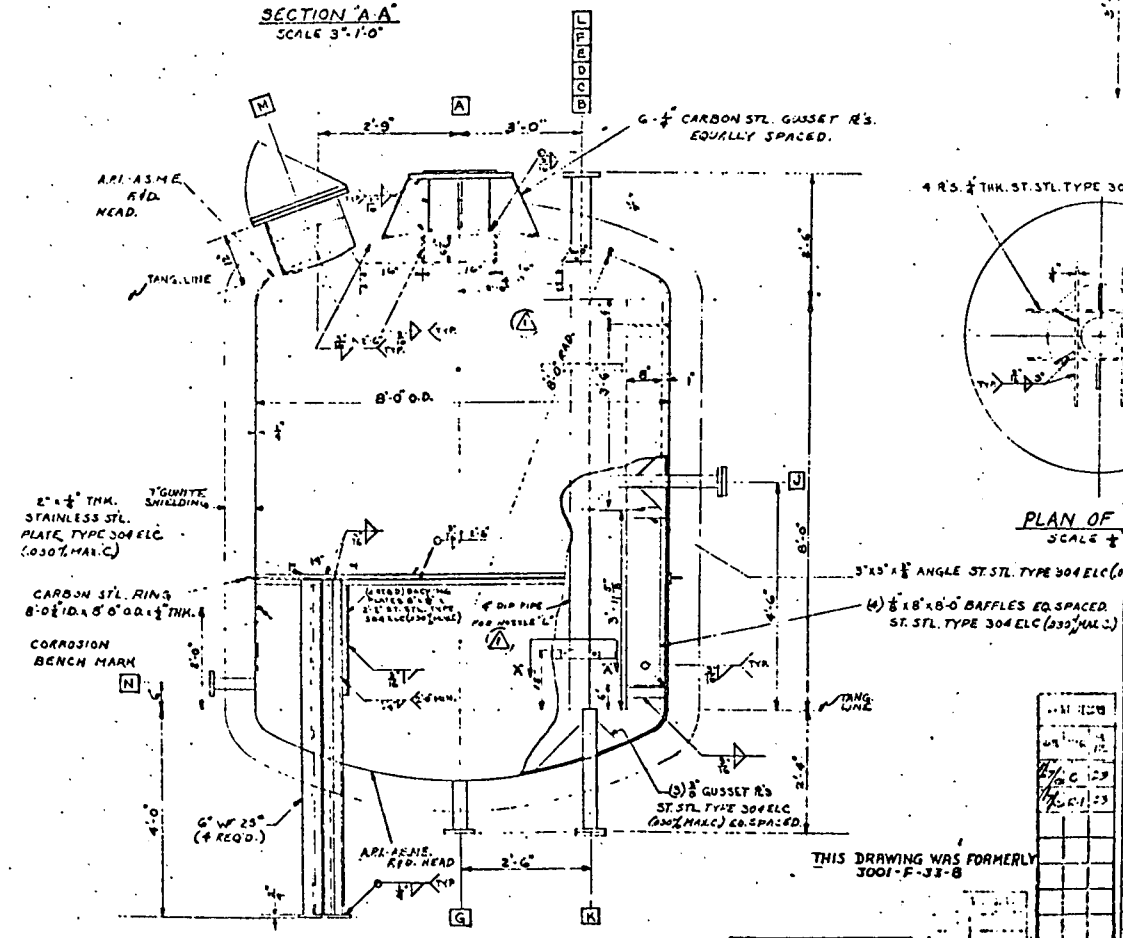
3001-F-95-B

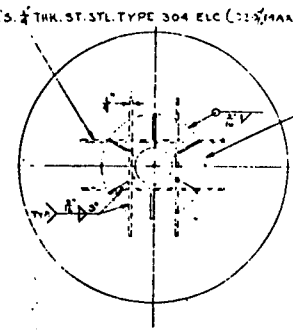



SECTION "A-A"
SCALE 3"=1'-0"

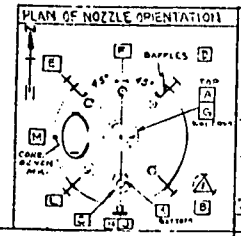



DETAIL OF BASE PLATE
SCALE 1"=1'-0"




PLAN OF HEAD
SCALE 1/4"=1'-0"




THIS DRAWING WAS FORMERLY 3001-F-33-B

SCALE FOR THIS DRAWING

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| M | 1 | 19" | | | | | |
| N | 1 | 1" | | 5'-0" | SAMPLE CONN. | | |
| L | 1 | 4" | | | DIP PIPE (LIQUID LEVEL) | | |
| K | 1 | 2" | | | OUTLET | WITH BLIND FLANGE | |
| J | 1 | 2" | | 5'-0" | INLET | WITH BLIND FLANGE | |
| G | 1 | 2" | | | OUTLET | | |
| F | 1 | 2" | | | INLET | | |
| E | 1 | 2" | | | VENT | | |
| D | 1 | 2" | | | INLET | | |
| C | 1 | 4" | | | INLET | | |
| B | 1 | 2" | | | INLET | | |
| A | 1 | 12" | | | AGITATOR | | |
| CONN. | NO. REQ'D. | SIZE | RATING & FACING | PROJECTION FROM VESSEL | SERVICE | REMARKS | |

| INDEX CODE | | | |
|---|---|---|---|
| 02E | 1450 | M | 00231 |

## GENERAL NOTES:

REQ'D NO. 3
REQ. NO. 3001-F-11
PUR. ORD NO. 2143

TANK TO BE ALL WELDED CONSTRUCTION IN ACCORDANCE WITH LATEST REVISION OF AMERICAN WELDING SOCIETY PROCEDURE

MATERIAL:
SHELL & HEADS - STAINLESS STEEL TYPE 304 ELC (.030% MAX.)
SUPPORTS - - - A.S.T.M. A-7 OR EQUAL
FLANGES - - - STAINLESS STEEL TYPE 304 ELC (.030% MAX.)
GASKETS - - - 1/16" TEFLON
PIPE - - - - STAINLESS STEEL TYPE 304 ELC (.030% MAX.)
BOLTS - - - STAINLESS STEEL TYPE 304
NUTS - - - STAINLESS STEEL TYPE 303
SHIELDING - - - 3" OF GUNITE (IN FIELD)
REMOVE ALL RUST, GREASE, MILL SCALE, ETC.
ALL WELDS TO BE DOUBLE NATURAL 1/8" UNLESS OTHERWISE NOTED
ALL EXTERNAL CARBON STEEL MEMBERS SHALL BE PAINTED WITH ONE SHOP COAT OF AMERICOAT #3 WASH PRIMER & ONE SHOP COAT OF AMERICOAT #3 SEAL COAT.
NORTH ARROW & ITEM V6 TO BE PAINTED ON VESSEL

TEST:
HYDROSTATIC TEST - - - - - - - - 25 PSI

WEIGHTS:
SHIPPING WEIGHT - - - - - - - - 6,000 LBS
OPERATING WEIGHT (FULL WATER) - - - 9,000 LBS
TEST WEIGHT - - - - - - - - 3,000 LBS.
CAPACITY (FULL) - - - - - - - - 3,000 GALS

REFERENCE DRAWINGS:
VESSEL TO BE FABRICATED IN ACCORDANCE WITH C.C.Co. SPECIFICATION PRESSURE VESSEL INDEX PART IX SECTION I.
△ STD HINGE DETAILS FOR MANHOLE FLANGES C.C.Co. D3F-10
△ LIQUID LEVEL DIP PIPE DETAIL D3K 139
CORROSION BENCH MARK DETAILS D3F-107

| | | | |
|---|---|---|---|
| 5 | | | |
| 4 | | | |
| 3 | | | |
| 2 | | | |
| 1 | 3/26/52 | Nozzle B Added To Orientation. Dip Pipe Was Sch. 160 & Called For On Nozzle C; Dwg. D3K-137 Added & Vent Hole; Revised To Suit. | JBS |
| REV. NO. | DATE | REVISIONS | MADE BY |

APPROVED FOR A.E.C. BY
DATE

UNITED STATES ATOMIC ENERGY COMMISSION
NEW YORK OPERATIONS OFFICE

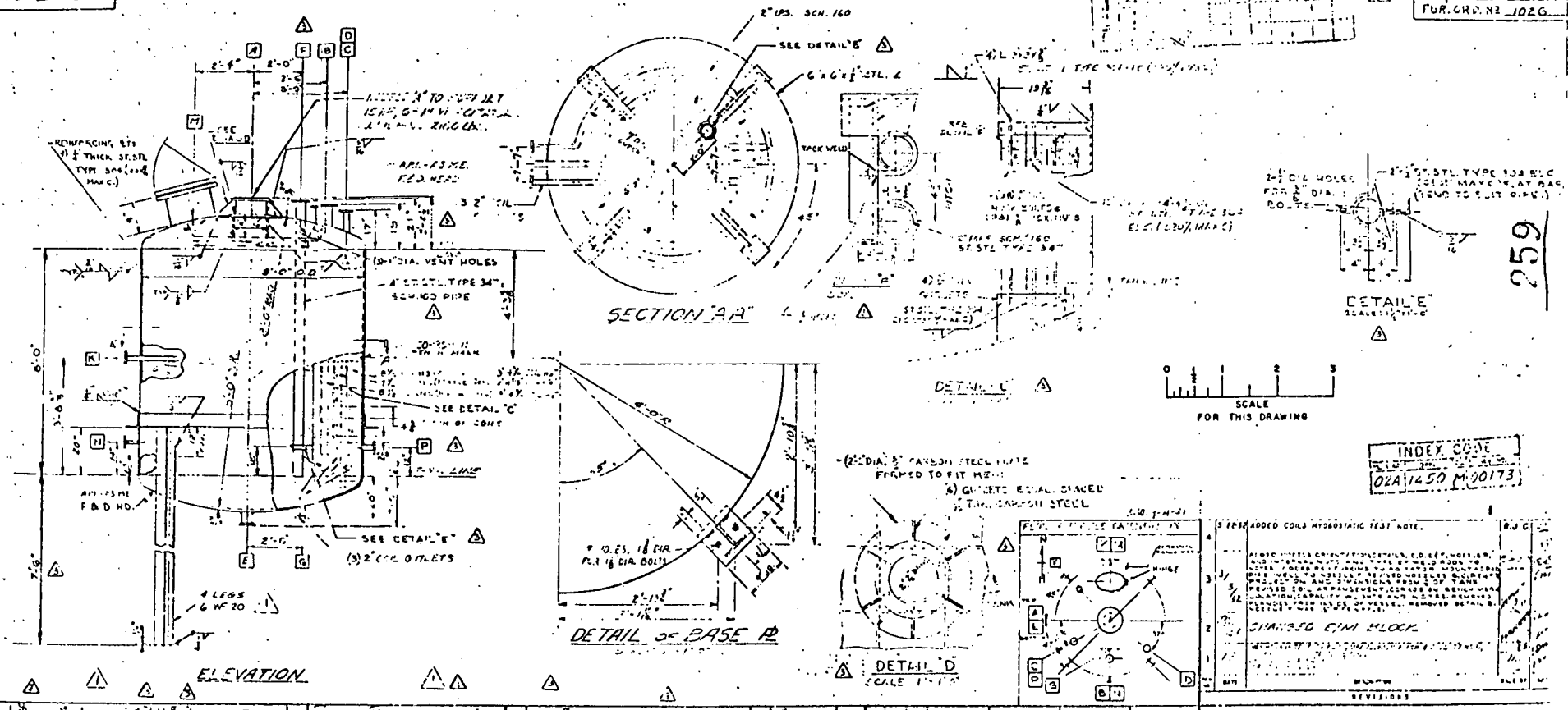
CONTRACT No. AT-30-1-1060

FEED MATERIALS PRODUCTION CENTER
FERNALD AREA

HOLD UP TANK
8'-0" O.D. x 8'-0" HIGH
ITEM F1-301, 302 & 303

DATE 3/23/52
SCALE AS SHOWN
DRAWN L.B. SCHERER
CHECKED
OFFICE OF CATALYTIC CONSTRUCTION CO. 828 WALNUT STREET PHILA. 6, PA.
APPROVED FOR CONSTRUCTION
DRAWING NO. 3001-F-95-B
REVISION NO. 1

5114




## DESIGN NOTES

| | |
|---|---|
| PRESSURE OPERATING | DESIGN 14.7 PSIG |
| TEMPERATURE OPERATING | DESIGN 200°F |
| CORROSION ALLOWANCE | — — — NONE |
| JOINT EFFICIENCY | SHELL-85% HEAD-100% |
| STRESS RELIEVE | — — — — — — NONE |
| RADIOGRAPH | — — — — — — NONE |
| HAMMER TEST | — — — — — — NONE |
| MAX. ALLOWABLE W.P. NEW & COLD | — — — NONE |
| MAX. ALLOWABLE FULLY CORRODED DESIGN TEMPERATURE | — — — — — — 300°F |
| HYDROSTATIC TEST | — — — — — — 300 PSIG |
| CONSTRUCTION: FUSION WELDED IN ACCORDANCE WITH LATEST REVISION OF API-ASME CODE FOR UNFIRED PRESSURE VESSELS, AND CODE STAMP, INSPECTION, OR FACSIMILE BOOD. | |
| FABRICATOR TO REMOVE OPENINGS TO MEET REQUIREMENTS OF API-ASME CODE. | |
| COLD HYDROSTATIC TEST | — — — — — — 300 PSIG BEFORE INSTALLING |

## MATERIAL NOTES

SHELL, HEADS: STAINLESS STEEL TYPE 304 (C-Mn)
SUPPORTS: ASTM A-7 OR EQUAL.
INTERNAL BOLTS: STAINLESS STEEL TYPE 304.
MANHOLE STUDS: STAINLESS STEEL TYPE 304.
FLANGES: STAINLESS STEEL TYPE 304 ELC (C0.03%)
MANHOLE AND COVER: STAINLESS STEEL TYPE 304 ELC (C0.03% MAX.).
PIPE: AS NOTED.
GASKETS: 1/8" TEFLON.
NUTS: STAINLESS STEEL TYPE 303.
INTERNAL NUTS: STAINLESS STEEL TYPE 304.
WELD PIPE WITH STSL. TYPE 347 WELD RODS.

## GENERAL NOTES

INSPECTION: TO BE INSPECTED BY CATALYTIC CONSTRUCTION COMPANY ONLY.
PAINTING: ALL EXTERNAL CARBON STEEL WEBBS TO BE PAINTED WITH ONE SHOP COAT OF AMERCOAT #13 WASH PRIMER AND ONE SHOP COAT OF AMERCOAT #15 SEAL COAT.
INSULATION: TO BE FIELD INSTALLED, 85% MAGNESIA 2" THK. BLOCKS.

| | |
|---|---|
| SHIPPING WEIGHT | — — — — — 12,000 LBS. |
| OPERATING WEIGHT | — — — — — 29,200 LBS. |
| TEST WEIGHT | — — — — — 49,200 LBS. |
| CAPACITY | — — — — — 3460 GALS. |

NOZZLE ARRANGEMENT ITEM NO. TO BE PAINTED ON VESSEL.
NOZZLE BOLT HOLES TO STRADDLE NATURAL C'S UNLESS OTHERWISE NOTED.

## REFERENCE DRAWINGS

STANDARD HINGE DETAILS OF MANHOLE FLANGE D.S.C. 1-00 (EXCEPT MATERIAL TO BE STSL. TYPE 304 ELECTROPOLISHED MAX.)
SUPPORTS - D.S.C. - 115.
CONNECTION BENCH MARK - D.S.P. 107.
VESSEL TO BE FABRICATED TO C.C.CO. SPEC'S
PRESSURE VESSEL INDEX PART II, SECTION I.

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| D | 1 | 2" | 150 LB. FLAT FACE | 4'-0" | TEMP. CONTROL | | | | |
| N | 1 | 1" | | 4'-0" | SAMPLE CONN. | | | | |
| M | — | 20" | 150 LB. FLAT FACE | | MANHOLE | FINISED | | | |
| K | 3 | 2" | 150 LB. FLAT FACE | 4'-6" | OPERATING LINES | | | | |
| G | 3 | 2" | | | HEATING COIL | | | | |
| F | 1 | 4" | | | L.L.C. | | STSL. SCH. 160 | 1/2" LONG | |
| E | 1 | 3" | | | DRAIN | | | | |
| D | 1 | 4" | | | MANIFOLD | | | | |
| C | 1 | 4" | | | MANIFOLD | | | | |
| B | 1 | 3" | 150 LB. FLAT FACE | | VENT | | | | |
| A | 1 | 12" | | | AGITATOR | | | | |
| SYM. | NO. REQ'D | SIZE | RATING & FACING | DIM. FROM C.L. | SERVICE | | REMARKS | | |

NOZZLE SCHEDULE

APPROVED FOR A.E.C. BY: _____
DATE _____

UNITED STATES ATOMIC ENERGY COMMISSION
NEW YORK OPERATIONS OFFICE

CONTRACT No. AT(30-1)-1060

FEED MATERIALS PRODUCTION CENTER
FERNALD AREA

"COLD" SOLUTION FEED TANK

DATE 12/1/59
DRAWN
CHECKED
ENGINEER

OFFICE OF
CATALYTIC CONSTRUCTION CO.
1528 WALNUT STREET
PHILA. 2, PA.

APPROVED FOR CONSTRUCTION

DRAWING NO. 3001-F-01-B

REVISION NO. 4

259