

FORMERLY UTILIZED SITES REMEDIAL ACTION PROGRAM

ELIMINATION REPORT
FOR
THE FORMER BRUSH BERYLLIUM COMPANY
CLEVELAND, OHIO

Department of Energy
Office of Nuclear Energy
Office of Remedial Action and Waste Technology
Division of Facility and Site Decommissioning Projects

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ELIMINATION REPORT
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CLEVELAND, OHIO

INTRODUCTION

The Department of Energy (DOE), Office of Nuclear Energy, Office of Remedial Action and Waste Technology, Division of Facility and Site Decommissioning Projects (and/or predecessor agencies, offices and divisions) has reviewed the past activities of the Manhattan Engineer District (MED) and the Atomic Energy Commission (AEC) at the former sites of Brush Beryllium Company in Cleveland, Ohio. On the basis of a preliminary radiological survey of the sites, DOE has determined that the conditions at these sites are in compliance with current radiological guidelines and standards and that no potential for radiological exposure exists beyond those resulting from natural background. Therefore, these sites require no remedial action and will not be included in the Formerly Utilized Sites Remedial Action Program.

This report presents information supporting the determination that the radiological conditions at the former Brush Beryllium sites are in compliance with current DOE radiological guidelines and standards¹ and provides assurance that use of the site will not result in any measurable radiological hazard to site occupants or the general public.

¹ U.S. Department of Energy Guidelines for Residual Radioactivity at Formerly Utilized Sites Remedial Action Program and Remote Surplus Facilities Management Program Sites (Rev. 1, July 1985).

This elimination report will be archived by DOE through the Assistant Secretary for Management and Administration. A copy of this package will be available for public review between 8:00 a.m. and 4:00 p.m., Monday through Friday (except Federal holidays), at the DOE Public Reading Room located in Room 1E-190 of the Forrestal Building, 1000 Independence Avenue, SW., Washington, D.C.

BACKGROUND

Site Function

Brush Laboratories, a subsidiary of Brush Beryllium Company (now Brush Wellman, Inc.) conducted research and development work on a process for the production of uranium metal through magnesium reduction of molten green salt (uranium tetrafluoride). The work began in August 1942 under an Office of Scientific Research and Development contract (number unknown), superceded by MED Contract W-7405-eng-3 (October 14, 1942). The work was discontinued upon contract expiration on July 31, 1943, because product quality and yield were unacceptably low. Brush later performed research and development with uranium (vapor phase reduction and other metallurgical experiments) and extruded thorium billets into slugs, primarily for General Electric's Hanford facility at Richland, Washington. The contract numbers for these operations are not known. The uranium work was conducted at least from 1949 through 1953 and possibly prior to and beyond that period. Extrusion of thorium was performed in 1952 and 1953, and possibly beyond. Under contract to MED and AEC, Brush also conducted work with beryllium at the Cleveland facilities and at other locations in Ohio during the 1940s and 1950s.

Site Description

Work with radioactive materials was limited to two buildings, one located at 4301 Perkins Avenue and another at 3714 Chester Street (Figure 1). Both buildings were leased by Brush. The Chester Street facility was apparently torn down late in 1946. The site is currently



Figure 1. Approximate Locations of Brush Beryllium Sites

vacant and is being used as a parking lot. The Perkins Avenue facility was also eventually demolished. A new building has been constructed on the site (now numbered 4201), and is currently occupied by S.S. Kemp and Company.

Radiological History and Status

Personnel from the Department of Energy (DOE) (then the Energy Research and Development Administration) Chicago Operations Office and Argonne National Laboratory performed a beta-gamma survey of the Chester Street site on May 17, 1977. The survey did not show any levels above background. Because of the new building covering the site of the former laboratory at Perkins Avenue, that location was not surveyed. It is probably not possible to determine where the demolition contractors disposed of the debris from the original buildings.

ELIMINATION ANALYSIS

The cursory radiological survey of the Chester Street site found that radiation levels were typical of natural background for the area. The structure and equipment at the Perkins Street site have been removed. Therefore, no significant quantity of radioactive material from the MED/AEC operations remains at these sites. Based on the information summarized in this report, DOE's Division of Facility and Site Decommissioning Projects has determined that no remedial action is necessary at these sites and has eliminated the former Cleveland locations of Brush Beryllium Company from further consideration under the Formerly Utilized Sites Remedial Action Program.

REFERENCES

- o Bauer, Robert H., (Energy Research and Development Administration) to Hal Hollister (Energy Research and Development Administration), "Resurvey Program-Brush Beryllium Company," July 1, 1977.

- o Hollister, Hal, (Energy Research and Development Administration) to Robert H. Bauer (Energy Reserach and Development Administration), "Brush Beryllium for Survey," July 25, 1977.

- o Bauer, Robert H., (Energy Research and Development Administration) to Martin Powers (Brush Wellman Incorporated), "Resurvey Program-Brush Beryllium," August 2, 1977.



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JUL 1 1977

Hal Hollister, Acting Director
Division of Operational and Environmental Safety, HQ

RESURVEY PROGRAM - BRUSH BERYLLIUM COMPANY

A visit to the Brush Beryllium Company (presently called Brush Wellman), Cleveland, Ohio was made by Edward J. Jascewsky and members of the Argonne National Laboratory survey team on May 17, 1977. The group met with Martin Powers and Nate Bass, Vice Presidents of Brush Wellman. The purpose of the visit was to determine if any radiological survey was needed as a result of past Atomic Energy Commission (AEC) contract work.

The work performed by Brush Beryllium involving radioactive materials was done at two locations in the Cleveland area. One site was located at 4201 Perkins Avenue and the other was located at 3714 Chester Street. The buildings, which were leased by Brush, were completely demolished at both sites. A new facility has been built on the Perkins Avenue site and is occupied by S. S. Kemp and Company. The Chester Street site is presently a vacant lot with no structures that could be surveyed. In addition there are very few areas where soil samples could be taken that would represent soil present during the period that Brush was operating. A cursory beta-gamma radiation survey three feet above the ground performed by the survey team at this site did not show any levels above background.

Therefore, because of the above considerations, it is recommended that no radiological survey of these sites be performed, and that these areas be considered for unrestricted use.

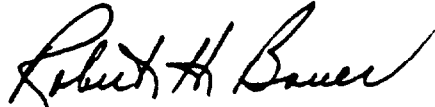
*Acting
Director*
08740

Hal Hollister

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JUL 1 1977

I would appreciate a response to this memo so I can determine if any additional action is required by my staff.



Robert H. Bauer
Manager

SD:EJJ



UNITED STATES
ENERGY RESEARCH AND DEVELOPMENT ADMINISTRATION
WASHINGTON, D.C. 20545

JUL 25 1977

Robert H. Bauer, Manager
Chicago Operations Office

BRUSH BERYLLIUM FOR SURVEY

Your letter report of June 13, 1977, concerning the radiological condition of the Brush Beryllium site in Cleveland, Ohio, is acknowledged. Based upon the conditions described in your letter report, we concur that no further radiological survey of this site is warranted. You should inform the company of our findings. Although this company has not been mentioned in any previous press releases, unless they desire that a local announcement be made, we would not require that one be made at this time. This company will be listed on future updating press releases on the status of this program.

Hal Hollister, Acting Director
Division of Operational and
Environmental Safety

cc: W. McCann, OPA
W. Brown, OGC

72028
~~7-11-77~~
1-4-5

AUG 2 1977

Mr. Martin Powers, Vice President
Brush Wellman Incorporated
17876 St. Clair Avenue
Cleveland, Ohio 44110

Dear Mr. Powers:

RESURVEY PROGRAM - BRUSH BERYLLIUM

This letter will confirm the telephone conversation on July 29, 1977, between Mr. Nate Bass of your organization and Mr. Edward Jascewsky of my staff.

As a result of Mr. Jascewsky's discussion with you, and his visit to the old Brush Beryllium sites, we recommended to the coordinators of the ERDA resurvey program that no radiological survey be performed, and that these areas be considered for unrestricted use. This group has concurred in our recommendation, therefore no surveys will be performed.

I would like to thank you and Mr. Bass for the cooperation and courtesy extended to my staff working on this program.

Sincerely,

Robert H. Bauer
Manager

bc: OM

0511-80

OFFICE	SAFETY	SAFETY	SAFETY	OM		
SURNAME	Jascewsky/kp	Shipp	Moser	Bauer		
DATE	8/1/77	8/1/77	8/1/77	8/2/77		

AW

U.S. DEPARTMENT OF ENERGY


memorandum

DATE AUG 1 1983

REPLY TO
ATTN OF NE-24

SUBJECT Meeting with Goodyear Tire and Rubber Co. Representatives Related
to a Former MED/AEC Beryllium Processing Site, Luckey, Ohio

TO File

THRU: John E. Baublitz, NE-24 

Steve Miller, OGC, at the request of an attorney representing the Goodyear Tire and Rubber Co., Akron, Ohio, convened a meeting on June 15, 1983, in Room 6A-180 at the Forrestal Building. The attendees included Mr. Joseph Smerglia, Section Head, Corporate Environmental Engineering, Goodyear Tire and Rubber Co., Akron, Ohio; Ms. Robin L. Crane, Attorney, Goodyear Tire and Rubber Co., Akron, Ohio; Mr. Vincent DeCarlo, DOE/EP-321, Mr. Steve Miller, DOE/GC-34; Mr. Ed DeLaney, DOE/NE-24; and Mr. Arthur J. Whitman, DOE/NE-24.

The purpose of the meeting was to brief the DOE on the former Brush Beryllium Co. processing site at Luckey, Ohio. The plant was a government-owned facility and was used to extract and produce beryllium. The beryllium was cast into billets and shipped to other facilities for processing and machining. The Brush Beryllium, Luckey, Ohio, site was acquired by Brush Wellman, Inc., who operated the plant for the AEC from 1949 to 1958. The Luckey plant was eventually closed and transferred to GSA in 1961. Goodyear Tire and Rubber Co. purchased the plant in 1968. At the time the plant was closed, the sludge and beryllium contaminated soil that was contained in the lagoon area of the plant was relocated to a site in the northeast corner of the plant property. The disposal area was diked, capped, graded, and seeded. From the photographs presented by the Goodyear lawyer, it appears that the contaminated material is leaching to the surface and in the process is contaminating an adjacent stream that goes offsite.

Presently, the USEPA is considering the feasibility to include the site under the superfund umbrella. The Ohio EPA is also investigating the site and its environmental impact. It appears that Goodyear, for all its interest, is sitting on its hands waiting for someone else to pick up the ball and run. They have made no concentrated effort to determine the extent of the hazard, if there is one, i.e., no soil, water, vegetation, and/or air sampling.

Their primary purpose of the visit was to get the plant under the FUSRAP in relation to the AECA of 1954 and the Health and Safety implications, the need for a records search, and determination of authority to conduct remedial action. Toward this end, Aerospace was requested to conduct a records search and historical documentation of the plant and its operation. They were to have the background data as soon as possible. They are presently compiling the requested information.

The contract numbers associated with the plant include one between Brush Beryllium Co., and the AEC numbered AT(30-1)541 in the early and mid-1950's. The second contract was for decontamination and decommissioning (disposal) of the Luckey site and facility by Brush Beryllium for the AEC. Its number was AT(11-1)-830, Sept. 1, 1959.

151
Arthur J. Whitman
FUSRAP/Surplus Facilities Group
Division of Remedial Action Projects

cc:
S. Miller, GC-34
E. DeLaney, NE-24
Aerospace

bcc:
A. Whitman, NE-24

NE-73 (4)
NE-24 RF
Whitman RF

NE-24: AWhitman ph: 353-5439: 7/19/83: V-5-A-14/15:

Handwritten signature and date:
A. Whitman
7/20/83

CONCURRENCES	
RTG SYMBOL	NE-24
INITIALS/SIG.	<i>[Signature]</i>
DATE	DeLaney...
RTG SYMBOL	7/20/83
INITIALS/SIG.	NE-24
DATE	Baoblitz
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