

# memorandum

Winston  
Ed Mitchell

JUL 27 1992

DATE:

REPLY TO: EM-421 (W. Williams, 903-8149)  
ATTN OF:

SUBJECT: Authority Determination--Former Bliss & Laughlin Steel Company Site,  
Buffalo, New York

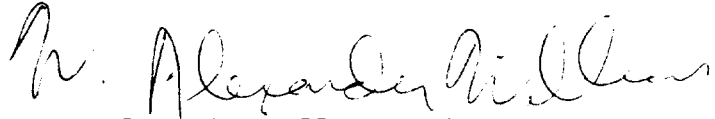
TO: The File

The attached review documents the basis for determining whether DOE has authority for taking remedial action at the former Bliss & Laughlin Steel Company site in Buffalo, New York, under the Formerly Utilized Sites Remedial Action Program (FUSRAP). The Bliss & Laughlin facility was used by the AEC or its prime contractor for uranium metal machining and rod straightening during the early 1950s. The following factors are significant in reaching the determination:

- o Available records suggest that Bliss & Laughlin was directly supervised by the AEC prime contractor. AEC staff apparently approved the arrangements to use the facility.
- o As a part of the operations at the site, there were requirements concerning security, accountability, health, and safety. It is not known whether these were controlled by AEC directly or through its prime contractor.
- o The uranium machined at the site was owned by the government; operations were apparently conducted on Saturdays to avoid disruption of other Bliss & Laughlin activities or for enhanced security.
- o AEC staff arranged for transportation of raw materials, wastes, and products to and from the site.
- o A radiological survey has established that uranium is present within the facility in excess of levels specified in DOE Order 5400.5, Chapter IV.

A tentative authority determination was made for this site on October 15, 1991. The previous authority review was furnished to the Office of General Counsel for review. The review was modified in accordance with the verbal recommendations of that office. This updated authority review was prepared to reflect the presence of uranium at the site. The Office of General Counsel has determined that their review of this update is not needed.

After review of the available original records and the authority review, I have determined that the Department of Energy has authority to conduct remedial action at the former Bliss & Laughlin Steel Company site in Buffalo, New York.



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Designation and Certification Manager  
Off-Site Branch  
Division of Eastern Area Programs  
Office of Environmental Restoration

Attachment

cc:  
S. Miller, GC-11

Authority Review  
Bliss & Laughlin Steel Company


5

bcc:  
Weston

Distribution:  
EM-40 (2)  
EM-42 (3)  
Williams Reader



EM-421:wagoner:djn:903-8145:7/22/92:bliss.aut

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**Authority Review For  
Bliss & Laughlin Steel Company  
110 Hopkins Street  
Buffalo, New York 14220**

**1. INTRODUCTION**

As part of the Formerly Utilized Sites Remedial Action Program (FUSRAP), the U.S. Department of Energy (DOE) has reviewed available information on the Bliss & Laughlin Steel Company site in Buffalo, New York. The site is being investigated for potential inclusion in FUSRAP, which applies to certain sites previously involved with activities of the Manhattan Engineering District (MED) or U.S. Atomic Energy Commission (AEC), both DOE predecessors. Such sites may require remedial action if they have residual contamination from those previous activities. This review is conducted to determine whether DOE has the authority for remedial action at the Bliss & Laughlin site.

The Bliss & Laughlin Steel Company machined and straightened uranium rods at its facility in Buffalo, New York. A radiological survey of the facility was conducted by the Oak Ridge Institute for Science and Education on March 14, 1992. This survey determined that uranium was present inside the facility.

The remainder of this review consists of the following sections:

2. Operational History
3. Current Conditions
4. Authority Analysis
5. Discussion and Conclusions
6. Copies of References

The information presented in these sections is in summary form. Pertinent references are identified in the text, and a copy of each is included in Section 6 for further use.

**2. OPERATIONAL HISTORY**

The Bliss & Laughlin Steel Company was a large processor of cold drawn steel. In the fall of 1952 the company performed machining and straightening operations on uranium rods. Although contracts or purchase orders have not been located, records of the AEC New York Operations Office (NYOO) suggest the work was performed for the National Lead Company of Ohio (NLO), an AEC prime contractor operating AEC's Feed Material Production Center at Fernald, Ohio. Rods were shipped from Lake Ontario Ordnance Works (LOOW) to Bliss & Laughlin, machined on-site, and then shipped directly to Fernald. Turnings from the operation were picked up by AEC trucks and returned to LOOW for packaging under oil and subsequent shipment to Fernald.

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Machining operations were conducted on Saturdays; Saturday operations may have been for security reasons or to avoid disrupting Bliss & Laughlin's on-going steel business. The exact quantity of uranium and the duration of operations is not known. NYOO records indicate machining in September and October of 1952, and 53 drums of turnings collected from Bliss & Laughlin were shipped from LOOW to Fernald in November 1952. There is no evidence of any operations after this date.

Bliss & Laughlin is referenced also in an October 1951 AEC letter as having accumulated four drums of dry uranium oxide. The nature of this earlier work is unknown.

Surveys were conducted by NLO during rod-turning operations. The alpha measurements of the general area ranged from 60 to 4900 disintegrations per minute per cubic meter (dpm/M<sup>3</sup>), above the guidelines of the day which restricted exposure to 70 dpm/M<sup>3</sup>. The Medart rod turning machine gave very high readings, approximately 20,000 dpm/M<sup>3</sup> on average with a maximum reading of 205,000 dpm/M<sup>3</sup>. Samples taken of the general area with the machine off showed only slightly elevated levels of radioactivity (Ref. a).

There is no evidence that the site was decontaminated.

### 3. CURRENT CONDITIONS

The site was owned by Bliss & Laughlin. Ramco Steel Incorporated purchased the facility in 1972. As of March 1992 the owner and occupant was the Niagara Cold Drawn Corporation. The processing area has not changed, although the machining equipment has been replaced. The disposition of the old equipment is not known, but it may have been returned/traded-in to the Medart Company in St. Louis, Missouri. An on-site visit was conducted by the Department of Energy and Oak Ridge Institute for Science and Education on March 14, 1992. This survey determined that residual uranium was present in the floor of the building.

### 4. AUTHORITY ANALYSIS

The authority determination is made according to the FUSRAP protocol by considering the answers to five questions based on available records. The answers to these questions from a review of available information are provided below.

4.1 Was the site/operation owned by a DOE predecessor or did a DOE predecessor have significant control over the operations or site?

DOE and its predecessors have never owned the site. A NLO representative conducted radiological surveys during operations and may have monitored operations to account for the uranium. Since machining was restricted to weekends, the plant was used exclusively by NLO. In all likelihood, AEC had a role in site operations because of the involvement of three different AEC sites (NYOO, LOOW, and Fernald) in the Bliss & Laughlin activities and because of the references to the site in two NYOO documents.

4.2 Was a DOE predecessor agency responsible for maintaining or ensuring the environmental integrity of the site (i.e., was it responsible for clean-up)?

NLO conducted radiological surveys during machining operations; however, records assigning responsibility have not been located. It is likely that the AEC approved a subcontract or purchase order for the services. AEC had some degree of responsibility for the waste because of AEC reports which mentioned the removal of waste and turnings from the site to LOOW.

4.3 Is the waste or radioactive material on the site the result of DOE predecessor related operations?

It is very likely that the residual uranium at the site is a direct result of DOE predecessor operations.

4.4 Is the site in need of further clean-up and was the site left in a non-acceptable condition as a result of DOE predecessor related activity?

The site does not comply with the current requirements of DOE Order 5400.5, Chapter IV. As such, further clean-up is required.

4.5 Did the present owner accept responsibility for the site with the knowledge of its contaminated condition and that additional remedial measures are necessary before the site is acceptable for use without radiological restrictions?

There is no evidence that the site was transferred in a contaminated condition or that the owners had any knowledge of site conditions.

5. DISCUSSION AND CONCLUSIONS

Although few records are available on the Bliss & Laughlin site, the available records indicate a direct involvement of the AEC in Bliss & Laughlin activities. A radiological survey indicates that uranium remains on the premises; this residual uranium is a likely result of the AEC work at the facility. Based on a review of the available historical documents, DOE has authority to perform the needed remedial action at the Bliss & Laughlin site.

6. COPIES OF REFERENCES

- a. National Lead Company of Ohio, Health and Safety Division Radiological Surveys, September and October 1952.
- b. Records from the New York Operations Office, dated August through October, 1952.
- c. J.D. Berger, Radiological Survey of the Former Bliss & Laughlin Steel Company Facility, Buffalo, New York, Oak Ridge Institute for Science and Education, Report ORISE 92/G-6, June, 1992.