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## 1.0 INTRODUCTION

This document is prepared in support of the 100 Area Environmental Restoration activity at the U.S. Department of Energy's Hanford Site near Richland, Washington. It provides a technical baseline of waste sites located in the vicinity of the White Bluffs township. The report is based on an environmental investigation undertaken by the History Office in support of the Environmental Restoration Engineering function and on a review and evaluation of numerous Hanford Site current and historical reports, drawings, and photographs, supplemented by site inspections and interviews with current and former employees. No intrusive field investigation or sampling was conducted. All coordinate locations are approximate locations derived from maps, photos, and field estimations. All units of measure are shown as they appear in the reference documents.

This report describes waste sites that include cribs, pits, ditches, solid waste burial grounds, septic systems, and drain fields. Each waste site is described separately. Photographs and maps are included as Appendix A.

## 2.0 BACKGROUND

### 2.1 GENERAL DESCRIPTION AND HISTORY

Prior to acquisition of the Hanford Site for the Manhattan Project, there were three small communities located within the boundaries of the site. The small town of White Bluffs was one of these.

The town of White Bluffs was a small agricultural-based community of 500 persons (Tri-City-Herald 1968). It was relocated at least twice during its history. It was first located on the east side of the Columbia River and was primarily a trading post on the route used by trappers and native populations. It was then relocated on the west bank of the river until a flood in the early 1900's. After the flood waters receded the townsite was relocated to its present location, which is adjacent to Route 2 North just inland of the Columbia River on the Hanford Site (Parker 1979). At the turn of the century White Bluffs had "settled down to a prosperous living from the rich irrigated lands and ... one of the longest growing seasons in the West" (Tri-City-Herald 1968).

Conversation with several former residents of the White Bluffs area indicates that domestic wastes are most likely to be found randomly throughout the site near homestead sites. These wastes are likely to consist of cans, bottles, and other solid wastes that could not be recycled for use in some way.

Generally, these domestic wastes were disposed of in open pits or natural depressions convenient to the homeowner to the rear of the homesite. Most if not all flammable wastes were burned. Food scraps were usually fed to domestic animals rather than disposed of in a landfill.

In 1943, when the site was taken by the U.S. Army Corp of Engineers to be used for the Manhattan Project, residents were given 30 days or less to vacate. Those residents that hired on as project

employees were allowed to remain in their homes until construction activities were nearing completion. The remaining structures were either converted for use or demolished, "some of the homes were in such a state of disrepair that they had no practical use" (Pioneer Association 1982, Wahlen 1991).

Nearly all of the residences of White Bluffs were located on the east side of the main railway and Railroad Ave. All of the facilities on the west side of the railway and on the north and south sides of Federal Ave. were commercial or industrial facilities (Dupont Drawing C-3316/War Dept. Drawing HAISSRE/E.I. De Nemours Dupont and Company 1945). As a result of this already established town layout, the bulk of the warehouse and temporary construction facilities were located to the west of the townsite. Available photographs and maps are included as Appendix A.

In the early 1970's, a plant-wide safety and housekeeping evaluation focused on farm remnants and deteriorating production facilities. As a result of this evaluation, a program was developed to eliminate these "public nuisances." The Cold Storage and the pre-Manhattan Engineering District gas station facilities at White Bluffs were demolished and buried in place during 1975. Potentially, any underground storage tanks at the gas station site remain in place. Former employees report that the gas station was located on the east side of Railroad Ave. and on the north side of Federal Ave. Water wells located in the vicinity were also "covered." Several of the facilities at White Bluffs had been sold as salvage and/or demolished several years prior to this effort (Wahlen 1991).

In the mid- to late 1980's, a project was completed to identify waste sites that were relatively unknown at the time. Several former employees were interviewed for this effort and the findings were documented as the 3004 Historical Review. This review document was a primary source of information for this report and is included as Appendix B.

### **3.0 PRIMARY AREA OF STUDY**

Within the assigned area of emphasis for this study, which is primarily southwest of Federal Ave. and west of Route 2 North, the following sites were identified. These sites were found by a study of available literature and by limited site surveillance.

#### **3.1 WHITE BLUFFS CENTRAL SHOPS MAJOR CONSTRUCTION FACILITIES**

The White Bluffs Central Shops Major Construction facilities were typical construction shops and warehouses. Facilities were located on both side of Federal Ave. Streets were either blacktop, oiled gravel, or gravel. Waste oils were used to surface roadways and/or dumped into pits. Garbage was disposed of at the site by the utilization of pre-Hanford Project dump sites. This area includes the Waste Acid Pickling Cribs, septic disposal, and disposal of solvents, oils, and grease from the shops and garage operations. Facilities at the site were in operation from 1943 to 1952 (Appendix B). Further discussion is included in Section 4.0 of this report concerning facilities and waste sites located north of Federal Ave.

### **3.2 PICKLING ACID CRIBS**

The Pickling Acid Cribs were constructed by Atkins and Jones Construction Company. These cribs were operated from 1943 to 1945 and received an estimated 37,853 L of nitric and hydrofluoric acid solutions. The site consists of two cribs located side by side. The west crib is about 200 ft by 45 ft wide. The east crib is about 225 ft by 50 ft wide. Pipes extrude from the surface at about 10-ft intervals. These threaded pipes once had sprinkler-type distribution heads attached. In a 1948 aerial photograph it can clearly be seen that the distributed liquids at these cribs formed a circle around each of these distribution pipes. The cribs are located about 500 yd south of the ice plant site and about 300 yd east of Federal Ave (WIDS database sheet, Appendix C).

Reportedly, the site received "thousands of gallons" of sulfuric and nitric acid solutions. Generally the acid would have been neutralized prior to disposal, but may not have been completely neutralized prior to disposal. The trenches are located just east of the old White Bluffs town dump. Potentially, acid wastes may have been processed through a septic tank system located across the street from the ice plant (Appendix B), although this is unlikely as a ground penetrating radar survey conducted in 1992 indicated that the pipes to the cribs were independent of the septic system.

### **3.3 WHITE BLUFFS CITY DUMP**

A White Bluffs City Dump was located about 100 yd east of the main grid power line, between Federal Ave and Route 2 North. It received wastes that included industrial and commercial wastes, domestic wastes, cans, bottles, and farm debris. It operated from an unknown date to 1944 (Appendixes B and C).

### **3.4 SPARE PARTS BURN PIT**

The Spare Parts Burn Pit was a dug-out pit that is located under the present Bonneville Powerline about 100 yd southeast of Federal Ave and about 300 yd southwest of Route 2 North. The site was used for the disposal of industrial/commercial wastes, waste oils and solvents, and other flammable materials. It is known to have been in operation from 1943 to 1948 (Appendix B).

### **3.5 SHALLOW DEPRESSION**

A shallow depression is located southeast of the Pickling Acid Crib site. This site appears as a natural depression. The northwest corner of the site is crossed by a powerline and dirt road. In the northeast corner of the site, a ditch terminates at a pile of concrete debris within the depression. Additionally, it appears that the southeast corner of the Pickling Acid Crib may have washed out and overflowed to this site. The vegetation within the depression appears to be stressed. The purpose of the ditch is unknown. It can clearly be seen in a 1948 aerial photograph of the site. There is a 6-in carbon steel pipe located in the bottom of the ditch to the east of the site. This ditch seems to terminate just southwest of the Septic Tanks near the Ice House, potentially the shallow depression was used as a surface drain field for septic waste water.

### **3.6 COAL ASH PILES**

Several small coal ash piles are located northeast of the Shallow Depression.

### **3.7 LARGE, FENCED DEPRESSION**

A large, fenced depression is located south and west of the Pickling Acid Cribs. It appears to pre-date Hanford Project activities. The purpose of this fenced area is unknown, but it appears to have been a reservoir that may have been used for irrigation purposes. The area is littered with broken glass and glass insulator material.

### **3.8 FARM SITE**

A farm site is located farther to the west of the site discussed in Section 3.7, at the top of the hill. Debris at the farm site indicate that it was occupied by the army for a period of time. The building foundations remain open and could be considered a hazard. The farmsite is littered with waste debris. The wastes include old battery cores, broken glass, concrete, cans, bottles, wire, machinery parts, and other domestic wastes.

### **3.9 BURN SITE AND PAINT DISPOSAL AREA**

A Burn Site and Paint Disposal area was located adjacent to Route 2 North at the southeasternmost part of the equipment storage area. There are several wooden decks and evidence of burning. There is also evidence of paint disposal on the surface and several paint cans on the ground surface. The entire area is littered with burned wood, partly burned roofing materials, nails, broken glass, and metallic debris.

### **3.10 WASTE DISPOSAL TRENCHES**

Two Waste Disposal Trenches are located directly south of the Pickling Acid Crib and west of Route 2 North. Both of these trenches can clearly be seen in a 1948 aerial photograph. The smaller of the two sites still appears as an open trench with industrial debris filling about a third of the site. These wastes included evidence of oil or chemical dumping, used railroad ties, metallic equipment, and domestic wastes. The larger of the two sites has been backfilled or covered with wind-blown sand. At the surface is evidence of industrial wastes such as piping, plumbing fixtures, and other metallic debris. In the area of these two sites there are several piles of used railroad ties, broken vitrified clay pipe, concrete pipe, 12-in. diameter, 20-ft-long spiral welded pipe, plumbing fixtures, and degraded asbestos insulation.

### **3.11 SMALL SUBSIDENCE**

A Small Subsidence can be found southwest of Federal Ave and Route 2 North, near an earthen loading dock visible from Route 2 North. There appears to be a subsurface concrete structure that is about 4 ft across. Soils around the structure have subsided into its underground void space.

### **3.12 TEMPORARY BUILDING SITE**

A Temporary Building Site is located adjacent to the loading dock mentioned in Section 3.11 of this report. The site appears to have been covered with coal ash. On the southern end of the site the soil appears to have been saturated with oil or other chemical contaminants.

### **3.13 OIL/OIL FILTER DUMP SITE**

An Oil/Oil Filter Dump site is also located near the earthen loading dock mentioned in Section 3.11 of this report. This small isolated dump site contains several used oil filters and an area about 3 ft in diameter of oil saturated soil.

## **4.0 OTHER AREAS OF STUDY**

Facilities of note located outside of the specific emphasis area of study for this report are described as follows.

### **4.1 AMERICAN PIPE COMPANY FACILITIES**

Located to the northwest of the townsite were the American Pipe Company facilities (Dupont Drawing C-3316). These facilities are also identified as the Stephensen's Cement Pipe factory (Pioneer Association 1982). No known hazardous materials were used at the facility, but there is potential for lubricant materials related to equipment maintenance and repair that may have been disposed of near the site. Field survey work for this report found several spots of what appeared to be oil-contaminated soil near the site of these facilities. Additionally, two small wooden structures were located that appear to be about 2 ft deep and about 2 ft square, the tops being flush with the ground. One of these wooden structures is filled with sawdust.

### **4.2 SPECIAL FABRICATION SHOP AND WAREHOUSE**

Located northwest of the pipe plant was the Special Fabrication Shop and Warehouse. Adjacent to the Special Fabrication Shop and Warehouse there was a small Boiler House (Dupont Drawing C-3316). Potentially, both of these sites may contain chemical contamination from cutting oils, solvents, and other chemicals used at these types of facilities.

### **4.3 CONSTRUCTION CONTRACTOR SHOP LANDFILL**

The Construction Contractor Shop Landfill, located in the vicinity of the American Pipe Company and the Special Fabrication Shop and Warehouse, is reportedly a dump site for carbon tetrachloride, oils, and other solvents and cleaning agents. In the mid- to late 1980's the site responded solidly to a metal-detector survey of the area. This site and its wastes were identified by a former employee, who co-authored Appendix B. It is known to have operated from 1943 to 1948. This site may be at or near the J.A. Jones 2 Burial Ground described in Section 4.4 of this report.

### **4.4 J.A. JONES 2 BURIAL GROUND**

The J.A. Jones 2 Burial Ground was located northwest of the White Bluffs townsite adjacent to the 100-H Reactor access road. The burial ground was small, measuring 30 ft square and 15 ft deep. This inactive, hazardous solid waste burial ground operated from 1948 to 1955. It received minor construction equipment and other wastes that included wood scraps, concrete debris, and metallic wastes. The site was exhumed in 1971, the contents were removed to the 200 Area Burial Grounds and the site backfilled to grade (Appendix C).

### **4.5 WHITE BLUFFS CENTRAL SHOPS MINOR CONSTRUCTION**

The White Bluffs Central Shops Minor Construction was located north of Route 2 North and adjacent to the east H-Area road near a concrete loading dock and tank-truck water-filling station. The site consisted of typical temporary construction shops and offices. Wastes received at the site included industrial scrap and some radioactive waste scrap. To the knowledge of the reference authors, the radioactive materials had been removed (Appendix B). The site included the Construction Contractor Shop Landfill pit in which solid wastes were disposed of and which is thought to contain only "wastes" (nonradioactive). The pit has been backfilled.

### **4.6 WHITE BLUFFS AREA**

The entire White Bluffs area is littered with broken glass, cans, metal objects (pipe, stock material, scrap and metal shavings), and miscellaneous debris. These debris sites are primarily to the north of the townsite near the Special Fabrications Shop and the American Pipe Company site locations.

### **4.7 EAST WHITE BLUFFS CITY DUMP SITES**

There are two known East White Bluffs City Dump sites located near the White Bluffs Ferry Landing. The first is located about 100 yd up river from buildings located at the present boat launch. The second is about 100 yd east of the present boat launch. These dump sites received wastes common to the time, which consisted of industrial wastes, cans, bottles and other domestic wastes. These dump sites were in operation from about 1900 to 1943.

#### **4.8 WHITE BLUFFS LANDFILL**

A third landfill is described as The White Bluffs Landfill which is located at the townsite, between Federal Ave and Route 2 North at Hanford Coordinates N49500 W36000. This inactive landfill operated from 1850 to 1943 and received hazardous solid wastes. Wastes received at the site included commercial and domestic wastes common to the time period. It was 125 ft long, 50 ft wide and 10 ft deep. The site was bulldozed and covered with clean soil (Appendix C).

#### **4.9 SPARE PARTS MACHINE SHOP LANDFILL**

The Spare Parts Machine Shop Landfill is located west of Federal Ave between White Bluffs and East White Bluffs and south of the Export Water line to the 100-F Area. This former gravel pit is horse-shoe shaped and has a telephone line running through the center of the site. It was used to dispose of metallic and other industrial wastes. Waste materials are scattered around the perimeter of the site.

#### **4.10 INSULATION WAREHOUSES**

There were two Insulation Warehouses located in the White Bluffs area, both in the northeast section of the townsite east of Railroad Ave. It is doubtful that these structures are of any environmental consequence, but they did contain asbestos materials that may be present in the soils beneath the sites. No evidence of asbestos contamination could be found during a limited field survey (Dupont Drawing C-3316).

#### **4.11 628-1 WHITE BLUFFS BURN PIT**

628-1 White Bluffs Burn Pit is located about 1,000 ft north of the Federal Ave/Route 2 North intersection at Hanford Coordinates N80900 W38450. The Hanford Coordinates for this site were determined by its proximity to Site Characterization Well #81-38. The site is covered with windblown sand and gravel, but appears to be an area of about a 1/4 acre. The vegetation in the area appeared to be stressed, indicating the potential for hazardous materials (Appendix C).

#### **4.12 EQUIPMENT WAREHOUSES AND STORAGE YARDS**

Equipment Warehouses and Storage Yards were located west of the townsite and north of Federal Ave. This massive storage area extends west to a wooden powerpole roadway and north to an east/west road in-line with the Special 105 Warehouses located northeast of White Bluffs and east of Route 2 North. There were several warehouse buildings scattered across the site, some of which are discussed in further detail in this report. The east boundary to the site is the main railway that runs in a northwest direction and separates the industrial area from the town of White Bluffs. The entire area has a graveled surface and is littered with debris that consist of metallic, glass, and isolated oil and paint wastes on the surface. Some building foundations and roadways can still be seen. The railroad tracks and ties to the westernmost rail spurs have been removed. To the west of

the site there are isolated dumping sites that consist of glass (light bulbs and beer bottles), drums containing tar, and miscellaneous metallic debris. Most of these can be clearly seen from the powerline access road.

#### 4.13 FUMIGATION BUILDING

The Fumigation Building was located west of the railroad tracks, east of Commercial Ave. and in line with Lincoln St. This building was a small wooden structure. Fumigation Buildings were typically in a fenced area and located near personnel living areas (E.I. De Nemours Dupont and Company 1945).

#### 4.14 AUTOMOTIVE REPAIR SHOP

An Automotive Repair shop may have been located adjacent to one of the access rail spurs to the equipment warehouse and storage area west of the township. At the site, there is evidence of oil and battery acid dumping. Numerous battery caps, gasket material, and oily soils are evident at the site.

### 5.0 REFERENCES

- Denton, L. and B. Buslach, 1987, *3004 Historical Review*, Westinghouse Hanford Company, Richland, Washington.
- DOE-RL, 1993, DRAFT *White Bluffs Pickling Acid Cribs*, DOE/RL-93-48, Rev. 0, U.S. Department of Energy, Richland Operations Office, Richland, Washington.
- E.I. Dupont De Nemours and Company, Inc., 1945, *Construction Hanford Engineer Works U.S. Contract No. W-7412-ENG-1 Dupont Project 9536 History Of The Project Volume II*, HW-10970, Wilmington, Delaware.
- Parker, M. B., 1979, *Tales of Richland, White Bluffs and Hanford 1805 Through 1943 Before the Atomic Reserve*, Ye Galleon Press, Fairfield, Washington.
- Pioneer Association, 1982, *Family Histories from Hanford and White Bluffs, WA Summer 1982*, The White Bluffs Hanford Pioneer Association, DOE Reading Room, Richland, Washington.
- Tri-City-Herald, 1968, "White Bluffs was Killed by Fast Rush of Progress," Kennewick, Washington.
- Wahlen, R. K., 1991, *Summary of the Hanford Site Decontamination, Decommissioning, and Cleanup FY 1974 through FY 1990*, WHC-EP-0478, Westinghouse Hanford Company, Richland, Washington.

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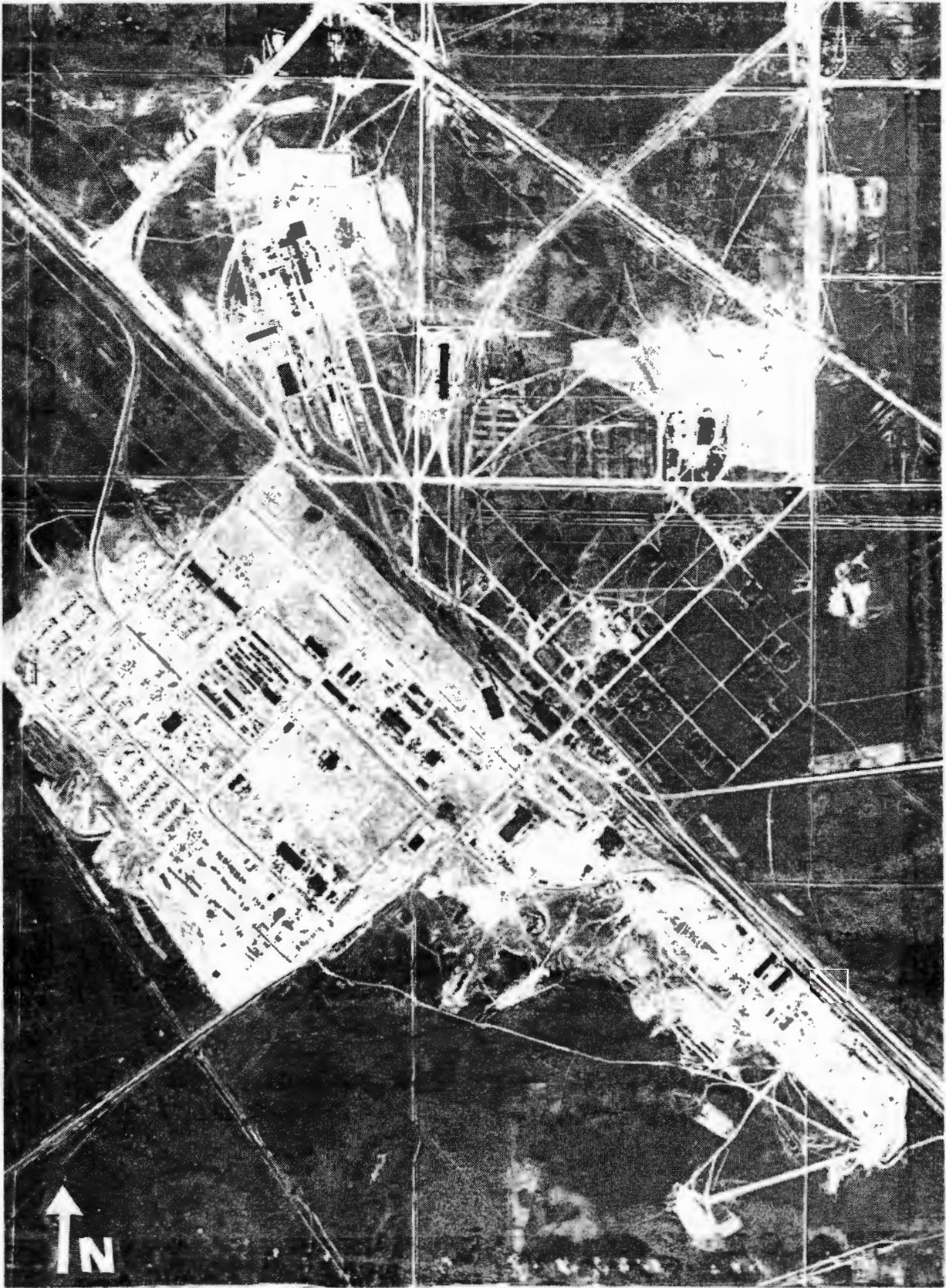
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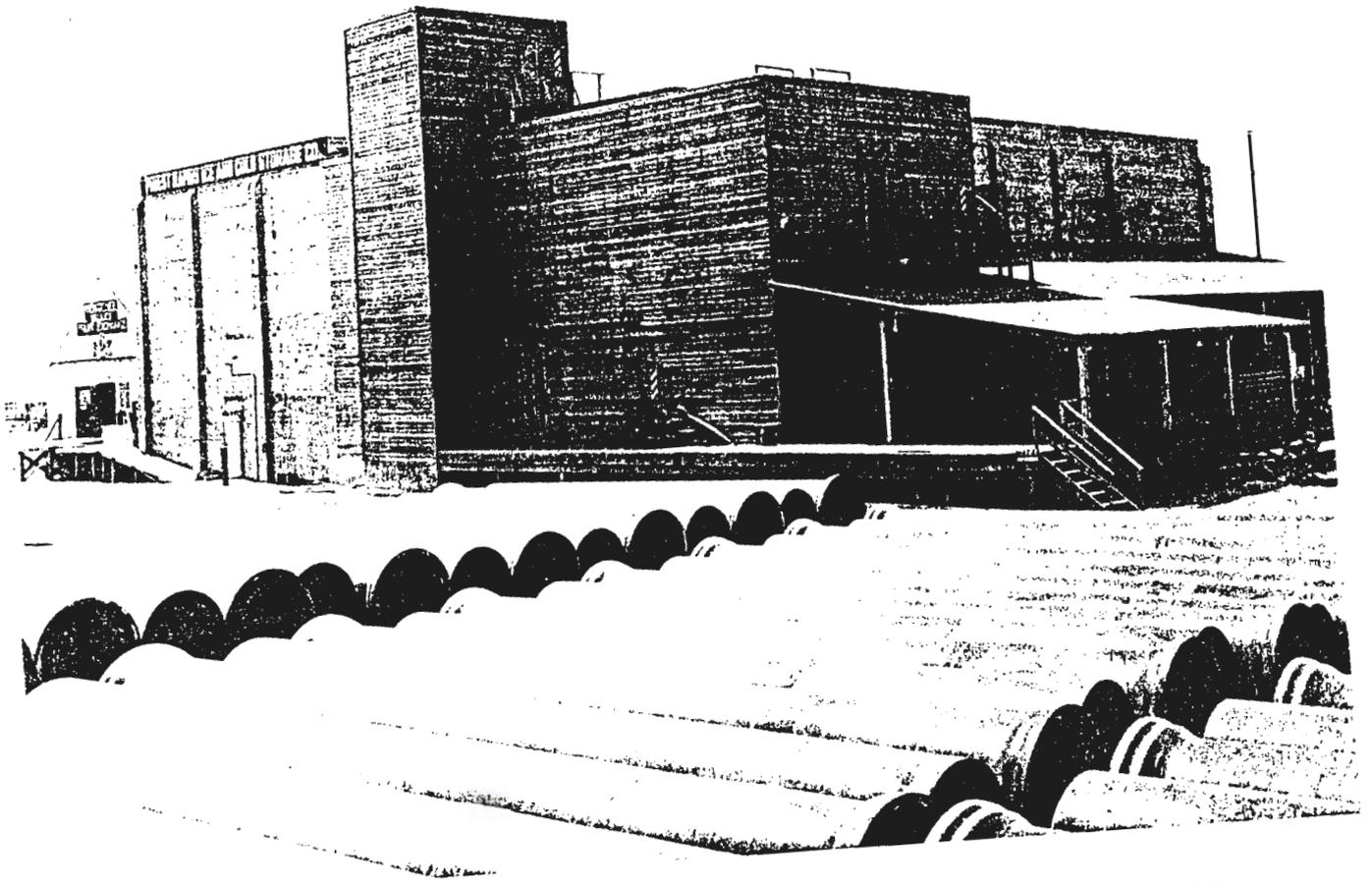
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**APPENDIX A**  
**PHOTOGRAPHS/MAPS**

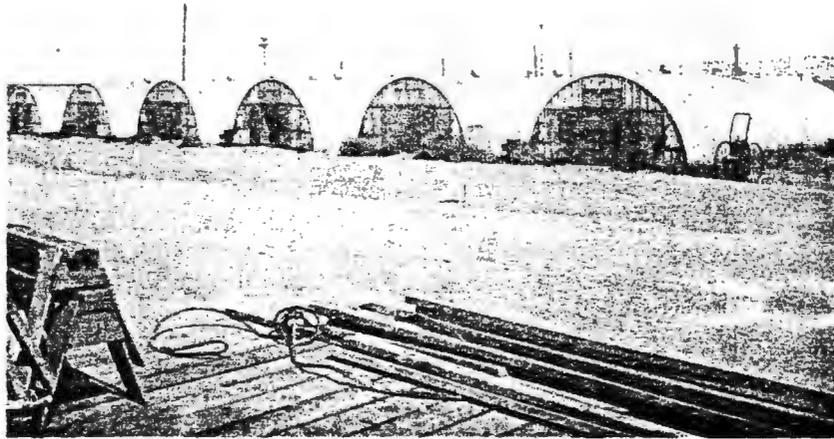




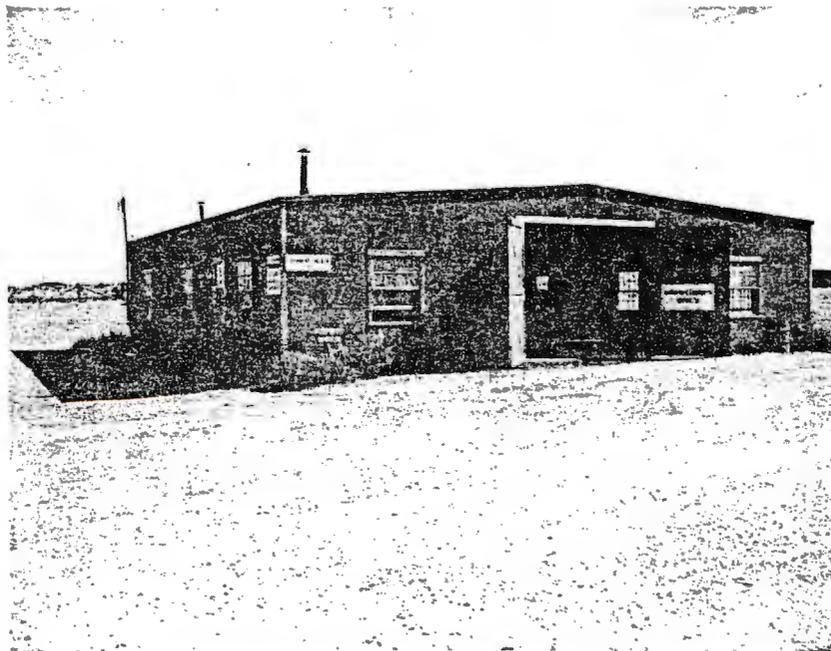
1948 Aerial, White Bluffs Townsite/Area.



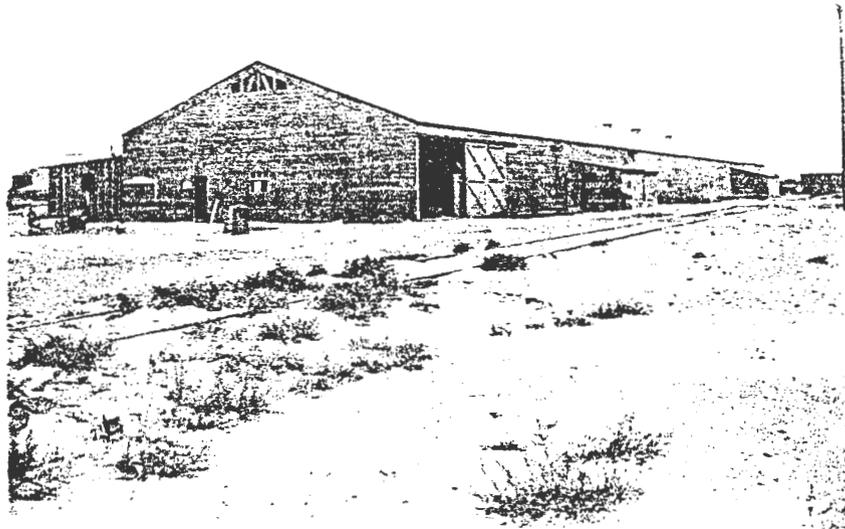
GC-40 - PRIEST RAPIDS ICE & COLD STORAGE PLANT  
Looking Southeast



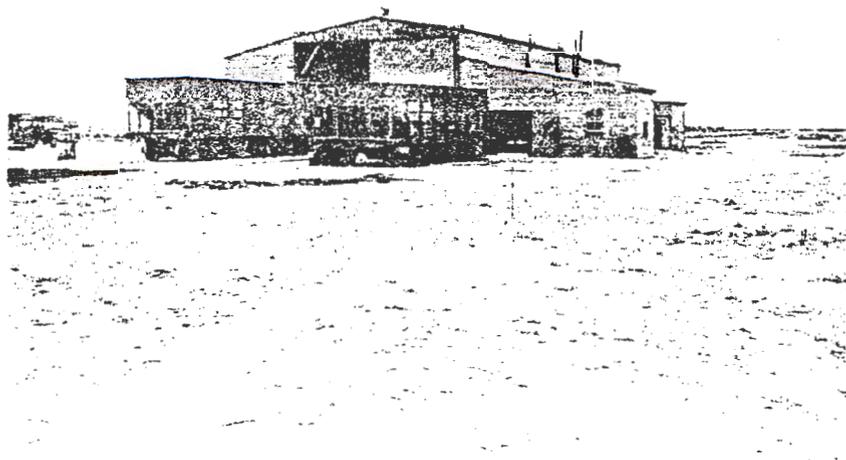
TC-10 - STORAGE HUTS - SALVAGE YARD  
Looking Southwest



TC-10 - SALVAGE SUPERVISOR'S OFFICE - GARAGE  
AND CHECK-IN BLDG AT SALVAGE YARD  
Looking Northwest



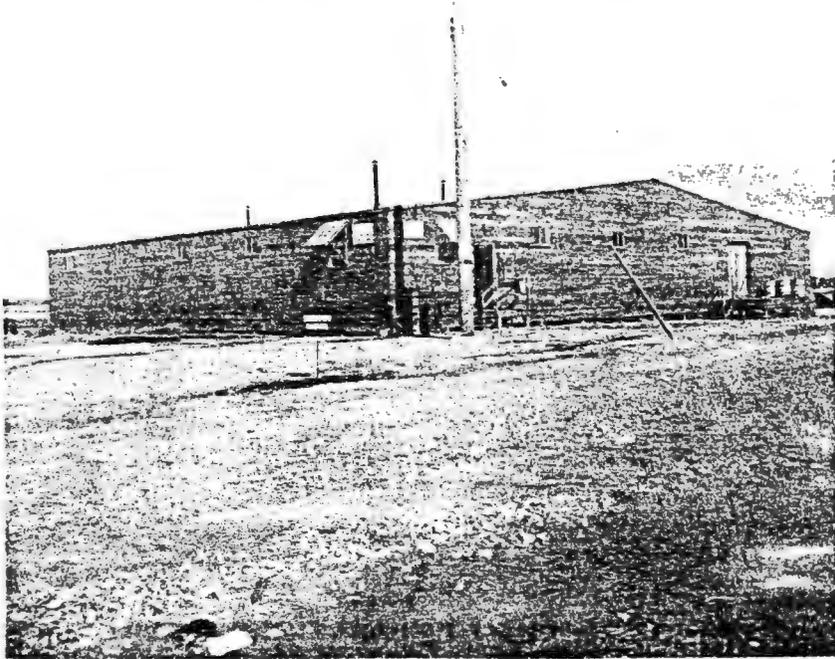
TC-10 - EXCESS EQUIPMENT STORAGE BUILDING  
(Bldg. purchased from American Pipe Co.)



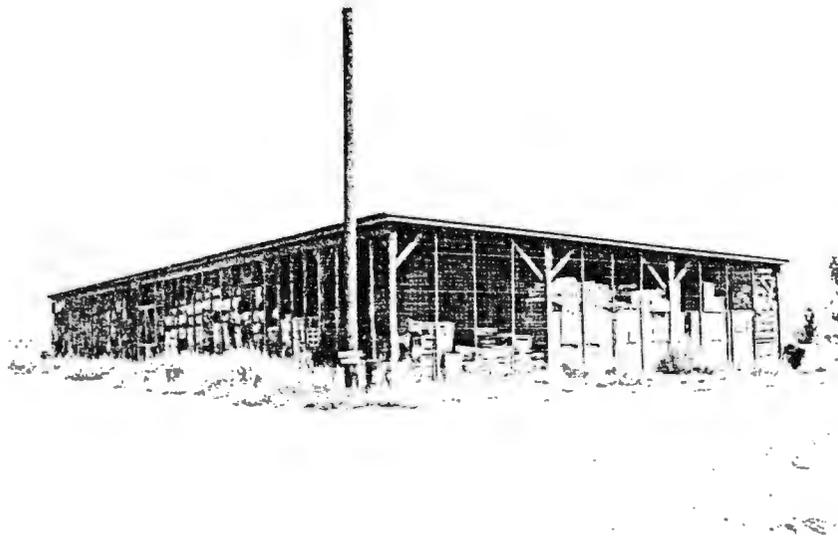
TC-10 - GONDOLA REPAIR SHOP  
Looking South

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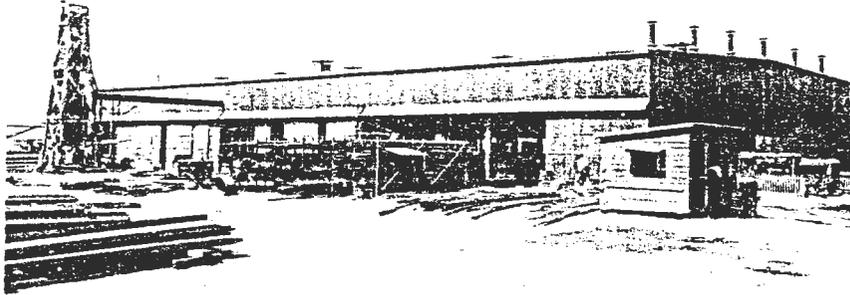
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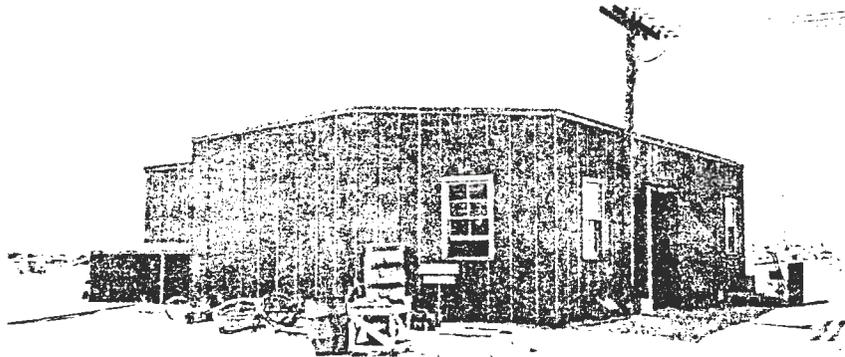
TC-10 - CENTRAL RECEIVING WAREHOUSE  
Looking Southwest



TC-10 - INSULATION WAREHOUSE  
Looking Northwest

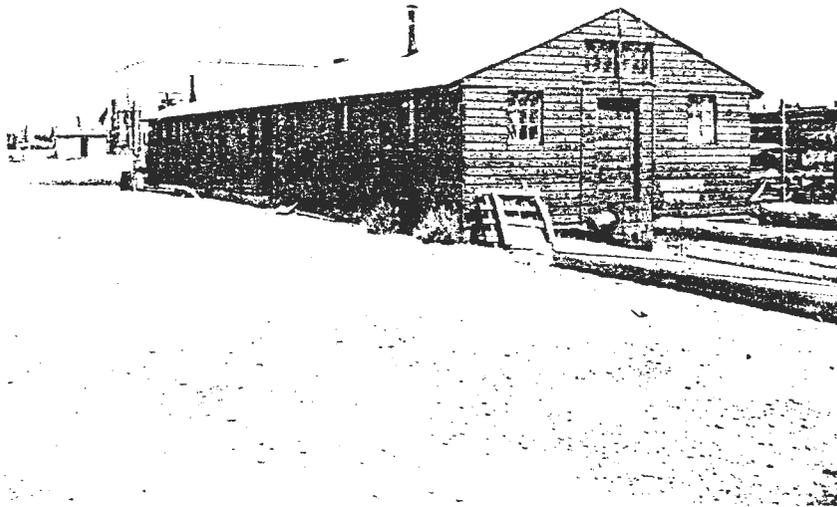


TC-10 - MAIN PIP FABRICATION SHOP  
AT WHITE BLUFFS  
Looking Northwest

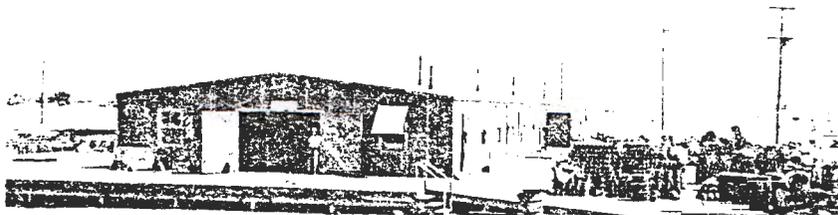


TC-10 - WELDING TEST SHOP  
Looking South





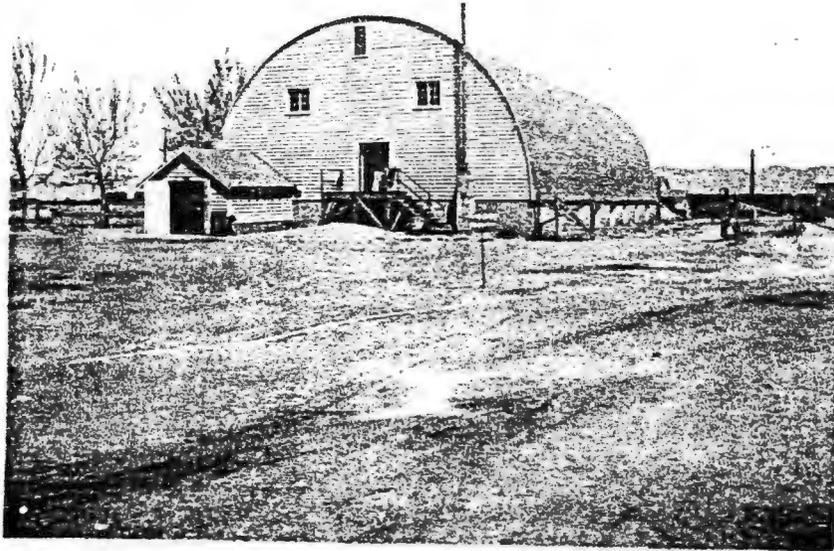
TC-10 - LINE YARD OFFICE at WHITE BLUFFS  
Looking West



TC-10 - MAIN PIPE WAREHOUSE  
Looking North

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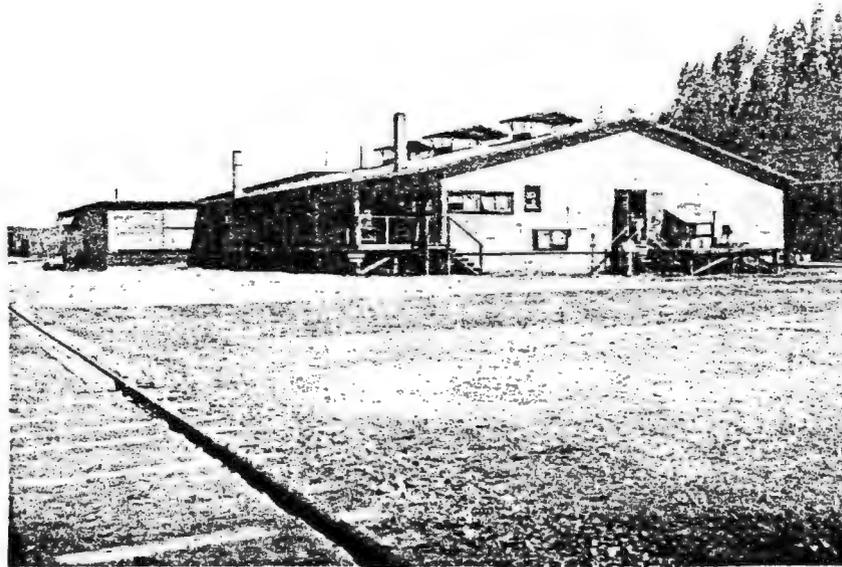
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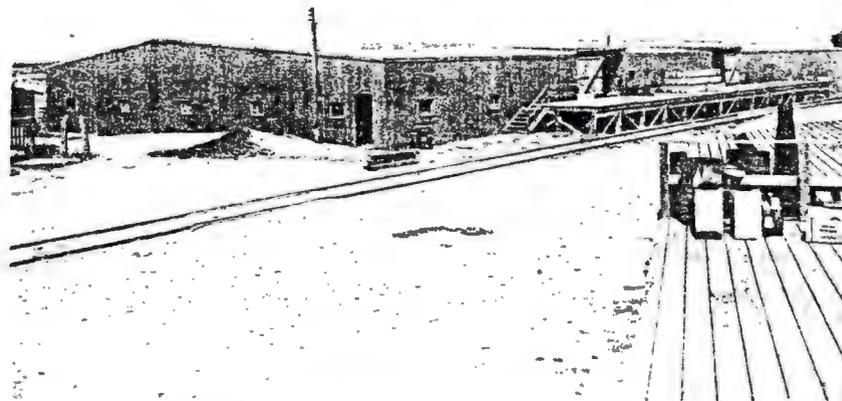
TC-10 - MS-9 WAREHOUSE AT WHITE BLUFFS  
Looking West



TC-10 - MS-9 WAREHOUSE AT WHITE BLUFFS  
Looking Northwest



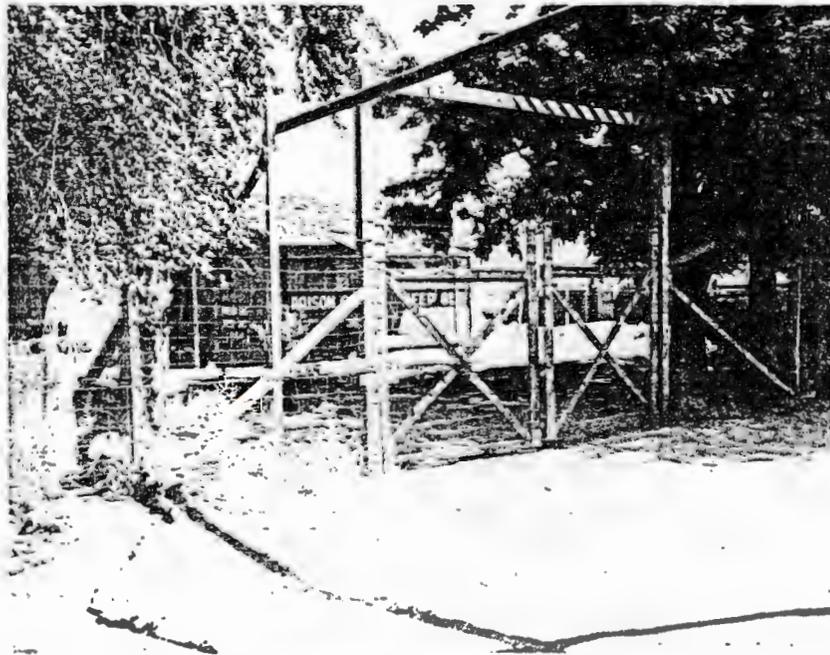
TC-10 - RECEIVING & MS WAREHOUSE AT WHITE BLUFFS  
Looking West



TC-10 - NAIL & SMALL TOOL WAREHOUSE  
AT WHITE BLUFFS  
Looking West



TC-1.11 - SUBCONTRACTORS' BADGE OFFICE  
Looking Southwest



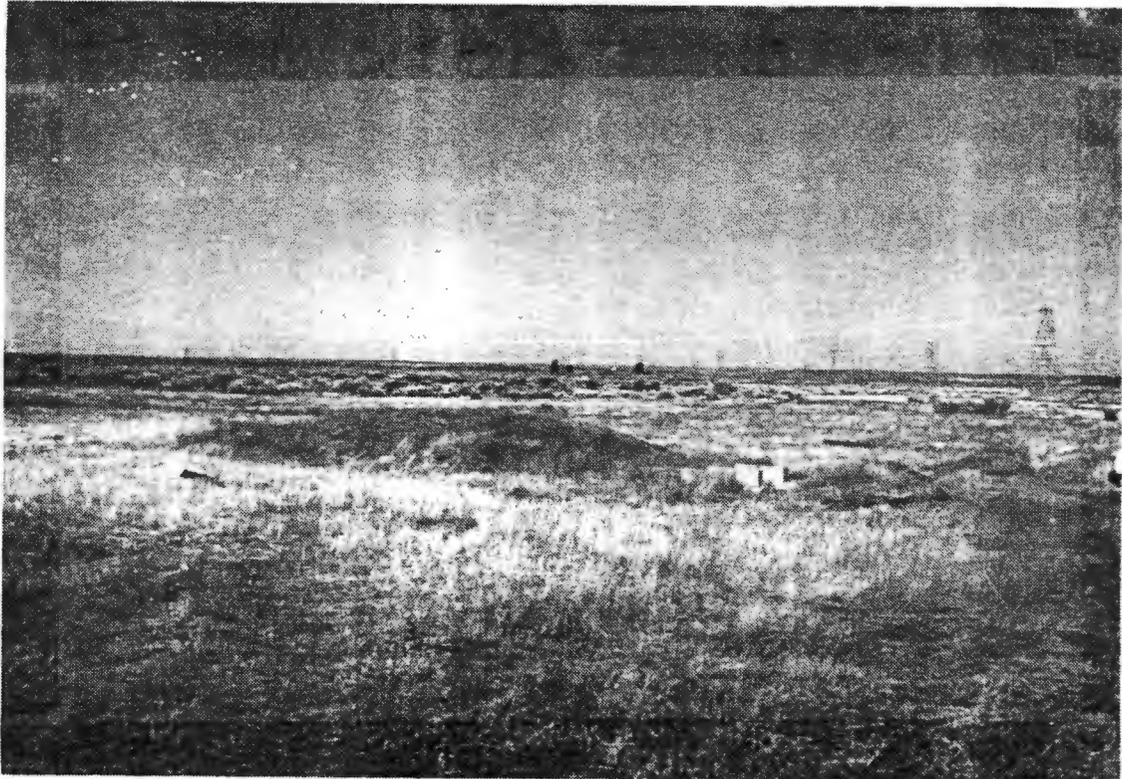
TC-1.6 - FUMIGATION CHAMBER  
Looking Northeast



Small Waste Disposal Trench, 1994



Degraded Asbestos Insulation and Spiral Welded Pipe, 1994



Earthen Loading Dock, 1994



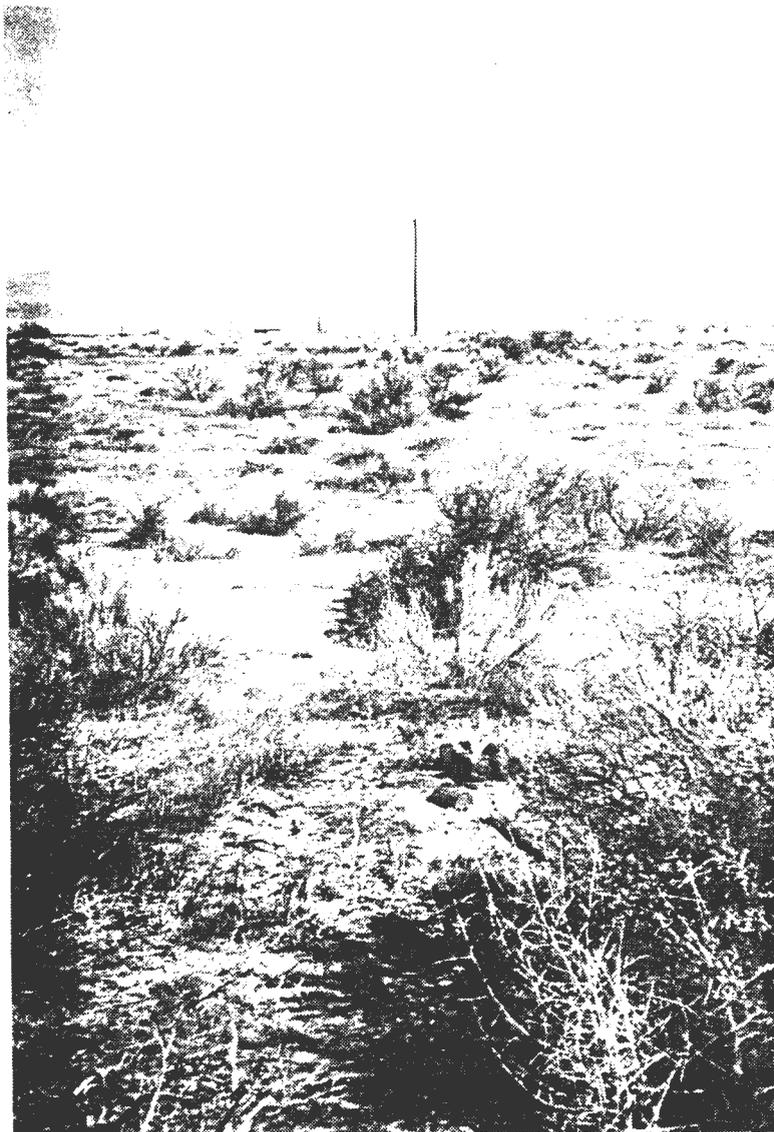
Temporary Building Site, 1994



Small Subsidence, 1994

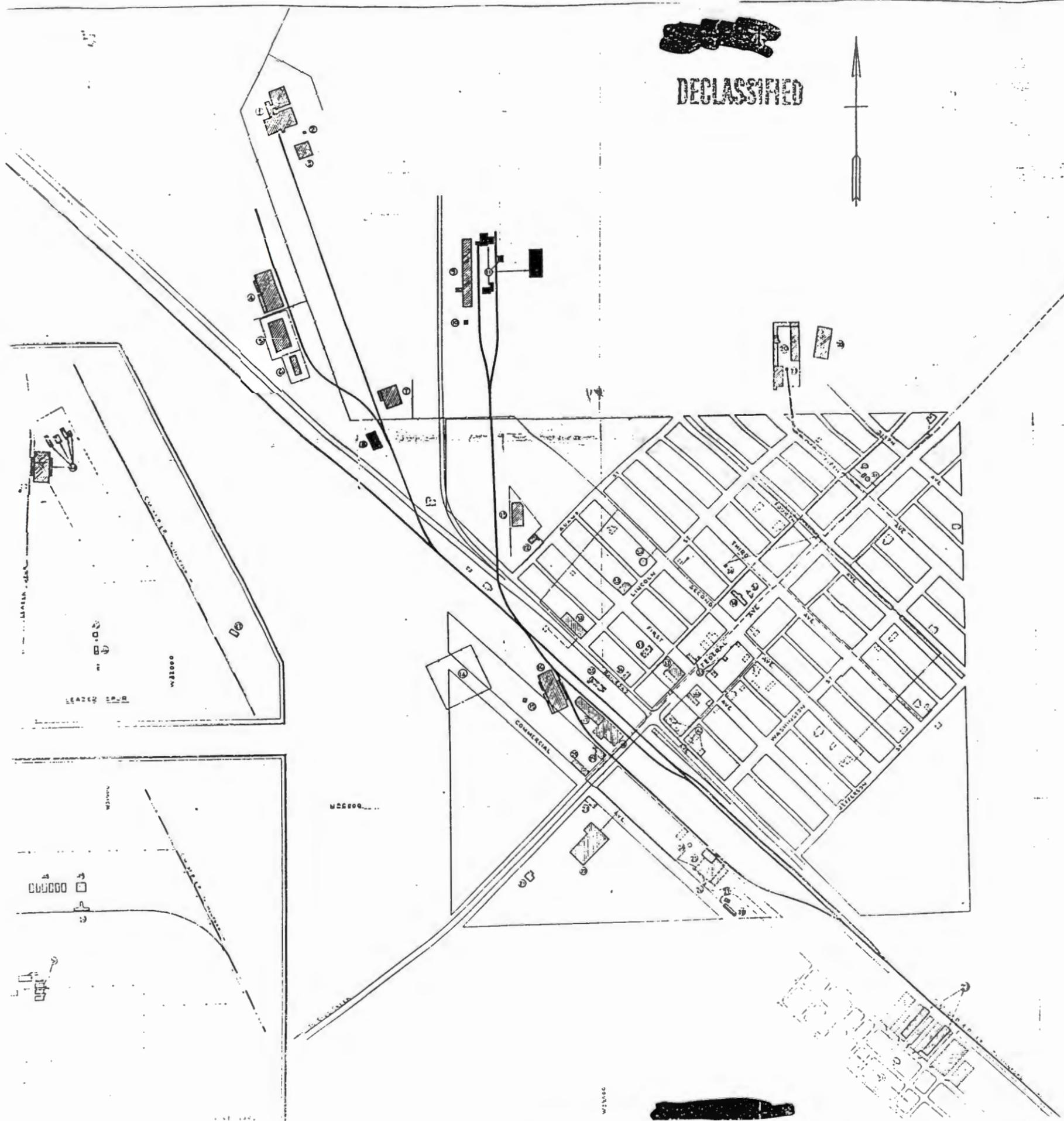


Small Subsidence Closeup, 1994



Oil/Oil Filter Dump Site, 1994

DECLASSIFIED



BUILDING DESCRIPTION

- 1 SPECIAL FABRICATION SHOP & WBS.
- 2 BOILER HOUSE
- 3 WAREHOUSE
- 4 100 VAREHOUSE - 100 AREAS
- 5 SPECIAL WBS. #1 - 105 AREAS
- 6 SPECIAL WBS. #2 - 105 AREAS
- 7 CENTRAL WAREHOUSE
- 8 INSULATING CONTRACTOR WBS.
- 9 EXCESS MATERIAL WBS.
- 10 EXCESS MATERIAL OFFICE
- 11 AMERICAN PIPE CO.
- 12 MECHANICAL EQUIPMENT WBS.
- 13 EQUIPMENT STORAGE PLATFORM
- 14 AUTOMOBILE CONTAINER YARD
- 15 FUMIGATION BUILDING
- 16 PAUL & SMALL TOOL WBS.
- 17 RECEIVING WBS. PLATFORM
- 18 RECEIVING WBS.
- 19 CARLOAD RECEIVING OFFICE
- 20 10-4 WAREHOUSE
- 21 PIPE TESTING SHOP
- 22 RACE PIPE FABRICATION SHOP
- 23 SUB-STATION
- 24 FILL
- 25 FRESH RAPID COLD STORAGE BLDG.
- 26 PUMP HOUSE
- 27 LINE MATERIAL STORAGE BLDG.
- 28 LEIS YARD OFFICE
- 29 PIPE STORAGE BLDG.
- 30 PIPE STORAGE PLATFORM
- 31 ELECTRICAL STORAGE & PIPE YARD
- 32 INSULATION WAREHOUSE
- 33 OFFICE EQUIPMENT WBS.
- 34 ELEVATED WATER STORAGE TANK
- 35 R.R. FREIGHT STATION
- 36 AIR & WELDING TOOL MAINT. BLDG.
- 37 FINE STATION
- 38 SERVICE DIVISION ENG. OFFICE
- 39 CIVIL, CHEMICAL & BASIC OFFICE
- 40 BOSTON STATION
- 41 CRACKED STORAGE TANK
- 42 STATISARY STORAGE WBS.
- 43 FINE INSPECTION OFFICE
  
- 44 10-21 WAREHOUSE
- 45 CRANE OPERATORS OFFICE
- 46 RIGGING LOFT
- 47 TRUCK DISPATCHERS OFFICE
  
- 48 1000' STORAGE BLDG.
- 49 SALVAGE CHECK-IN OFFICE
- 50 SALVAGE PLATFORM
- 51 SALVAGE PARTS WBS.
- 52 SALVAGE PARTS OFFICE

LEGEND

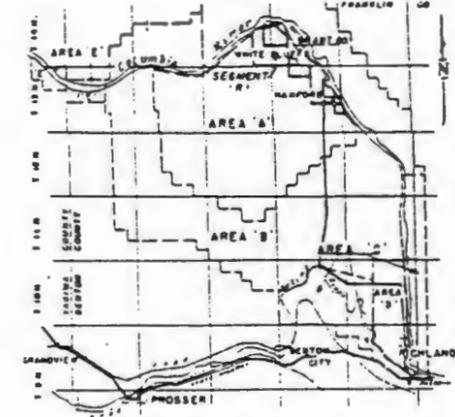
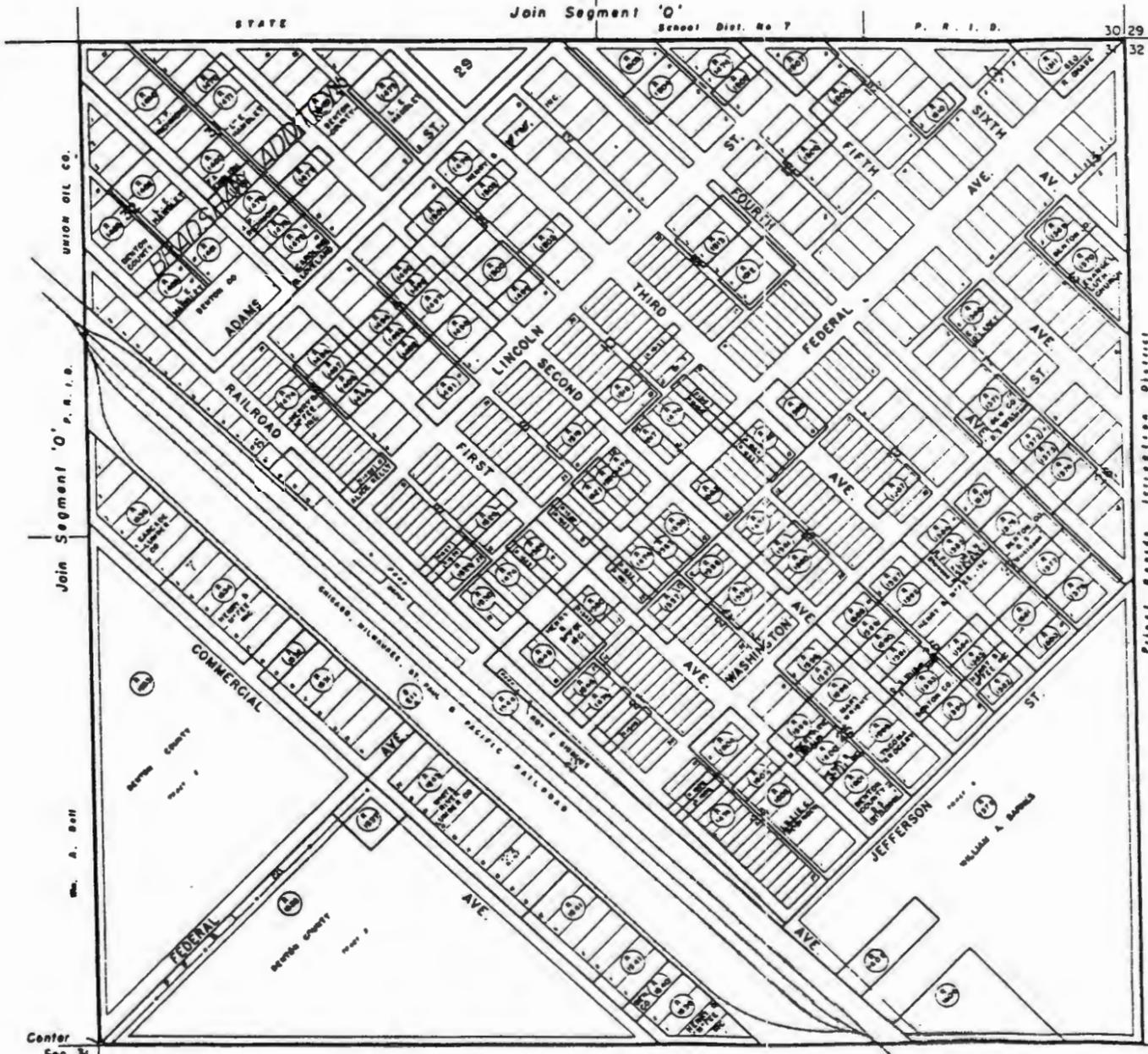
- EXISTING BUILDINGS
- EXISTING BUILDING USED
- BUILDINGS CONSTRUCTED BY DUPONT
- BUILDINGS CONSTRUCTED BY OUE CONTRACTORS
- PERMANENT RAILROADS
- T.C. RAILROADS
- T.C. WATER LINES
- T.C. FENCES
- EXISTING WATER LINES

REVISIONS	APPROVED FOR		BY DUPONT OR SUBCONTRACTOR MAINTENANCE ENGINEER WORKS	C-3316 DATE
	DATE	DATE		

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NE 1/4 OF SEC. 31, T. 14 N., R. 27 E., W.M.



TRACT	OWNER	ACRES	TRACT	OWNER	ACRES
R1468	J. P. RICHMOND	.37	R1540	BENTON COUNTY	.21
R1469	BENTON COUNTY	4.13	R1541	SANTA CRUZ FRUIT PACKING CO.	1.43
R1470	ADA S. HOWELL	.85			
R1471	L. E. HAMBLET	.17	R1543	WHITE RIVER LUMBER CO.	2.24
R1473	L. E. HAMBLET	.00	R1544	ROY E. GIBBONS	.34
R1474	HENRY B. WEFEE INC.	31.00	R1545	R. S. PETERSON	.45
R1475	CAROLINE D. LOVELAND	.41	R1546	PAUL SCHICKA	.22
R1476	A. S. WEFEE	.17	R1547	M. COLE	.09
R1477	MARY E. REAL ET AL.	.17	R1548	HARRY KELLER	.36
R1478	J. P. RICHMOND	.33	R1549	HENRY B. WEFEE INC.	.23
R1479	BENTON COUNTY	.34	R1551	M. F. O'BRIEN HEIRS	.23
R1480	F. A. ENGLISH	.17	R1552	ALICE KELLY	.08
R1481	BENTON COUNTY	1.84	R1553	C. MARC MILLER	.20
R1482	L. E. HAMBLET	.88	R1554	HARRY KELLER	.33
R1483	BENTON COUNTY	1.60	R1555	WHITE BLUFFS & COLUMBIA RIVER	.10
R1484	WHITE BLUFF INVESTMENT CO.	.17		TELEPHONE COMPANY	.80
R1485	L. E. HAMBLET	.17	R1557	W. J. JENKINS	.22
R1486	OSCAR SWANSON	.17	R1558	ETHEL REMLINGER	.34
R1487	WILE ROACH EST. Fred Schuyler	.17	R1560	M. GERTRUDE BRAUN	.27
R1488	OSCAR SWANSON	.17	R1561	FRANK J. DONOHAN S. R. Donohans	.18
R1489	ALICE KELLY	.18	R1562	CAROLINE D. LOVELAND	.38
R1491	EDMUND ANDERSON	.27	R1563	BENTON COUNTY	.10
R1492	EDMUND ANDERSON	.17	R1564	URSULA DONOHAN	.10
R1493	HENRY B. WEFEE INC.	.17	R1565	M. F. O'BRIEN HEIRS	.33
R1494	M. F. O'BRIEN HEIRS	.17	R1566	SIOBHAN D. JOHNSON	.32
R1495	M. F. O'BRIEN HEIRS	.17	R1567	FLORA M. STEVENS	.18
R1496	EDMUND ANDERSON	.17	R1568	E. J. CLAREY	.39
R1497	M. GERTRUDE BRAUN	.34	R1569	BENTON COUNTY	.18
R1498	EDMUND ANDERSON	.34	R1570	EVANGELICAL LUTHERAN CHURCH	.63
R1499	BENTON COUNTY	.17	R1571	BENTON COUNTY	.51
R1500	FRANK J. DONOHAN A. F. Donohans	.38	R1572	F. A. ENGLISH	.27
R1501	FREDRICK A. ENGLISH	.17	R1573	F. A. ENGLISH	.17
R1502	BENTON COUNTY	.17	R1574	ST. PAUL'S LUTHERAN CHURCH	.38
R1503	GUARANTEE TRUST CO. H. A. Lohrey	.17	R1575	F. A. ENGLISH	.17
R1504	ETHEL M. REMLINGER	.34	R1576	BENTON COUNTY	.51
R1505	CHURCH OF L. O. S.	.58	R1577	JOHN DOWNE LUMBER CO.	.34
R1506	D. S. WILKINSON ET AL.	.17	R1578	FRANK J. DONOHAN A. F. Donohans	.41
R1507	FRANK J. DONOHAN A. F. Donohans	.37	R1579	WILLIAM A. BARNES	.17.73
R1508	ERNA KIRBY	.17	R1580	PHILIP L. HEATH	.25
R1509	BENTON COUNTY	.17	R1581	R. E. SMOGINS	.36
R1510	EW. WADE ET AL.	.27	R1582	RUTH CURRY	.28
R1511	GEORGE R. CHASE	.47	R1583	FRANK L. WISE ET AL. F. A. English	.17
R1512	WONCA S. BORDEN	.44	R1584	M. GERTRUDE BRAUN	.17
R1513	FRED SCHUYLER	.34	R1585	FLORA M. STEVENS	.36
R1514	WHITE BLUFFS WATER WORKS INC.	.08	R1586	KARL BEHNT	.28
R1515	C. MARC MILLER	.10	R1587	BENTON COUNTY	.27
R1516	WOMANS CLUB	.38	R1588	BENTON COUNTY	.27
R1517	BENTON COUNTY	.33	R1589	FLORENCE M. WALK	.17
R1518	A. S. WEFEE ET AL.	.38	R1590	WILLIAM E. JOHNSON	.17
R1519	FRANK J. DONOHAN A. F. Donohans	.17	R1591	PAUL SCHICKA	.17
R1520	MARVIN CHASE	.20	R1592	HENRY B. WEFEE INC.	1.10
R1521	F. A. ENGLISH	.21	R1593	BENTON COUNTY	.34
R1522	EDWIN F. NEWTON	.10	R1594	HENRY B. WEFEE INC.	.18
R1523	M. F. O'BRIEN EST. J. M. Donohans	.20	R1595	YACOMA GROCERY CO.	.70
R1524	WHITE BLUFF MOTOR CO. Fred Schuyler	.34	R1596	MARY WRIGHT	.50
R1525	M. F. O'BRIEN HEIRS	.10	R1597	FRANK L. BADNER	.17
R1526	CATHOLIC BISHOP OF SPOKANE	.17	R1598	WHITE BLUFFS W. CO. F. L. Schuyler	.28
R1527	WHITE BLUFFS INVESTMENT CO.	.08	R1599	M. GERTRUDE BRAUN	.37
R1528	J. MORTON Thomas Thomas	.28	R1600	HENRY B. WEFEE INC.	.38
R1529	C. MARC MILLER	.21	R1601	BENTON COUNTY	.60
R1530	WATIE COLE	.10	R1602	LILLIE ROBERTSON	1.10
R1531	JAMES A. LORRY JR.	1.40	R1603	C. J. KONESKI	.41
R1532	PAUL ADDENBECK ET AL.	.21	R1604	M. F. O'BRIEN HEIRS	.17
R1533	BENTON COUNTY	11.63	R1605	FREDRICK A. ENGLISH	.86
R1534	HENRY B. WEFEE INC.	1.24	R1606	BENTON COUNTY	.04
R1535	CASCADE LUMBER CO.	1.37	R1608	EDITH M. DOOLEY E. M. Wainwright	.08
R1537	PACIFIC POWER & LIGHT CO.	.41	R1609	CHARLES B. HEADLEY	1.41
R1538	BENTON COUNTY	11.58			
R1539	HENRY B. WEFEE INC.	.73			

O 5114 HARRY A. SCARFETTI, WALTER J. CUMMINGS & GEORGE R. HAUNT, AS TRUSTEES OF C. M. S. P. & P. R. CO. 16.00

KEY TO OWNERSHIP  
 Names in CAPITAL LETTERS - Record Joint  
 1 - Other names - Co-owners  
 2 - Assessment Record  
 3 - Tax paid by  
 PURCHASE AREA

TOTAL SEGMENT AREA 159.66 AC. 2

STATE \_\_\_\_\_ WASHINGTON  
 COUNTY \_\_\_\_\_ BENTON  
 DIVISION \_\_\_\_\_ BENTON  
 DISTRICT \_\_\_\_\_ MANNINGHAM  
 SERVICE COMMAND \_\_\_\_\_ NO. 2  
 USING AGENCY \_\_\_\_\_  
 \_\_\_\_\_ MILES HWY. OF PASCO, WASH.  
 \_\_\_\_\_ MILES HWY. OF PROSSER, WASH.

- TRANSPORTATION FACILITIES -  
 NP UP CNST P&P \_\_\_\_\_ RAILROAD  
 3 11A \_\_\_\_\_ STATE ROAD  
 410 \_\_\_\_\_ FEDERAL ROAD  
 UNITED AIRLINES \_\_\_\_\_ AIRLINE

- LAND AREA -  
 ACRES OWNED BY W.D. \_\_\_\_\_ 159.66  
 ACRES LEASED BY W.D. \_\_\_\_\_  
 ACRES LEASED FROM W.D. \_\_\_\_\_  
 ACRES TRANSFERRED TO W.D. \_\_\_\_\_  
 ACRES DONATED TO W.D. \_\_\_\_\_

- DISPOSALS -  
 ACRES SOLD \_\_\_\_\_  
 ACRES TRANSFERRED \_\_\_\_\_  
 ACRES EXCHANGED \_\_\_\_\_  
 ACRES OTHERWISE \_\_\_\_\_

LEGEND

BOUNDARY LINE	---
STATE OR PROVINCE LINE	---
COUNTY LINE	---
SEGMENT BOUNDARY	---
TRACT BOUNDARY	---
CITY, VILLAGE, OR BOROUGH	---
CEMETERY, SMALL PARK, ETC.	---
TOWNSHIP LINE	---
SECTION LINE	---

WAR DEPARTMENT, O. C. E.  
 CONSTRUCTION DIVISION

**REAL ESTATE**

**HANFORD ENGINEER WORKS**  
 (SEGMENT 'R')  
 TRACT NO. R-1468-R-1609

RECOMMENDED *Edith M. Dooley* DATE 10-2-29

APPROVED *Edith M. Dooley* DATE 10/2/29

COMPILED E.R.R. TRACED T.B. CHECKED E.R.R.

DATE BY	REVISIONS	APPROVED
10-2-29	INITIAL DESIGNED TO DATE	<i>Edith M. Dooley</i>
10-2-29	WITH FINAL REVISION	<i>Edith M. Dooley</i>
10-2-29	THE PLAT IS AS COMPLETED	<i>Edith M. Dooley</i>

SHEETS 18 OF 41 DRAWING NO. HA1512E

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**APPENDIX B**

**3004 HISTORICAL REVIEW**

NOTE: Names deleted,  
Privacy Act protection.



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## 3004 HISTORICAL REVIEW

The history of Hanford can be divided into four parts: (1) Construction Period 1943 - 1946; (2) Expansion Period 1947 - 1959; (3) Diversification Period 1965 - 1967; and (4) Multiprogram Period 1967 - Present.

My assignment was to fulfill a DOE requirement to contact early project employees to discuss any known practices or spills concerning hazardous wastes or materials that could affect the environment. Interviews and investigations were conducted during the months of October, November and December, 1986.

The basis of our investigation was the CERCLA document and the BNW Phase I document. We were to note any items discovered that were not included in these documents. The areas included in our search are from Cold Creek Road (Route 11) from Hanford to Midway.

In the early stages of this endeavor, \_\_\_\_\_ was brought on board to assist. His connections got us in touch with DOE's Real Estate people and some other DOE retired officials. Through these people we were able to obtain drawings. We then went to the Records Center and obtained additional drawings, pictures and prints.

\_\_\_\_\_ acquaintance with old time Hanford-White Bluffs residents helped us obtain information about dumping practices before the Manhattan Project. Information obtained from these old timers indicated that waste from the old farm sites, as well as the communities of White Bluffs and Hanford, was either burned, or the unburnable material was either dumped over the riverbanks so that later floods washed the refuse down river, or dumped out in the sagebrush a fairly common practice in those days.

Information indicated that used oils were poured on the unpaved roads to eliminate dust and sand. 100-H Area had a used oil tank that was removed by a salvage contractor. 100-K Area has underground used oil storage with an opening (on the north side) near 1717-K .

We contacted the following old time employees for any information they could provide on any dump sites, spills or burial sites where hazardous materials could have been placed that are not included in the CERCLA or Phase I documents:

## NAMES OF OLD TIME EMPLOYEES

Employed from 1943 - 1973 as an ironworker, Superintendent of the Hot Semi-Works, and as a General Superintendent of Riggers. Worked in all the 100 Areas. Interviewed on November 12, 1986.

Employed from 1943 - 1982 as a Principal Engineer. Worked in all the 100 Areas and 300 Area. Interviewed on October 27, 1986.

1/20/87 SKK

B-3  
 Autocopy: Larry Denton, Bob Buslach, WHC.  
 Document was input to CERCLA, and it is Report a.  
 "HANFORD SITE WASTE MANAGEMENT UNITS REPORT" DEC-86, 58 30.

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NAMES OF OLD TIME EMPLOYEES - Continued

Employed from 1948 - Present as a Security Patrol Officer, Reactor Operator and Fuels Supervisor. Worked Plant wide. Interviewed on December 16, 1986.

Employed from 1947 - 1982 as a fireman for the Richland Fire Department. He was raised on the Benson Ranch at the base of Rattlesnake Mountain, then in later years owned the tavern at Hanford, left in 1941. Worked in the ship yards on the coast and returned in 1947 and worked in Richland for the Richland Fire Department. Interviewed on November 26, 1986.

Employed from 1947 - 1983 as a Property Control Specialist. Worked in all the 100 Areas. Interviewed on November 6, 1986. Then hired to work with \_\_\_\_\_ to find and document all the waste sites on the Project.

Employed from 1944 - 1975 as a Process Supervisor. Worked in all the 100 Areas and 300 Area. Interviewed on October 30, 1986.

Currently employed with the Department of Energy as a Realty Specialist. He is responsible for overseeing all archeological sites on the Project. We are showing him different sites on the project that have archeological significance at the request of the Department of Energy. First interviewed on December 2, 1986.

Employed from 1946 - Present with Kaiser Engineering as a surveyor. He works plant wide. Loaned us the use of a compass and gave us the number for the newest maps. Interviewed on November 20, 1986.

Employed from 1947 - Present as an engineer. Worked in all the 100 Areas. Interviewed on December 18, 1986.

Employed from 1943 - 1981 as a Safety Engineer and in Fire Protection. Worked all over the whole project. Interviewed on December 9, 1986.

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NAMES OF OLD TIME EMPLOYEES - Continued

Currently employed with Rockwell Hanford Operations as a 600 Area Landlord. Works plant wide. Interviewed on December 15, 1986.

Employed from 1952 - 1979 as an AEC/DOE Electrical Engineer. Mainly worked in the Federal Building. Interviewed on December 16, 1986.

Employed from 1943 - 1984 as a Millwright Maintenance Supervisor, and Maintenance Planner. Work in all the 100 Areas. Interviewed on December 16, 1986.

Employed from 1947 - 1980 as a Project Manager, Senior Engineer, Chief OI Inspector, and the Manager of Energy Conservation. Worked most 100 areas and at White Bluffs. Interviewed on December 8, 1986.

Employed from 1974 to present with J. A. Jones as a Field Manager. Worked in the 100 Areas and 200 Areas. Interviewed on November 5, 1986.

Currently employed with Rockwell Hanford Operations as a 600 Area Landlord. Works plant wide. Interviewed on December 15, 1986.

Employed from 1943 - 1956 as the Official Photographer for both Dupont and AEC. Worked plant wide. Interviewed on December 1, 1986.

Currently employed with the Department of Energy as a Realty Specialist. She is in charge of DOE real estate. Interviewed on November 5, 1986.

Employed from 1943 - 1982 as an AEC/DOE Public Relations person. Worked plant wide. Interviewed on November 3, 1986.

NAMES OF OLD TIME EMPLOYEES - Continued

Currently employed with Rockwell Hanford Operations as a 600 Area Landlord. Works plant wide. Interviewed on December 15, 1986.

Employed from 1946 - 1983 as the Manager, Rockwell Utilities. Worked plant wide. Interviewed on November 14, 1986.

Employed from 1943 - 1986 as the Manager, Spare Parts Control. Worked in all the 100 Areas. Interviewed on November 17, 1986.

Employed from 1943 - 1974 as an Automobile Maintenance Foreman. Worked plant wide. Interviewed on November 27, 1986.

Employed from 1943 - 1976 as a Reactor Operator. Worked in the 100 Areas and 300 Area. Interviewed on October 30, 1986.

Employed from 1943 - 1969 as a Maintenance Supervisor. Worked in all the 100 Areas. Interviewed on October 30, 1986.

Employed from 1946 - 1984 as an Assistant Fire Chief. Worked in all the 100, 200 and 300 Area Fire Stations. Interviewed on January 9, 1987.

Employed from 1943 - 1976 as a Maintenance Supervisor. Worked in all the 100 Areas. Interviewed on December 5, 1986.

Employed from 1944 - 1979 as an engineer and process supervisor. Worked in the 300 Area and all the 100 Areas. Interviewed on December 9, 1986.

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Page 5

NAMES OF OLD TIME EMPLOYEES - Continued

Employed from 1948 - 1983 as a Process Supervisor and a Maintenance Foreman. Worked in all the 100 Areas and 300 Area. Interviewed on October 30, 1986.

Employed from 1945 - 1978 as a Senior Engineer. Worked in all the 100 Areas. Interviewed on November 3, 1986.

Employed from 1964 - 1986 as a B.P.A. Substation Operation. Worked at Midway substation and other substations like 100-N, Ash Substation. Interviewed December 15, 1986.

From our memories and through interviews with the above employees and the information we were able to obtain from the drawings, photographs and prints obtained from the records center, the following sites were identified:

SITE NAME/DESIGNATION

**K Construction and Operational Dump**

Dump. Backfilled and uncovered miscellaneous scrap and transite. Take gravel road south of Allard Pump Building (road Patrol used to reach 100-K west railroad gate) head east 1/4 mile. Backfilled area between gravel road and old irrigation ditch. Uncovered scrap and transite is dumped in old ditch. In operation from 1950 to an undetermined time and the later users are unknown.

**Central Shops (DuPont) (Historical - 1)**

All purpose construction shop. Located south of present day 251 substation above present road site and before railroad was made to 200 East. See photos P-1899, P-1900 and P-1901 (notice the 200 North buildings in the background). In operation from 1943 - 1946. No waste site has been identified.

**Leisure Spur (Pierce Siding) (Historical - 2)**

Consisted of warehouses, riggers loft, staging area. Located south of Route 1, west of Route 2 North on all four corners of railroad track. Asmuth Marker N-71500 W-3200, Elev. 407.70. See Hanford Site Map 600 General H-6-951. In operation from 1943 to 1945. No waste site has been identified.

3004 Historical Review  
Page 6

SITE NAME/DESIGNATION - Continued

Honey Dumps - Toilet Waste Dumps (Historical - 3)

Dumping and cleaning stations. Located one at the north end of West Lake; and one southeast of Hanford Construction Camp. Used for dumping and cleaning the tanks from portable toilets. In operation from 1943 to 1945. Received portable toilet chemicals and waste.

Riverland (Historical - 4)

First Hanford/White Bluffs Train Station. Located west of present highway 240, south of Vernita Bridge. The site had been exhumed at around 1970. In operation approximately 1943 to 1948. No waste site was located.

White Bluffs Central Shops Major Construction (Historical - 5)

Typical construction shops and warehouses. Located on both sides of Federal Avenue, south west of railroad tracks and Route 2 North. Blacktop streets among the industrial building structures. Waste oils were either dumped in pits or distributed on the streets to fix the dust and sand. Refuse from the garage was disposed of at the site. In operation from 1943 to 1952. Received spent acid from pipe shop pickle line, solvents from pipe and machine shop. Grease, oil, and solvents from garage, sewage from building complex.

White Bluffs Central Shops Minor Construction (Historical - 6)

Typical construction shops and offices. Located north of Route 2 North, adjacent to the H Area road (east). Blacktop streets remain. In operation from 1943 to 1952. Received industrial wastes. Some radioactive waste had been accumulated, but to the best of memory, it had been removed. All signs and/or barriers have been removed. Only clean waste is assumed to have been left in the pit and covered.

Archeological Digs at 100-N Area (Historical - 7)

Located upstream adjacent to WPPSS outfall. In June, 1973 the University of Idaho conducted an archeological dig upstream of the WPPSS outfall near 100-N Area.

Liquid Seep Ponds (L-600-1)

Waste Water Seepage. Located at original Camp Hanford. One pond for each fixed boiler house. In operation from 1943 to 1945. Received industrial and commercial waste common for the period.

3004 Historical Review  
Page 7

SITE NAME/DESIGNATION - Continued

**White Bluffs Pipe Shop Pickle Solution Dump (L-600-2)**

Constructed by Atkins and Jones. Located directly south of where the White Bluffs ice plant was (about 500 yards) and east of Federal Avenue (about 300 yards). Many thousand gallons of sulfuric and nitric acid from the pickle process were pumped to trenches east of the shop and the old town dump, that is east of the current BPA transmission lines. This acid may not have always been completely neutralized. In operation from 1943 to 1955. The acid may or may not have gone through the septic tanks for the sewage (location is thought to be across road from old ice plant, inside old 4 x 4 posts.)

**White Bluffs City Dump (S-WB-1)**

Landfill. Located east of Bonneville main grid at White Bluffs, between Federal Avenue and Route 2 North, 100 yards east of power line. In operation from an unknown date to 1944. Received normal industrial, commercial, and domestic wastes common for the period. (Located adjacent to L-600-2).

**East White Bluffs Dumps (S-EWB-1)**

City Dumps. One located west of PNL boat sheds at White Bluffs Ferry Landing, 100 yards up riverbank from buildings to trees, and the other 100 yards east of the ferry slip. There is a Bonneville survey marker across river under the first galvanized tower that reads: 2660+750 Elev. 401. There are no apparent dumps on the north side of the river in the vicinity of the ferry landing. In operation from approximately 1900 to 1943. Received normal industrial, commercial, and domestic wastes common for the period.

**City Dump, Hanford (S-Hanford-1)**

Landfill, located south of Hanford Construction Camp between Route 2 South and east of Camp Hanford swim pond. In operation from an unknown date until 1943. Received normal industrial, commercial and domestic wastes common for the period.

**Hanford Trailer Camp Dump (S-600-1)**

Solid waste. Located northwest corner of the trailer camp, south of the 101 Building location. Pit remains. Trash has been covered at north edge of pit. In operation from 1943 to 1945. Received normal domestic wastes common for the period. (See Building 101 photos.)

SITE NAME/DESIGNATION - continued

101 Building Graphite Dump (S-600-2)

Plowed into ground when building was demolished. Remnants of site remain on surface. The 101 Building was used during the 1943-1944 construction program for machining graphite for the 100 Area. It was then declared surplus and partially dismantled. It was reconstructed for machining graphite in 1948. It was located on east road to 100 areas in 'V' caused by Hanford transmission line and road. West of Hanford High School. In operation from 1943 to 1945. Received graphite and building refuse.

Firing Range (S-600-3)

Patrol practice range. Located northeast end of Gable Mountain, approximately W2,265,000 and N462,000. Drawing 600 Gen H-6-951 Sheet 1 of 1. Shooting stand pads remain. In operation from 1943 until 1945. Received lead shell shot.

Construction Camp Landfill (S-600-4)

Trenches, backfilled. Approximately 115,000 square yards. (325 yards x 478 yards x 324 yards.) Various types of scrap appear on surface through out. (W2,263,000 by N425,000) Drawing 600 Gen H-6-951 Sheet 1 of 1. Railroad on west, pit on southwest corner, trees on southwest corner, gravel road on west, gravel road on north. In operation from 1943 to 1948. Received commercial and industrial wastes common for the period.

Spare Parts Burn Pit (S-600-5)

Dug out pit. Located under present Bonneville line 100 yards southeast of Federal Avenue. 300 yards southwest of Route 2 North. It is hard to locate. Ashes remain on surface. In operation from 1943 until 1948. Received normal industrial and commercial wastes (oils, solvents, etc.).

Spare Parts Machine Shop Landfill (S-600-6)

Gravel pit. Located between White Bluffs and East White Bluffs, west of Federal Avenue, south of export line. The telephone line goes through the center of the pit. It is horseshoe shaped. Burial traces appear at edges. Received industrial wastes, mostly metallic.

Midway Landfill (S-600-7)

Buried open pit dump. Located south of main Midway road, one dump is located on the east side of Midway Village, and the other is located on the west side of the Midway Substation. Normal domestic waste is disposed of in these dumps. In operation from 1943 to 1984. Received normal domestic wastes.

SITE NAME/DESIGNATION - Continued

Sodium Dichromate Drum Dump (S-600-8)

Landfill. Located between D&H Areas. Take old road from D east badgehouse to H badgehouse, at export line turn left 200 yards. It is 100 yards over hill to the west. It is backfilled, some drums and debris are exposed. In operation from 1945 to present. Received steel drums with sodium dichromate residue.

Construction Contractor Shop Landfill (S-600-9)

Open pit. Located north of shops, south of water station. Pit was filled to mound. Approximately 75' x 90'. It was contaminated and cleaned out. Solidly responds to metal detector search. White Bluffs. In operation from 1943 to 1948. Received shop waste. Was contaminated and cleaned out. But CHECK IT OUT.

100-B/C Southeast Burn Pit (S-600-10)

Spark-proof cage over open pit. Located east of 105-C, north of C railroad track. Yellow posts mark entry. Pit was backfilled, although some debris remains scattered on the surface. In operation from 1943 to 1948.

P-11 Test Site (S-600-11)

Laboratory - Contaminated. P-11 test site was located between 100-F and old Hanford (W24791.25, N63194.06 Elev. 394.4): It was a 200 Area experiment using Plutonium. They had a criticality problem which resulted in a contamination spread. The area was fenced off for a long time, then in 1974 everything was dug up and buried in 200 West Area and the area cleaned and backfilled. In operation from 1943 to 1974.

White Bluffs Historical Area Dump (S-600-12)

Dump. Located south shore of river adjacent to Locke Island. Residential and industrial materials on surface and protruding from the ground. Received general and typical wastes (i.e. transite siding, iron, glass, and wood.)

Archeological and Historical

There are areas of a very sensitive nature on the Project. It is very important that all excavations and/or construction be approved by responsible landlords who in turn will act consistant with DOE guidelines.

Another site identified is the Allard Pump Plant, a Hanford Irrigation District old pumphouse, located on the riverbank between 100-K and 100-B Areas. DOE has indicated it is on the historical register, and before any work can be done to these facilities, DOE's concurrence must be obtained.

3004 Historical Review  
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#### General Synopsis of Persons Interviewed

Radiological records are very accurate, one exception could be that the 105-DR gas loop site does not extend far enough.

All disposal practices were ahead of their times and for the most part well documented.

Some documents that could benefit this endeavor have been disposed of by the document center. An in depth search of all records could possibly verify extrapolated figures.

**APPENDIX C**  
**APPLICABLE WIDS DATABASE SHEETS**



Waste Information Data System  
General Summary Report  
June 2, 1994

BHI-00049  
Rev. 00

SITE NAME: JA Jones 2 [359]

ALIASES:

J. A. Jones #2 [309]

SITE TYPE: Burial Ground [309]

WASTE CATEGORY: Hazardous Waste [NR]

WASTE TYPE: Solid [309]

STATUS: Inactive [309] Pre-1980 [309] Exhumed [309]

START DATE: 1948 [309]

END DATE: 1955 [309]

OPERABLE UNIT: 100-IU-2 [329]

O.U. CATEGORY: Undefined [323]

SWMU: Yes [606]

TPA: Yes [329]

PNL Hazardous Ranking System Migration Score: 0.00 [309]

HANFORD AREA: 600 Area [309]

LOCATION: Northwest of White Bluffs townsite [329] off the 100 H Access Road [309]

GROUND ELEVATION: 420.00 feet above MSL [309]

WATER TABLE DEPTH: 45.00 feet below grade [309]

SITE DIMENSIONS: Length: 30.00 feet [309]

Width: 30.00 feet [309]

Depth: 15.00 feet [309]

WASTE TYPES AND AMOUNTS: This site contained minor construction equipment used by the J. A. Jones Construction Company, including wood scraps, concrete, and some metallic waste [315].

CLEANUP ACTIONS: The site was exhumed and its contents taken to a 200 Area burial ground in 1971. The site was then backfilled to grade [315].

Waste Information Data System  
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**SITE NAME:** White Bluffs Pickling Acid Crib [309]

**SITE TYPE:** Crib [309]

**WASTE CATEGORY:** Hazardous Waste [309]  
**WASTE TYPE:** Liquid [309]

**STATUS:** Inactive [309] Pre-1980 [309]  
**START DATE:** 1943 [309]  
**END DATE:** 1945 [309]

**OPERABLE UNIT:** 100-IU-5 [329]  
**O.U. CATEGORY:** Undefined [323]  
**SWMU:** Yes [606]  
**TPA:** Yes [329]

**PNL Hazardous Ranking System Migration Score:** 35.49 [309]

**HANFORD AREA:** 600 Area [309]

**COORDINATES:** N495000 W36000 [370]

**LOCATION:** 500 yd from the old White Bluffs Ice Plant and 300 yd east of Federal Avenue [309]

**WASTE VOLUME RECEIVED:** 37,853.00 liters [815]

**SITE DIMENSIONS:** Length: 290.00 feet [837]  
Width: 100.00 feet [837]  
Depth: 10.00 feet [309]

**SITE DESCRIPTION:** The site consists of two cribs located side by side. The western most crib is -200 ft by -45 ft and has a riser pipe -3 ft in diameter. The eastern crib is -225 ft by -50 ft. Vent pipes extrude from the surface in a grid pattern at roughly 10 ft intervals.

**WASTE TYPES AND AMOUNTS:** The site was used to dispose spent pickling acid used to pickle galvanized piping for use in the reactor buildings during construction. The process used several thousand gallons of nitric and hydrofluoric acid [309].

**CLEANUP ACTIONS:** The surface was covered with large cobbles [309].

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Waste Information Data System  
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**SITE NAME:** 628-1 [634]

**ALIASES:**

White Bluffs Burn Pit [634]

**SITE TYPE:** Burning Pit [634]

**WASTE CATEGORY:** Hazardous Waste [634]

**WASTE TYPE:** Solid [634]

**STATUS:** Inactive [634]

**OPERABLE UNIT:** 100-IU-2 [634]

**O.U. CATEGORY:** Undefined [634]

**SWMU:** Yes [635]

**TPA:** Yes [634]

**HANFORD AREA:** 600 Area [634]

**COORDINATES:** N80900 W38450 [634]

**LOCATION:** -1,000 ft north of the Route 2 North and Federal Ave. intersection [634]

**TE DESCRIPTION:** This unit was covered with sand and gravel (cannot determine if it is natural erosion, backfill, or both). The size is unknown; however, physical evidence (e.g. small pieces of ash, etc.) indicates that the area affected was -1/4 acre. Vegetation is stressed. Rabbit brush growth is almost nonexistent compared to the growth on the surrounding terrain and tumbleweeds are discolored and stressed. Verification of site coordinates is required; they are based on coordinates for well #81-38 [634].

**ASSOCIATED STRUCTURES:**

Associated with the remaining White Bluffs Fire Station foundation located -1,000 ft south of this unit. The foundation is adjacent to the intersection of Route 2 North and Federal Avenue [634].

**WASTE TYPES AND AMOUNTS:** Soil sampling will be required to determine what contaminants are present [634].

Waste Information Data System  
General Summary Report  
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**SITE NAME:** White Bluffs Landfill [309]  
**ALIASES:**  
White Bluffs City Landfill [315]

**SITE TYPE:** Landfill [309]  
**WASTE CATEGORY:** Hazardous Waste [NR]  
**WASTE TYPE:** Solid [309]  
**STATUS:** Inactive [309] Pre-1980 [309]  
**START DATE:** 1850 [309]  
**END DATE:** 1943 [309]  
**OPERABLE UNIT:** 100-IU-2 [329]  
**O.U. CATEGORY:** Undefined [323]  
**SWMU:** Yes [606]  
**TPA:** Yes [329]

**PNL Hazardous Ranking System Migration Score:** 8.69 [309]

**HANFORD AREA:** 600 Area [309]  
**COORDINATES:** N495000 W36000 [370]  
**LOCATION:** At the old White Bluffs townsite, between Federal Avenue and Route 2N  
[309]

**SITE DIMENSIONS:** Length: 125.00 feet [309]  
Width: 50.00 feet [309]  
Depth: 10.00 feet [309]

**SITE DESCRIPTION:** The unit is an unlined excavation [309].

**WASTE TYPES AND AMOUNTS:** The site was used for normal commercial and domestic wastes at the time. It contains no known radioactive constituents [309].

**CLEANUP ACTIONS:** The site has been bulldozed and covered with clean soil [309].

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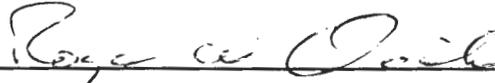
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