

MALLINCKRODT CHEMICAL WORKS, Building No. 52A
(~~Mallinckrodt Inc.~~)
Bounded by Buildings 51A, 52, and 7th Alley
St. Louis, Missouri

HABS No. MO-1929-E

HABS
MO
96-SALU,
134E-

PHOTOGRAPHS

WRITTEN HISTORICAL AND DESCRIPTIVE DATA

Historic American Buildings Survey
National Park Service
Great Plains Support Office
1709 Jackson Street
Omaha, Nebraska 68102-2571

HISTORIC AMERICAN BUILDINGS SURVEY
MALLINCKRODT CHEMICAL WORKS, BUILDING 52A
(~~Mallinckrodt Inc.~~)

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Location: Bounded by Building 51A, 7th Alley, Buildings 52 and 51, Mallinckrodt and Second streets, St. Louis, Missouri
USGS Granite City, Illinois-Missouri Quadrangle (7.5'), Universal Transverse Mercator Coordinates: 744305 E; 4282776 N

Present Owner: Mallinckrodt Inc.

Original Use: Unknown, site of foundry, Buck's Stove and Range Company

Present Use: Demolished September 1996

Significance: One of 16 buildings at Mallinckrodt Chemical Works associated with the Manhattan Engineer District/Atomic Energy Commission (MED/AEC)—sponsored program to process uranium for use in the development of atomic weapons, Building 52A was used for miscellaneous re-extraction as part of the process to purify uranium.

PART I. HISTORICAL INFORMATION

A. Physical History

1. **Date of erection:** Building 52A was built ca. 1900-1940.
2. **Architect:** The architect for this building is unknown.
3. **Original and subsequent owners:** The original owner of the site of Building 52A was the Buck's Stove and Range Company, founded before 1883 in the North Broadway industrial section along the Mississippi River. The property/building was bought by Mallinckrodt Chemical Works (MCW) in 1935.
4. **Builder-contractor:** The contractor is unknown.
5. **Original plans and construction:** This building served as storage for the Mallinckrodt Chemical Works' uranium processing facilities. It is unknown whether there are original plans extant.
6. **Alterations and additions:** There have been a number of alterations to Building 52A, including: infill of windows on the east, west, and north sides; and installation of new plywood double doors on the east side.

B. Historical Context:

The building 50 series (50, 51, 51A, 52, 52A), constructed between 1883 and 1941, consists of five interconnected industrial warehouse buildings. The area where Building 52A was located originally was the site of the foundry for the Buck's Stove and Range Company. The Buck's Stove and Range Company, located in the block between Mallinckrodt, Destrehan, Second, and Main streets, was founded in 1846 by Charles H. Buck in partnership with Wiley S. Wright. The company manufactured gas stoves, heating stoves, coal and wood ranges, gray iron castings, and porcelain and enamel ware. It was incorporated in 1875, and maintained warehouses in Chicago, Los Angeles, and San Francisco.

The company facilities consisted of several foundries, a casting house, enameling house, mounting, plating and polishing building, warehouses, offices, sample showrooms, a carpenter and pattern shop, pattern vault, tin

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shop, and boiler building. The majority of the buildings were brick with several wood or corrugated metal buildings as well.¹

In 1935, Mallinckrodt Chemical Works purchased the western half of the Buck's Stove Company (Block 1207), including the site of Building 52A. In April 1942, when MCW became involved in purifying large batches of uranium oxide for the U.S. government as part of the wartime effort to develop the atomic bomb, Buildings 50, 51, 51A, 52, and 52A were taken over as the production site for the purification of the uranium oxide. The purification process took place in five stages: conversion of the uranium oxide to uranyl nitrate (which Mallinckrodt had sold for years as an analytical reagent), purification of the uranyl nitrate by ether extraction, recovery of the uranyl nitrate from the ether, conversion of the uranyl nitrate to uranium trioxide, and, finally, the reduction of uranium trioxide to uranium dioxide.²

Building 52A is a small storage room added on to the north side of Building 52 but not connected to it on the interior. It is not known what use this building had in the uranium purification operations, although a 1958 map indicates it was used for "Miscellaneous Re-extraction."³

PART II. ARCHITECTURAL INFORMATION

A. General Statement

1. **Architectural character:** Building 52A is a small single-room brick building that was added onto Building 52 and is now enclosed within Building 51A.
2. **Condition of fabric:** The fabric is in fair condition.

B. Description of Exterior

1. **Overall Dimensions:** Building 52A measures 16'-6" x 17' x 24' in height.
2. **Foundation:** The foundation is concrete.
3. **Walls:** The walls are brick.

¹ North St. Louis Businessmen's Association, *Who's Who in North St. Louis* (St. Louis: A.S. Werrenmyer, 1925), 303; Whipple's *Fire Insurance Map of St. Louis, Missouri* (St. Louis: A. Whipple, 1897), 136.

² The History Factory, *Mallinckrodt 125th Year Anniversary* (Washington, D.C., 1992), 57.

³ Mallinckrodt Chemical Works, *Mallinckrodt Chemical Works Map*, 1958.

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4. **Structural system, framing:** Building 52A has load-bearing brick walls.
5. **Porches:** There are no porches or steps.
6. **Chimneys:** There are no chimneys.
7. **Openings:**
 - a. **Doorways and doors:** Building 52 has one plywood double door on the east side.
 - b. **Windows:** There are no windows in Building 52A. Former large windows on the east and the west have been bricked in.
8. **Roof:**
 - a. **Shape, covering:** The flat concrete slab roof is supported by steel I-beams.
 - b. **Cornice, eaves:** There are no cornice or eaves.
 - c. **Dormers, cupolas, towers:** There are no dormers, cupolas or towers.

C. Description of Interior

1. **Floor plans:** There is a single two-story high vacant room in Building 52A.
2. **Stairways:** There are no stairways.
3. **Flooring:** The building has concrete floors.
4. **Wall and ceiling finish:** The load-bearing brick walls are unpainted.
5. **Openings:** The former large window on the east side and vent in the west side have been infilled.
6. **Decorative features and trim:** There are no decorative features and trim.
7. **Hardware:** None of the original hardware remains.

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8. **Mechanical equipment:**

- a. **Heating, air conditioning, ventilation:** The building was heated with steam from Building C in Plant 1. No mechanical equipment remains.
- b. **Lighting:** None of the original lighting remains.
- c. **Plumbing:** There are no bathrooms or water pipes.

9. **Furnishings:** None of the furnishings remain.

D. **Site**

1. **General setting and orientation:** The 50 series buildings (50, 51, 51A, 52, 52A) are located in Plant 2, set within a number of new buildings on the north, south, and west sides. Oriented east-west, the five buildings are connected and appear as a single unit.
2. **Historic landscape design:** The setting is industrial and there was no landscaping.

PART III. SOURCES OF INFORMATION

- A. **Architectural Drawings:** Original drawings for this building were not located.

B. **Bibliography**

Hopkins, G.M. *Atlas of the City of St. Louis, Missouri*. Philadelphia: G.M. Hopkins, 1883.

Mallinckrodt Chemical Works Map. Courtesy Mallinckrodt Inc., 1958.

North St. Louis Businessmen's Association. *Who's Who in North St. Louis*. St. Louis: A.S. Werrenmyer, 1925.

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PART IV. PROJECT INFORMATION

This HABS documentation project was undertaken as mitigative recordation required by Section 106 of the National Historic Preservation Act of 1966. The United States Department of Energy Former Sites Restoration Division demolished the Building 50 series in September 1996 as part of site remediation and decontamination.

The documentation was prepared by Alexandra C. Cole, architectural historian at Science Applications International Corporation (SAIC), Santa Barbara, California, in October 1996. Large-format photography was done by Bruce Harms of Louis Berger and Associates, Inc., Marion, Iowa, in August/September 1996. Measured floor plans and elevations were prepared under the supervision of Ohannes Armani of Bechtel National Incorporated (BNI), Oak Ridge, Tennessee, in September 1996.

*FOR SITE PLANS SEE MO-1929 FIELD NOTES