PHILIPS DISPLAY COMPONENTS COMPANY
SENECA FALLS, NEW YORK

RCRA FACILITY ASSESSMENT
SAMPLING VISIT WORK PLAN

VOLUME I
MANAGEMENT PLAN

Prepared by:

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PROJECT NO. 288788-11

JUNE 1990

PHILIPS DCC
SENECA FALLS, NEW YORK
SAMPLING VISIT WORK PLAN

VOLUME I
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1.0 INTRODUCTION

Philips Display Components Company operated a facility in the village of Seneca Falls, New York. The facility is bordered by Van Cleef Lake and the Seneca River/Barge Canal to the south, undeveloped and agricultural areas to the north and east, and a residential area to the west. A schematic plan view of the facility is shown in Figure 1. The facility was used to manufacture black and white and color television tubes, and served as headquarters for other Philips operations. The manufacturing equipment has been removed from the buildings, but the utility lines are still functional. The facility has been sold to Seneca County, New York.

Hazardous waste was generated in television glass and metal tube component fabrication, cleaning, finishing, coating, and tube salvage operations. The closure plan for the facility includes the removal of all hazardous solid wastes from all identified units, in addition to the removal of liquids and materials which have come in contact with the hazardous waste, and in addition to soil testing at all identified units to assess the extent of subsurface contamination, if any.

Section 3004(U) of RCRA requires corrective action for all releases of hazardous waste or hazardous constituents from any Solid Waste Management Unit (SWMU), regardless of the time the waste was placed in such a unit. The facility is currently in the first part of the RCRA corrective action program. The RCRA corrective action program consists of three phases:

- The RCRA Facility Assessment (RFA) to identify releases or potential releases requiring further investigation.

- The RCRA Facility Investigation (RFI) to fully characterize the extent of the releases.

10" CITY WATER SUPPLY

CONRAIL (AUBURN BRANCH LINE)

662'

HWMB

PARKING

GUARD HOUSE

UNDEVELOPED AREA

813.63'

MAINTENANCE STOCK ROOM

SEWAGE PUMP STATION

175,000 GAL RESERVOIR

FIRE PUMP 1,500 G.P.M./100 PSI

DETECTION PIT

TRUCK DOCK

STOCK ROOM (SMALL STORES)

8" UNDERGROUND SPRINKLER LOOP

2" UNDERGROUND FORCEMAIN TO WASTEWATER TREATMENT PLANT

GROUNDWATER FLOW DIRECTION *

INFIRMARY

GUARD HOUSE

Fluoride Sump

ORGANIC CHEMICAL STOR. & DISPENSING BAYS

PRIMARY WASTE TREATMENT

Removed

WASTE TREATMENT PLANT SLUDGE HOLDING LAGOON (62,600 GALS)

TRAN. STA.

Contents Removed As Per Closure

WASTE WATER EFFLUENT SETTLING LAGOON (306,000 GALS)

NYS E. & G. TRANSFORMER SUB-STATION

PUMP HOUSE

EDGE OF ESCARPMENT

100,000 GAL. ELEVATED SPRINKLER WATER TOWER

EMPTY 55 GAL. DRUM STORAGE AREA

Effluent Line

Influent Line Removed

Effluent Line Removed

FLUME SHELTER

18" OVERFLOW - STORM WATER FLOW

003 INTAKE

OUTFALL 002

(2) 150,000 GALS FUEL OIL TANKS WITH 166,000 GAL CONTAINMENT DIKE (NOTE-4)

30,000 GAL. LIQ. PROPANE TANK

6' EFFLUENT - COOLING WATER FLOW

OLD ERIE CANAL LOCK

LOCK NO. 2

BARGE CANAL (SENECA RIVER) (EL. 379.9)

COMPLIANCE MONITORING POINT *

1443.0'

780'

138' ±

65' ±

Legend

- FO — Fuel Oil Spill Areas
- OB — Open Burning Area
- PS 1 — SOIA Primary Storage
- PS 2 — SOIB Primary Storage
- IS 1 — SOIC Interim Storage
- IS 2 — SOID Interim Storage
- SS 13 — Satellite Storage Sites

0 125' 250' 500'

Scale Feet

Philips Display Components
Seneca Falls, New York

Facility Plan View

KEYSTONE ENVIRONMENTAL RESOURCES, INC.

Figure 1

- Corrective Measures (CM) to determine the need for and extent of remedial measures. This step includes the selection and implementation of appropriate remedies for all problems identified.

A RCRA Facility Assessment and a RCRA Facility Investigation are being addressed as part of the corrective action program for the Seneca Falls site. This document addresses only the RFA phase; a RFI will be issued under separate cover. The RCRA Facility Assessment consists of three steps requiring the collection and analysis of data to support initial release determinations, and determine the need for further investigation in a RFI. The three steps include:

- The Preliminary Review (PR) focuses primarily on evaluating existing information, such as inspection reports, permit applications, historical monitoring data, and interviews with personnel who are familiar with the facility.

- The Visual Site Inspection (VSI) consists of an on-site collection of visual information to obtain additional evidence of releases.

- The Sampling Visit (SV) fills gaps that remain upon completion of the PR and VSI by obtaining field data and analytical data from samples collected at the facility.

For the Philips, Seneca Falls Facility, the Preliminary Review and the Visual Site Inspection have been completed by the New York State Department of Environmental Conservation (NYSDEC). The next steps in the RFA phase of the program are the development of a detailed Sampling Visit Work Plan and implementation of the Sampling Visit. The Sampling Visit Work Plan has been developed in accordance with the NYSDEC Sampling Visit Guidance Document, and is organized into three volumes:

- Management Plan (Volume I)

  The Management Plan is the umbrella management plan for Project Management, Sampling and Analysis, and Health and Safety. The purpose of the Management Plan is to provide for the efficient scheduling of resources such as manpower, equipment, laboratory services and subcontractor services. In addition, the Management Plan addresses the site-specific circumstances that are relevant to the Sampling Visit.

- Sampling and Analysis Plan (Volume II)

  The Sampling and Analysis Plan identifies the site investigation team, sampling locations and matrix, sampling protocols, and analytical parameters.

- Health and Safety Plan (Volume III)

  The Health and Safety Plan establishes requirements and provides guidance for protecting the health and safety of personnel performing the site investigation.

A Quality Assurance Project Plan (QAPjP) has been developed for the Site Visit Work Plan and associated investigations at the Philips site and is being issued under separate cover. The QAPjP provides the framework for conducting the Site Visit in a manner that will furnish sound and properly documented data on which to base the characterization and assessment of the facility.

A portion of the material covered in the Site Visit Work Plan (SVWP) is also addressed in the Quality Assurance Project Plan (QAPjP). Should there be any difference(s) concerning procedure between the two documents, the QAPjP will govern.

2.0 SITES FOR INVESTIGATION AND/OR SAMPLING

2.1 Primary Storage Areas - SO1A and SO1B

Two inventory controlled storage areas were used at the facility to store drums: the pole barn and the adjacent area (designated as SO1A and SO1B in Figure 1). The list of wastes stored in these areas is presented in Volume II. Two soil borings are planned in each of these areas. The Sampling and Analysis Plan specifies the sampling locations and the analytical parameters applicable to these areas.

2.2 Interim Storage Areas - SO1C and SO1D

Interim storage areas were located adjacent to the incinerator (designated as S01C in Figure 1) and adjacent to the southwestern corner of Building 7 (designated as S01D in Figure 1), and were used for storage of waste oil, waste solvent and waste incinerator chrome slag, and for the storage of empty lacquer and hydrofluoric acid drums and of waste paint, respectively.

SO1C is located within the area of the hazardous waste management units that were closed in Autumn 1989. The closure documents, including the results of soil sampling in the area, were submitted to NYSDEC in January 1990. The area was suitable for closure; therefore, no sampling will be performed at this location.

Two soil borings are planned in area SO1D. The Sampling and Analysis Plan, Volume II, specifies the sampling locations and the analytical parameters applicable to this area.

2.3 Satellite Storage Areas

The thirteen satellite storage areas investigated (see Figure 1) are inside manufacturing buildings and outside of the buildings. The inside areas are located on concrete floors and the outside areas are on asphalt, except for the storage area adjacent to the incinerator, which was on soil. In this latter area, the soil has been excavated and properly disposed off-site under the direction of Philips.

2.3.1 Waste Oil Collection Point - Building #1

This area in the eastern part of Building #1 (designated as SS 1 in Figure 1; see also Figure 2) was used as a collection point for waste oil and lubricants. All material was drummed and stored on the concrete floor. No cracks in the concrete floor or other evidence of pathways for migration of the material into the environment are evident. No sampling will be performed at this location.

2.3.2 Coating Preparation Room - Building #4

This area in the central part of Building #4 (designated as SS 2 in Figure 1; see also Figure 3) was used to prepare the coating for the cathode ray tubes. The vehicle for this material was butyl acetate. Other waste solvents were also collected in this area. The floor of the room is coated with an impermeable, non-skid finish. No cracks in the concrete floor or other evidence of pathways for migration of the material into the environment are evident. No sampling will be performed at this location.

2.3.3 Glass Buffing Dust Collector - Building #9

This area in the east-central part of Building #9 (designated as SS 3 in Figure 1; see also Figure 4) was used to collect high lead glass from the glass buffing dust collector. All material was collected in drums. No cracks in the concrete floor or other evidence of pathways for migration of the material into the environment are evident. No sampling will be performed at this location.

2.3.4 Frit Room - Building #10

This area in the south-central part of Building #10 (designated as SS 4 in Figure 1; see also Figure 5) was used to collect high lead glass frit waste. This material was collected in drums. No cracks in the concrete floor or other evidence of pathways for migration of the material into the environment are evident. No sampling will be performed at this location.

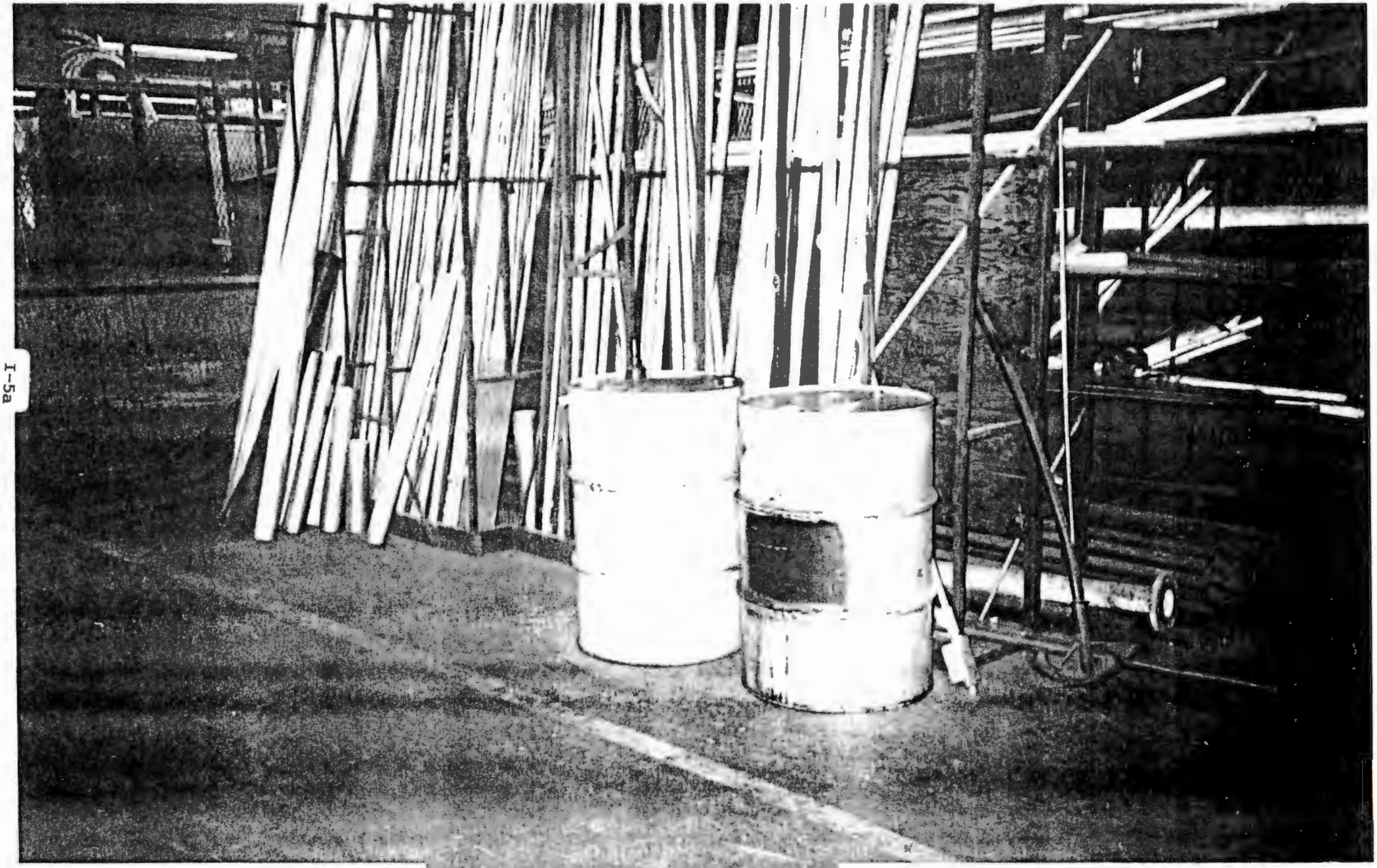

Figure 2 Waste Oil Collection Point Building No. 1

Philips Display Components Corporation Seneca Falls, New York

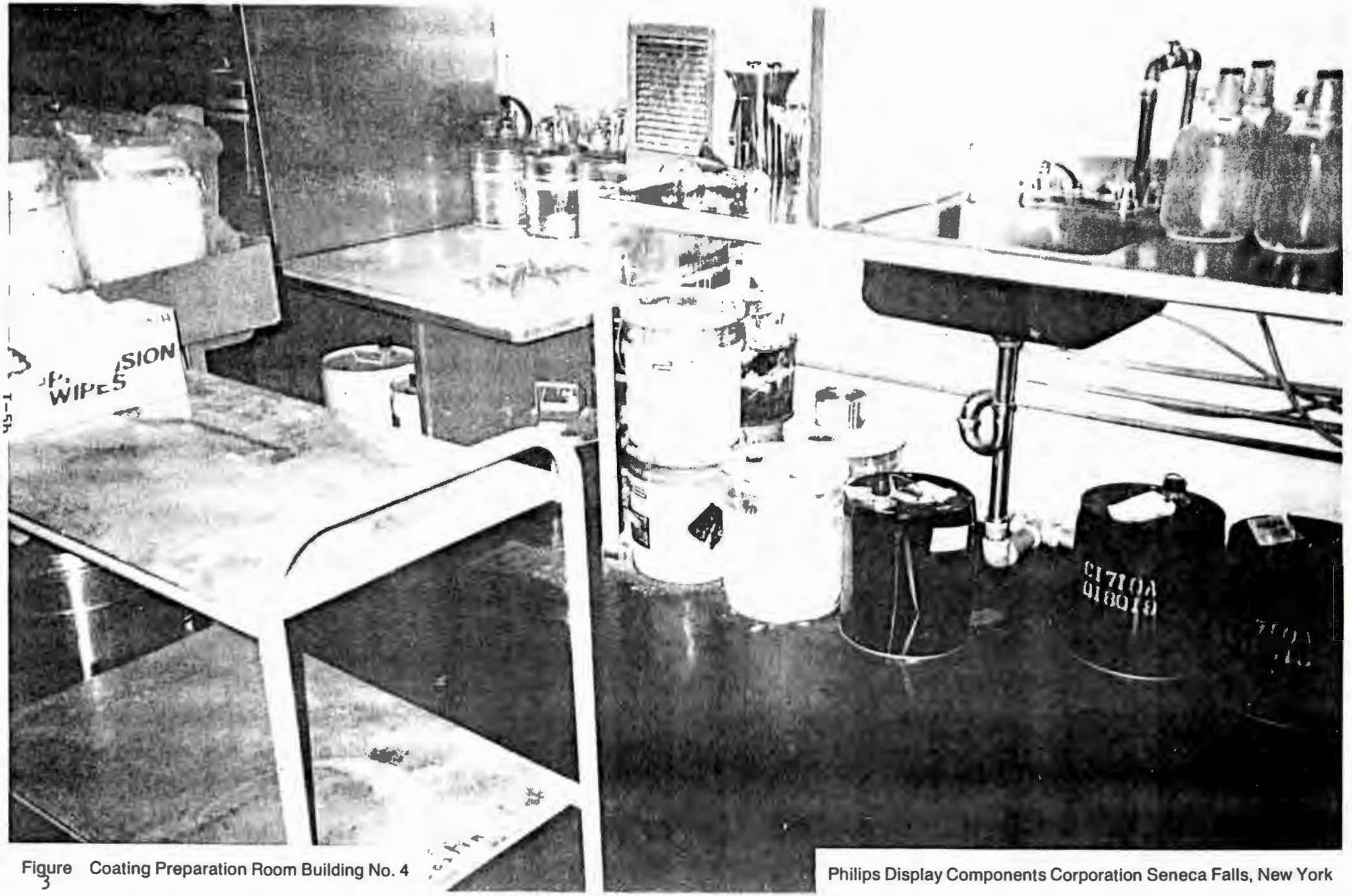

Figure 3 Coating Preparation Room Building No. 4

Philips Display Components Corporation Seneca Falls, New York

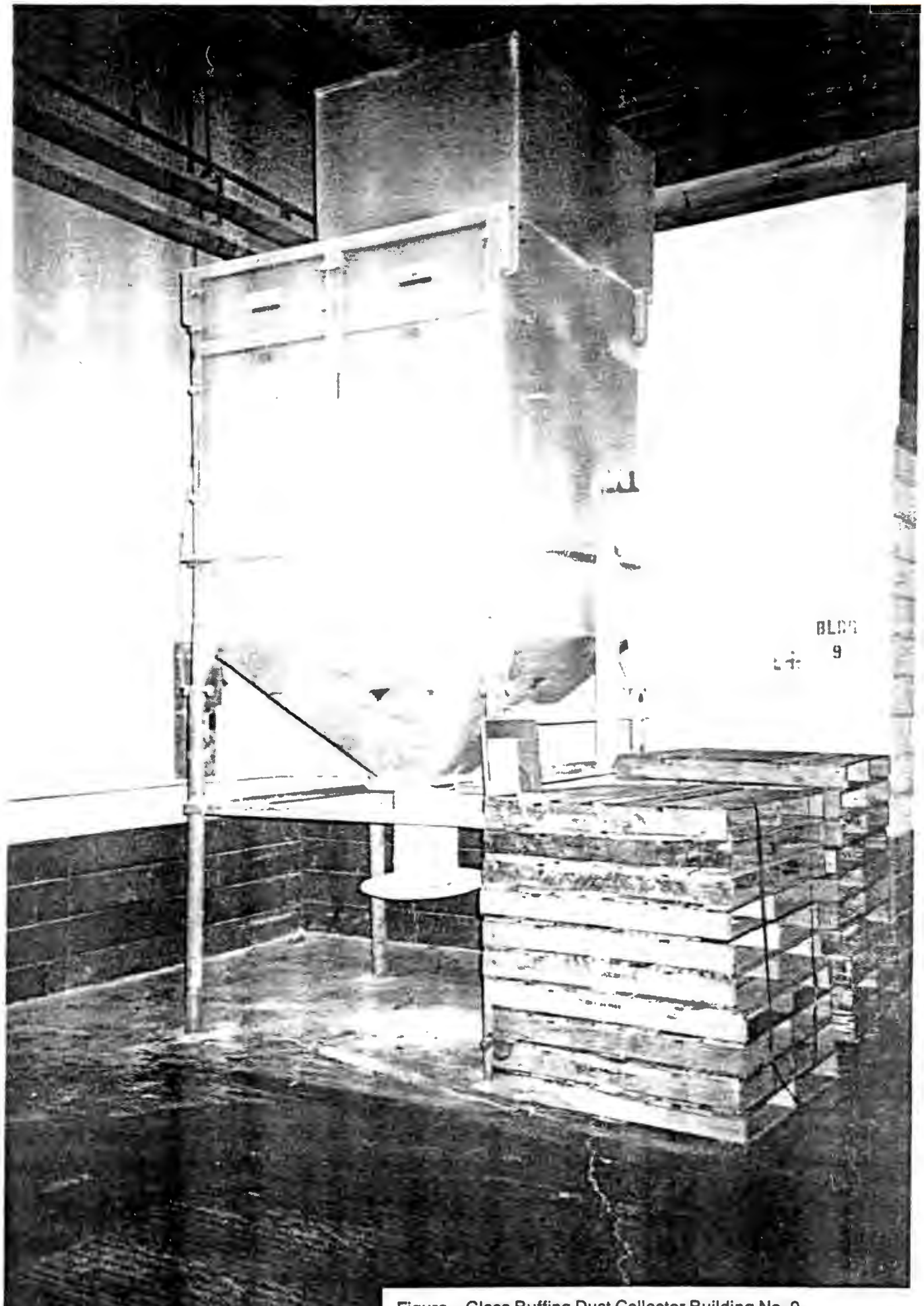

Figure 4 Glass Buffing Dust Collector Building No. 9

Philips Display Components Corporation Seneca Falls, New York

Figure 5 Frit Room Building No. 10

Philips Display Components Corporation Seneca Falls, New York

2.3.5 Hydrofluoric Salvage Washing Pit - Building #13

This area in the north-central part of Building #13 (designated as SS 5 in Figure 1; see also Figure 6) was used to wash out the coating from salvaged cathode ray tubes. Ten to fifteen percent concentrated hydrofluoric acid was used. The acid wash with the coating (matrix material and phosphor) was sent to the waste treatment system. Solid material having a residual acid coating was occasionally removed from the pit and stored temporarily in drums near the pit. This material was disposed of off-site by outside vendors. No cracks in the concrete floor or other evidence of pathways for migration of the material into the environment are evident. No sampling will be performed at this location.

2.3.6 Matrix Mix Room - Building #13A

This area in the eastern corner of Building #13A (designated as SS 6 in Figure 1; see also Figure 7) was used to temporarily store batches of the matrix conductive coating. This coating consisted of carbon black graphite mixed with water and ammonia. No cracks in the concrete floor or other evidence of pathways for migration of the material into the environment are evident. No sampling will be performed at this location.

2.3.7 Fork Lift Recharge/Repair Area - Building #3

This area in the eastern part of Building #3 (designated as SS 7 in Figure 1; see also Figure 8) was used to service the fork lift trucks at the plant, including lubrication, maintenance, and battery charging. Minor surface discoloration is observed on the floor; however, no cracks in the concrete floor or other evidence of pathways for migration of the material into the environment are evident. No sampling will be performed at this location.

2.3.8 External Conductive Coating Mix Room - Building #7

This area in the southwestern part of Building #7 (designated as SS 8 in Figure 1; see also Figure 9) was used to temporarily store batches of the external conductive

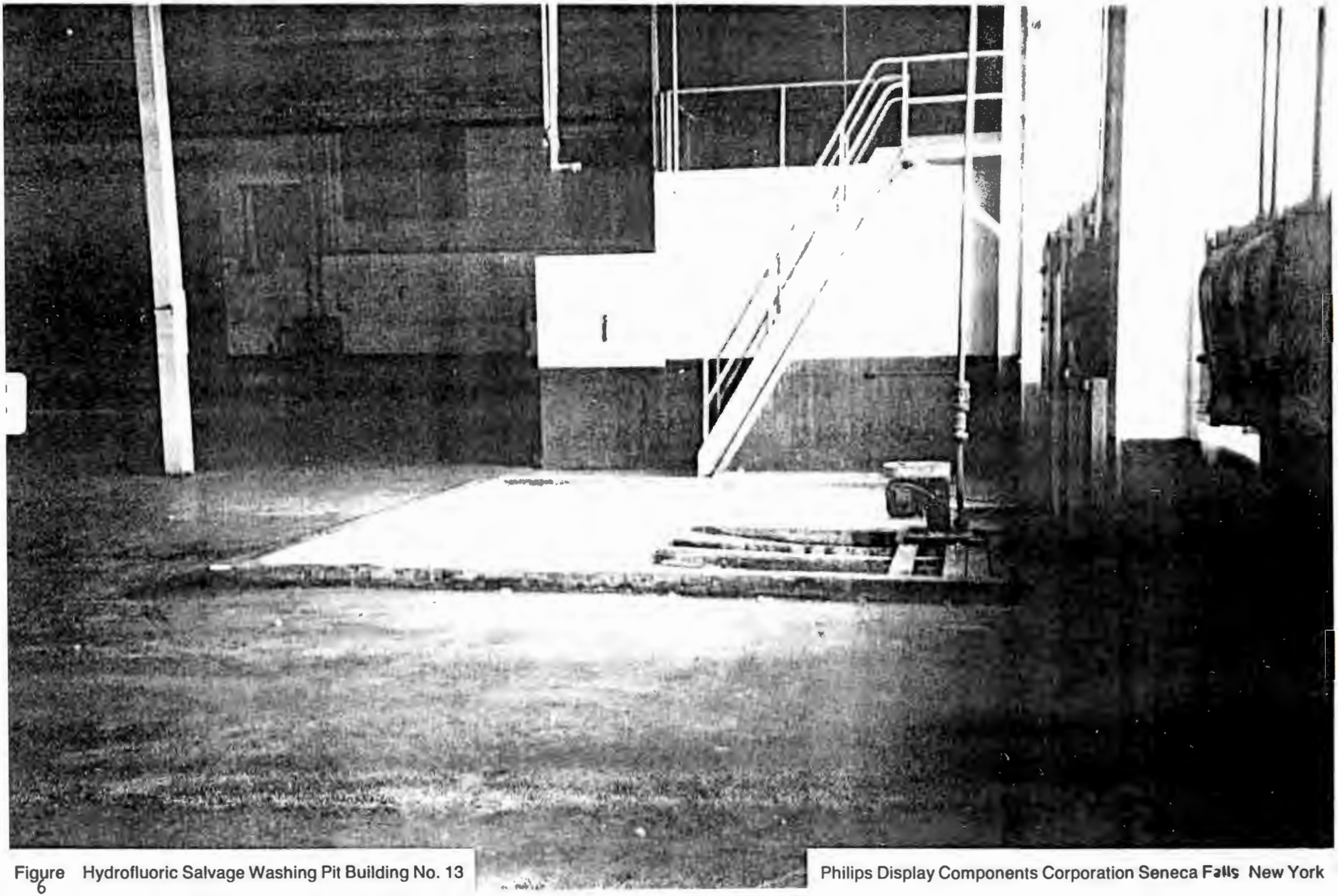

Figure 6 Hydrofluoric Salvage Washing Pit Building No. 13 Philips Display Components Corporation Seneca Falls New York

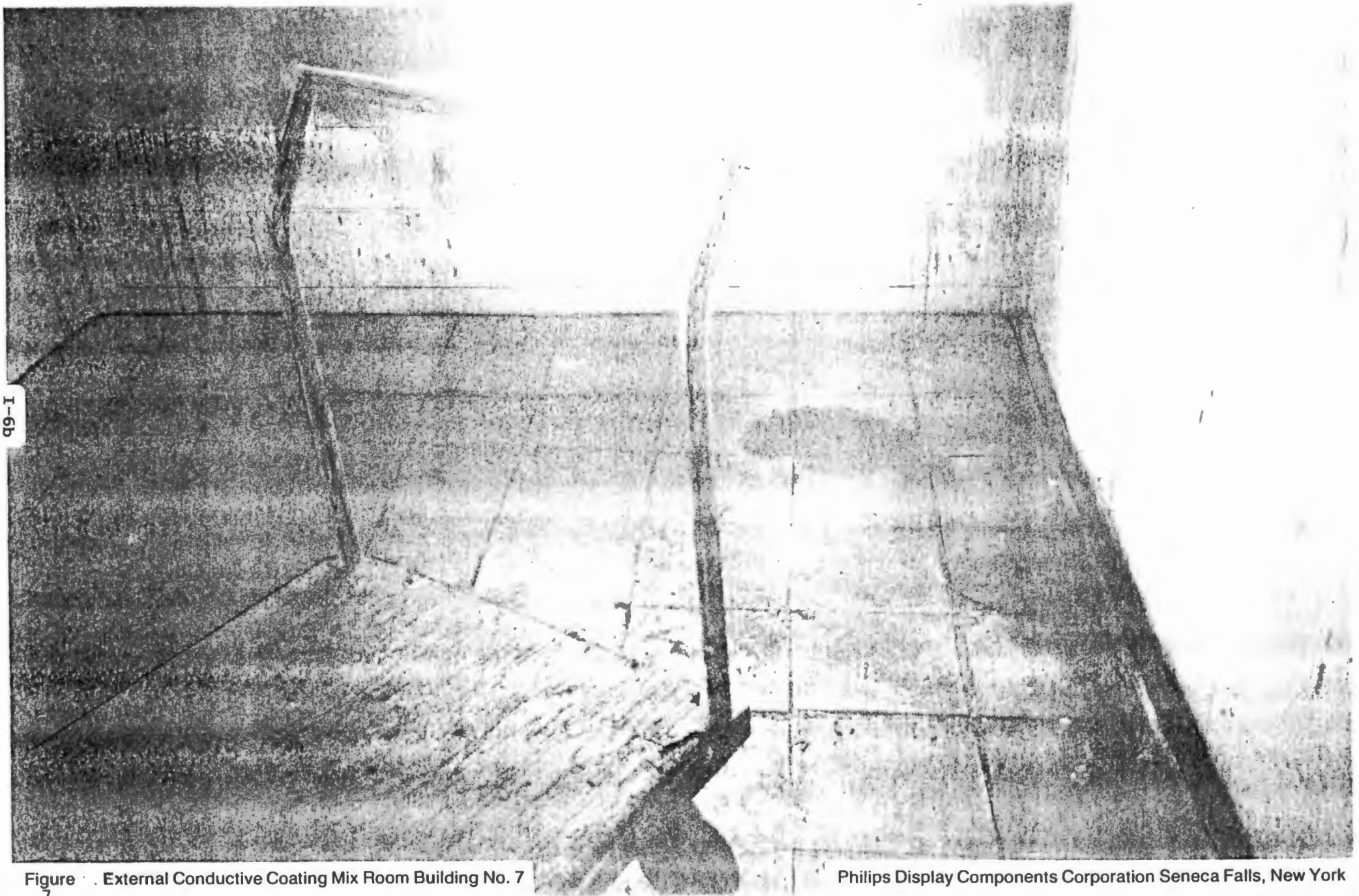

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Figure . External Conductive Coating Mix Room Building No. 7

Philips Display Components Corporation Seneca Falls, New York

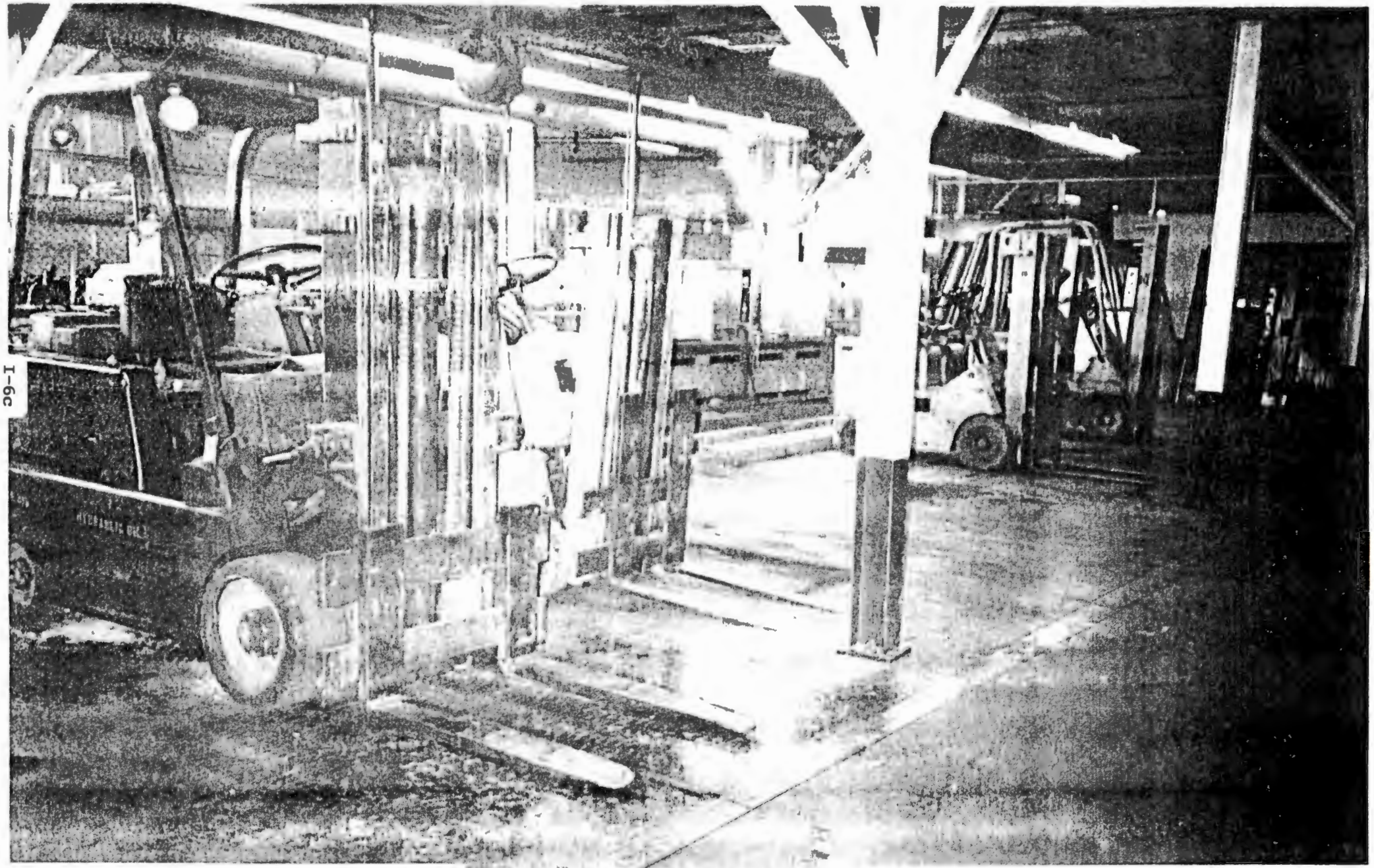

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Figure 8 Fork Lift Recharge/Repair Area Building No. 3

Philips Display Components Corporation Seneca Falls, New York

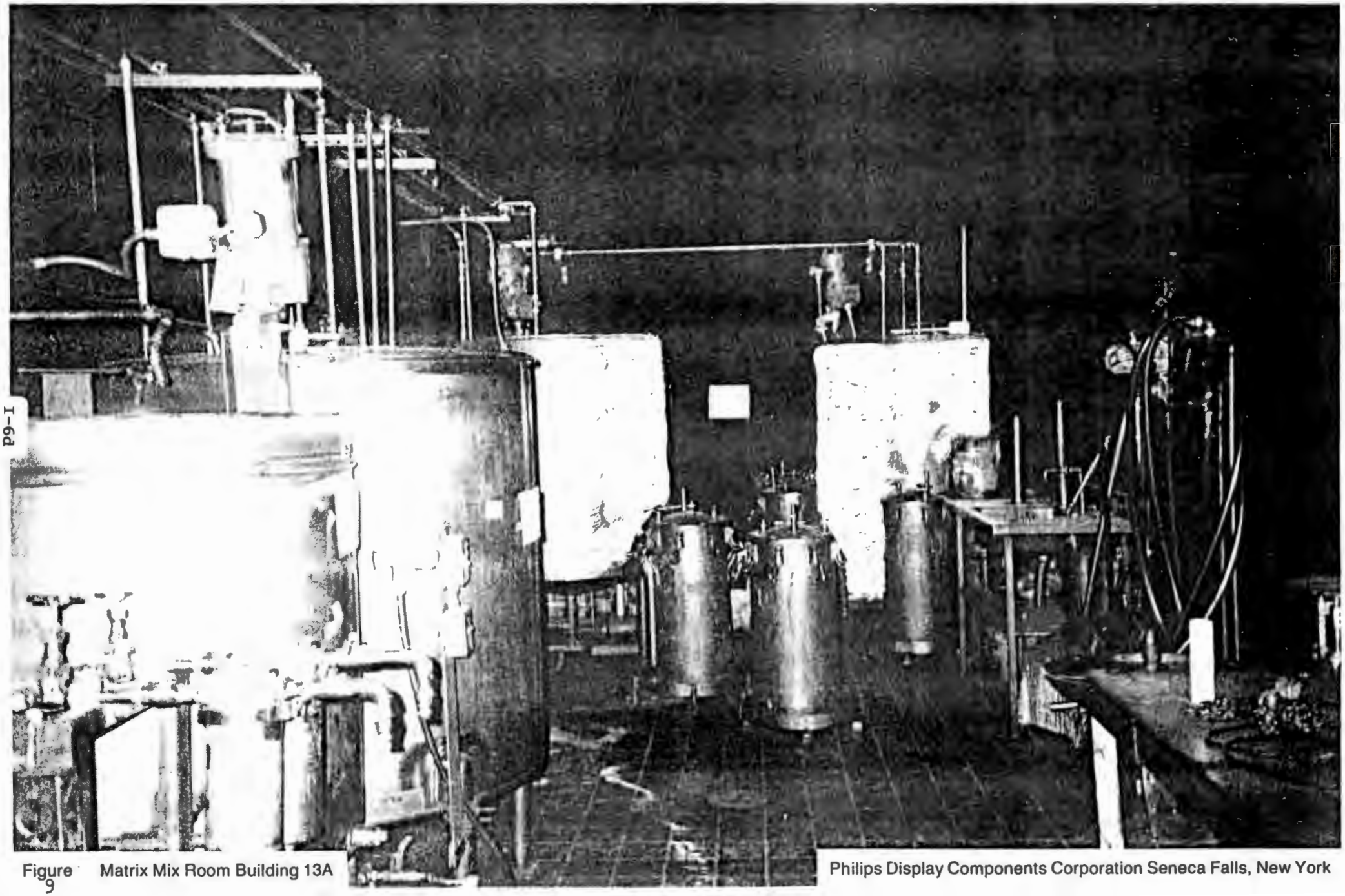


Figure 9 Matrix Mix Room Building 13A Philips Display Components Corporation Seneca Falls, New York

coating. In the early years of operation, this coating consisted of graphite mixed with a toluene vehicle. In later years, the coating became water-based. No cracks in the concrete floor or other evidence of pathways for migration of the material into the environment are evident. No sampling will be performed at this location.

2.3.9 Drum Collection Area - Building #11

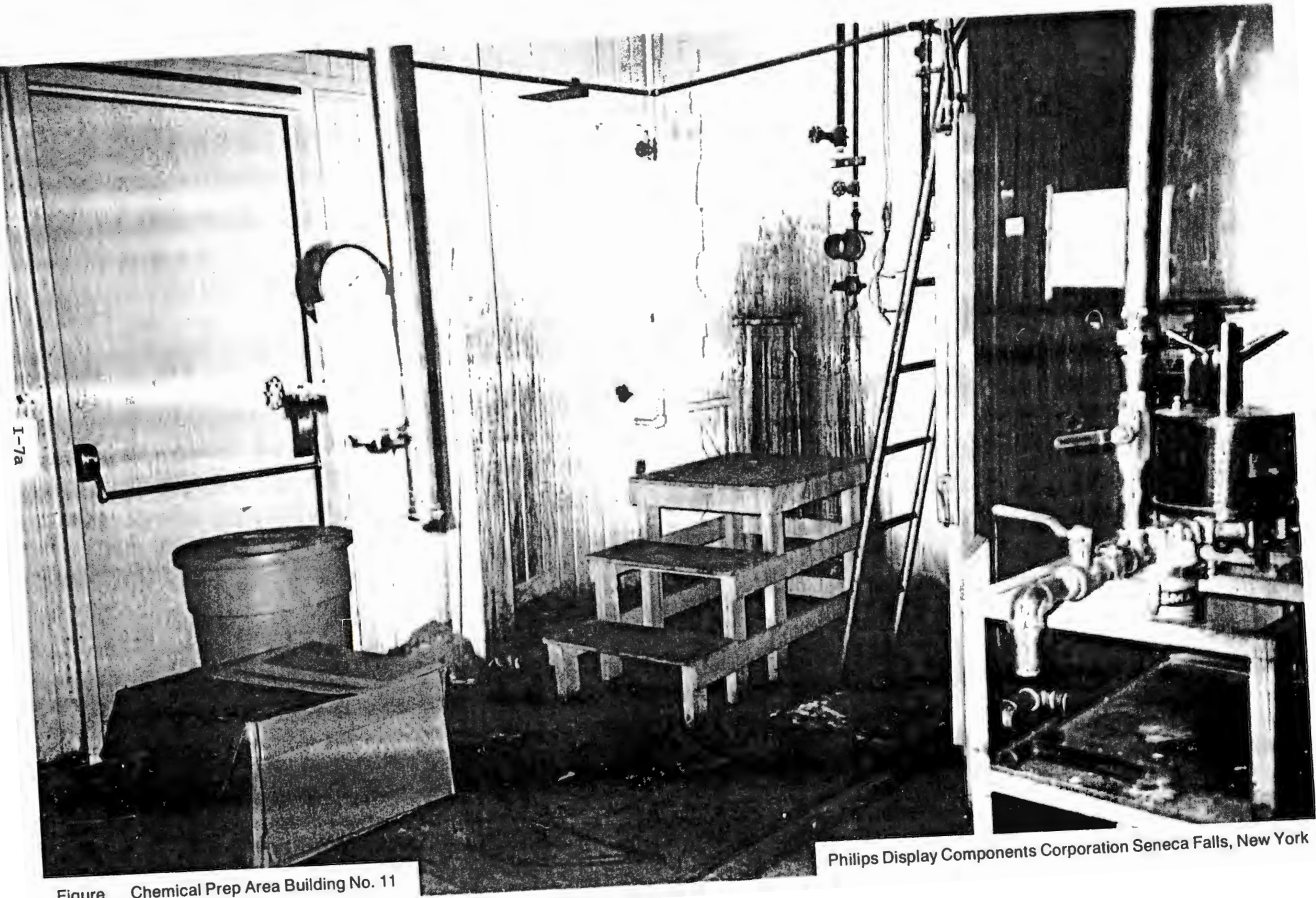
This area in the northwestern part of Building #11 (designated as SS 9 in Figure 1) was used to temporarily store Aquadag E internal conductive coating. This material is a water-based, graphite coating that contains about 2% ammonium hydroxide. All material was stored in drums. No cracks in the concrete floor or other evidence of pathways for migration of the material into the environment are evident. No sampling will be performed at this location.

2.3.10 Chemical Preparation Area - Building #11

This area in the southeastern part of Building #11 (designated as SS 10 in Figure 1; see also Figure 10) was used to temporarily store lacquer waste and non-halogenated waste solvents. Minor surface contamination is present on the floor and walls of the room; however, no cracks in the concrete floor or other evidence of pathways for migration of the material into the environment are evident. No sampling will be performed at this location.

2.3.11 Collector Point Hazardous Waste - Building #13

This area in the south central part of Building #13 (designated as SS 11 in Figure 1; see also Figure 11) was used to temporarily store drums of flammable waste. In the early years of operation of the plant, the area held a lacquer/water separator; however, material and process changes eliminated the need for water/lacquer separation. Therefore, the separator has not been used in recent years. No cracks in the concrete floor or other evidence of pathways for migration of the material into the environment are evident. No sampling will be performed at this location.



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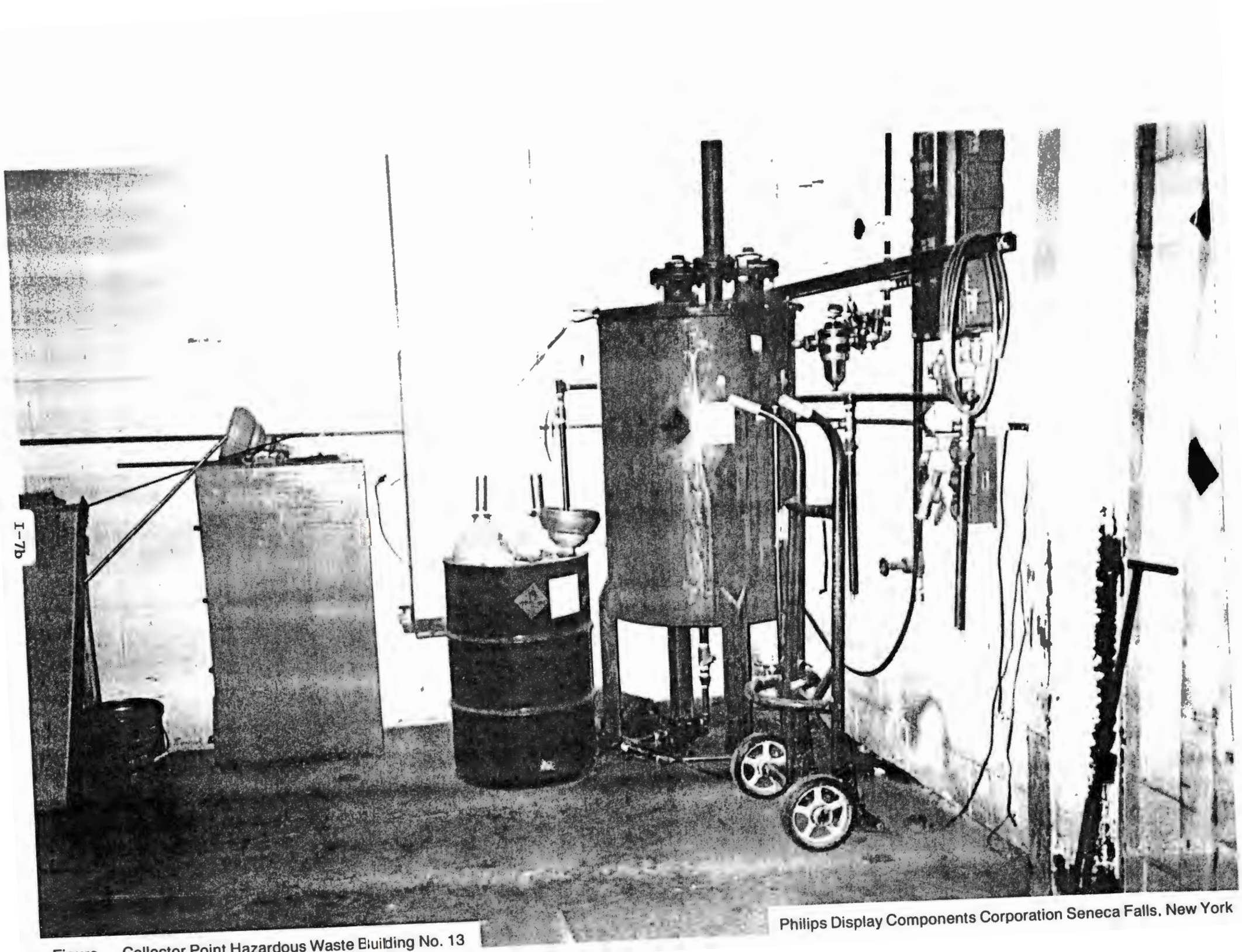
Philips Display Components Corporation Seneca Falls, New York

Figure Chemical Prep Area Building No. 11



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Philips Display Components Corporation Seneca Falls, New York

Figure ___ Collector Point Hazardous Waste Building No. 13

2.3.12 Loading/Unloading Dock South of Building #11

The loading/unloading dock south of Building #11 (designated as SS 12 in Figure 1; see also Figure 12) was used for temporary storage of drummed waste prior to off-site disposal. Cracks are noted in the concrete truck ramp leading to the loading dock. A Philips document to the U.S. EPA entitled "Information Regarding Potential Hazardous Waste and Hazardous Waste Constituent Releases from Solid Waste Management Units," dated April 24, 1985 provides information regarding historic spills in this area. One soil boring is planned at each of the locations adjacent to, or in the loading/unloading dock. The Sampling and Analysis Plan, Volume II, specifies the sampling locations and the analytical parameters applicable to this area.

2.3.13 Area Near Monitoring Well MW-1

Monitoring well MW-1 (designated as SS 13 in Figure 1; see also Figure 13) was installed hydraulically upgradient of the closed waste management units which consist of a settling lagoon and a filter cake storage pit. Groundwater samples collected from MW-1 have shown the presence of the volatile organic compound 1,1,1-trichloroethane. The source of contamination is believed to be a spill reported to have occurred approximately 250 feet east of Building #13A. A separate RCRA Facility Investigation Work Plan to address this facility will be submitted to NYSDEC.

2.4 Underground Storage Tanks

There are eleven documented underground storage tank sites at the facility. Except for the area covered in Section 2.4.1, the investigation of the other ten underground storage tank sites will be addressed in a supplemental Site Visit Work Plan.

2.4.1 Underground Fuel Oil Tank

Documentation indicates that oil soaked soils were once observed in the area overlying the previous location of an underground fuel oil tank adjacent to the

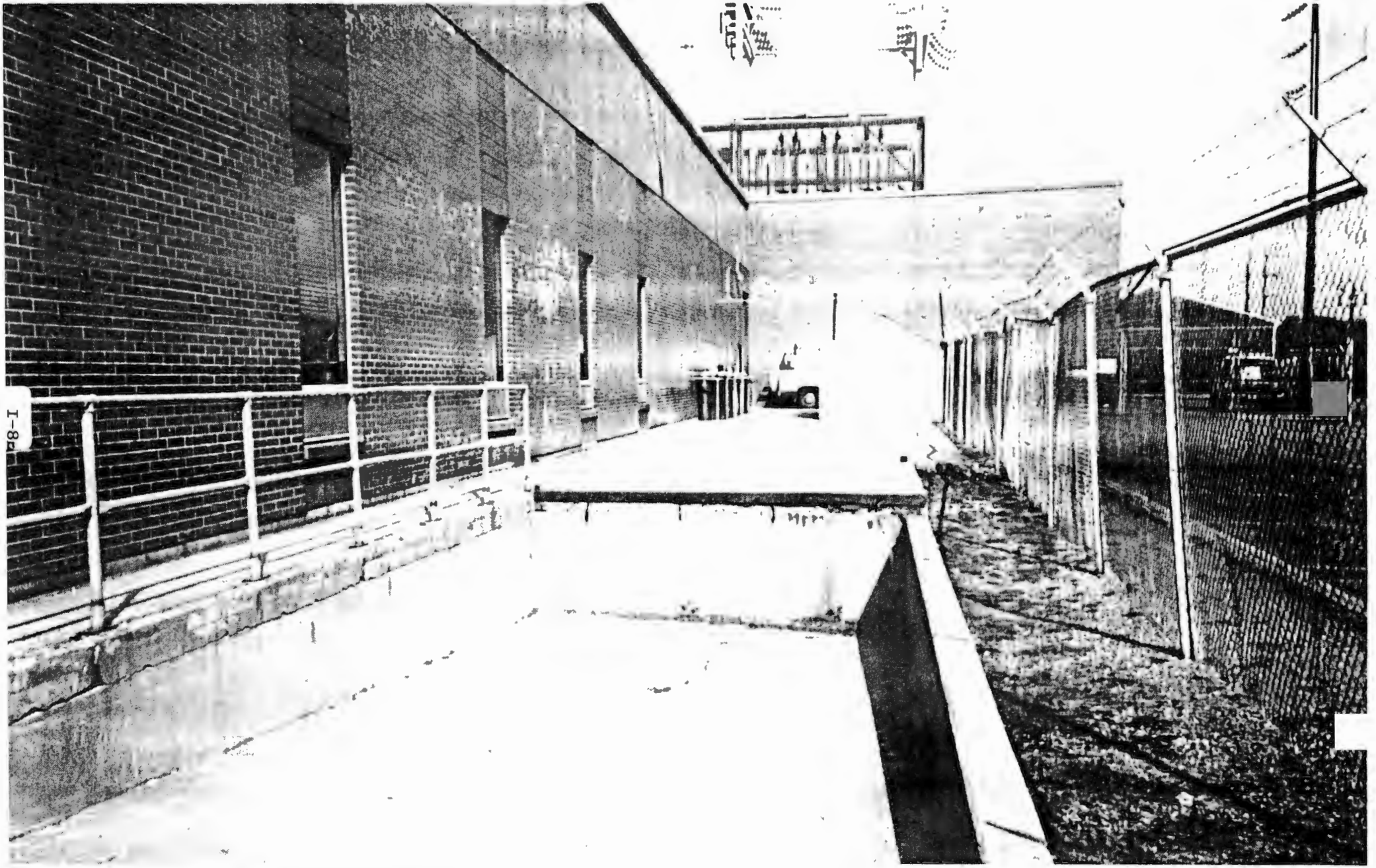

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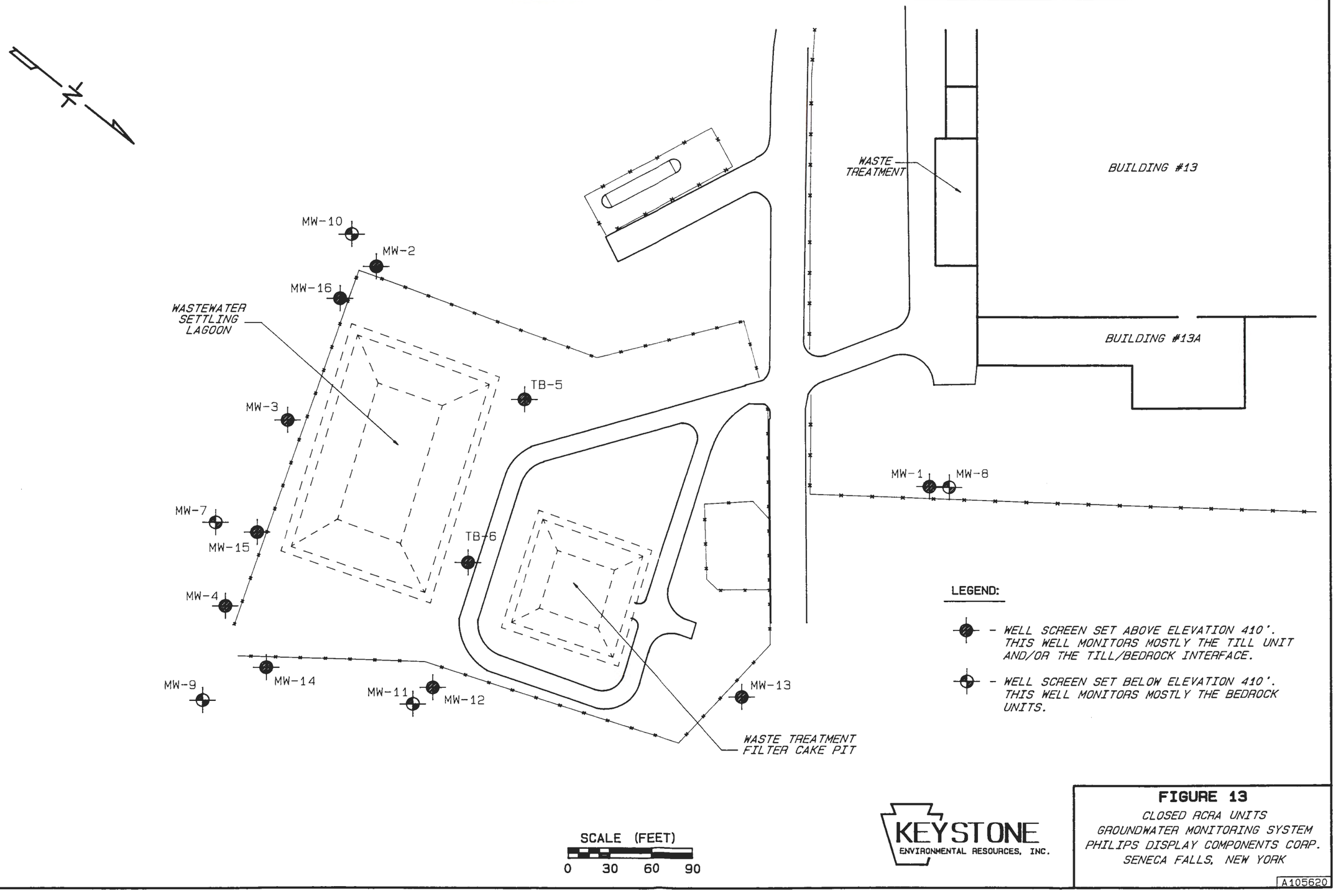
Figure 12 Loading/Unloading Dock - South of Building No. 11

Philips Display Components Corporation Seneca Falls, New York



KEYSTONE
ENVIRONMENTAL RESOURCES, INC.

FIGURE 13

CLOSED RCRA UNITS
GROUNDWATER MONITORING SYSTEM
PHILIPS DISPLAY COMPONENTS CORP.
SENECA FALLS, NEW YORK

A105620

southeast corner of Building 10 (see Figure 1, FO2). Philips documentation indicates that the tank and surrounding soils had been removed. To determine clean closure, three soil borings will be completed in the area. The Sampling and Analysis Plan, Volume II, specifies the sampling locations and the analytical parameters applicable to this area.

2.5 Sumps and Drains Identified by NYSDEC

At the Philips Plant there are a number of sumps, pits and floor drains which the NYSDEC identified as having the potential to have released process waters into the ground; they are:

- the floor drain in the southwest corner of Room 7A in Building 13A
- the sump in Room 6A (Building 13)
- the waste collection pits in Room 4A (Building 13)
- the floor drains in the former degreaser area in Building 11 and the area under the TCE fill pipe outside Building 11.
- the sumps and drains in the Lead Treatment Room (Building 7A)
- the trench and sump in Building 9A (adjacent to Building 9)
- the outside lift station No. 1 sump

The locations of the above referenced sumps and drains are shown in Figures 14a and 14b. A total of 16 borings is planned in the sumps, pits and drains listed above. The Sampling and Analysis Plan, Volume II, specifies the sampling locations and the analytical parameters applicable to these areas.

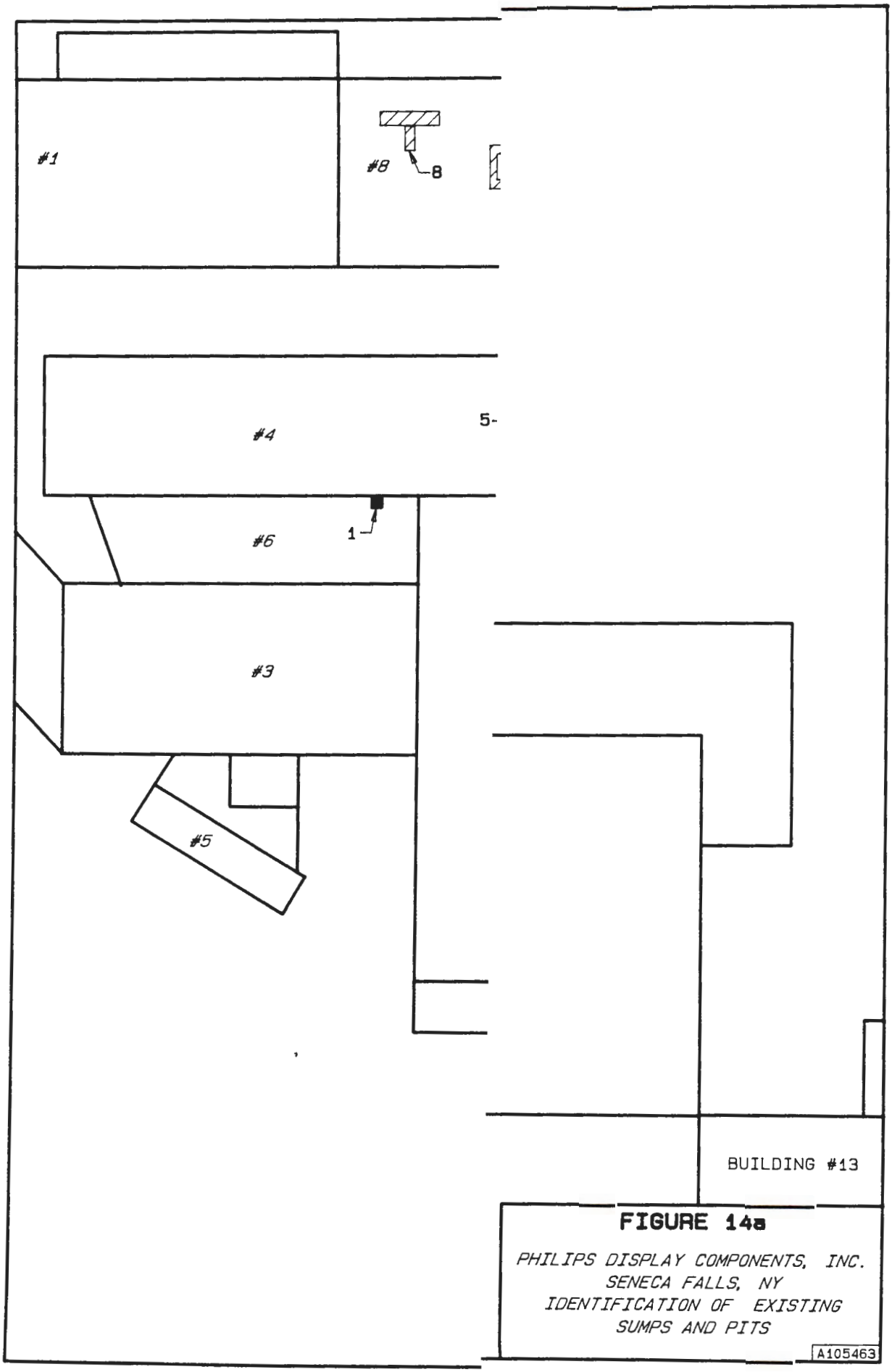


FIGURE 14a

PHILIPS DISPLAY COMPONENTS, INC.
SENECA FALLS, NY
IDENTIFICATION OF EXISTING SUMPS AND PITS

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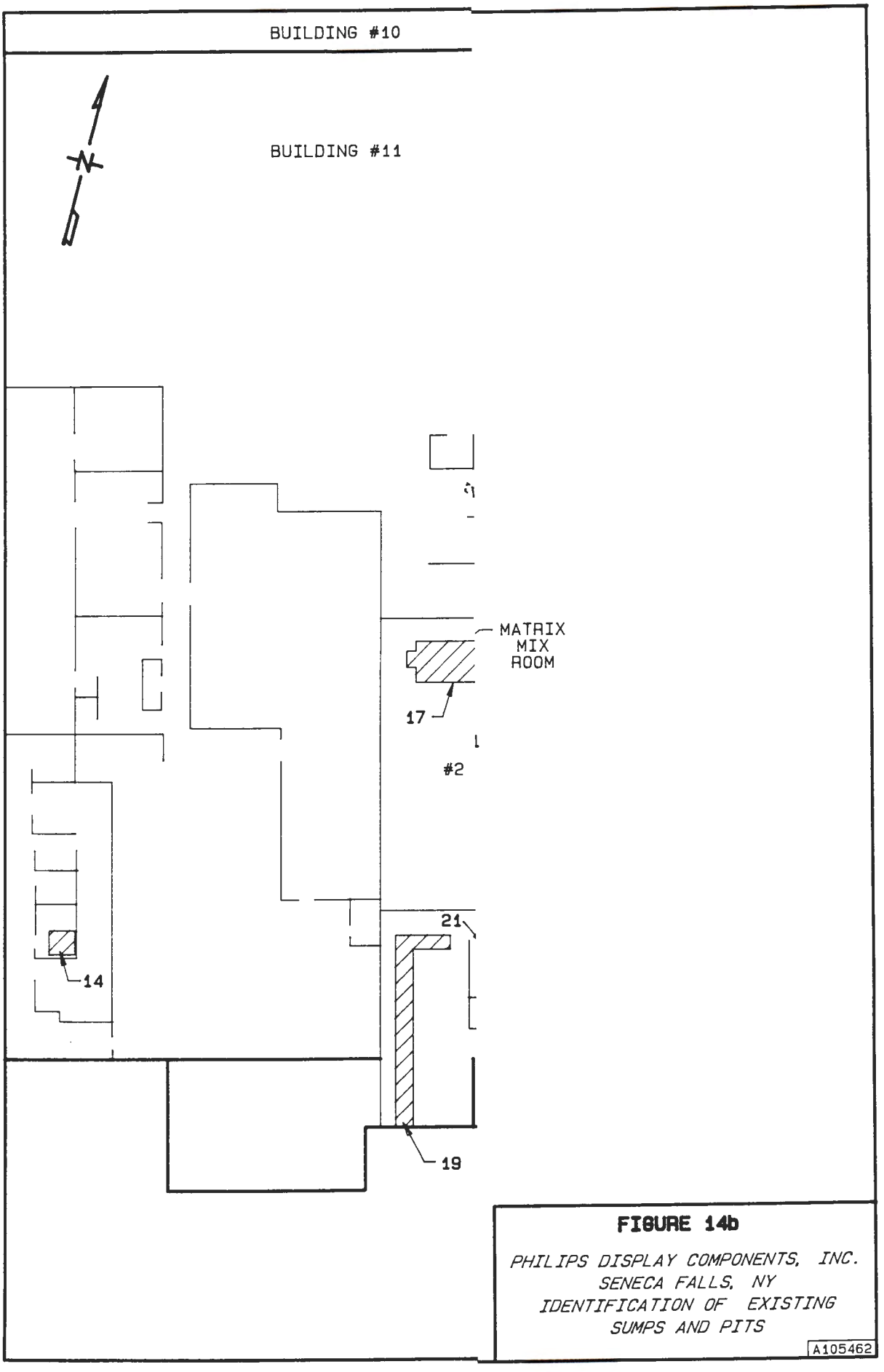


FIGURE 14b

PHILIPS DISPLAY COMPONENTS, INC.
SENECA FALLS, NY
IDENTIFICATION OF EXISTING
SUMPS AND PITS

A105462

2.6 Other Areas

In addition to the primary, interim and satellite storage areas, and to the underground storage tank, sumps and drains discussed above, other areas were identified as having had the potential for release into the environment. These additional areas are discussed in the following paragraphs.

2.6.1 Detonation Pit

A temporary detonation pit located east of the Plant was used once in May 1979 by an outside detonation expert. This was a one time event for small amounts of material amounting to 1 1/4 pounds, 1 quart and 1 pint. No sampling will be performed at this location.

2.6.2 PCB Capacitor Storage Area yes

Twenty-three capacitors were removed from this location between April 28 and May 5, 1980. During the subsequent visual site inspection, a small area of the transformer yard appeared to be discolored. Four soil borings are planned to determine the extent and type of release of transformer oils into the environment. The Sampling and Analysis Plan, Volume II, specifies the sampling locations and the analytical parameters applicable to this area.

2.6.3 Open Burning Area yes

Open burning occurred prior to 1969 in the vicinity of the 30,000 gallon propane tank (see Figure 1). The area will be evaluated for soil contamination by collection of soil samples from six soil test borings at this location. The Sampling and Analysis Plan, Volume II, specifies the sampling locations and the analytical parameters applicable to this area.

2.6.4 #2 Fuel Oil Loading Area

A small fuel oil spill occurred in 1985 at the fuel oil loading area (for location see Figure 1, FO1). This one-time release was contained with absorbent material, and the area was subsequently cleaned up. No sampling will be performed at this location.

2.7 Building Sumps, Pits, Overhead and Underground Sewers

Sumps, pits, overhead and underfloor sewer lines were used to handle and transfer wastes to their respective primary treatment processes and/or the Wastewater Treatment Plant (WTP). Figures 14a and 14b locates the existing sumps and pits in the various plant buildings and rooms. Figure 15 shows the overhead sewer lines and Figure 16 shows the underground sewers to be leak tested around buildings 13 and 13A.

Table 1 describes the function of the sumps and pits and the wastewaters handled.

The decontamination and testing of the sumps, pits and sewer lines are addressed in the Sewer Evaluation Report.

The sumps, pits and sewers with visual evidence of potential releases from cracks, lining defects etc are described in section 2.5. A subsurface investigation will be performed in these areas; the work is described in Section 4.2.5 of the SVWP, Volume II.

2.7.1 Overhead Wastewater Transfer Lines to Waste Treatment Plant

These pressurized overhead lines were used to transfer acid, chrome and caustic wastewater from the sumps to the WWT plant as shown in Figure 15.

The line routings begin at the north end of Building 7, easterly through Building 9, turning south at Building 10, and turning east through Building 11, and again

TABLE 1
PHILIPS DISPLAY COMPONENTS
SENECA FALLS, NEW YORK
EXISTING SUMPS AND PITS

NO.	DESCRIPTION/FUNCTION	WASTEWATER HANDLED
	BUILDING 6	
1	SUMP/COLLECT MISCELLANEOUS CHEMICAL LABORATORY WASTES	MISCELLANEOUS LABORATORY WASTES
	BUILDING 7A	
2	SUMP-MIDDLE OF ROOM/COLLECT TREATED, SPENT HN03 FILTRATE AND ANY SPILLED HNO3 TO SEND TO WWT	TREATED, SPENT HNO3 AND SPILLED FILTRATE FROM FILTER PRESS
3	SUMP-AGAINST NORTH WALL/COLLECT PLATE AND FRAME FILTER PRESS WASH DOWN WATER	FITLER PRESS WASH DOWN WATER
4	PIT-MIDDLE OF ROOM-TRENCH DRAIN COLLECT SPILLED HNO3 AND OTHER SPILLAGES FROM ROOM	SPILLAGE FROM HNO3 DRUMS AND ANY LEAKAGE FROM SPENT HNO3 TREATMENT SYSTEM
5	SUMP-ALONG WEST WALL/COOLING WATER	COOLING WATER (DISCHARGE TO NON-TREATED DRAINAGE)
	BUILDING 8	
6	PIT-CENTER OF BLDG-ISLAND SURROUNDED BY TRENCH DRAIN/COLLECT LEAD CONTAMINATED HNO3 FROM DEFRITTING PROCESS. PREVIOUS PROCESS-HF FOR INTERNAL CONDUCTIVE COATING REMOVAL ON INSIDE OF GLASS FUNNELS	LEAD CONTAMINATED HNO3 AND HF USED FOR INTERNAL CONDUCTIVE COATING REMOVAL
7	SUMP-EAST OF PIT/COLLECT LEAD CONTAMINATED HNO3 FROM PIT #6	LEAD CONTAMINATED HNO3 AND HF USED FOR INTERNAL CONDUCTIVE COATING REMOVAL
8	PIT-NORTHWEST CORNER OF BLDG./ COLLECT WATER AND RESIDUALS FROM GLASS BUFFING AND GRINDING- WET PROCESS	SOLIDS, OVERFLOW WEIR WATER DIRECTED TO UNTREATED PLANT DRAINAGE

TABLE 1
PHILIPS DISPLAY COMPONENTS
SENECA FALLS, NEW YORK
EXISTING SUMPS AND PITS

NO.	DESCRIPTION/FUNCTION	WASTEWATER HANDLED
	BUILDING 9	
9	PIT-ENGINEERING SCREEN LAB/GLASS PANEL WASHING WITH DILUTE HF ACID	DILUTE HF ACID AND WASH WATER RINSES
10	SUMP-ENGINEERING SCREEN LAB/ GLASS PANEL WASHING WITH DILUTE HF ACID	DILUTE HF ACID AND WASH WATER RINSES
	BUILDING 9A	
11	PIT-NORTHEAST CORNER OF BLDG/ COLLECT SPILLED CONCENTRATED AND DILUTED HF(1950-EARLY 1960s). RECENT YEARS- DRAW OFF OF 50% LIQUID CAUSTIC IN HAND CARRIED CONTAINERS FOR BOILER WATER TREATMENT	HF ACID AND CAUSTIC
	BUILDING 10	
12	SUMP-ALONG NORTH WALL OF FUNNEL INTERNAL COATING ROOM/COLLECT WATE WITH IRON OXIDE MATERIAL COATING	IRON OXIDE (WATER BASED CONDUCTIVE COATING- PUMPED TO WWT)
13	PIT-MIDDLE OF INTERNAL COATING ROOM/ COLLECT WATER WITH IRON OXIDE COATING	IRON OXIDE (WATER BASED CONDUCTIVE COATING- PUMPED TO WWT)
	BUILDING 11	
14	PIT-RESEARCH LABORATORY/COLLECT HF RINSE WATER FROM WASHING OF VERY SMALL GLASS PANELS	HF ACID WASH RINSE WATERS-TO NONTREATED DRAINAGE
15	SUMP-CHEMICAL DIPTANK ROOM/COLLEC CAUSTIC WASTEWATER FROM CLEANING ALUMINUM FROM ALUMINIZER HEADS	CAUSTIC RINSEWATER
16	PIT-FRENCH FLOOR DRAIN-CHEMICAL DIPTANK ROOM/COLLECT CAUSTIC RINSEWATER FROM CHEMICAL DIP TANKS FOR ALUMINIZER HEAD CLEANING	CAUSTIC RINSEWATER
17	PIT-ROOM #2-NORTH WALL/COLLECT SPILLAGE OF COOLING WATER FROM ALUMINIZING PROCESS AND ALSO SLIGHT LOSS OF VACUUM PUMP OILS	COOLING WATER TO UNTREATED DRAINAGE

TABLE 1
PHILIPS DISPLAY COMPONENTS
SENECA FALLS, NEW YORK
EXISTING SUMPS AND PITS

NO.	DESCRIPTION/FUNCTION	WASTEWATER HANDLED
18	SUMP-ROOM #2-NORTH WALL/COLLECT COOLING WATER PIPED DIRECT FROM ALUMINIZER CARTS	COOLING WATER (RECYCLED) NOT COLLECTED IN PIT #18
19	"L" PIT-FRENCH DRAIN-ROOM #2-CHEMICAL MIXING ROOM/CHROME BEARIN WASTE FROM WATER BASED PHOTO RESIST MAKE UP AND SOLUTION PREPARATION	CHROME BEARING WASTER BASED PHOTO RESIST SOLUTIONS
20	PIT-ROOM #2-CHEMICAL MIXING ROOM-SOUTH DOOR/ WASHING OF PRESSURE POTS USED IN PROCESSING PHOTO RESIST AND CONTAINMENT OF CHROME BEARING WASTES- DRAINS TO #20	CHROME BEARING WASTE SOLUTIONS AND WASHWATER
21	PIT-ROOM #2-CHEMICAL MIXING ROOM-NORTH DOOR/FOR CONTAINMENT PURPOSES- DRAINS TO SUMP #20	CONTAINMENT FOR CHROME BEARING WASTES IN SOLUTION ROOM
22	PIT-AT DOORWAY -ACID MAKE UP ROOM-BARREL STORAGE BLDG-EAST ROOM/ CONTAINMENT FOR ANY ACID SPILLAGE-DRAINS TO LIFT STATION	DILUTE HF ACID
23	PIT-COMBINED WITH DRAIN IN ACID MAKE UP ROOM- BARREL STORAGE BLDG-EAST ROOM/ROOM UTILIZED FOR DILUTION OF 70% HF ACID FROM DRUMS TO 5-15% FOR PROCESS USES. DILUTED ACID HAND CARRIED IN PLASTIC CONTAINERS TO PROCESS USE- DRAINS TO LIFT STATION	CONCENTRATED (70%) AND DILUTE (5-15%) HF ACID
	BUILDING 13	
24	PIT AND SUMP-COMBINED-NORTHWEST CORNER OF BLDG.-PANEL SALVAGE WASH/ COLLECT DILUTE HF AND PUMP OUT OVERHEAD TO PIT #26- DRAINS TO LIFT STATION	DILUTE HF ACID AND WASHWATERS
25	PIT-ROOM #3A AND #4AWR/COLLECT ACID WASH FROM PANEL WASH PROCESS	DILUTE HF ACID AND RINSEWATER

TABLE 1
PHILIPS DISPLAY COMPONENTS
SENECA FALLS, NEW YORK
EXISTING SUMPS AND PITS

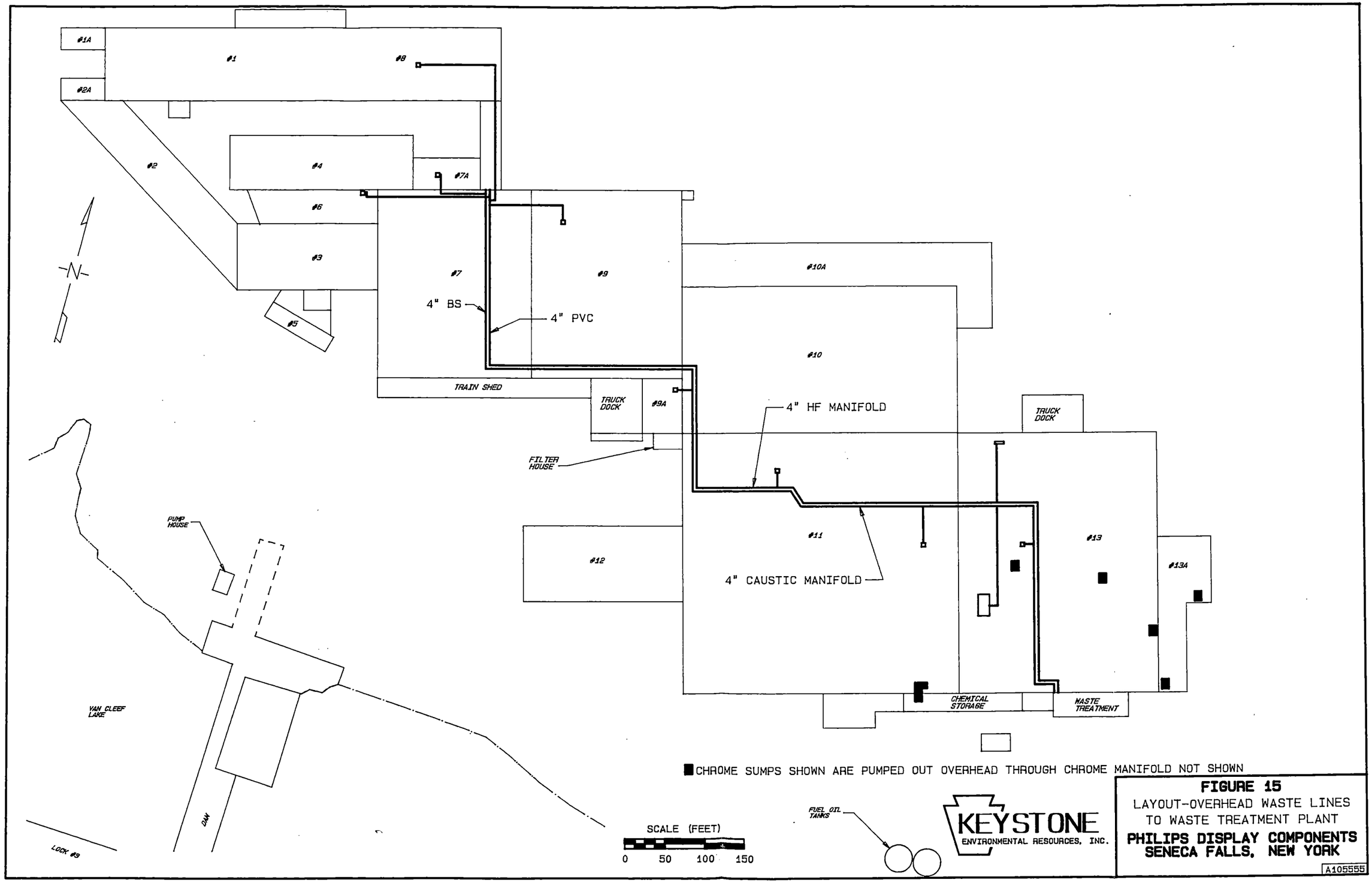
NO.	DESCRIPTION/FUNCTION	WASTEWATER HANDLED
26	SUMP-ROOM #3A AND #4AWR/COLLECT ACID WASH FROM AN ADJACENT WASHER PIT ABANDONED IN 1981 AND FILLED WITH CONCRETE	DILUTE HF ACID AND RINSEWATERS (PRIOR TO 1981)
27	PIT-ROOM #4A/MATRIX COATING PROCESS WASTES	WATER BASED BLACK MATRIX COATING AND WASHWATERS
28	SUMP-ROOM #4A-ALONG WEST WALL/ COLLECT ACID WASH FROM PIT #26 (DRAINS TO LIFT STATION)	DILUTE HF ACID AND RINSEWATERS FROM PANEL WASH PROCESS
29	SUMP-ROOM #4A-ALONG NORTH WALL/ COLLECT MATRIX COATING PROCESS WASTES- PUMPED TO WWT	WATER BASED BLACK MATRIX COATING AND WASHWATERS
30	PIT-ROOM #4A-COLLECT CHROME BEARIN WATER FROM MATRIX PROCESS (DRAINS TO SUMP #31)	CHROME BEARING PROCESS WATERS
31	SUMP-ROOM #4A-ALONG SOUTH WALL/ COLLECT CHROMIUM BEARING WATER FRO PROCESS- PUMPED TO CHROME TREATMENT	PHOTO RESIST AND CHROME BEARING PROCESS WATERS
32	PIT-ROOM #5-ALONG NORTH WALL/ COLLECT SPILLAGE OF COOLING WATER FROM ALUMINIZING PROCESS- ALSO SLIGHT LOSS OF VACUUM PUMP OILS	COOLING WATER (TO NONTREATED DRAINAGE)
33	PIT-ROOM #5-ALONG SOUTH WALL/ COLLECT SPILLAGE OF COOLING WATER FROM ALUMINIZING PROCESS- ALSO SLIGHT LOSS OF VACUUM PUMP OILS	COOLING WATER (TO NONTREATED DRAINAGE)
34	SUMP-ROOM #5-ALONG NORTH WALL/ COLLECT COOLING WATER- PIPED DIRECT FROM ALUMINIZING CARTS (NOT COLLECTED FROM PIT)	COOLING WATER (RECYCLED)
35	SUMP-ROOM #5-ALONG SOUTH WALL/ COLLECT COOLING WATER- PIPED DIRECT FROM ALUMINIZING CARTS (NOT COLLECTED FROM PIT)	COOLING WATER (RECYCLED)

TABLE 1
PHILIPS DISPLAY COMPONENTS
SENECA FALLS, NEW YORK
EXISTING SUMPS AND PITS

NO.	DESCRIPTION/FUNCTION	WASTEWATER HANDLED
36	PIT-ROOM #6AWR-"L" SHAPED/COLLECT ACID WASH FROM PANEL WASH PROCESS-DRAINS TO LIFT STATION	DILUTE HF ACID AND RINSEWATERS
37	SUMP-ROOM #6AWR/COLLECT ACID WASH FROM PIT #36-DRAINS TO LIFT STATION	DILUTE HF ACID AND RINSEWATERS
38	PIT-ROOM #6AWR-SMALL PIT/COLLECT ACID WASH FROM PROCESS-DRAINS TO LIFT STATION	DILUTE HF ACID AND RINSEWATERS
39	PIT-ROOM #6A-NORTHEAST PIT/ COLLECT CHROMIUM BEARING WATER FROM MATRIX PROCESS	PHOTO RESIST AND CHROME BEARING PROCESS WATERS
40	PIT-ROOM #6A-SOUTHWEST PIT/ COLLECT MATRIX COATING PROCESS WASTEWATERS	WATER BASED BLACK MATRIX COATING AND WASHWATERS
41	SUMP-ROOM #6A-NORTHEAST/COLLECT CHROMIUM BEARING WATER FROM PIT #39-PUMPED TO CHROME TREATMENT	PHOTO RESIST AND CHROME BEARING PROCESS WATERS
42	SUMP-ROOM #6A-SOUTHWEST CORNER/ COLLECT MATRIX COATING AND PROCESS WASTEWATERS FROM PIT #40	WATER BASED BLACK MATRIX COATING AND WASHWATERS
	BUILDING 13A	
43	PIT-ROOM #7AWR/COLLECT ACID WASH FROM PANEL WASH PROCESS	DILUTE HF ACID AND RINSEWATERS
44	SUMP-ROOM #7AWR-ALONG WEST WALL/ COLLECT ACID WASH FROM PIT #43-DRAINS TO LIFT STATION	DILUTE HF ACID AND RINSEWATERS
45	PIT-CLEANOUT FOR 6" DRAIN LINE	
46	PIT-ROOM #7A/COLLECT BLACK MATRIX COATING AND PROCESS WASHWATERS	WATER BASED BLACK MATRIX COATING AND WASHWATERS
47	PIT-ROOM #7A-ALONG WEST WALL/ COLLECTION OF CHROMIUM BEARING WATER FROM PROCESS	PHOTO RESIST AND CHROME BEARING PROCESS WATERS

TABLE 1
PHILIPS DISPLAY COMPONENTS
SENECA FALLS, NEW YORK
EXISTING SUMPS AND PITS

NO.	DESCRIPTION/FUNCTION	WASTEWATER HANDLED
48	SUMP-ROOM #7A-ALONG EAST WALL/ COLLECT BLACK MATRIX COATING PROCESS WASTEWATER FROM PIT #46- PUMPED TO WWT	WATER BASED BLACK MATRIX COATING AND WASHWATERS
49	SUMP-ROOM #7A-SOUTHWEST CORNER/ COLLECT CHROMIUM BEARING WATER FROM PIT #47	PHOTO RESIST AND CHROME BEARING PROCESS WATERS
50	PIT-ROOM #7A-EAST OF SUMP #46/ CLEANOUT OF 6" ACID DRAIN LINE	
51	SUMP-MATRIX MIX ROOM/COLLECT WASH WATER OF MATRIX COATING MIX TANKS AND WASTE MATRIX COATING- PUMPED TO WWT	WATER BASED MATRIX COATING (CARBON/GRAPHITE)
	LIFT STATION	
52	SUMP/COLLECT ALL DILUTE ACID AND RINSEWATER FROM BLDG. 13 AND 13A PANEL WASH SUMPS AND ACID MAKE UP ROOM BARREL STORAGE BLDG.-PUMPS TO TWO 10,000 GALLON STORAGE TANKS- THEN TO WWT	DILUTE HF ACID AND FLUORIDE WASTEWATERS



■CHROME SUMPS SHOWN ARE PUMPED OUT OVERHEAD THROUGH CHROME MANIFOLD NOT SHOWN

KEYSTONE
ENVIRONMENTAL RESOURCES, INC.

FIGURE 15
LAYOUT-OVERHEAD WASTE LINES
TO WASTE TREATMENT PLANT
PHILIPS DISPLAY COMPONENTS
SENECA FALLS, NEW YORK
A105555

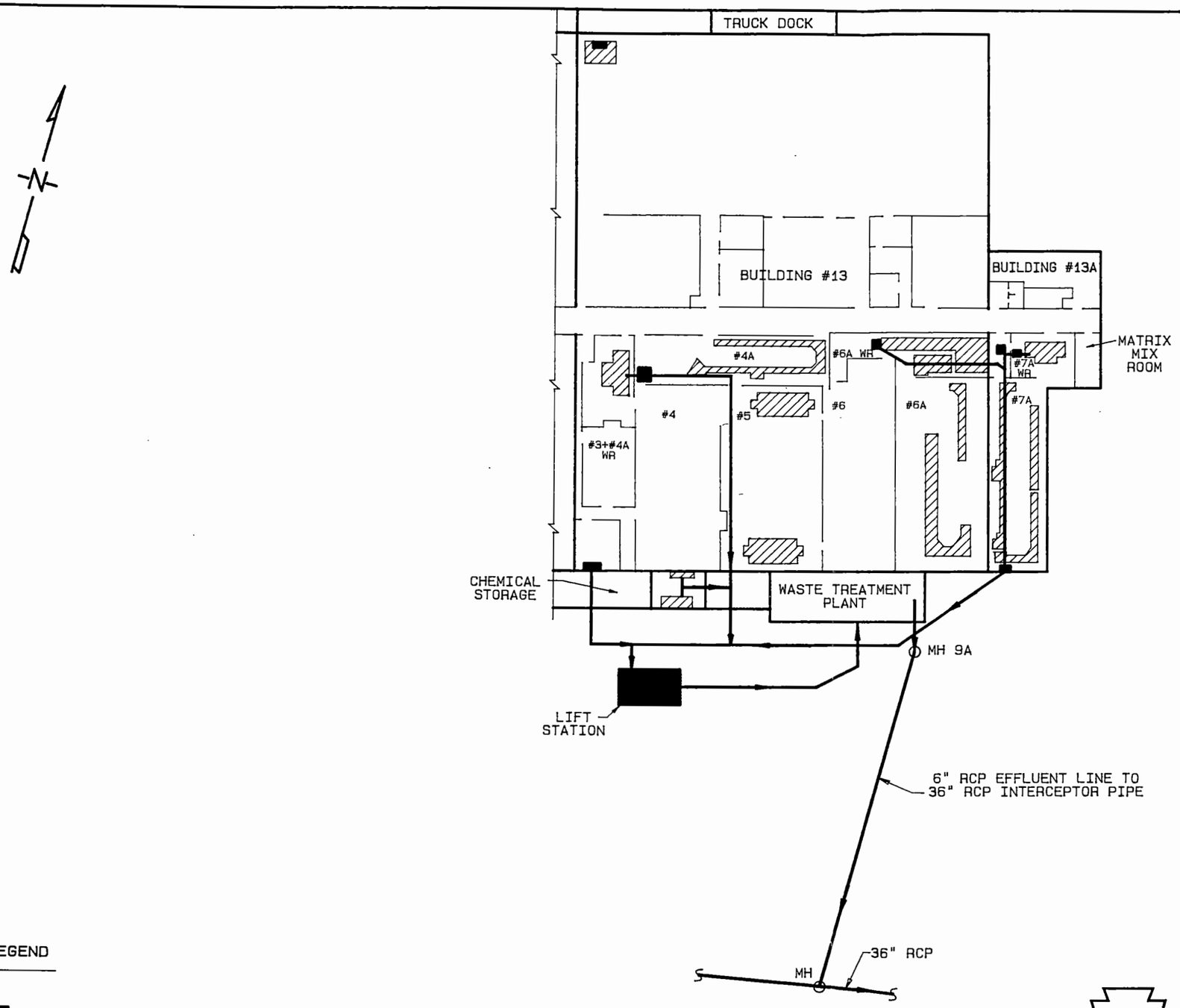


FIGURE 16
PHILIPS DISPLAY COMPONENTS
SENECA FALLS NY
UNDERGROUND SEWERS FOR
LEAKTESTING AROUND BUILDINGS
#13 & #13A

A105556

southerly at Building 13 and continuing to the waste treatment plant (See Figure 15).

Migration of the wastewater transferred by these pipes to soil or air is not an environmental concern since the pipes have been maintained and any leakages over the operating years were evident and were repaired immediately to prevent injury to working personnel and to maintain a safe working environment. No major leakage/spillage events are known to have occurred. Philips flushed these overhead lines until the rinse water met SPDES permit effluent requirements. No sampling is necessary on these lines.

2.7.2 Underground Wastewater Sewer Lines to Waste Treatment Plant

These gravity sewer lines are shown in Figure 16 and their flushing and leak testing procedures are addressed in the Sewer Evaluation Report.

2.8 Wastewater Treatment/Pretreatment Cleaning Procedures

Decontamination of the Wastewater Treatment and Pretreatment facilities is complete and is addressed in the Wastewater Treatment Plant Decommission Report.

3.0 EQUIPMENT REQUIREMENTS

The equipment required for the tasks discussed in Section 2 will be supplied by Keystone Environmental Resources, Inc. and the indicated Subcontractors.

4.0 CONTRACTUAL SERVICES

Keystone Environmental Resources, Inc. (Keystone) will act as Project Manager for this phase of the RFA. Keystone will conduct the Sampling Visit as outlined in Volume II, arrange for and coordinate work with subcontractors, perform soil and

groundwater sampling, conduct all laboratory analyses, interpret the data, and report the results of the Sampling Visit.

The drilling subcontractor is not known at this point, but Keystone will ensure that the subcontractor is adequate for the work, is familiar with the sampling plan, and can meet the requirements of the QAPjP.

5.0 TRAINING AND SAFETY REQUIREMENTS

All Keystone employees assigned to the project have completed the 40 hour OSHA training required by 29 CFR 1910.120. Supervisors have completed the 8 hour OSHA Manager training. Keystone personnel assigned to this project are experienced in RCRA investigations, and are proficient in the required protocols.

Subcontractors will be screened on the basis of fulfilling the requirements of 29 CFR 1910.120. Subcontractors will be given copies of the Health and Safety Plan developed for the Seneca Falls Facility and will be made aware of its provisions in order for them to develop their own Health and Safety Plans, which will be reviewed by Keystone and cannot be less stringent than Keystone's Health and Safety Plan. Keystone, however, does not assume responsibility for subcontractors' implementation of, and abidance by their Health and Safety Plans.

6.0 WASTE DISPOSAL PROCEDURES

All waste generated as part of the Sampling Visit activities, such as disposable gloves, suits, etc. will be containerized in drums to be disposed of by Philips. Liquids and soil cuttings will be containerized and, if found hazardous, they will be transported and placed in a waste disposal site by Philips.

7.0 QA/QC

The QA/QC procedures developed for the Sampling Visit Work Plan are presented in the Quality Assurance Project Plan (QAPjP) issued under separate cover. The QAPjP is aimed at conducting the Site Visit in a manner that will

provide sound and properly documented data on which to base the characterization and assessment of the facility.

8.0 MANAGEMENT PLAN

This section provides a description of the overall management approach for implementing the Sampling Visit Work Plan (SVWP) to identify releases or potential releases requiring further investigation at the Seneca Falls site.

8.1 Project Management

The technical project management responsibility for the Philips SVWP assessment project resides with Keystone Environmental Resources, Inc. Keystone will be responsible for the management of its personnel assigned to this project and ensure that project deliverables are accomplished in a timely and cost-effective manner. The Project Manager will report technical progress to the designated Philips Project Manager. During all phases of this project, there will be an open channel of communication between the Keystone Project Manager and the Philips Project Manager. Philips Project Manager will ensure that all technical progress is communicated to the designated NYSDEC Project Coordinator at a predetermined interval.

On-site personnel will keep a log of daily activities which will be reviewed by the Project Manager. These logs will be completed as specified in the QAPjP and will be available for review by the Philips Project Manager and the NYSDEC Project Coordinator, as required.

Senior technical personnel have been assigned to this project and are presented in the QAPjP. These personnel will provide oversight and review for the appropriate activities to be performed. The major technical activities will be supervised by either a senior scientist or engineer who have direct experience in the areas they are managing. The senior scientist or engineer will be supported by a technical staff consisting of a mix of hydrogeologist, engineers, risk assessment specialists, chemists, and field/laboratory technicians, with experience in the management and

implementation of environmental investigations. Their individual assignments and responsibilities are described in the QAPjP.

8.1.1 Personnel Assignments

A summary of the Keystone personnel assigned to the SVWP assessment as presented in the QAPjP for this project are as follows:

Henry Owoc	Project Manager	(412) 825-9821
Gianni Chieruzzi	Field Team Leader	(412) 825-9820
Penny Gardner	Laboratory Director	(412) 825-9767
James Thomas, II	Health and Safety Officer	(412) 825-9639

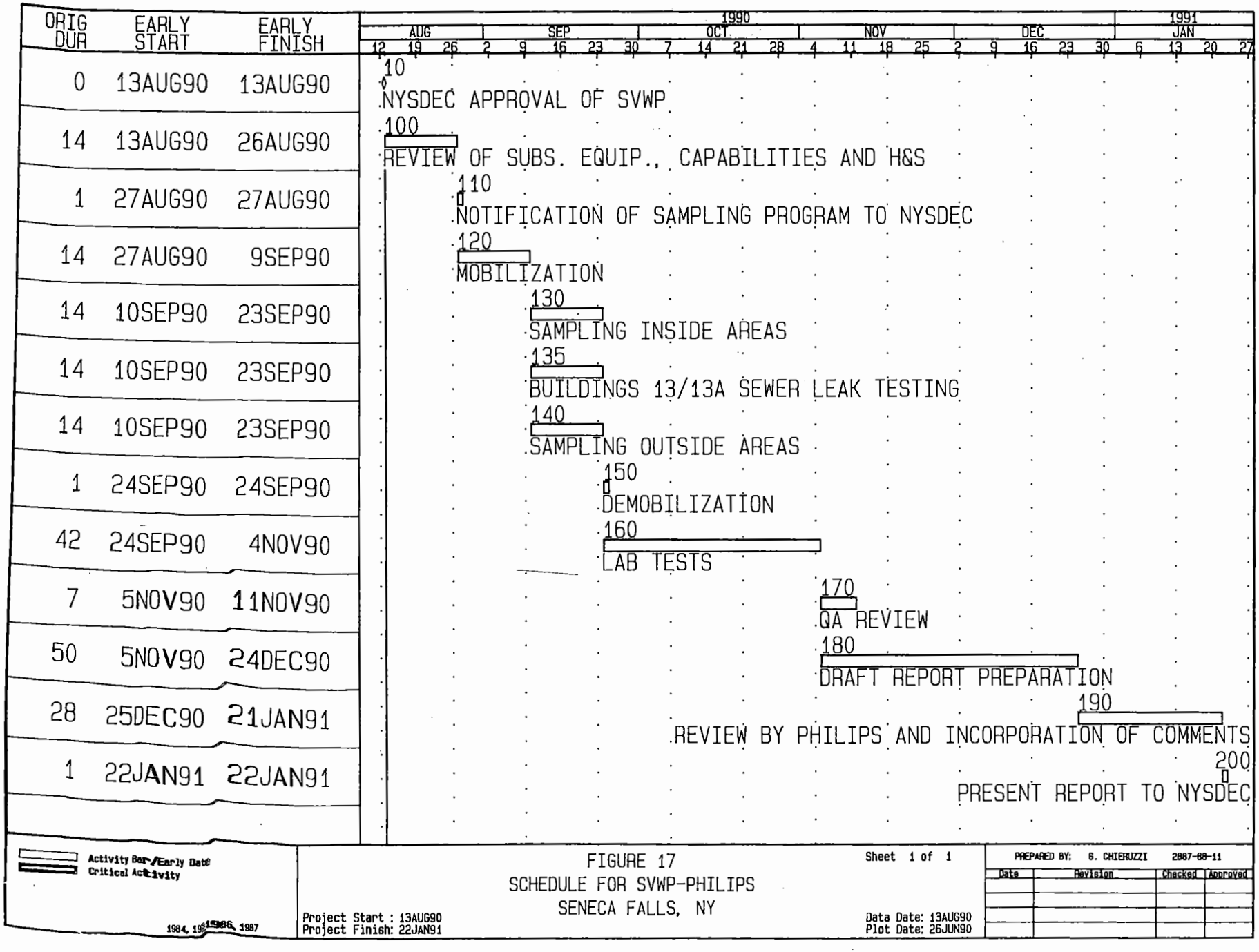
The Philips Project Manager is William M. Rupert at the Ottawa Ohio facility (419-523-4321).

Their assignments and responsibilities for this project are defined in the QAPjP. Any technical contact should be addressed to Mr. Henry Owoc unless the reason for contact specifically requires the attention of the Keystone personnel listed above.

8.1.2 Schedule

After final approval of the SVWP by the NYSDEC, the field activities would commence within 30 days and would be completed over a two to three week period. The proposed schedule does not take into consideration additional NYSDEC requests for field activities or potential delays beyond Keystone's control.

A draft report presenting the findings from this SVWP assessment will be submitted to Philips approximately three months following the completion of all field activities. Allowing another month for Philips review and incorporation of comments, the final report will then be submitted to the NYSDEC. The SVWP tasks and benchmarks are summarized in Figure 17.


ORIG DUR
EARLY START
EARLY FINISH
1990
1991
AUG
SEP
OCT
NOV
DEC
JAN
12 19 26 2 9 16 23 30 7 14 21 28 4 11 18 25 2 9 16 23 30 6 13 20 27
0 13AUG90 13AUG90
10
NYSDEC APPROVAL OF SVWP
14 13AUG90 26AUG90
100
REVIEW OF SUBS. EQUIP., CAPABILITIES AND H&S
1 27AUG90 27AUG90
110
NOTIFICATION OF SAMPLING PROGRAM TO NYSDEC
14 27AUG90 9SEP90
120
MOBILIZATION
14 10SEP90 23SEP90
130
SAMPLING INSIDE AREAS
14 10SEP90 23SEP90
135
BUILDINGS 13/13A SEWER LEAK TESTING
14 10SEP90 23SEP90
140
SAMPLING OUTSIDE AREAS
1 24SEP90 24SEP90
150
DEMOBILIZATION
42 24SEP90 4NOV90
160
LAB TESTS
7 5NOV90 11NOV90
170
QA REVIEW
50 5NOV90 24DEC90
180
DRAFT REPORT PREPARATION
28 25DEC90 21JAN91
190
REVIEW BY PHILIPS AND INCORPORATION OF COMMENTS
1 22JAN91 22JAN91
200
PRESENT REPORT TO NYSDEC
Activity Bar/Early Date
Critical Activity
1984, 1985, 1987
FIGURE 17
SCHEDULE FOR SVWP-PHILIPS
SENECA FALLS, NY
Sheet 1 of 1
Project Start : 13AUG90
Project Finish: 22JAN91
Data Date: 13AUG90
Plot Date: 26JUN90
PREPARED BY: G. CHIERUZZI 2887-68-11
Date
Revision
Checked
Approved

8.2 Data Management

Data to be managed for this SVWP assessment and the subsequent evaluation is technical or analytical information that is either generated by, or the result of, specific SVWP tasks and information that must be tracked to monitor, manage, and document the actual performance of the SVWP tasks.

The data generated during this SVWP assessment will require certain procedures regarding documentation. These procedures will ensure that the field investigation and data collection activities are properly conducted, that data reduction, validation, and reporting techniques are controlled, that data collected are representative of the setting, that proper sampling techniques are implemented, and the use and manipulation of obtained data is evaluated and presented in an informative and useful manner. These documentation procedures and the correct procedures for completing these individual tasks are detailed in the QAPjP.

8.3 Reporting Terms

A draft report will be submitted to Philips which will document field activities, present the results of the soil boring and sampling and sewer leak testing. This report will also identify data gaps, if they exist. If a release is determined during the SVWP assessment, the release will be investigated as an addition to the RFI program.