ATTACHMENT 2
PERMIT APPLICATION PART A

(PERMIT APPLICATION SECTION 2)

2.1 § 270.13(a-g)(i)(k)(m) - Facility ID Form and Part A Application

Information for § 270.13(a-g)(i)(k)(m) is provided in Appendix 2-A in the Facility ID Form and Part A Application. This Part A documentation has been modified to reflect comments received in the June 3, 2003 Notice of Incompleteness. A discussion about these modifications is provided as follows.

NMED stated in the June 3, 2003 Notice of Incompleteness that the treatment of P078 waste by evaporation and volatilization in the ETU does not meet the treatment standard for this waste stream pursuant to 20.4.1.800 NMAC incorporating 40 CFR§268.40. NASA concurs with this statement. However, NASA does not evaporate and volatilize P078 waste at the ETU. NASA generates debris that is contaminated with a liquid dimer of P078. This debris has already absorbed the P078 waste. This debris may be rinsed to eliminate any fume hazard from the contaminated debris with the hazardous constituent being absorbed by the rinsate. This achieves the treatment process of venting compressed gases into an absorbing or reacting media (liquid or solid) and meets the standard of ADGAS as per the definition in 40 CFR §268.42. The EPA granted NASA a determination of equivalency for this procedure on January 4, 1994, and restated this opinion on July 26, 1994. Dilute amounts of nitric acid are generated from this process and are drained to the ETU for safety reasons regardless of meeting the definition of corrosivity or not. Potential testing operations may, on occasion, generate P078 wastes where the media in the ETU is used to either perform or complete an ADGAS operation. Based on these potential scenarios, NASA has included the waste code P078 in the Part A Description of Hazardous Wastes.

NMED also states that the treatment by evaporation and volatilization for the waste codes P068, U098, and U133 in the ETU does not meet the treatment standards for these waste streams pursuant to 20.4.1.800 NMAC incorporating 40 CFR §268.40. NASA will manage waste streams with these waste codes at the FTU. However, pursuant to NMED direction, waste streams carrying any of these waste codes will be managed at the ETU if analytical results are ND (non-detectable) for all the waste codes.

The P005, P022, P076, P116, U020, U086, U109, and U119 waste codes were included on the original Part A submitted more than 10 years ago. These waste codes were originally included in the Part A due to the possibility that very small quantities of each waste could be generated based on special testing requirements. Upon review of these waste codes, NASA has determined that, historically, any generation of these codes is minimal and can be managed on an as-generated basis. In fact, the supplemental tables in Appendix 2-A do not include any WIWPS with these waste codes. Based on this, NASA is deleting these waste codes from the updated Part A documentation.

2.2 § 270.13(h)(1) and (2) - Scale Drawing and Photos

A scale drawing of the facility showing the locations of all past, present, and known future treatment, storage and disposal areas is provided in Appendix 2-A. This facility drawing, entitled "Part A Treatment, Storage, and Disposal Areas", shows the location of the Annual Unit Audit (AUA) Solid Waste Management Units (SWMUs), Waste Accumulation Areas (WAAs), Open Detonation Unit (ODU), Evaporation Tank Unit (ETU), Fuel Treatment Unit (FTU), and thermal treatment units (Oxidizer Burners). Appendix 2-A also includes detailed scale drawings and several photos of the ETU and FTU. The locations of all AUA SWMUs are also shown on the Part B Topographic Map, Sheet 1. Descriptions of each of the AUA SWMUs can be found in Section 20.0 - Solid Waste Management Units (SWMUs) along with a detailed figure showing the locations of the SWMUs with an index of SWMU numbers and descriptions. The locations of all WAAs can also be found on the Part B Topographic Map, Sheet 3.

The ETU and FTU were not used in the past (prior to being permitted) for treatment or storage. The permit issued February 12, 1993 explains the nature and duration of activities conducted at these units.

2.3 § 270.13(j) - Waste Specification and Quantity

The WSTF WIWPS database submitted in April 2003 has been updated to address the Volatile Organics that enter the ETU. A Subtitle CC Compliance field has been added for clarity. It separates the VOC information from the comments field. The WIWPS database is a tracking tool used by the Environmental Department; a hardcopy file exists as part of the operating record. The filed copies and the operating record contain the Subtitle CC (MSDSs, and analytical) documentation. In addition, where possible, the unique WSTF MSDS #s are represented in the proper space on the form/database. The following are specific responses to Notice of Incompleteness comments (actual comment language in italics).

All fields in the WIWPS form should be filled out, those that are not applicable should be marked with n/a;

Much of the information in the Access Database is 15 years old and originally existed either in hardcopy or Rbase. The Database was and still is used for tracking and reporting of waste quantities on various reports, i.e.: Biennial Hazardous Waste. The database is a reflection of hardcopies that have been maintained since the inception of the WIWPS system. If the originator did not fill in a blank, the blank is likely to be that way in the Access Database unless the process, concentration, or quantity has changed between reviews.

Environmental representatives will issue memos to waste generators prior to the next annual review and request that the forms be completed such that all fields are occupied during the review period. Upon receipt of completed/reviewed forms, the Environmental Department representative will place the information into the Access database.

The dates of initial completion of the form should be filled out, including the date of review and following updates;

The dates of initial WIWPS completion that are blank are pre-permit (original 1993 version) and the old Rbase information maintained some of these forms with no dates. The WIWPS that have been generated since the Access Database has been available for tracking (1998) have names and dates of initial completion. The hardcopy forms have spaces in the upper right corner for date stamps that are physically imprinted on the WIWPS when the Environmental Department representative completes his/her initial and annual reviews. The forms are copied and distributed to the generators per WSTF Standard Instruction 22-SW-0005. In addition, updates to the WIWPS are generally included in the "Generation Process" or "Constituents/Concentration" fields or in the comments. The operating record contains the original WIWPS and copies of all updates performed during the profile's active life.

The supporting analytical data should be included;

Copies representing examples of analytical data filed in the operating record have been included with Appendix 21F.

The use of abbreviations, such as "etc.", is not appropriate in a waste description database;

All "etcs" have been updated, thus removed. Some other abbreviations such as "cont." for contaminated are used to ensure that descriptive information fits in the data fields. Those that are not appropriate will be eliminated when the blanks are filled in during the next generator review.

Waste stream description should include both the brand names of the product and the information from the MSDS of the product or other analysis. NASA should note that brand name inorganic cleaners may contain multiple organic additives or impurities;

The waste name field, in many instances, identifies the product by brand, i.e., "Oakite HD 126", the WSTF MSDS numbers normally reflect a specific brand of product i.e., "653 is Olin monomethylhydrazine". Additionally, a common process

generated waste such as removing propellants from space hardware or test equipment is similar in several areas and WIWPS submissions reflect "Decon Water w/Ox" or Fuel Cont. Decon Water.

Waste streams of fuels, oxidizers and others should include a description of the corresponding grade. NASA should note that different grade inorganic fuels might contain multiple organic impurities or additives.

Fuels (Hydrazines) that are used for testing are subject to mil/shuttle specifications and are sampled and analyzed for their required parameters. Fuel waste streams that are placed into the Evaporation Tanks from remote locations are ND for hydrazine(s) by HPLC analysis and present no safety issues during off load operations.

Supplemental tables with waste specifications and quantities are include in Appendix 2-A. The tables provided list current waste streams that are managed at the ETU and FTU. Obsolete and one-time waste stream profiles are archived in the WSTF Environmental Department files.

2.4 § 270.13(l) - Topographic Map

The Part A topographic map provides an overall view of WSTF and is presented, as an illustration, in the body of the permit renewal application at a size of 8.5 inches by 11 inches. However, the map may be printed at any size available to the reader at an optimal size of 22 inches by 34 inches.

The Part A topographic map (Appendix 2-A) provides the following information:

- Map scale, date, and orientation at the bottom of the legend;
- A one mile radius extending beyond WSTF's Industrial Area;
- Locations of WSTF's discharge lagoons and ponds;
- Locations of the ETU and FTU;
- Locations of WSTF's monitoring, drinking, injection, and extraction wells; and
- Surface water bodies and wells located within ¼ mile of WSTF's Buffer Zone/Co-Use Areas boundary.

2.5 § 270.13(n) - Hazardous Debris

This section does not apply to WSTF.

Appendix 2-A Part A Application

OMB#: 2050-0175 Expires 12/31/2003

MAIL THE COMPLETED FORM TO: The Appropriate EPA Regional or State Office.	United States Environmental Protection Agency **RCRA SUBTITLE C SITE IDENTIFICATION FORM**	

1. Reason for Submittal (See instructions on page 25) CHECK CORRECT BOX(ES)	**Reason for Submittal:** ☐ To provide initial notification (to obtain an EPA ID Number for hazardous waste, universal waste, or used oil activities). ☐ To provide subsequent notification (to update site identification information). ☐ As a component of a First RCRA Hazardous Waste Part A Permit Application. ☒ As a component of a Revised RCRA Hazardous Waste Part A Permit Application (Amendment # Renewal). ☐ As a component of the Hazardous Waste Report.	
2. Site EPA ID Number **(See instructions on page 26)**	**EPA ID Number:** NM8800019434	
3. Site Name (See Instructions on page 26)	**Name: NASA White Sands Test Facility**	
4. Site Location Information (See instructions on page 26)	**Street Address: 12600 NASA Road**	
	City, Town, or Village: Las Cruces	**State: NM**
	County Name: Dona Ana	**Zip Code: 88012**
5. Site Land Type (See instructions on page 26)	**Site Land Type:** ☐ Private ☐ County ☐ District ☒ Federal ☐ Indian ☐ Municipal ☐ State ☐ Other	
6. North American Industry Classification System (NAICS) Code(s) for the Site (See instructions on page 26)	**A.** 927110	**B.**
	C.	**D.**
7. Site Mailing Address (See Instructions on page 27)	**Street or P. O. Box: P.O. Box 20**	
	City, Town, or Village: Las Cruces	
	State: NM	
	Country: United States	**Zip Code: 88004-0020**
8. Site Contact Person (See instructions on page 27)	**First Name: Radel**	**MI: L.** **Last Name: Bunker-Farrah**
	Phone Number: 505-524-5733	**Phone Number Extension:**
9. Legal Owner and Operator of the Site (See instructions on pages 27 and 28)	**A. Name of Site's Legal Owner:** U.S. Army – WSMR	**Date Became Operator (mm/dd/yyyy):**
	Owner Type: ☐ Private ☐ County ☐ District ☒ Federal ☐ Indian ☐ Municipal ☐ State ☐ Other	
	B. Name of Site's Operator: NASA White Sands Test Facility	**Date Became Operator (mm/dd/yyyy):** 07/07/1962
	Operator Type: ☐ Private ☐ County ☐ District ☒ Federal ☐ Indian ☐ Municipal ☐ State ☐ Other	

EPA ID No.	N	M	8	8	0	0	0	1	9	4	3	4

10: Type of Regulated Waste Activity (Mark 'X' in the appropriate boxes. See instructions on pages 28 to 32)

A. Hazardous Waste Activities

1. Generator of Hazardous Waste (choose only one of the following three categories)

☒ a. LQG: Greater than 1,000 kg/mo (2,200 lbs./mo.) of non-acute hazardous waste; or

☐ b. SQG: 100 to 1,000 kg/mo (220-2,200 lbs./mo.) of non-acute hazardous waste: or

☐ c. CESQG: Less than 100 kg/mo (220 lbs./mo.) of non-acute hazardous waste

In addition, indicate other generator activities (check all that apply)

☐ **d. United States Importer of Hazardous Waste**

☐ **e. Mixed Waste (hazardous and radioactive) Generator**

For Items 2 through 6, check all that apply:

☐ 2. Transporter of Hazardous Waste

☒ 3. Treater, Storer, or Disposer of Hazardous Waste (at your site) Note: A hazardous waste permit is required for this activity.

☐ 4. Recycler of Hazardous Waste (at your site) Note: A hazardous waste permit may be required for this activity.

5. Exempt Boiler and/or Industrial Furnace

☐ a. Small Quantity On-site Burner Exemption

☐ b. Smelting, Melting, and Refining Furnace Exemption

☐ 6. Underground Injection Control

B. Universal Waste Activities

1. Large Quantity Handler of Universal Waste (accumulate 5,000 kg or more) (refer to your State regulations to determine what is regulated). Indicate types of universal waste generated and/or accumulated at your site.

(check all boxes that apply):

	Generated	Accumulated
a. Batteries	☐	☐
b. Pesticides	☐	☐
c. Thermostats	☐	☐
d. Lamps	☐	☐
e. Other (specify) _____	☐	☐
f. Other (specify) _____	☐	☐
g. Other (specify) _____	☐	☐

☐ 2. Destination Facility for Universal Waste

Note: A hazardous waste permit may be required for this activity.

C. Used Oil Activities

1. Used Oil Transporter – Indicate Type(s) of Activity(ies)

☐ a. Transporter

☐ b. Transfer Facility

2. Used Oil Processor and/or Re-refiner – indicate Type(s) of Activity(ies)

☐ a. Processor

☐ b. Re-refiner

3. Off-Specification Used Oil Burner

4. Used Oil Fuel Marketer – Indicate Type(s) of Activity(ies)

☐ a. Marketer Who Directs Shipment of Off-Specification Used Oil to Off-Specification Used Oil Burner

☐ b. Marketer Who First Claims the Used Oil Meets the Specifications

11. Description of Hazardous Wastes (See instructions on page 33)

See Part A Application

A. Waste Codes for Federally Regulated Hazardous Wastes. Please list the waste codes of the Federal hazardous wastes handled at your site. List them in the order they are presented in the regulations (e.g., D001, D003, F007, U112). Use an additional page if more spaces are needed.

EPA ID No.	N	M	8	8	0	0	0	1	9	4	3	4

B. Waste Codes for State-Regulated (i.e., non-Federal) Hazardous Wastes. Please list the waste codes of the State-regulated hazardous wastes handled at your site. List them in the order they are presented in the regulations. Use an additional page if more spaces are needed for waste codes.

12. Comments (See instructions on page 33)

Permit Renewal

13. Certification. I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. (See instructions on page 33)

Signature of owner, operator, or an authorized representative	Name and Official Title (type or print)	Date Signed (mm/dd/yyyy)
for	Donald E. Gentry	02/12/2004
	Colonel, U.S. Army	
	Garrison Commander, WSMR	
Stephen C. Nunez	Stephen C. Nunez, Manager	3/2/04
	NASA White Sands Test Facility	

OBM#: 2050-0034 Expires 10/31/02

United States Environmental Protection Agency

HAZARDOUS WASTE PERMIT INFORMATION FORM

1. Facility Permit Contact (See instructions on page 35)	First Name: Radel	MI: L.	Last Name: Bunker-Farrah
	Phone Number: 505-524-5733		Phone Number Extension:
2. Facility Permit Contact Mailing Address (See instructions on page 35)	Street or P. O. Box: P.O. Box 20		
	City, Town, or Village: Las Cruces		
	State: New Mexico		
	Country: United States		Zip Code: 88004-0020
3. Legal Owner Mailing Address and Telephone Number (See instructions on page 36)	Street or P. O. Box: White Sands Missile Range		
	City, Town, or Village: WSMR		
	State: New Mexico		
	Country: USA	Zip Code: 88002	Phone Number: 505-678-1101
4. Operator Mailing Address and Telephone Number (See instructions on page 36)	Street or P. O. Box: P.O. Box 20		
	City, Town, or Village: Las Cruces		
	State: New Mexico		
	Country: USA	Zip Code: 88004-0020	Phone Number: 505-524-5733
5. Facility Existence Date (See instructions on page 36)	Facility Existence Date (mm/dd/yyyy): 07/07/1962		

6. Other Environmental Permits (See instructions on page 36)

Permit Type (Enter code)	B. Permit Number	C. Description
E	DP-584	Discharge Plan – Sewer
E	DP-1170	Discharge Plan – Salt Ponds
E	DP-697	Discharge Plan – Cooling Water
E	DP-392	Discharge Plan – Sewage
E	629-4001-M-1	Area 400 Air Permit
E	629-AREA-700	Area 700 Air Permit
E	629-AREA-800	Area 800 Air Permit
E	629-M-1,2,3	Area 300 Air Permit

7. Nature of Business (Provide a brief description; see instructions on page 37)

The NASA White Sands Test Facility is an organizational element of The Johnson Space Center, Houston, TX. WSTF provides testing and evaluation of potentially hazardous materials, space flight components, and rocket propulsion systems.

8. Process Codes and Design Capacities (See instructions on page 37)

A. PROCESS CODE – *Enter the code from the list of process codes below that best describes each process to be used at the facility. Thirteen lines are provided for entering codes. If more lines are needed, attach a separate sheet of paper with the additional information. For "other" processes (i.e., D99, S99, T04 and X99), describe the process including its design capacity) in the space provided in Item 9.*

B. PROCESS DESIGN CAPACITY – *For each code entered in column A, enter the capacity of the process*

1. AMOUNT – *Enter the amount. In a case where design capacity is not applicable (such as in a closure/post-closure or enforcement action) enter the total amount of waste for that process.*

2. UNIT OF MEASURE – *For each amount entered in column B(1), enter the code in column B(2) from the list of unit of measure codes below that describes the unit of measure used. Select only from the units of measure in this list.*

C. PROCESS TOTAL NUMBER OF UNITS – *Enter the total number of units for each corresponding process code.*

PROCESS CODE	PROCESS	APPROPRIATE UNITS OF MEASURE FOR PROCESS DESIGN CAPACITY
	Disposal:	
D79	Underground Injection Well Disposal	Gallons; Liters; Gallons Per Day; or Liters Per Day
D80	Landfill	Acre-feet; Hectare-meter; Acres; Cubic Meters; Hectares; Cubic Yards
D81	Land Treatment	Acres of Hectares
D82	Ocean Disposal	Gallons Per Day or Liters Per Day
D83	Surface Impoundment Disposal	Gallons; Liters; Cubic Meters; or Cubic Yards
D99	Other Disposal	Any Unit of Measure Listed Below
	Storage:	
S01	Container	Gallons; Liters; Cubic Meters; or Cubic Yards
S02	Tank Storage	Gallons; Liters; Cubic Meters; or Cubic Yards
S03	Waste Pile	Cubic Yards or Cubic Meters
S04	Surface Impoundment Storage	Gallons; Liters; Cubic Meters; or Cubic Yards
S05	Drip Pad	Gallons; Liters; Acres; Cubic Meters; Hectares; or Cubic Yards
S08	Containment Building Storage	Cubic Yards or Cubic Meters
S99	Other Storage	Any Unit of Measure Listed Below
	Treatment:	
T01	Tank Treatment	Gallons Per Day; Liters Per Day; Short Tons Per Hour; Gallons Per Hour; Liters Per Hour; Pounds Per Hour; Short Tons Per Day; Kilograms Per Hour; Metric Tons Per Day; or Metric Tons Per Hour
T02	Surface Impoundment	Gallons Per Day; Liters Per Day; Short Tons Per Hour; Gallons Per Hour; Liters Per Hour; Pounds Per Hour; Short Tons per Day; Kilograms Per Hour; Metric Tons Per Day; or Metric Tons Per Hour
T03	Incinerator	Short Tons Per Hour; Metric Tons Per Hour; Gallons Per Hour; Liters Per Hour; Btu Per Hour; Pounds Per Hour; Short Tons Per Day; Kilograms Per Hour; Gallons Per Day; Liters Per Day; Metric Tons Per Hour; or Million Btu Per Hour
T04	Other Treatment	Gallons Per Day; Liters Per Day; Pounds Per Hour; Short Tons Per Hour; Kilograms Per Hour; Metric Tons Per Day; Metric Tons Per Hour; Short Tons Per Day; Btu Per Hour;
T05	Boiler	Gallons Per Day; Liters Per Hour; or Million Btu Per Hour Gallons; Liters; Gallons Per Hour; Liters Per Hour; Btu Per Hour; or Million Btu Per Hour

PROCESS CODE	PROCESS	APPROPRIATE UNITS OF MEASURE FOR PROCESS DESIGN CAPACITY
T81	Cement Kiln	Gallons Per Day; Liters Per Day; Pounds Per Hour; Short Tons Per Hour; Kilograms Per Hour; Metric Tons Per Day; Metric Tons Per Hour; Short Tons Per Day; Btu Per Hour; Liters Per Hour; Kilograms Per Hour; or Million Btu Per Hour; Gallons Per Day; Liters Per Day; Pounds Per Hour; Short Tons Per Hour; Kilograms Per Hour; Metric Tons per Day; Metric Tons Per Hour; Short Tons Per Day; Btu Per Hour; Gallons Per Hour; Liters Per Hour; or Million Btu Per Hour
T82	Lime Kiln	
T83	Aggregate Kiln	
T84	Phosphate Kiln	
T85	Coke Oven	
T86	Blast Furnace	
T87	Smelting, Melting, or Refining Furnace	
T88	Titanium Dioxide Chloride Oxidation Reactor	
T89	Methane Reforming Furnace	
T90	Pulping Liquor Recovery Furnace	
T91	Combustion Device Used in The Recovery of Sulfur Values From Spent Sulfuric Acid Halogen Acid Furnaces Other Industrial Furnaces	
T92	Listed in 40 CFR §260.10	
T93		
T94	Containment Building-Treatment	Cubic Yards; Cubic Meters; Short Tons Per Hour; Gallons Per Hour; Liters Per Hour Btu Per Hour; Pounds Per Hour; Short Tons Per Day; Kilograms Per Hour; Metric Tons Per Day; Gallons Per Day; Liters Per Day; Metric Tons Per Hour; or Million Btu Per Hour
	Miscellaneous (Subpart X):	
X01	Open Burning/Open Detonation	Any Unit of Measure Listed Below
X02	Mechanical Processing	Short Tons Per Hour; Metric Tons Per Hour; Short Tons Per Day; Metric Tons Per Day; Pounds Per Hour; Kilograms Per Hour; Gallons Per Hour; Liters Per Hour; or Gallons Per Day
X03	Thermal Unit	Gallons Per Day; Liters Per Day; Pounds Per Hour; Short Tons Per Hour; Kilograms Per Hour; Metric Tons Per Day; Metric Tons Per Hour; Short Tons Per Day; Btu Per Hour; or Million Btu Per Hour
X04	Geologic Repository	Cubic Yards; Cubic Meters; Acre-feet; Hectare-meter; Gallons or Liters
X99	Other Subpart X	Any Unit of Measure Listed Below

UNIT OF MEASURE	UNIT OF MEASURE CODE
Gallons	G
Gallons Per Hour	E
Gallons Per Day	U
Liters	L
Liters Per Hour	H
Liters Per Day	V
Short Tons Per Hour	D
Metric Tons Per Hour	W
Short Tons Per Day	N
Metric Tons Per Day	S
Pounds Per Hour	J
Kilograms Per Hour	R
Million Btu Per Hour	X
Cubic Yards	Y
Cubic Meters	C
Acres	B
Acre-feet	A
Hectares	Q
Hectare-meter	F
Btu Per Hour	I

8. Process Codes and Design Capacities (Continued)

EXAMPLE FOR COMPLETING Item 8 (shown in line number X-1 below): A facility has a storage tank, which can hold 533.788 gallons.

Line Number		A. Process Code (From list above)			B. PROCESS DESIGN CAPACITY (1) Amount (specify)	B. (2) Unit of Measure (Enter code)	C. Process Total Number of Units	For Official Use Only					
X	1	S	0	2	533.788	G	001						
	1	T	0	1	1,150.000	U	001						
	2	T	0	1	150.000	U	001						
	3												
	4												
	5												
	6												
	7												
	8												
	9												
1	0												
1	1												
1	2												
1	3												

***NOTE:** If you need to list more than 13 process codes, attach an additional sheet(s) with the information in the same format as above. Number the lines sequentially, taking into account any lines that will be used for "other" processes (i.e., D99, S99, T04 and X99) in Item 9.*

9. Other Processes (See instructions on page 37 and follow instructions from Item 8 for D99, S99, T04 and X99 process codes)

Line Number (Enter #s in sequence with Item 8)		A. Process Code (From list above)			B. PROCESS DESIGN CAPACITY (1) Amount (Specify)	B. (2) Unit of Measure (Enter code)	C. Process Total Number of Units	D. Description of Process
X	1	T	0	4				In-situ Vitrification
	1							
	2							
	3							
	4							

10. Description of Hazardous Wastes (See instructions on page 37)

A. EPA HAZARDOUS WASTE NUMBER – *Enter the four-digit number from 40 CFR, Part 261 Subpart D of each listed hazardous waste you will handle. For hazardous wastes which are not listed in 40 CFR, Part 261 Subpart D, enter the four- digit number(s) from 40 CFR Part 261, Subpart C, that describes the characteristics and/or the toxic contaminants of those hazardous wastes.*

B. ESTIMATED ANNUAL QUANTITY – *For each listed waste entered in column A, estimate the quantity of that waste that will be handled on an annual basis. For each characteristic or toxic contaminant entered I column A, estimate the total annual quantity of all the non-listed waste(s) that will be handled which possess the characteristic or contaminant.*

C. UNIT OF MEASURE – *For each quantity entered in column B, enter the unit of measure code. Units of measure which must be used and the appropriate codes are:*

ENGLISH UNIT OF MEASURE	CODE	METRIC UNIT OF MESURE	CODE
POUNDS	P	KILOGRAMS	K
TONS	T	METRIC TONS	M

If facility records use any other unit of measure for quantity, the units of measure must be converted into one of the required units of measure, taking into account the appropriate density or specific gravity of the waste.

D. PROCESSES

1. PROCESS CODES:

For listed hazardous waste: For each listed hazardous waste entered in column A select the code(s) from the list of process codes contained in Items 8A and 9A on page 3 to indicate the waste will be stored, treated, an d/or disposed at the facility

For non-listed hazardous waste: For each characteristic or toxic contaminant entered in column A, select the code(s) from the list of process codes contained in items 8A and 9A on page 3 to indicate all the processes that will be used to store, treat, and/or dispose of all the non-listed hazardous wastes that possess that characteristic or toxic contaminant.

NOTE: THREE SPACES ARE PROVIDED FOR ENTERING PROCESS CODES. IF MORE ARE NEEDED:

1. *Enter the first two as described above.*
2. *Enter "000" in the extreme right box of Item 10.D(1).*
3. *Use additional sheet, enter line number from previous sheet, and enter additional code(s) in Item 10.E.*

2. PROCESS DESCRIPTION: *If a code is not listed for a process that will be used, describe the process in Item 10.D(2) or in Item 10.E(2).*

NOTE: HAZARDOUS WASTES DESCRIBED BY MORE THAN ONE EPA HAZARDOUS WASTE NUMBER – Hazardous wastes that can be described by more than one EPA Hazardous Waste Number shall be described on the form as follows:

1. *Select one of the EPA Hazardous Waste Numbers and enter it in column A. On the same line complete columns B, C and D by estimating the total annual quantity of the waste and describing all the processes to be used to treat, store, and/or dispose of the waste.*
2. *In column A of the next line enter the other EPA Hazardous Waste Number that can be used to describe the waste. In column D(2) on that line enter "included with above" and make no other entries on that line.*
3. *Repeat step 2 for each EPA Hazardous Waste Number that can be used to describe the hazardous waste.*

EXAMPLE FOR COMPLETING Item 10 (shown in line numbers X-1, X-2, X-3, and X-4 below) – A facility will treat and dispose of an estimated 900 pounds per year of chrome shavings from leather tanning and finishin g operations. In addition, the facility will treat and dispose of three non-listed wastes. Two wastes are corrosive only and there will be an estimated 200 pounds per year of each waste. The other waste is corrosive and ignitable and there will be an estimated 100 pounds per year of that waste. Treatment will be in an incinerator and disposal will be in a landfill.

Line Number		A. EPA Hazardous Waste No. (Enter code)				B. Estimated Annual Quantity of Waste	C. Unit of Measure (Enter code)	D. PROCESSES (1) PROCESS CODES (Enter code)								(2) PROCESS DESCRIPTION (If a code is not entered in D(1))
X	1	K	0	5	4	900	P	T	0	3	D	8	0			
X	2	D	0	0	2	400	P	T	0	3	D	8	0			
X	3	D	0	0	1	100	P	T	0	3	D	8	0			
X	4	D	0	0	2											Included With Above

10. Description of Hazardous Wastes *(Continued; Additional Sheet)*

Line Number		A. EPA Hazardous Waste No. (Enter code)				B. Estimated Annual Quantity of Waste	C. Unit of Measure (Enter code)	D. PROCESSES									
								(1) PROCESS CODES (Enter code)									(2) PROCESS DESCRIPTION (If a code is not entered in D(1))
	1	D	0	0	2	150	T	T	0	1							ETU
	2	P	0	7	6	1	T	T	0	1							ETU
	3	P	0	7	8	1	T	T	0	1							ETU
	4	F	0	0	1	750	T	T	0	1							ETU
	5	F	0	0	2	750	T	T	0	1							ETU
	6	P	0	6	8	230	T	T	0	1							FTU
	7	U	0	9	8	230	T	T	0	1							FTU
	8	U	1	3	3	230	T	T	0	1							FTU
	9																
1	0																
1	1																
1	2																
1	3																
1	4																
1	5																
1	6																
1	7																
1	8																
1	9																
2	0																
2	1																
2	2																
2	3																
2	4																
2	5																
2	6																
2	7																
2	8																
2	9																
3	0																
3	1																
3	2																
3	3																

11. Map (See instructions on page 38)

Attach to this application a topographic map, or other equivalent map, of the area extending to at least one mile beyond property boundaries. The map must show the outline of the facility, the location of each of its existing and proposed intake and discharge structures, each of its hazardous waste treatment, storage, or disposal facilities, and each well where it injects fluids undergrund. Include all springs, rivers and other surface water bodies in this map area. See instructions for precise requirements.

12. Facility Drawing (See instructions on page 39)

All existing facilities must include a scale drawing of the facility (see instructions for more detail).

13. Photographs (see instructions on page 39)

All existing facilities must include photographs (aerial or ground-level) that clearly delineate all existing structures; existing storage, treatment and disposal areas; and sites of future storage, treatment or disposal areas (see instructions for more detail).

14. Comments (See instructions on page 39)

1. Permit Renewal

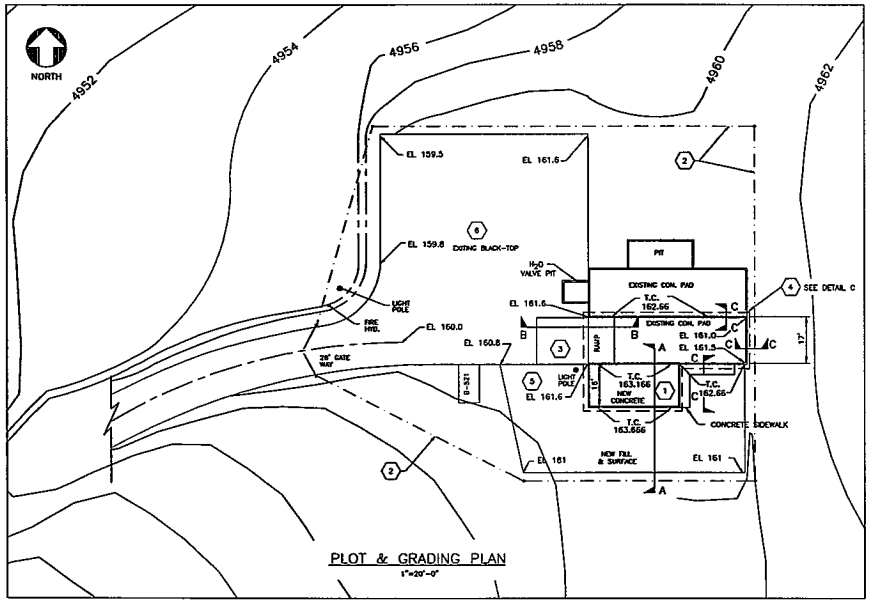
2. A. Permit Type	B. Number	C. Description
R	NM8800019434-2	Post-Closure Care
E	DP-1255	Discharge Plan – Injection

3. T01 unit code in bold/italic font indicates the Fuel Treatment Unit (FTU).

4. Oxidizer codes indicate "potential" treatment in ETU. Added per NMED request.

5. F001 and F002 indicate purge water (investigative derived waste) management per resolution of an NMED Letter of Violation (dated June 19, 1998).

SYMBOL	LETTER	ZONE	DESCRIPTION	DATE	APPROVAL
	A		INC REDLINES AS PER DCN A-1 R.E.M. 6-18-93 REVISED PER DCN A-2 C. CURTIS 7-7-93	7-7-93	A. SILVA D. OGDEN E.WOLF R. MONJARAS
	B		INC REDLINES AS PER DCN B-1 GABE. 12-13-93 REVISED PER DCN B-2 C. CURTIS 03/04/94	3-4-94 3-4-94 3-10-94 3-10-94	D. DAY G. MACKLER C. WOLF A. SILVA
	C		REVISED PER DCN C-1 C. CURTIS 05-25-94	5-25-94 5-31-94 6-1-94 6-1-94	D. DAY L. CANONG C. WOLF A. SILVA
	D		REVISED PER DCN D-1 G.GAMBOA 06-24-94	7-21-94 7-26-94 8-1-94 8-1-94	D. DAY L. CANONG C. WOLF A. SILVA
	E		REVISED PER DCN E-1 THRU E-3 R.CARPENTER 08-20-96	9-25-96 10-2-96 10-18-96 10-25-96	D. DAY L. CANONG D. AMDEI A. SILVA
	F		REVISED PER DCN F-1 AND F-2 C. HOLCOMB 08-26-98	8-26-98 9-11-98 9-18-98 9-18-98	C. CURTIS L. CANONG D. AMDEI A. SILVA
	G		REVISED PER DCN G-1 C. HOLCOMB 10-13-99	10-13-99 11-01-00 11-02-00 11-02-00	D. DAY L. CANONG D. AMDEI A. SILVA
	H		REVISED PER DCN H-1 K. BERGLUND 05/16/01		

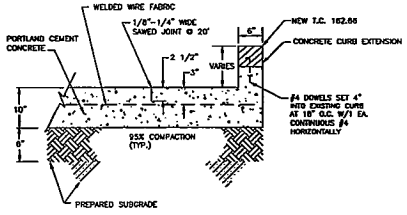


LEGEND

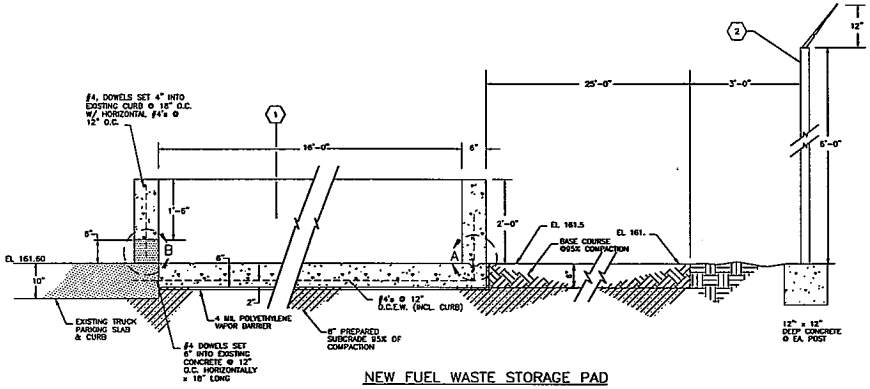
- SECONDARY CONTAINMENT BOUNDARY
- CONCRETE CURB (SECONDARY CONTAINMENT) (T.C.=TOP OF CURB)

NOTES:

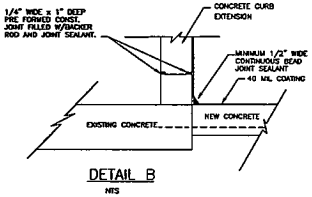
1. NEW FUEL WASTE STORAGE PAD
   - PREPARED SUBGRADE TO BE COMPACTED TO 95% OF MODIFIED PROCTOR.
   - REINFORCING TO BE ASTM D1557 GRADE 60 UNLESS OTHERWISE NOTED
   - CONCRETE TO BE 3000PSI DESIGNED PER ASTM C94, W/ 5-1/2 SACK/CY PORTLAND TYPE I-II CEMENT @ W.C. RATIO = .5, SLUMP = 4", 1" C.A. WATER REDUCING AND AIR ENTRAINING ADMIXTURES MAY BE USED RESULTING IN A DECREASE OF .91 GAL H20/SACK OF CEMENT.
   - ALL CONSTRUCTION JOINTS AND SURFACE OF CONCRETE TO BE COATED WITH 40MIL THICKNESS OF TECHNI-PLUS 6XDS NOVOLAC COATING, OR EQUAL AND TECHNI-PLUS FLEX 3 JOINT SEALANT, OR EQUAL.
   - 1'-6" HIGH CONTAINMENT BERM PROVIDES A SECONDARY CONTAINMENT VOLUME OF 8,400 GALLONS. THE CALCULATED VOLUME OF THE WASTE STORAGE TANK, NaOH TANK, AND ASSOCIATED PIPING IS 4,600 GALLONS.
2. NEW ISOLATION FENCE WITH WARNING SIGNS & THREE STRAND BARBED WIRE OUTRIGGER.
   - 8-FOOT CHAIN-LINK FENCE TO BE INSTALLED AROUND FACILITY AND JOINED TO EXISTING CHAIN-LINK GATES ACROSS ROAD.
   - FENCING MATERIAL TO HAVE HOT-DIPPED GALVANIZED COATING CONFORMING TO FS RR-F-191, INSTALLED PER MANUFACTURERS INSTRUCTIONS.
3. NEW TRUCK PARKING LANE CONTAINMENT RAMP.
   - EXISTING ASPHALT TO BE REMOVED UNDER WEST HALF OF RAMP.
   - REINFORCING TO BE ASTM D1557 GRADE 60.
   - CONCRETE TO BE 3000PSI PER (1) ABOVE.
   - THE NEW CONTAINMENT RAMP AND RAISED CURB PROVIDE A SECONDARY CONTAINMENT VOLUME OF 8,800 GALLONS. THE MAXIMUM CONTENTS OF THE TREATMENT TANK AND ASSOCIATED PIPING IS 4,200 GALLONS.
   - EAST SIDE OF EXISTING TRUCK PARKING LANE TO BE COATED & JOINTS SEALED WITH SAME EPOXY COATING PER NOTE (1)
4. GAP IN EXISTING CURB CLOSED PER DETAIL C
5. VEHICLE ACCESS AREA AROUND FUEL WASTE STORAGE PAD.
6. VEHICLE TURN-AROUND



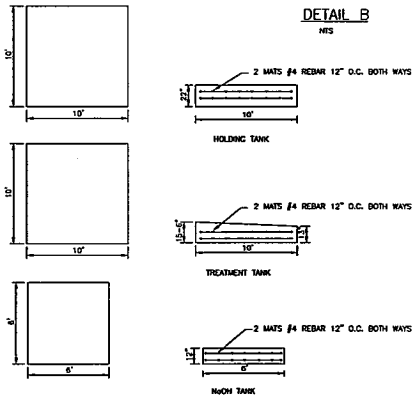
EXISTING TRUCK PARKING LANE
TYP. CONCRETE SECTION
SECTION C-C
NTS



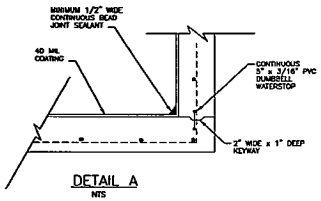
NEW FUEL WASTE STORAGE PAD
TYP. CONCRETE SECTION
SECTION A-A
NTS



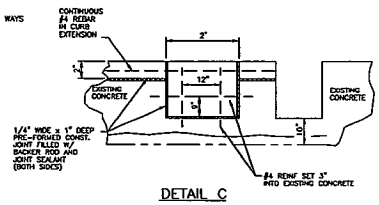
DETAIL B
NTS



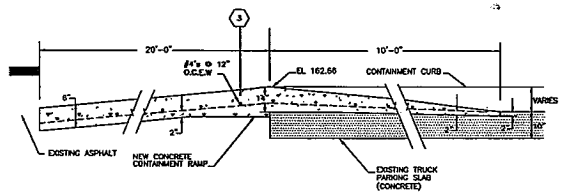
CONCRETE TANK FOUNDATIONS
N.T.S.



DETAIL A
NTS



DETAIL C
NTS



NEW RAMP
TYP. CONCRETE SECTION
SECTION B-B
NTS

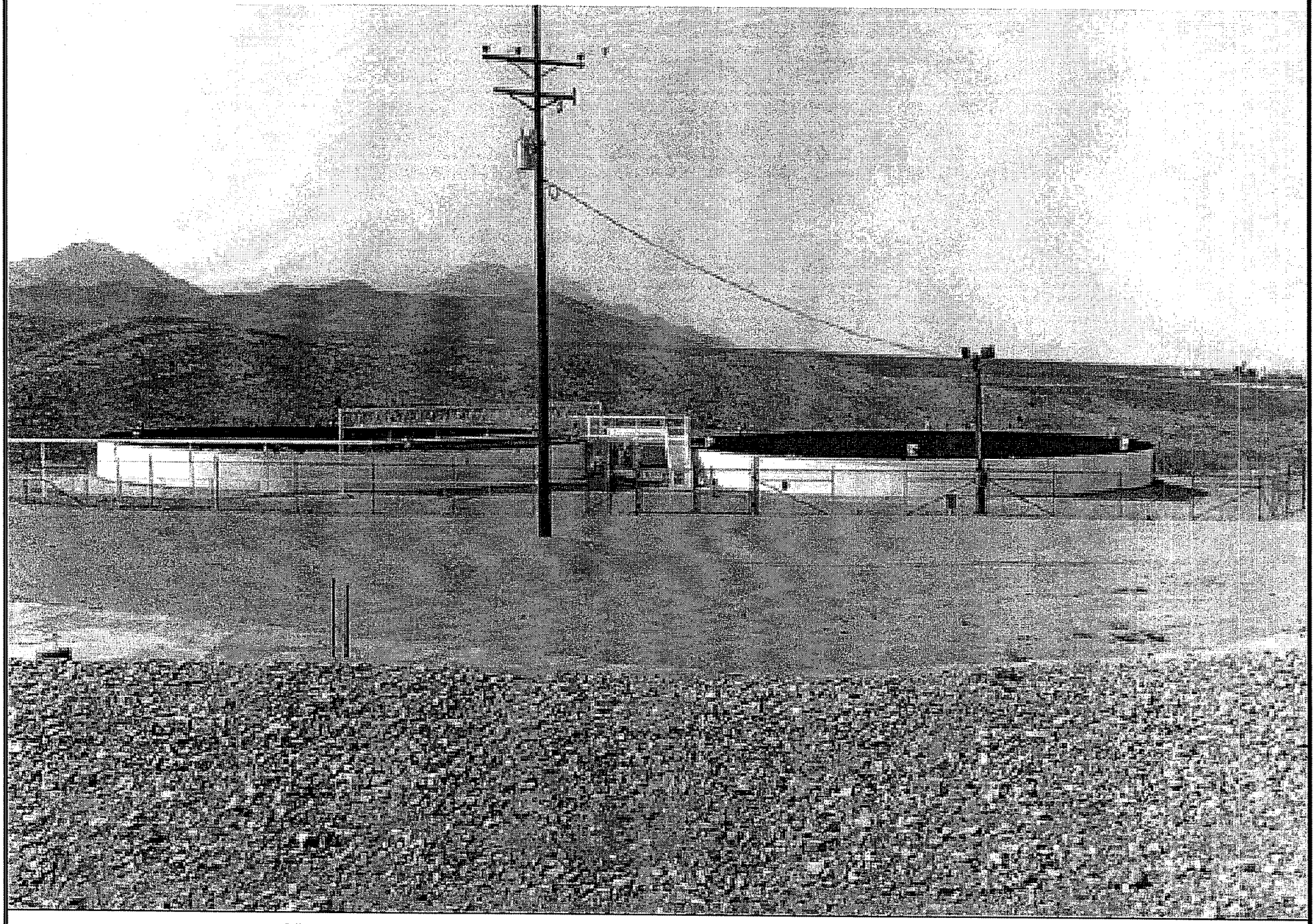
ITEM NO.	PART NO.	DESCRIPTION	MATERIAL	SPECIFICATION	SHT. NO.
REQ'D PER ASSY					

DIMENSIONAL TOLERANCE UNLESS NOTED OTHERWISE
.xx ANGLES ±
.xxx FRACTIONS ±
.xxxx
DIMENSIONS ARE IN INCHES
SURFACE FINISH IN MICRO INCHES RMS UNLESS OTHERWISE NOTED, √
UNLESS NOTED OTHERWISE REMOVE ALL SHARP EDGES AND BURRS.
NEXT ASSY / RELATED DWG'S

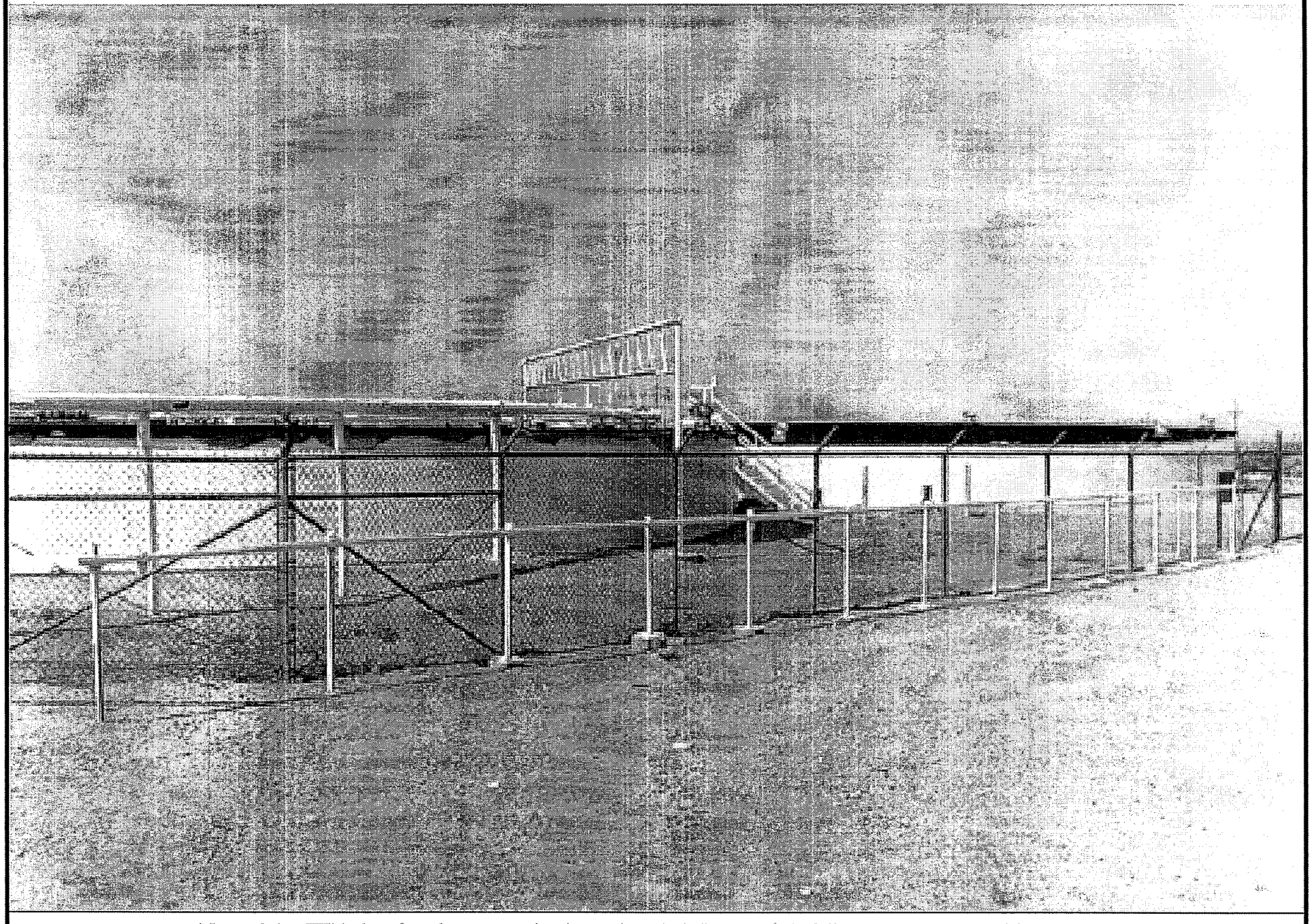
DRAWN BY	G.P. MONTALVO	2-17-93
ENGINEER	D. OGDEN	2-17-93
DESIGNED BY	D. OGDEN	2-17-93
CHECKED BY	A. SILVA	3-8-93
APPROVAL	G. MACKLER	3-8-93
APPROVAL	C. WOLF	3-8-93
AUTHORIZED	J. DANDY	3-9-93
RELEASE	R. MONJARAS	3-10-93

National Aeronautics and Space Administration — NASA
Lyndon B. Johnson Space Center
White Sands Test Facility
500 AREA
WASTE FUEL TREATMENT FACILITY
PLUMBING PLAN

A.B. DWG. NO. | SCALE | SHEET 1 OF 4
CODE IDENT. | SIZE F | DWG. NO. 584-14359 | REV. H

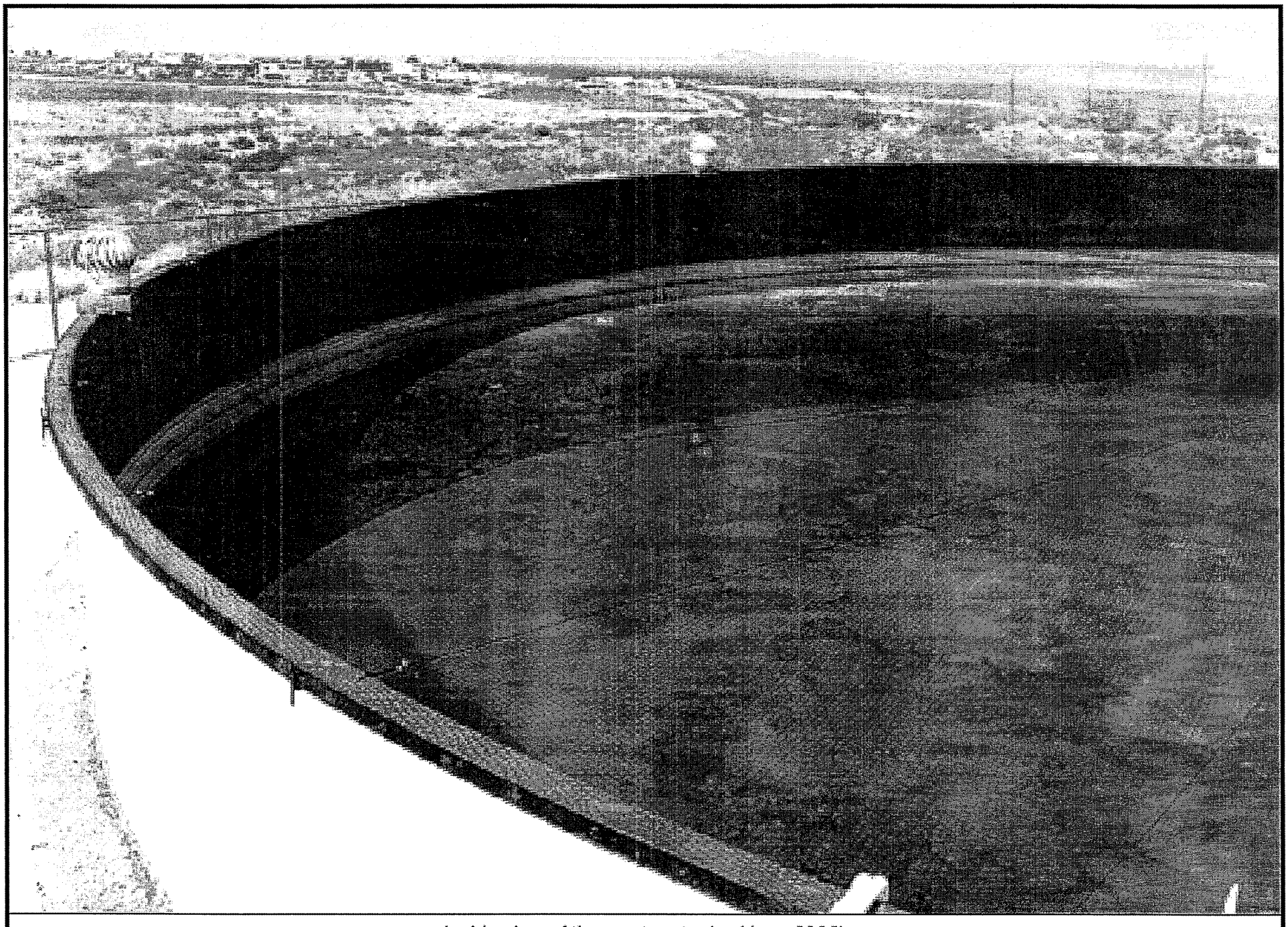


View of the evaporation tank unit (ETU) showing the entrance gates. (June 2002)

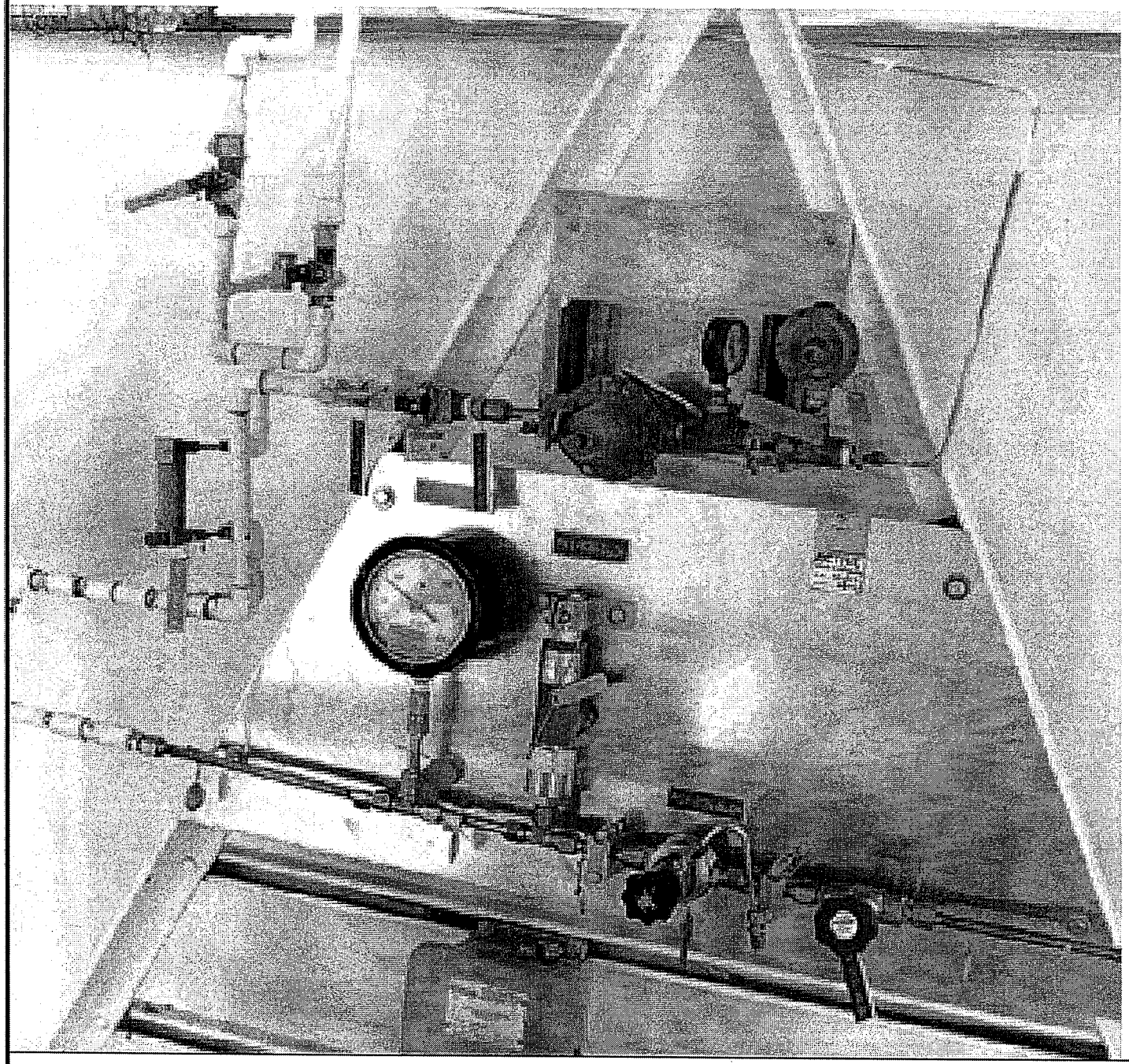


View of the ETU showing the two tanks, incoming drainline, and drainline support truss. (June 2002)

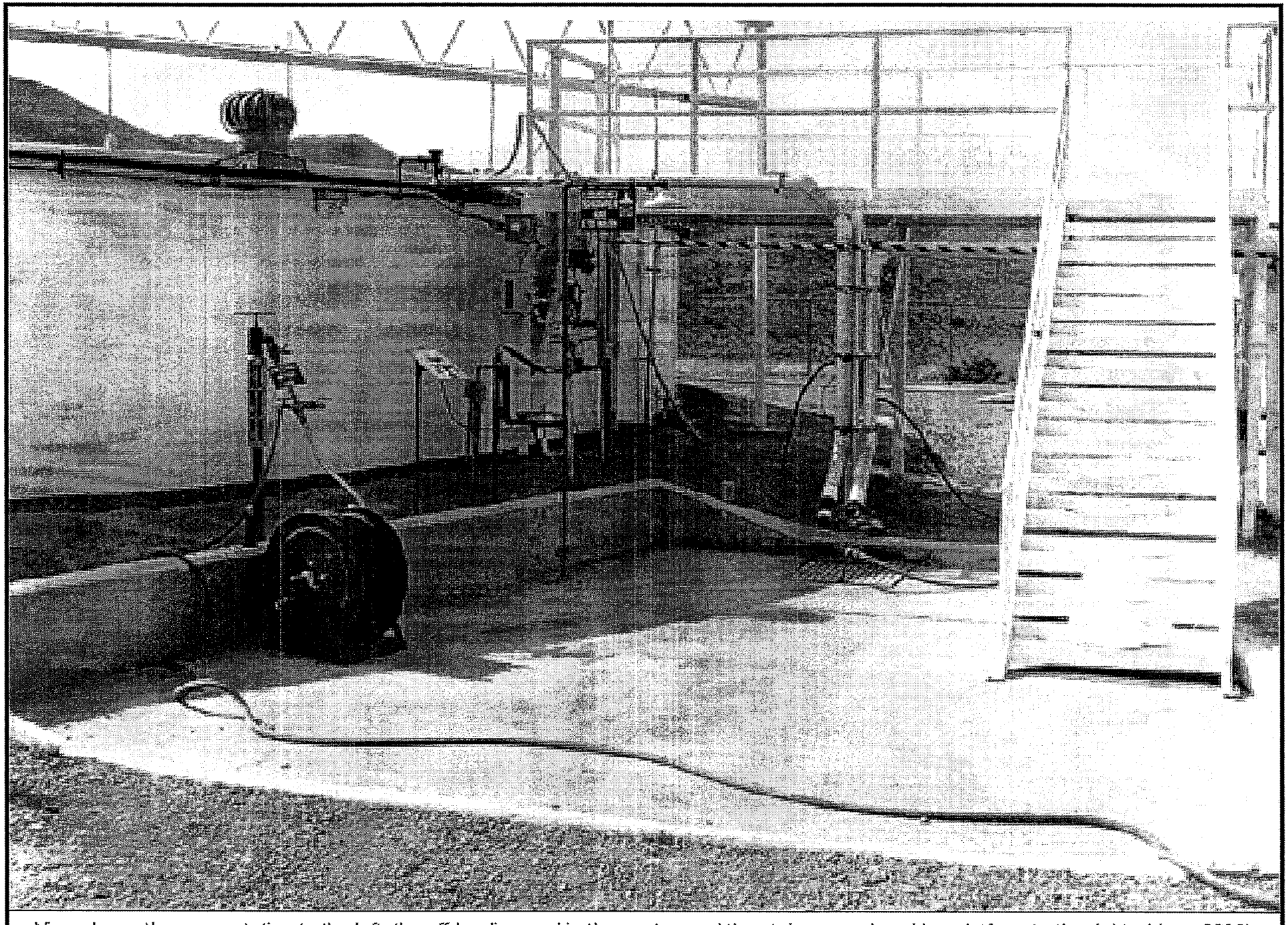
Inside view of the eastern tank. (June 2002)



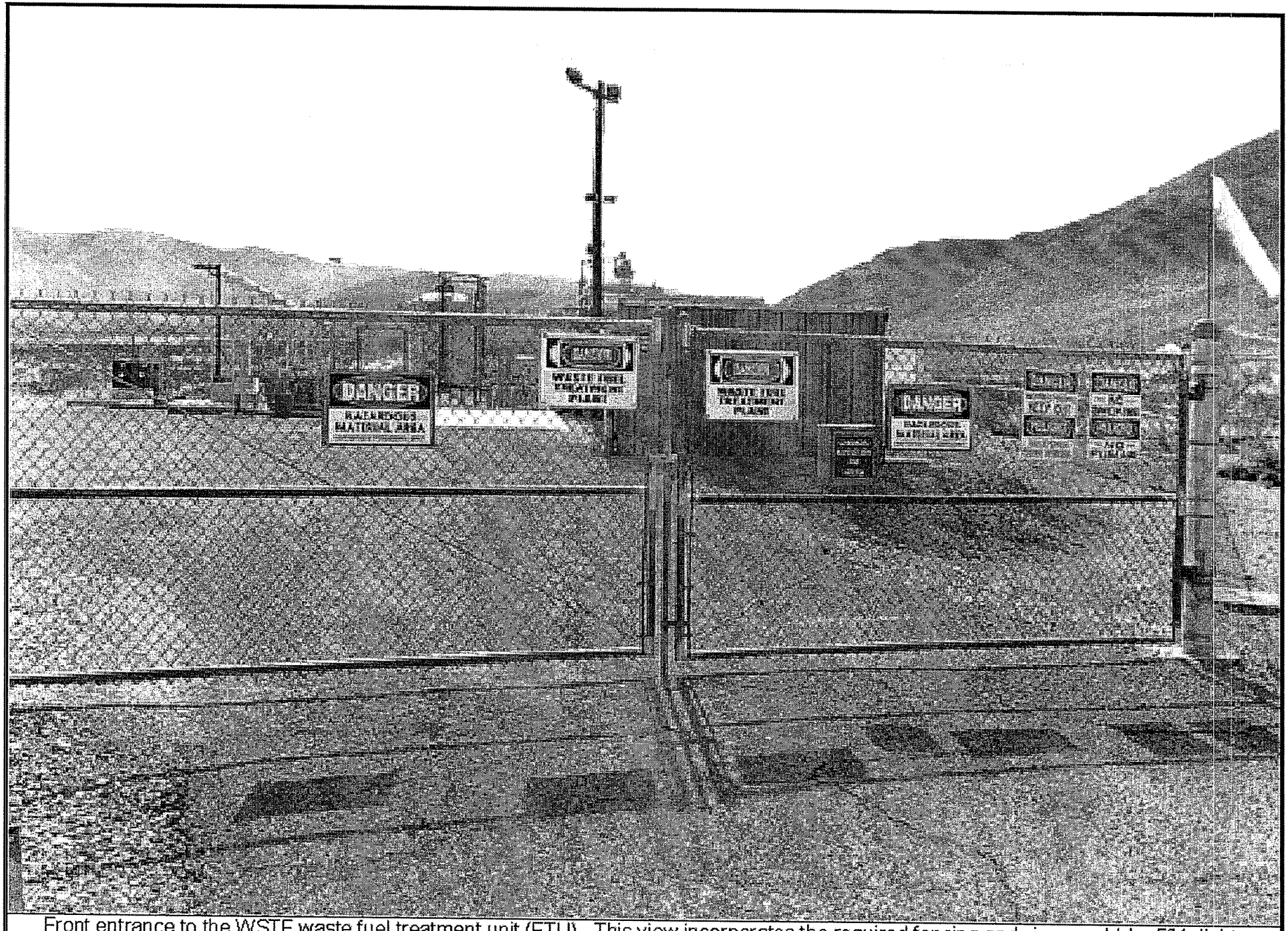
Inside view of the western tank. (June 2002)



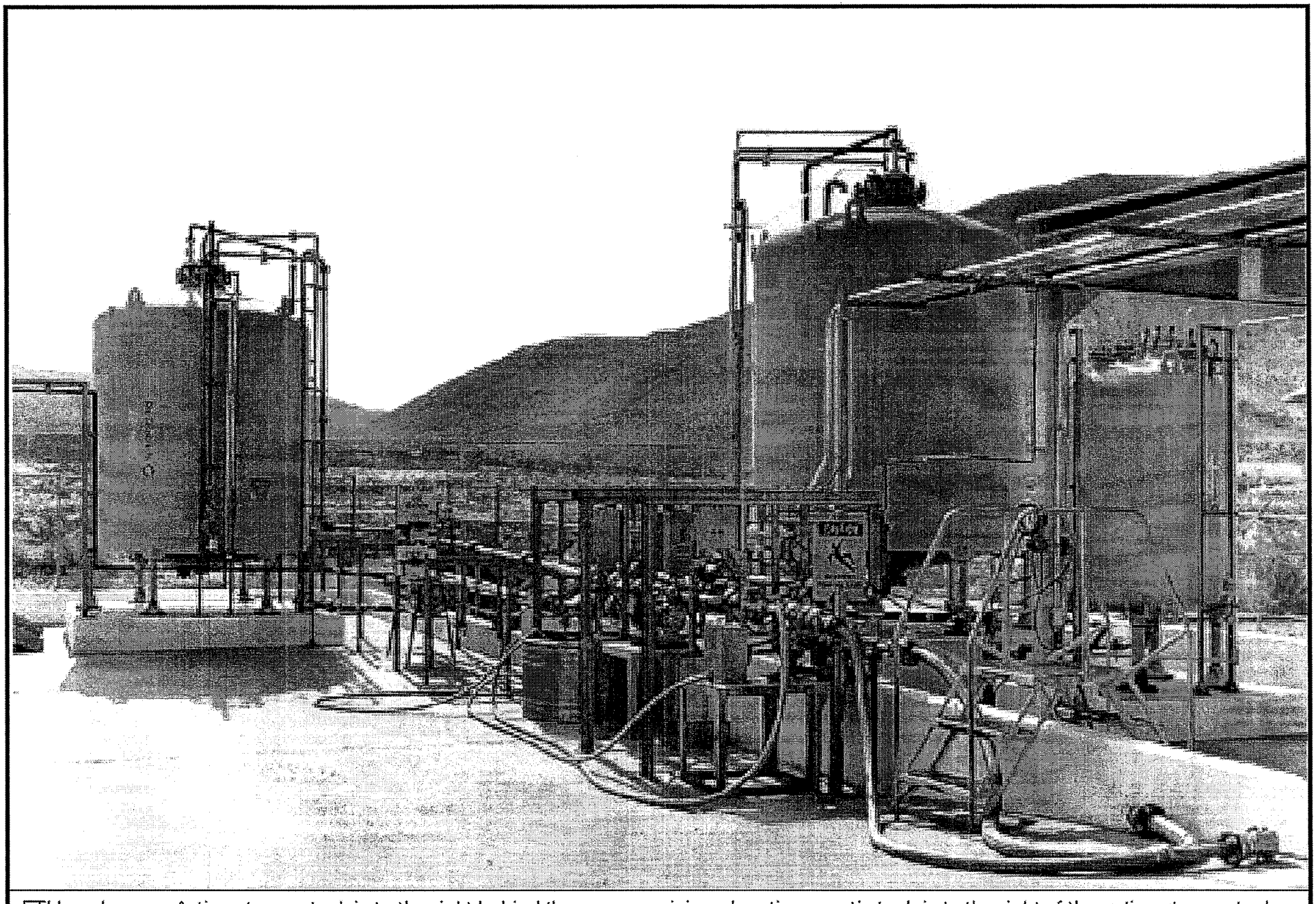
Front view of the nitrogen panel. (June 2002)



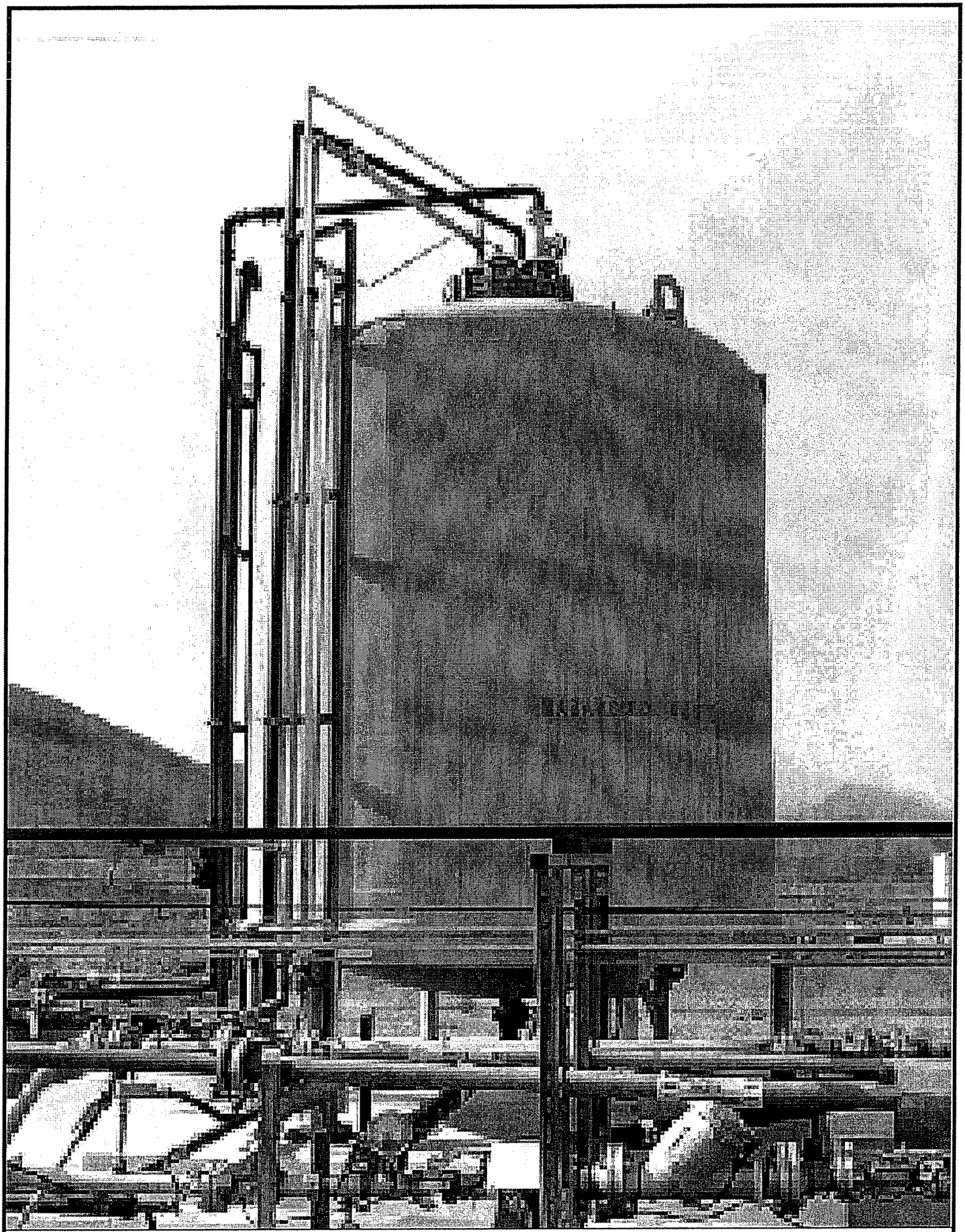
View shows the pump station to the left, the off-loading pad in the center, and the stairway and working platform to the right. (June 2002)



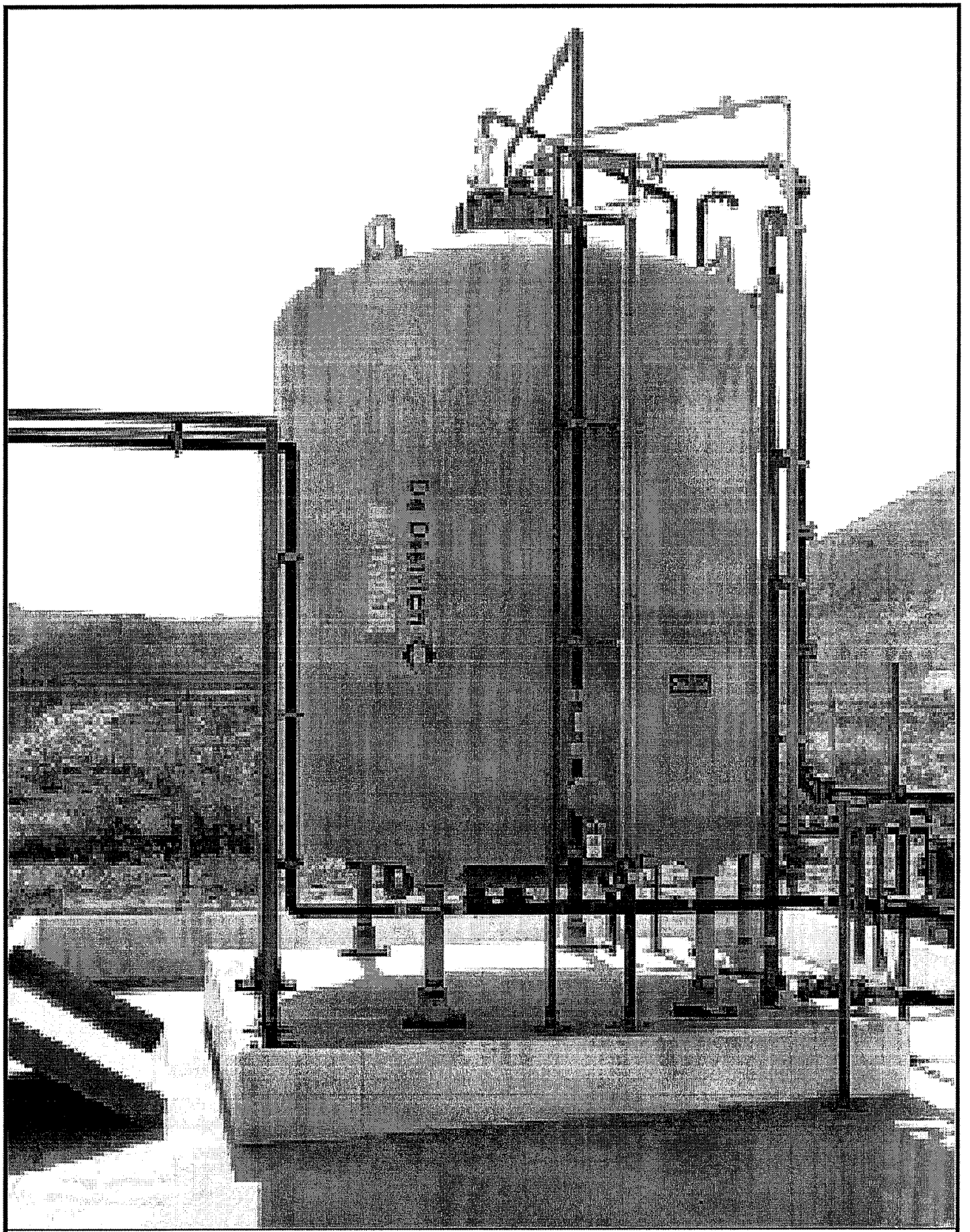
Front entrance to the WSTF waste fuel treatment unit (FTU). This view incorporates the required fencing and signage, bldg. 521, light tower and tanks. (June 2002)



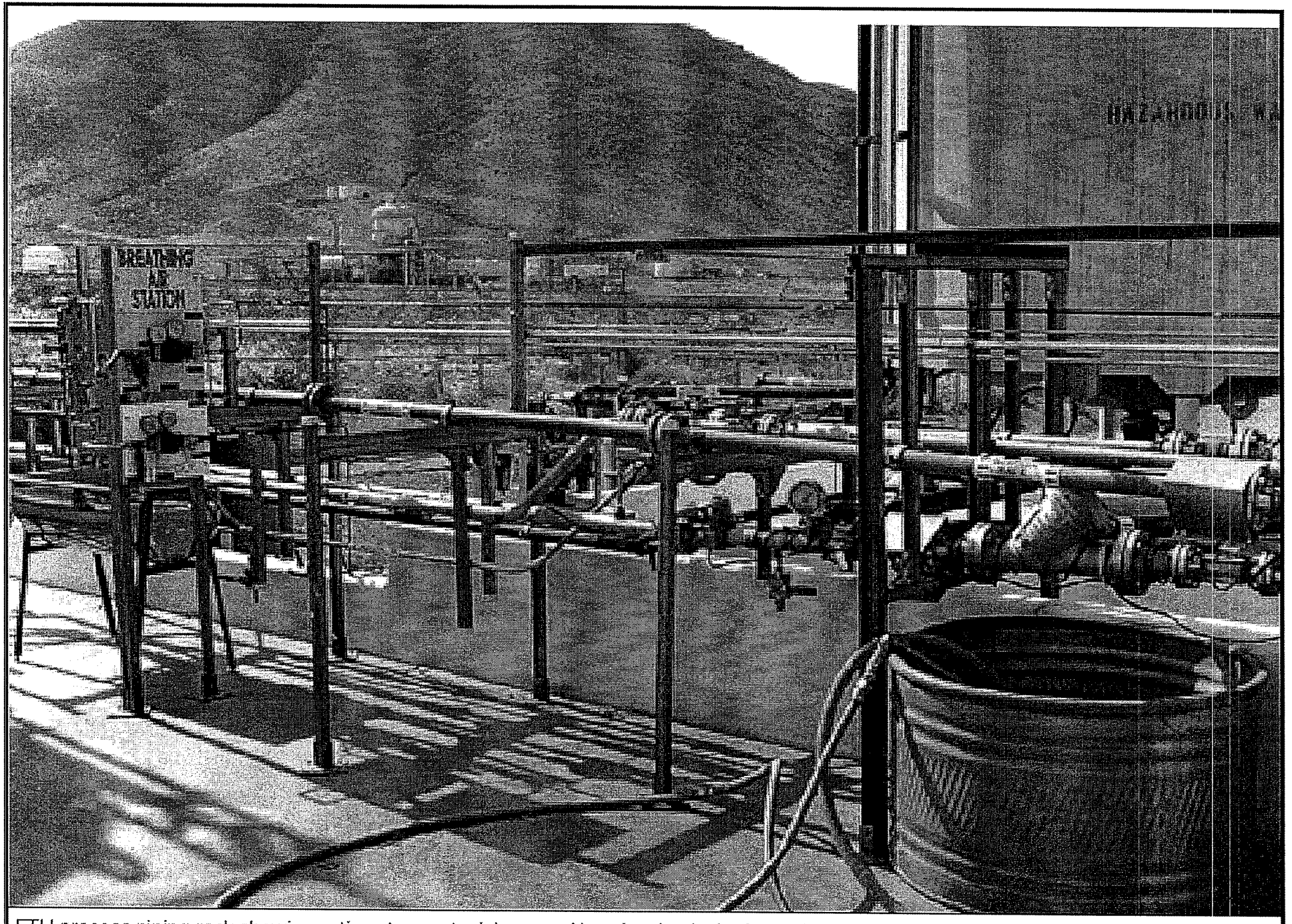
FTU work area. Active storage tank is to the right behind the process piping. Inactive caustic tank is to the right of the active storage tank. Inactive treatment tank is at the end of the tanker slot/work area. Large flex hoses are the tanker on-load and off-load hoses. Small flex hoses are the container on-load and off-load hoses. Stile crosses secondary containment wall. Secondary containment is sealed with epoxy/novalac coating (gold color on concrete). (June 2002)



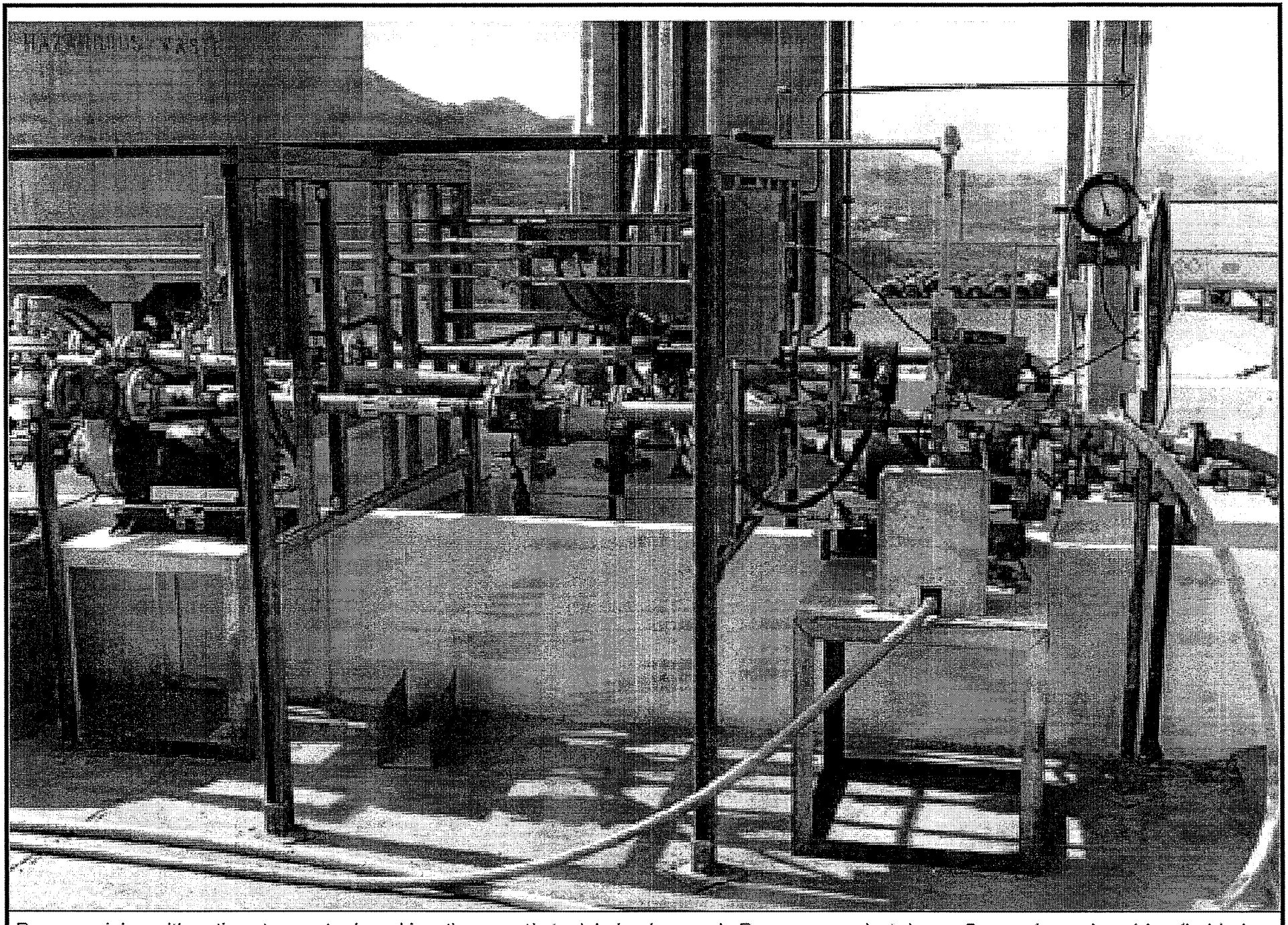
Active storage tank showing sight glass, vent, and addition piping. Pipe rack showing filter, pressure gauge, pipe labels, and low-point drain. (June 2002)



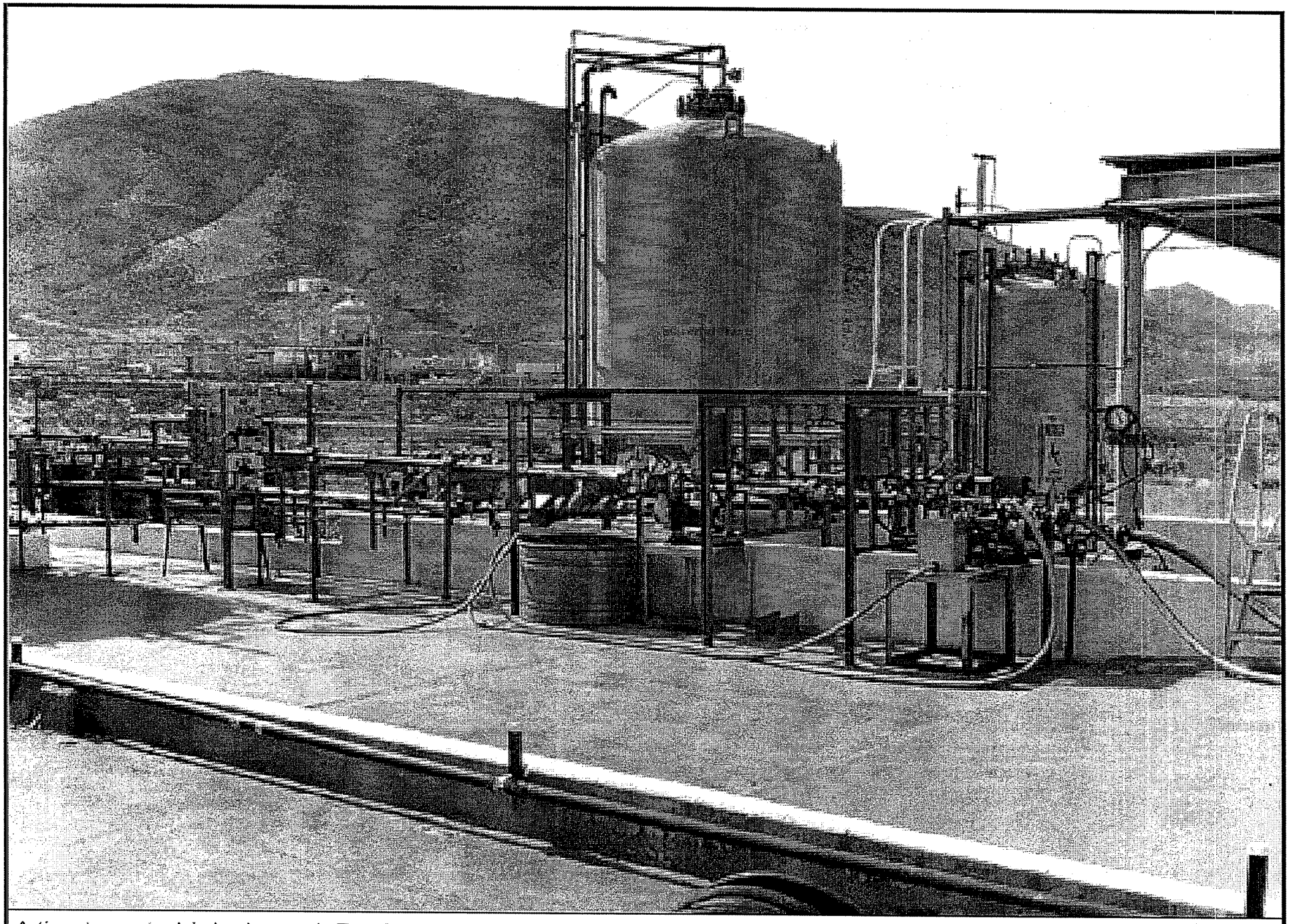
Inactive treatment tank showing red valve lockouts w/yellow tags, tank pedestal, sight glass, and circulation piping. Site process water is copper line coming from overhead left. (June 2002)



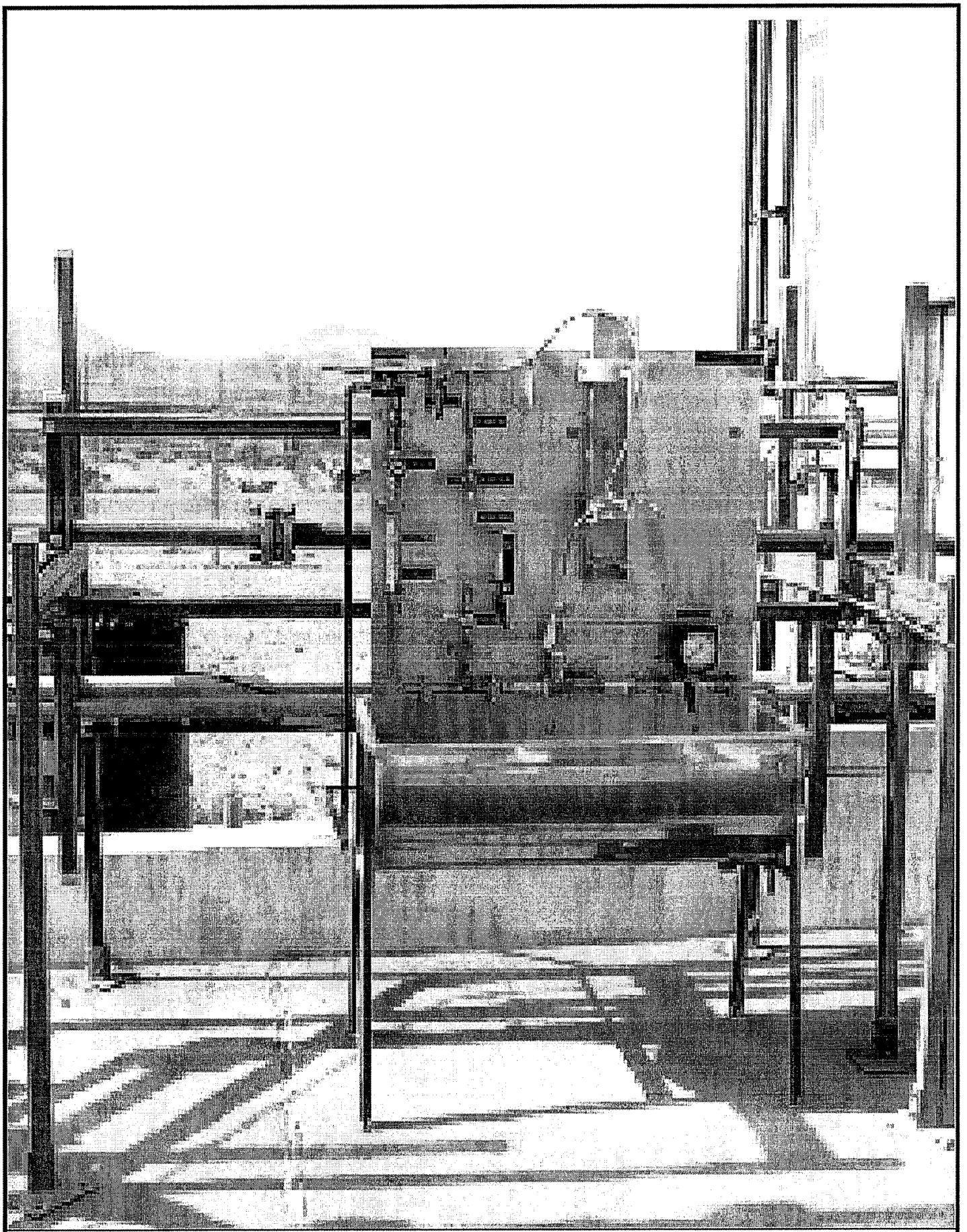
FTU process piping rack showing active storage tank in rear. Also showing is the breathing air and GN2 panels with the HOKE station panel with S.S. sink in the background. Also shown are the secondary containment gold and white coatings. (June 2002)



Process piping with active storage tank and inactive caustic tank in background. Pumps on pedestals are Cranes (green) and Aro (behind galvanized sheet metal box). Crane pump emergency shut-off boxes are gray boxes on the pipe supports. (June 2002)



Active storage tank in background. Breathing air and gaseous nitrogen panels on left side. Test Stand 302 in far background. Water hose reel is in foreground with the copper site-water line. (June 2002)



HOKE panel with S.S. sink containment. Shows HOKE holder, flow meters, aspirator, and water bypass components. Also shows coal tar urethane joint in flooring. (June 2002)

ETU HAZARDOUS WASTE

WIWPS#	WASTE STREAM NAME	PROCESS DESCRIPTION	EPA WASTE CODE	ESTIMATED GALLONS PER YEAR
10-08-02	AMMONIUM HYDROXIDE	BLUE LINE COPY MACHINE USES AMMONIA TO COPY. THE AMMONIA IS USED UP AND COLLECTED IN ORIGINAL CONTAINER.	D002	10
10-09-05	PURGED GROUND WATER	WATER REMOVED FROM WELLS DURING SAMPLING, PUMP TESTING, OR DEVELOPMENT.	F001, F002	500000
10-09-10	BUILDING 637 DECON WATER	GROUNDWATER MONITORING PUMPS AND VARIOUS OTHER EQUIPMENT USED FOR THE GROUNDWATER PLUME INVESTIGATION ARE DECONTAMINATED AT THE BUILDING 637 STEAM-PAD. WATER IS CONTAINED IN A CATCH TANK AND WHEN FULL IS TRANSFERRED TO THE EVAPORATION TANKS.		2000
10-20-13	GW REMEDIATION AQUEOUS WASTE	AQUEOUS WASTE GENERATED DURING ROUTINE OPERATION OF THE PLUME-FRONT REMEDIATION FACILITY CONSISTING OF: GROUNDWATER, CONTAINING WSTF GROUNDWATER CONTAMINANTS; RINSE WATER.	F001, F002	5000
10-20-21	SPENT CITRIC ACID DESCALER	ROUTINE DESCALING OF THE PLUME-FRONT REMEDIATION FACILITY AIR STRIPPERS AND UV REACTOR PER WJI ENV-0065, "PLUME FRONT STABILIZATION TREATMENT SYSTEM OPERATION AND MAINTENANCE MANUAL" OR TASK MEMO. UP TO A 10 % CITRIC ACID SOLUTION WILL BE USED DURING THE DESCALING PROCESS: HOWEVER THE SPENT SOLUTION PERCENTAGE IS APPROXIMATELY 0.2%	TBD	5000
20-01-01	RINSEWATER	PARTS, SOFTGOODS AND GLASSWARE ARE RINSED W/WATER. RINSE WATER CONSISTS OF TAP WATER AND ULTRA PURE WATER. WATER IS CONTAMINATED BY DRAGOUT FROM OAKITE 126, OAKITE 31, BRULIN 815 AND SIMPLE GREEN VATS.		1000
20-01-11	SPENT OAKITE HD126 SOLUTION	OAKITE HD126 IS MIXED WITH WATER (4-8 OZ/GALLON OF WATER). IT IS USED FOR THE GROSS CLEANING OF PARTS CONTAMINATED WITH OILS, GREASES, AND HEAVY METALS. THE PARTS ARE IMMERSED IN A 80 GAL TANK CONTAINING THE MIXTURE. THE 126 IS KEPT AT 140 deg F WHEN USED.	D002	2080
20-01-13	SPENT OAKITE RUSTRIPPER SOLN.	OAKITE RUSTRIPPER IS USED TO CLEAN RUST, OILS, & GREASE FROM CARBON STEEL PARTS. IT IS ALSO USED AS AN ETCHANT. RUSTRIPPER IS USED AT 140degF.	D002	500
20-01-14	SPENT PICKLING SOLUTION	PICKLING SOLUTION. 3-5% HCL AND FeCl EACH	D002	50
20-01-18	SIMPLE GREEN WASHWATER	A 1% SIMPLE GREEN SOLUTION (99% WATER) IS USED IN A BATCH PROCESS TO CLEAN VARIOUS METAL AND ELASTOMERIC PARTS/COMPONENTS. BATCH SIZE VARIES FROM LESS THAN 1 LITER TO GREATER THAN 100 GALLON QUANTITIES, DEPENDING ON THE SIZE OF THE CLEANING OPERATION.		500
20-01-22	DERUSTIT SS-3	USED AS A METAL CLEANER. 2.6% HYDROFLUORIC ACID.	D002	5
20-01-23	WASHWATER	WASHWATER USED IN ROUTINE CLEAN UP OF THE LAB CON HIGHBAY.		2500
20-01-28	ACID RINSATE/SOFTGOODS	GLOVES, AND WIPES USED FOR GENERAL CLEAN UP OF ACIDIC CLEANING SOLUTIONS (PICKLING SOLUTION, OAKITE 31, SIMPLE GREEN).		50

ETU HAZARDOUS WASTE

WIWPS#	WASTE STREAM NAME	PROCESS DESCRIPTION	EPA WASTE CODE	ESTIMATED GALLONS PER YEAR
20-01-29	CAUSTIC RINSATE/SOFGOODS	GLOVES, AND WIPES USED FOR GENERAL CLEAN UP OF BASIC CLEANING SOLUTIONS (OAKITE HD 126, SIMPLE GREEN, OAKITE RUST STRIPPER).		
20-01-36	LAB CON AQUEOUS WASTE	AQUEOUS WASTE GENERATED FROM CLEANING LARGE TANKS AND EQUIPMENT INTHE LAB CON HIGHBAY. MAY CONTAIN SMALL QUANTITIES OF SOLVENTS. THIS PROFILE SHEET IS LIMITED TO THE FOLLOWING WATER SOLUABLE CLEANERS: OAKITE 31, OAKITE 126, PICKLING SOLUTION, OAKITE RUSTRIPPER, SIMPLE GREEN, CITRIC ACID 5%, BRULIN 815 GD.		3750
20-01-37	CLASS 100 AQUEOUS WASTE	AQUEOUS WASTE GENERATED FROM SHUTDOWN CLEANING OF THE CLEAN ROOM CLASS 100 EQUIP. (GRATES, TABLES, AND CONTAINERS) CLEANING IS PERFORMED IN PLACE OR AT THE LAB-CON HIGH BAY OR EVAP TANK UNLOADING PAD USING A HIGH PRESSURE WASHER, STEAM CLEANER, AND BRUSHES.		200
20-01-38	CITRIC ACID 5%	ACID CLEANING SOLUTION USED TO CLEAN AND REMOVE RUST/SCALE FROM METAL ASSEMBLY. (MIXED METAL)	D002	1000
20-01-44	ACID DEOXIDIZER	STAINLESS STEEL HARDWARE IS POLISHED IN THIS SOLUTION. IT REMOVES RUST, OXIDATION TRAPPED SALTS, AND PASSIVATES THE SURFACES.	D002	110
20-01-45	BRULIN 815 GD	PRELIMINARY CLEAN AND DEGREASE OPERATION USED IN FIRST STEP OF CLEANING PROCESS. THIS IS AN AQUEOUS, PHOSPHATE TYPE CLEANER.		550
20-01-50	WASTE OAKITE 31	SOLUTIONS OF OAKITE 31 AND WATER ARE USED FOR ROUTINE CLEANING IN THE CLEAN ROOM. PARTS ARE CLEANED BY IMMERSION AND/OR BRUSHING FOLLOWED BY STANDARD CLEAN ROOM RINSING AND DRYING PROCEDURES.	D002	2080
20-01-52	OAKITE 90	REMOVING CONTAMINATION FORM THRUSTER. CONTAMINATION: FINGERPRINTS, ADHESIVES FROM TAPE, OTHER MANUFACTURING RESIDUES.	D002	10
20-01-56	DECON WATER	VALVES AND FITTINGS THAT HAVE BEEN EXPOSED TO FUEL AND OXIDIZER ARE RINSED WITH WATER AT DECON SINK. PARTS HAVE BEEN FIELD DECONNED PRIOR.		1000
20-02-01	SPENT INORGANIC ETCHANTS	VARIOUS INORGANIC ACIDS SUCH AS; HCl, HNO3, H2SO4, AND HF ARE MIXED WITH WATER IN 10 - 100 ml INCREMENTS AND USED TO REMOVE STAINLESS STEEL, OTHER NONHAZARDOUS ALLOYS, AND COPPER.	D002	0.5
20-02-07	DEVELOPER/DETERGENT WASHWATER	SIMPLE GREEN (A MILD DETERGENT) IS USED TO CLEAN PHOTOGRAPHIC EQUIPMENT CONTAINING DEVELOPER, AND IS RINSED OFF WITH WATER TO PRODUCE <10% CONCENTRATION.		1
20-02-08	WATER SOLUBLE OILS	WATER SOLUBLE OILS FROM METALOGRAPHIC PREPARATION OR EQUIPMENT CLEANING ARE RINSED OFF WITH WATER.		50
20-02-10	WATER W/POLISHING COMPOUND	ALUMINA OR DIAMOND POLISH (WITH/H2O AS LUBRICANT) IS USED AT THE POLISHING TABLE TO POLISH PARTS. THE RINSE WATER WILL CONTAIN POLISHING COMPOUND, METAL FLAKES, AND PLASTICS.		5

ETU HAZARDOUS WASTE

WIWPS#	WASTE STREAM NAME	PROCESS DESCRIPTION	EPA WASTE CODE	ESTIMATED GALLONS PER YEAR
20-02-16	WATER W/PLASTIC & METAL CHIPS	WATER IS USED FOR LUBRICATION AND FLUSHING OF METALLOGRAPHIC HAND GRINDER. THE WATER PICKS UP PIECES GROUND OFF.		1000
20-04-01	AQUEOUS LAB WASTE	WASHWATER USING DETERGENTS, INORGANIC CLEANERS, INORGANIC ACIDS AND BASES, HYDROGEN PEROXIDE, METALS SOLUTIONS, AQUEOUS SAMPLES AND RINSE WATER GENERATED DURING ROUTINE OPERATION OF THE CHEM LAB.		10000
20-04-02	CYANIDE BEARING WASTE	CYANIDE GENERATED FROM CHEMICAL STANDARDS.	D003	3
20-04-27	AMMONIA RINSATE/SOFTGOODS	IMMERSION TESTING OF MATERIALS IN LIQUID AMMONIA. MATERIALS ARE RINSED WITH WATER, DRIED AND WEIGHED AFTER IMMERSION. PROFILE INCLUDES ASSOCIATED CLEAN UP/SPILL MATERIALS.		10
20-04-49	FUEL SCRUBBER WASTE WATER	INTEREL GK-140 USED TO SCRUB FUEL HOODS, CITRIC ACID (0.2%) IS ADDED WEEKLY PRIOR TO DUMPING.		10000
20-04-74	HYDROLYZED OXIDIZER	DINOTROGEN TETROXIDE FROM OXIDIZER TESTING IS HYDROLYZED BY AQUEOUS SODIUM HYDROXIDE, RATHER THAN EVAPORATED.		10
20-04-88	ACID/GLYCERINE ELECTROLYTE	SOLUTIONS OF SULFURIC ACID, PHOSPHORIC ACID, CHROMIC ACID, AND GLYCERINE ARE USED AS ELECTROLYTES IN ELECTROCHEMICAL EXPERIMENTS.		1
20-13-01	SILK SCREEN PREPARATION	SCREENS ARE PREPPED WITH THINNER, SCREEN WASH AND DEGREASER USING BRUSH AND RUNNING WATER		120
20-13-02	SILK SCREEN DEVELOPMENT	AFTER THE FILM IS EXPOSED, IT IS DEVELOPED WITH RUNING WATER. SOME COMPONENTS OF THE FILM ARE WASHED AWAY		400
20-13-03	SILK SCREEN OPENING	SCREEN IS SPRAYED WITH INSTANT SCREEN OPENER AND WASHED WITH RUNNING WATER. SOME INK GOES DOWN THE DRAIN ALONG WITH WATER AND SCREEN OPENER.		120
20-13-04	SILK SCREEN CLEAN UP	AFTER SCREENING IS OVER, ALL INK AND REMAINING FILM IS WASHED AWAY USING STENCIL REMOVER, RUNNING WATER AND THINNER.		400
20-20-06	EVAP TANK LIQUID WASTE	LIQUID WASTE, RINSATE, ACCUMULATED PRECIPITATION, TANKERIZED (FOR OFF-SITE SHIPMENT) GENERATED DURING ROUTINE OPERATIONS, LINER REPAIR, TANK CLEAN OUT AT THE 200 AREA EVAPORATION TANK SYSTEM. DISPOSAL OF RINSATE FORM SAMPLING EQUIPMENT GENERATED DURING SAMPLING/MAINTENANCE ACTIVITIES.		
20-20-07	EVAPORATION TANK BALLAST	SITE WATER IS ADDED TO THE EVAPORATION TANKS TO MAINTAIN A DEPTH IN THE TANKS OF AT LEAST 12" AS REQUIRED BY WJI ENV-0021.B.		10,000
20-20-08	RAINWATER	LEAKS DEVELOP IN SEALANT AROUND VAULT HATCHES, ALLOWING RAINWATER TO ENTER.		100
30-01-02	OXIDIZER CONT. DECON WATER	DECONTAMINATION OF EQUIPMENT, PIPES, AND FITTINGS RESULTS IN WATER CONTAMINATED WITH RESIDUAL OXIDIZER (N2O4). POINT OF ORIGIN 300 AREA OXIDIZER SYSTEM TANKS AND PIPING.	D002, P078	50

ETU HAZARDOUS WASTE

WIWPS#	WASTE STREAM NAME	PROCESS DESCRIPTION	EPA WASTE CODE	ESTIMATED GALLONS PER YEAR
30-01-04	OXIDIZER ASPIRATOR WATER	ASPIRATOR PULLS OXIDIZER (N2O4) VAPORS AND RESIDUAL LIQUID OUT OF PROCESS PIPES CAPTURING THE OXIDIZER IN WATER. POINT OF ORIGIN 300 AREA OX SYSTEM PIPING AND TANKS.	D002	50
30-01-37	OXIDIZER THRUSTER RESIDUALS	RCS TEST ARTICLE MANIFOLD PRIMING/LOADING (ESTIMATE FOR 3 PRIMING OPERATIONS AT EACH TS PER YEAR AND IN A WORST CASE 12 LBS. OF OXIDIZER WILL BE RELEASED DURING EACH OPERATION, THE TOTAL WOULD BE 72 POUNDS ANNUALLY). POINT OF ORIGIN DISCUSSED ABOVE.	D002, P078	10
35-01-07	FUEL FLOW TEST WATER	FILTERED DI WATER USED AS FLOW MEDIA IS PRESSURE FED THROUGH VALVES OF DECONNED PRCS THRUSTER ASSEMBLIES TO CHARACTERIZE VOLUME AND MIXTURE RATIOS		8000
35-01-19	SPENT PC TUBE FLUSH/SAMPLE H2O	DI WATER IS FLUSHED THROUGH THE PRCS/VRCS PC TRANSDUCER TUBES, THEN CAUGHT FOR FIELD SAMPLING PRIOR TO DISPOSAL.		10
35-01-21	OMS-E DECON FLOW WATER W/FUEL	DECONTAMINATION OF THE OMS-E INLET AND SERVICE LINES PRIOR TO DISASSEMBLY AND TESTING. THE PROCESS WILL UTILIZE WARM DEIONIZED WATER MIXED WITH BASIC-H, A WETTING AGENT, AT 1/3 OUNCE OF BASIC-H/75 GALLONS OF WATER.		600
40-01-02	OXIDIZER CONT. DECON WATER	DECONTAMINATION OF EQUIPMENT, PIPES, AND FITTINGS RESULTS IN WATER CONTAMINATED WITH RESIDUAL OXIDIZER (N2O4).	D002	100
40-01-04	OXIDIZER ASPIRATOR WATER	ASPIRATOR PULLS OXIDIZER (N2O4) VAPORS AND RESIDUAL LIQUID OUT OF PROCESS PIPES CAPTURING THE OXIDIZER IN WATER.	D002	100
50-20-02	RAINWATER (FTU)	PRECIPITATION ACCUMULATING IN FTU SECONDARY CONTAINMENTS		4000
80-02-03	OXIDIZER DECON WATER	WATER USED TO DECON COMPONENTS CONTAMINATED WITH OXIDZER DURING ROUTINE OPERATION OF THE 800 AREA.	D002, P078	150
80-02-21	AMMONIA GAS/LIQUID	AMMONIA IMMERSION TESTS IN THE HFTA TEST CELLS WILL UTILIZE APPROXIMATELYU ½ LITER OF LIQUID AMMONIA. A SLIGHTLY GREATER QUANTITY WILL BE USED TO FILL THE CHAMBER TO SUPPORT TESTING. WASTE AMMONIA VAPOR IS BUBBLED INTO A BARREL OF WATER AS PART OF THE PROCESS		40
80-02-42	OX PAD WASTE WATER	WASTE WATER FROM THE SPILL CONTAINMENT FOR THE OXIDIZER END OF THE HFTA DRAINS INTO A 1500-GALLON CATCH TANK. WASTEWATER IS GENERATED FROM PRECIPITATION, CELL WASHDOWN AND FIRE EX CHECKOUT		7200
80-02-43	FUEL PAD WASTEWATER	WASTEWATER FROM THE SPILL CONTAINMENT FOR THE FUEL END OF THE HFTA DRAINS INTO A 1500-GALLON CATCH TANK. WASTEWATER IS GENERATED FROM PRECIPITATION, CELL WASH DOWN, AND FIRE EX CHECKOUT.		7200
80-02-44	AMMONIA HX WATER	HEAT EXCHANGER, WHICH IS PART OF GAS GENERATOR TEST USES WATER AND AMMONIA. WATER COOLS AMMONIA. WATER WILL BE DRAINED AND COLLECTED IN A CATCH BARREL APPROXIMATELY THREE TIMES PER YEAR. IF HX LEAKS INTERNALLY, WATER COULD BE CONTAMINATED.		150

ETU HAZARDOUS WASTE

WIWPS#	WASTE STREAM NAME	PROCESS DESCRIPTION	EPA WASTE CODE	ESTIMATED GALLONS PER YEAR
80-02-46	835 CELL DECON WATER	FUEL DECON WATER FROM THE CLEAN UP OF TEST EQUIPMENT SPILLS AND LEAKS IN CELL 835 DURING TESTING WITH HYDRAZINES OR MMH. WASTE WILL UNDERGO ANALYSIS FOR FUELS PRIOR TO DISCHARGE TO ETU.		50
80-02-58*	OXYGEN GENERATOR RINSE WATER	ACTIVATION OF O2 GENERATOR WITH THE INTENT OF TRYING TO CAUSE THE HOUSING TO BURN. ONCE BURNING, WILL ATTEMPT TO EXTINGUISH WITH WATER. THE LIQUID WILL BE COLLECTED FOR DISPOSAL. UPDATED 2/22/99 TO INCLUDE SOAP USED IN THE PROCESS 3 GALLONS TOTAL (SEE MSDS ATTACHED TO ORIGINAL PROFILE IN ENVIRONMENTAL FILE).		100
80-02-63	OX CONTAMINATED WATER	VACUUM CHAMBER TESTS ON PORTIONS OF THE ORBITRER PROPELLANT TRANSFER SYSTEM WITH NTO OR OTHER MONs. TEST PROCEDURE WILL REQUIRE DECON OF SOME HARDWARE.	D002, P078	50
80-02-67	HYDROGEN PEROXIDE	90% HYDROGEN PEROXIDE WILL BE USED FOR RAPID COMPRESSION TESTING IN CELL 839 (20 CC PER TEST). HYDROGEN PEROXIDE VAPOR WILL BE RELEASED TO THE ATMOSPHERE. RESIDUAL LIQUIDS WILL BE COLLECTED FOR DISPOSAL. UNUSED HYDROGEN PEROXIDE WILL BE TAKEN TO EVAPORATION TANKS DILUTED TO APPROXIMATELY A 3% SOLUTION AND PUMPED TO TANKS.	D002	900
80-02-68	N2O4 & WATER	OXIDIZER IS VENTED TO INLINE OXIDZER DRAIN LINE CATCH TANK. MOISTURE AND GASEOUS OXIDIZER ACCUMULATE IN SMALL AMOUNTS IN THE TANK'S SIGHT GLASS AND AT THE BOTTOM OF THE TANK .		0.25
80-04-01	IGNITER WASTE	WASTE MATERIALS FROM THE PRODUCTION OF IGNITERS FOR FLAMMABILITY TESTING, RINSE WATER AND WASTE/OFF SPEC IGNITER MIXTURE (HEXAMETHYLENE TETRAMINE, SODIUM META-SILICATE, GUM ARABIC) DISSOLVED IN WATER.		25
80-04-10	AQUEOUS FLASH POINT SAMPLES	POST TEST AQUEOUS SAMPLES FROM FLASHPOINT TESTING IN THE PREP LAB. THIS PROFILE IS LIMITED TO FLASHPOINT ANALYSIS OF SAMPLES FROM THE 200 AREA		6
80-04-15	SPENT BRULIN 815	CLEANING SS PARTS USED FOR ASTM G86 AND ASTM 2512 TESTING.		50
80-04-17	SPENT OAKITE 31	CLEANING STRIKER PIN AND OTHER COMPONENTS USED FOR MECHANICAL IMPACT TESTING	D002	10
80-04-18	SPENT OAKITE 126	CLEANING STRIKER PIN AND OTHER COMPONENTS USED FOR MECHANICAL IMPACT TESTING	D002	10

*Waste stream has been deactivated.

CURRENT WIWPS NUMBER ASSOCIATED WITH EPA WASTE CODES MANAGED IN THE ETU

F001
10-09-05
10-20-13
20-20-06

F002
10-09-05
10-20-13
20-20-06

P078
30-01-02
30-01-37
80-02-03
80-02-63

D002
10-08-02
10-20-13
20-01-11
20-01-13
20-01-14
20-01-22
20-01-38
20-01-44
20-01-50
20-01-52
20-02-01
30-01-02
30-01-04
30-01-37
40-01-02
40-01-04
80-02-03
80-02-68
80-04-17
80-04-18

Note:
Waste streams are variable based on testing operations. The waste streams listed in the tables may become inactive at times and new waste streams may be added. However, only waste streams that are profiled at the point of generation and approved for permitted units (per Part A documentation) will be managed at the ETU.

FTU HAZARDOUS WASTE

WIWPS#	WASTE STREAM NAME	PROCESS DESCRIPTION	EPA WASTE CODE	ESTIMATED GALLONS PER YEAR
20-04-03	WASTE FUEL	MILLILITER SAMPLES OF NEAT FUEL ARE TESTED FOR PURITY OR OTHER CHEMICAL/PHYSICAL PROPERTIES. WASTE FUEL IS GENERATED DURING THIS TESTING.	P068, U098, U133	100
20-04-49	FUEL SCRUBBER WASTE WATER	INTEREL GK-140 USED TO SCRUB FUEL HOODS, CITRIC ACID (0.2%) IS ADDED WEEKLY PRIOR TO DUMPING..	P068, U098, U133	10000
20-04-61	WASTE FUEL (HOKE BOTTLES)	HOKE BOTTLES OF WASTE FUEL (HYDRAZINE, MMH, UDMH) FROM FUEL ANALYSES IN THE CHEM LAB.	P068, U098, U133	10
30-01-01	FUEL CONTAMINATED DECON WATER	MMH PRODUCT DISTRIBUTION SYSTEM IS PURGED AND VENTED. RESIDUAL FUEL ON THE CONTAINMENT HARDWARE/SOFTGOODS (PIPING, FITTINGS, GASKETS, SEALS, EQUIPMENT, ETC.) IS POG WASTE. SOME MANAGED WASTE IS FROM DIRECT MIXING OF A SOLID WASTE (WATER IN BUCKET) WITH A LISTED WASTE (RESIDUAL FUEL) WHEN THE PRODUCT CONTAINMENT IS BREECHED. THE REST OF THE MANAGED WASTE IS THE RINSATE FROM THE EQUIVALENT TRIPLE RINSE OF THE RESIDUAL PRODUCT FROM THE CONTAINMENT HARDWARE/SOFTGOODS. THE CONTAINMENT HARDWARE/SOFTGOODS LOSE(S) THE LISTING CODES UPON COMPLETION OF TRIPLE RINSING, AND THE AQUEOUS RINSATE IS MANAGED AS A P068 HAZARDOUS WASTE.	P068	50
30-01-03	FUEL ASPIRATOR WATER	ASPIRATOR PULLS THE POG RESIDUAL FUEL (MMH) VAPORS AND RESIDUAL LIQUID OUT OF PROCESS PIPES AND CAPTURES THE FUEL IN WATER. THIS PROCESS CONTROLS AIR EMISSIONS AND RENDERS THE TEST AREAS SAFE FOR NORMAL ACCESS AND WORK.	P068	50
30-01-33	VENT TANK WATER W/FUEL	TEST STANDS VENT PRODUCT FUEL VAPORS (<5 VOLUME % FUEL) AND PURGE GASES (>95 VOLUME % He OR GN2) TO THE EMISSIONS CONTROL UNIT TANK FOR SCRUBBING. THE PROCESS TANK CONTROLS AIR EMISSIONS AND THE SCRUBBING FLUID IS MANAGED AS HAZARDOUS WASTE WHEN REMOVED FROM THE UNIT.	P068, U133	1000
30-01-35	TES DECON RINSE WATER	PROPULSION PROCEDURES REQUIRE THAT A POST OPERATION DECONTAMINATION WITH SITE RINSE WATER BE DONE TO REMOVE RESIDUAL PROPELLANT (HYDRAZINE OR MMH), LIQUID/VAPORS FROM THE TOTALLY ENCAPSULATED SUIT (TES) TO PREVENT PERSONNEL EXPOSURE. AN EQUIVALENT OF A TRIPLE RINSE IS ACCOMPLISHED USING A SAFETY SHOWER OR FIRE HOSE OVER CATTLE TROUGH.	P068, U133	200
30-01-40	DECON SINK WATER W/FUEL	FUEL PRODUCT DISTRIBUTION SYSTEM IS PURGED AND VENTED. RESIDUAL FUEL ON THE CONTAINMENT HARDWARE/SOFTGOODS (PIPING, FITTINGS, GASKETS, SEALS, EQUIPMENT, ETC.) IS POG WASTE. THE MANAGED WASTE IS THE RINSATE (<10%) FROM THE EQUIVALENT TRIPLE RINSE OF THE RESIDUAL PRODUCT FROM THE CONTAINMENT HARDWARE/SOFTGOODS AT THE DECON SINK. THE CONTAINMENT HARDWARE/SOFTGOODS LOSE THE LISTING CODES UPON COMPLETION OF TRIPLE RINSING, AND THE AQUEOUS RINSATE IS MANAGED AS A HAZARDOUS WASTE.	P068, U133	55
30-02-01	HYDRAZINE CONTAMINATED DECON WATER	HYDRAZINE PRODUCT DISTRIBUTION SYSTEM IS PURGED AND VENTED. RESIDUAL FUEL ON THE CONTAINMENT HARDWARE/SOFTGOODS (PIPING, FITTINGS, GASKETS, SEALS, EQUIPMENT, ETC.) IS POG WASTE. SOME MANAGED WASTE IS FROM DIRECT MIXING OF A SOLID WASTE (WATER IN BUCKET) WITH A LISTED WASTE (RESIDUAL FUEL) WHEN THE PRODUCT CONTAINMENT IS BREECHED. THE REST OF THE MANAGED WASTE IS THE RINSATE FROM THE EQUIVALENT TRIPLE RINSE OF THE RESIDUAL PRODUCT FROM THE	U133	10

FTU HAZARDOUS WASTE

WIWPS#	WASTE STREAM NAME	PROCESS DESCRIPTION	EPA WASTE CODE	ESTIMATED GALLONS PER YEAR
		CONTAINMENT HARDWARE/SOFTGOODS. THE CONTAINMENT HARDWARE/SOFTGOODS LOSE THE LISTING CODES UPON COMPLETION OF TRIPLE RINSING, AND THE AQUEOUS RINSATE IS MANAGED AS A U133 HAZARDOUS WASTE.		
35-01-01	DECON WATER W/FUEL	THRUSTERS USED FOR SHUTTLE FLIGTHS AND/OR ACCEPTANCE TESTING ARE NITROGEN PURGED PRIOR TO RECIEPT AT CTF. THE WJI PROP-CTF-0006 "PRCS THRUSTER PREPARATION RECEIVING INSPECTION AND DECONTAMINATION." THE PROCESS UTILIZES DI WATER TO REMOVE RESIDUAL FUEL (POG) BY FLUSHING (TRIPLE RINSE EQUIVALENT) NEWLY RECEIVED THRUSTERS AND COMPONENTS FOR TESTS AND ANALYSIS. RINSATE IS "MANAGED" WASTE.	P068	5
35-01-07	FUEL FLOW TEST WATER	FILTERED DI WATER USED AS FLOW MEDIA IS PRESSURE FED THROUGH VALVES OF DECONNED PRCS THRUSTER ASSEMBLIES TO CHARACTERIZE VOLUME AND MIXTURE RATIOS	P068	8000
35-01-14	SCRUBBER WATER CONTAMINATED W/FUEL	FUEL IS VENTED FROM COMPONENTS UNDER THE FUEL EXHAUST HOOD, @ 1250 CUBIC FT. PER MIN. TO A WATER SCRUBBER. VAPORS ARE ABSORBED BY THE WATER IN THE SCRUBBER TO ENSURE THE SAFETY OF CTF PERSONNEL.	P068	50
35-01-21	OMS-E DECON FLOW WATER W/FUEL	DECONTAMINATION OF THE OMS-E INLET AND SERVICE LINES PRIOR TO DISASSEMBLY AND TESTING. THE PROCESS WILL UTILIZE WARM DEIONIZED WATER MIXED WITH BASIC-H, A WETTING AGENT, AT 1/3 OUNCE OF BASIC-H/75 GALLONS OF WATER.	P068	600
35-01-26	CRYO TRAP WASTE W/FUEL	POST FLIGHT/TEST FUEL VAPORS IN THE OMS-E BIPROP VALVE SHAFT SEAL CAVITY AND THE PRCS AND VRCS FUEL VALVE DECON WILL BE DRAWN INTO THE CRYO TRAP BY PULLING A VACUUM AT CP001.	P068	1
40-01-01	FUEL CONTAMINATED DECON WATER	DECONTAMINATION OF MMH, HYDRAZINE, OR UDMH INTO AND/OR WITH SITE WATER OF EQUIPMENT, PIPES, AND FITTINGS. THE WATER IS THEN CONTAMINATED WITH RESIDUAL FUEL. FROM TEST ARTICLES AND MMH PROPELLANT SYSTEMS/CONTAINERS ASSOCIATED WITH TEST STANDS 401, 402, 403, 405, AND 406. THIS PROCESS REMOVES THE . MAJORITY OF THE SAFETY HAZARD AND IS NECESSARY FOR FUTURE HANDLING OF THE EQUIPMENT.	P068,U098, U133	100
40-01-03	FUEL ASPIRATOR WATER	ASPIRATOR PULLS FUEL (MMH, HY, UDMH) VAPORS AND RESIDUAL LIQUID OUT OF PROCESS PIPES AND CAPTURING AND SCRUBBING THE FUEL IN WATER.	P068,U098, U133	100
40-01-46	TES DECON RINSE WATER	POST TOTAL ENCAPSULATING SUITS (TES) DECONTAMINATION RINSE WATER. WATER IS USED TO WASH SUIT AFTER COMPLETING A TES OPERATION. THIS REQUIRED PROCEDURE IS DONE TO REMOVE RESIDUAL PROPELLANT, (MMH, HY, UDMH) FROM THE SUIT TO PREVENT PERSONNEL EXPOSURE.	P068,U098, U133	500
40-01-47	VENT TANK WATER W/FUEL	TEST STANDS VENT PRODUCT FUEL VAPORS (<5 VOLUME % FUEL) AND PURGE GASES (>95 VOLUME % He OR GN2) TO THE EMISSIONS CONTROL UNIT TANK FOR SCRUBBING. THE PROCESS TANK CONTROLS AIR EMISSIONS AND THE SCRUBBING FLUID IS MANAGED AS HAZARDOUS WASTE WHEN REMOVED FROM THE UNIT.	P068,U098, U133	3000
40-01-54	DECON SINK WATER W/FUEL	EQUIPMENT AND HARDWARE USED IN FUEL (HYDRAZINE(S) SYSTEMS ARE RINSED/DECONED FOLLOWING GN2 PURGES. FIELD DECON IS PERFORMED (REQUIRED) AS PART OF THE TESTING PROCESS, PRIOR TO TRANSFER TO THE CONTAMINATION CONTROL FACILITY.	P068,U098, U133	55

FTU HAZARDOUS WASTE

WIWPS#	WASTE STREAM NAME	PROCESS DESCRIPTION	EPA WASTE CODE	ESTIMATED GALLONS PER YEAR
40-01-60	TEST STAND-CELL WASHDOWN WATER	WATER GENERATED BY CELL WASHES AND/OR RINSES FOLLOWING FIRING SEQUENCES. THE WASHDOWN REMOVES THE BYPRODUCTS GENERATED WHEN THE PROPELLANTS ARE BURNED TO TEST THRUSTERS.	P068,U098, U133	350
40-01-62	MINUTEMAN DECON WATER	CUSTOMER REQUIRED DECONTAMINATION REQUIRES NITROGEN PURGES THEN A TOTAL OF 8 FLUSHES OF 30 GALLONS EACH OF THE MINUTEMAN TEST ARTICLE USING DEIONIZED WATER FOLLOWING TEST FIRING. TEST PROCEDURE WJI-PROP-401-084 'MINUTEMAN DECONTAMINATION PROCEDURE" IS USED FOR THE PROCESS. THE DECON WATER WILL COLLECT IN THE BOTTOM OF THE TEST STAND PRIOR TO SAMPLING AND REMOVAL.	P068	300
50-01-04	TES DECON RINSE WATER	POST TES DECONTANINATION RINSE WATER. WATER IS USED TO WASH THE SUIT AFTER AN TES OPERATION. THIS IS DONE TO REMOVE RESIDUAL PROPELLANT (HYDRAZINE(S)) FROM THE SUIT TO PREVENT PERSONNEL EXPOSURE.	P068,U098, U133	10
80-02-04	WASTE FUEL	FUEL WASTE FROM TESTING IS VENTED OR DRAINED INTO A BARREL OF WATER. NEAT FUEL AT POG.	P068,U098, U133	100
80-02-19	FUEL DECON WATER	FUEL DECON WATER GENERATED FROM ROUTINE OPERATION OF THE 800 AREA. WATER IS USED TO TRIPLE RINSE PARTS/COMPONENTS CONTAMINATED WITH HYDRAZINE/MMH/UDMH. PARTS/COMPONENTS ARE PURGED WITH AN INERT GAS AND/OR WATER TO REMOVE RESIDUAL LIQUID FUEL PRIOR TO DECONTAMINATION AT THE DECON STATION.	P068,U098, U133	150
80-02-26	WASTE FUEL AND WATER	FUEL VENTED INTO BARREL OF WATER FROM APU TANKS BEING TESTED IN CELL 843	U133	50
80-02-28	N2H4 CONTAMINATED H20	A FUEL ASPIRATOR USED AS PART OF THE TEST SYSTEM IN TEST CELLS 844 AND 843 UTILIZES A 50 GALLON RESERVOIR OF WATER STORED IN A 100 GALLON TANK. WATER WILL BECOME CONTAMINATED WITH SMALL AMOUNTS OF N2H4 DURING EACH USE..	U133	250
80-02-32	N2H4CONTAMINATED WATER	GGVM HEAT EXCHANGER OPERATION IN CELL 844 WILL GENERATE ABOUT 225 GALLONS OF WASTE WATER PER TEST. WATER WILL BE DRAINED FROM HEAT EXCHANGER AND COLLECTED FOR PROPER DISPOSAL. IN THE EVENT OF EQUIPMENT FAILURE WATER MAY BECOME CONTAMINATED.	U133	900
80-02-60	FUEL DECON WATER	AFTER INITIAL FIELD DECON TEST ARTICLES ARE CLEANED AT HFTA DECON STATIONS.	P068,U098, U133	300
80-02-61	FUEL CONTAMINATED WATER	VACUUM CHAMBER TESTS ON PORTIONS OF THE ORBITER PROPELLANT TRANSFER SYSTEM WITH MMH. TEST PROCEDURE WILL REQUIRE DECON OF SOME HARDWARE.	P068	50

CURRENT WIWPS NUMBER ASSOCIATED WITH EPA WASTE CODES MANAGED IN THE FTU

P068

20-04-03	20-04-49	20-04-61
30-01-01	30-01-03	30-01-33
30-01-35	30-01-40	35-01-01
35-01-07	35-01-14	35-01-21
35-01-26	40-01-01	40-01-03
40-01-46	40-01-47	40-01-54
40-01-60	40-01-62	50-01-04
80-02-04	80-02-19	80-02-60
80-02-61		

U098

20-04-03	20-04-49	20-04-61
30-01-33	30-01-35	30-01-40
30-02-01	40-01-01	40-01-03
40-01-46	40-01-47	40-01-54
40-01-60	50-01-04	80-02-04
80-02-19	80-02-26	80-02-28
80-02-32	80-02-60	

U133

20-04-03	20-04-49	20-04-61
40-01-01	40-01-03	40-01-46
40-01-47	40-01-54	40-01-60
50-01-04	80-02-04	80-02-19
80-02-60		

Note:

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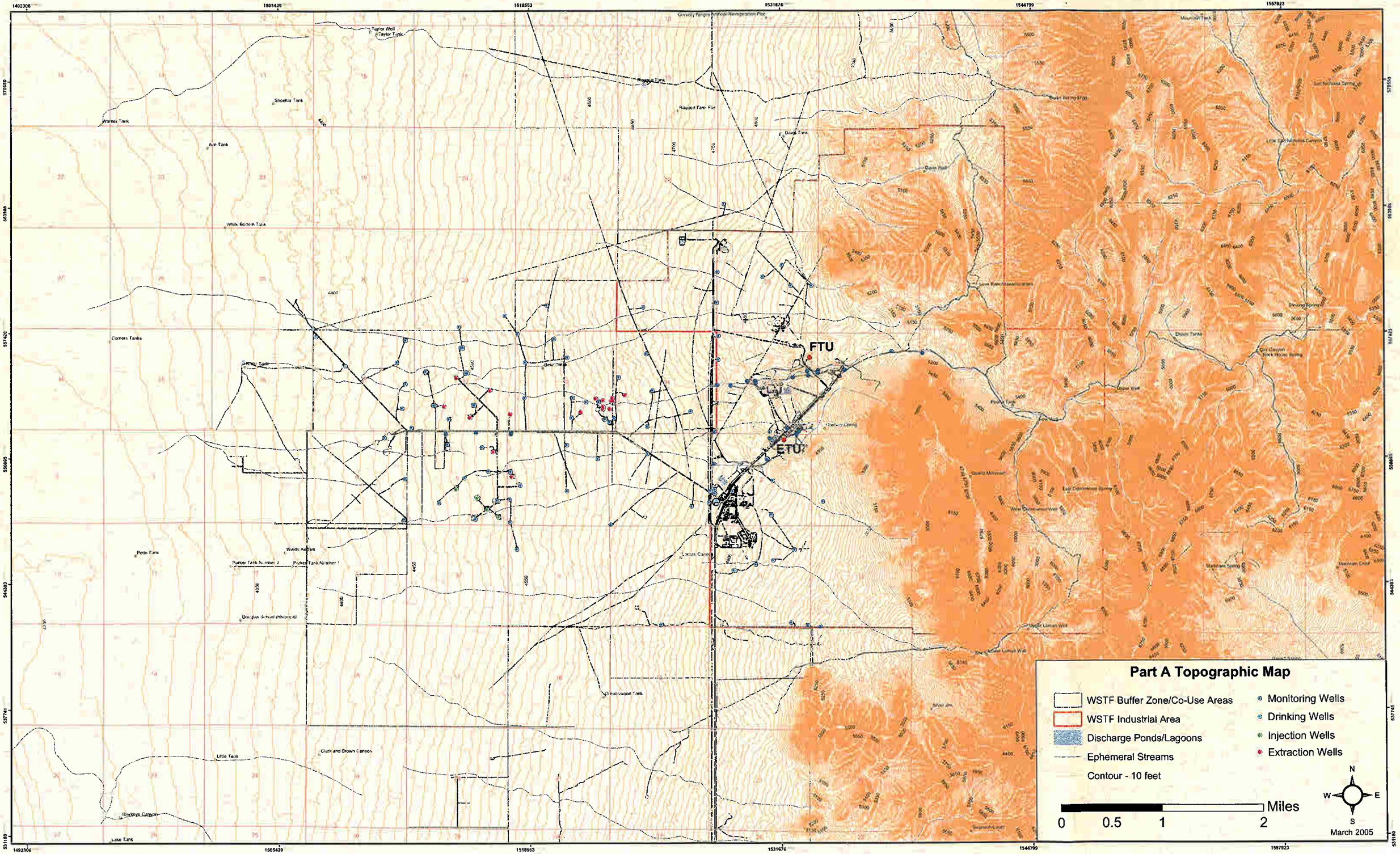

Part A Topographic Map
WSTF Buffer Zone/Co-Use Areas
WSTF Industrial Area
Discharge Ponds/Lagoons
Ephemeral Streams
Contour - 10 feet
Monitoring Wells
Drinking Wells
Injection Wells
Extraction Wells
0
0.5
1
2
Miles
N
S
E
W
March 2005
FTU
ETU
Taylor Well
Taylor Tank
Shoellar Tank
Warner Tank
Ace Tank
White Bottom Tank
Corners Tanks
Ragged Tank
Ragged Tank Flat
Davis Tank
Davis Well
Lower Ranch Reservoir
Divide Tanks
Upper Well
Pedro Tank
Potts Tank
Weeds Airpark
Parker Tank Number 2
Parker Tank Number 1
Douglas School (historical)
Greasewood Tank
Little Tank
Clark and Brown Canyon
Hawkeye Canyon
Lake Tank
Upper Loman Well
Lower Loman Well
Mountain Tank
Low Rock Hollow Canyon
Sheeting Spring
Dry Canyon
Rock Hollow Spring
Mountain Spring
Mountain Chief
Silver Jim
Swanson Court
1492306
1505429
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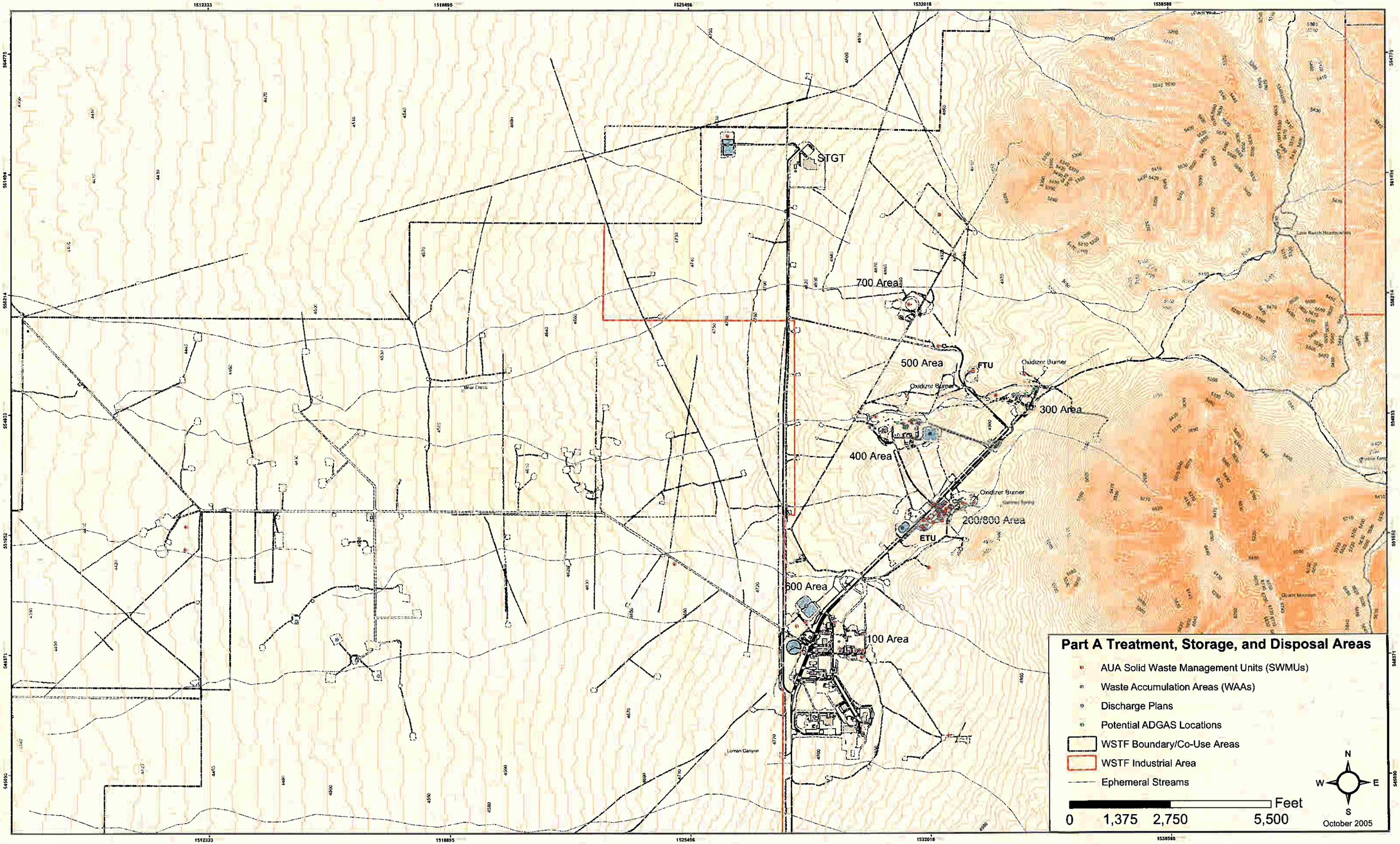
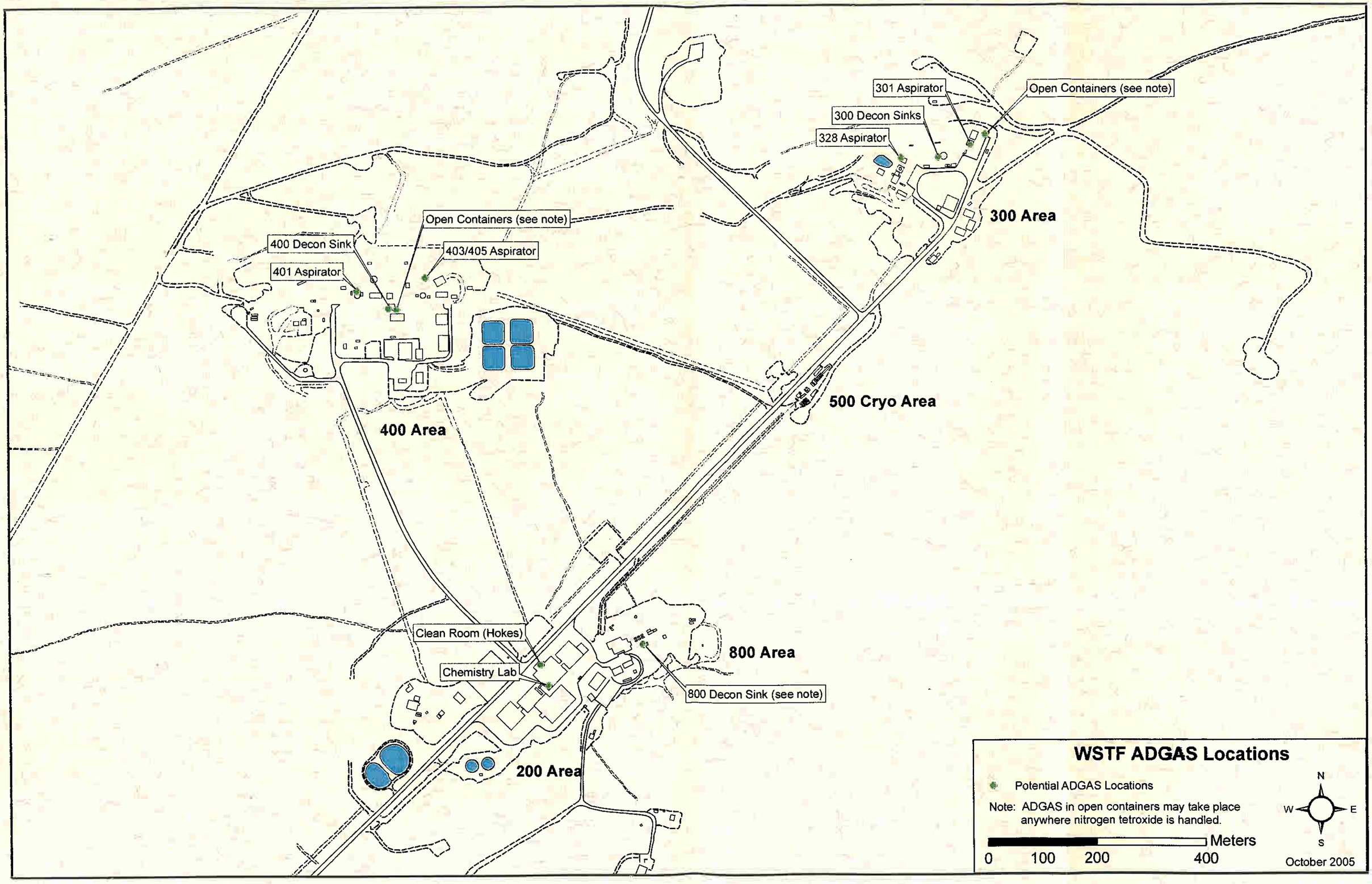
1531676
1544799
1557923


STGT
700 Area
500 Area
FTU
Oxidizer Burner
Oxidizer Burner
300 Area
400 Area
Oxidizer Burner
200/800 Area
ETU
600 Area
100 Area
Bear Creek
Loman Canyon
Part A Treatment, Storage, and Disposal Areas
AUA Solid Waste Management Units (SWMUs)
Waste Accumulation Areas (WAAs)
Discharge Plans
Potential ADGAS Locations
WSTF Boundary/Co-Use Areas
WSTF Industrial Area
Ephemeral Streams
Feet
0 1,375 2,750 5,500
N
W E
S
October 2005


301 Aspirator
Open Containers (see note)
300 Decon Sinks
328 Aspirator
300 Area
Open Containers (see note)
400 Decon Sink
403/405 Aspirator
401 Aspirator
500 Cryo Area
400 Area
Clean Room (Hokes)
800 Area
Chemistry Lab
800 Decon Sink (see note)
200 Area
WSTF ADGAS Locations
Potential ADGAS Locations
Note: ADGAS in open containers may take place anywhere nitrogen tetroxide is handled.
N
W
E
S
Meters
0
100
200
400
October 2005