INDIANA ARMY AMMUNITION PLANT

SUPPLEMENTAL PHOTOGRAPHIC DOCUMENTATION OF ARCHETYPAL BUILDINGS, STRUCTURES, AND EQUIPMENT FOR U.S. ARMY MATERIEL COMMAND NATIONAL HISTORIC CONTEXT FOR WORLD WAR II ORDNANCE FACILITIES

by
K. Diane Kimbrell
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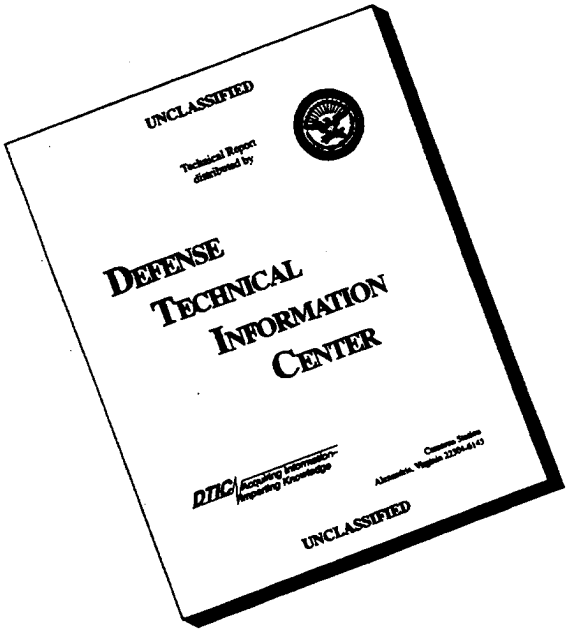
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This report presents a photographic record of the archetypal buildings, structures, and equipment of the World War II Ordnance Department's government-owned, contractor-operated (GOCO) industrial facility, the Indiana Army Ammunition Plant, at Charleston, Indiana. This photographic documentation was completed under partial fulfillment of an Army Materiel Command (AMC) Legacy Resource Program demonstration project for assistance to small installations and in fulfillment of the 1993 Programmatic Agreement among the AMC, the Advisory Council on Historic Preservation, and Multiple Historic State Historic Preservation Officers concerning the program to discontinue maintenance, or dispose, of particular GOCO properties.

The objective of the project was to photographically record World War II-vintage equipment and buildings, some of which housed different stages of the ammunition manufacturing process and were of the same architectural design. Modern buildings and equipment are not included in this document. Efforts were made to arrange the photographs in the order of ammunition manufacture and facility processes; however, this presentation should not be perceived as a complete chronological sequence for ammunition manufacturing during World War II. The buildings photographed in this document are classified as under either "stand-by" or "layaway" status. The active buildings depicted in this volume are of an insensitive and/or "safe" nature and include Administration and Shop buildings.

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I.

INTRODUCTION

This report presents a photographic record of the archetypal buildings, structures, and equipment of the World War II Ordnance Department's government-owned, contractor-operated (GOCO) industrial facility, the Indiana Army Ammunition Plant, Charleston, Indiana. Geo-Marine, Inc. was contracted by the U.S. Army Corps of Engineers, Fort Worth District, to undertake this project in September of 1993. Duane E. Peter, Director of the Cultural Resources Division of Geo-Marine, Inc., acted as Principal Investigator for the project. Kathleen Hiatt completed the photographic field work for the project.

This photographic documentation was completed under Delivery Order No. 14, Contract No. DACA63-93 D-0014, Task C, in partial fulfillment of an Army Materiel Command (AMC) Legacy Resource Program demonstration project for assistance to small installations. This documentation also represents partial fulfillment of the 1993 Programmatic Agreement among the AMC, the Advisory Council on Historic Preservation, and Multiple Historic State Historic Preservation Officers concerning the program to discontinue maintenance of, or dispose of, particular Government-owned properties. This work was conducted in compliance with the National Environmental Policy Act of 1969 (PL 90-190); the National Historic Preservation Act of 1966 (PL 96-515), as amended; the Archaeological and Historic Preservation Act of 1974 (PL 93-291), as amended; and Executive Order No. 11593, "Protection and Enhancement of the Cultural Environment."

In fulfillment of Task C, this volume includes a brief history of the installation (Section III), the photographs with captions (Section IV), a complete photographic log (Appendix A), and a map of the installation with building numbers marked (Attachment I).

II.

PHOTOGRAPHIC RECORDATION LOGISTICS AND METHODOLOGY

The objective of Task C was to photographically record World War II vintage buildings and equipment. Numerous buildings that housed different stages of the ammunition manufacturing process were of the same architectural design. Accordingly, the order of photographs that follows is based on differences in architectural design rather than on the step-by-step process of ammunition manufacturing. Modern buildings and necessary equipment in ammunition processing are absent from this photographic account due to their vintage (i.e., replacement equipment, though similar in function and/or design, was not photographed). Ammunition manufacturing is divided into lines (i.e., lines or clusters of buildings) according to the type of ammunition being manufactured and by the stages of manufacture. Additionally, there may be more than one line for the same manufacturing process. Accordingly, the architectural design of these buildings in different lines is similar, as is their equipment. Photographs of specific building types were not taken from a single line; rather, the photographs were taken from any number of lines as dictated by lighting conditions and physical restrictions. In short, though efforts were made to arrange the photographs in order of ammunition manufacture and facility processes, the presentation should not be perceived as a complete chronological sequence for ammunition manufacturing.

Equipment was commonly found stored in a different facility than that in which it was housed when in use. Thus, in some cases, equipment that is depicted may not be a part of the process indicated by the building in which it is located. This is another reason not to take this account as a step-by-step explanation of ammunition plant processes. Photographs of ammunition buildings and equipment in this account are classified as under either "stand-by" or "lay-away" status. Depicted active buildings are of an insensitive and/or "safe" nature. Such buildings include Administration and Shop buildings.

Photographic angles were largely dependent upon the angle of the sun and spatial restrictions. Time constraints and work schedules of the Army personnel (escorts) did not allow any return visits to buildings that may have been better depicted with a different sun angle. In many cases, preferred angles for photography were impossible due to overhead pipelines, powerline poles, and other structures.

Indoor lighting was also a determining factor for the photographic results of plant equipment. Electrical power had been shut off to the buildings on "lay-away" status. Unbarred windows and doors were opened and a camera flash was employed to compensate for poor lighting conditions. Indoor photography of equipment was also controlled by spatial restrictions. It was virtually impossible to photograph tanks spanning two or more stories. In some instances, walls and other equipment obstructed photographic angles; therefore, photographs of some equipment were not possible.

The age of some equipment cannot be determined. Each piece of equipment has a plant inventory number. An inventory list of the equipment details each piece by its inventory number. Not every piece of equipment on this list, however, has a manufacture or acquisition date. Increasing the uncertainty of age determination was the illegibility or absence of some inventory tags. In addition, the equipment inventory list was not exhaustive. The list did not include "installed equipment;" furthermore, the installed equipment was not easily discernible. Equipment installed at the time of the building's construction, in many cases, has been replaced in recent times. The installed equipment does not have a definitive appearance and purchased equipment without an inventory tag may be mistaken as installed. Photographs were taken of all equipment if its age was in question. Thus, the equipment depicted within this volume is not definitely World War II equipment unless a date is listed for a given piece. The equipment included in this account, however, is representative of the World War II era.

Pieces of equipment were found in various stages of disassembly. These pieces were not photographed unless they retained sufficient physical integrity to indicate their former function. In this account, such pieces are labeled as being in a state of partial disassembly.

Motors, tanks, and pumps are necessary in numerous plant processes. Due to the common function and design of such equipment, a single photograph was taken to represent any number of similar pieces of equipment. A representative unit was selected for its physical integrity and photographic accessibility.

III.

HISTORICAL OVERVIEW

The Indiana Army Ammunition Plant encompasses 4,310 ha (10,650 ac) and is situated in southern Indiana, bounded by the Ohio River on the east and U.S. Highway 62 on the west (Figure 1). On the other side of U.S. Highway 62 lies the community of Charleston, which at the time of the 1990 census had a population of almost 6,000. The plant lies 24 km (15 mi) north of the center of Louisville, Kentucky.

Originally, the Indiana Army Ammunition Plant was three separate facilities--a smokeless powder plant, a bag-loading plant and a rocket propellant plant, the last of which was never completed. The first phase of construction, begun August 26, 1940, involved the completion of the Indiana Ordnance Works Plant 1 (IOW #1), the first single-based, smokeless powder plant authorized by the National Defense Program during the years leading to World War II, and a model for other powder production facilities. The contract to design, construct, and operate this installation was awarded to E.I. Du Pont de Nemours & Company, which had long been involved in the manufacture of dynamite and gunpowder. As news reports and rumors spread information and misinformation about the start of construction, thousands of jobless men jammed the employment offices that Du Pont had opened in the area. Within a month, all skilled construction laborers within a radius of 80 km (50 mi) of Charleston had been hired and the contractor began hiring from other parts of the country. In all, 46 states were represented on the construction site.

The high pay and steady work Du Pont offered, for at least a few months, were a great boon to many at the end of the Depression, but the project brought the people of Charleston a number of problems, all rooted in the huge number of workers who flocked to the town beginning in the summer and fall of 1940. Nearly everyone took in boarders, tents lined the roads, and trailers filled every vacant lot; however, there were nights when some still had no accommodations and slept in trucks or cars, or at the town fire station. Employment reached its zenith on May 1, 1941, when 27,520 people showed up for work for the contractor, subcontractors, and government. (It should be noted that this figure does not include the approximately 5,000 employees working nearby at the Hoosier Ordnance Plant, the Du Pont employees not involved in construction, or the Ordnance Department employees.) Construction progressed steadily throughout the nine months it took to build the greater part of the plant. According to one employee, a person could stand back and watch "the side wall of a three-story building...grow" (E.J. Howard, personal communication, 1994).

IOW #1 was completed in May 1942. The 619 permanent and approximately 100 temporary construction buildings had been raised at a cost of $107,500,000. That was nearly 400 percent over the original budget, but the plant was also considerably larger than the one originally designed and funded (Garner 1992:32).

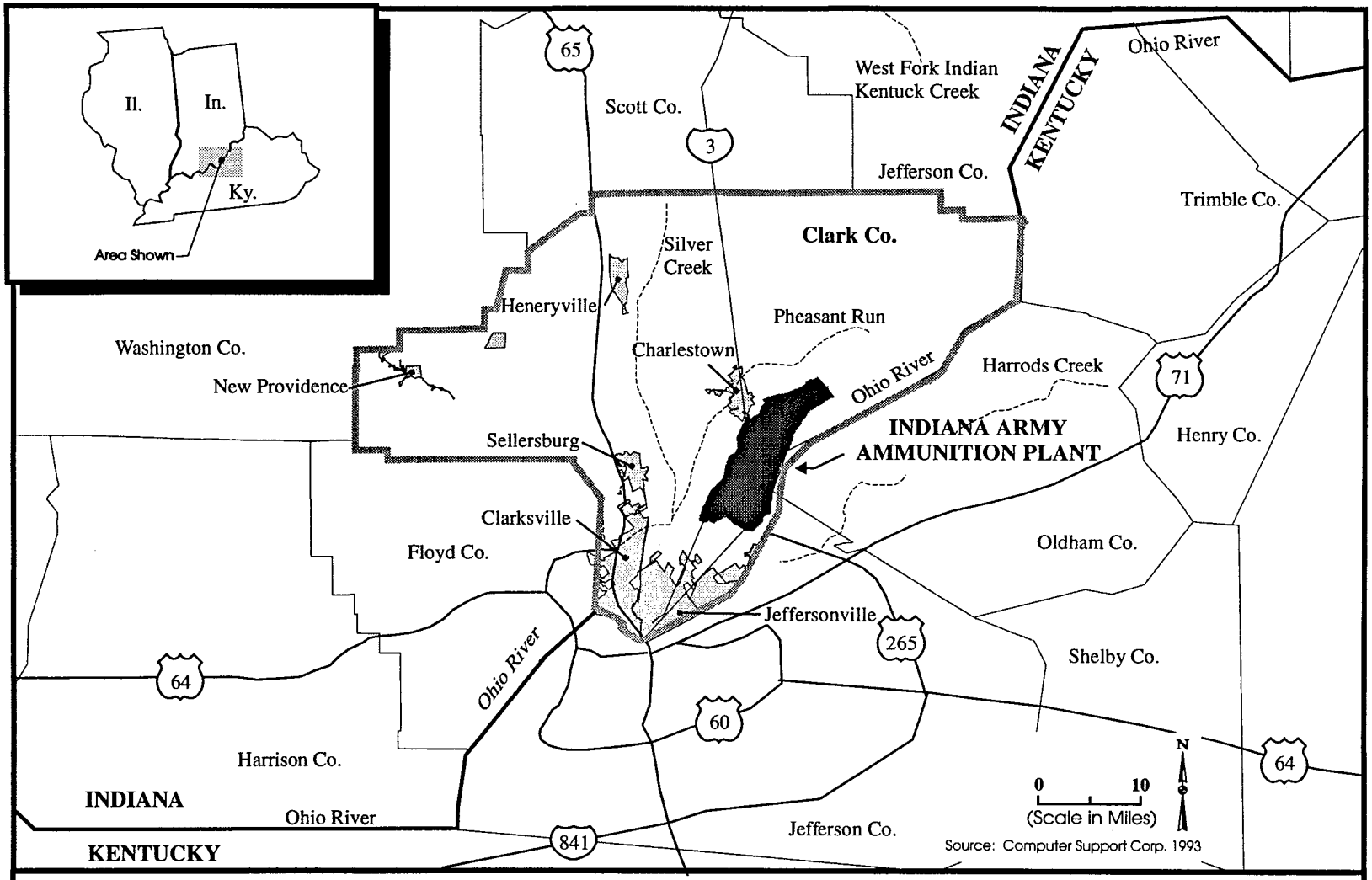


Figure 1. Regional Location of Indiana Army Ammunition Plant.

The first powder had already come off the line a year earlier, on May 8, 1941. Production increased rapidly as more of the facility was completed and put into operation, and on September 7, 1942, it reached its high point. That day, 453,529 kg (almost one million pounds) of powder were packed. Employment at the plant hit a high on November 1, 1942, with 9,442 persons on the job (Historical Monograph n.d.:9-10). IOW #1 began shutting down only a few weeks after V-J Day, August 14, 1945, and the final lot of powder was packed October 5, 1945. The lines, however, were only idle a few months (Unit History of Indiana Army Ammunition Plant n.d.:2).

The second portion of the plant to be built was the Hoosier Ordnance Plant (HOP). New land acquisitions at the end of 1940 extended the boundary of the facility [as a whole] south almost as far asthe small community of Utica. The land acquired for HOP more than doubled the size of the original project, adding another 2,023 ha (5,000 ac), and increased the efficiency of war-time production by establishing a load, assembly, and pack facility, where artillery, cannon, and mortar projectiles were assembled, immediately next to the powder production facility.

Unlike IOW #1 where Du Pont was responsible for everything from planning to production, separate contracts were awarded for the setup and operations at HOP. The Detroit firm of Shreve, Anderson, and Walker, Engineers and Architects, was given the contract for the design and engineering. The construction contract was awarded to a four-firm partnership: Winston Brothers Company; C.F. Haglin and Sons, Inc.; Missouri Valley Bridge and Iron Company; and Sollitt Construction Company, Inc. The Goodyear Engineering Corporation, an Indiana subsidiary of the Goodyear Tire and Rubber Company, would to operate the plant when completed (Final Completion Report 1942:I-5).

By the time these contracts had been signed, the Ordnance Department had adopted cost-cutting measures that excluded HOP from the architectural "frills" enjoyed by its neighbor to the north. At IOW #1 brick and steel had been used extensively in the construction of permanent buildings, expected to last at least twenty-five years. Structures at HOP were only designed to last ten to twenty years, so wood and asbestos siding were employed wherever possible. If structural considerations demanded the use of sturdier materials, as they did on some of the larger buildings like the huge 1.62-ha (4 ac) bag manufacturing building, concrete blocks were used instead of brick to cover the steel framework. Construction began February 5, 1941, and ended January 31, 1942.

The first charges were loaded on September 2, 1941, a few months before the facility was completed. By the beginning of December, all eight lines were in production and employment reached its peak in March 1945, just after the plant had turned out its 100,000,000th charge; however, the end of the war came quickly for HOP. On V-J Day, 500 production workers were terminated and all production ceased four days later on August 18.

Construction on the third portion of the plant did not begin until near the war's end. On the last day of October 1944, Du Pont was issued a change order giving it the "go-ahead" for the construction of a rocket propellant plant, Indiana Ordnance Works Plant 2 (IOW #2). Plans for the plant, which was to be situated on about 3,200 ha (8,000 ac), called for three lines producing double-based, smokeless powder, otherwise known as rocket propellant. Construction, which began December 8, 1944, was hampered by rain and labor shortages, but stayed close to schedule. A small amount of propellant was produced in July and August of the next year, but two weeks after Japan surrendered, all construction and operations ceased. IOW #2 was never completed.

Soon after the war ended the three plants were consolidated under the new name Indiana Arsenal and much of the land purchased for IOW #2 was excessed (about 2,000 ha [5,000 ac]). Parts of the facility were leased to various private manufacturing concerns and Du Pont made ammonium nitrate-based fertilizers as part of the European Recovery Program. The country's only Machine Tool Surveillance Laboratory, which stored and maintained industrial machinery for the production of ordnance, was set up there in

August 1950. After rehabilitation in 1951 and 1952, the arsenal began producing material for the Korean conflict. Production and employment peaked in 1953. The plant was once again put in "lay-away" status in the last quarter of 1955.

Liberty Powder Defense Corporation took over the responsibility of maintaining the plant from Goodyear Engineering Corporation in 1959. Its parent company, Olin Mathieson Chemical Corporation, dissolved Liberty and assumed its contractual obligations in 1961. In November 1961, the plant was once again renamed, this time to the Indiana Ordnance Plant, and at the same time began its production of munitions to be used in Southeast Asia. The plant name was changed to the current Indiana Army Ammunition Plant in August 1963.

Production increased steadily throughout most of the 1960s, but in 1968 the largest labor relations problem in the plant's history occurred. Strikes halted production for nearly three weeks in October, growing to involve 15,000 workers, virtually the entire labor force. A more favorable contract was accepted at the end of the month.

The current operating contractor is ICI Americas Inc., which has its headquarters in Wilmington, Delaware. ICI is a subsidiary of Imperial Chemical Industries PLC, located in London, England. The company took over operations on May 1, 1972.

IV.

PHOTOGRAPHIC DOCUMENTATION

ADMINISTRATIVE FACILITIES

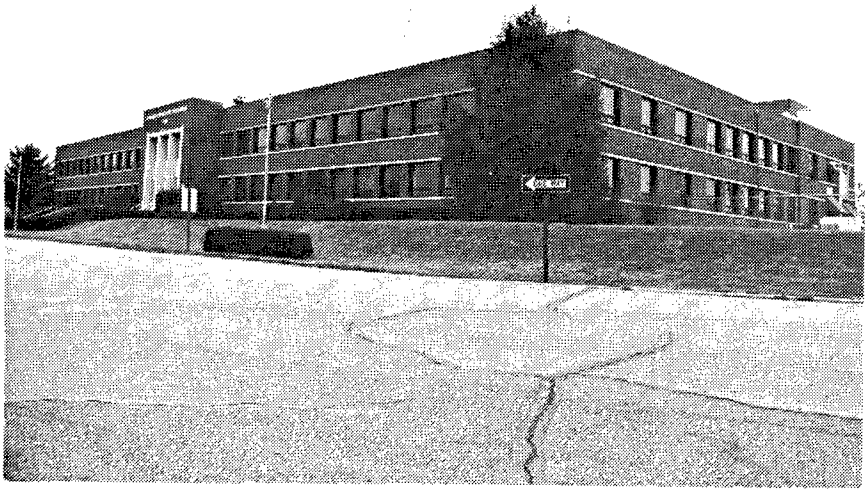


Figure 1. Building 703: Two-story, brick Administration Building.

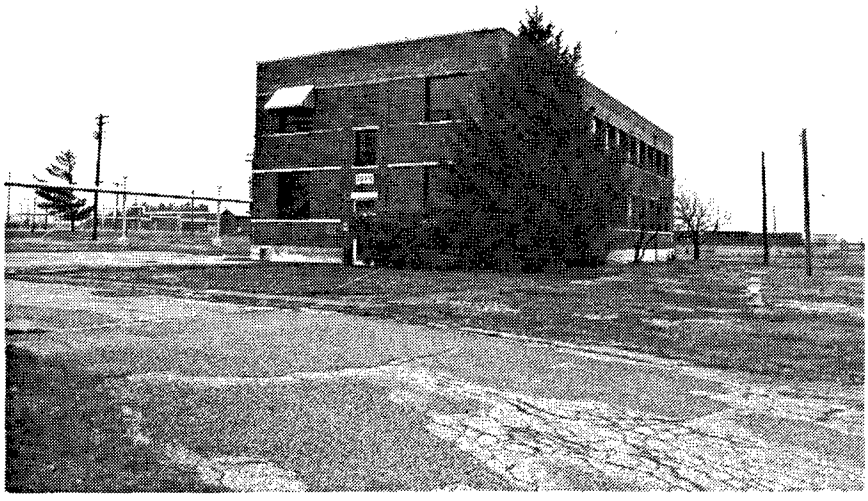


Figure 2. Building 703-1C: Administration Building.

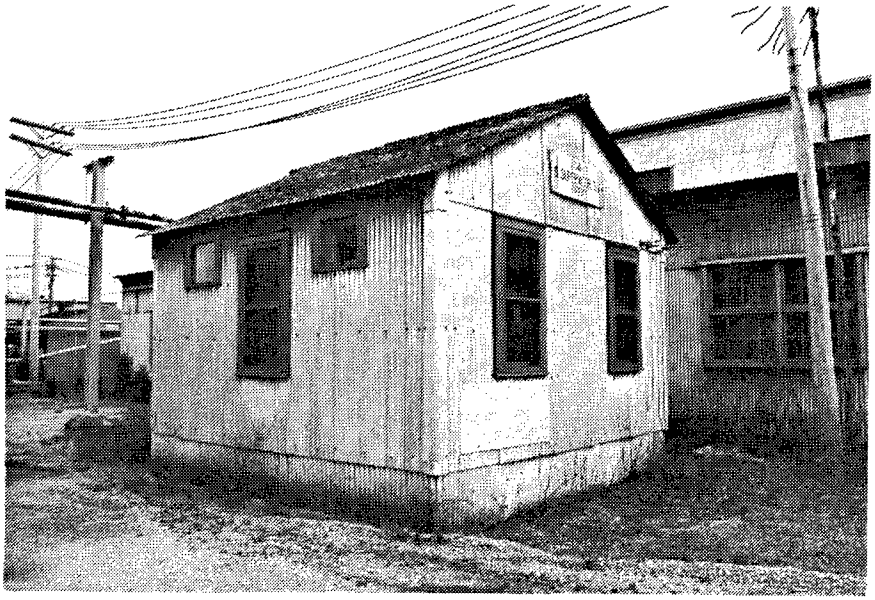


Figure 3. Building 704-11: Supervisor's Office.

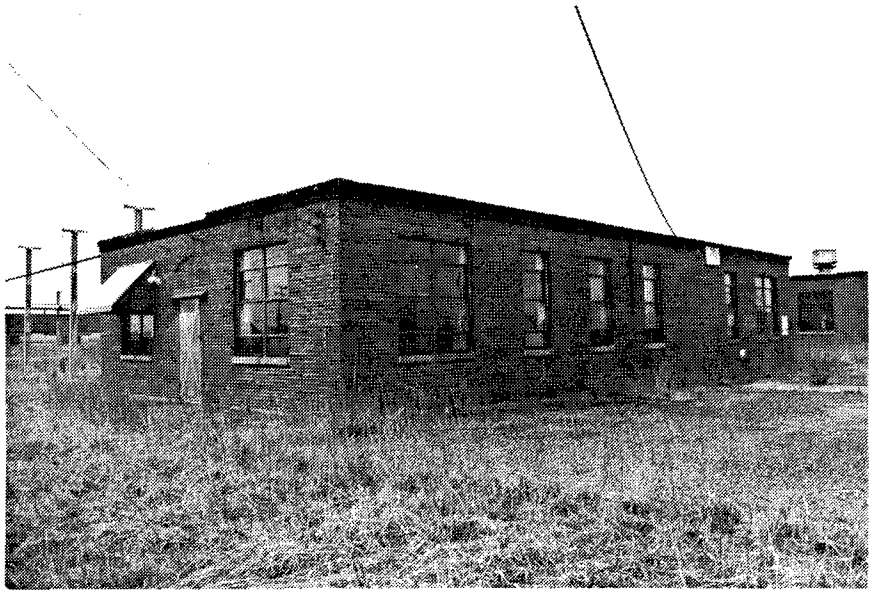


Figure 4. Building 704-8: Supervisor's Office.



Figure 5. Building 720: Guard Headquarters.

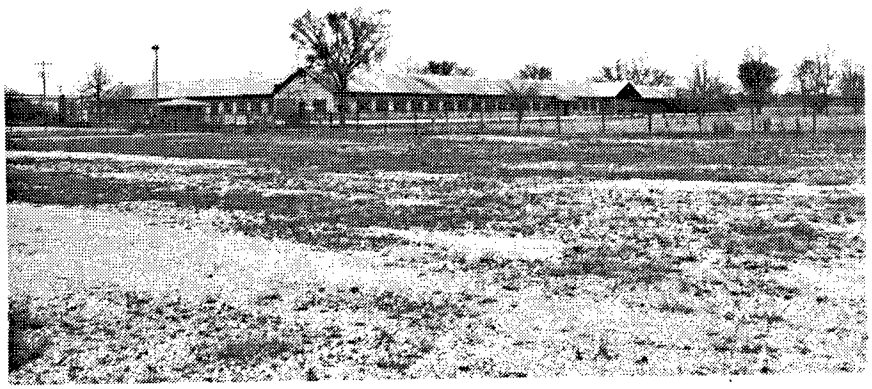


Figure 6. Building 2501: Administration Building.

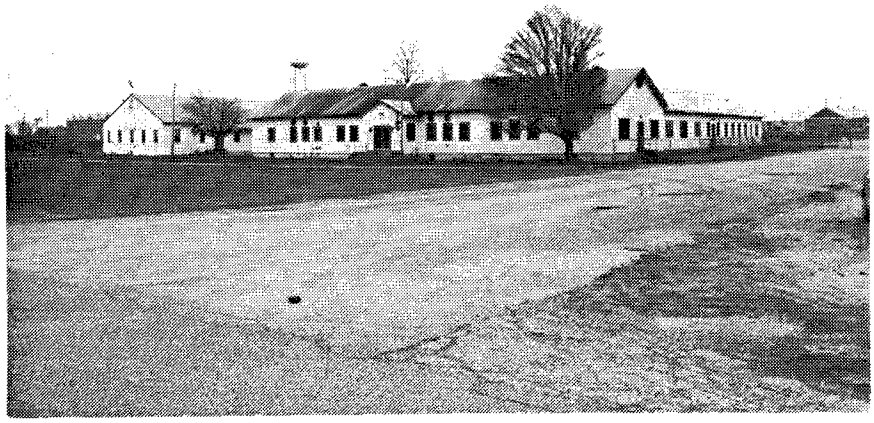


Figure 7. Building 2511: Employment Building, where the administration of employee logistics occurred.



Figure 8. Building 2642: River Ridge Housing Office, commonly known as the housing area's "Club House."

HOUSING FOR EMPLOYEES

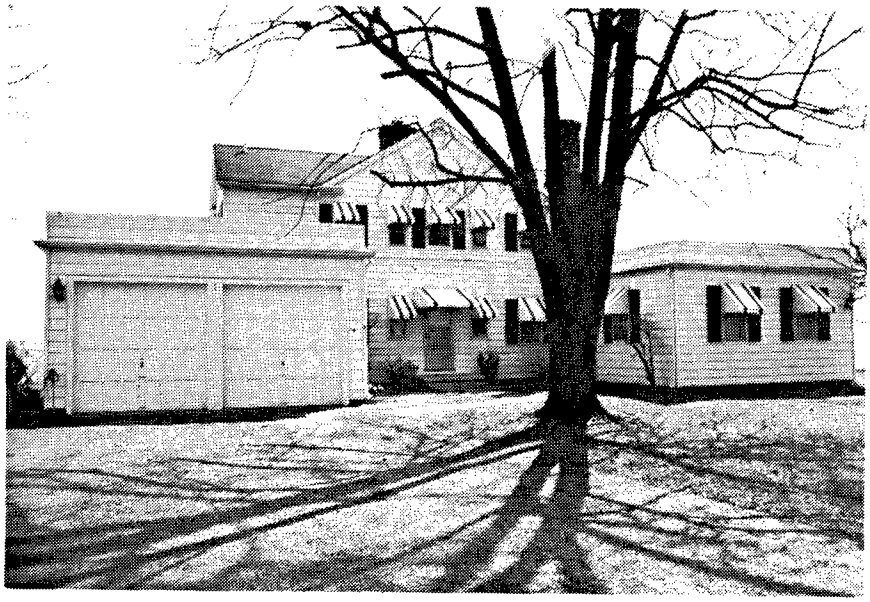


Figure 9. Building 2720: Personnel House Type "A." There are three types of architectural designs for residences labelled A, B, and C.



Figure 10. Building 2701: Type "C" residence.



Figure 11. Building 2708: Type "B" residence.



Figure 12. Building 2737: Pre-World War II-vintage House. One of the two remaining buildings pre-dating the plant.

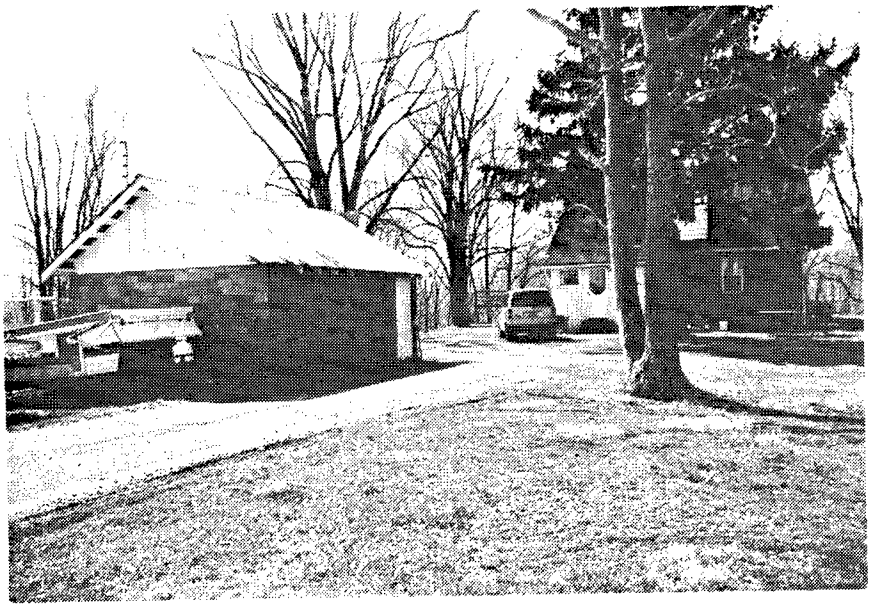


Figure 13. Building 2737-2: Garage (constructed before the plant) adjacent to the house.

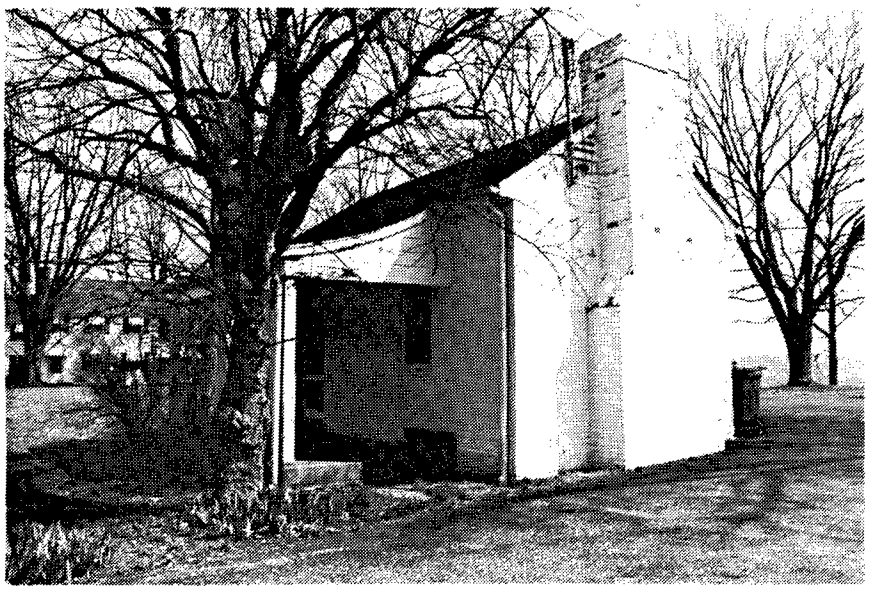


Figure 14. No building number: Second of two houses pre-dating the plant.

MANUFACTURING AND CHEMICAL PROCESS BUILDINGS

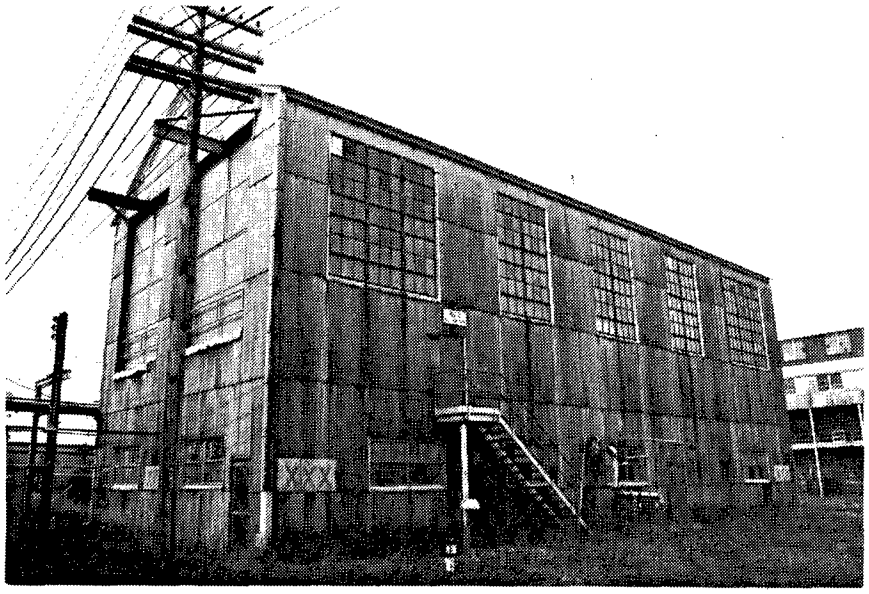


Figure 15. Building 102-2: Nitrocellulose Tank Farm Warming House.

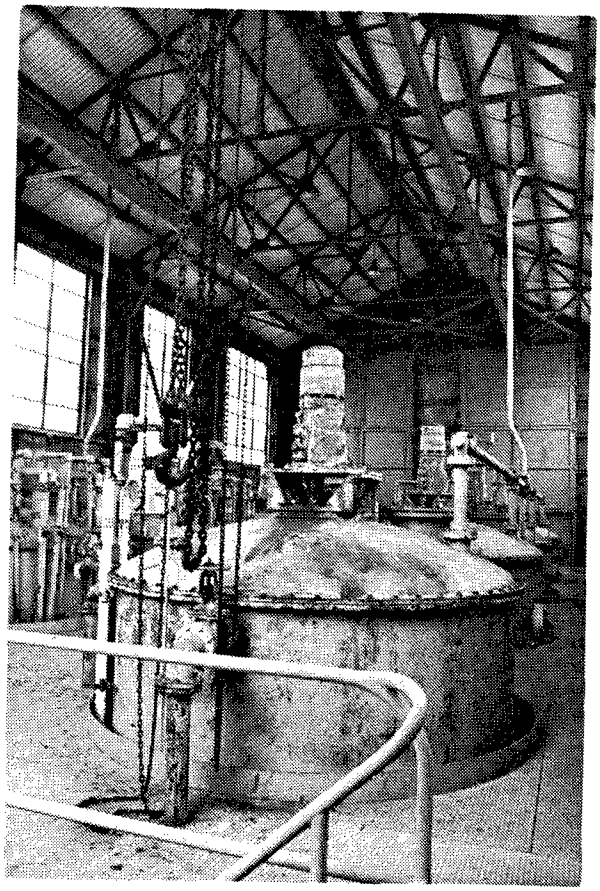


Figure 16. Building 102-2: Grauer Tank on the second floor.

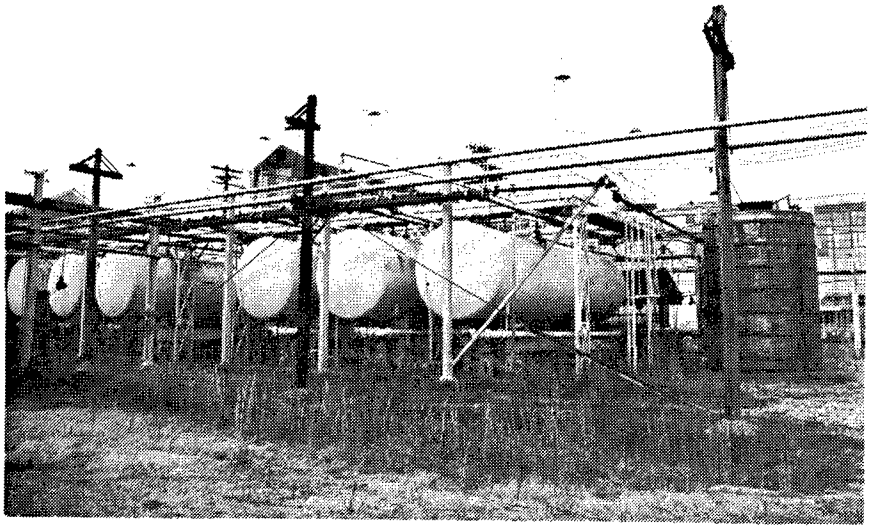


Figure 17. Building 102-3: Nitrocellulose Tank Farm associated with the Nitrocellulose Warming House.



Figure 18. Building 103-3: A Cotton Dry Conveyor connecting a Wood Pulp House to a Nitrating House.



Figure 19. Buildings 104-1 and 103-001: Cotton Dry House and Cotton Dry Conveyor (the Cotton Conveyor can be seen on the left).

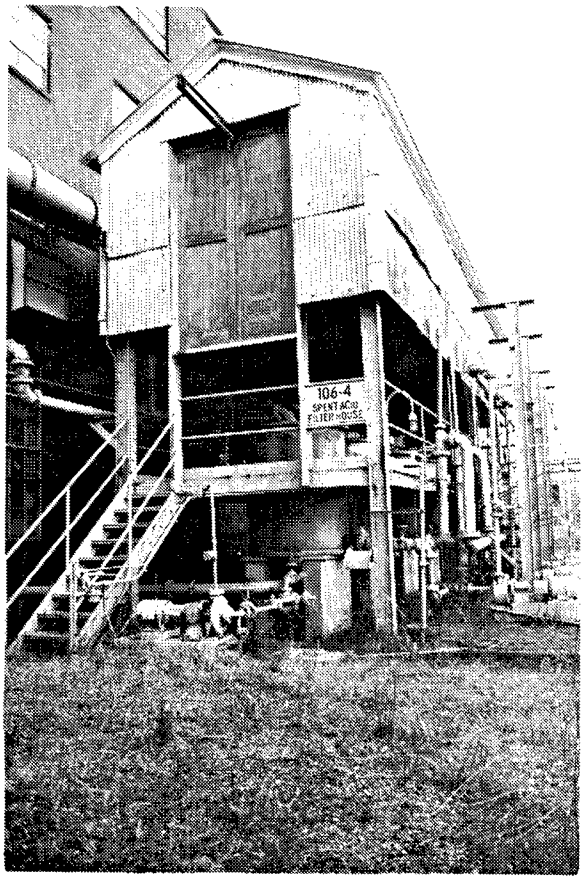


Figure 20. Building 106-4: Spent Acid Filter House.

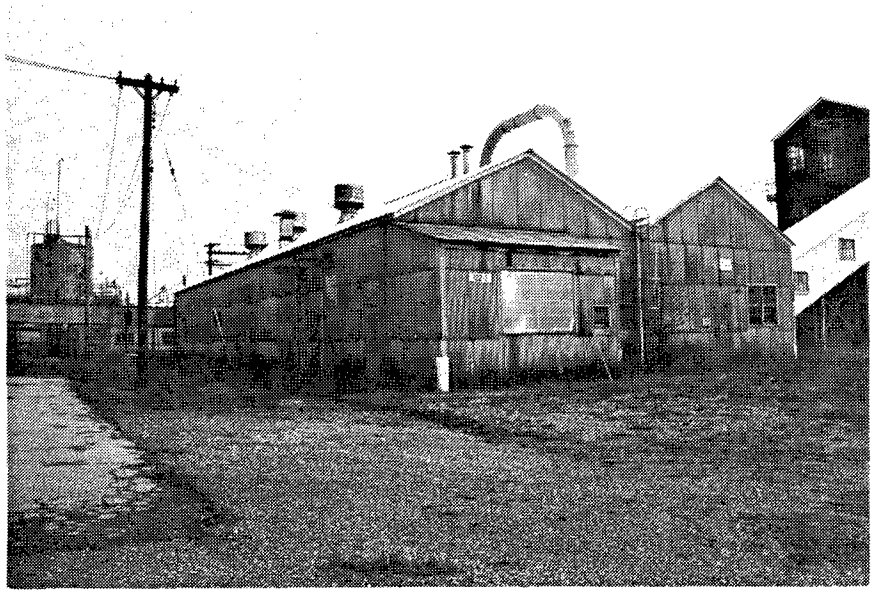


Figure 21. Buildings 122-3 and 104-3: A Cotton Dry House connected to a Wood Pulp Dry House.

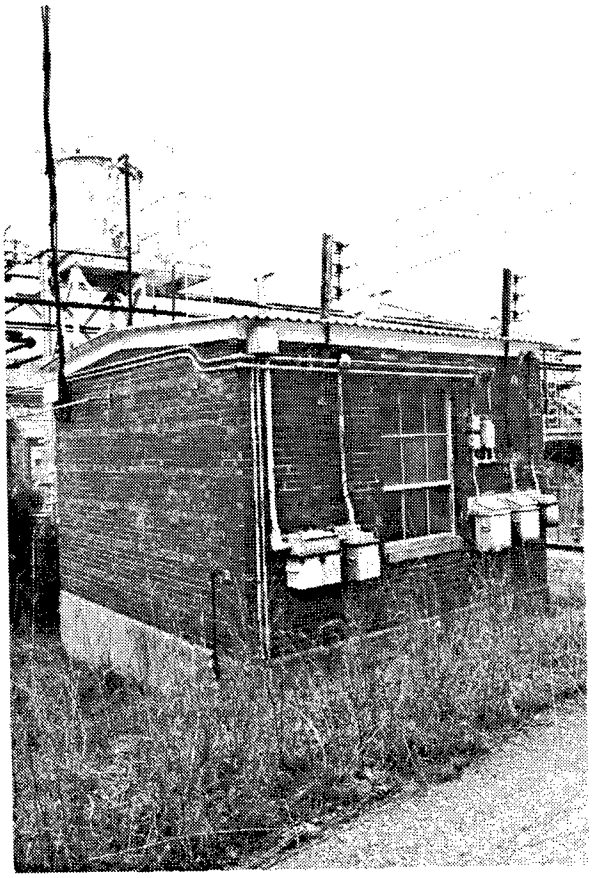


Figure 22. Building 202: Caustic Mix and Pump House; note the caustic tanks on top of the structure.

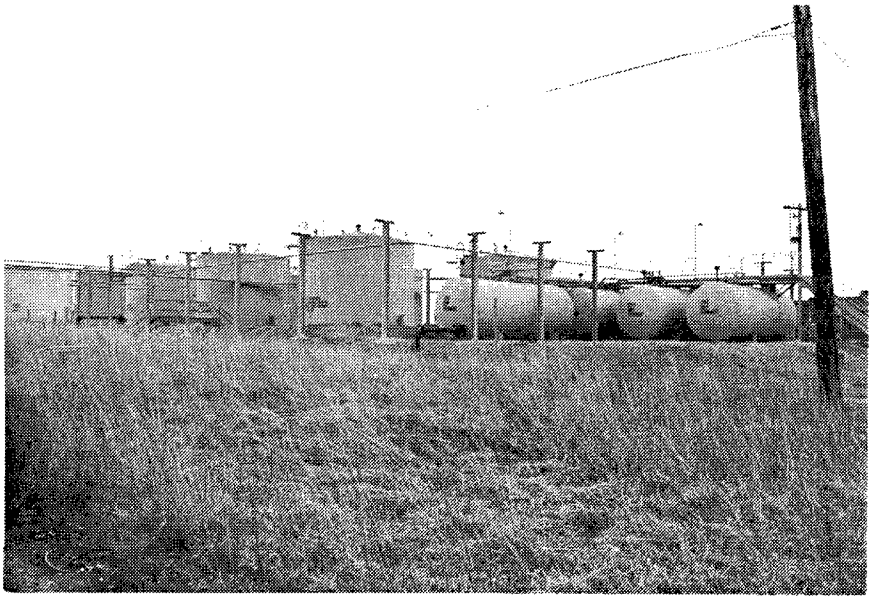


Figure 23. Building 203-2: Alcohol and Dibutylphthalate Tank Farm.



Figure 24. Building 203-1: Another Alcohol and Dibutylphthalate (DBP) Storage Tank Farm.

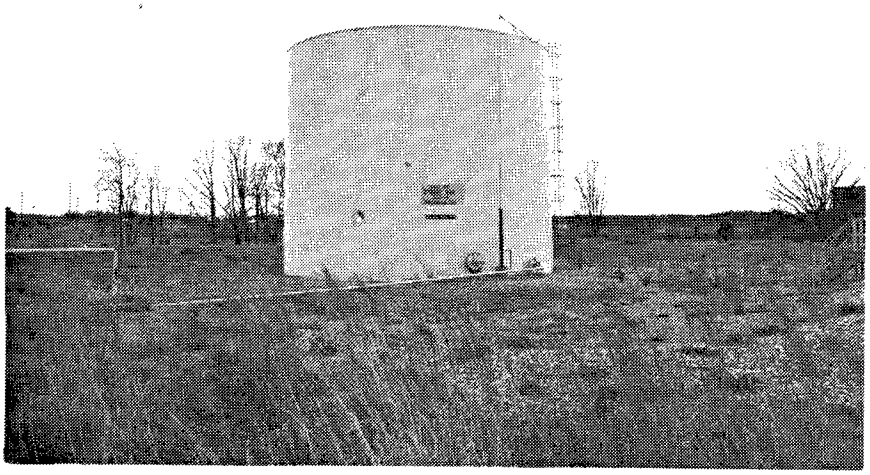


Figure 25. Building 203-4: Alcohol Storage Tank at this tank farm.

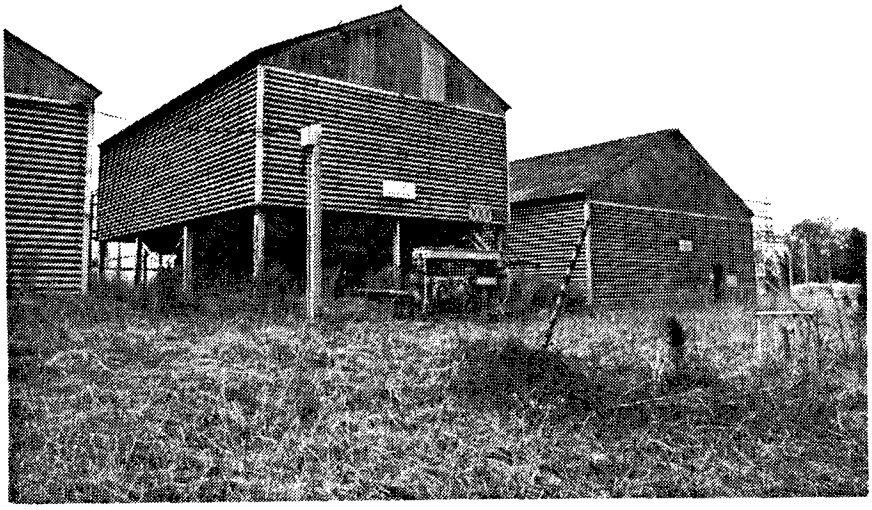


Figure 26. Building 207-7B: Ether Weigh and Storehouse.

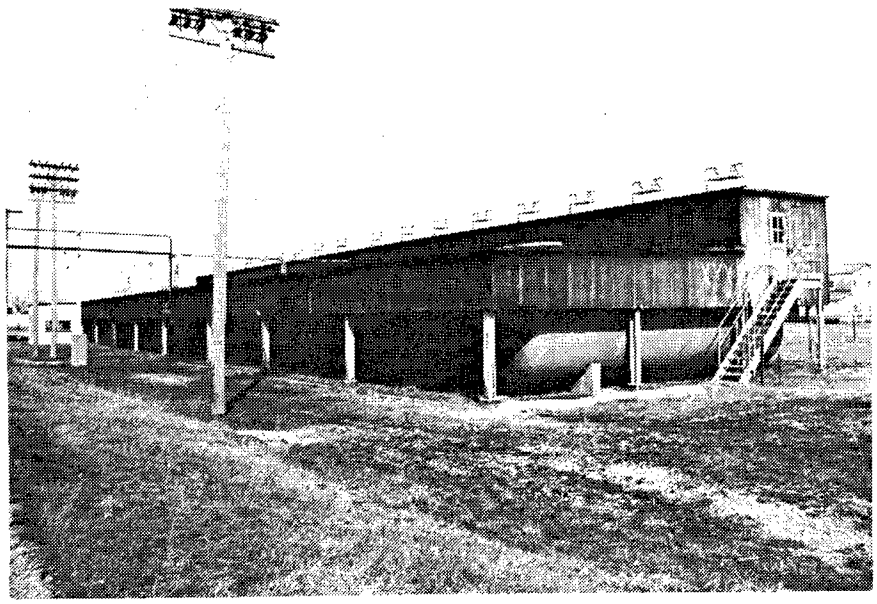


Figure 27. Building 207: Ammonia Storage at a tank farm.

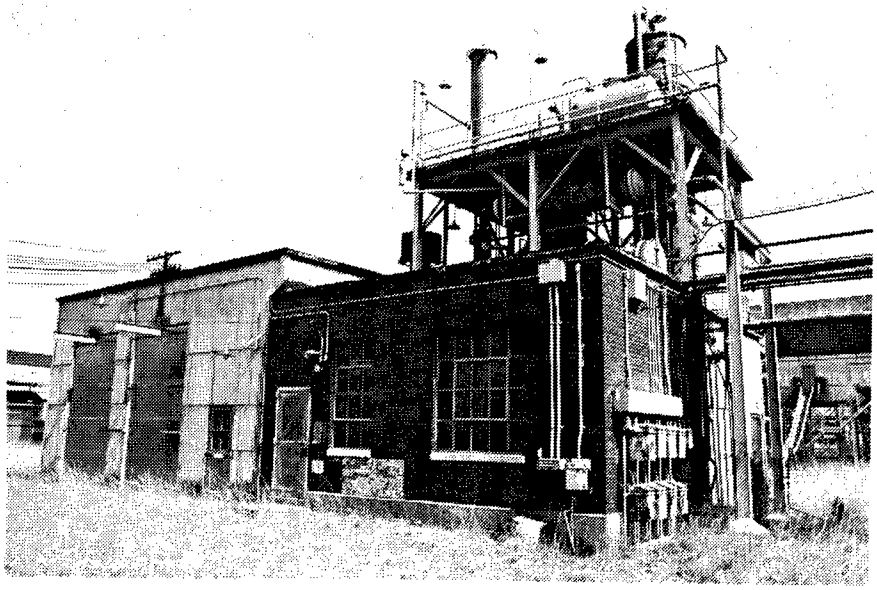


Figure 28. Building 207-3: Ether and Alcohol Still House.

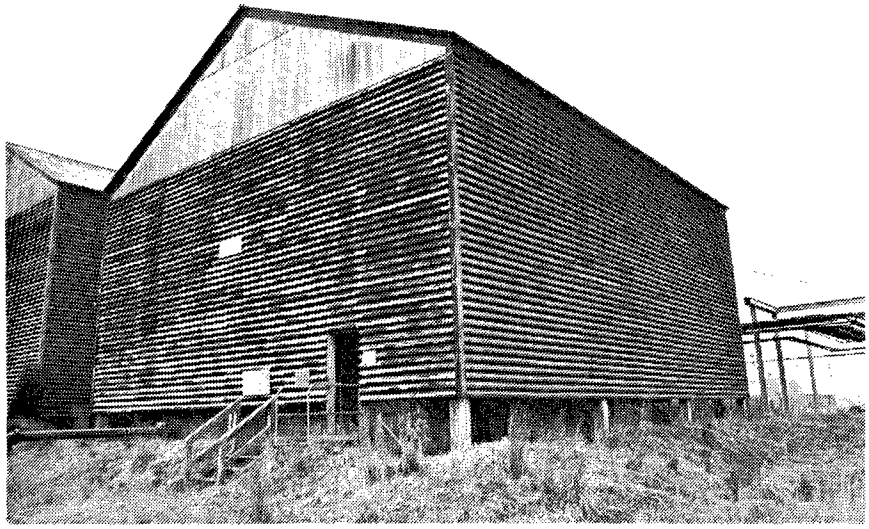


Figure 29. Building 207-8: Recovered Ether and Alcohol Storehouse.

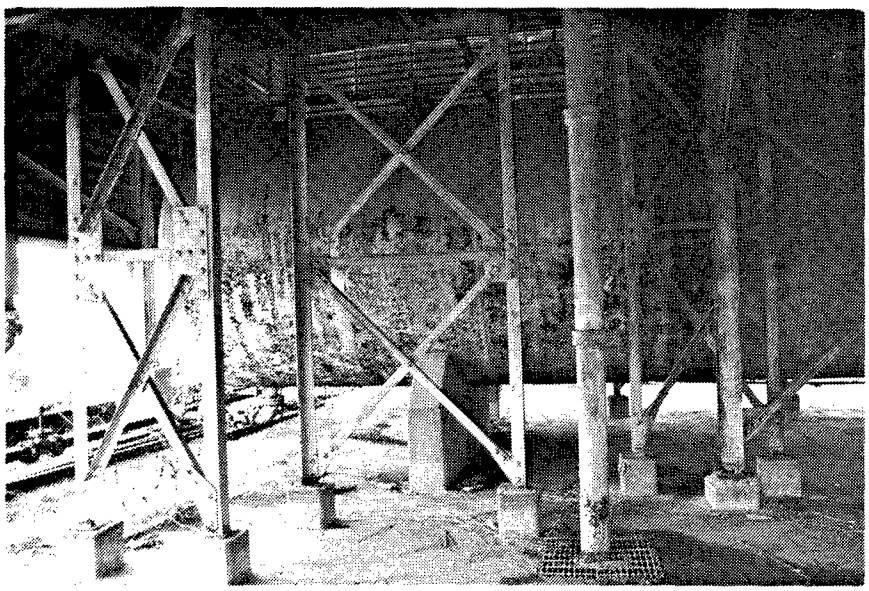


Figure 30. Building 207-8: Northern one-half of a thirty-six-foot storage tank inside the Recovered Ether and Alcohol Storehouse.

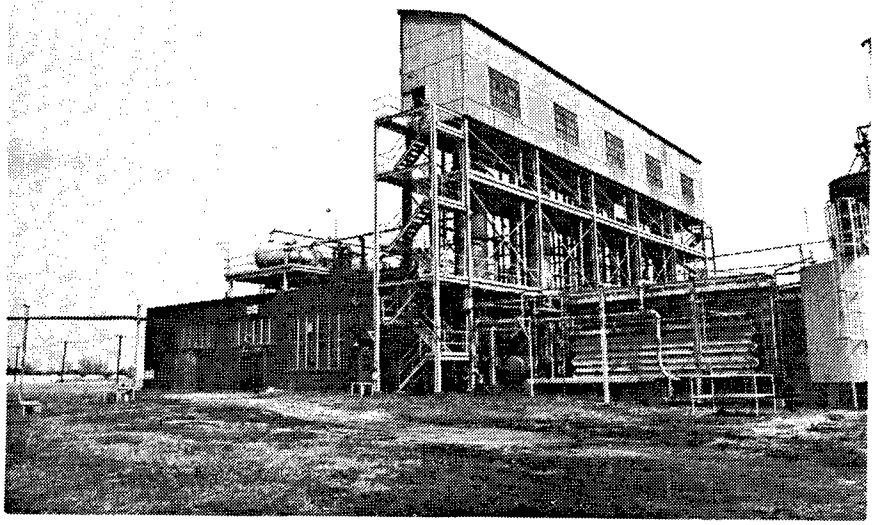


Figure 31. Building 302-1: Ammonia Oxidation Plant.

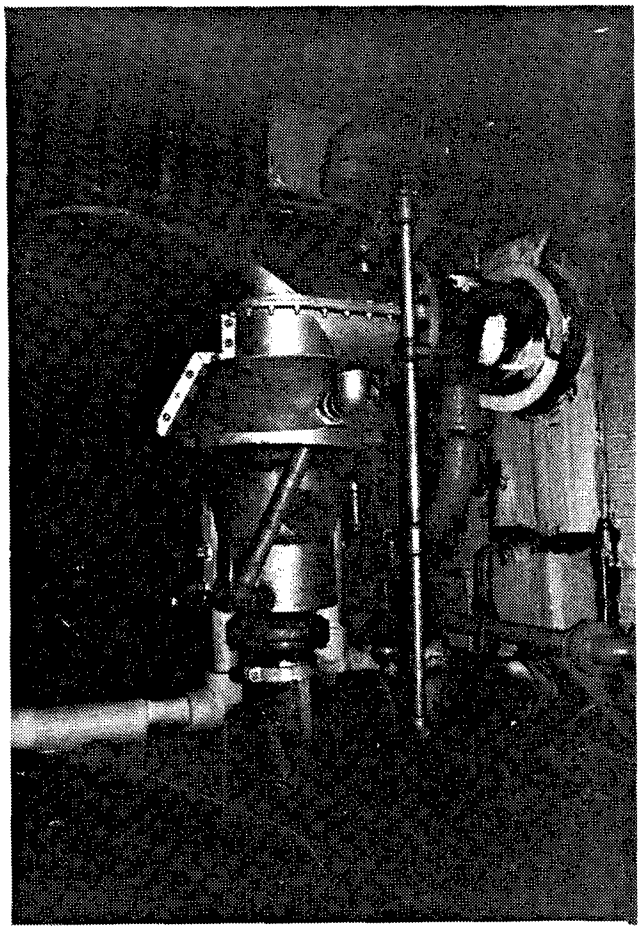


Figure 32. Building 302-1: Converter manufactured by Forginks Plates.

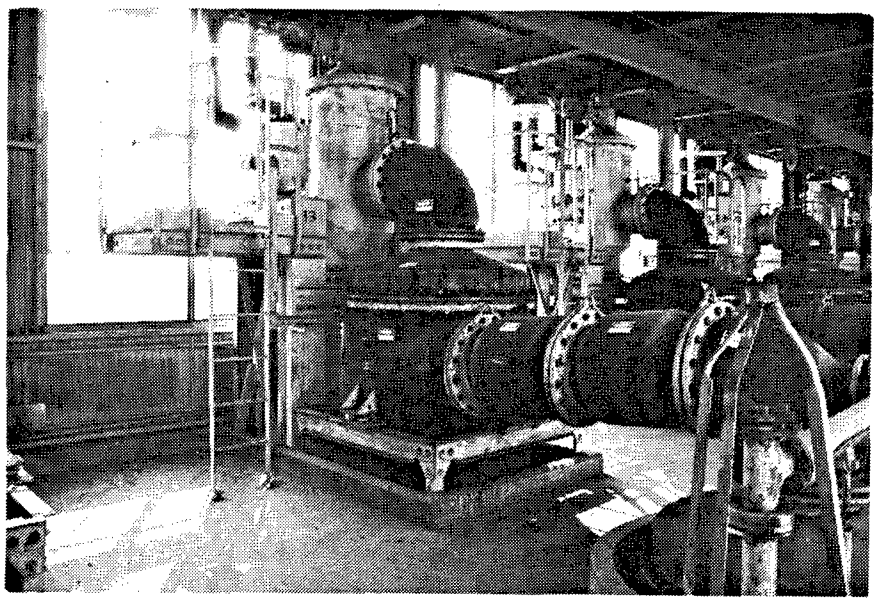


Figure 33. Building 303-1: Dehydration Separation Tank, on the second floor of the Anhydrous Ammonia Storage Building.

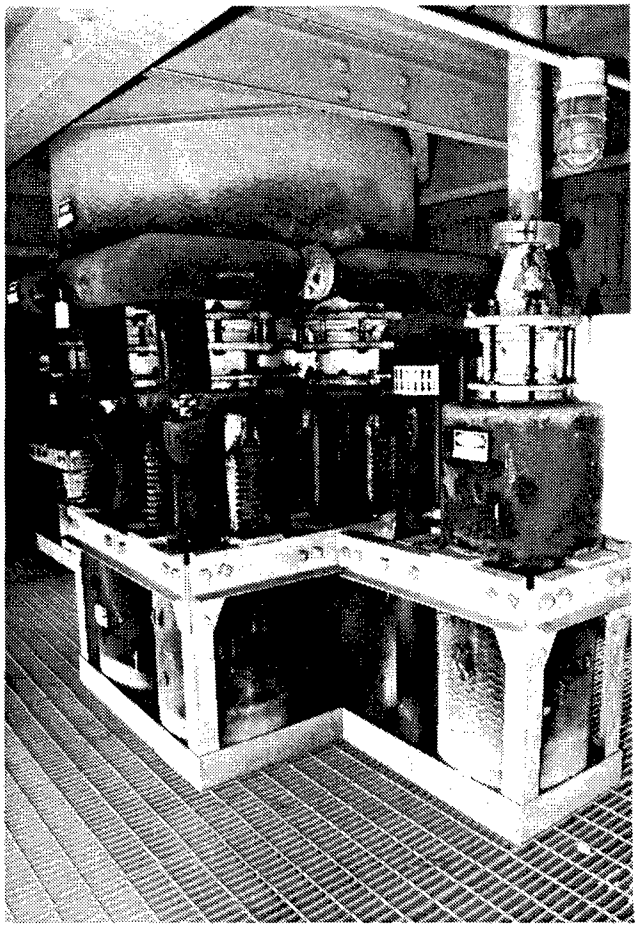


Figure 34. Building 303-1: Top of Sulfuric Acid Preheater on the second floor of the Anhydrous Ammonia Building.

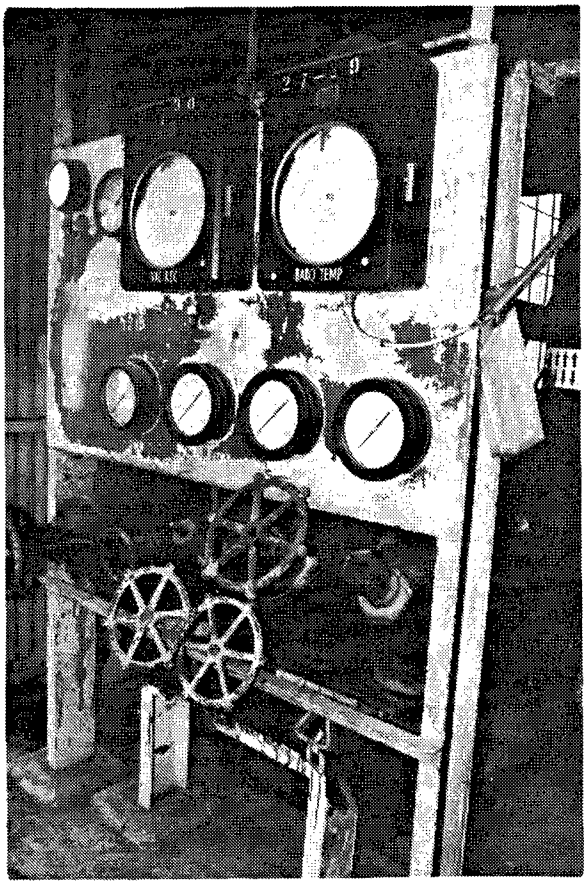


Figure 35. Building 303-1: Controls with gauges for ammonia stores on the first level of the Anhydrous Ammonia Building.

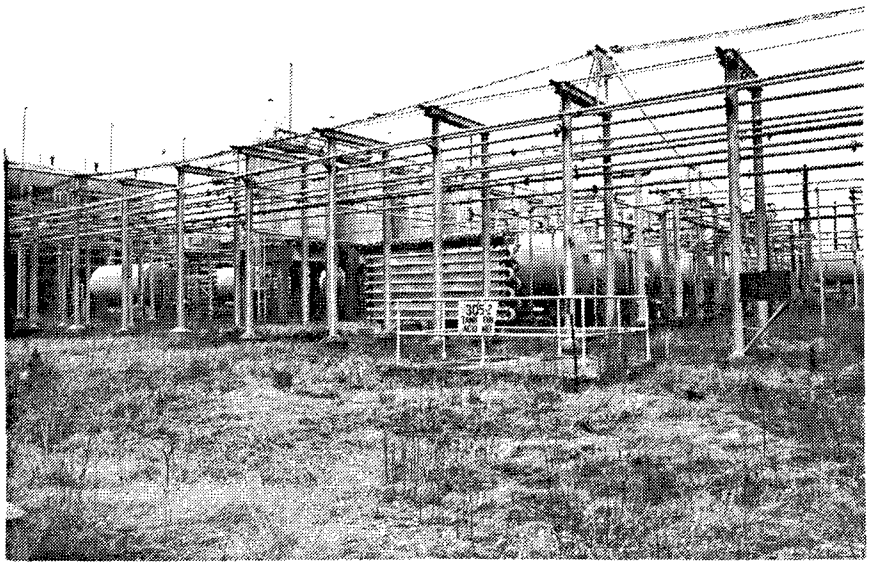


Figure 36. Building 305-2: Tank Farm Acid Area.

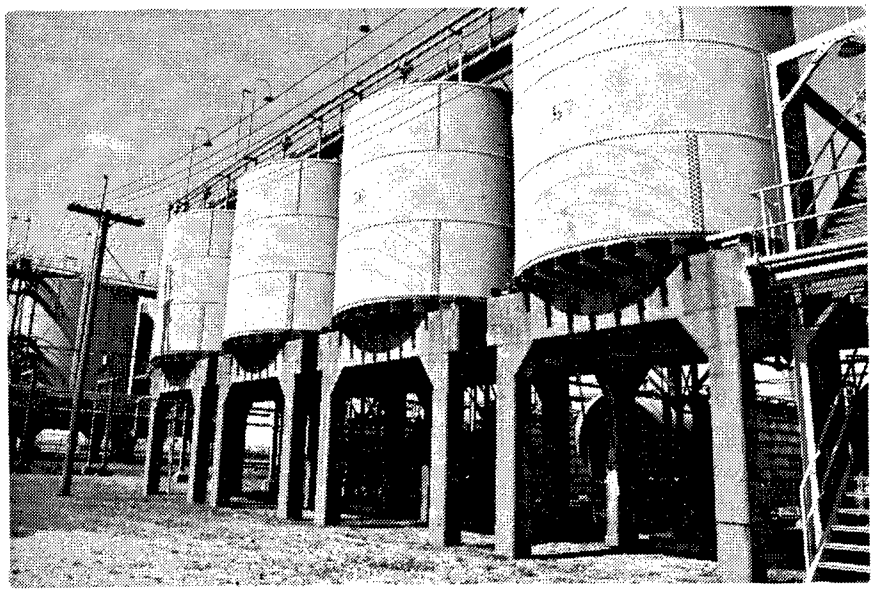


Figure 37. Building 305-1: Spent Acid Circulator Tanks.

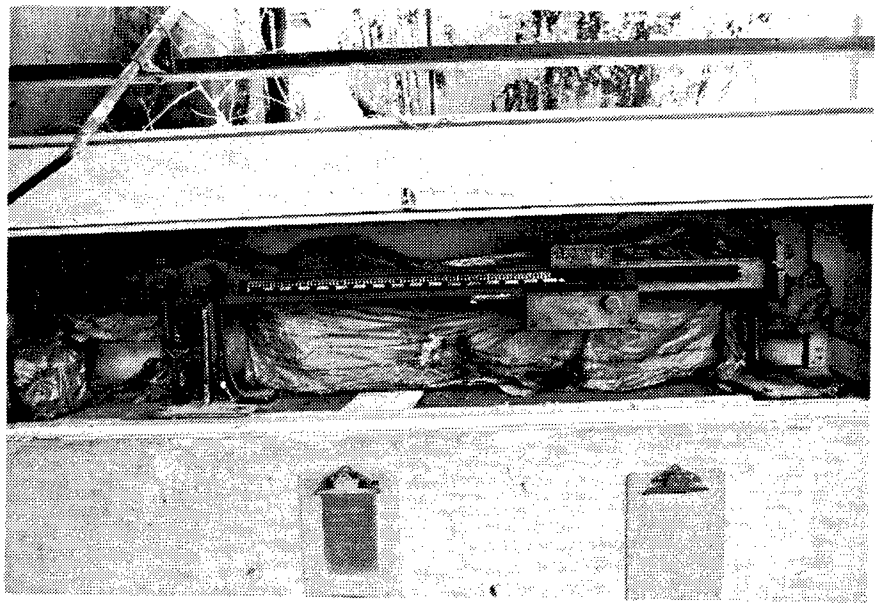


Figure 38. Building 305-1: Howe scale, with a capacity of 60,000 gallons, used to measure the level of spent acid in its associated spent acid circulator tank.

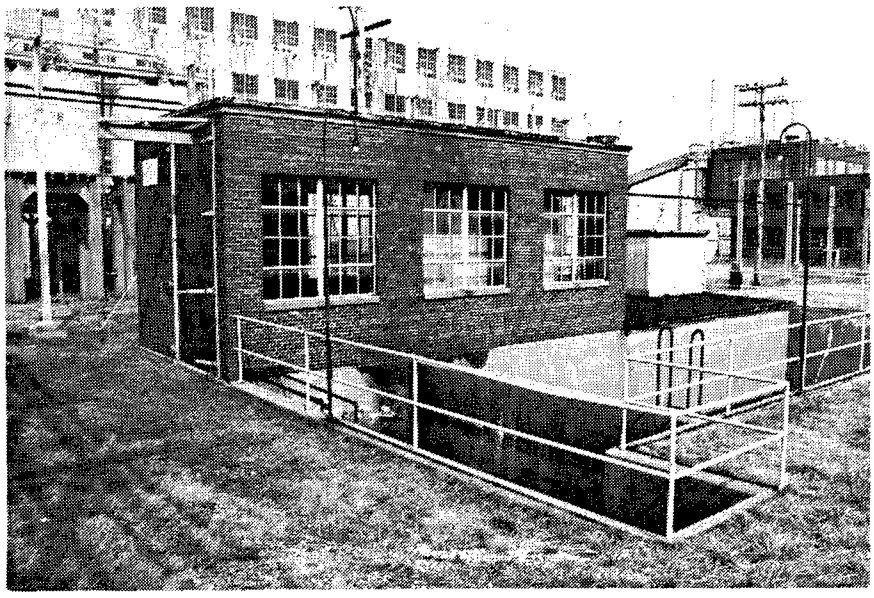


Figure 39. Building 306-1: Acid Area Water Reuse House.

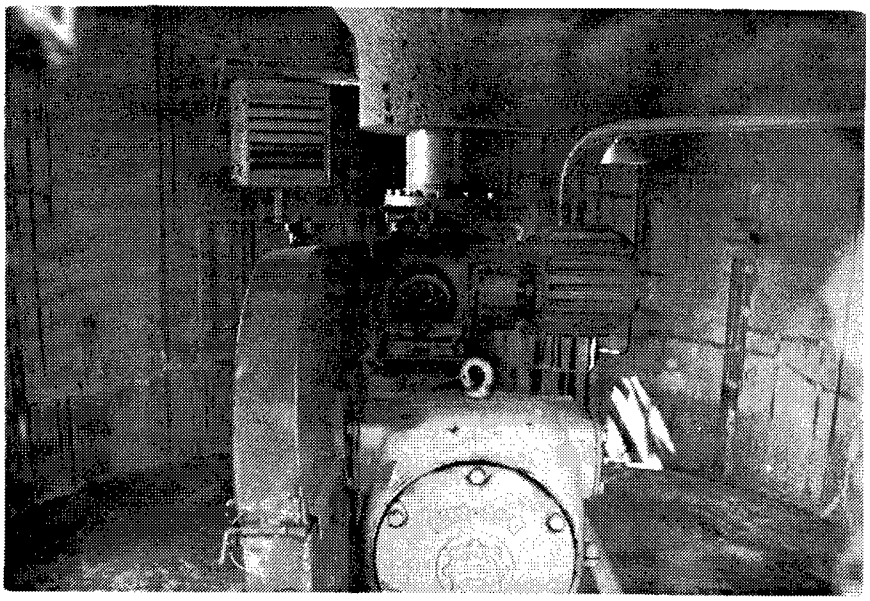


Figure 40. Building 612-1: Reducer in the Acid Neutralizing Pump House.

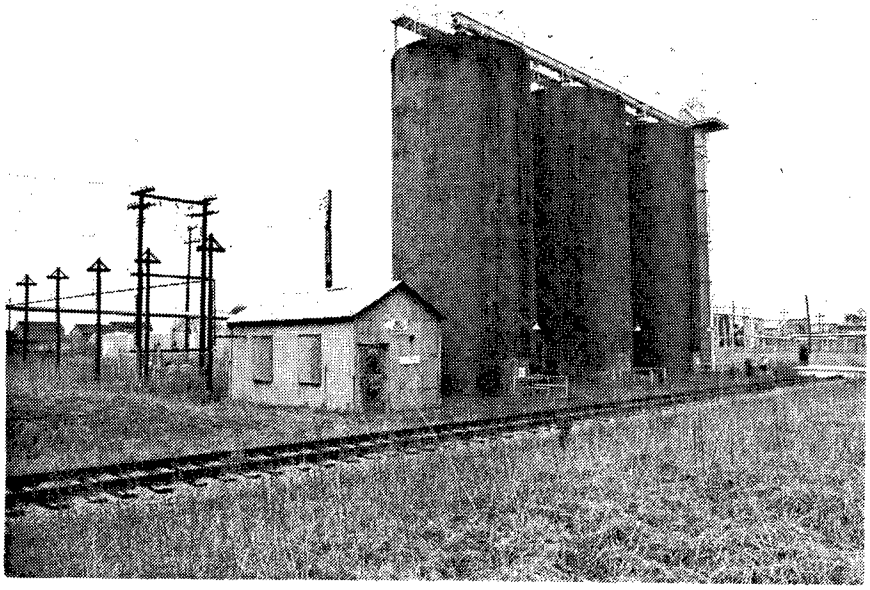


Figure 41. Buildings 612-1 and 1A: Acid Neutralizing Pump House.

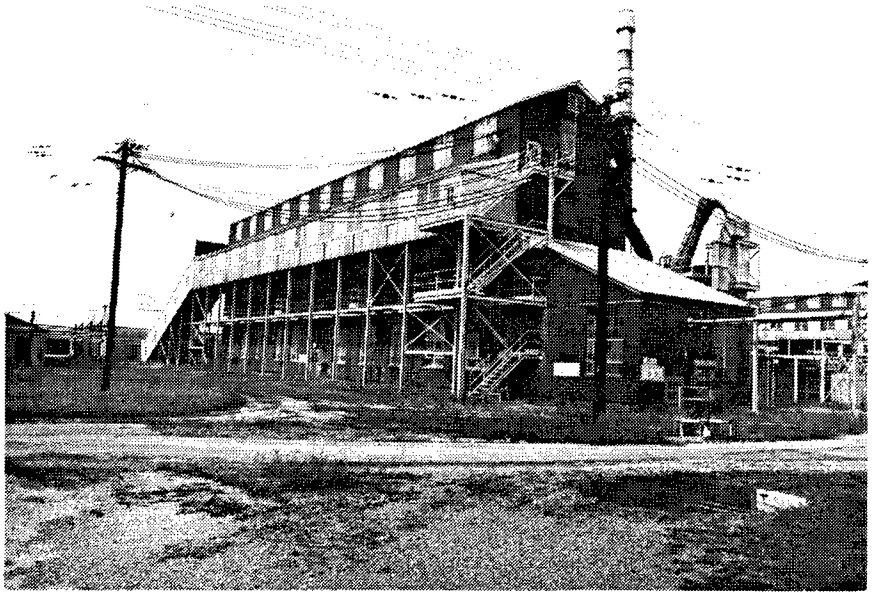


Figure 42. Building 105-3: Four-story, brick Nitrating House in which the cellulose (cotton or wood pulp) was mixed with nitric acid to make nitrocellulose.

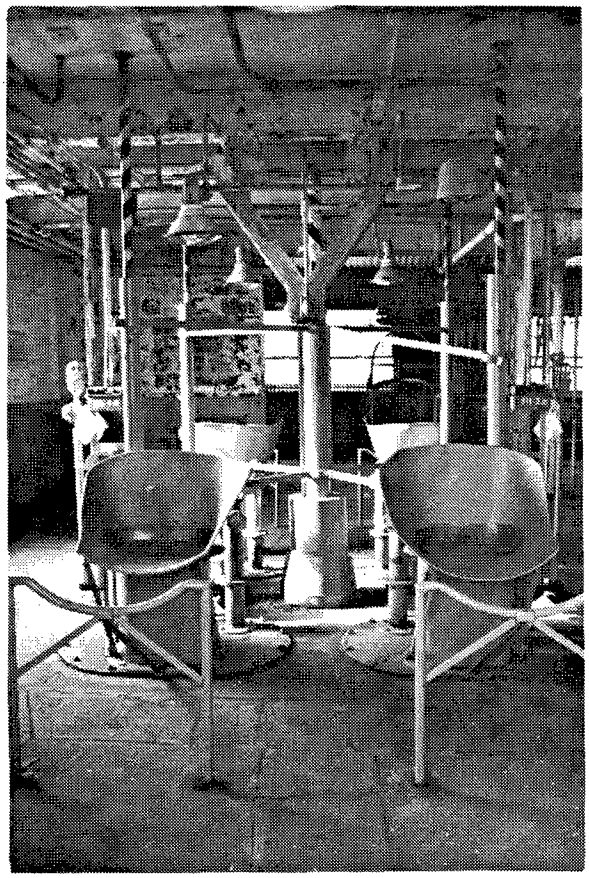


Figure 43. Building 105-1: Chrome dipping pot with agitator on the third floor.

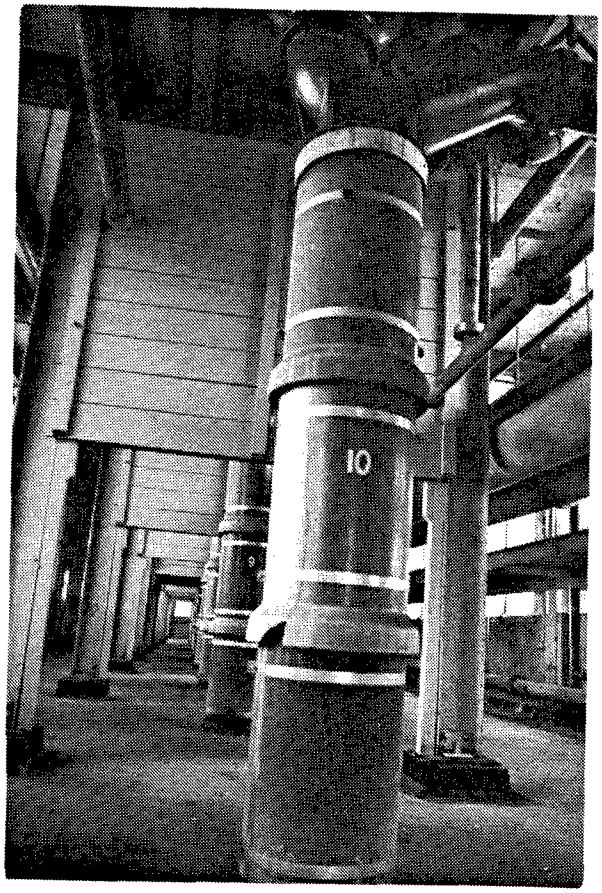


Figure 44. Building 105-1: Wringer base, constructed of concrete pipe and insulated by a ceramic coating, located on the first level of a Nitrating House.

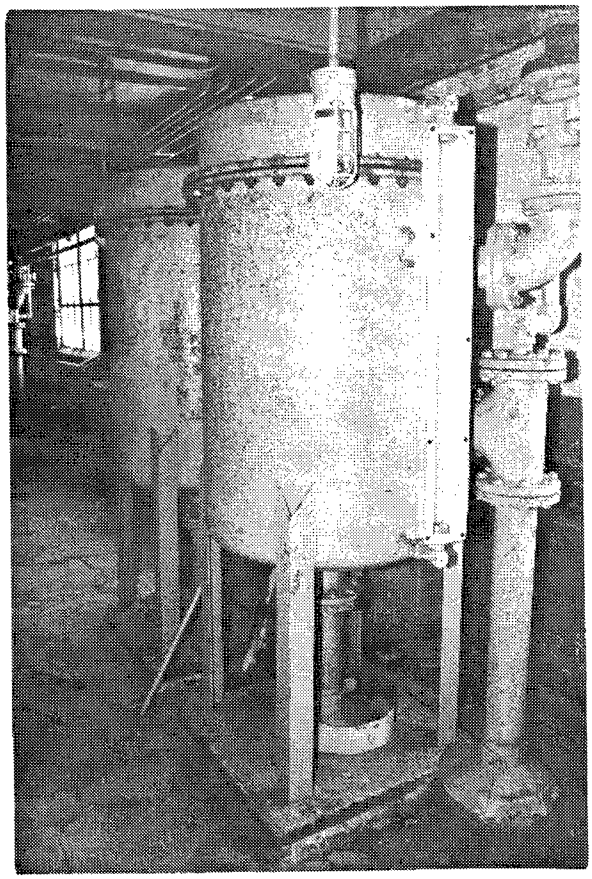


Figure 45. Building 105-3: Acid measuring tank on the third floor.

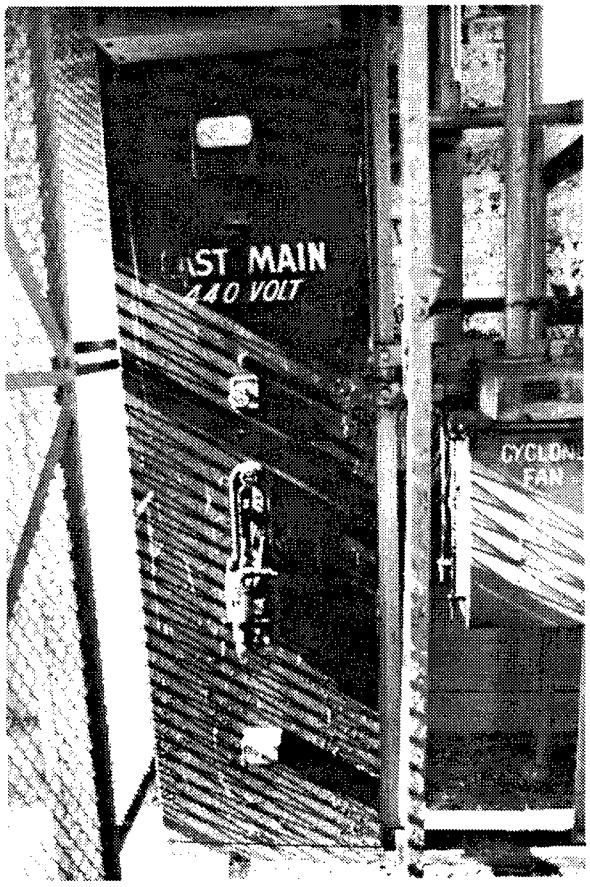


Figure 46. Building 105-1: Last main control panel of the Motor Room located on the fourth floor of a Nitrating House.

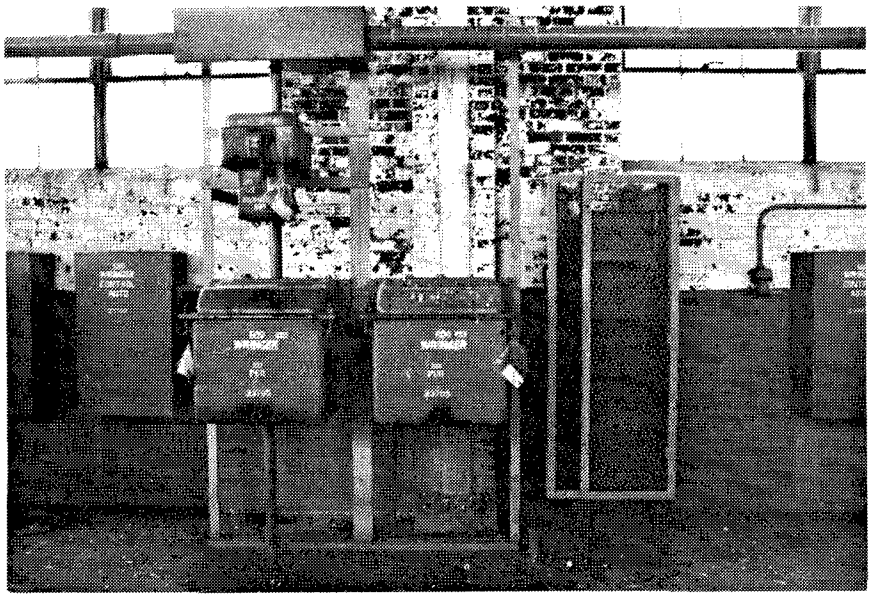


Figure 47. Building 105-1: Contactor for the Motor Room located on the fourth floor of a Nitrating House.

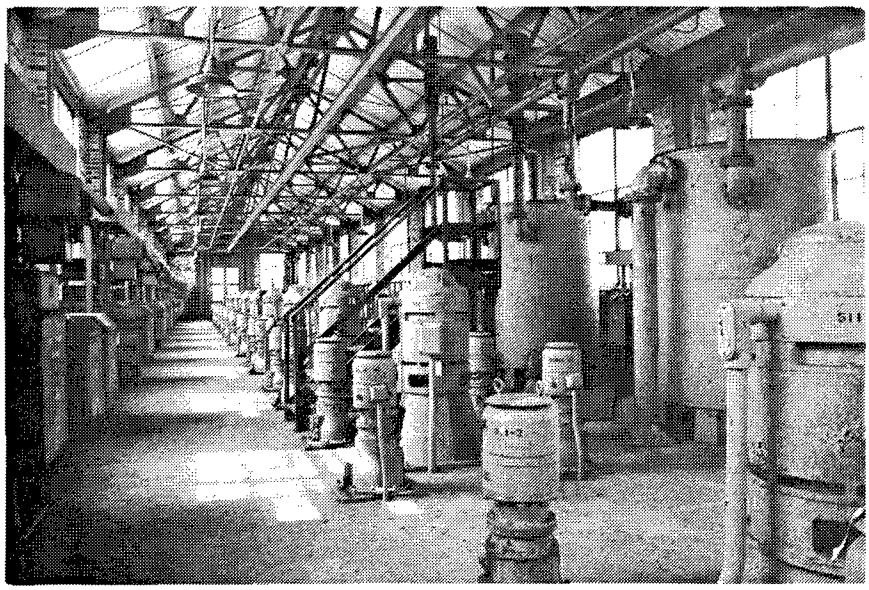


Figure 48. Building 105-3: Overview of the Motor Room located on the fourth floor of a Nitrating House. White water surge tanks line the far wall and the center row of machinery that includes four dipping-pot agitator-gear drives surrounded by one wringer drive motor.

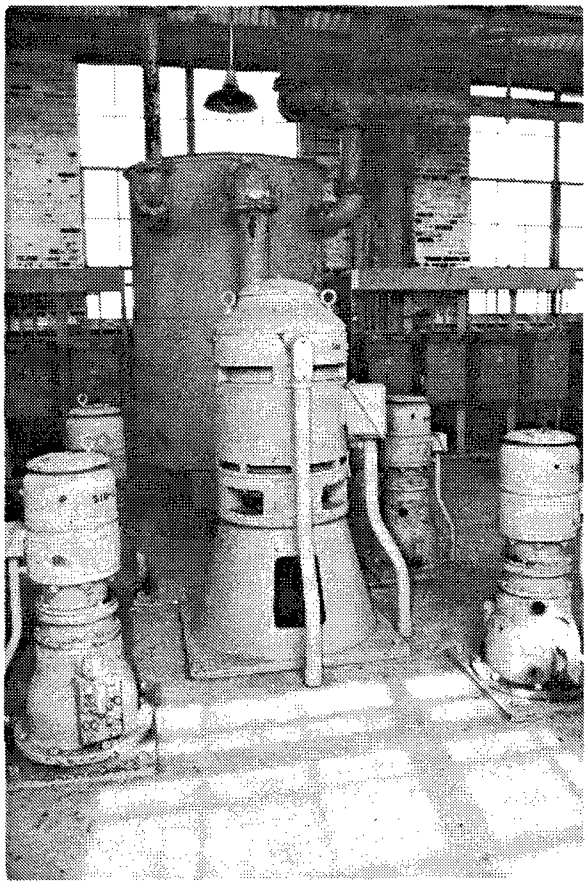


Figure 49. Building 105-3: White water surger tank on the fourth floor of a Nitrating House.

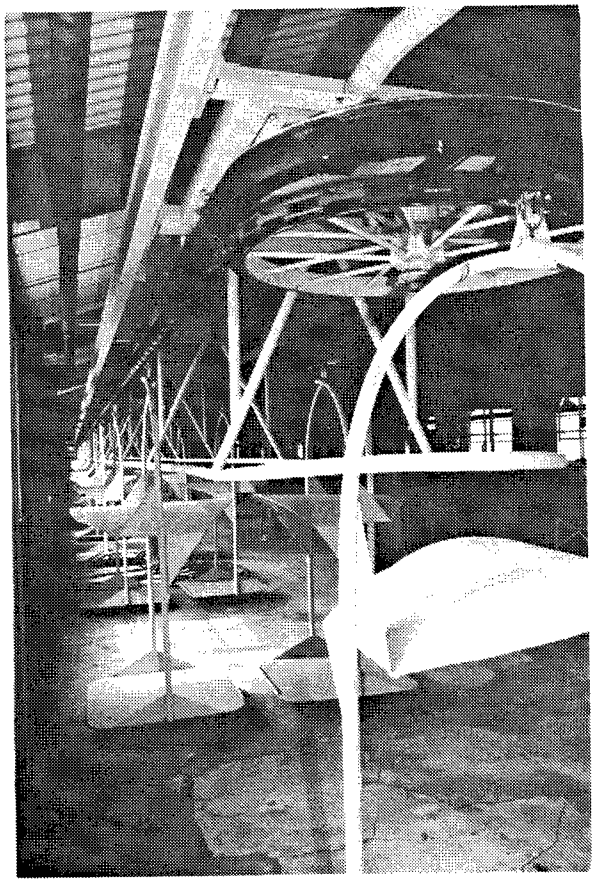


Figure 50. Building 105-3: Conveyor from Wood Pulp Building, entering the third level of a Nitrating House.



Figure 51. Building 108-2: Boiling Tub House where undesirable by-products of the nitrating process were removed.



Figure 52. Building 109-3: Pulping House where the slurry was pulped or ground.

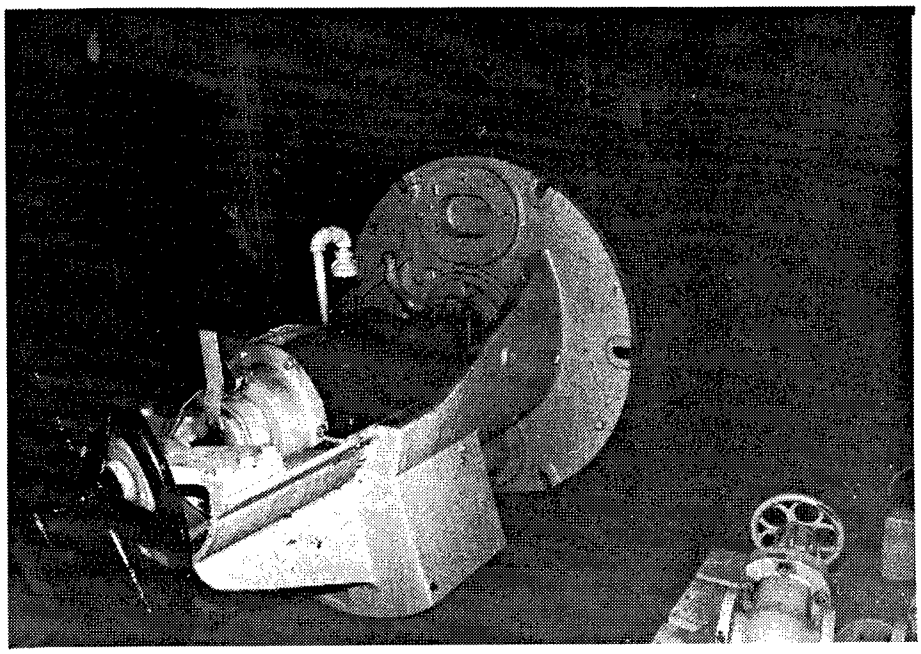


Figure 53. Building 109-1: Jordan engine on the first level of this Pulping House.

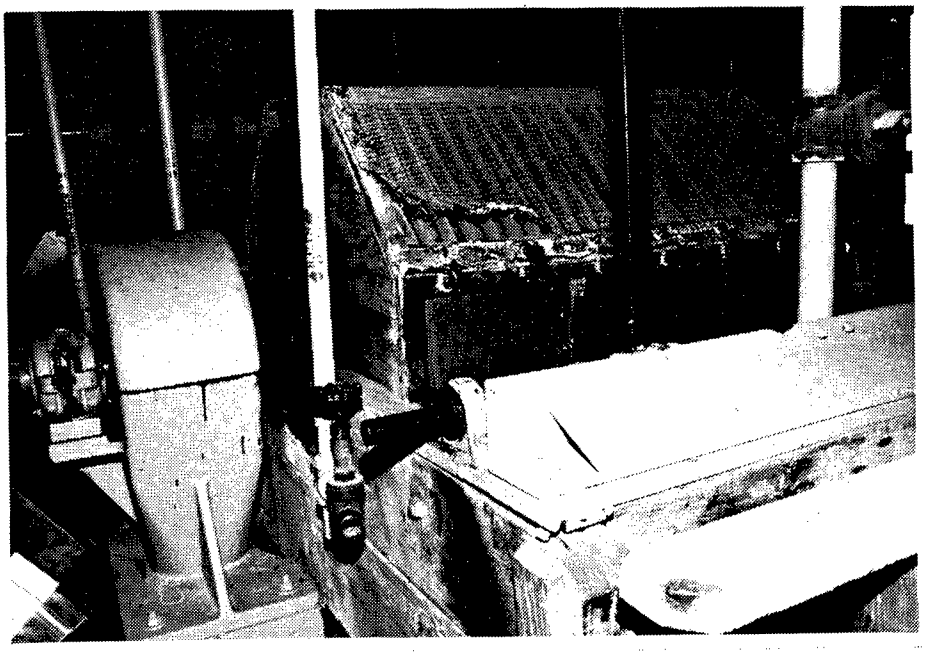


Figure 54. Building 109-1: Wooden tank de-waterer and screen (constructed in 1941) located on the first floor of this Pulping House. This stationary box contains an oscillating screen.

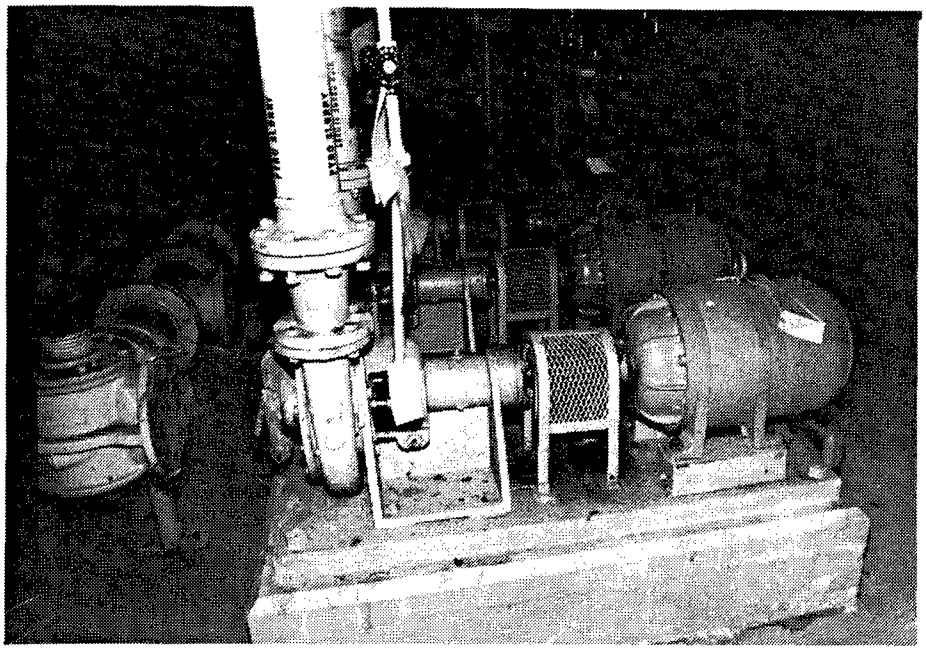


Figure 55. Building 109-1: A pyro slurry pump and General Electric motor on the first floor of a Pulping House.

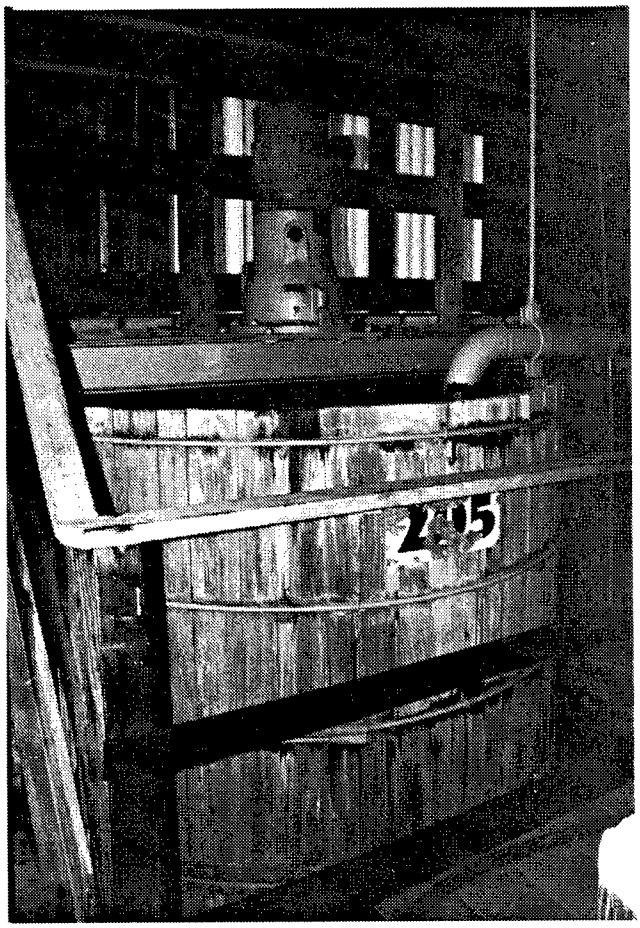


Figure 56. Building 109-1: Jordan Tank with Philadelphia motor on the second floor of a Pulping House.

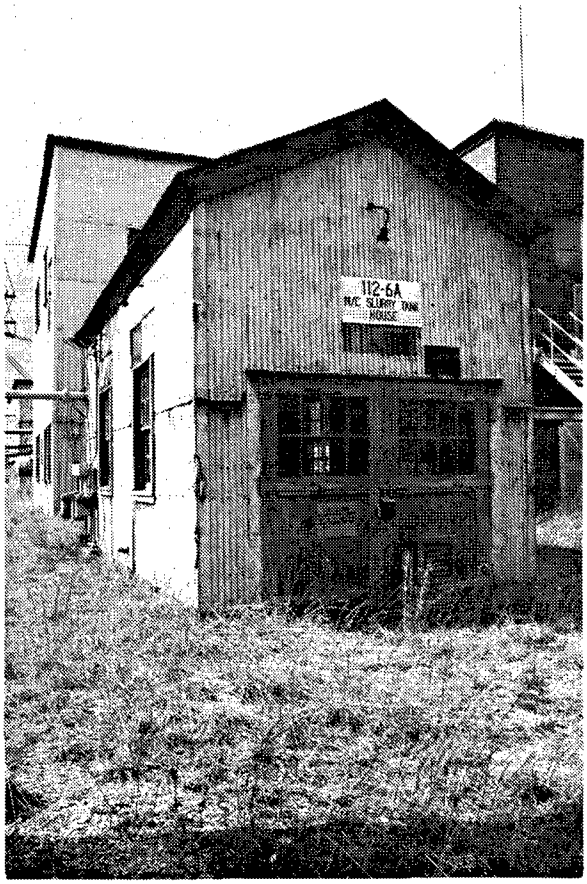


Figure 57. Building 112-6A: Nitrocellulose Slurry Tank House.

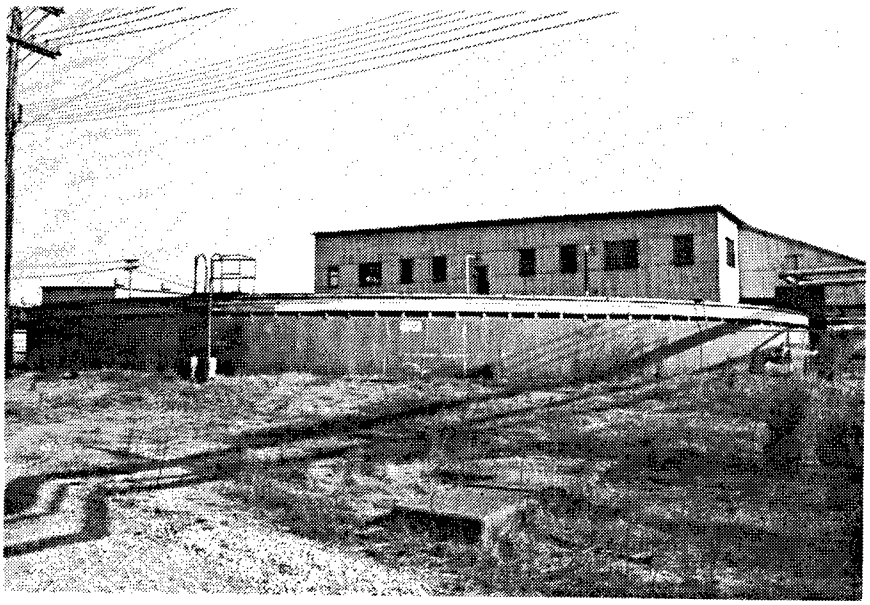


Figure 58. Building 120-5: Save-All Tanks for the Pulping, Poaching, and Blending Houses.

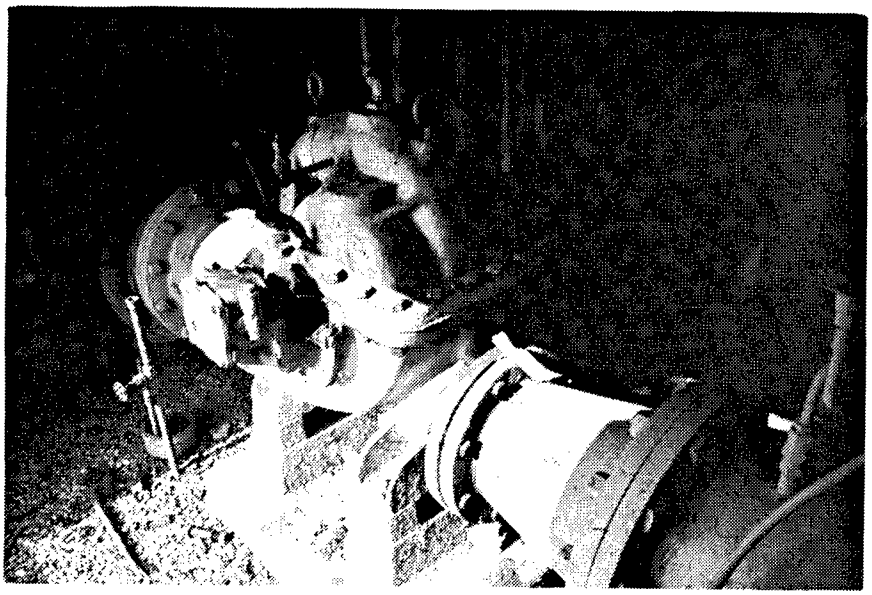


Figure 59. Building 120-5: General Electric motor pump, for the Save-All Tanks; its contactor is missing.

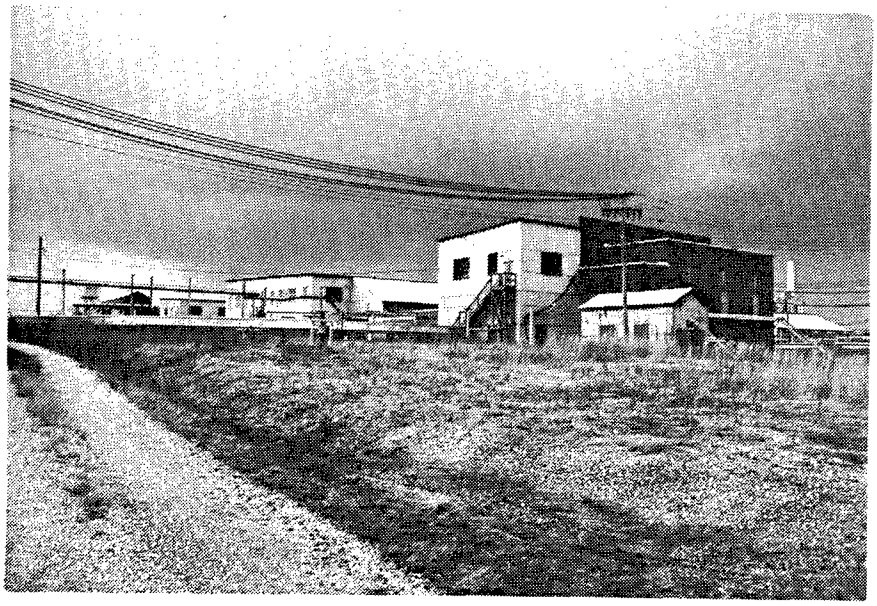


Figure 60. Building 113-3: Final Blend and Wringer House.

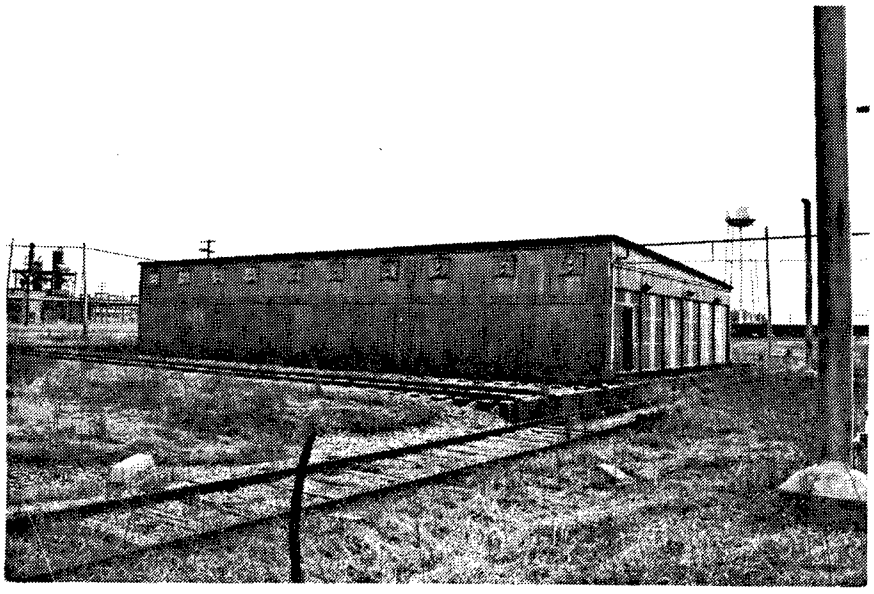


Figure 61. Building 201-3: Nitrocellulose Lag Storage.

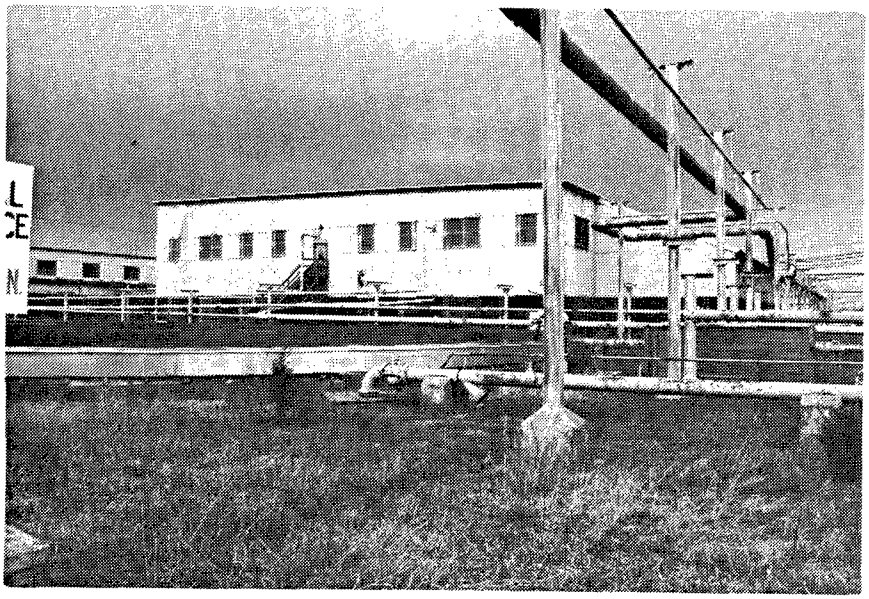


Figure 62. Building 112-3: Poacher Tub House.



Figure 63. Building 202-5: Dehydration Press House.

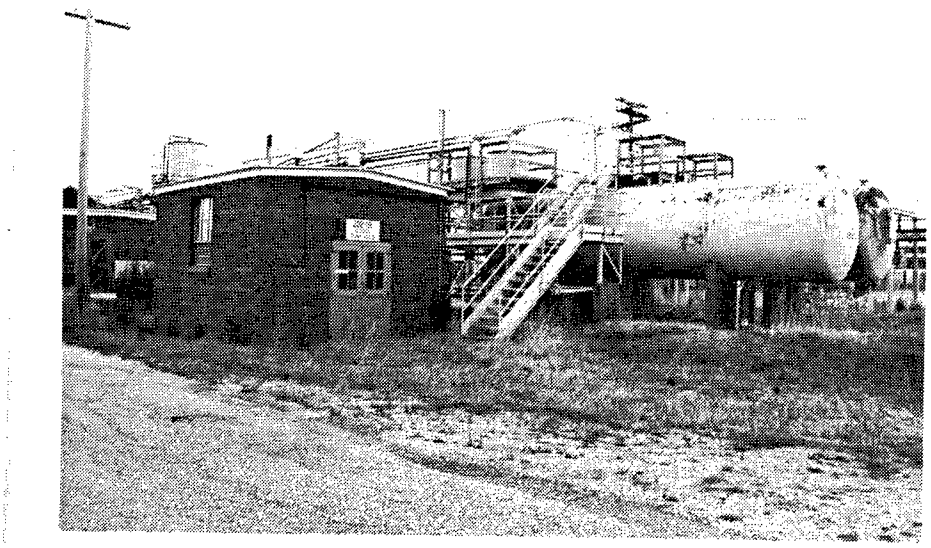


Figure 64. Building 202-18: Alcohol Pump House, which supplied alcohol for the Dehydration Pump House.

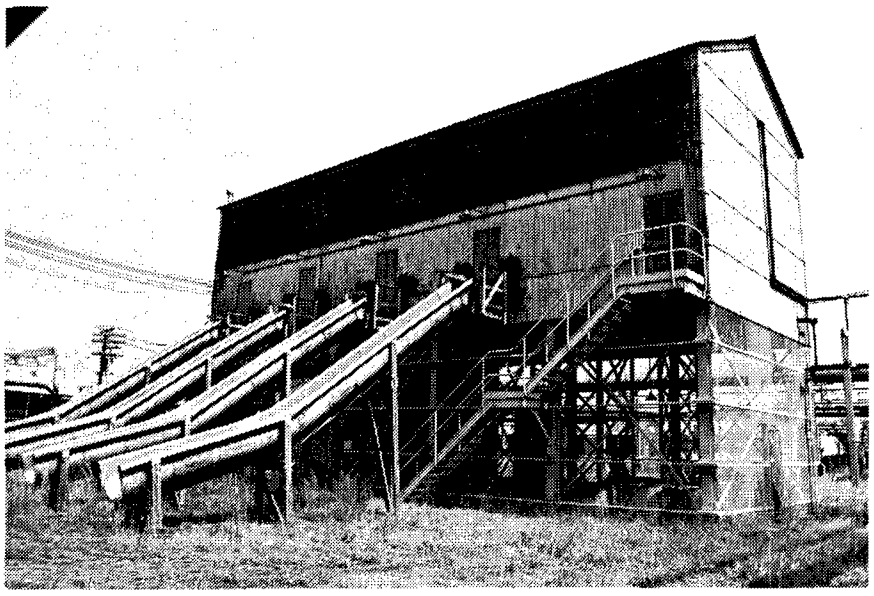


Figure 65. Building 206-3: Ether Mix House.

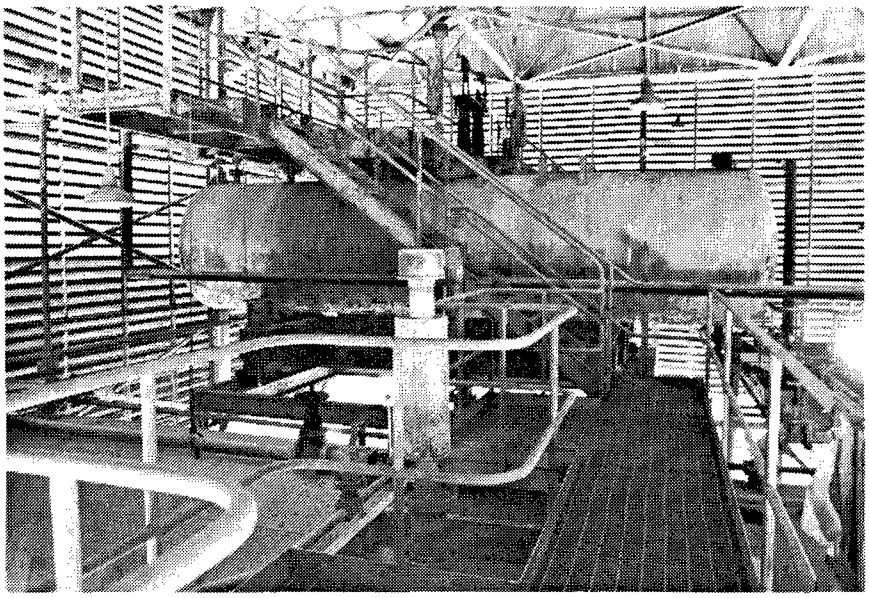


Figure 66. Building 206-3: Nineteen-foot tall ether/alcohol tank on the catwalk at the Ether Mix House.



Figure 67. Building 205-2: Dinitrotoluene Screen House and barricade where impurities were sifted from the nitrocellulose.

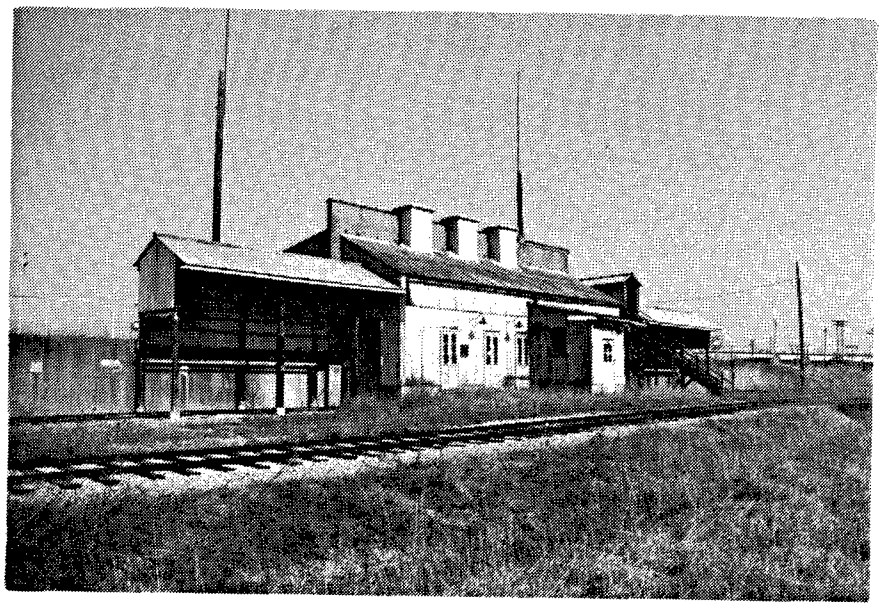


Figure 68. Buildings 205-23 and 205-1: Dry Screen House.

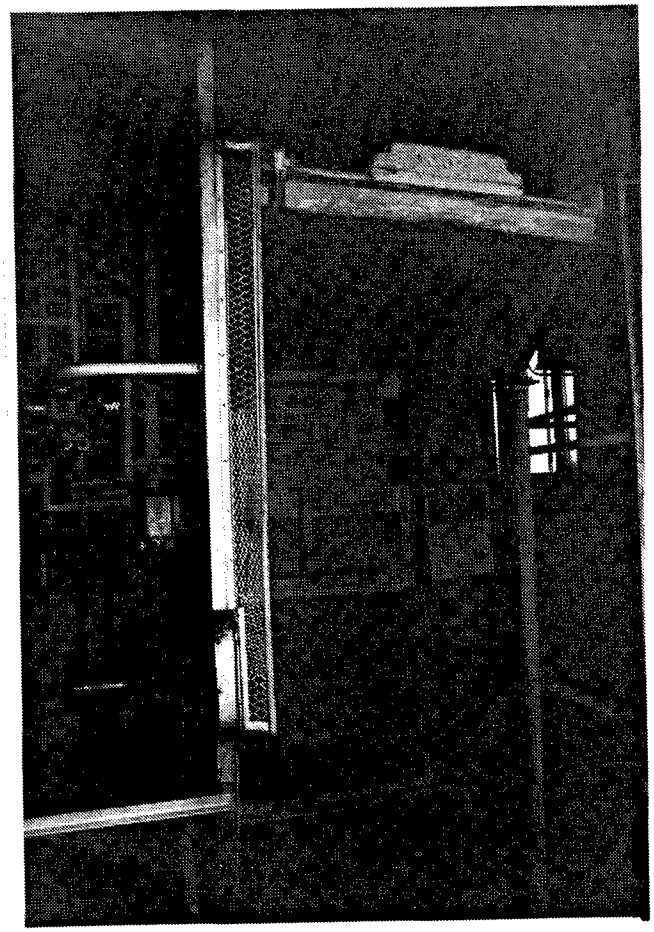


Figure 69. Building 205-2: Screen with weight capacity of 1,000 pounds.

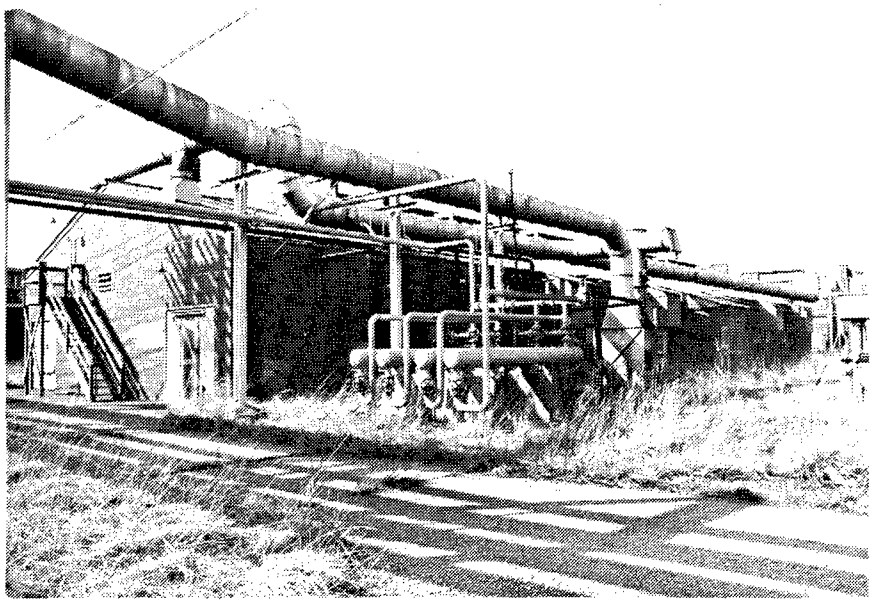


Figure 70. Building 208-9: Mixer House, representing one of two construction designs.

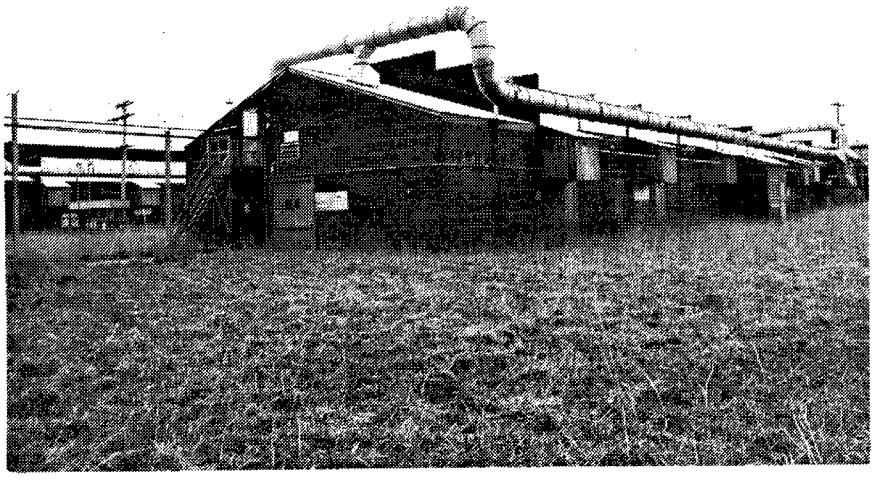


Figure 71. Building 208-2: Mixer House representing the second construction design.

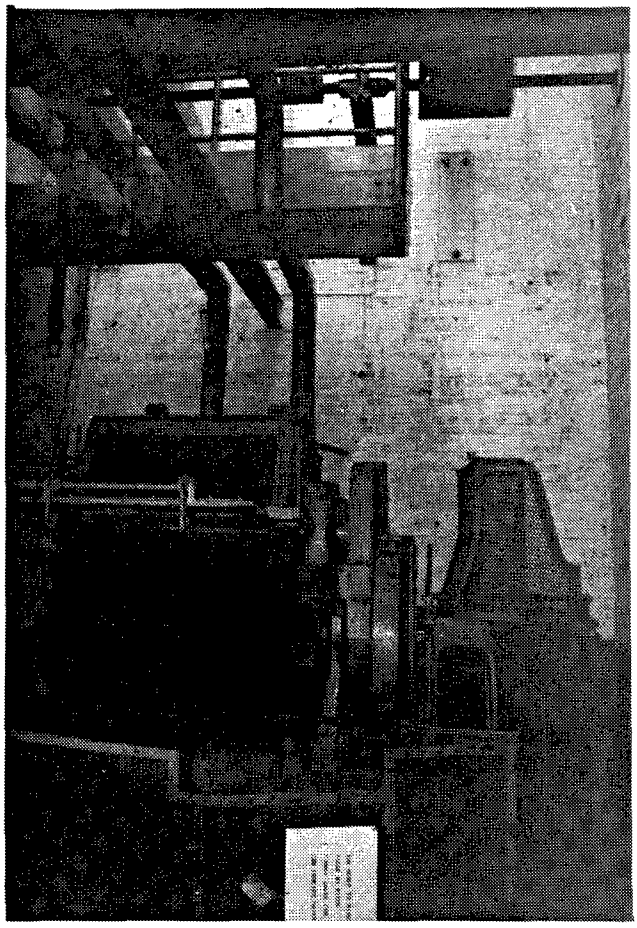


Figure 72. Building 208-2: Baker-Perkins mixer and kneading machine with a 100-gallon capacity.

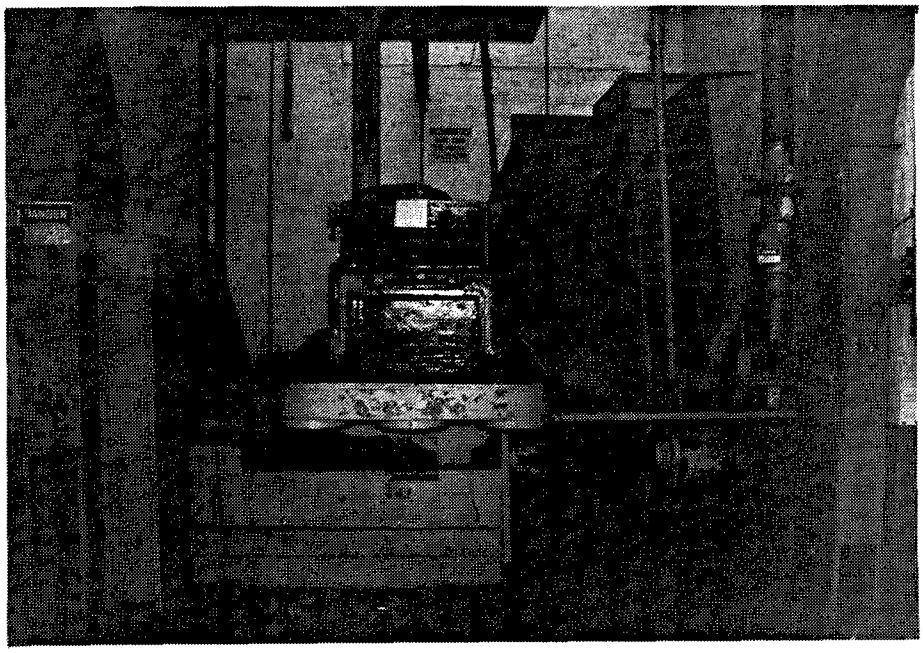


Figure 73. Building 208-2: Macerator with spout and hopper in a Mixer House.

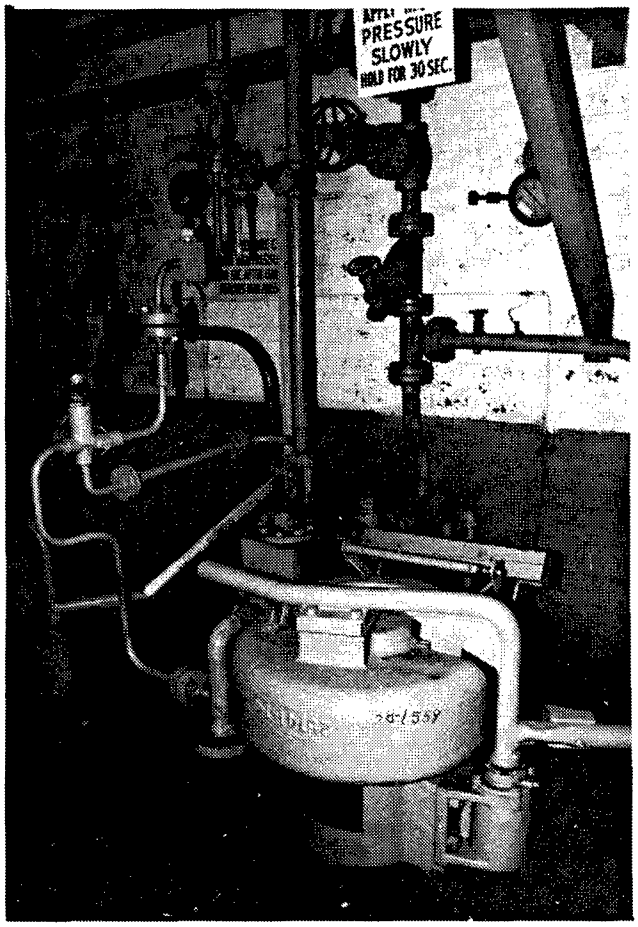


Figure 74. Building 208-2: Vertical blocking press at this Mixing House.

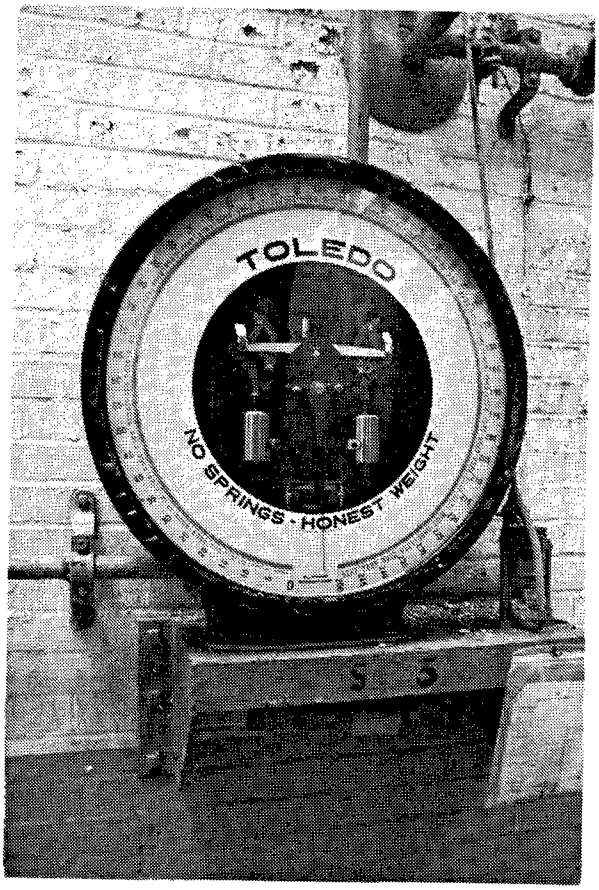


Figure 75. Building 208-2: Toledo 250-pound capacity scale manufactured in 1941.

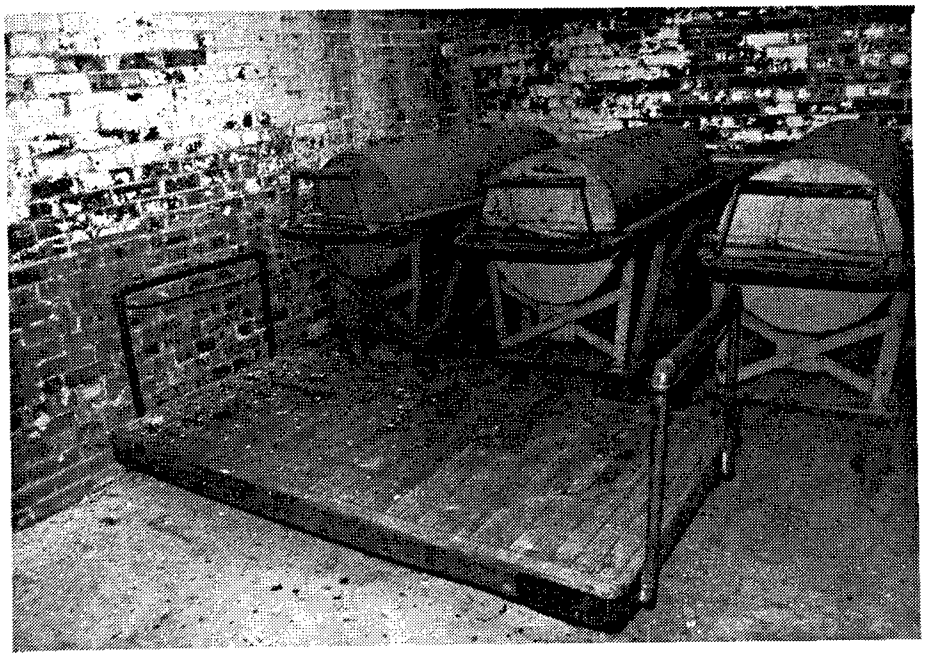


Figure 76. Building 208-2: Cylinder buggy and wooden flat-bed cart at this Mixer House.

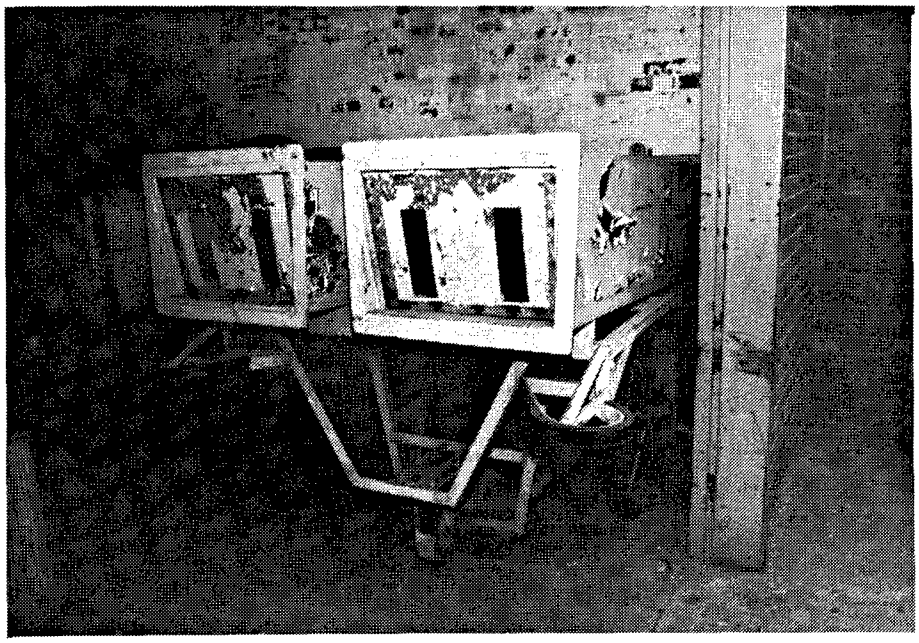


Figure 77. Building 208-2: Cart at this Mixer House.

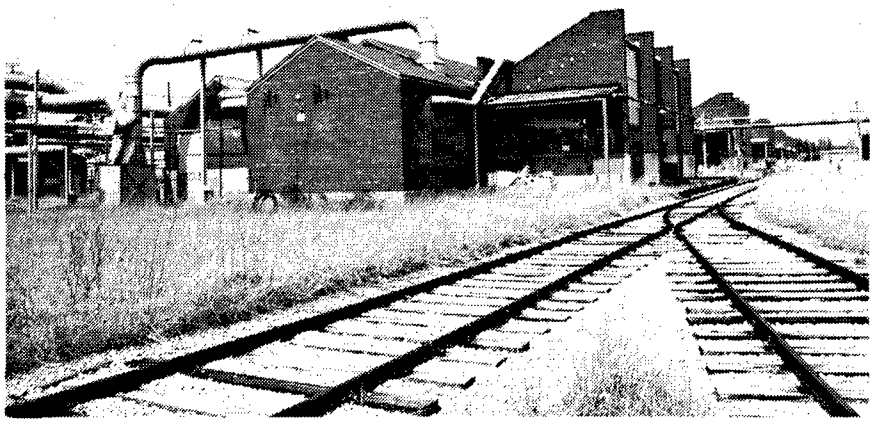


Figure 78. Building 211-6: Horizontal Screening and Press House.



Figure 79. Building 211-8: Horizontal Screening and Press House that represents a second architectural design for this type of building.

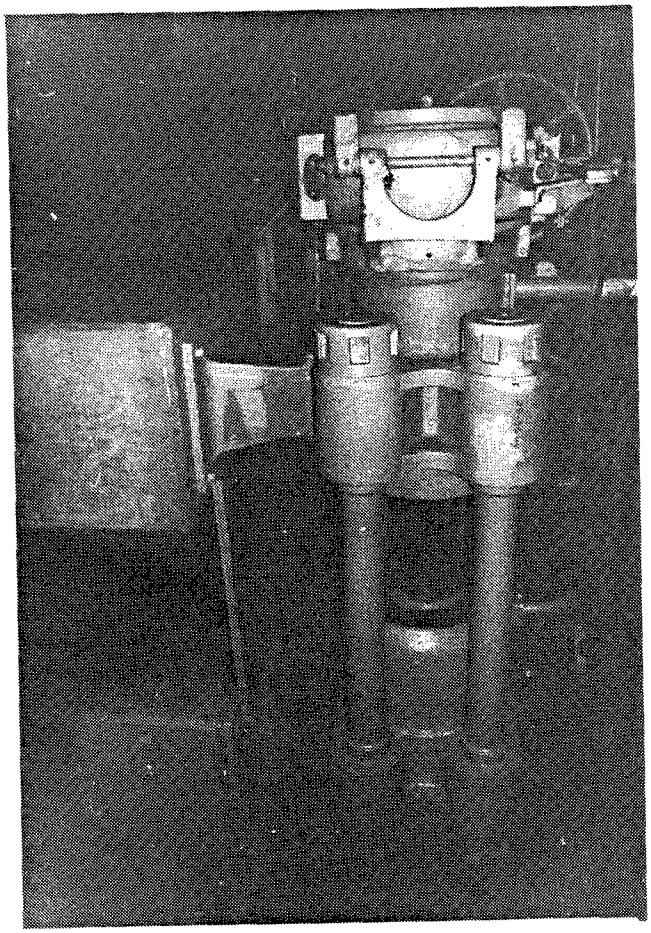


Figure 80. Building 211-8: Watson Stillman twelve-inch horizontal press operated by a hydraulic piston with a perforated brass plate and a removable screen attached to the horizontal press.

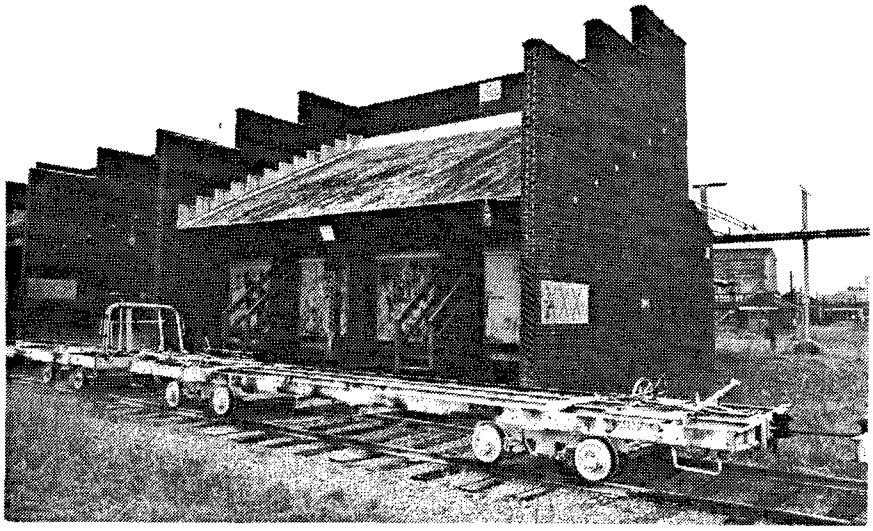


Figure 81. Building 214-1: Brick-constructed Solvent Recovery House (with rail flatcars in foreground) where the solvents, ether, and alcohol were extracted from the powder.

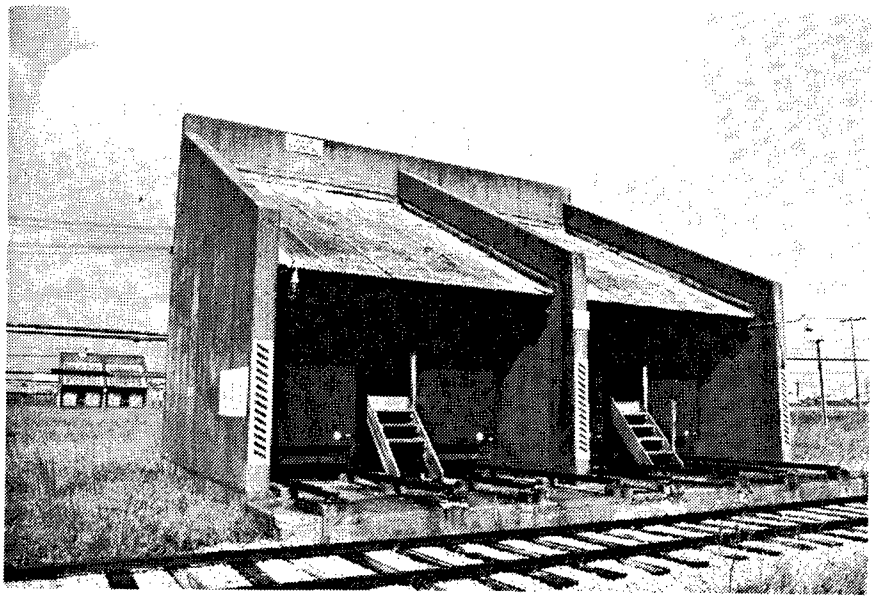


Figure 82. Building 214-88: Solvent Recovery House constructed of concrete.

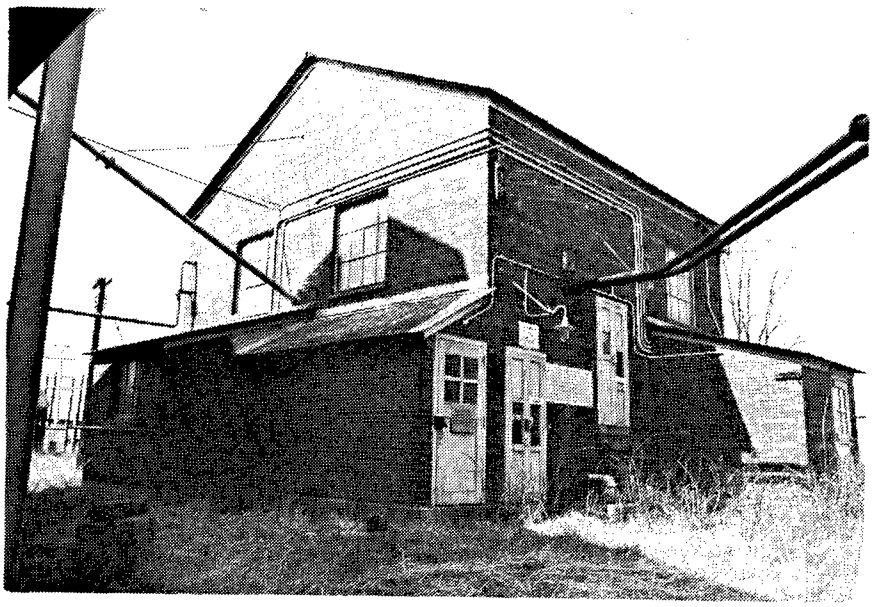


Figure 83. Building 218-10: Unloading and Screening House in which powder was unloaded and screened.



Figure 84. Building 218-10: An interior overview of this Unloading and Screening House. To the left is where the powder was "dumped" or unloaded from the solvent recovery cars; to the right is the screener.

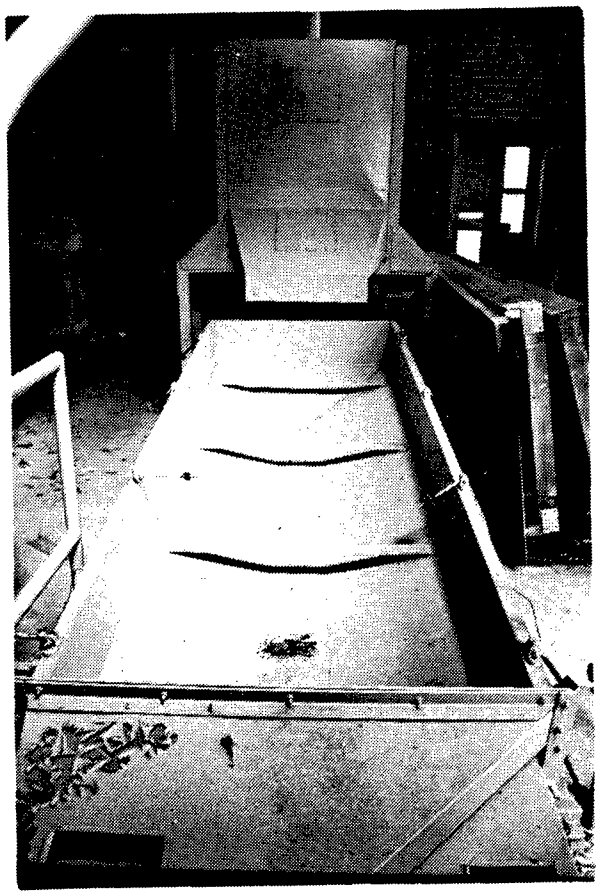


Figure 85. Building 218-10: Screener, constructed by Ro-Ball, J.H. Day Company, of Cincinnati, Ohio. The screens have been removed.

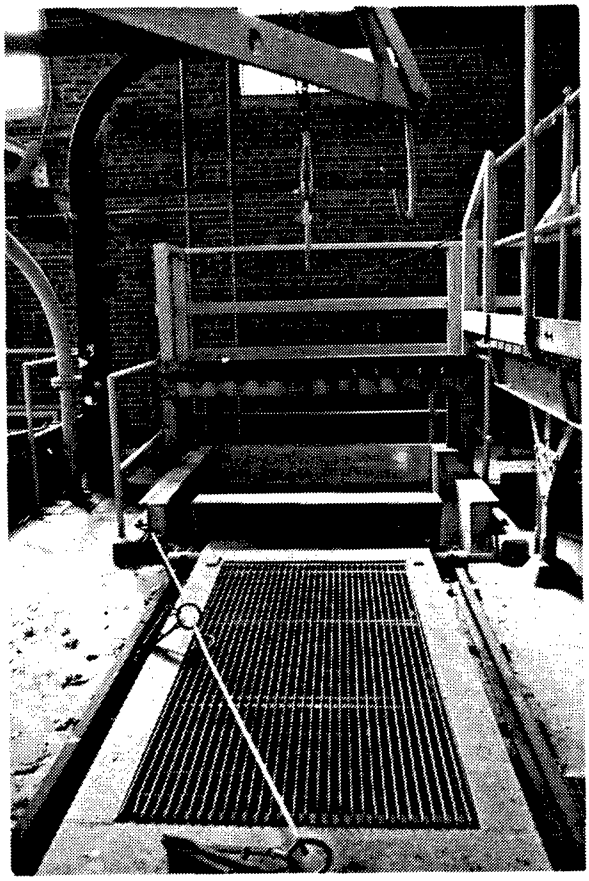


Figure 86. Building 218-10: Note the pulley system over the "dump" that aided in unloading the solvent recovery cars at this Unloading and Screening House.

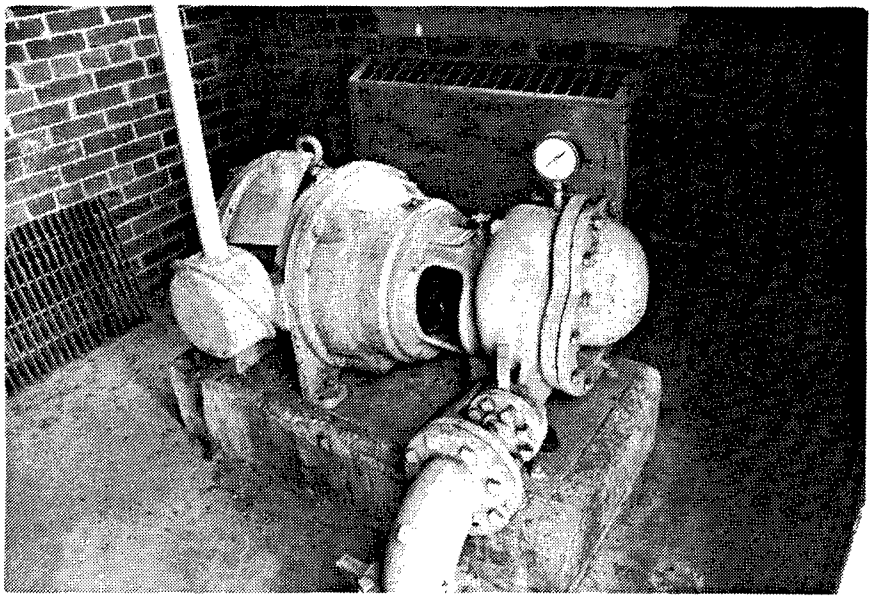


Figure 87. Building 218-10: Jet Pump.



Figure 88. Building 219-10: Water Dry House with Dump Shed in background.



Figure 89. Building 219-10: Interior view of this Water Dry House.

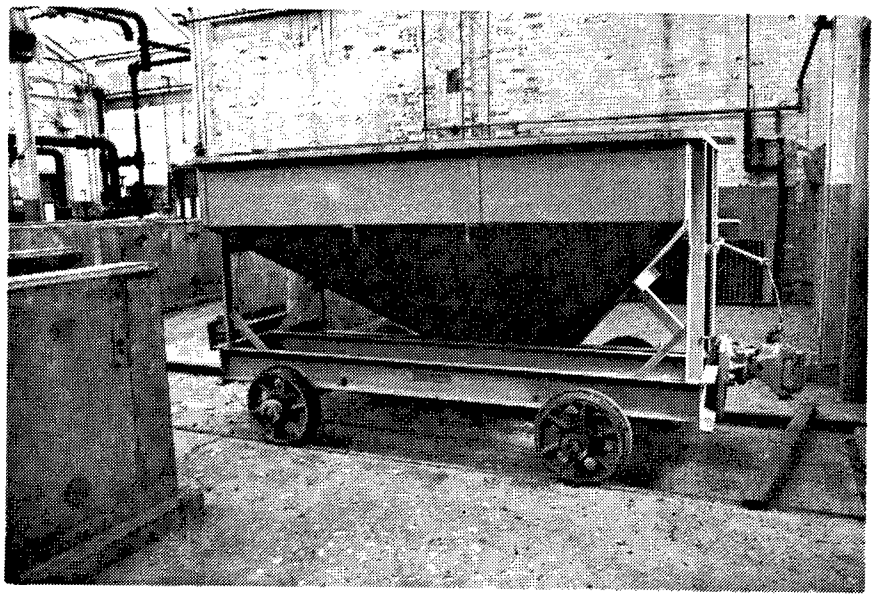


Figure 90. Building 219-10: Wet Powder Rail Car.

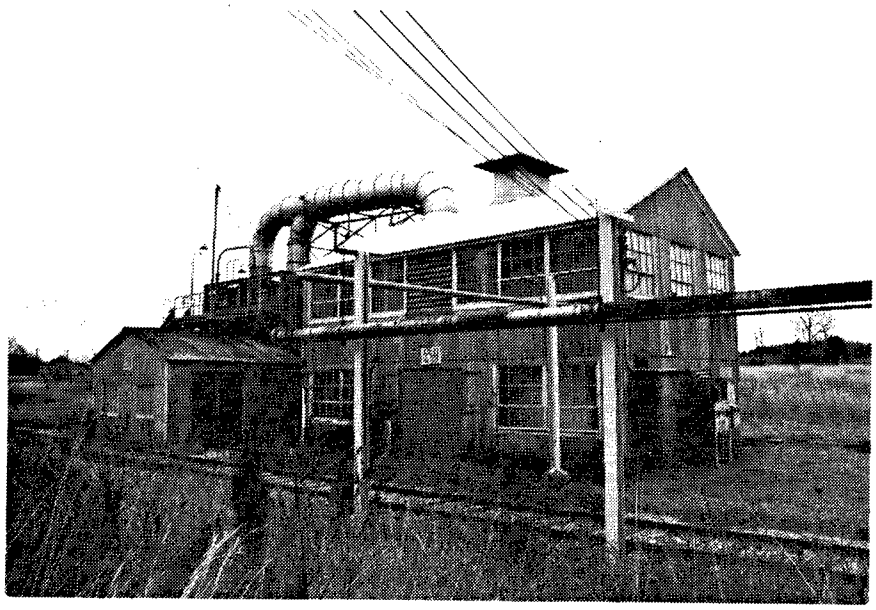


Figure 91. Building 220-23: Controlled Circulation Dryer Fan House.

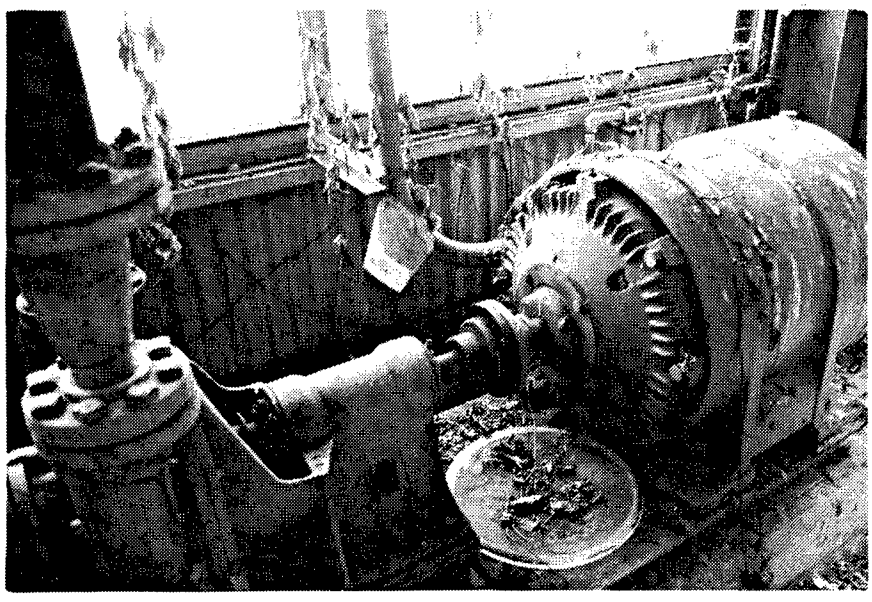


Figure 92. Building 220-23: Allis Chalmers GOHP electric motor built in 1941.

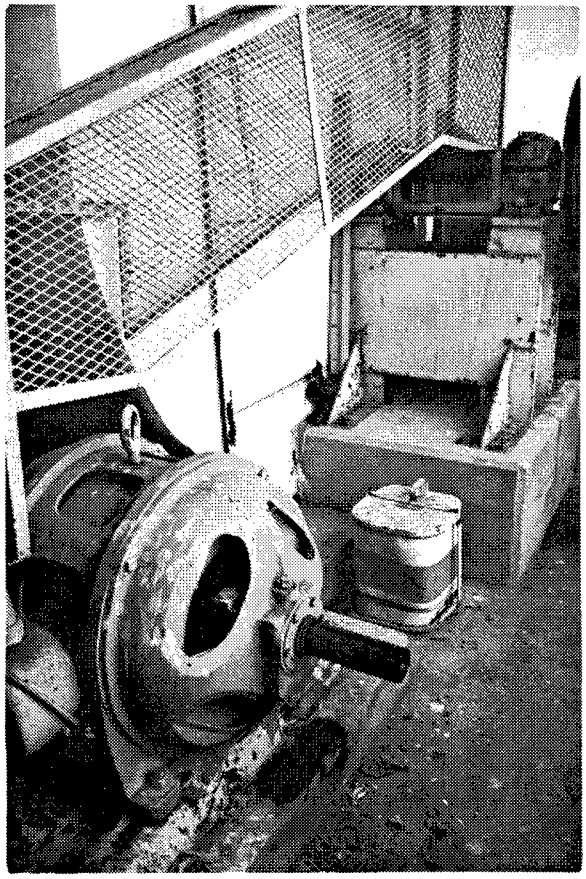


Figure 93. Building 220-23: Fan ARRGT #1, Buffalo Forge Company.

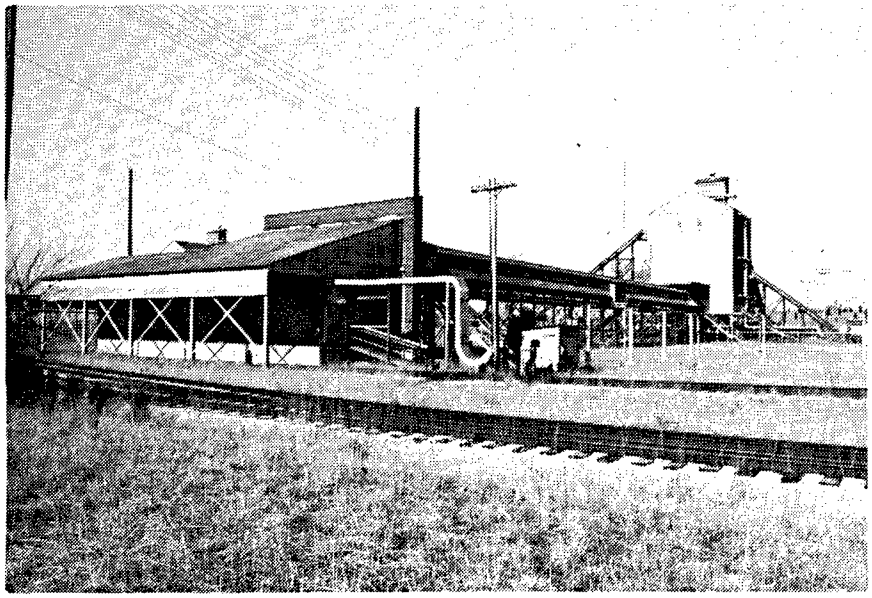


Figure 94. Building 221-2: Pack House (foreground), Walkway, and Blending Tower (background).

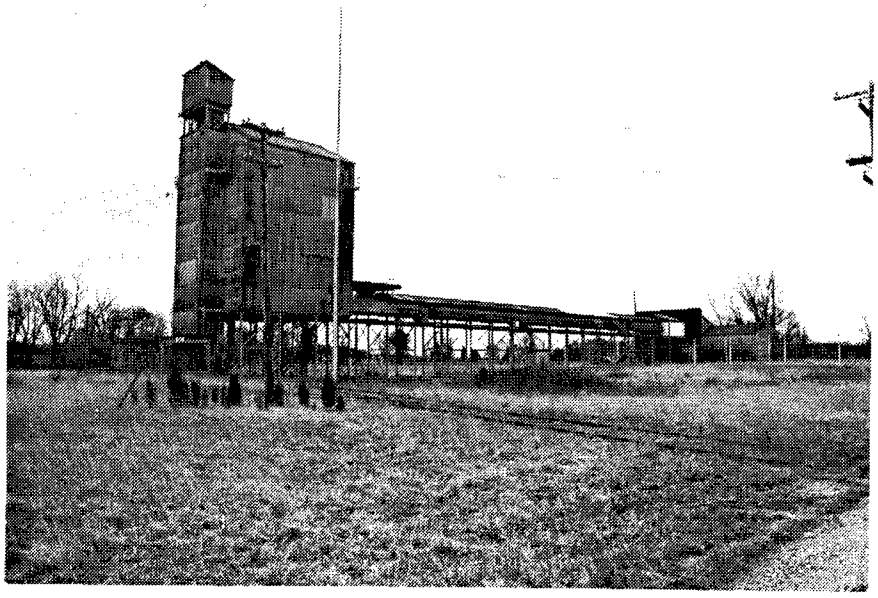


Figure 95. Building 221-4: Second view of the Blending Tower and Pack House.

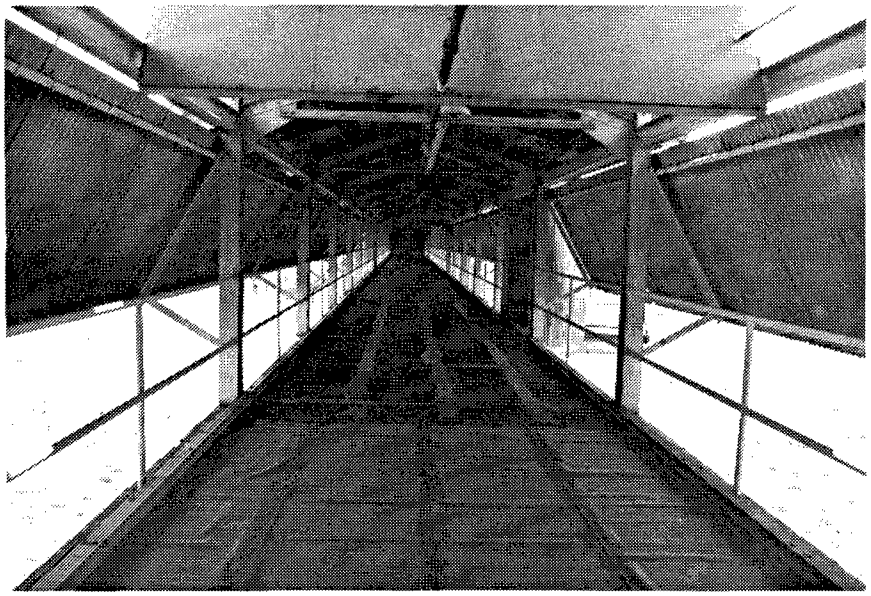


Figure 96. Building 221-2: Catwalk, or walkway, connecting the Blending Tower and Can Pack House.

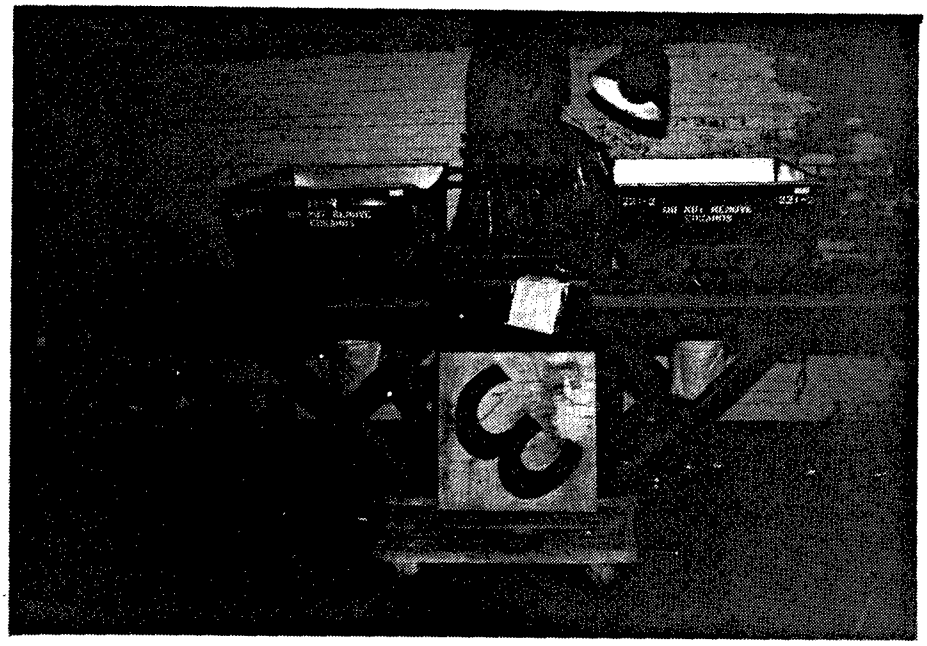


Figure 97. Building 221-2: Hopper and Toledo scale in this Pack House.

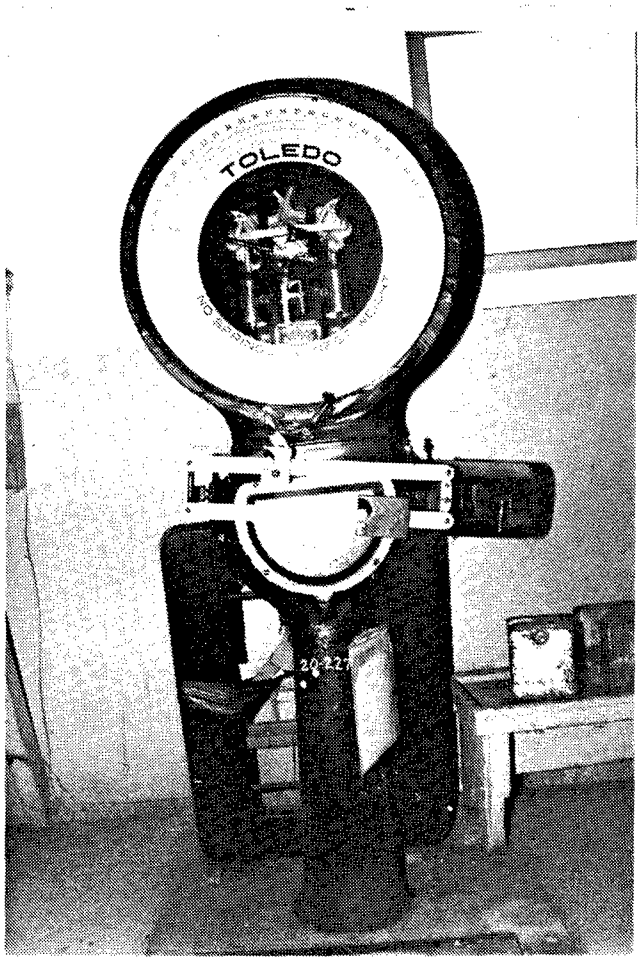


Figure 98. Building 221-2: Toledo scale with a 175-pound capacity utilized in this Pack House.

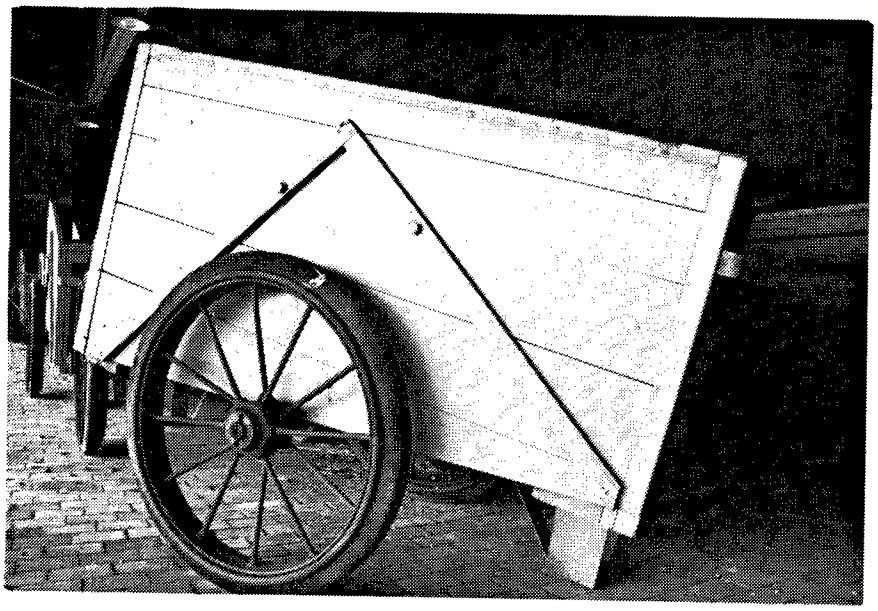


Figure 99. Building 221-2: Powder Buggy with Goodyear tires that was used to take powder from the Blending Tower to the Pack House.

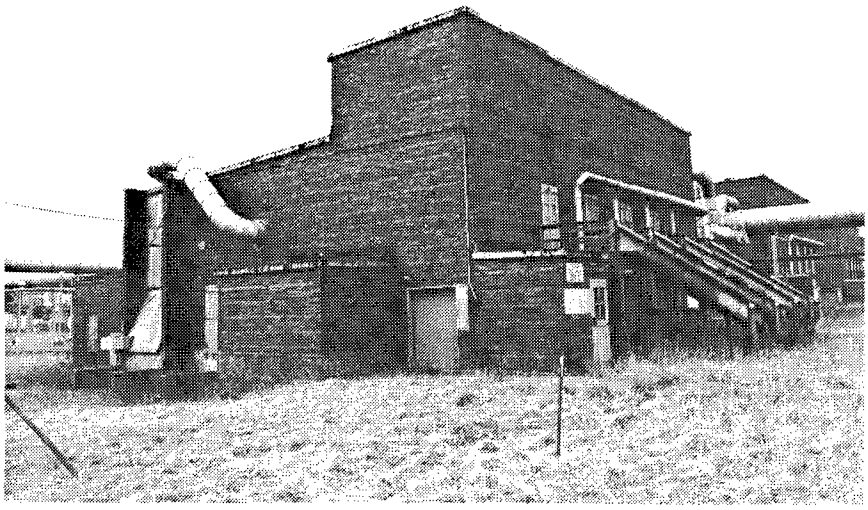


Figure 100. Building 234-5: Vertical Press House for graining single-perforated powder.

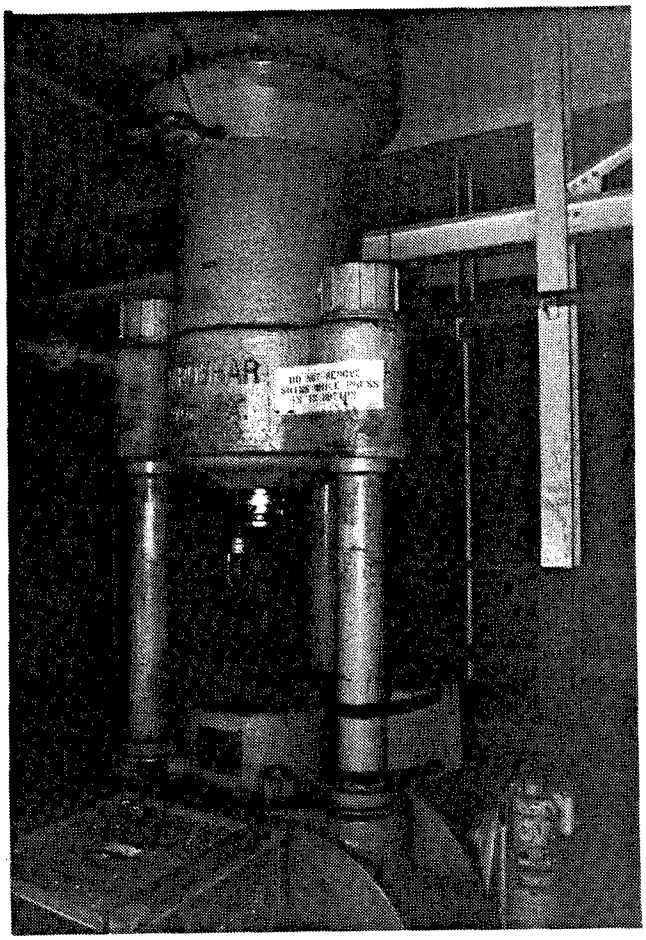


Figure 101. Building 234-6, from catwalk: Vertical Finishing Press that was refurbished by Fulton Iron Works in 1953; originally it was manufactured by Farquhar.

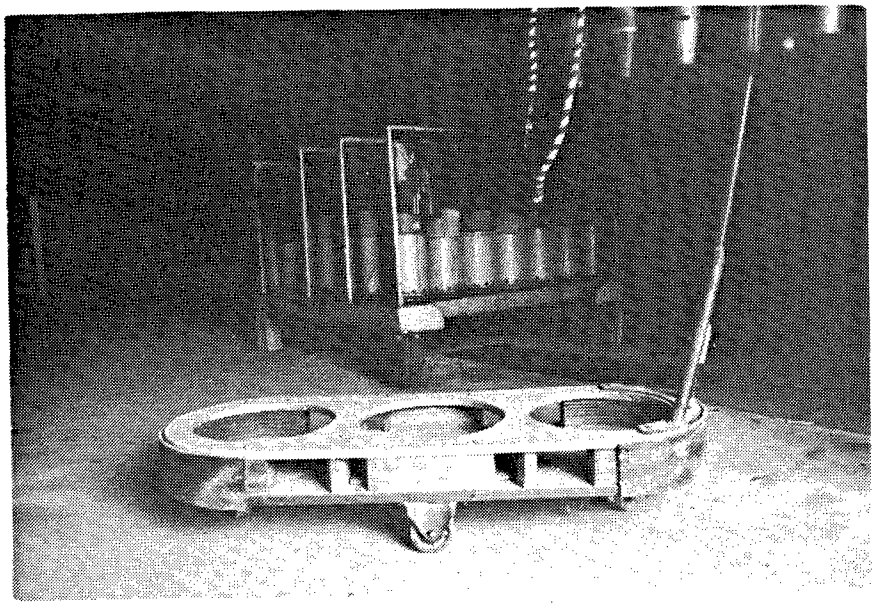


Figure 102. Building 234-6: Trolley.



Figure 103. Building 235-1: Rifle Water Dry House where single-perforated powder was sent after the completion of the solvent recovery process.



Figure 104. Buildings 237-13 and 237-12: Tray Dry Motor House and Tray Dry House.

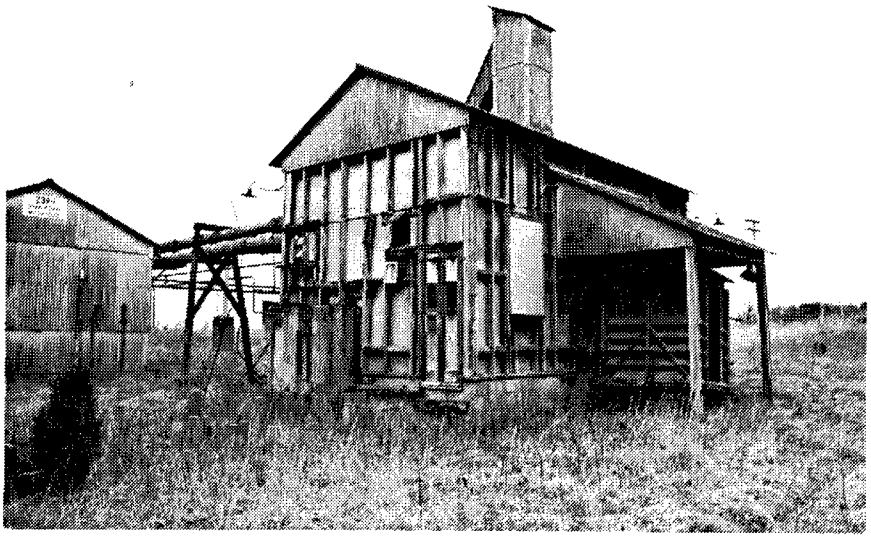


Figure 105. Building 239-2: Shaker Sieve House where single-perforated powder was purified.

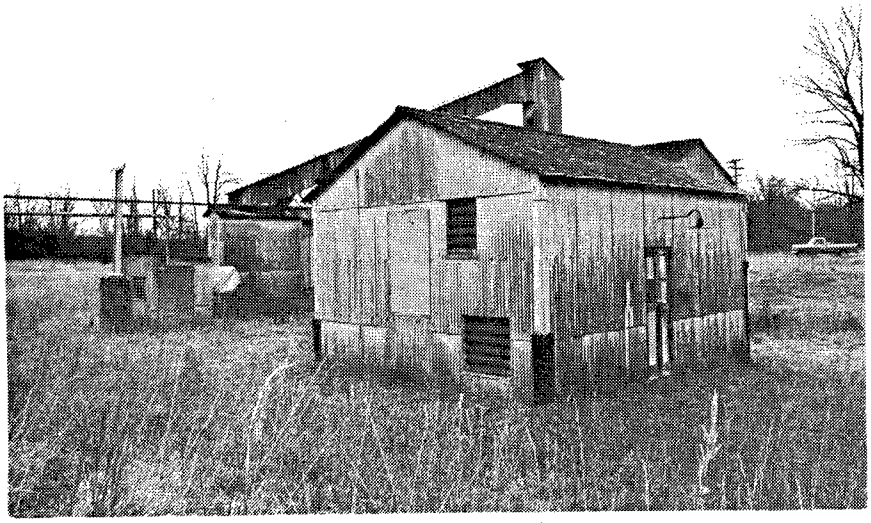


Figure 106. Building 239-1: The Motor House for the Shaker Sieve House.



Figure 107. Building 239-2A: Screen Storehouse for the Shaker Sieve House.

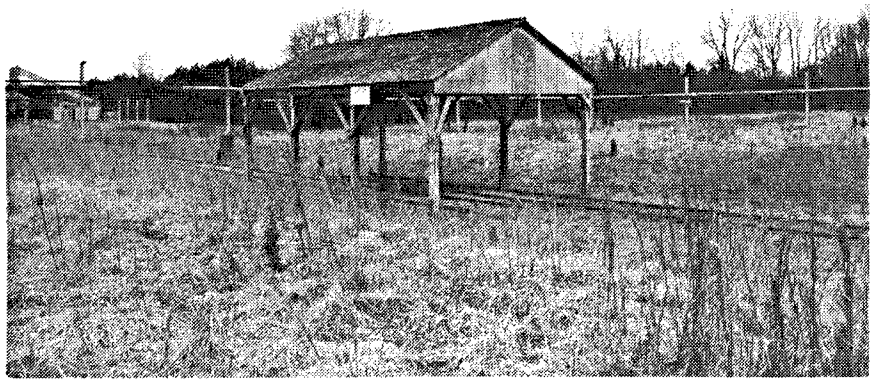


Figure 108. Building 239-2B: Transfer Shed for the Shaker Sieve House.

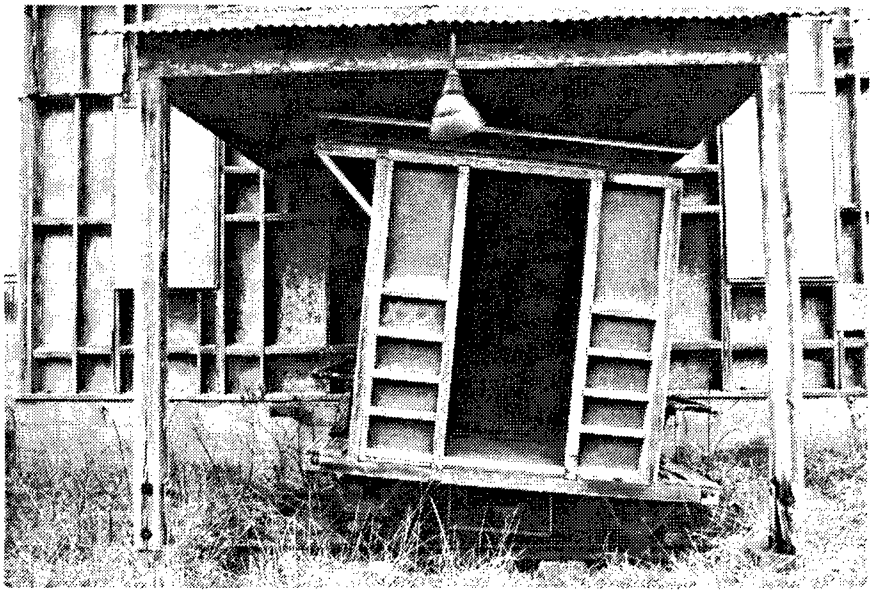


Figure 109. Building 239-2: Trolley on the east side of the Shaker Sieve House.



Figure 110. Building 1001: Bag Manufacturing Building with a sawtooth roof. In this building, hundreds of women sat at sewing machines stitching bags together for the powder.

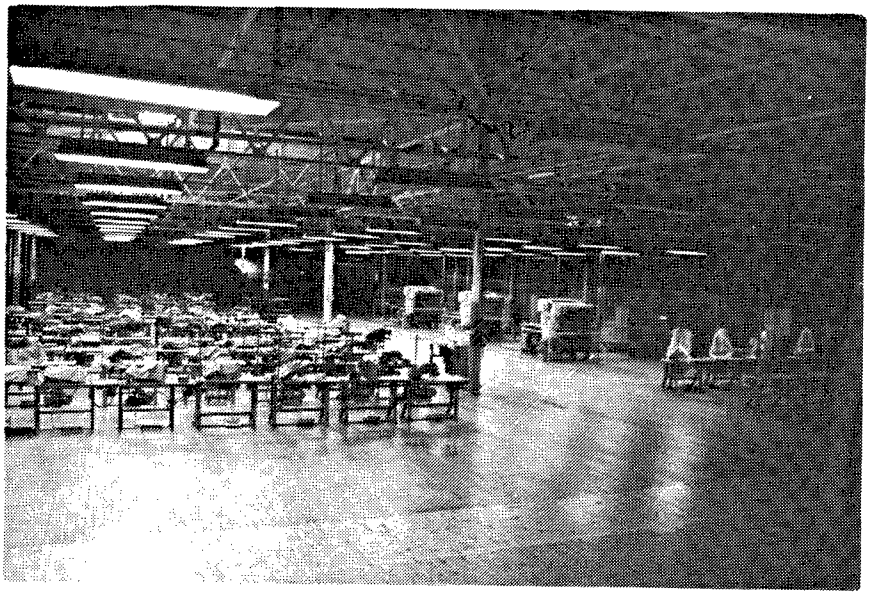


Figure 111. Building 1001: Interior view showing a small portion of the bag manufacturing assembly line.

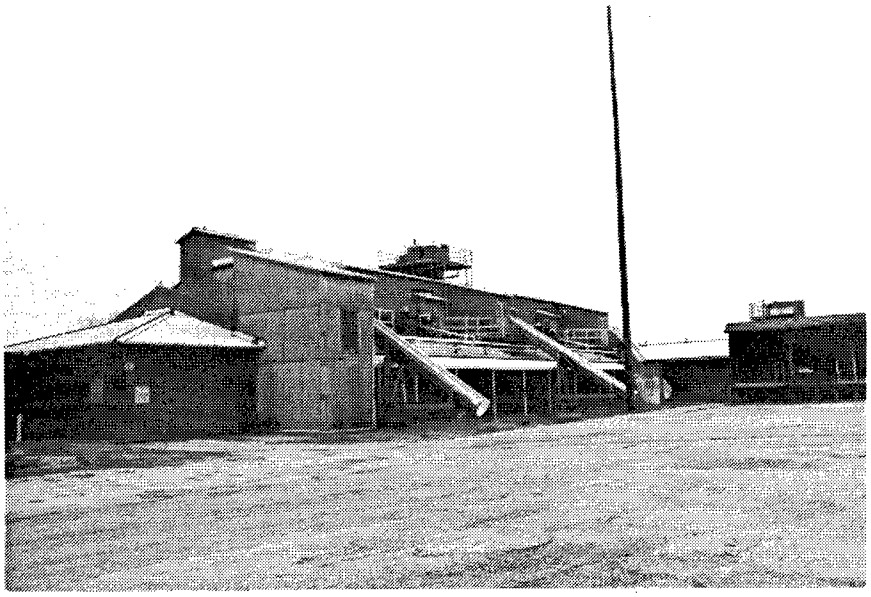


Figure 112. Building 3013: Bag Loading Building for Propellant Charge Load Line #6.

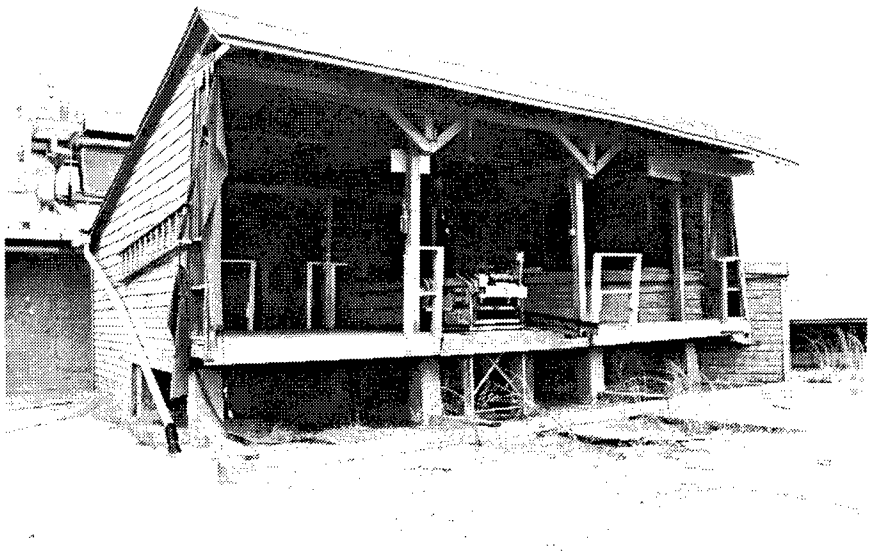


Figure 113. Building 3013: Can Dock where the finished product was taken from the line.



Figure 114. Building 3013: Covered walkway to the Bag Load Line.



Figure 115. Building 4942: Black Powder Loading Rest House.



Figure 116. Building 4902: Black Powder Fan and Dry House.

SUPPORT FACILITIES FOR MANUFACTURING



Figure 117. Building 716-2: Garage or Repair Shop.

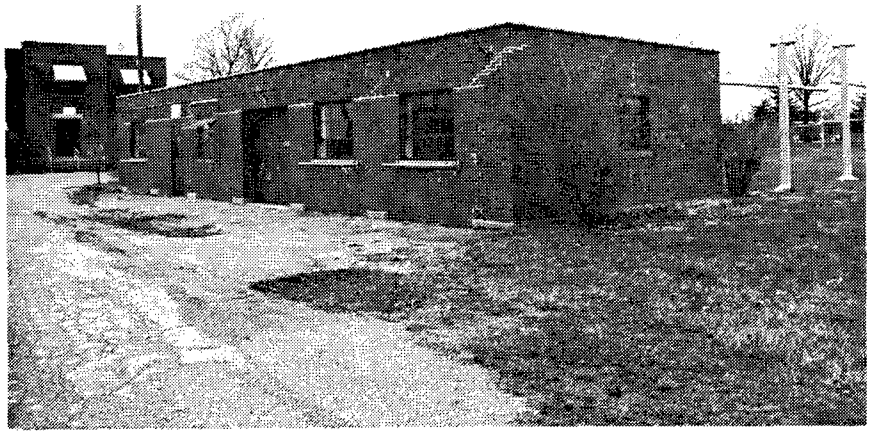


Figure 118. Building 716-3: Radio Repair Shop.



Figure 119. Building 717: Combined Shop for metal and woodworking.



Figure 120. Building 722-4: Area Shop - Battery Shop.

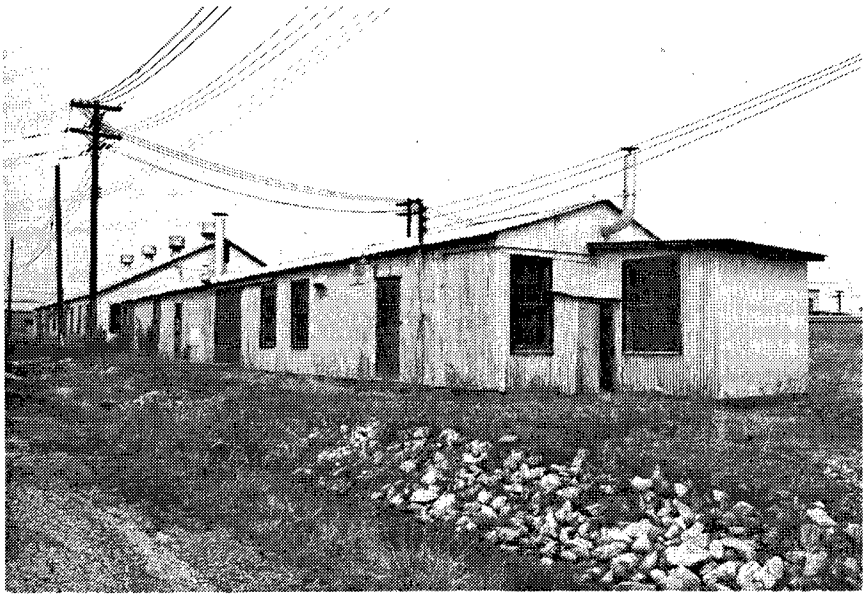


Figure 121. Building 722-9: Area Shop - Instrument and Scale.

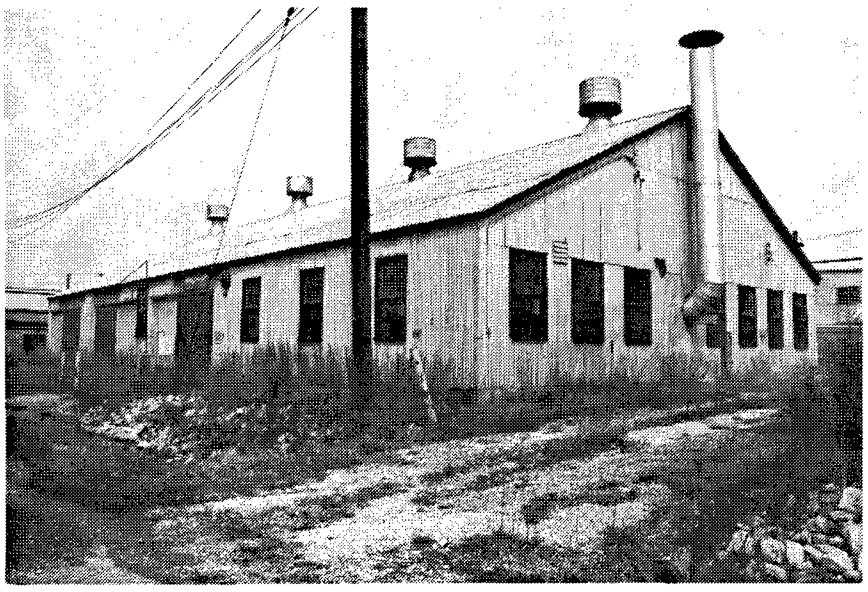


Figure 122. Building 722-11: Area Shop - Paint and Sign.



Figure 123. Building 722-12: Area Shop - Salvage.

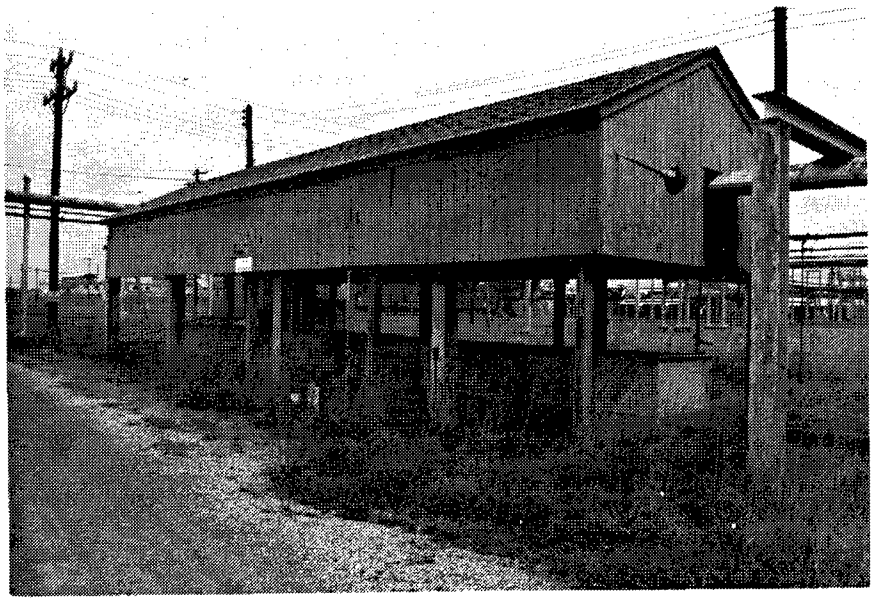


Figure 124. Building 722-16: Area Shop - Caustic Cleaning.



Figure 125. Building 725: Heavy Equipment Garage and Shop.

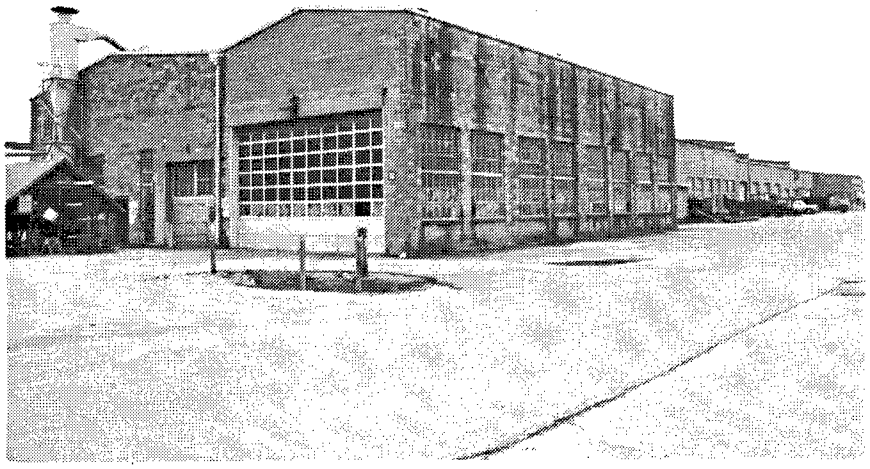


Figure 126. Building 2561: Combined Shop.



Figure 127. Building 228-1: Ballistic Laboratory.



Figure 128. Building 706-1: Main Laboratory in the Propellant and Explosives (P&E) Area with laboratory equipment dating from the 1950s and 1960s that monitored quality control.

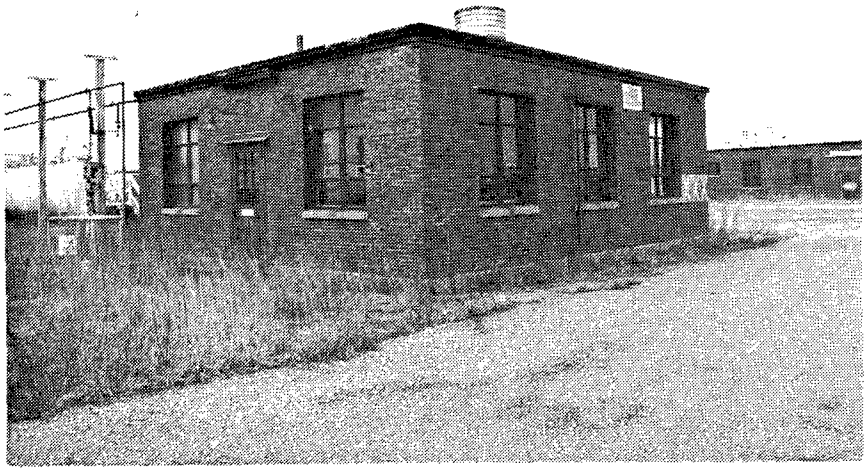


Figure 129. Building 706-4: Stability Laboratory where nitrocellulose was tested.

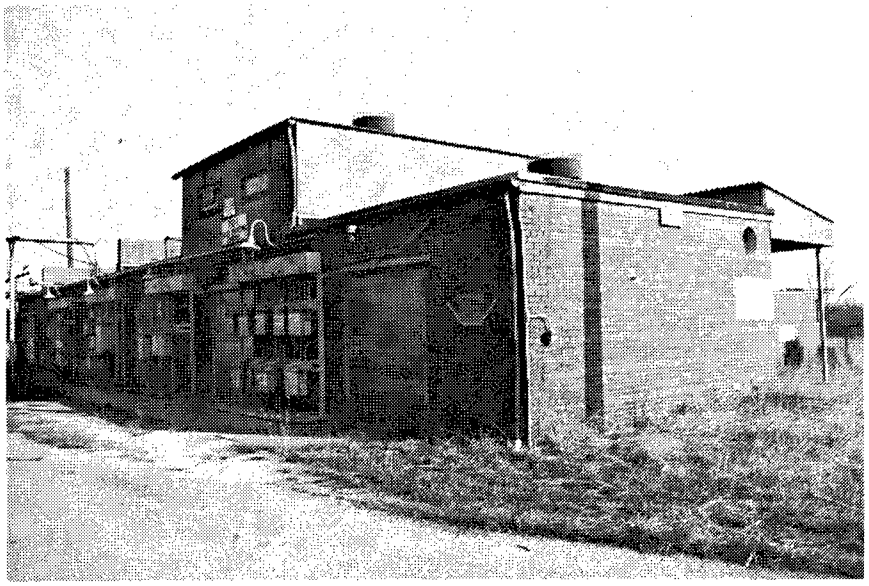


Figure 130. Building 750-1: Semi-works Building where experimental equipment was tested.

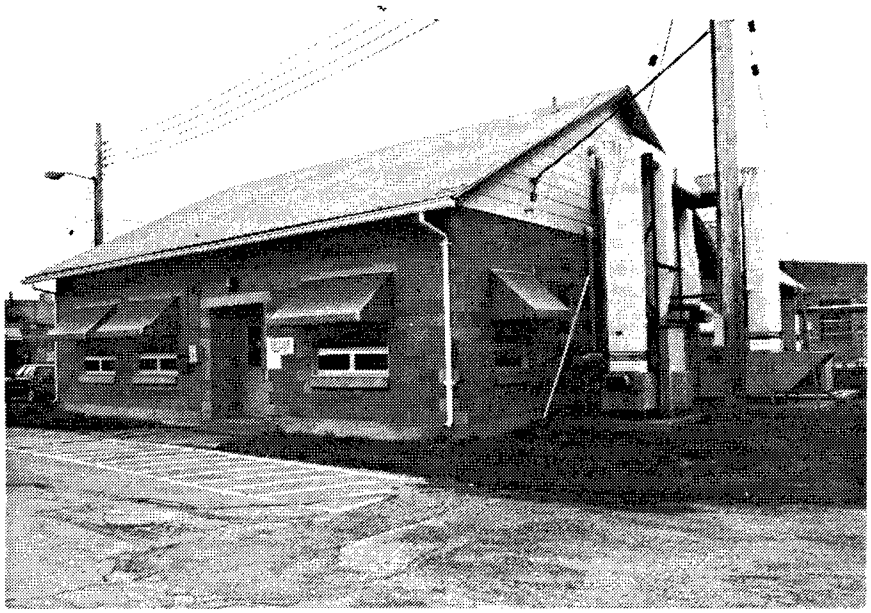


Figure 131. Building 2591: Laboratory and Inspection Building.



Figure 132. Building 209-2: Scrap Rework House.

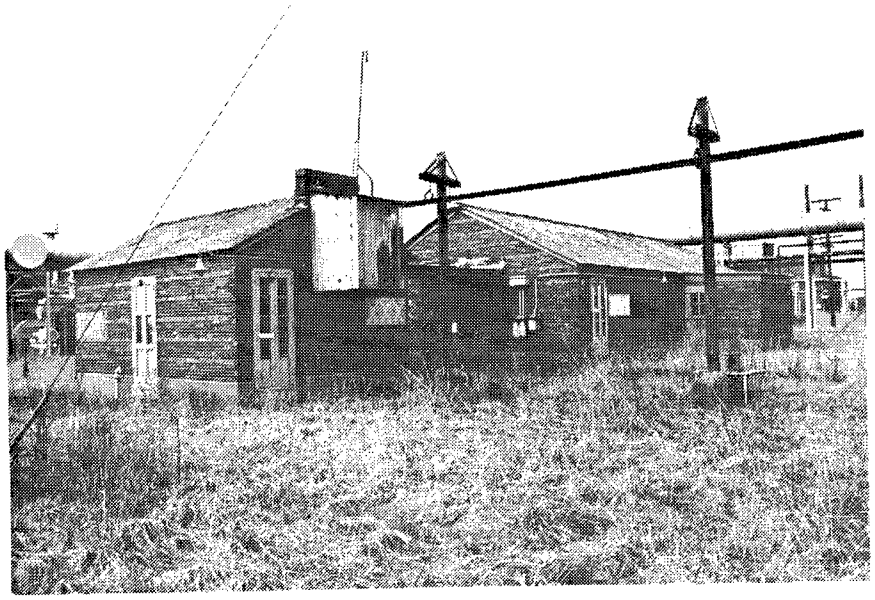


Figure 133. Building 209-3: Scrap Rework House.

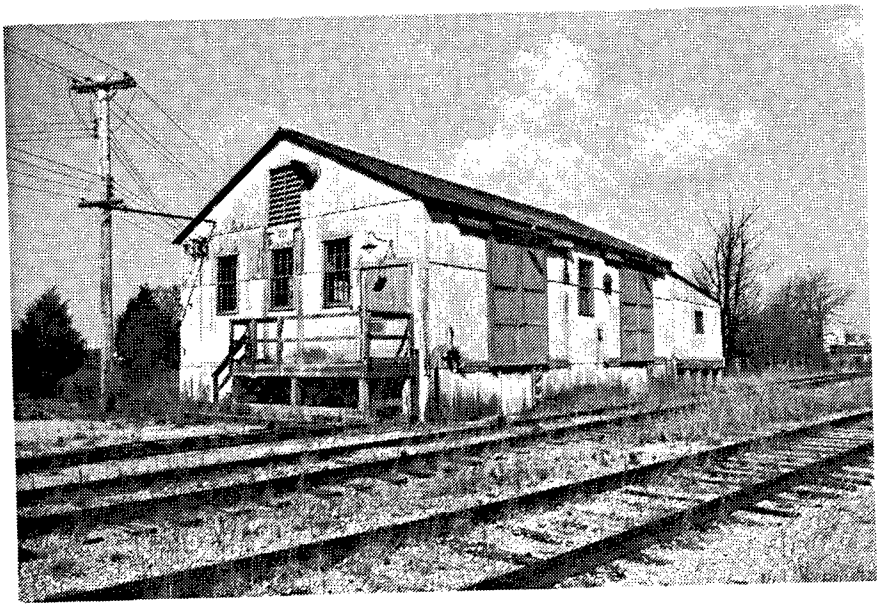


Figure 134. Building 232: Box Repair House.

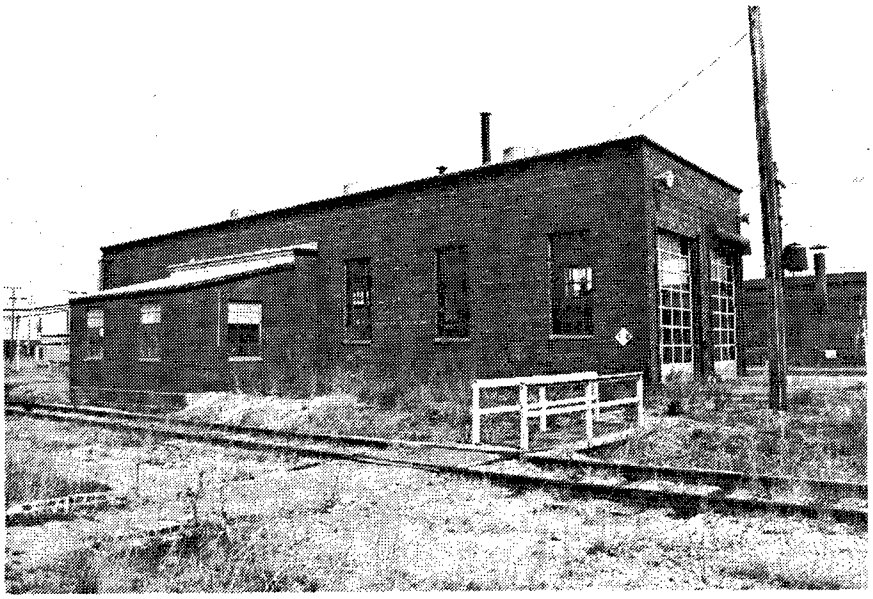


Figure 135. Building 718: Locomotive House.

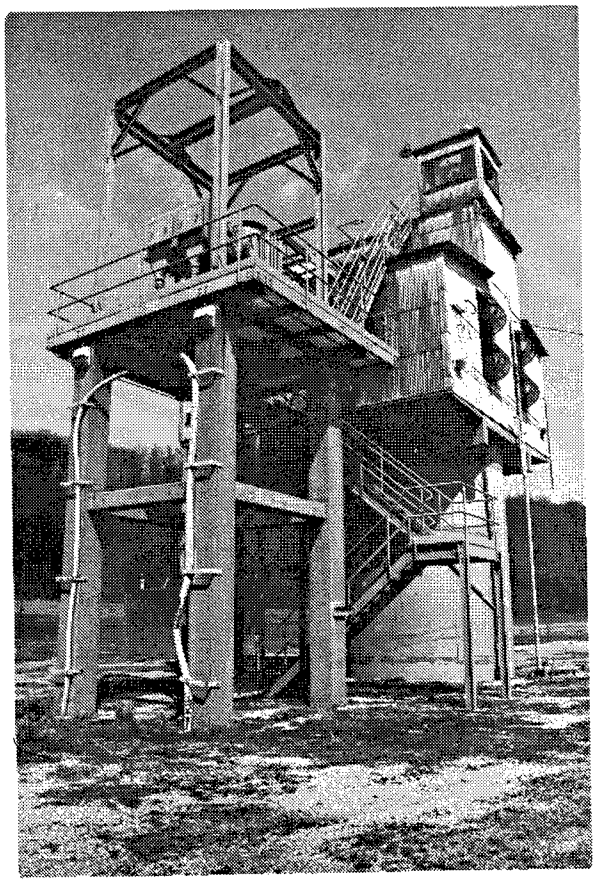


Figure 136. Building 404-1: Ranney Water Well.

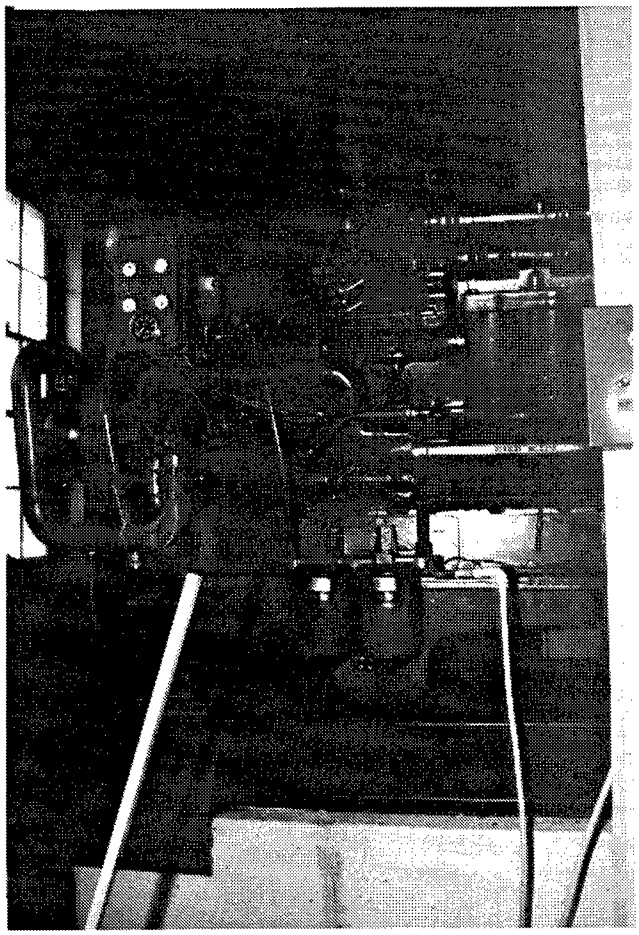


Figure 137. Building 404-1: Cummins engine that is part of the Ranney Water Well system.

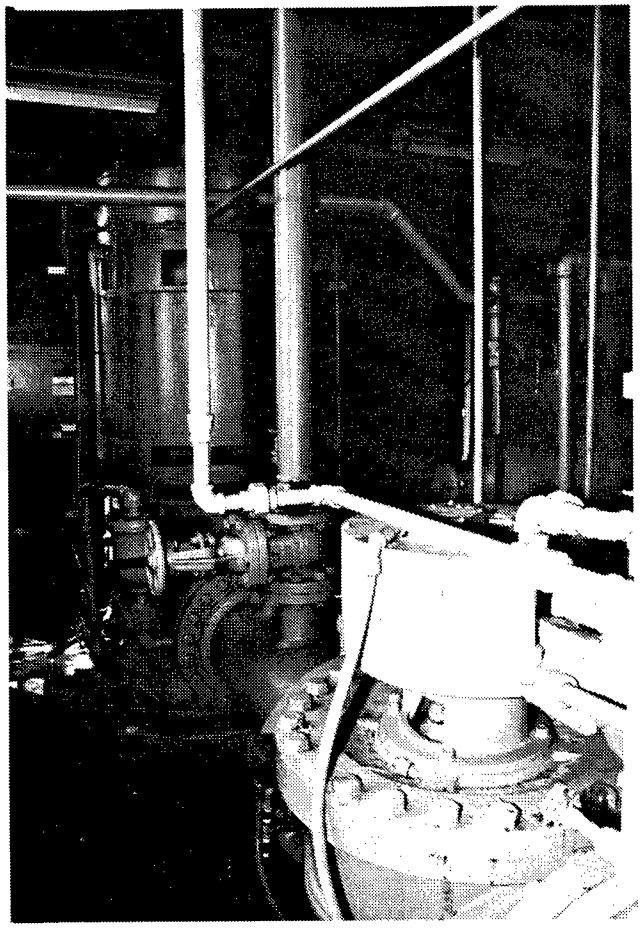


Figure 138. Building 404-1: General Electric deep well pump motor that is part of the Ranney Water Well system.

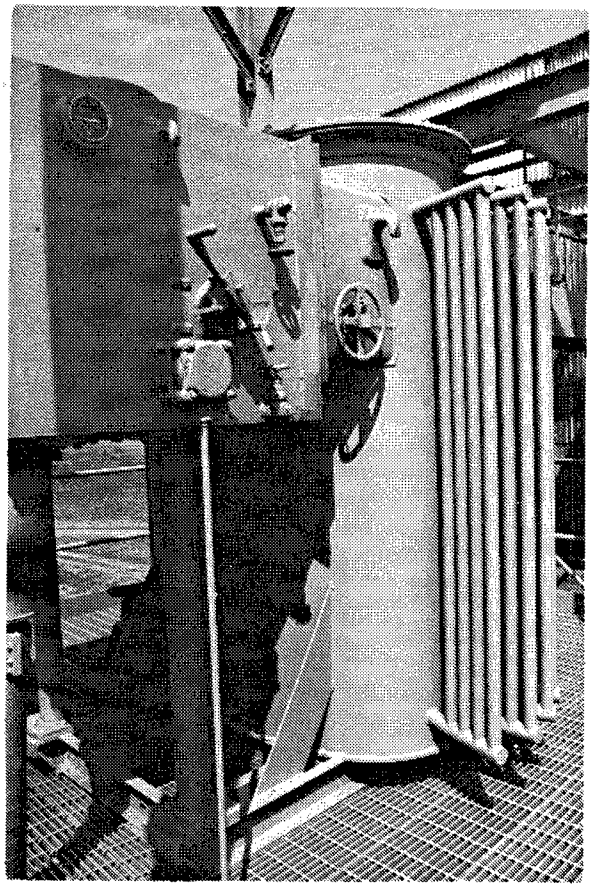


Figure 139. Building 404-1: Transformer.

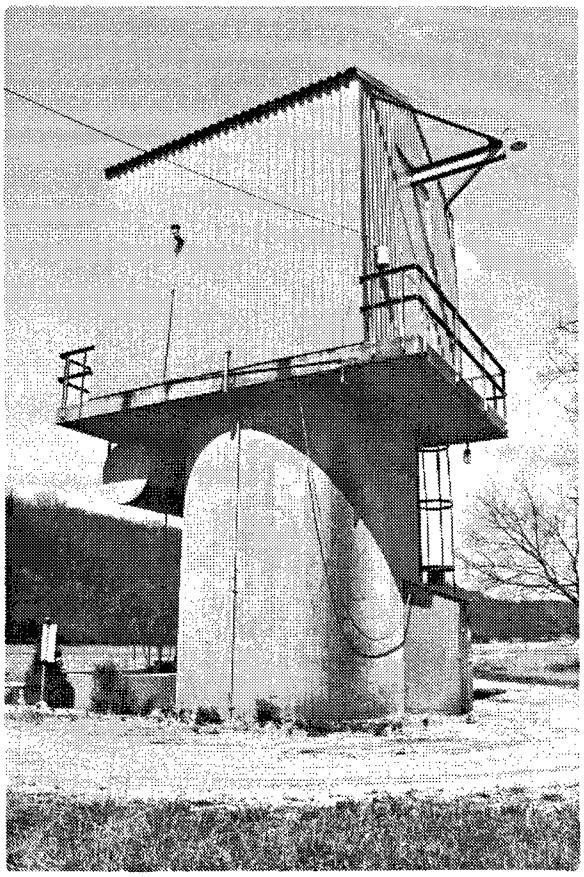


Figure 140. Building 6002: Well Pumping Station that provided the Load Assembly and Pack Area with water.

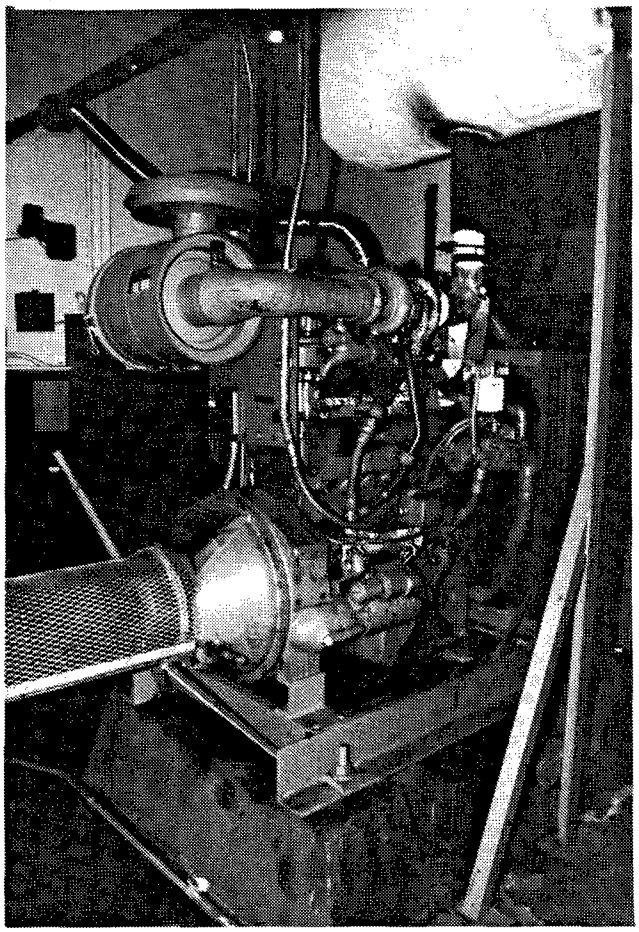


Figure 141. Building 6002: Engine in the Well Pumping Station.

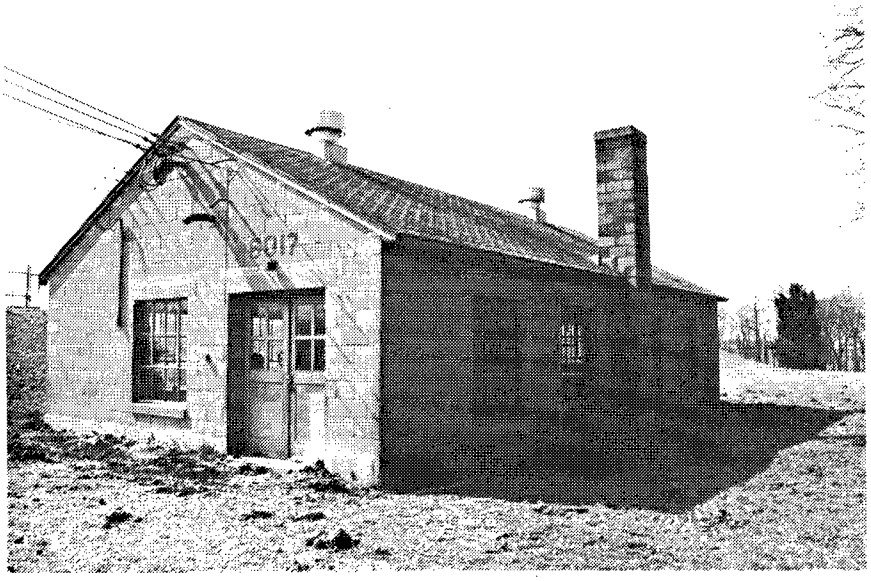


Figure 142. Building 6017: Pump House and Reservoir.

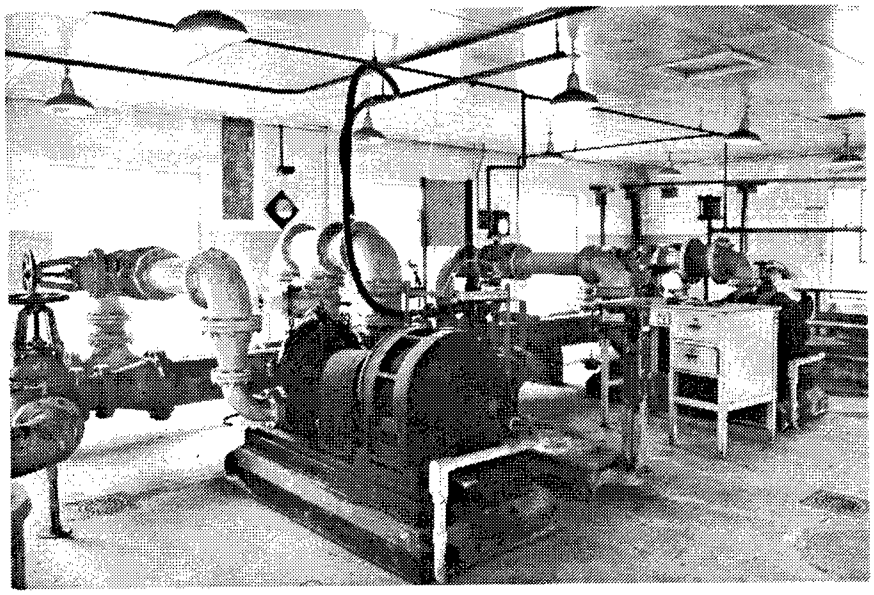


Figure 143. Building 6017: Gould's pumps and motor at this pump house.

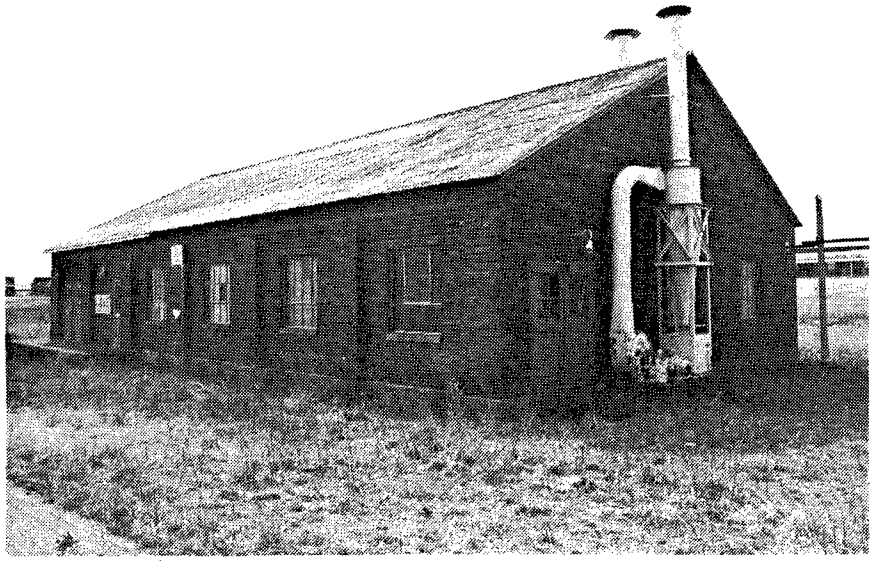


Figure 144. Building 233: Screen Cleaning House.



Figure 145. Building 1021: Laundry and Dye House with a sawtooth roof; this roof type is unique to Indiana Army Ammunition Plant.

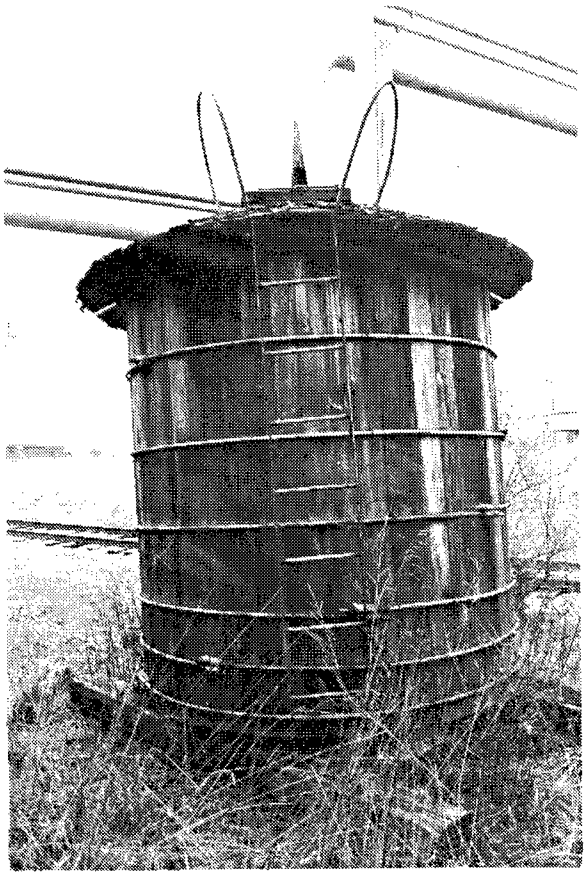


Figure 146. Building 723-001: 2,000-gallon wooden water tank, constructed in 1941, located behind the Laundry Building.

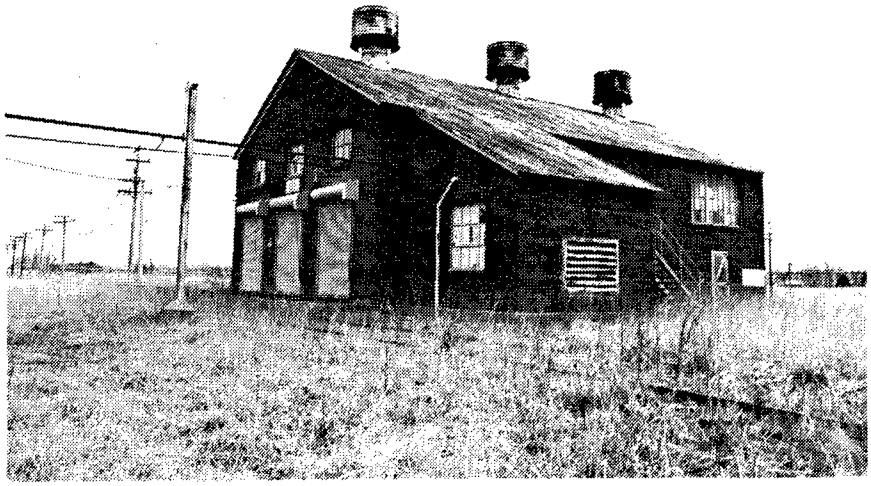


Figure 147. Building 213-2: Solvent Recovery Car Wash.



Figure 148. Building 214-1: Rail Flatcars located outside of a Solvent Recovery House.

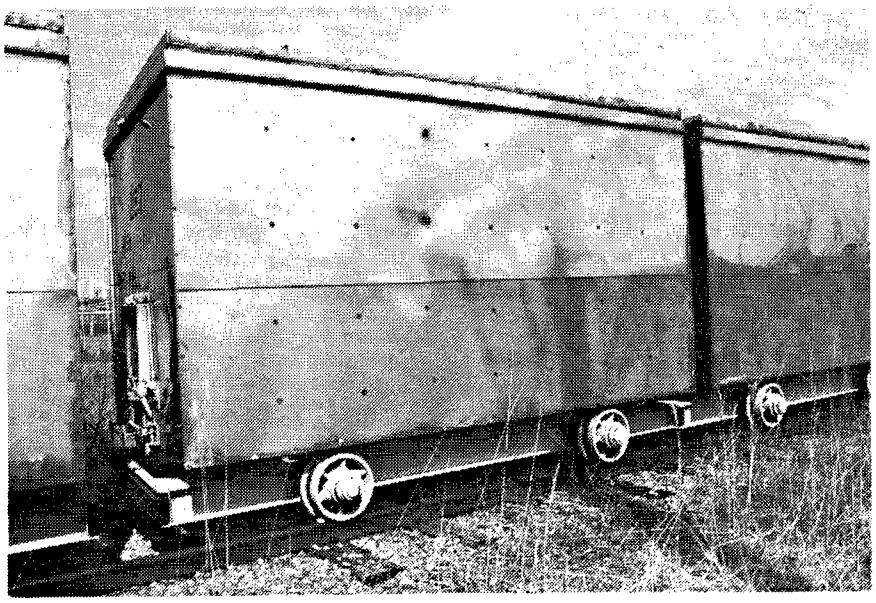


Figure 149. No building number: Solvent recovery rail cars located behind the Water Dry House and Sorting House.

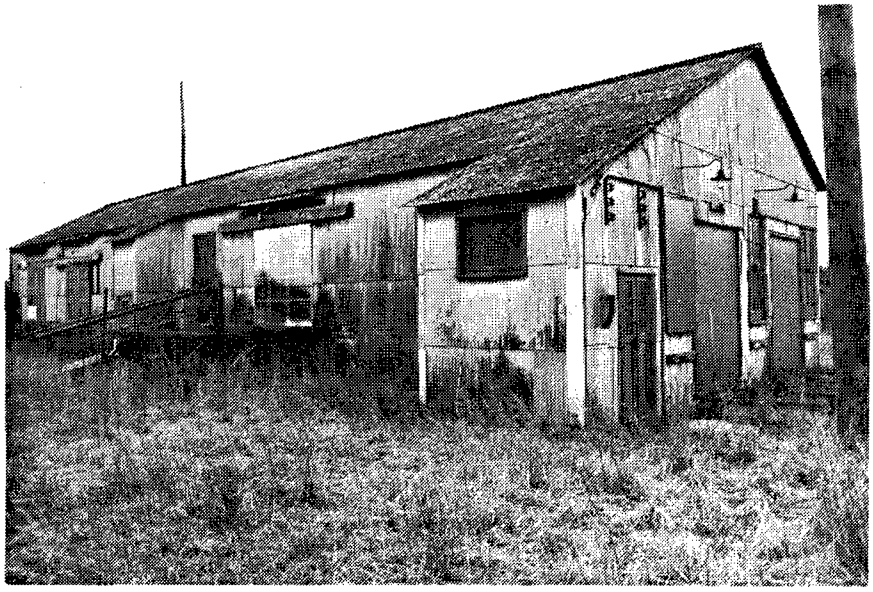


Figure 150. Building 224-3: Air Test House where filled propellant cans were tested for leaks.

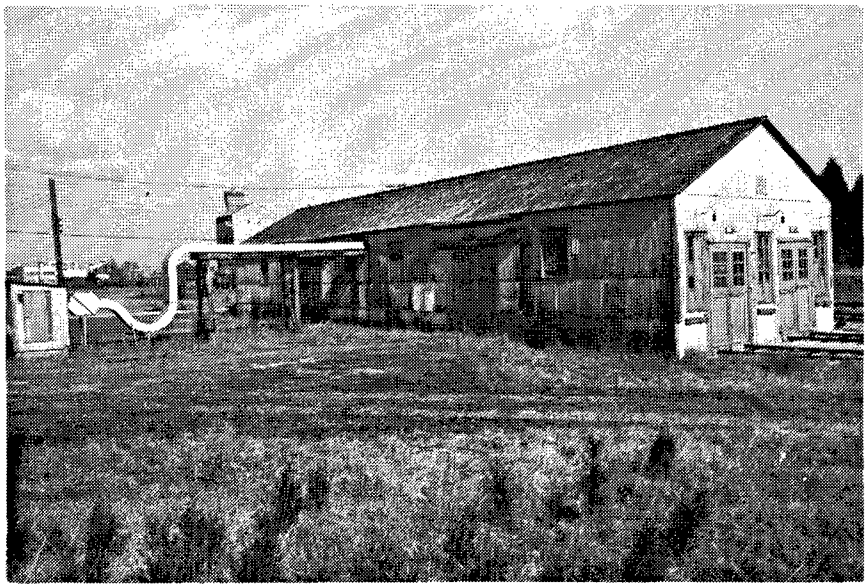


Figure 151. Building 224-1: Air Test House.

SHIPPING AND STORAGE FACILITIES

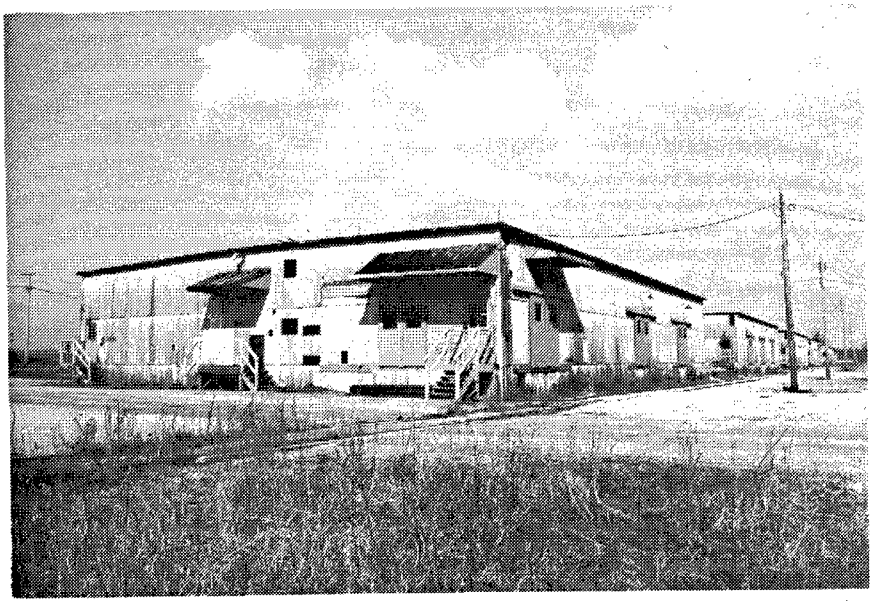


Figure 152. Building 223: Box Storehouse.

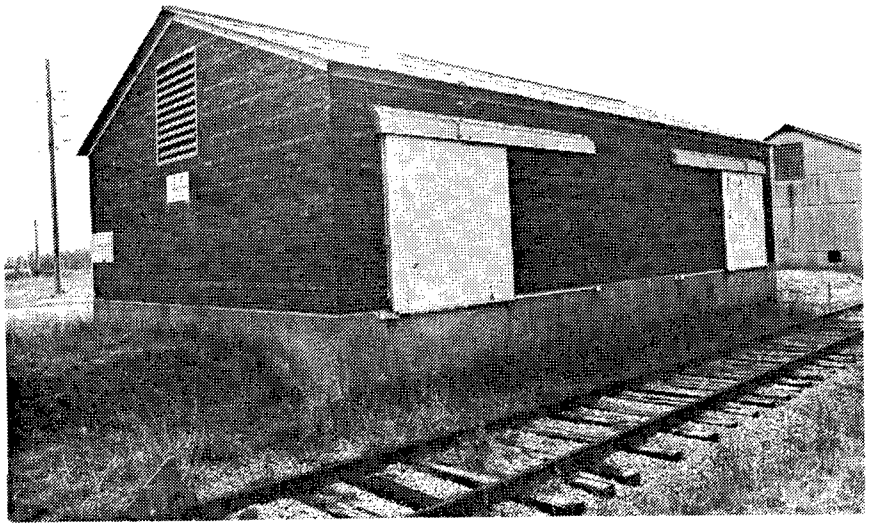


Figure 153. Building 227-4: Dry Ingredient Storehouse.



Figure 154. Building 251-4: Activated Carbon Solvent Recovery House.

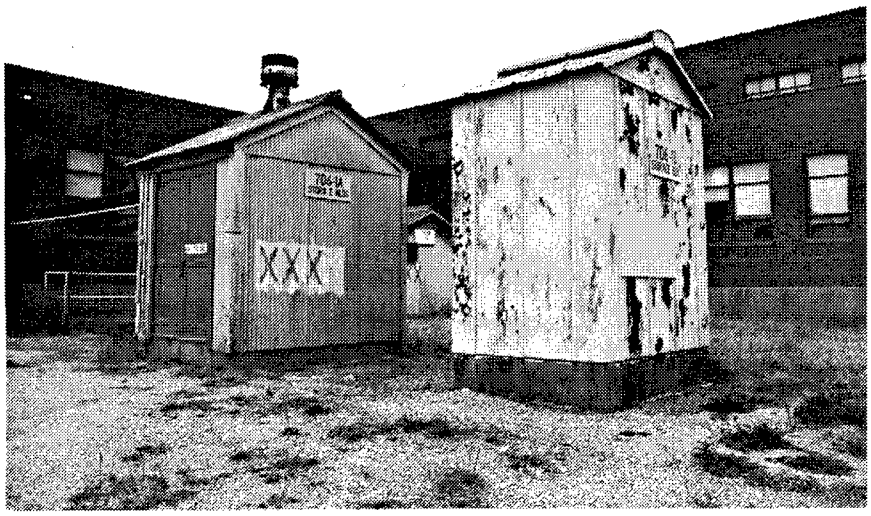


Figure 155. Buildings 706-1A and 706-1B: Powder Sample Dry House and Powder Sample Storage.

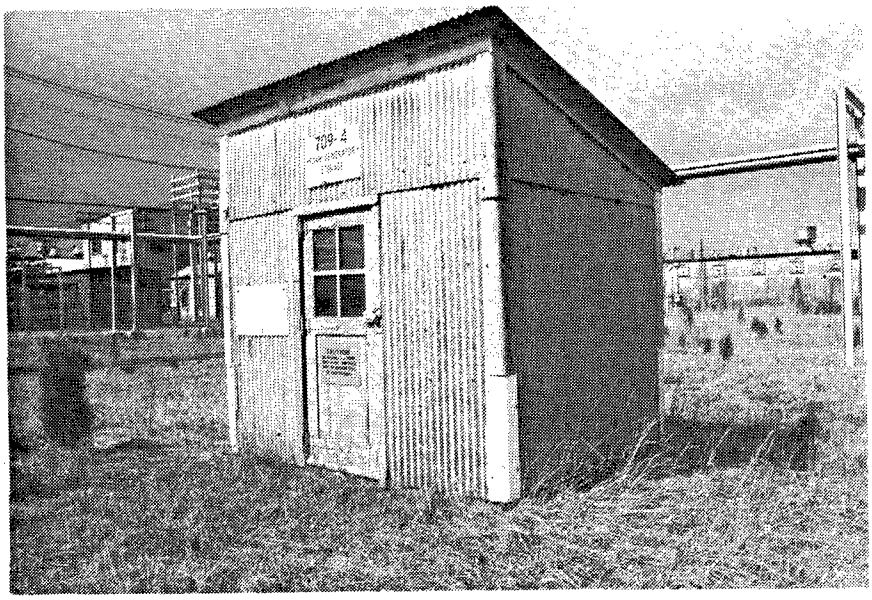


Figure 156. Building 709-4: Foam General Storage.

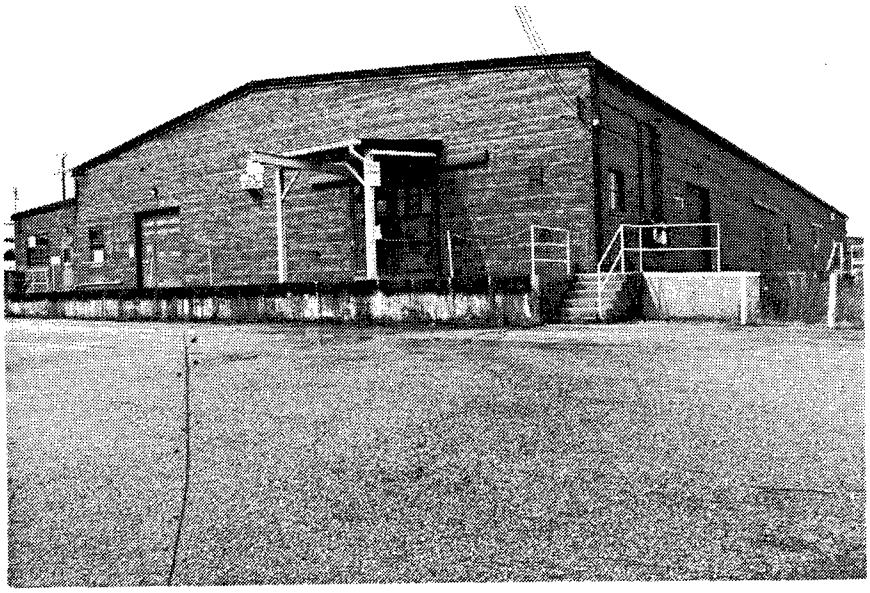


Figure 157. Building 713: General Storehouse.

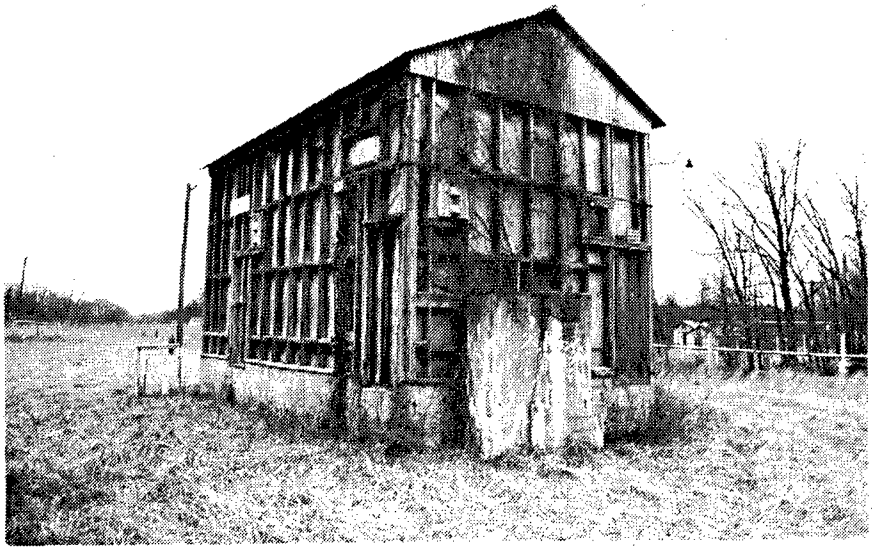


Figure 158. Building 714-16B: Material Storage Building.

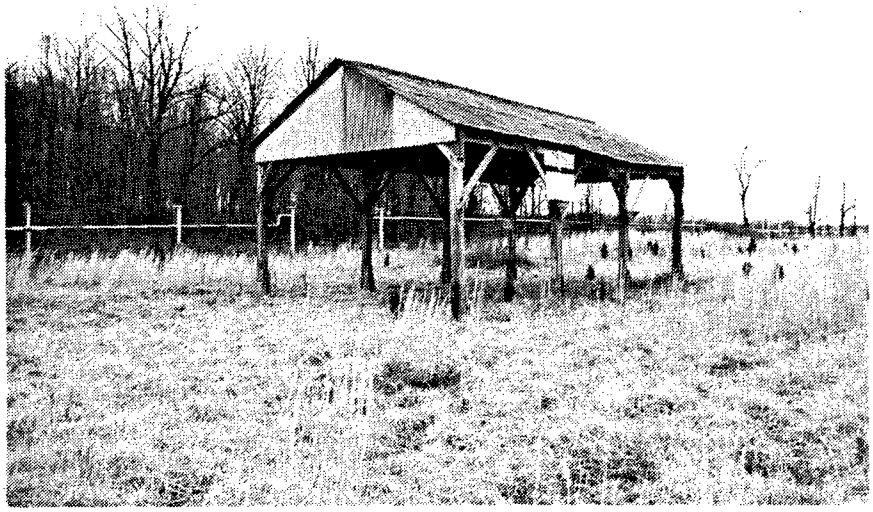


Figure 159. Building 714-16D: Material Storage Building.



Figure 160. Building 714-2B: Material Storage Building.



Figure 161. Building 722-10: Area Storage in the nitrocellulose area.

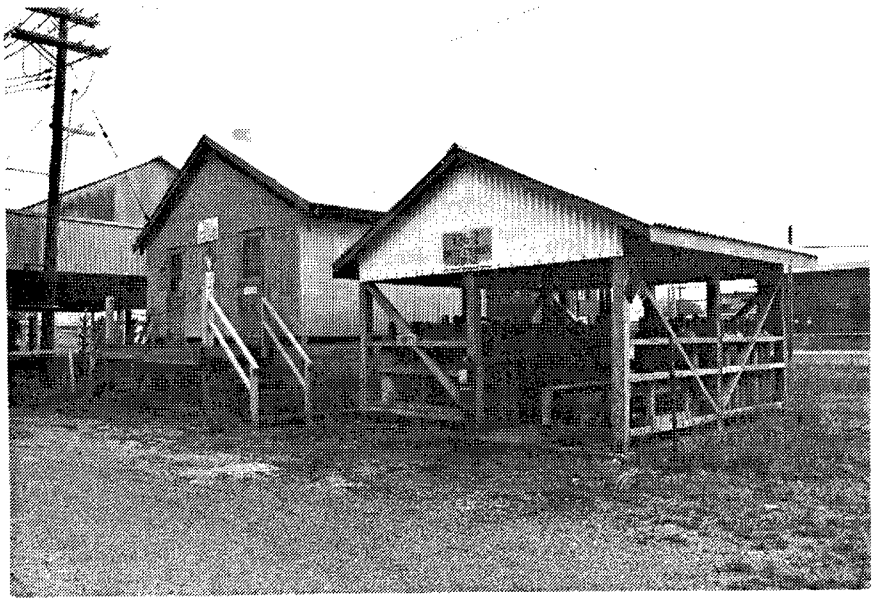


Figure 162. Building 726-2 (forefront) and Building 726 (background): Acetylene Storage Buildings.

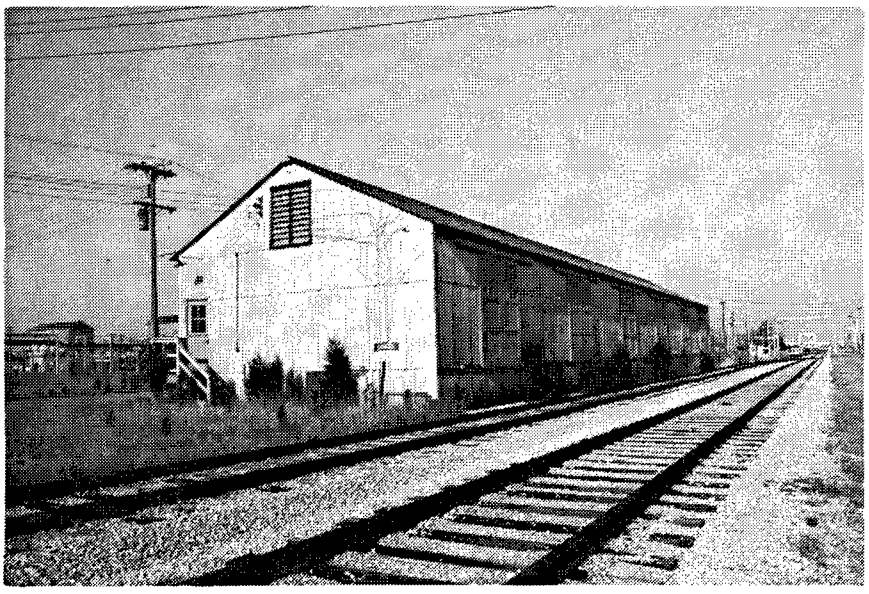


Figure 163. Building 729-3: Spare Machinery Storage.

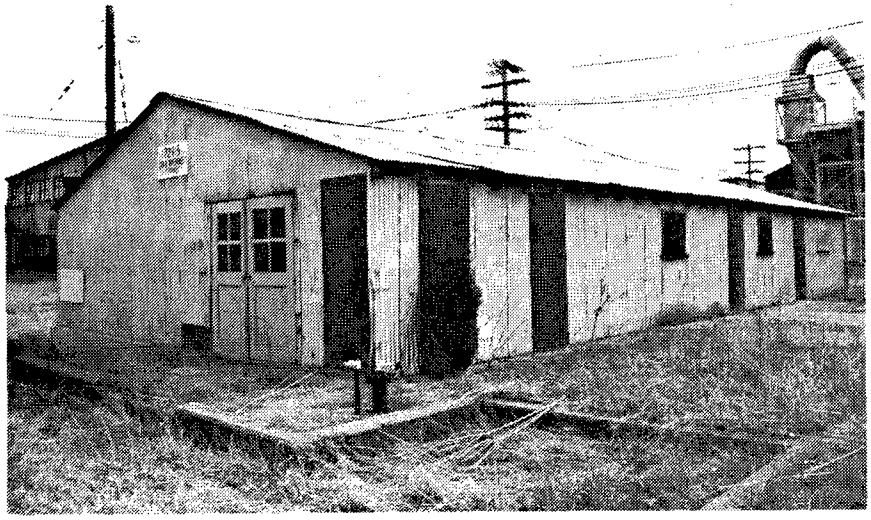


Figure 164. Building 729-5: Spare Machinery Storage.

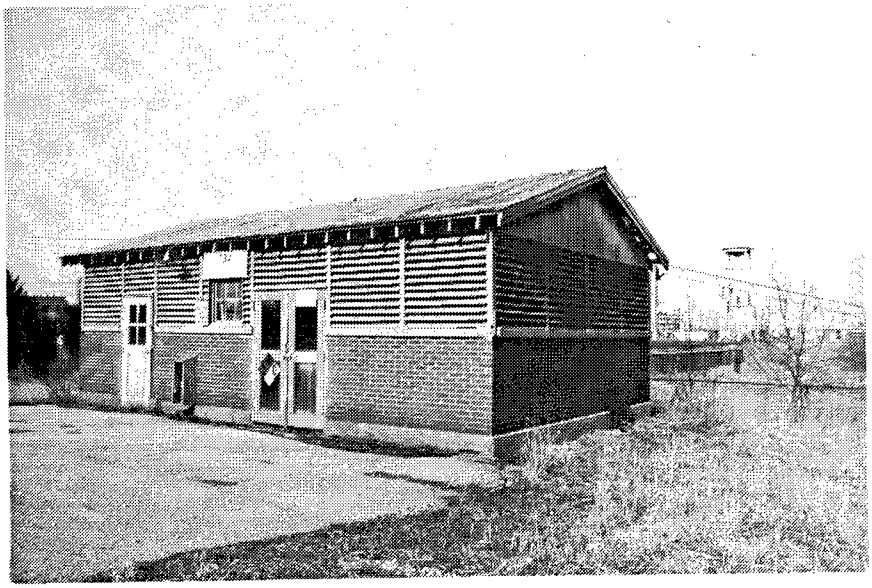


Figure 165. Building 734: Cylinder Storage.

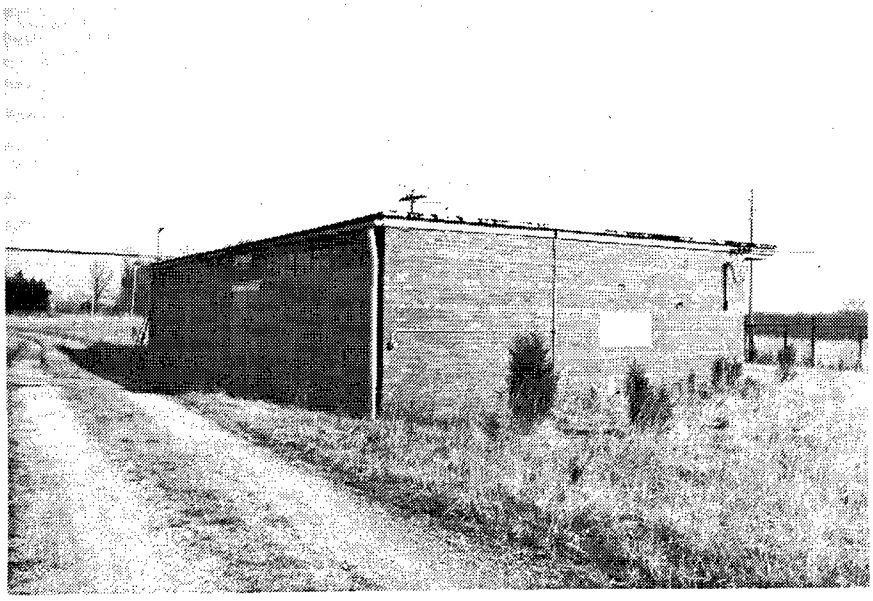


Figure 166. Building 750-2: Semi-works Storage Building.

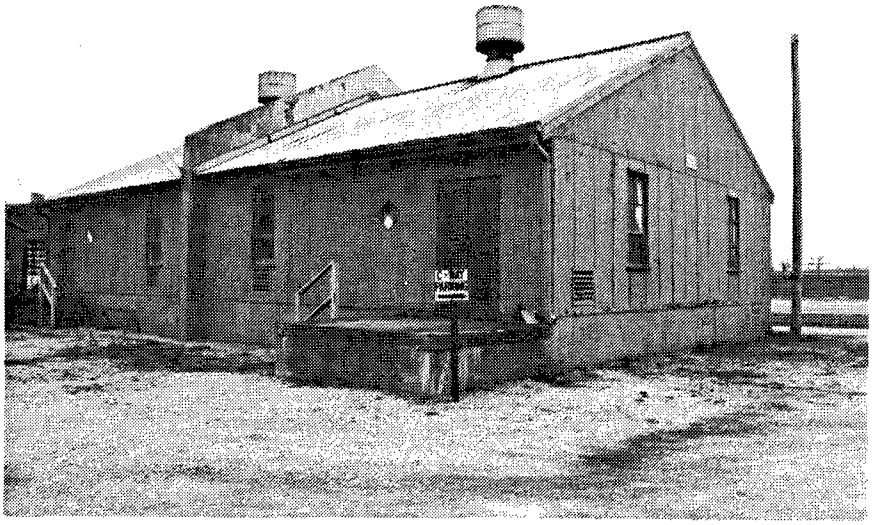


Figure 167. Building 2581: Paint and Oil Storage Building with a fire wall dividing the building in half.

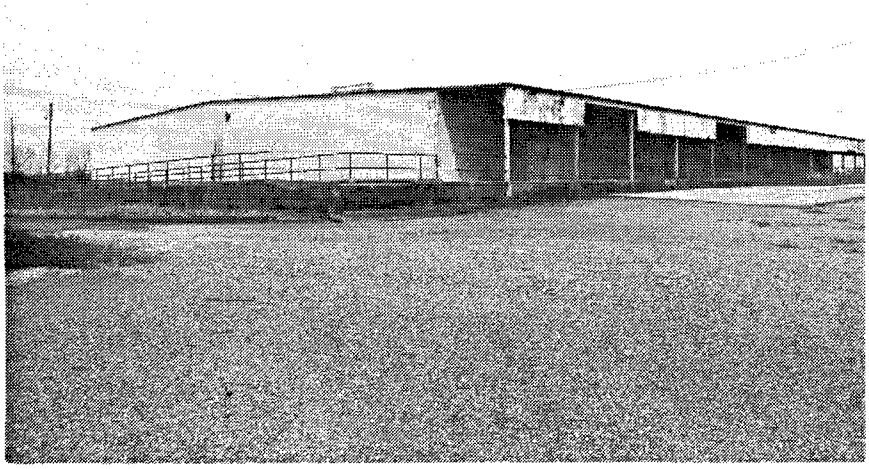


Figure 168. Building 101-3: Warehouse for raw materials and parts located in the P&E area.

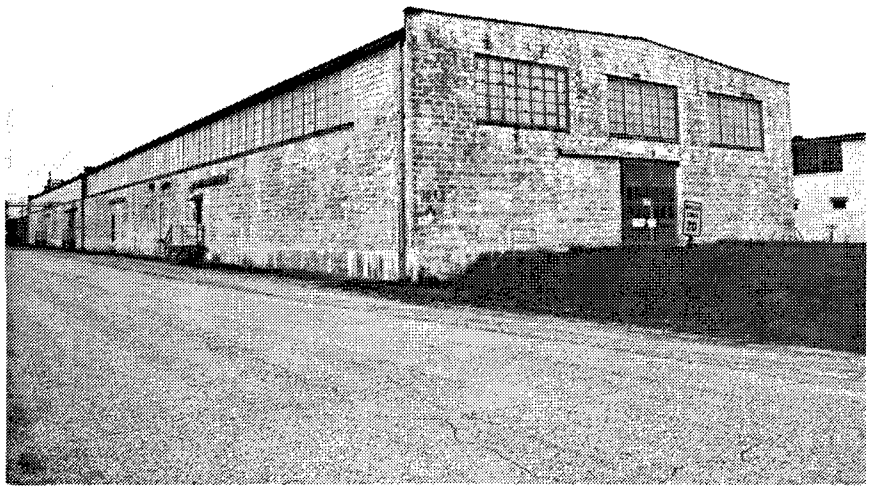


Figure 169. Building 1511: Warehouse.

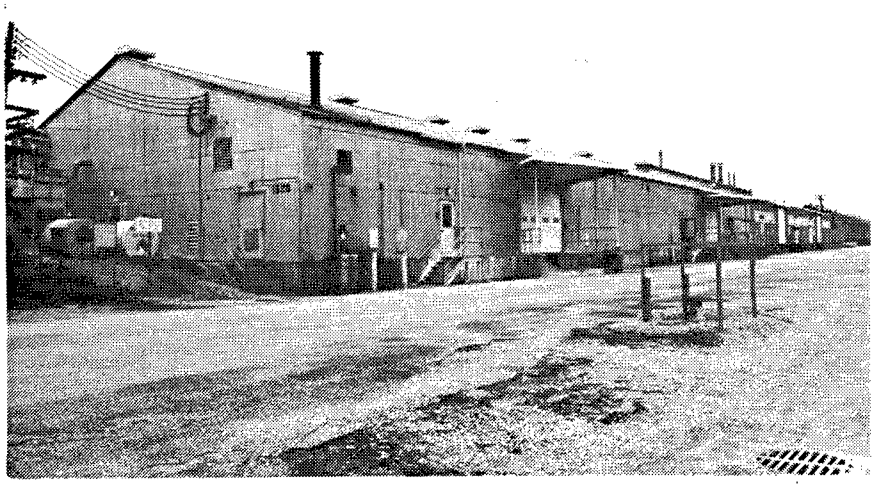


Figure 170. Building 1526: General Purpose Warehouse.

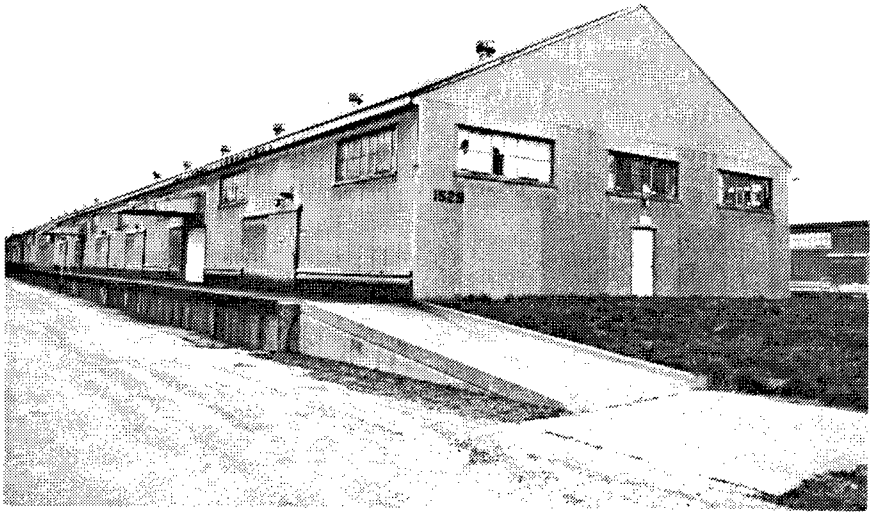


Figure 171. Building 1529: Inert Storage Warehouse with awnings.

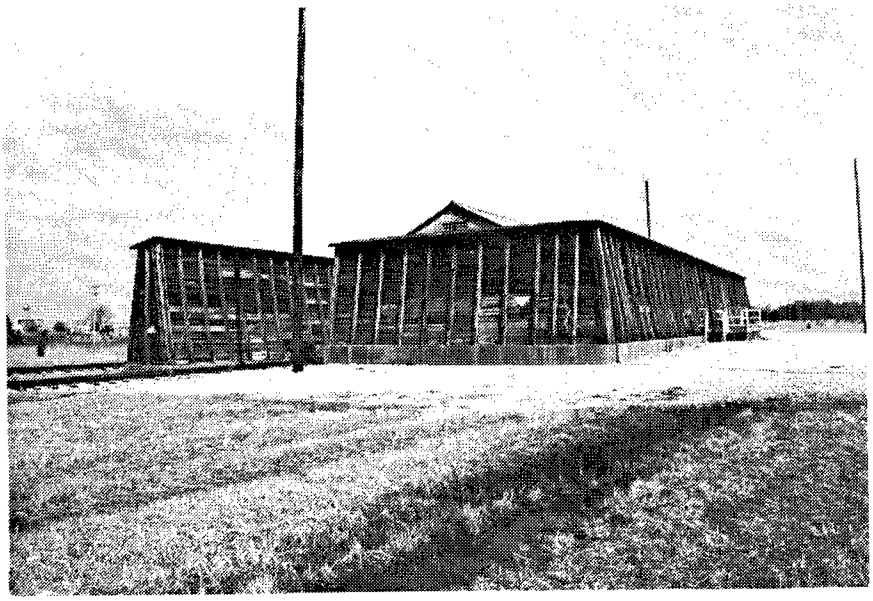


Figure 172. Buildings 229-10 and 227-9: Shipping House and its barricade.

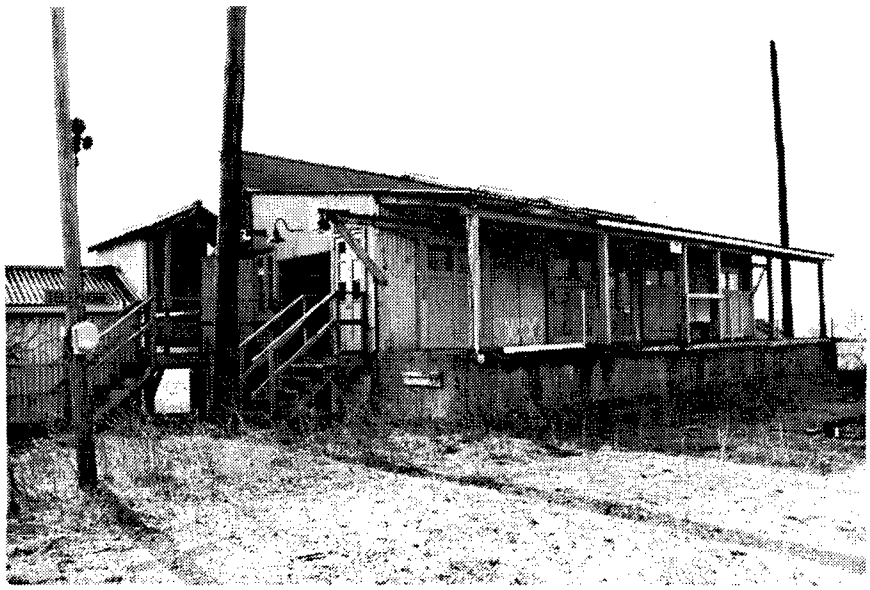


Figure 173. Building 264: Powder Dumping House.



Figure 174. Building 264: Interior view of a Powder Dumping House; note the powder hoppers behind the rail.

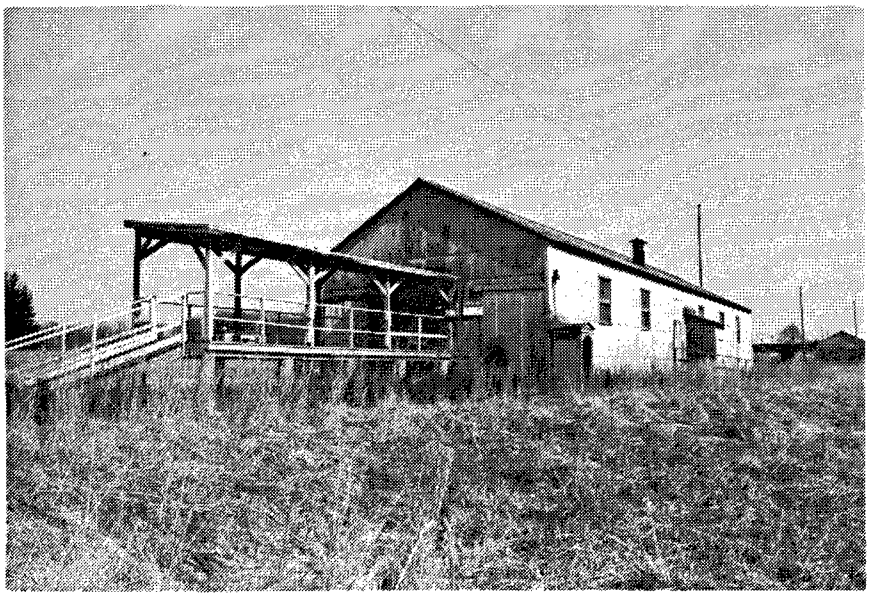


Figure 175. Building 262-2: Powder Transfer House.

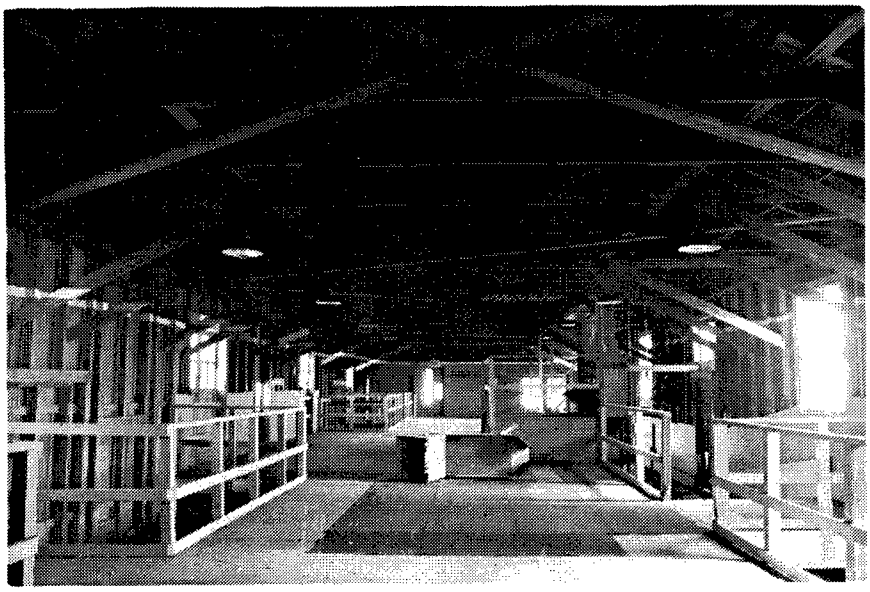


Figure 176. Building 262-2: Interior view of the Powder Transfer House.

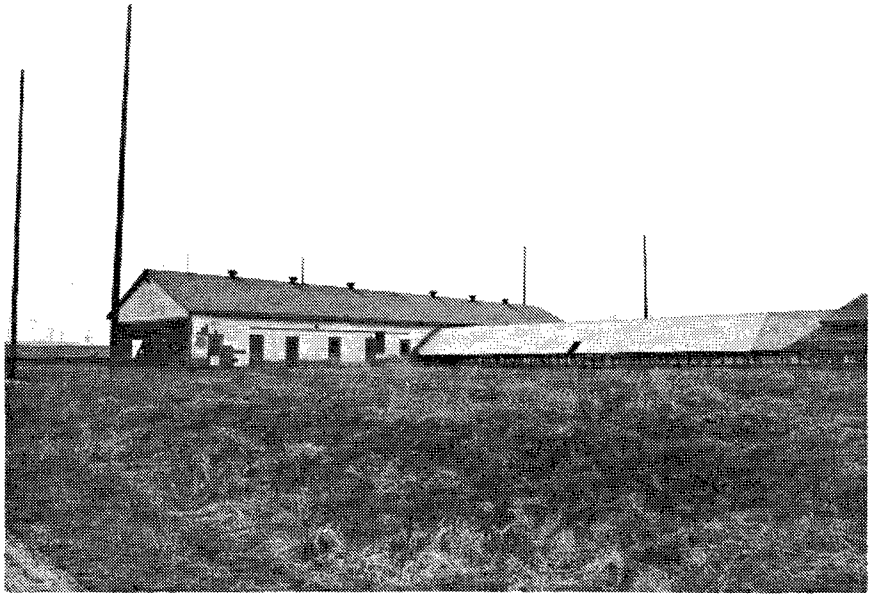


Figure 177. Building 3613: Crating Shed, or Shipping and Container Building, with a covered walkway extending from it.



Figure 178. Buildings 5402 and 7632: Crating Building and Loading Dock.



Figure 179. Building 7433: Loading Dock.

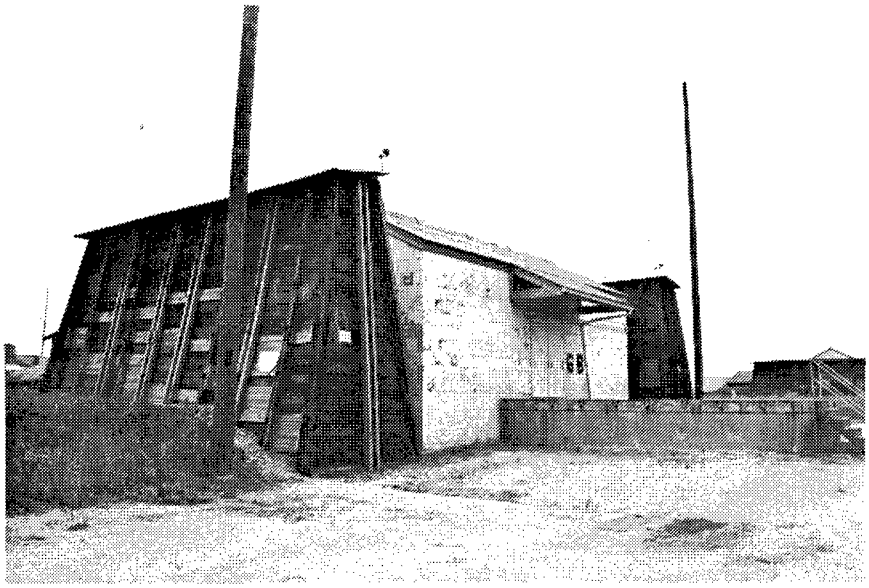


Figure 180. Buildings 3113 and 3163: Receiving Magazine and its barricade.



Figure 181. Buildings 3206 and 3256: Center Shipping Magazine and its barricade.



Figure 182. Building 5032: Smokeless Powder Igloo where finished ammunition products were stored until they were shipped out of the plant.

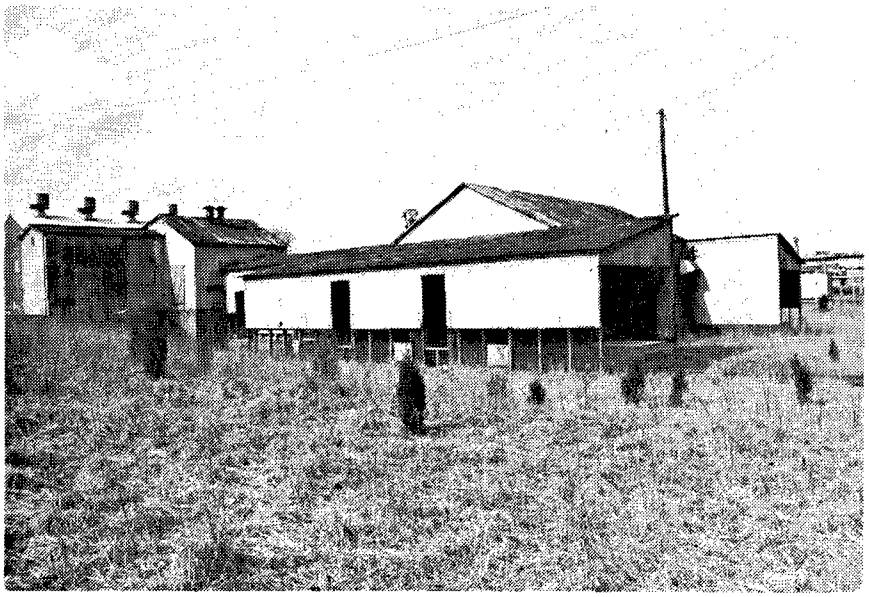


Figure 183. Building 259: Hand Sort Dump Shed.

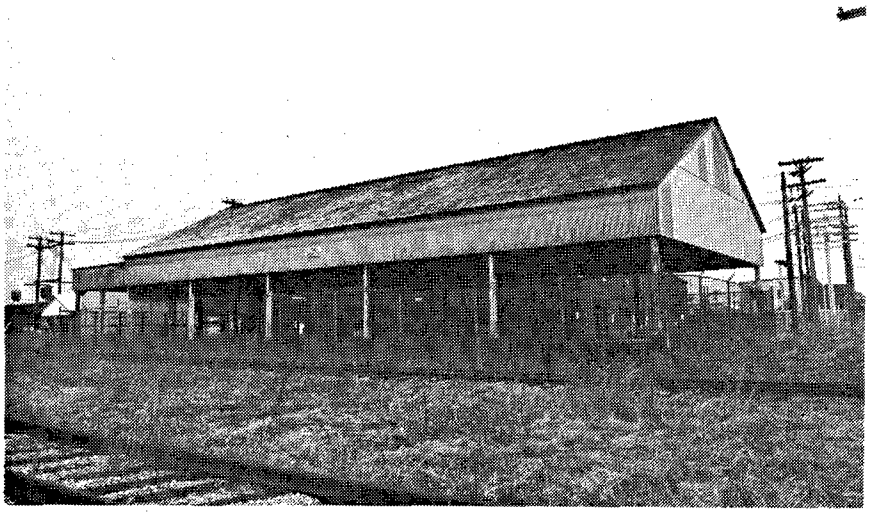


Figure 184. Building 714-1: Material Shed.

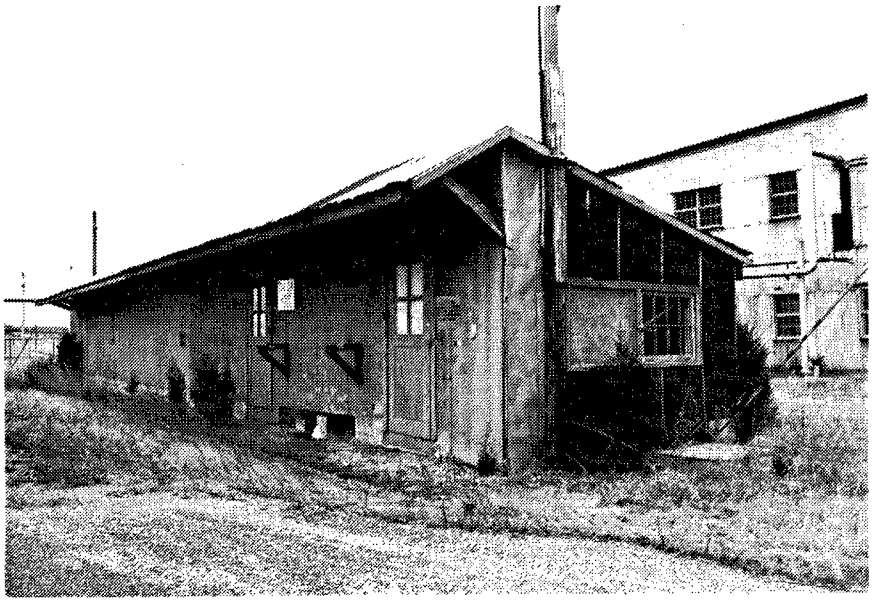


Figure 185. Building 722-10: Material Storage Shed.

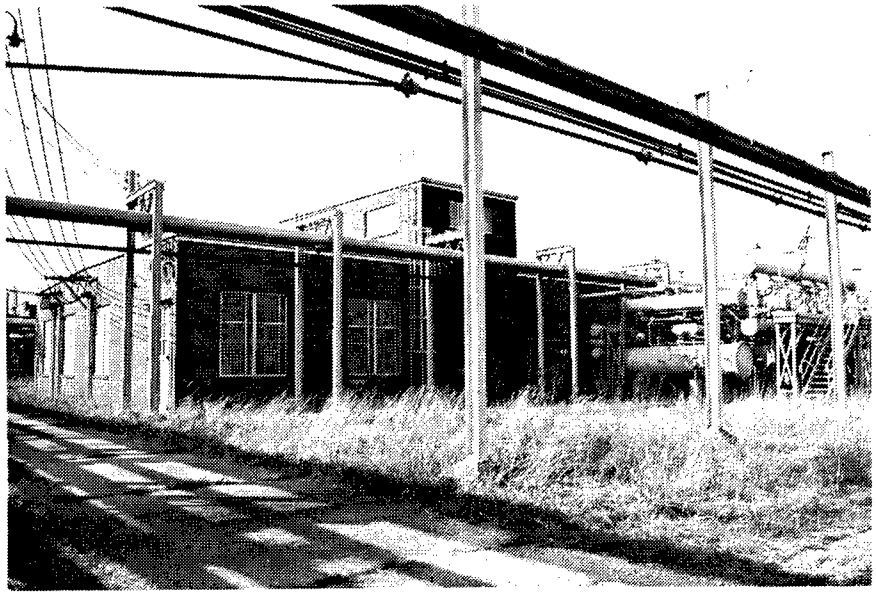


Figure 186. Building 226-2: Hydraulic Refrigerator House.

SUPPORT FACILITIES FOR EMPLOYEES



Figure 187. Building 719: Industrial Hospital.

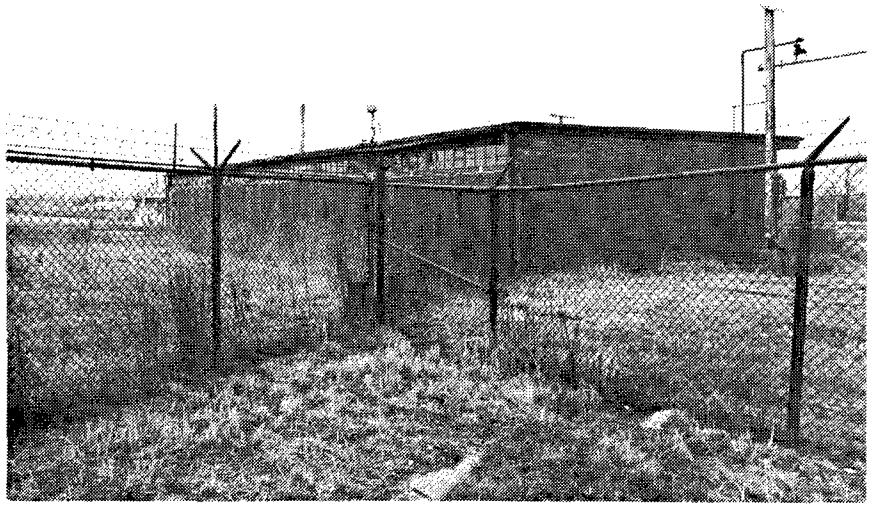


Figure 188. Building 701-3: Clock Alley, an employee plant entrance.

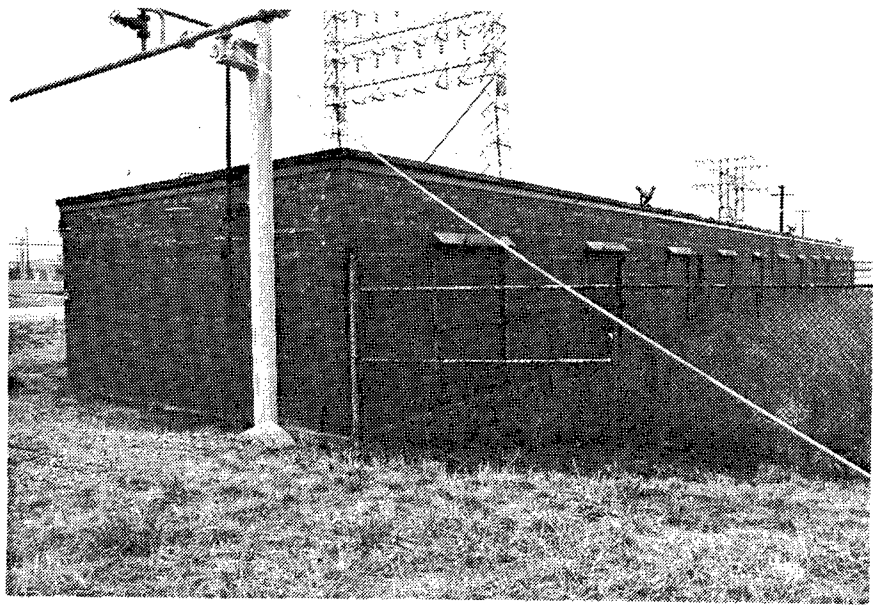


Figure 189. Building 701-3A: Search House where employees were searched for cigarettes and matches upon entrance into the plant.



Figure 190. Building 708-1: Main Cafeteria.

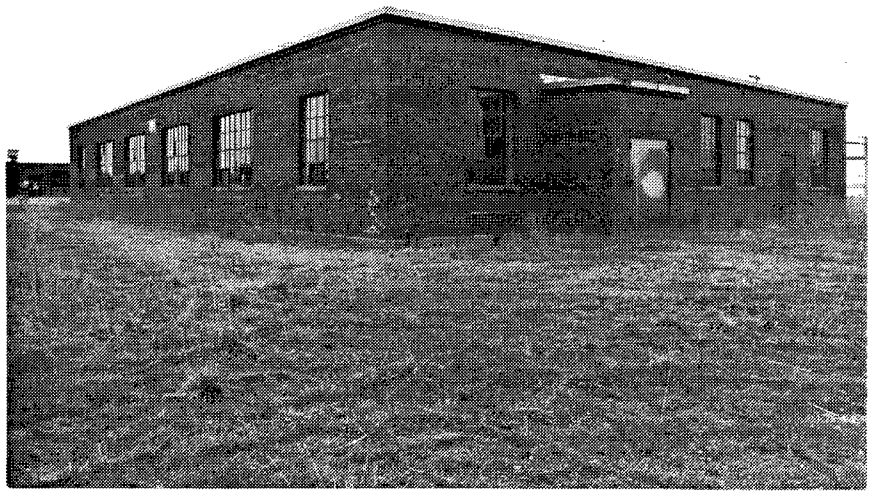


Figure 191. Building 708-3: Typical cafeteria found in production areas.

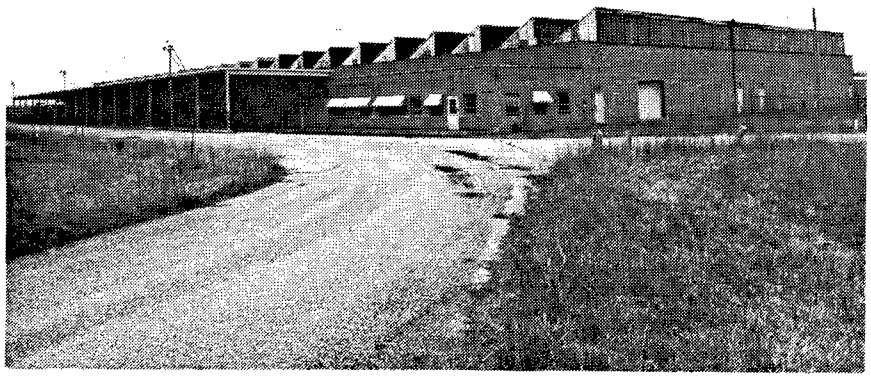


Figure 192. Building 211-8: Main Change House.



Figure 193. Building 707-30: Change House with a design unique to Indiana Army Ammunition Plant.

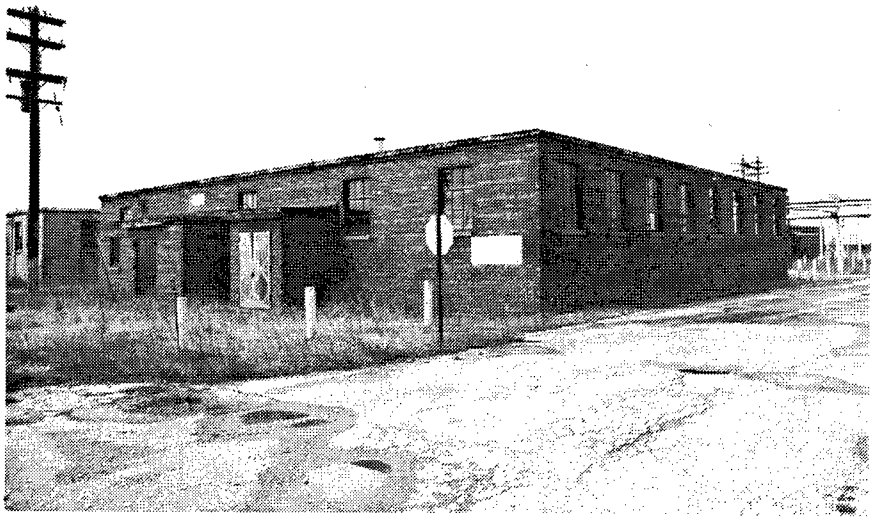


Figure 194. Building 707-11: A common Change House type.



Figure 195. Building 707-24: Another common Change House type.



Figure 196. Building 5403: Latrine for the Crating Building.

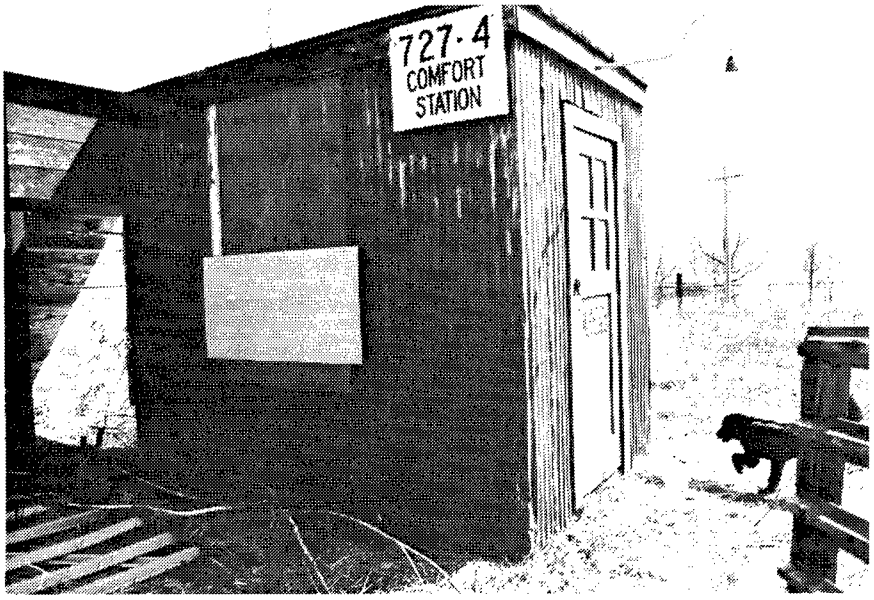


Figure 197. Building 727-4: Comfort Station with added modern shed.

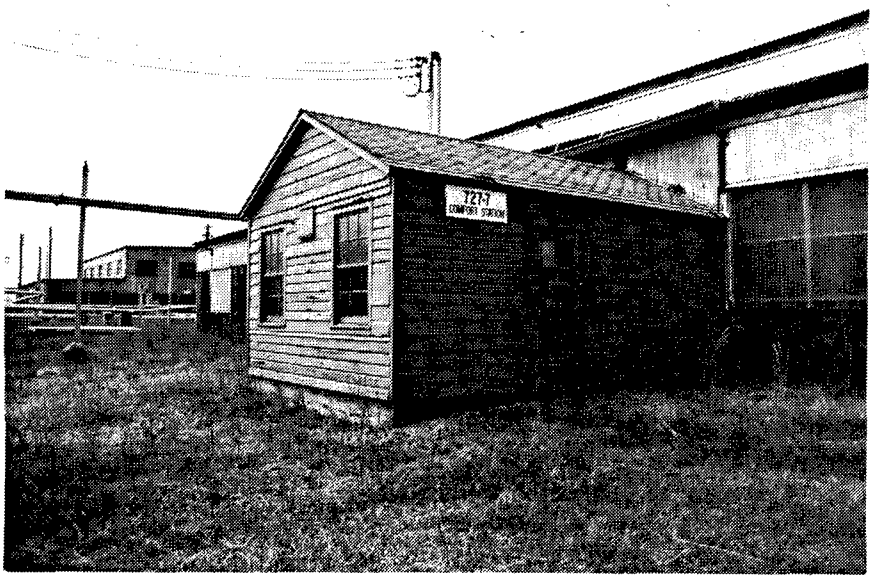


Figure 198. Building 727-7: Comfort Station.



Figure 199. Building 106-3A: Shelter for the Spent Acid Filter Area to protect employees during poor weather.

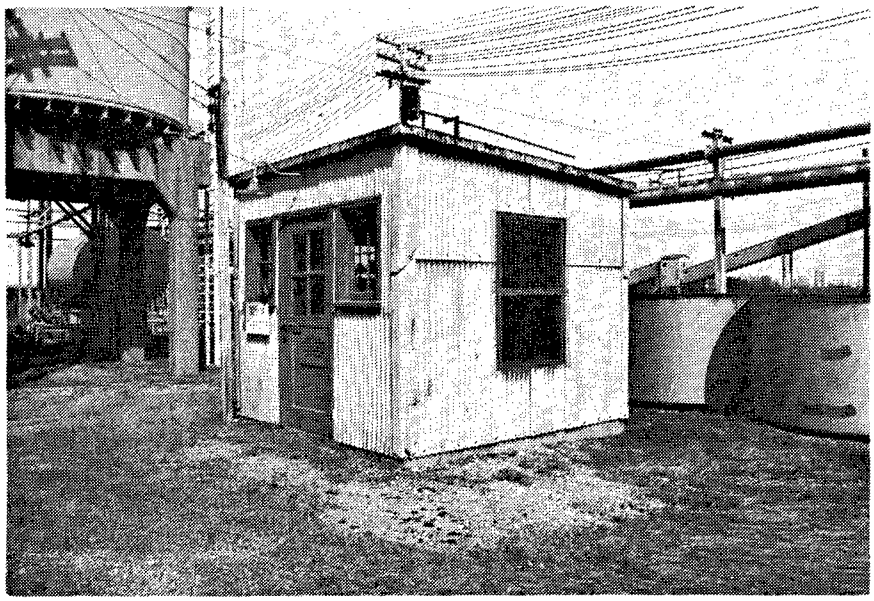


Figure 200. Building 305-1A: Shelter for the Acid Tank Farm.

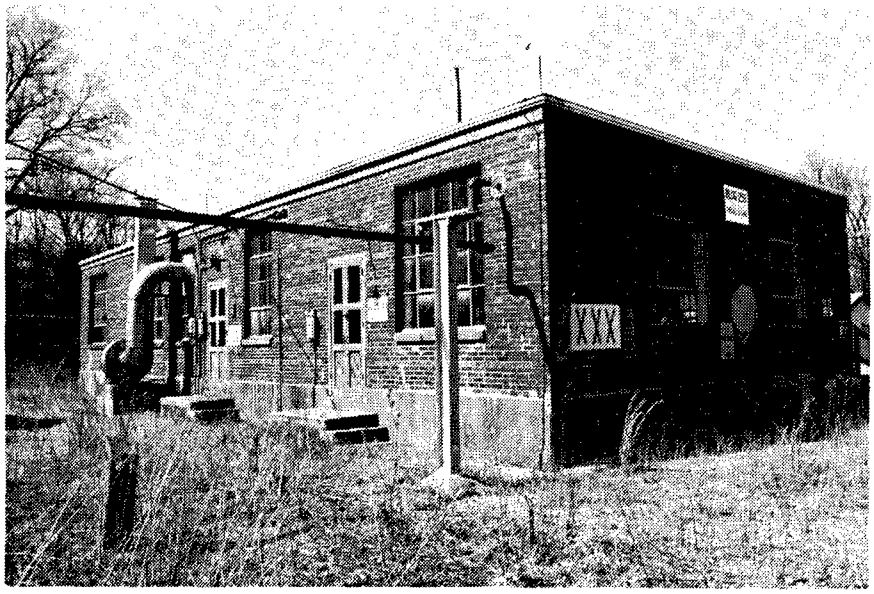


Figure 201. Building 255: Trial Building where new employees were trained in the skills of shipping and handling explosives.

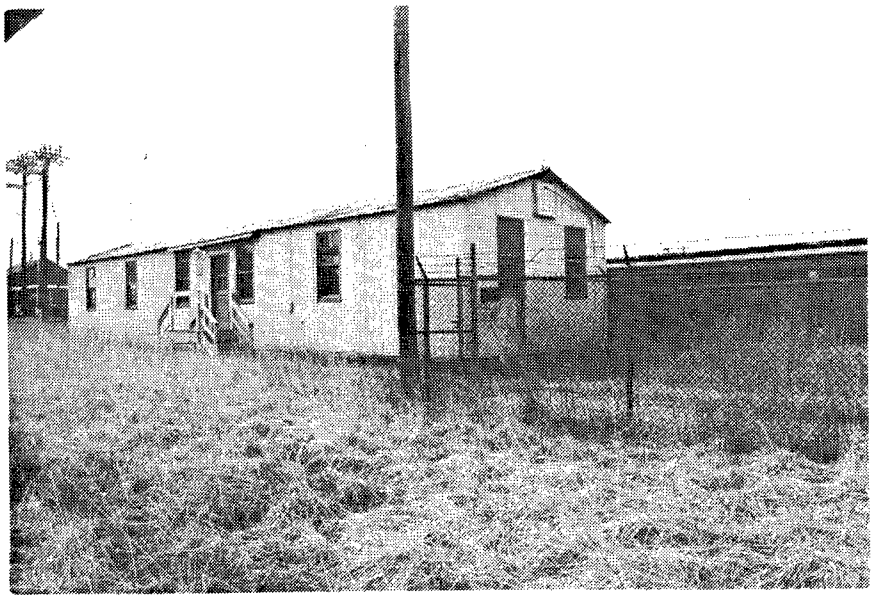


Figure 202. Building 733-1: Safety Assembly Hall.

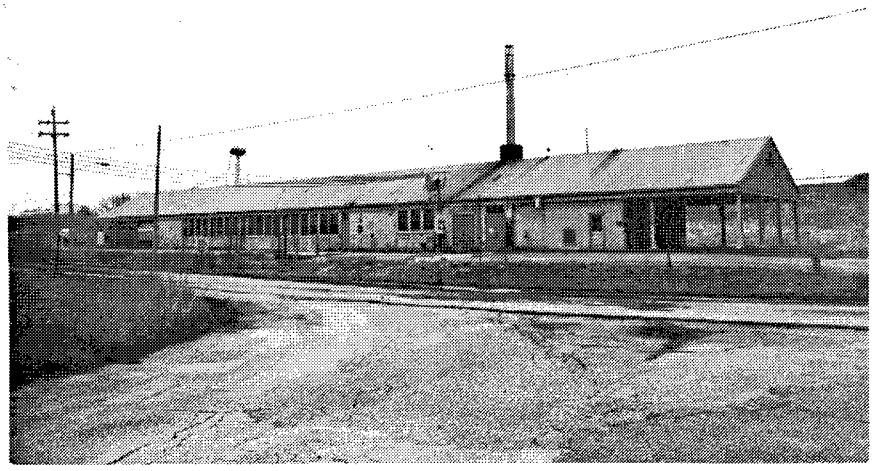


Figure 203. Building 3402: Canteen and Boiler House for Load Line #2.

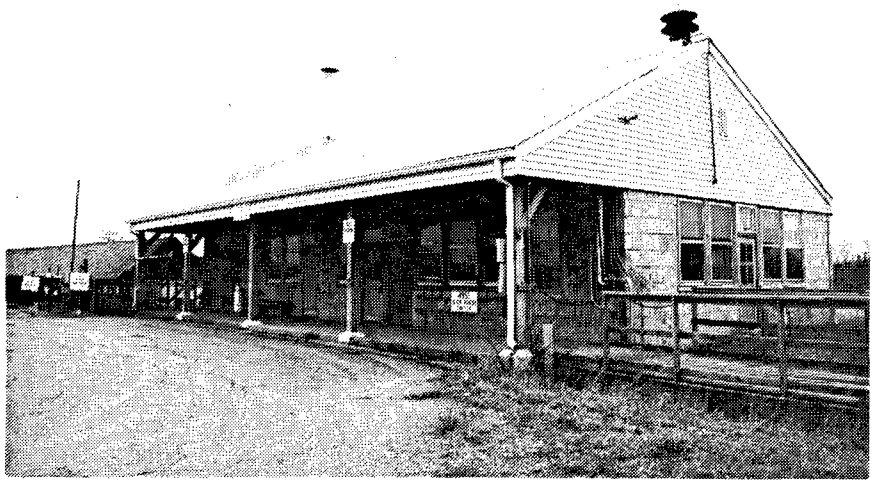


Figure 204. Building 4951: Black Powder Canteen and Covered Walkway.

UTILITIES AND INFRASTRUCTURES

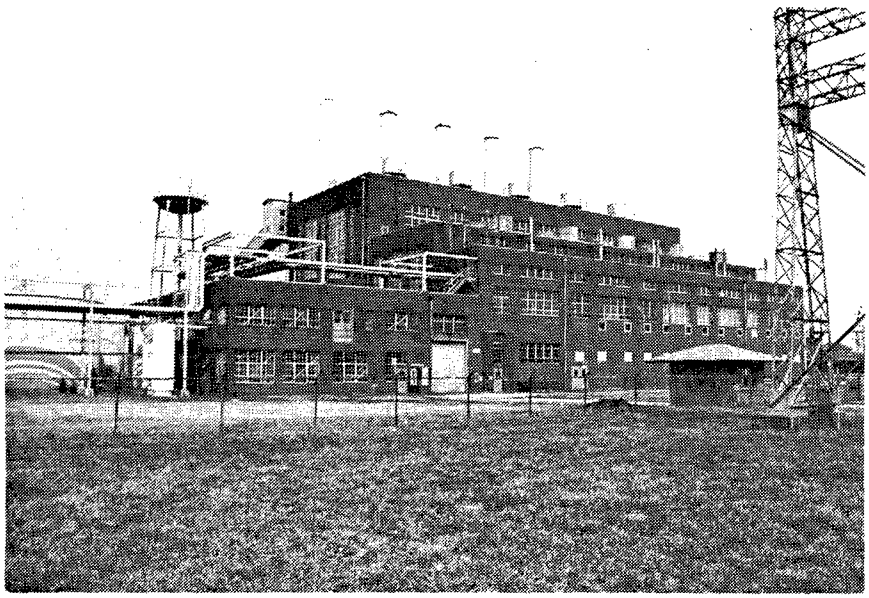


Figure 205. Building 401-1: Coal-generated Power House.

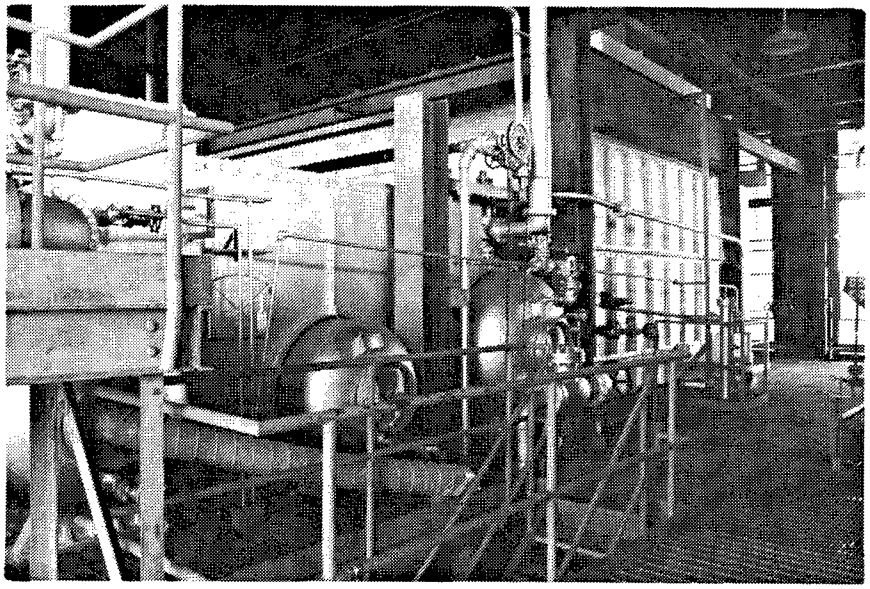


Figure 206. Building 401-1: The top of the coal bin on the fourth floor of the Power House.

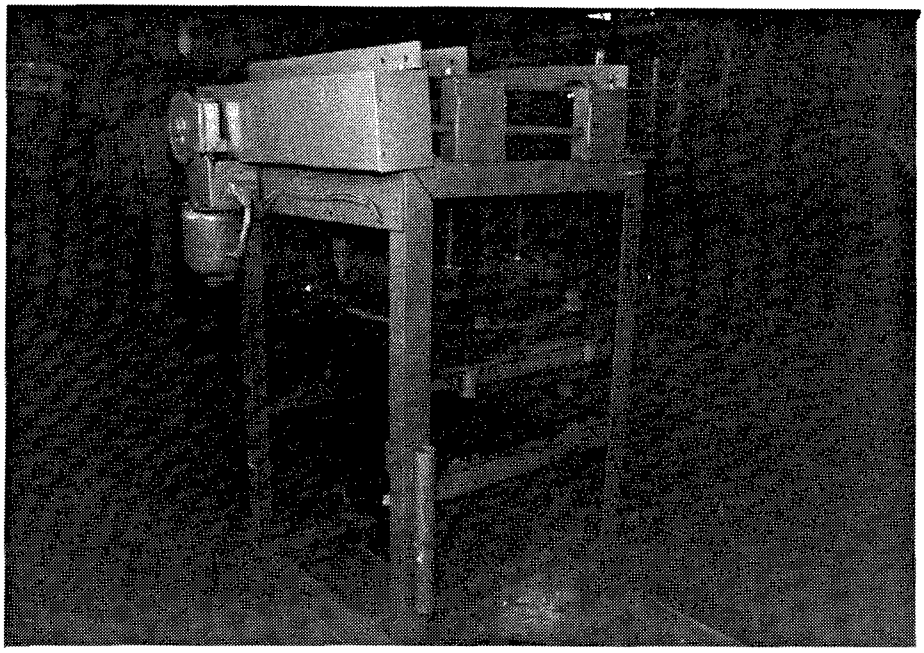


Figure 207. Building 401-1: General Electric oil circuit breaker on the second floor of the Power House.

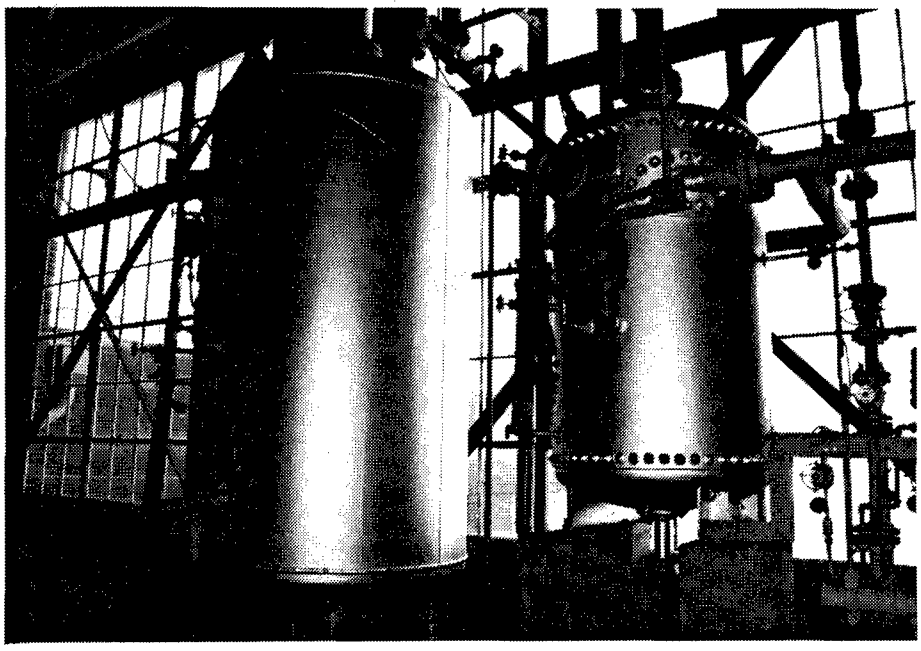


Figure 208. Building 401-1: Hydraulic Tank (constructed in 1940) that is on the second floor of the Power House.

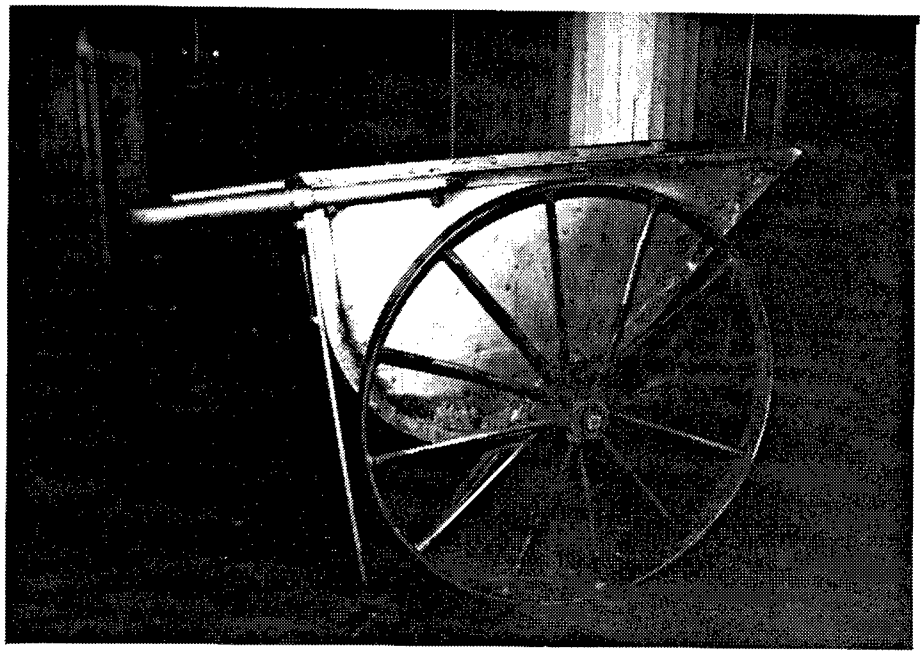


Figure 209. Building 401-1: Buggy with steel wheels, located on the second floor of the Power House.

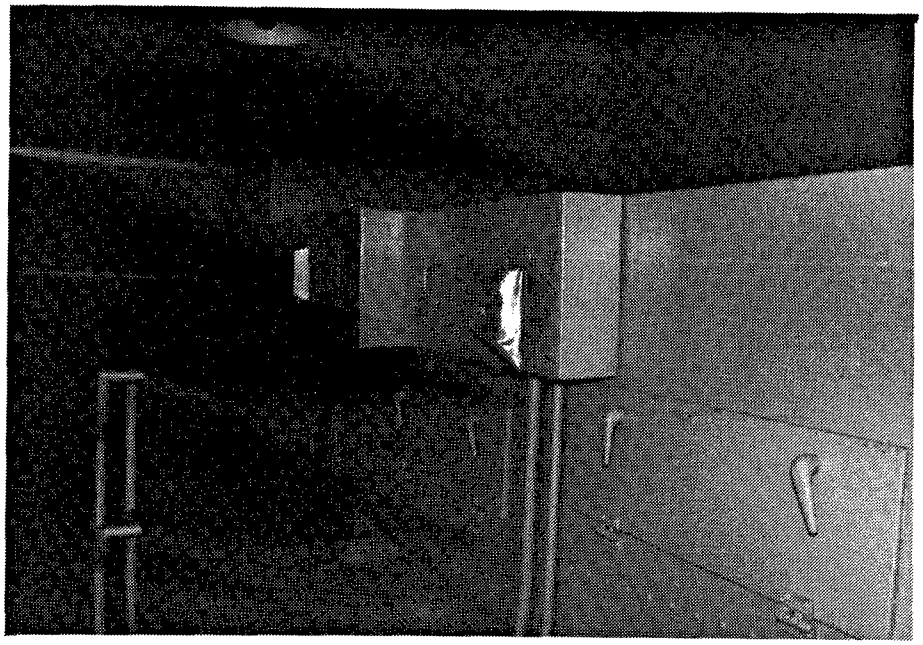


Figure 210. Building 401-1: Interior view of the second floor of the Power House.

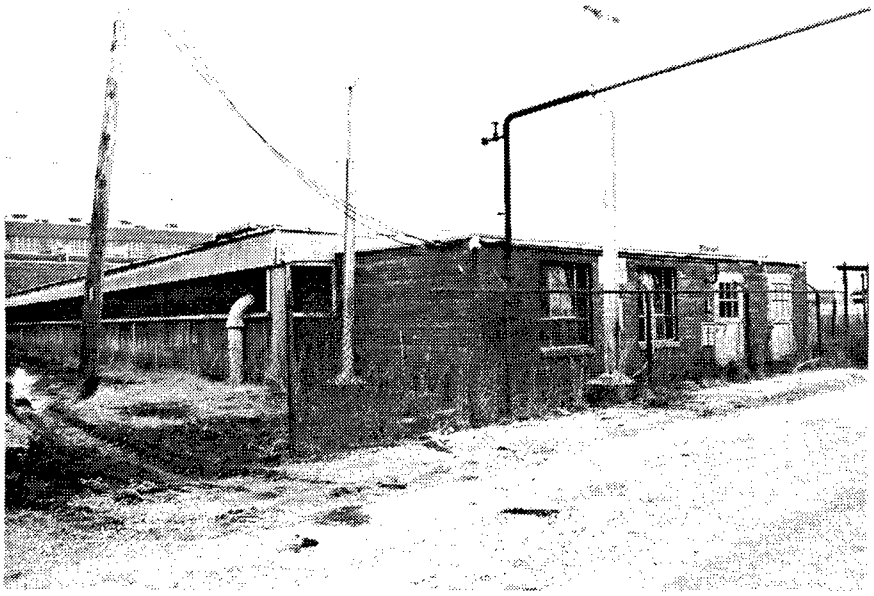


Figure 211. Building 402-6: Front of the Drinking Water Pump House and the covered reservoir that extends behind it.

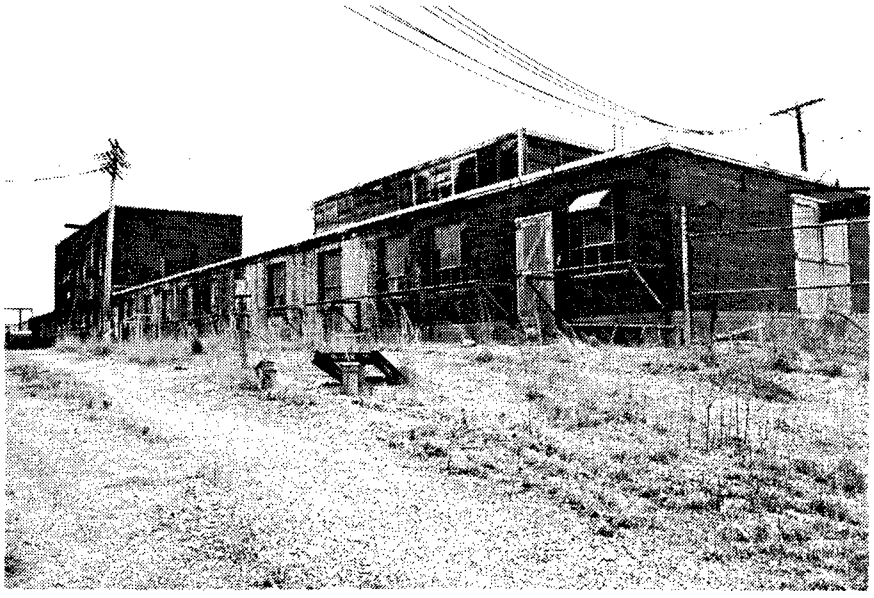


Figure 212. Buildings 403-2 and 402-2: The brick building is the Reservoir Pump House (Building 402-2), and the Cooling Tower (Building 403-2) is the wooden structure visible above it.

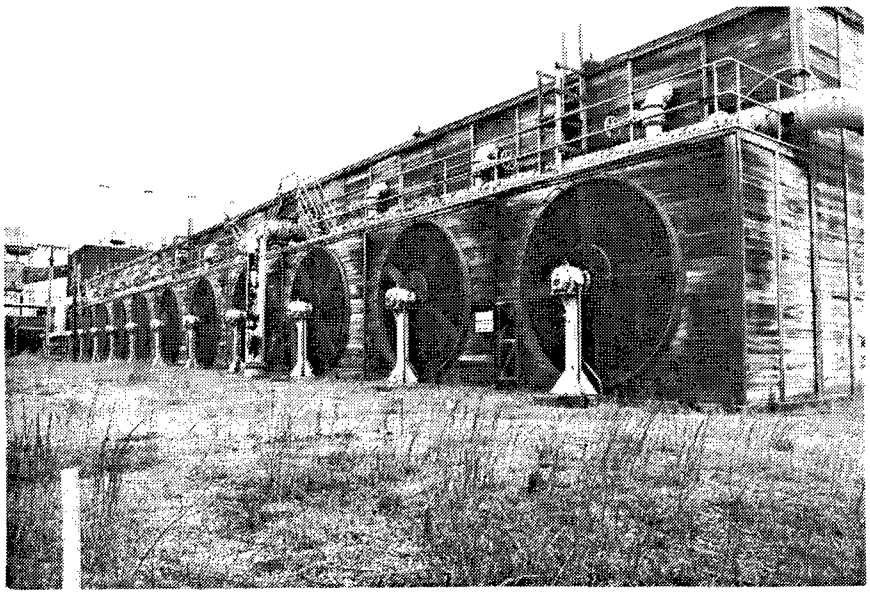


Figure 213. Building 403-2: Cooling Tower with ten fans, the blades of which are constructed of wood.

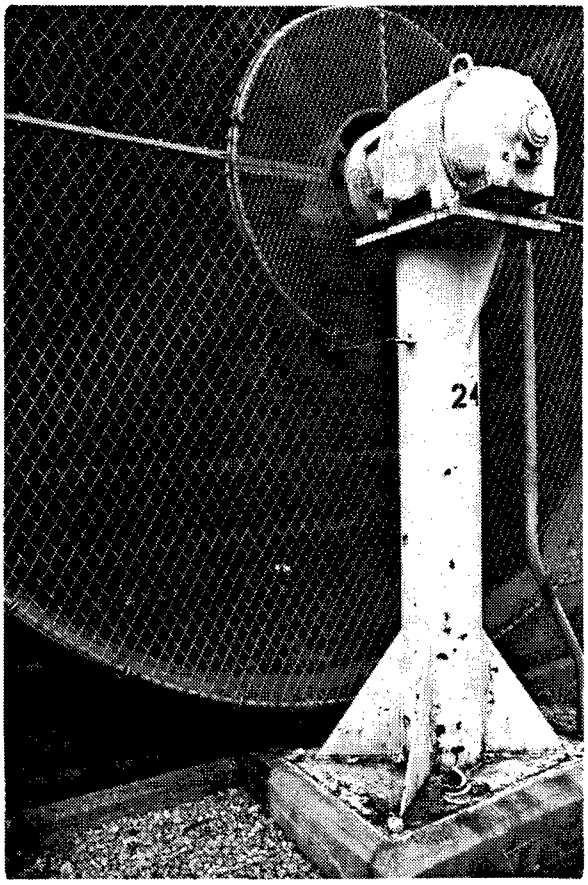


Figure 214. Building 403-2: One of the Philadelphia 25-horsepower reducer gears for the cooling tower fans.

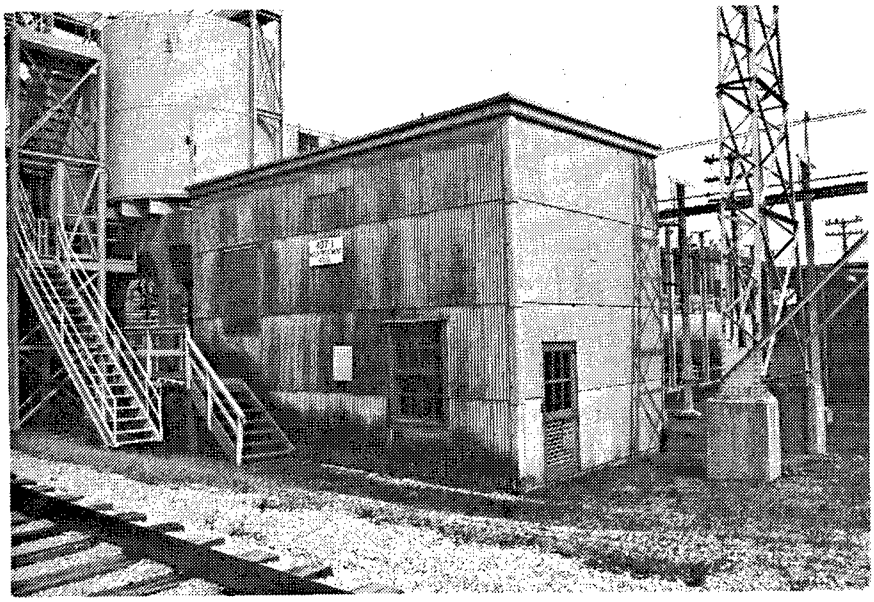


Figure 215. Building 407-1: Water Treatment House.

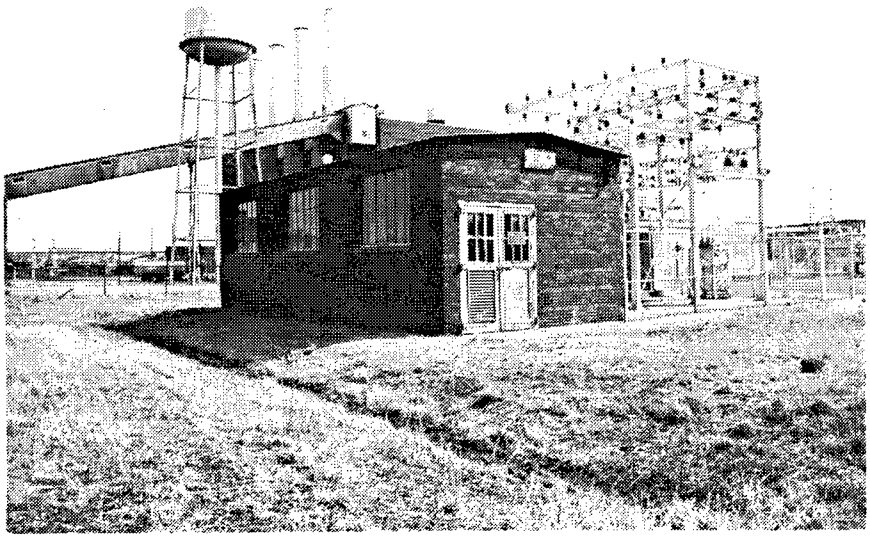


Figure 216. Building 501-9: One of nineteen Electric Substations that supplied electricity throughout the P&E Area.



Figure 217. Building 510: Elevated Water Tower.

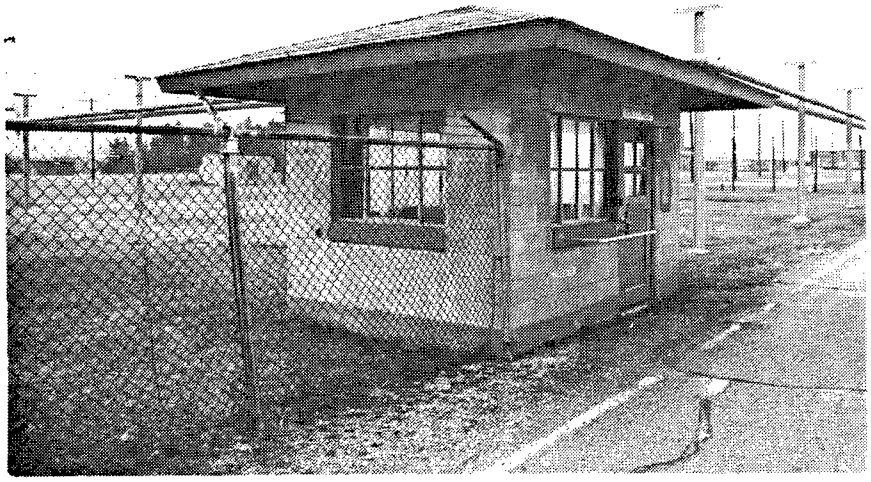


Figure 218. Building 605-18: Sentry House for the Administration Area.

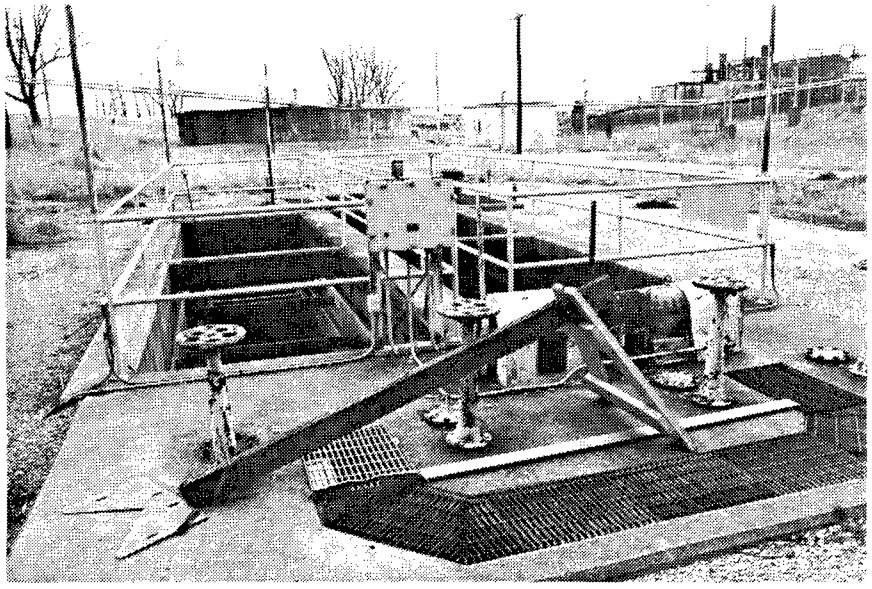


Figure 219. Building 606: Settling Tanks.

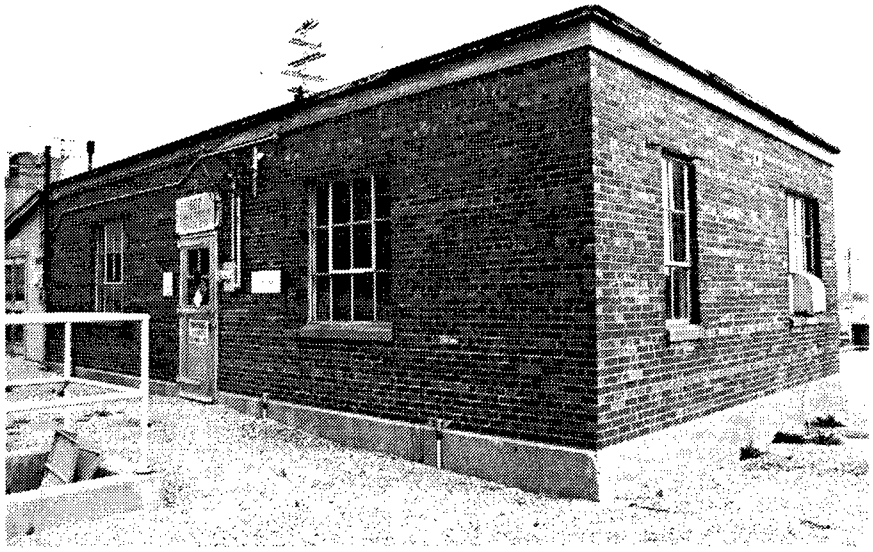


Figure 220. Building 607: Sewage Disposal Building.

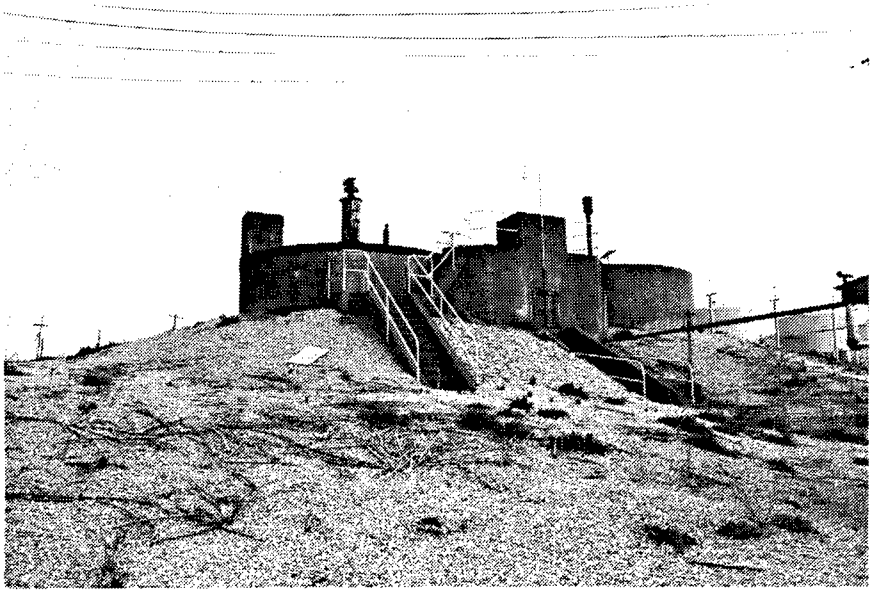


Figure 221. Building 608: Digestion Tank and Waste Gas Barn.

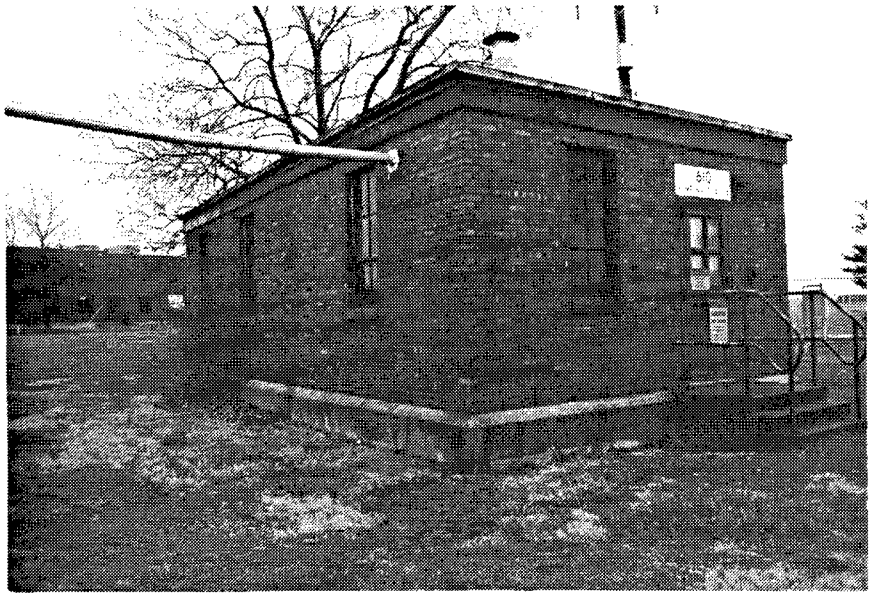


Figure 222. Building 610: Sewage Pumping Building.



Figure 223. Building 702: Telephone Exchange Building.

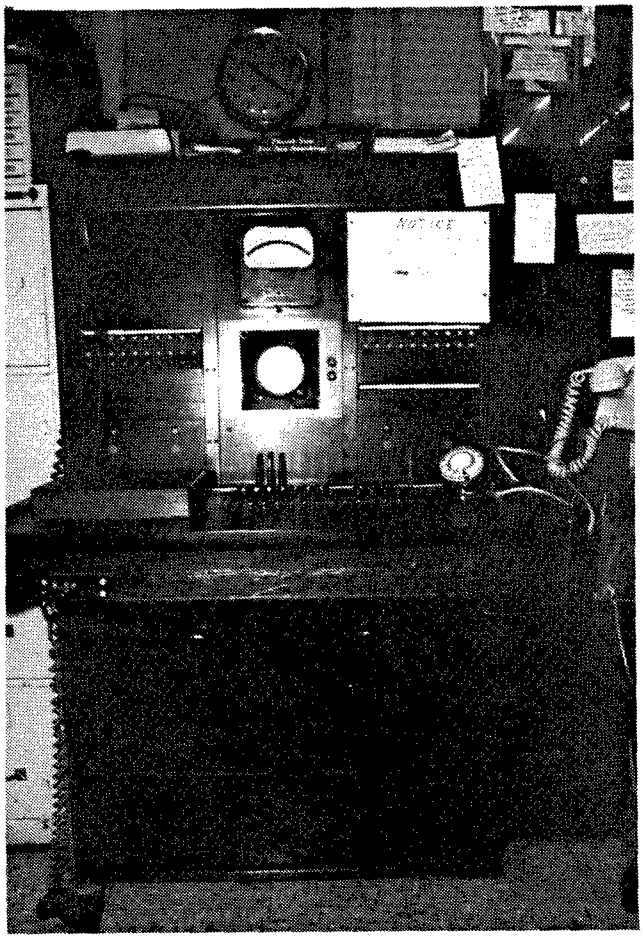


Figure 224. Building 702: Test cabinet constructed in 1949 by Federal Telephone and Radio Company on the first floor of the Telephone Exchange Building.



Figure 225. Building 709-1: Fire Station for the P&E area.

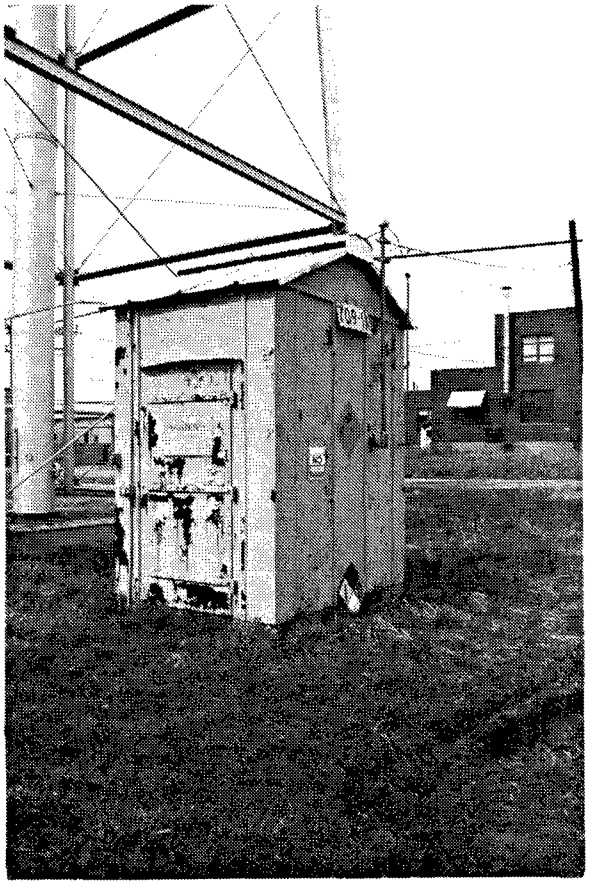


Figure 226. Building 709-1A: Radio Communication Building.

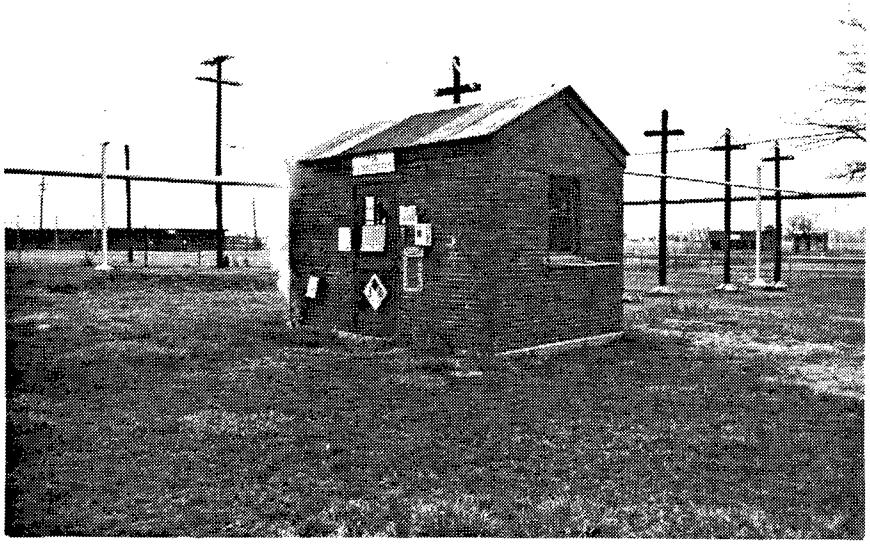


Figure 227. Building 736: Chlorinating House for the Administration Area.

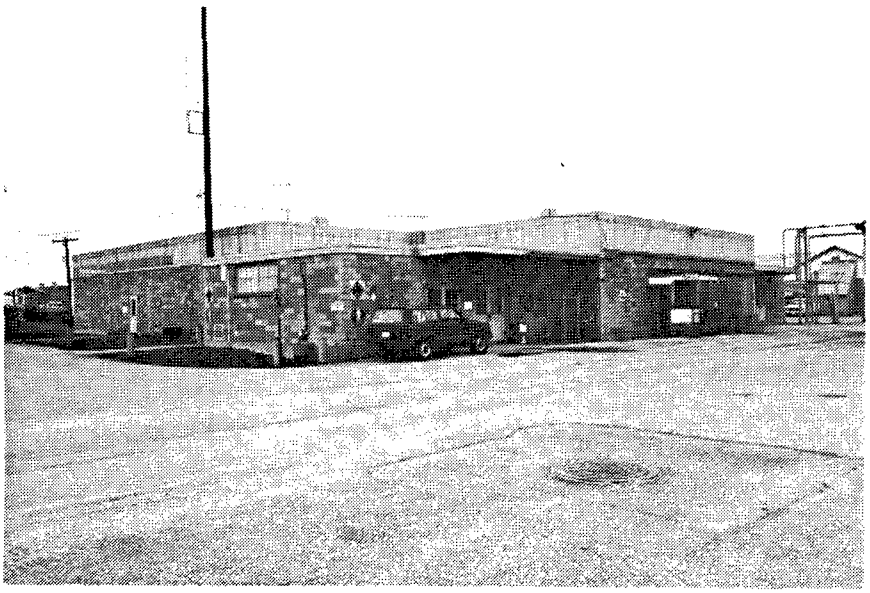


Figure 228. Building 2532: Security Building. For a period after its construction, this building was used as a Change House for the Shop Area.

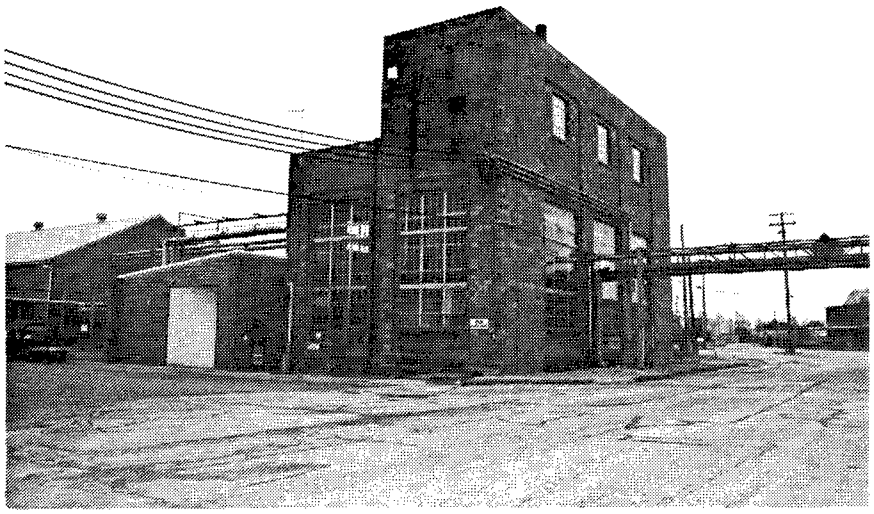


Figure 229. Building 2541: Central Heating Plant in the Bag Manufacturing Area.

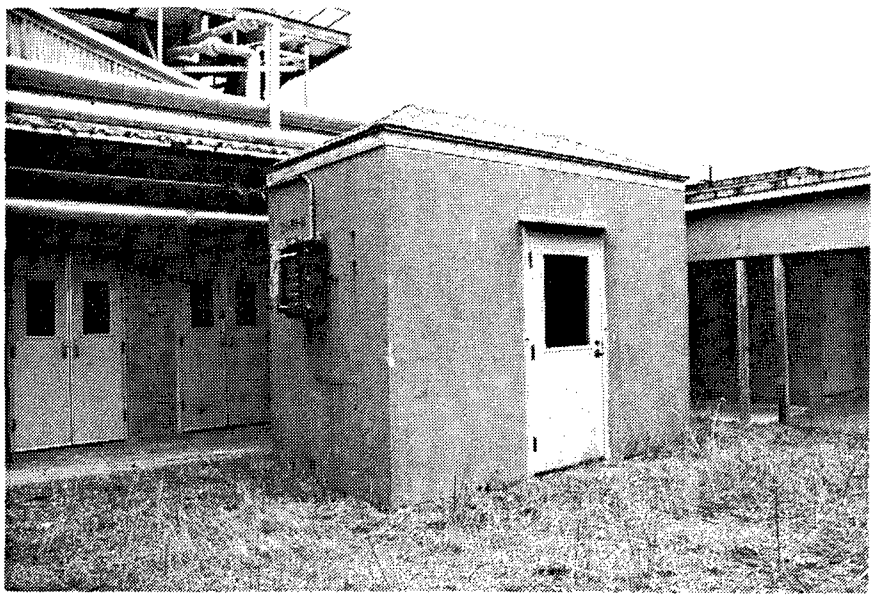


Figure 230. Building 2631-11: This Sprinkler Valve House contained the water main for the fire suppression/sprinkler system.



Figure 231. Building 5012-2: Constant Current Regulator House.

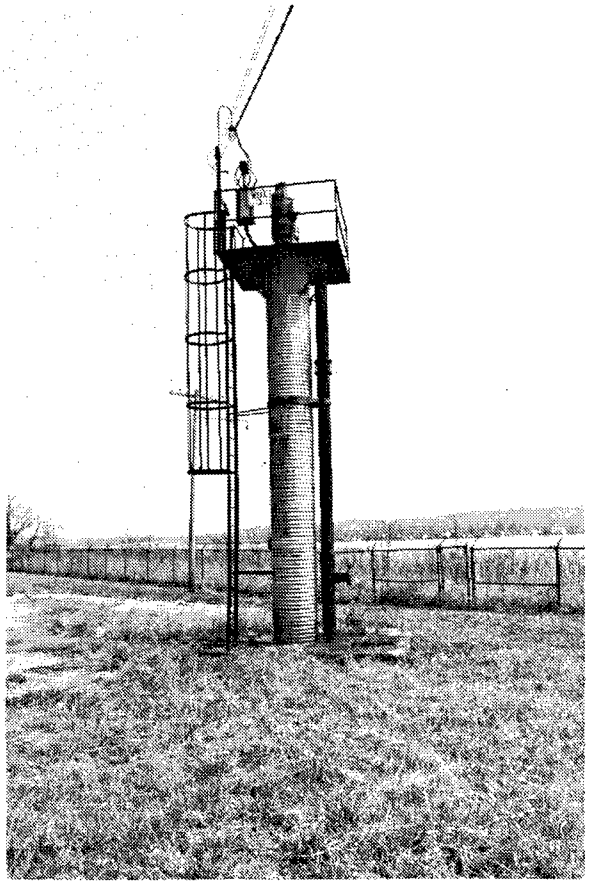


Figure 232. No building number: This is a well within a cluster of water wells built prior to the establishment of the plant.



Figure 233. Building 2521: Fire Station in the Bag Manufacturing Area.

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Fine, L., and J. Remington

1942 "The Corps of Engineers: Construction in the United States" In *The United States Army in World War II: The Technical Services.* Office of the Chief of Military History, United States Army, Washington D.C.

Garner, J.

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United States Government

n.d. *Historical Monograph of Indiana Army Ammunition Plant, Charleston, Indiana, from 17 July 1940 to 1 July 1963.* Located in the archives of the Indiana Army Ammunition Plant.

United States Government

n.d. *Unit History of Indiana Army Ammunition Plant from 17 July 1940 to 31 December 1967.* Located in the archives of the Indiana Army Ammunition Plant.

United States Government

1942 *Final Completion Report, Hoosier Ordnance Plant.* A ten-volume set of records describing the facility as it existed upon completion.

APPENDIX A

PHOTOGRAPHIC DATA SHEETS

GEO-MARINE INC.
PHOTOGRAPHIC DATA SHEET

Project #: 1114-014 AMC Task C

Film: Kodak TMAX black and white

Installation: Indiana Army Ammunition Plant

Roll Number: 1

Exp. No.	Building No(s).	Description	Dir.	Date	Recorder
0	703	Two story, brick, Administration Building, north front & west side	SE	03/28/94	Hiatt
1	702	Two story, Telephone Exchange Building, north front & east side	SW	03/28/94	Hiatt
2	610	Single story, Sewage Pumping Building, north front & east side	SW	03/28/94	Hiatt
3	708-1	Main Cafeteria (not in use), west front and north side	SE	03/28/94	Hiatt
4	708-1	Second angle, Main Cafeteria, east back and north side	SW	03/28/94	Hiatt
5	703-1c	Two story, Administration Building (not in use), west side and north front	SE	03/28/94	Hiatt
6	736	Chlorinating House for the Administration Area, south front and west side	NE	03/28/94	Hiatt
7	720	Two story, Guard Headquarters, east front and south side	NW	03/28/94	Hiatt
8	716-3	Radio Repair Shop, east side and front side	W	03/28/94	Hiatt
9	719	Industrial Hospital, north & south side		03/28/94	Hiatt
10	5012-2	Constant Current Regulator House, east & south side	NW	03/28/94	Hiatt
11	701-3	Clock Alley (an employee plant entrance) located opposite the Search House, east back and north side	SW	03/28/94	Hiatt
12	701-3A	Search House, located opposite clock alley, west front and north side	SE	03/28/94	Hiatt
13	702	First floor, Test cabinet: Federal Telephone and Radio Company 1949 (in use)		03/28/94	Hiatt
14	605-18	Sentry House for the Administration Area, west front and north side	SE	03/28/94	Hiatt
15	708	Material store		03/28/94	Hiatt
16		Blank Exposure		03/28/94	Hiatt
17	707-24	Change House, north front and east side	SW	03/28/94	Hiatt

GEO-MARINE INC.
PHOTOGRAPHIC DATA SHEET

Project #: 1114-014 AMC Task C

Film: Kodak TMAX black and white

Installation: Indiana Army Ammunition Plant

Roll Number: 1

Exp. No.	Building No(s).	Description	Dir.	Date	Recorder
18	704-8	Supervisors Office, north front and east side	SW	03/28/94	Hiatt
19	706-4	Stability Laboratory for testing nitrocellulose, north front and east side	SW	03/28/94	Hiatt
20	708-3	Cafeteria located within a production area, north front and west side	SE	03/28/94	Hiatt
21	612-1 & 1A	Acid Neutrilizing Pump House, east side and north front	SW	03/28/94	Hiatt
22	722-12	Area Shop-Salvage (maintenance shop), east side and south front	NW	03/28/94	Hiatt
23	722-16	Area Shop - Caustic Cleaning, east side and south front	NW	03/28/94	Hiatt
24	709-1	Fire Station for the Propellant and Explosives (P&E) Area, north front and east side	SW	03/28/94	Hiatt
25	709-1A	Radio Communications Building, north side and east front	SW	03/28/94	Hiatt
26	510	Elevated Water Tower, north side	S	03/28/94	Hiatt
27	713	General Store House, north front and east side	SW	03/28/94	Hiatt
28	706-1	Main Laboratory in the Propellant & Explosives Area, north front and east side	SW	03/28/94	Hiatt
29	714-1	Material Shed, south front and east side	NW	03/28/94	Hiatt
30	718	Locomotive House, east front and south side	NW	03/28/94	Hiatt
31	716-2	Garage or Repair Shop, north side and east front	SW	03/28/94	Hiatt
32	725	Heavy Equipment Garage & Shop, east front and north side	SW	03/28/94	Hiatt
33	101-3	Warehouse for raw materials and parts, located in the P&E Area, east front and north side	SW	03/28/94	Hiatt
34	122-3 & 104-3	Cotton Dry House (122-3) connected to a Wood Pulp Dry House (104-3), west front and south side	NE	03/28/94	Hiatt
35	103-3	Cotton Dry Conveyor connecting a Wood Pulp Dry House (104-3) to a Nitrating House, south & west side	NE	03/28/94	Hiatt

GEO-MARINE INC.
PHOTOGRAPHIC DATA SHEET

Project #: 1114-014 AMC Task C

Film: Kodak TMAX black and white

Installation: Indiana Army Ammunition Plant

Roll Number: 1

Exp. No.	Building No(s).	Description	Dir.	Date	Recorder
36	707-11	Change House, east front and north side	SW	03/28/94	Hiatt
37	722-4	Area Shop-Battery Shop, north back and west side	SE	03/28/94	Hiatt

GEO-MARINE INC.
PHOTOGRAPHIC DATA SHEET

Project #: 1114-014 AMC Task C

Film: Kodak TMAX black and white

Installation: Indiana Army Ammunition Plant

Roll Number: 2

Exp. No.	Building No(s).	Description	Dir.	Date	Recorder
3	722-11	Area Shop - Paint and Sign, south front and east side	NW	03/28/94	Hiatt
4	722-9	Area Shop - Instrument and Scale, south front and east side	NW	03/28/94	Hiatt
5	706-1	Steam Bath, complete outfit, by Duriron Company Inc. 6/23/54, located on the first floor of the Main Laboratory in the Propellant & Explosives Area		03/28/94	Hiatt
6	706-1	First floor overview of the Main Laboratory in the Propellant and Explosives Area. Forefront - log table		03/28/94	Hiatt
7	706-1	Insulated Kelothal Unit by MSL Davis. Located on the first floor of the Main Laboratory in the P&E Area		03/28/94	Hiatt
8	706-1	Oven by American Instrument Company. Located on the first floor of the Main Lab in the P&E Area		03/28/94	Hiatt
9	706-1	Distalation powder moisture test area on the first floor of the Main Laboratory in the P&E Area.		03/28/94	Hiatt
10	706-1	Vacuum Oven, Precision Freas. Model No. 510. Located on the first floor of the Main Laboratory in the P&E Area.		03/28/94	Hiatt
11	706-1	Constant temperature water bath refrigerator (built in the 1960's). Located on the first floor of the Main Laboratory in the P&E Area.		03/28/94	Hiatt
12	706-1	Central Scientific Companys Tray Oven for nitrogen samples. Located on the first floor of the Main Laboratory in the P&E Area.		03/28/94	Hiatt
13	706-1	115v Chemical centrifuge by International Equipment Co. 10/13/53. Located on the first floor of the Main Laboratory in the P&E Area		03/28/94	Hiatt
14	706-1	154 # states this equipment is a constant temperature control bath manufactured by Aminco 3/18/52. Located on the 1st floor of the Main Lab in the P&E Area		03/28/94	Hiatt
15	706-1	Weber Electric Oven on the first floor of the Main Laboratory in the P&E Area		03/28/94	Hiatt
16	706-1	Webber Electric Oven located on the first floor of the Main Laboratory in the P&E Area		03/28/94	Hiatt

GEO-MARINE INC.
PHOTOGRAPHIC DATA SHEET

Project #: 1114-014 AMC Task C

Film: Kodak TMAX black and white

Installation: Indiana Army Ammunition Plant

Roll Number: 2

Exp. No.	Building No(s).	Description	Dir.	Date	Recorder
17	706-1	Constant Temperature Apparatus located on the first floor of the Main Laboratory in the P&E Area		03/28/94	Hiatt
18	706-1	Vacuum Pump located on the first floor of the Main Laboratory in the P&E Area		03/28/94	Hiatt
19	706-1	Vacuum Pump located on the first floor of the Main Laboratory of the P&E Area		03/28/94	Hiatt
20	706-1	First floor of the Main Laboratory in the P&E Area: Left = Fisher flash point tester, right = Dayton motor		03/28/94	Hiatt
21	706-1	First floor in the Main Laboratory for the P&E Area: Left = Fisher flash point tester, right = Dayton motor		03/28/94	Hiatt
22	706-1	First floor of the Main Laboratory in the the P&E Area. L-L 1/2" regulator model no. 1584 by Arrow Tools Inc.		03/28/94	Hiatt
23	706-1	First floor of the Main Laboratory in the P&E Area: L-L 1/2" Regulator model no. 1584 by Arrow Tools Inc.		03/28/94	Hiatt
24	706-1	First floor of the Main Laboratory in the P&E Area: Portable Electric Powder Cutter, dated 7/14/56		03/28/94	Hiatt
25	706-1	International Oil Testing Centrifuge located on the first floor of the main laboratory in the P&E Area		03/28/94	Hiatt
26	706-1	Kodak Timer and Centrifuge located on the first floor of the Main Laboratory in the P&E Area		03/28/94	Hiatt
27	706-1	Centrifuge located on the first floor of the Main Laboratory in the P&E Area.		03/28/94	Hiatt
28	706-1	115v, Fisher Titrimeter/Fyrite kit (7/13/53). Located on the first floor of the main laboratory in the P&E area.		03/28/94	Hiatt
29	706-1	First floor of the Main Laboratory in the P&E Area: Determinator Moisture Apparatus with a 2 1/2" iron pipe support, 3/24/52		03/28/94	Hiatt
30	706-1	First floor of the Main Laboratory in the P&E Area: Scale balance moisture, Cenco Infra-Red Drying 11/15/62		03/28/94	Hiatt
31	706-1	First floor of the Main Laboratory in the P&E Area: Cellulose equipped Fiber classifier, 11/28/55		03/28/94	Hiatt

GEO-MARINE INC.
PHOTOGRAPHIC DATA SHEET

Project #: 1114-014 AMC Task C

Film: Kodak TMAX black and white

Installation: Indiana Army Ammunition Plant

Roll Number: 2

Exp. No.	Building No(s).	Description	Dir.	Date	Recorder
32	706-1	First floor of the Main Laboratory in the P&E Area: Determinator Moisture Apparatus with an iron support, 8/20/73		03/28/94	Hiatt
33	706-1	Insulated Tank located on the first floor of the Main Laboratory in the P&E Area		03/28/94	Hiatt
34	706-1	Wash Station located on the first floor of the Main Laboratory in the P&E Area		03/28/94	Hiatt
35	706-1	First floor of the Main Laboratory in the P&E Area: Allan Bradley		03/28/94	Hiatt
36	717	Combined Shop for metal and wood working, front and east side	W	03/28/94	Hiatt
37	105-3	Nitrating House (four stories, brick construction), south side	N	03/28/94	Hiatt

GEO-MARINE INC.
PHOTOGRAPHIC DATA SHEET

Project #: 1114-014 AMC Task C

Film: Kodak TMAX black and white

Installation: Indiana Army Ammunition Plant

Roll Number: 3

Exp. No.	Building No(s).	Description	Dir.	Date	Recorder
1	105-3	General Electric 4.5 hp motor located on the first floor of the Nitrating House.		03/28/94	Hiatt
2	105-3	Nitrating House, first floor, interior view looking west: Note the Steel girders	W	03/28/94	Hiatt
3	105-3	Nitrating House, first floor: Durco Pump (154-60121 & 65646)		03/28/94	Hiatt
4	105-3	Nitrating House, second floor; Wringer, complete, unit size 42, 7/1/51		03/28/94	Hiatt
5	105-3	Nitrating House, third floor: Cotton or wood pulp linters		03/28/94	Hiatt
6	105-3	Nitrating House, third floor: Conveyor from wood pulp building		03/28/94	Hiatt
7	105-3	Nitrating House, third floor; Acid Measuring Tanks		03/28/94	Hiatt
8	105-3	Nitrating House, fourth floor: White Water Surger Tanks		03/28/94	Hiatt
9	105-3	Nitrating House, fourth floor: Control contractor 7/1/51		03/28/94	Hiatt
10	105-3	Nitrating House, fourth floor: general interior overview of Motor Room looking west. Note girders	W	03/28/94	Hiatt
11	108-2	Boiling Tub House, west front and north side	SE	03/28/94	Hiatt
12	106-3A	Shelter for Spent Acid Filter employees (empty), west front and north side	SE	03/28/94	Hiatt
13	102-2	Nitrocellulose Tank Farm and Warming House, east back and south side	NW	03/28/94	Hiatt
14	102-2	Tanks on the first floor of the Nitrocellulose Tank Farm Warming House		03/28/94	Hiatt
15	102-2	Nitrocellulose Tank Farm Warming House, second floor: Graver Tank, dated 7/1/51		03/28/94	Hiatt
16	102-2	Nitrocellulose Tank Farm Warming House, second floor: second angle of Graver Tank dated 7/1/51		03/28/94	Hiatt
17	729-5	Spare Machinery Storage Building, north & west side	SE	03/28/94	Hiatt

GEO-MARINE INC.
PHOTOGRAPHIC DATA SHEET

Project #: 1114-014 AMC Task C

Film: Kodak TMAX black and white

Installation: Indiana Army Ammunition Plant

Roll Number: 3

Exp. No.	Building No(s).	Description	Dir.	Date	Recorder
18	401-1	Coal Generated Power House, south & west side	NE	03/28/94	Hiatt
19	401-1	Coal Generated Power House, south and west side	NE	03/28/94	Hiatt
20	104-1&103-001	Cotton Dry House (front, 104-1) and Cotton Dry Conveyor (left background, 103-101), north & east side	SW	03/28/94	Hiatt
21	306-1	Acid Area Water Reuse House, west front and south side	NE	03/28/94	Hiatt
22	407-1	Water Treatment House, west front and south side	NE	03/28/94	Hiatt
23	302-1	Ammonia Oxidation Plant, west front and south side	NE	03/28/94	Hiatt
24	401-1	Coal Generated Power House, west & north side. Building 501-9 in forefront, north side	SE	03/28/94	Hiatt
25	501-9	Electric Sub-station supplying the Propellant and Explosives (P&E) Area, west front and north side	SE	03/28/94	Hiatt
26		Void		03/28/94	Hiatt
27		Void		03/28/94	Hiatt
28		Void		03/28/94	Hiatt
29	302-1	Ingersoll-Rand Air Compressor, primary, 2 stage, 2800 cfm, dated 10/72. Located in the Ammonia Oxidation Plant.		03/28/94	Hiatt
30	302-1	Ammonia Oxidation Plant: Second angle of the Ingersoll-Rand Air Compressor, primary, 2 stage, 2800 cfm, dated 10/72		03/28/94	Hiatt
31	302-1	Ammonia Oxidation Plant. Third angle of the Ingersoll-Rand Air Compressor, primary, 2 stage, 2800 cfm, dated 10/72		03/28/94	Hiatt
32	302-1	Compressor Control 2300, located in the Ammonia Oxidation Plant		03/28/94	Hiatt
33	302-1	Compressor control 2300, located in the Ammonia Oxidation Plant		03/28/94	Hiatt
34	302-1	Motor generator set at 1750 RMP, located in the Ammonia Oxidation Plant		03/28/94	Hiatt

GEO-MARINE INC.
PHOTOGRAPHIC DATA SHEET

Project #: 1114-014 AMC Task C

Film: Kodak TMAX black and white

Installation: Indiana Army Ammunition Plant

Roll Number: 3

Exp. No.	Building No(s).	Description	Dir.	Date	Recorder
35	302-1	Converter by Forginks Plates in the Ammonia Oxidation Plant		03/28/94	Hiatt
36	207	Ammonia Storage at a Tank Farm		03/28/94	Hiatt
37	207	Ammonia Storage at a Tank Farm		03/28/94	Hiatt

GEO-MARINE INC.
PHOTOGRAPHIC DATA SHEET

Project #: 1114-014 AMC Task C

Film: Kodak TMAX black and white

Installation: Indiana Army Ammunition Plant

Roll Number: 4

Exp. No.	Building No(s).	Description	Dir.	Date	Recorder
0	305-1A	Shelter for the Acid Tank Farm, south & west side	NE	03/28/94	Hiatt
1	303-1	Anhydrous Ammonia Storage Building, first floor: controls with guages		03/28/94	Hiatt
2	303-1	Ammonia Storage Building: Fuel absorbtion tank behind control gauges		03/28/94	Hiatt
3	303-1	Ammonia Storage Building: Durco Pump, Dayton, OH		03/28/94	Hiatt
4	303-1	Ammonia Storage Building: Durco Pump, Dayton, OH		03/28/94	Hiatt
5	303-1	Ammonia Storage Building, second floor: Midpart of acid pr...		03/28/94	Hiatt
7	303-1	Ammonia Storage Building, second floor: Preheating tank units		03/28/94	Hiatt
8	303-1	Ammonia Storage Building, second floor: Top of sulpheric acid preheater		03/28/94	Hiatt
9	303-1	Ammonia Storage Building, fourth floor; Dehydrating Separation tank		03/28/94	Hiatt
10	303-1	Ammonia Storage Building, fourth floor: Dehydrating Separation tank		03/28/94	Hiatt
11	717	Combined shop for wood and metal working: Delta Machine (15427068)		03/28/94	Hiatt
12	717	Combined Shop for wood and metal working: Electric Drying Ovens (15422935) by Despatch Ovens, Minn., MN. (measuring 4'x6'x5)'		03/28/94	Hiatt
13	717	Combined Shop for wood and metal working. Cleaning booth, Square D		03/28/94	Hiatt
14	717	Combined Shop for wood and metal working: 150 ton press, by General Electric (15U-271866)		03/28/94	Hiatt
15	717	Combined shop for metal and wood working: Second angle of 150 ton press by General Electric (15U-271866)		03/28/94	Hiatt
16	717	Air Receiver tanks in the Combined Shop for metal and wood working.		03/28/94	Hiatt

GEO-MARINE INC.
PHOTOGRAPHIC DATA SHEET

Project #: 1114-014 AMC Task C

Film: Kodak TMAX black and white

Installation: Indiana Army Ammunition Plant

Roll Number: 4

Exp. No.	Building No(s).	Description	Dir.	Date	Recorder
17	717	Do-All Band Saw (27-1841) in the Combined Shop for wood and metal working.		03/28/94	Hiatt
18	717	Second angle, Do-all Band Saw (27-1841) in the Combined Shop for metal and wood working		03/28/94	Hiatt
19	726 & 726-2	Acetylene Storage Buildings, Bldg. 726 in forefront and Bldg. 726-2 in background	SE	03/28/94	Hiatt
20	113-3	Final Blend and Wringer House, north front and east side. Note tanks to south	SW	03/28/94	Hiatt
21	113-3	Second angle of Final Blend & Wringer House, south and east side	NW	03/28/94	Hiatt
22	201-3	Nitrocellulose Lag Storage, north back and west side	SE	03/28/94	Hiatt
23	112-3	Poacher Tub House, south and east side	NW	03/28/94	Hiatt
24	109-3	Pulping House, north front and east side	SW	03/28/94	Hiatt
25	109-3	Pulping House, south and west side	NE	03/28/94	Hiatt
26	727-7	Comfort Station, front north and east side	SW	03/28/94	Hiatt
27	203-1	Alcohol and Dibutylphthalate (DBP) Storage Tank Farm		03/28/94	Hiatt
28	203-1	Alcohol and DBP Storage Tank Farm: #2A Blower by Raymond Pulverizer Division, Chicago, IL, serial #40807		03/28/94	Hiatt
29	203-1	Alcohol and DBP Storage Tank Farm: Second angle of #2A Blower by Raymond Pulverizer Division, Chicago, IL, serial #40807		03/29/94	Hiatt
30	203-1	Alcohol and DBP Storage Tank Farm: Third angle of #2A Blower by Raymond Pulverizer Division, Chicago, IL, serial #40807		03/29/94	Hiatt
31	203-1	Alcohol and DBP Storage Tank Farm: Unknown equipment		03/29/94	Hiatt
32	203-1	Alcohol and DBP Storage Tank Farm: Coal bin		03/29/94	Hiatt
33	203-1	Alcohol and DBP Storage Tank Farm: Allis-Cralmer		03/29/94	Hiatt
34	203-1	Alcohol and DBP Storage Tank Farm: Hot well pump		03/29/94	Hiatt

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Project #: 1114-014 AMC Task C

Film: Kodak TMAX black and white

Installation: Indiana Army Ammunition Plant

Roll Number: 4

Exp. No.	Building No(s).	Description	Dir.	Date	Recorder
35	203-1	Alcohol and DBP Storage Tank Farm: Second angle of Hot well pump		03/29/94	Hiatt
36	203-1	Alcohol and DBP Storage Tank Farm: Central vacuum		03/29/94	Hiatt
37	203-1	Alcohol and DBP Storage Tank Farm: Second angle of Central vacuum		03/29/94	Hiatt

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Project #: 1114-014 AMC Task C

Film: Kodak TMAX black and white

Installation: Indiana Army Ammunition Plant

Roll Number: 5

Exp. No.	Building No(s).	Description	Dir.	Date	Recorder
0	401-1	Coal Generated Power House, first floor: Coal bin & Induced draft fan by Buffalo Force Company		03/29/94	Hiatt
1	401-1	Coal Generated Power House, first floor: Top of coal bins		03/29/94	Hiatt
2	401-1	Coal Generated Power House, first floor: Control panel		03/28/99	Hiatt
3	401-1	Coal Generated Power House, first floor: Close up of a few of the dials on the control panel		03/29/94	Hiatt
4	401-1	Coal Generated Power House, second floor: Richardson Scale Company		03/29/94	Hiatt
5	401-1	Coal Generated Power House, second floor: Buggy with steel wheels		03/29/94	Hiatt
6	401-1	Coal Generated Power House, second floor: Overhead view, Allis-Cralmer		03/29/94	Hiatt
7	401-1	Coal Generated Power House, second floor: Overhead view, Allis-Cralmer		03/29/94	Hiatt
8	401-1	Coal Generated Power House, second floor: Fram tachometer		03/29/94	Hiatt
9	401-1	Coal Generated Power House, second floor: second angle of Westinghouse generator		03/29/94	Hiatt
10	401-1	Coal Generated Power House, second floor: third angle of Westinghouse generator		03/29/94	Hiatt
11	401-1	Coal Generated Power House, second floor: General Electric Oil Circuit Breaker		03/29/94	Hiatt
12	401-1	Coal Generated Power House, second floor: Second angle of General Electric Oil Circuit Breaker		03/29/94	Hiatt
13	401-1	Coal Generated Power House, second floor: Dehumidifier by Desomatic Products, 8/61 (31-246)		03/29/94	Hiatt
14	401-1	Coal Generated Power House, second floor: Generator		03/29/94	Hiatt
15	401-1	Coal Generated Power House, second floor: Dehumidifier by Desomatic, 1962 (31-326)		03/29/94	Hiatt

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Project #: 1114-014 AMC Task C

Film: Kodak TMAX black and white

Installation: Indiana Army Ammunition Plant

Roll Number: 5

Exp. No.	Building No(s).	Description	Dir.	Date	Recorder
16	401-1	Coal Generated Power House, second floor: Panel box		03/29/94	Hiatt
17	401-1	Coal Generated Power House, second floor: Deafrating Heater, Elliott, 1		03/29/94	Hiatt
18	401-1	Coal Generated Power House, second floor: Hydraulic Tank constructed in 1940		03/29/94	Hiatt
19	401-1	Coal Generated Power House: Interior view of second floor, top and back of "Heater"		03/29/94	Hiatt
20	401-1	Coal Generated Power House: Interior view of second floor, side of the top of "Heater"		03/29/94	Hiatt
21	401-1	Coal Generated Power House: Second floor		03/29/94	Hiatt
22	401-1	Coal Generated Power House, third floor: Fan turbine		03/29/94	Hiatt
23	401-1	Coal Generated Power House, third floor: Second angle of Fan Turbine		03/29/94	Hiatt
24	401-1	Coal Generated Power House, third floor: Coal bin		03/29/94	Hiatt
25	401-1	Coal Generated Power House, fourth floor: Top of coal bin		03/29/94	Hiatt
26	734	Cylinder Storage Building, east front and north side	SW	03/29/94	Hiatt
27	704-2	Drinking Water Pump House, east front and north side	SW	03/29/94	Hiatt
28	729-3	Spare Machinery Storage Building, north front and east side	SW	03/29/94	Hiatt
29	750-1	Semi Works Building where experimental equipment was tested, south back and east side	NW	03/29/94	Hiatt
30	750-1	Semi Works Building where experimental equipment was tested, north front and east side	SW	03/29/94	Hiatt
31	750-2	Semi-Works Storage Building, south front and east side	NW	03/29/94	Hiatt
32	750-2	Semi-Works Storage Building, south front & east side	NW	03/29/99	Hiatt
33	750-2	Westing House inside Semi Works Storage Building		03/29/94	Hiatt
34	750-2	Westing House, inside Semi-Works Storage Building		03/29/94	Hiatt

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Project #: 1114-014 AMC Task C

Film: Kodak TMAX black and white

Installation: Indiana Army Ammunition Plant

Roll Number: 5

Exp. No.	Building No(s).	Description	Dir.	Date	Recorder
35	750-2	Second angle of Westing House inside Semi Works Storage Building		03/29/94	Hiatt
36	750-2	Third angle of Westing House (38-3456) inside Semi Works Storage Building		03/29/94	Hiatt

GEO-MARINE INC.
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Project #: 1114-014 AMC Task C

Film: Kodak TMAX black and white

Installation: Indiana Army Ammunition Plant

Roll Number: 6

Exp. No.	Building No(s).	Description	Dir.	Date	Recorder
1	221-2	Pack House (221-2, front), walkway, and Blending Tower (background), north and east side	SW	03/29/94	Hiatt
2	221-2	Pack House: Powder Buggy with Goodyear tires used to take powder from the Blending Tower to the Pack House		03/29/94	Hiatt
3	221-2	Pack House: Hopper and Toledo Scale to weigh smokeless powder, model #1891		03/29/94	Hiatt
4	221-2	Pack House: Second angle of Hopper and Toledo Scale to weigh smokeless powder. Note rollers and scale behind hopper		03/29/94	Hiatt
5	221-2	Pack House: Toledo scale with 175 lb. capacity (20-2273)		03/29/94	Hiatt
6	221-2	Pack House: Catwalk connecting Blending Tower to Pack House		03/29/94	Hiatt
7	221-2	Pack House: Hopper spill into blender		03/29/94	Hiatt
8	221-2	Pack House, second floor: Hopper spill		03/29/94	Hiatt
9	221-2	Pack House, third floor: Hopper spill and elevator with a 6000 lb capacity		03/29/94	Hiatt
10	221-2	Pack House, third floor: Second angle of hopper spill & elevator		03/29/94	Hiatt
11	224-1	Air Test House, east and south side	NW	03/29/94	Hiatt
12	232	Box Repair House, southeast front and northeast side	W	03/29/94	Hiatt
13	223	Box Storehouse, east and south side	NW	03/29/94	Hiatt
14	229-6	Shipping House, west and south side	NE	03/29/94	Hiatt
15	227-9 & 229-10	Shipping House (229-10) and its barricade (229-9), south front and south side	N	03/29/94	Hiatt
16	227-9 & 229-10	Second angle, Shipping House (229-10) and its barricade (229-9)		03/29/94	Hiatt
17	214-88	Solvent Recovery House (constructed of concrete), east and south side	NW	03/29/94	Hiatt

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PHOTOGRAPHIC DATA SHEET

Project #: 1114-014 AMC Task C

Film: Kodak TMAX black and white

Installation: Indiana Army Ammunition Plant

Roll Number: 6

Exp. No.	Building No(s).	Description	Dir.	Date	Recorder
18	259	Hand Sort Dump Shed, north and east side	SW	03/29/94	Hiatt
19	259	Hand Sort Dump Shed: Brass hopper		03/29/94	Hiatt
20	259	Light panel with Westinghouse circuits, located on the east side of the Hand Sort Dump Shed		03/29/94	Hiatt
21	259 & 219	Rail Cars located behind the Water Dry House and the Sorting House		03/29/94	Hiatt
22	218-10	Unloading and Screening House		03/29/94	Hiatt
23	218-10	Unloading and Screening House: Jet Pump (154-66517)		03/29/94	Hiatt
24	218-10	Unloading and Screening House: Screener constructed by Ro-Ball, J.H. Day Company, Cinncinati, Ohio. The screens are not present		03/29/94	Hiatt
25	218-10	Unloading and Screening House: Second angle of the Screener constructed by Ro-ball, J.H. Day Company, Cinncinati, Ohio. The screens are not present.		03/29/94	Hiatt
26	218-10	Unloading and Screening House: Note pulley system over the dump that aided in unloading the solvent recovery cars.		03/29/94	Hiatt
27	218-10	Interior overview of the Unloading and Screen House: The dump is on the left, and the screener is to the right.		03/29/94	Hiatt
28	219-10	Interior view of the Water Dry House		03/29/94	Hiatt
29	219-10	Water Dry House: Wet powder rail car (06-2286)		03/29/94	Hiatt
30	219-10	Water Dry House (front) with the Dump shed (259) in background, north and east side	SW	03/29/94	Hiatt
31	213-2	Solvent Recovery Car Wash, west and south side	NE	03/29/94	Hiatt
32	221-4	Another angle of the Blending Tower and Pack House, north and west side	SE	03/29/94	Hiatt
33	220-23	Controlled Circulation Dryer Fan House, south and west side	NE	03/29/94	Hiatt
34	220-23	Controlled Circulation Dryer Fan House: Allis Chalmers GOHP Electric Motor, 60 hp, 1941		03/29/94	Hiatt

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Project #: 1114-014 AMC Task C

Film: Kodak TMAX black and white

Installation: Indiana Army Ammunition Plant

Roll Number: 6

Exp. No.	Building No(s).	Description	Dir.	Date	Recorder
35	220-23	Controlled Circulation Dryer Fan House: Second angle, Allis Chalmers GOHP Electric Motor, 60hp, 1941		03/29/94	Hiatt
36	220-23	Controlled Circulation Dryer Fan House: Fan, ARRGT #1, Buffalo Forge Company.		03/29/94	Hiatt

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Project #: 1114-014 AMC Task C

Film: Kodak TMAX black and white

Installation: Indiana Army Ammunition Plant

Roll Number: 7

Exp. No.	Building No(s).	Description	Dir.	Date	Recorder
1	220-23	Controlled Circulation Dryer Fan House: Fan, ARRGT #1 CFM Buffalo Forge Company, 1952		03/29/94	Hiatt
2	220-23	Controlled Circulation Dryer Fan House: Fan, ARRGT #1, Buffalo ForgeCompany, 1952		03/29/94	Hiatt
3	220-23	Controlled Circulation Dryer Fan House: Johnson Controls, 1958		03/29/94	Hiatt
4	202-5	Dehydration Press House: Refurbished, Fulton Iron Works dehydrating 3500 lb. Loomis press		03/29/94	Hiatt
5	202-5	Dehydration Press House: Close up of Refurbished, Fulton Iron Works Dehydrating 4500 lb. Loomis press		03/29/94	Hiatt
6	202-5	Dehydration Press House: Overview from first floor		03/29/94	Hiatt
7	202-5	Dehydration Press House, south and west side	NE	03/29/94	Hiatt
8	202-18	Alcohol Pump House, south front and west side	NE	03/29/94	Hiatt
9	208-2	Mixer House, west front and south side	NE	03/29/94	Hiatt
10	208-2	Mixer House: Electric motor, 60 hp		03/29/94	Hiatt
11	208-2	Mixer House: Vertical Blocking Press, Farquhar Co.		03/29/94	Hiatt
12	208-2	Mixing House: Macerator with spout and hopper		03/29/94	Hiatt
13	208-2	Mixer House: Second angle, Macerator with spout & hopper		03/29/94	Hiatt
14	208-2	Mixer House: Baker and Perkins mixer and kneading machine, 100 gallon capacity		03/29/94	Hiatt
15	208-2	Mixer House: Second angle, Baker & Perkins mixer & kneading machine, 100 gallon capacity		03/29/94	Hiatt
16	208-2	Mixing House: 250 lb Scale and hopper, 1941		03/29/94	Hiatt
17	208-2	Mixer House: 250lb Scale and hopper, 1941		03/29/94	Hiatt
18	208-2	Mixer House: Cylinder buggy (154-9110) and wooden flat-bed cart (154-42723)		03/29/94	Hiatt
19	208-2	Mixing House: Close up of Mixer		03/29/94	Hiatt

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Project #: 1114-014 AMC Task C

Film: Kodak TMAX black and white

Installation: Indiana Army Ammunition Plant

Roll Number: 7

Exp. No.	Building No(s).	Description	Dir.	Date	Recorder
20	208-2	Mixing House: Cart		03/29/94	Hiatt
21	208-2	Mixing House: Cart		03/29/94	Hiatt
22	211-6	Horizontal Screening and Press House, east back and south side	NW	03/29/94	Hiatt
23	209-2	Scrap Rework House		03/29/94	Hiatt
24	211-6	Horizontal Screening and Press House, south side, note roof	N	03/29/94	Hiatt
25	251-2	Active Carbon Solvent Recovery Building		03/29/94	Hiatt
26	206-3	Ether Mix House		03/29/94	Hiatt
27	206-3	Ether Mix House: Nineteen foot tall Ether/alcohol tank, view from catwalk		03/29/94	Hiatt
28	207-8	Recovered Ether and Alcohol Store House: Northern half of 36 foot storage tank		03/29/94	Hiatt
29	207-8	Recovered Ether and Alcohol Store House, north side and east front	SW	03/29/94	Hiatt
30	207-3	Ether and Alcohol Still House, west front and south side	NE	03/29/94	Hiatt
31	207-7B	Ether Weigh and Store House, (Bldg. 207 is in background), east and south side	NW	03/29/94	Hiatt
32	214-1	Solvent Recovery House (brick construction) with rail flat cars in foreground		03/29/94	Hiatt
33	214-1	Close up of rail flat cars outside of the Solvent Recovery House		03/29/94	Hiatt
34	233	Screen Cleaning House, east and north side	SW	03/29/94	Hiatt
35	709-4	Foam General Storage, east & south side	NW	03/29/94	Hiatt
36	112-6A	Nitrocellulose Slurry Tank House		03/29/94	Hiatt
37	607	Sewage Disposal Building		03/29/94	Hiatt

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PHOTOGRAPHIC DATA SHEET

Project #: 1114-014 AMC Task C

Film: Kodak TMAX black and white

Installation: Indiana Army Ammunition Plant

Roll Number: 8

Exp. No.	Building No(s).	Description	Dir.	Date	Recorder
0	608	Digestion Tank and Waste Gas Barn, west and south side	NE	03/29/94	Hiatt
1	606	Settling Tanks	E	03/29/94	Hiatt
2	203-2	Alcohol and Dibutyphthalate (DBP) Tank Farm, north and west side	SE	03/28/94	Hiatt
3	203-4	Alcohol Storage Tank at a Tank Farm, north side		03/29/94	Hiatt
4	706-1A &1B	Powder Sample Dry House & Powder Sample Storage, south and west side	NE	03/29/94	Hiatt
5	722-10	Area Storage in the Nitrocellulose Area, north and east side	SW	03/29/94	Hiatt
6	714-3A	Material Storage Shed - Lumbar Shop, north and west side	SE	03/29/94	Hiatt
7	106-4	Spent Acid Filter House, east and north side	SW	03/29/94	Hiatt
8	704-11	Supervisor's Office, north and east side	SW	03/29/94	Hiatt
9	102-3	Nitrocellulose Tank Farm & Warming House	W	03/29/94	Hiatt
10	102-3	Second angle, Nitrocellulose Tank Farm & Warming House		03/29/94	Hiatt
11	102-3	80 gallon Water Heater, 1941, in the Nitrocellulose Warming House		03/29/94	Hiatt
12	723-001	2000 gallon wood water tank (1941), located behind the Laundry Building (723-001)	W	03/29/94	Hiatt
13	227-4	Dry Ingredient Storehouse, east and north side	SW	03/29/94	Hiatt
14	226-2	Hydraulic Refrigerator House, south and east side	NW	03/29/94	Hiatt
15	226-2	Hydraulic Refrigerator House, south & east side	NW	03/29/94	Hiatt
16	208-9	Mixer Houes, different design type, note bird houses on side. South and east side	NW	03/29/94	Hiatt
17	237-12 & 13	Tray Dry House (237-12) and Tray Dry Motor House (237-13), west and south side	NE	03/29/94	Hiatt
18	235-1	Rifle Water Dry House, south and west side	NE	03/29/94	Hiatt

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Project #: 1114-014 AMC Task C

Film: Kodak TMAX black and white

Installation: Indiana Army Ammunition Plant

Roll Number: 8

Exp. No.	Building No(s).	Description	Dir.	Date	Recorder
19	224-3	Air Test House, north and east side	SW	03/29/94	Hiatt
20	714-16B	Material Storage Building, east and north side	SW	03/29/94	Hiatt
21	714-16D	Material Storage Building, east and south side	NW	03/29/94	Hiatt
22	714-2B	Material Storage Building, west and south side	NE	03/29/94	Hiatt
23		Void		03/29/94	Hiatt
24	306-1	Tanks, Acid Area Water Reuse House in foreground.	N	03/29/94	Hiatt
25	104-1	Cotton Dry House: First angle of Dryer (38-000826)		03/29/94	Hiatt
26		Void		03/29/94	Hiatt
27		Void		03/29/94	Hiatt
28		Void		03/29/94	Hiatt
29		Void		03/29/94	Hiatt
30	104-1	20-2000 Toledo platform beam scale in the Cotton Dry House		03/29/94	Hiatt
31	104-1	Tanks in the Cotton Dry House		03/29/94	Hiatt
32	109-1	Pulping House: Exciter, 40 HP, Model No. 52A52		03/29/94	Hiatt
33	109-1	Pulping House: Second angle, Exciter, 40hp, model No.52A52		03/29/94	Hiatt
34	109-1	Jordan engine on the first floor of the pulping house		03/29/94	Hiatt
35	109-1	Second angle, Jordan engine on the first floor of the pulping house		03/29/94	Hiatt
36	109-1	Third angle, Jordan engine on the first floor of the pulping house		03/29/94	Hiatt
37	109-1	Pulping House: Tank (15461109)		03/29/94	Hiatt

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Project #: 1114-014 AMC Task C

Film: Kodak TMAX black and white

Installation: Indiana Army Ammunition Plant

Roll Number: 9

Exp. No.	Building No(s).	Description	Dir.	Date	Recorder
1	109-1	Pulping House, second floor: Jordan tank with 1941 Philadelphia motor		03/30/94	Hiatt
2	109-1	Pulping House, first floor: 1941 Pyro slurry pump and General Electric motor		03/30/94	Hiatt
3	109-1	Pulping House, first floor: 1941 Wooden Tank dewaterer and screen		03/30/94	Hiatt
4	109-1	Pulping House, first floor: Second angle, 1941 wooden tank dewaterer and screen		03/30/94	Hiatt
5	109-1	Pulping House, first floor: Third angle, 1941 wooden Tank dewaterer and screen		03/30/94	Hiatt
6	209-3	Scrap Rework House, north front and east side	SW	03/30/94	Hiatt
7	234-6	Trolley		03/30/94	Hiatt
8	234-6	From catwalk, Vertical Finishing Press, refurbished in 1953 by Fulton Iron Works, originally manufactured by Farquhar		03/30/94	Hiatt
9	234-6	Close up of vertical finishing press		03/30/94	Hiatt
10	234-5	Vertical Press House, north and west side	SE	03/30/94	Hiatt
11	733-1	Safety Assembly Hall, west side and northfront	SE	03/30/94	Hiatt
12	402-2	Reservoir for the Reservoir Pump House		03/30/94	Hiatt
13	403-2	Cooling Tower, with wooden fan blades, east and south side	NW	03/30/94	Hiatt
14	403-2	Cooling Tower: Size 326 Phillia reducer gear 25hp		03/30/94	Hiatt
15	402-2 & 5	Reservoir Pump House (402-2, foreground), Reservoir (background), and Water Cooling Tower (wooden building), west front and south	NE	03/30/94	Hiatt
16	305-2	Tank Farm Acid Area	W	03/30/94	Hiatt
17	402-6	Front of the Drinking Water Pump House and the covered reservoir behind it, east and south side	NW	03/30/94	Hiatt
18	202	Caustic Mix and Pump House with Caustic Tanks on top of the structure		03/30/94	Hiatt

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Project #: 1114-014 AMC Task C

Film: Kodak TMAX black and white

Installation: Indiana Army Ammunition Plant

Roll Number: 9

Exp. No.	Building No(s).	Description	Dir.	Date	Recorder
19	707-30	Change house with a unique design, west front and north side	SE	03/30/94	Hiatt
20	239-2	Shaker Sieve House, east and south side	SW	03/30/94	Hiatt
21	239-2A	Screen Storehouse for the Shaker Sieve House, north and east side	SW	03/30/94	Hiatt
22	239-2	Trolley on east side the Shaker Screen House		03/30/94	Hiatt
23	239-1	Motor House (front, bldg 239-1) for the Shaker Sieve House (in background), west and south side	NE	03/30/94	Hiatt
24	239-2B	Transfer Shed for the Shaker Sieve House, north and east side	SW	03/30/94	Hiatt
25	228-1	Ballistic Laboratory, east and north side	SW	03/30/94	Hiatt
26	228-1	Second angle, Ballistic Laboratory with support building, north and west side	SE	03/30/94	Hiatt
27	5032	Smokeless Powder Igloo, west and south side	NE	03/30/94	Hiatt
28	5402 & 7432	Crating Building (#5402) & Loading Dock (#7432), north and east side	SW	03/30/94	Hiatt
29	5403	Latrine for Crating Building, south and east side	NW	03/30/94	Hiatt
30	7433	Loading Dock, north and east side	SW	03/30/94	Hiatt
31	251-4	Activated Carbon Solvent Recovery House, east and south side	NW	03/30/94	Hiatt
32	251-4	Activated Carbon Solvent Recovery House, east & south side	NW	03/30/94	Hiatt
33	211-8	Horizontal Screening and Press House with a different architectural design, west front and south side	NE	03/30/94	Hiatt
34	211-8	Horizonatal Screening and Press House: Twelve inch horizontal press by Watson Stillman 1941		03/30/94	Hiatt
35	211-8	Horizontal Screening and Press House: Second angle, twelve inch horizontal press by Watson Stillman 1941		03/30/94	Hiatt

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Film: Kodak TMAX black and white

Installation: Indiana Army Ammunition Plant

Roll Number: 9

Exp. No.	Building No(s).	Description	Dir.	Date	Recorder
36	211-8	Main Change House (now labeled as general purpose warehouse), north side and east back	SW	03/30/94	Hiatt

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Film: Kodak TMAX black and white

Installation: Indiana Army Ammunition Plant

Roll Number: 10

Exp. No.	Building No(s).	Description	Dir.	Date	Recorder
0	2532	Security building (for a time it was used as a change house for the shop area), west front and north side	SE	03/30/94	Hiatt
1	1001	Bag Manufacturing Building, east back and north side	SW	03/30/94	Hiatt
2	1011	Locker Room and Cafeteria in the Bag Manufacturing Building		03/30/94	Hiatt
3	2591	Laboratory and Inspection Building, west front and south side	NE	03/30/94	Hiatt
4	2521	Fire Station in the Bag Manufacturing Area, east front and south side	NW	03/30/94	Hiatt
5	2541	Central Heating Plant in the Bag Manufacturing Area, north and west side	SE	03/30/94	Hiatt
6	1001	Bag Manufacturing Building: Note saw tooth ceiling		03/30/94	Hiatt
7	1001	Overview of the interior of the Bag Manufacturing Building showing a small portion of the bag manufacturing assembly line. Note the number of ceiling supports		03/30/94	Hiatt
8	1031 A & B	Covered walks	W	03/30/94	Hiatt
9	2511	Employment Building for administration of employee logistics, west back and south side	NE	03/30/94	Hiatt
10	2511	Employment Building for the administration of employee logistics, west front and south side	NE	03/30/94	Hiatt
11	2501	Administration Building, west front and north side	SE	03/30/94	Hiatt
12	2511	Employment Building for the administration of employee logistics, note fire break, west front & south side		03/30/94	Hiatt
13	1526	General Purpose Warehouse, west & south side	NE	03/30/94	Hiatt
14	1526	General Purpose Warehouse, west & south side	NE	03/30/94	Hiatt
15	1529	Inert Storage Warehouse, note the awnings, east and south side	NW	03/30/94	Hiatt
16	2581	Paint and Soil Storage Building with a fire wall dividing the building, east and south side	NW	03/30/94	Hiatt

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Film: Kodak TMAX black and white

Installation: Indiana Army Ammunition Plant

Roll Number: 10

Exp. No.	Building No(s).	Description	Dir.	Date	Recorder
17	2561	Combined Shop, north back and east side	SW	03/30/94	Hiatt
18	1021	Laundry and Dye House with a saw tooth roof, east back and north side. This roof type is unique to IAAP	SW	03/30/94	Hiatt
19	1511	Warehouse		03/30/94	Hiatt
20	3402	Canteen and Boiler House for Load Line #2, west front and south side	NE	03/30/94	Hiatt
21	3402	B block of Load Line Propellant #2. Covered walkway and Canteen and Boiler House (bldg 3402) for Load Line #2 in background, west and south side	NE	03/30/94	Hiatt
22	3113 & 3163	Receiving Magazine (3113) and its Barricade (3163), in receiving magazine load line propellant #6, east back and south side	NW	03/30/94	Hiatt
23	3613	Crating Shed or Shipping and Container Building with a catwalk (covered walkway), east back and south side	NW	03/30/94	Hiatt
24	3013	Bag Loading Building for the propellant charge load line #6, north and east side	SW	03/30/94	Hiatt
25	3013	Can Dock for the Bag Loading Building	W	03/30/94	Hiatt
26	3013	Bag Loading Building: Catwalk (covered walkway) to the bag load line	W	03/30/94	Hiatt
27	3206 & 3256	Center Shipping Magazine and its barricade (front #3256), with the Crating Building in the background, east and south side	NW	03/30/94	Hiatt
28	3062	Earth Barricade blocking the bag area and catwalk, west and north side	SE	03/30/94	Hiatt
29	4404	Igniter Line, canteen and boiler line, west front and south side	NE	03/30/94	Hiatt
30	4104 & 4154	Service magazine barricade (earth filled wood), catwalk, rest house, house, east and south side	NW	03/30/94	Hiatt
31		Line #2 Catwalk from inside		03/30/94	Hiatt
32	Unk #	Rest house to house		03/30/94	Hiatt

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Film: Kodak TMAX black and white

Installation: Indiana Army Ammunition Plant

Roll Number: 10

Exp. No.	Building No(s).	Description	Dir.	Date	Recorder
33	Unk #	West side of house, catwalk		03/30/94	Hiatt
34	4951	Black powder canteen and covered walkway, west front and south side	NE	03/30/94	Hiatt
35	4942	Black powder loading rest house, southwest and southeast side	N	03/30/94	Hiatt
36	4902	Black Powder Fan and Dry House, west front and south side	NE	03/30/94	Hiatt
37	2631-11	Sprinkler Valve House on Load Line #6, north front and east side	SW	03/30/94	Hiatt

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Film: Kodak TMAX black and white

Installation: Indiana Army Ammunition Plant

Roll Number: 11

Exp. No.	Building No(s).	Description	Dir.	Date	Recorder
1	105-1	Nitrating House, first floor: Base of wringer constructed from a concrete pipe and insulated with a ceramic coating		03/31/94	Hiatt
2	105-1	Nitrating House, first floor: Second angle of base of wringer		03/31/94	Hiatt
3	105-1	Nitrating House, second floor: Wringer #67555		03/31/94	Hiatt
4	105-1	Nitrating House, second floor: Second angle, Wringer #67555		03/31/94	Hiatt
5	105-1	Nitrating House, third floor: Chrome dipping pot with agitator		03/31/94	Hiatt
6	105-1	Nitrating House, fourth floor: Contactor for the Motor Room		03/31/94	Hiatt
7	105-1	Nitrating House, fourth floor: Last main control panel of the motor room		03/31/94	Hiatt
8	120-5	Save All Tanks	NW	03/31/94	Hiatt
9	120-5	General Electric motor pump for the Save All tanks, the contactor is missing		03/31/94	Hiatt
10	120-5	Second angle, General Electric motor pump for the Save All tanks, without contactor		03/31/94	Hiatt
11	120-5	Rowan motor controlling unit, #69319 and 69320		03/31/94	Hiatt
12	120-5	Rowan motor controlling unit, #69319 & 69320		03/31/94	Hiatt
13	609	Sewage drying beds	SW	03/31/94	Hiatt
14	264	Powder Dumping House, west front and north side	SE	03/31/94	Hiatt
15	264	Interior of the Powder Dumping House, note the powder hoppers behind the rail, south side and east back	NW	03/31/94	Hiatt
16	205-1 & 23	Dry Screen Houses		03/31/94	Hiatt
17	205-2	Dinitrotoluene (DNT) Screen House: DNT cart		03/31/94	Hiatt
18	205-2	DNT Screen House: Screen with a capacity of 1000 lb		03/31/94	Hiatt

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Film: Kodak TMAX black and white

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Roll Number: 11

Exp. No.	Building No(s).	Description	Dir.	Date	Recorder
19	205-2	DNT Screen House: Second angle, screener with 1000lb capacity		03/31/94	Hiatt
20	205-2	DNT Screen House: Third angle, screener with 1000lb capacity		03/31/94	Hiatt
21	205-2	DNT Screen House: Motor drive and belt		03/31/94	Hiatt
22	205-2	DNT Screen House Barricade		03/31/94	Hiatt
23	205-2	DNT Screen House: DNT Packer		03/31/94	Hiatt
24	205-2	DNT Screen House: Second angle, DNT packer		03/31/94	Hiatt
25	262-2	Powder Transfer House, interior looking north	N	03/31/94	Hiatt
26	262-2	Powder Transfer House, east & south side	NW	03/31/94	Hiatt
27	6017	Pump House and Reservoir, west and north side	SE	03/31/94	Hiatt
28	6017	Pump House: Goulds pumps (#25 and 24) and motor (9-1313)		03/31/94	Hiatt
29	6017	Pump House: Close up of Goulds Pumps (#25 & #24) and motor (9-1313)		03/31/94	Hiatt
30	2642	River Ridge Housing Office, commonly referred to as the "Club House" for the housing area, northeast side	SW	03/31/94	Hiatt
31	2701	Type "C" residence, constructed in 1941, north side	S	03/31/94	Hiatt
32	2708	Type "B" residence, northwest side	SE	03/31/94	Hiatt
33	Unk #	Pre WWII House located to the west of Bldg. 2720. This house predates the plant		03/31/94	Hiatt
34	2720	Personnel House Type A		03/31/94	Hiatt
35	2737	Pre WWII House, north and west side. This house predates plant construction.	SE	03/31/94	Hiatt
36	2737-2	Garage adjacent to Bldg. 2737, with Bldg. 2737 in background. This garage predates the plant.		03/31/94	Hiatt
37	727-4	Comfort station with a modern shed addition, south and east sides	NW	03/31/94	Hiatt

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Film: Kodak TMAX black and white

Installation: Indiana Army Ammunition Plant

Roll Number: 12

Exp. No.	Building No(s).	Description	Dir.	Date	Recorder
1	404-1	Ranney Water Well		03/31/94	Hiatt
2	404-1	Cummings Engine (39-915) part of the Ranney Water Well System		03/31/94	Hiatt
3	404-1	Deep well pump motor by General Electric, part of the Ranney Water Well System		03/31/94	Hiatt
4	404-1	Second angle, Deep well pump motor by General Electric, part of Ranney Water Well System		03/31/94	Hiatt
5	404-1	Transformer for the Ranney Water Well System	NW	03/31/94	Hiatt
6	No #	Close up of a well that pre-dates the plant		03/31/94	Hiatt
7	No #	Overview of a cluster of wells that pre-date the plant		03/31/94	Hiatt
8	6002	Well pumping station that provided water for the Load Assembly and Pack area	NW	03/31/94	Hiatt
9	6002	Engine (383911) located in the Well Pumping Station		03/31/94	Hiatt
10	6002	Second angle, Engine (383911) in the Well Pumping Station		03/31/94	Hiatt
11	305-1	20' Carbon steel, Spent Acid Circulator Tank, 37-000988	NW	03/31/94	Hiatt
12	305-1	Howe scale with a capacity of 60,000 gallons	W	03/31/94	Hiatt
13	305-1	Second angle, Howe Scale with a 60,000 gallon capacity		03/31/94	Hiatt
14	305-1	Third angle, Howe Scale with 60,000 gallon capacity, (Spent Acid Circulator Tank in background)		03/31/94	Hiatt
15	612-1	Reducer in Acid Neutralizing Pump House		03/31/94	Hiatt
16	612-1	Second angle, reducer, speed link belt, in Acid Neutralizing Pump House		03/31/94	Hiatt
17	612-1	Third angle, Reducer in Acid Neutralizing Pump House		03/31/94	Hiatt
18	255	Trial Building, south and east side	NW	03/31/94	Hiatt