10-14-08 P12:21 IN

SEC Petition
Office of Compensation Analysis & Support
NIOSH
4676 Columbia Pkwy., MS-C-47
Cincinnati, Ohio 45226

are survivors of an energy employee,
The NIOSH tracking . was employed by Bliss & Laughlin Steel,
Buffalo, New York, f 936 until 1972. We would like to file
a petition for Special Exposure Cohort. Thank you so much.

attachments

Use of this form and disclosure of Social Security Number are voluntary. Failure to use this form or disclose this number will not result in the denial of any right, benefit, or privilege to which you may be entitled.

General Instructions on Completing this Form *(complete instructions are available in a separate packet)*:

Except for signatures, please **PRINT** all information clearly and neatly on the form.

Please read each of Parts A — G in this form and complete the parts appropriate to you. If there is more than one petitioner, then each petitioner should complete those sections of parts A – C of the form that apply to them. Additional copies of the first two pages of this form are provided at the end of the form for this purpose. A maximum of three petitioners is allowed.

If you need more space to provide additional information, use the continuation page provided at the end of the form and attach the completed continuation page(s) to Form B.

If you have questions about the use of this form, please call the following NIOSH toll-free phone number and request to speak to someone in the Office of Compensation Analysis and Support about an SEC petition: **1-800-356-4674.**

If you are:	☐ A Labor Organization,	Start at D	on Page 3
	☐ An Energy Employee (current or former),	Start at C	on Page 2
	☒ A Survivor (of a former Energy Employee),	Start at B	on Page 2
	☐ A Representative (of a current or former Energy Employee),	Start at A	on Page 1

A Representative Information — Complete Section A if you are authorized by an Employee or Survivor(s) to petition on behalf of a class.

A.1 **Are you a contact person for an organization?** ☐ Yes (Go to A.2) ☒ No (Go to A.3)

A.2 **Organization Information:**

Name of Organization

Position of Contact Person

A.3 **Name of Petition Representative:**

Mr./Mrs./Ms. First Name Middle Initial Last Name

A.4 **Address:**

Street Apt # P.O. Box

City State Zip Code

A.5 **Telephone Number:** ( )

A.6 **Email Address:**

A.7 ☐ Check the box at left to indicate you have attached to the back of this form written authorization to petition by the survivor(s) or employee(s) indicated in Parts B or C of this form. An authorization

If you are representing a Survivor, go to Part B; if you are representing an Employee, go to Part C.

Name or Social Security Number of First Petitioner: _

B Survivor Information — Complete Section B if you are a Survivor or representing a Survivor.

B.1 **Name of Survivor:**

Middle Initial Last Name

B.2 **Social Security Number of Survivor:**

B.3 **Address of Survivor:**

Street Apt # P.O. Box

City State Zip Code

B.4 **Telephone Number of Survivor:**

B.5 **Email Address of Survivor:**

B.6 **Relationship to Employee:**

Go to Part C.

C Employee Information — Complete Section C UNLESS you are a labor organization.

C.1 **Name of Employee:**

First Name Middle Initial Last Name

C.2 **Former Name of Employee** (e.g., maiden name/legal name change/other):

Mr./Mrs./Ms. First Name Middle Initial Last Name

C.3 **Social Security Number of Employee:**

C.4 **Address of Employee** (if living):

Street Apt # P.O. Box

City State Zip Code

C.5 **Telephone Number of Employee:**

C.6 **Email Address of Employee:**

C.7 **Employment Information Related to Petition:**

~~C.7a~~ Employee Number (if known):

C.7b Dates of Employment: Start -36 End 72

C.7c Employer Name: Bliss & Laughlin Steel

C.7d Work Site Location: 110 Hopkins Street
Buffalo, New York, 14220

C.7e Supervisor's Name:

Go to Part E.

D Labor Organization Information — Complete Section D ONLY if you are a labor organization.

D.1 **Labor Organization Information:**

_____
Name of Organization

_____
Position of Contact Person

D.2 **Name of Petition Representative:**

_____

D.3 **Address of Petition Representative:**

_____
Street Apt # P.O. Box

_____
City State Zip Code

D.4 **Telephone Number of Petition Representative:** (____) _____

D.5 **Email Address of Petition Representative:** _____

D.6 **Period during which labor organization represented employees covered by this petition** (please attach documentation): Start _____ End _____

D.7 **Identity of other labor organizations that may represent or have represented this class of employees** (if known):

_____

Go to Part E.

E Proposed Definition of Employee Class Covered by Petition — Complete Section E.

E.1 **Name of DOE or AWE Facility:** Bliss & Laughlin Steel

E.2 **Locations at the Facility relevant to this petition:** 110 Hopkins Street Buffalo, New York 14220
Entire facility rolled uranium bars.
Our basis for this petition is Lack of monitoring records

E.3 **List job titles and/or job duties of employees included in the class. In addition, you can list by name any individuals other than petitioners identified on this form who you believe should be included in this class:** See enclosure attached to back of pg 4 of 7.

E.4 **Employment Dates relevant to this petition:**

Start	1936	End	1972
Start	1948	End	1952 - AWE
Start	1953	End	1998 - residual radiation

E.5 **Is the petition based on one or more unmonitored, unrecorded, or inadequately monitored or recorded exposure incidents?:** ☐ Yes ☒ No

If yes, provide the date(s) of the incident(s) and a complete description (attach additional pages as necessary): Please see all enclosures in back of packet.

The former Bliss and Laughlin site consists of a single large building with a floor area of about 12,000 cubic meters. There have been only minor changes to the structure since the 1950's. The floor is concrete and contains several shallow trenches. Floor surfaces are generally rough, pitted, and covered with a thin layer of oil absorbent material, dried oil, and grease. Machining equipment and material storage racks prevent access to some floor surface areas. Ceilings are approximately 12 meters high and supported by a framework of trusses. The machining area of the building is open (i.e. without inside walls or partitions). E2

Rolled uranium bars

Go to Part F.

Special exposure cohort petition – Form B

Enclosures state that uranium, machined at Bliss and Laughlin Steel was owned by the government and operations were conducted on Saturdays to avoid disruption of other activities or for enhanced security. (please see enclosure) did work on those Saturdays.

No records indicating the radiological conditions of the site, following uranium machining, have been located. We have enclosed a map of the site's floor plan. There was **one** building housing the mill.

(please see enclosure.). This information was stated in our transcript at the hearing for this claim March 22, 2006. only the mill roof. There was no separate controlled ventilation system. He breathed the same contaminated air and was exposed to the same occupational radiation as all other mill workers. However, his exposure was repeatedly compounded by his 48-60 hour work week. was exposed to external radiation, deposition of particles on the skin, immersion in a radioactive cloud, inhalation and ingestion of radionuclides. For lack of monitoring, NIOSH does not have any informational records on Bliss and Laughlin Steel, Buffalo, N.Y.

NIOSH tracking

F Basis for Proposing that Records and Information are Inadequate for Individual Dose — Complete Section F.

Complete **at least one** of the following entries in this section by checking the appropriate box and providing the required information related to the selection. You are not required to complete more than one entry.

F.1 ☒ I/We have attached either documents or statements provided by affidavit that indicate that radiation exposures and radiation doses potentially incurred by members of the proposed class, that relate to this petition, were not monitored, either through personal monitoring or through area monitoring.

(Attach documents and/or affidavits to the back of the petition form.)

Describe as completely as possible, to the extent it might be unclear, how the attached documentation and/or affidavit(s) indicate that potential radiation exposures were not monitored.

There are no monitoring records available at NIOSH to the best of our knowledge. We have enclosed documents of research material that indicate radiation exposures incurred and not monitored.

Documents enclosed

F.2 ☐ I/ We have attached either documents or statements provided by affidavit that indicate that radiation monitoring records for members of the proposed class have been lost, falsified, or destroyed; or that there is no information regarding monitoring, source, source term, or process from the site where the employees worked.

(Attach documents and/or affidavits to the back of the petition form.)

Describe as completely as possible, to the extent it might be unclear, how the attached documentation and/or affidavit(s) indicate that radiation monitoring records for members of the proposed class have been lost, altered illegally, or destroyed.

Part F is continued on the following page.

F.3 ☒ I/We have attached a report from a health physicist or other individual with expertise in radiation dose reconstruction documenting the limitations of existing DOE or AWE records on radiation exposures at the facility, as relevant to the petition. The report specifies the basis for believing these documented limitations might prevent the completion of dose reconstructions for members of the class under 42 CFR Part 82 and related NIOSH technical implementation guidelines.

(Attach report to the back of the petition form.)

F.4 ☐ I/We have attached a scientific or technical report, issued by a government agency of the Executive Branch of Government or the General Accounting Office, the Nuclear Regulatory Commission, or the Defense Nuclear Facilities Safety Board, or published in a peer-reviewed journal, that identifies dosimetry and related information that are unavailable (due to either a lack of monitoring or the destruction or loss of records) for estimating the radiation doses of employees covered by the petition.

(Attach report to the back of the petition form.)

Go to Part G.

G Signature of Person(s) Submitting this Petition — Complete Section G.

All Petitioners should sign and date the petition. A maximum of three persons may sign the petition.

S _____ Date 10-4-2008

S _____ Date 10-4-2008

Signature _____ Date 10-4-2008

Notice: Any person who knowingly makes any false statement, misrepresentation, concealment of fact or any other act of fraud to obtain compensation as provided under EEOICPA or who knowingly accepts compensation to which that person is not entitled is subject to civil or administrative remedies as well as felony criminal prosecution and may, under appropriate criminal provisions, be punished by a fine or imprisonment or both. I affirm that the information provided on this form is accurate and true.

Send this form to:

SEC Petition
Office of Compensation Analysis and Support
NIOSH
4676 Columbia Parkway, MS-C-47
Cincinnati, OH 45226

If there are additional petitioners, they must complete the Appendix Forms for additional petitioners. The Appendix forms are located at the end of this document.

Public Burden Statement

Public reporting burden for this collection of information is estimated to average 300 minutes per response, including time for reviewing instructions, gathering the information needed, and completing the form. If you have any comments regarding the burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, send them to CDC Reports Clearance Officer, 1600 Clifton Road, MS-E-11, Atlanta GA, 30333; ATTN:PRA 0920-0639. Do not send the completed petition form to this address. Completed petitions are to be submitted to NIOSH at the address provided in these instructions. Persons are not required to respond to the information collected on this form unless it displays a currently valid OMB number.

Privacy Act Advisement

In accordance with the Privacy Act of 1974, as amended (5 U.S.C. § 552a), you are hereby notified of the following:

The Energy Employees Occupational Illness Compensation Program Act (42 U.S.C. §§ 7384-7385) (EEOICPA) authorizes the President to designate additional classes of employees to be included in the Special Exposure Cohort (SEC). EEOICPA authorizes HHS to implement its responsibilities with the assistance of the National Institute for Occupational Safety (NIOSH), an Institute of the Centers for Disease Control and Prevention. Information obtained by NIOSH in connection with petitions for including additional classes of employees in the SEC will be used to evaluate the petition and report findings to the Advisory Board on Radiation and Worker Health and HHS.

Records containing identifiable information become part of an existing NIOSH system of records under the Privacy Act, 09-20-147 "Occupational Health Epidemiological Studies and EEOICPA Program Records. HHS/CDC/NIOSH." These records are treated in a confidential manner, unless otherwise compelled by law. Disclosures that NIOSH may need to make for the processing of your petition or other purposes are listed below.

NIOSH may need to disclose personal identifying information to: (a) the Department of Energy, other federal agencies, other government or private entities and to private sector employers to permit these entities to retrieve records required by NIOSH; (b) identified witnesses as designated by NIOSH so that these individuals can provide information to assist with the evaluation of SEC petitions; (c) contractors assisting NIOSH; (d) collaborating researchers, under certain limited circumstances to conduct further investigations; (e) Federal, state and local agencies for law enforcement purposes; and (f) a Member of Congress or a Congressional staff member in response to a verified inquiry.

This notice applies to all forms and informational requests that you may receive from NIOSH in connection with the evaluation of an SEC petition.

Use of the NIOSH petition forms (A and B) is voluntary but your provision of information required by these forms is mandatory for the consideration of a petition, as specified under 42 CFR Part 83. Petitions that fail to provide required information may not be considered by HHS.

Name or Social Security Number of First Petitioner:

Special Exposure Cohort Petition
under the Energy Employees Occupational Illness Compensation Act

U.S. Department of Health and Human Services
Centers for Disease Control and Prevention
National Institute for Occupational Safety and Health

OMB Number: 0920-0639 Expires: 05/31/2007

Special Exposure Cohort Petition — Form B **Appendix — Petitioner 2**

Use of this form and disclosure of Social Security Number are voluntary. Failure to use this form or disclose this number will not result in the denial of any right, benefit, or privilege to which you may be entitled.

Use this Appendix for Petitioner 2.

This appendix form is to be used as needed. Petitioner 2, or his or her representative, should complete the parts applicable to him or her.

Refer to the General Instructions on completing petitioner information for Parts A, B, or C.

If you need more space to provide additional information, use the continuation page provided at the end of the form and attach the completed continuation page(s) to Form B.

Except for signatures, please **PRINT** all information clearly and neatly on the form.

If you are:	☐ An Energy Employee (current or former),	Start at C
	☑ A Survivor (of a former Energy Employee),	Start at B
	☐ A Representative (of a current or former Energy Employee),	Start at A

A Representative Information — Complete Section A if you are authorized by an Employee or Survivor(s) to petition on behalf of a class.

A.1 **Are you a contact person for an organization?** ☐ Yes (Go to A.2) ☐ No (Go to A.3)

A.2 **Organization Information:**

Name of Organization

Position of Contact Person

A.3 **Name of Petition Representative:**

Mr./Mrs./Ms. First Name Middle Initial Last Name

A.4 **Address:**

Street Apt # P.O. Box

City State Zip Code

A.5 **Telephone Number:** ( ) -

A.6 **Email Address:**

A.7 ☐ Check the box at left to indicate you have attached to the back of this form written authorization to petition by the survivor(s) or employee(s) indicated in Parts B or C of this form. An authorization form for this purpose is provided.

If you are representing a Survivor, go to Part B; if you are representing an Employee, go to Part C.

Name or Social Security Number of First Petitioner:

Special Exposure Cohort Petition
under the Energy Employees Occupational Illness Compensation Act

U.S. Department of Health and Human Services
Centers for Disease Control and Prevention
National Institute for Occupational Safety and Health

OMB Number: 0920-0639 Expires: 05/31/2007

Special Exposure Cohort Petition — Form B

Appendix — Petitioner 2

B Survivor Information — Complete Section B if you are a Survivor or representing a Survivor.

B.1 **Name of Survivor:**

First Name Middle Initial Last Name

B.2 **Social Security Number of Survivor:**

B.3 **Address of Survivor:**

Street Apt # P.O. Box

City State Zip Code

B.4 **Telephone Number of Survivor:**

B.5 **Email Address of Survivor:**

B.6 **Relationship to Employee:**

Go to Part C.

C Employee Information — Complete Section C.

C.1 **Name of Employee:**

First Name Middle Initial Last Name

C.2 **Former Name of Employee** (e.g., maiden name/legal name change/other):

Mr./Mrs./Ms. First Name Middle Initial Last Name

C.3 **Social Security Number of Employee:**

C.4 **Address of Employee** (if living):

Street Apt # P.O. Box

City State Zip Code

C.5 **Telephone Number of Employee:** ( )

C.6 **Email Address of Employee:**

C.7 **Employment Information Related to Petition:**

C.7a Employee Number (if known):

C.7b Dates of Employment: Start -1936 End -1972

C.7c Employer Name: Bliss and Laughlin Steel

C.7d Work Site Location: 110 Hopkins ST
Buffalo N.Y. 14220

C.7e Supervisor's Name:

Sign Part G of the original petition.

Name or Social Security Number of First Petitioner:

Special Exposure Cohort Petition
under the Energy Employees Occupational Illness Compensation Act

U.S. Department of Health and Human Services
Centers for Disease Control and Prevention
National Institute for Occupational Safety and Health

OMB Number: 0920-0639 Expires: 05/31/2007

Special Exposure Cohort Petition — Form B **Appendix — Petitioner 3**

Use of this form and disclosure of Social Security Number are voluntary. Failure to use this form or disclose this number will not result in the denial of any right, benefit, or privilege to which you may be entitled.

Use this Appendix for Petitioner 3.

This appendix form is to be used as needed. Petitioner 3, or his or her representative, should complete the parts applicable to him or her.

Refer to the General Instructions on completing petitioner information for Parts A, B, or C.

If you need more space to provide additional information, use the continuation page provided at the end of the form and attach the completed continuation page(s) to Form B.

Except for signatures, please **PRINT** all information clearly and neatly on the form.

If you are:	❑ An Energy Employee (current or former),	Start at C
	☒ A Survivor (of a former Energy Employee),	Start at B
	❑ A Representative (of a current or former Energy Employee),	Start at A

A Representative Information — Complete Section A if you are authorized by an Employee or Survivor(s) to petition on behalf of a class.

A.1 **Are you a contact person for an organization?** ❑ Yes (Go to A.2) ❑ No (Go to A.3)

A.2 **Organization Information:**

Name of Organization

Position of Contact Person

A.3 **Name of Petition Representative:**

Mr./Mrs./Ms. First Name Middle Initial Last Name

A.4 **Address:**

Street Apt # P.O. Box

City State Zip Code

A.5 **Telephone Number:** ( )

A.6 **Email Address:**

A.7 ❑ Check the box at left to indicate you have attached to the back of this form written authorization to petition by the survivor(s) or employee(s) indicated in Parts B or C of this form. An authorization form for this purpose is provided.

If you are representing a Survivor, go to Part B; if you are representing an Employee, go to Part C.

Special Exposure Cohort Petition
under the Energy Employees Occupational Illness Compensation Act

U.S. Department of Health and Human Services
Centers for Disease Control and Prevention
National Institute for Occupational Safety and Health

OMB Number: 0920-0639 Expires: 05/31/2007

Special Exposure Cohort Petition — Form B

Appendix — Petitioner 3

B Survivor Information — Complete Section B if you are a Survivor or representing a Survivor.

B.1 **Name of Survivor:**

First Name Middle Initial Last Name

B.2 **Social Security Number of Survivor:**

B.3 **Address of Survivor:**

Street Apt # P.O. Box

City State Zip Code

B.4 **Telephone Number of Survivor:**

B.5 **Email Address of Survivor:**

B.6 **Relationship to Employee:**

Go to Part C.

C Employee Information — Complete Section C.

C.1 **Name of Employee:**

First Name Middle Initial Last Name

C.2 **Former Name of Employee** (e.g., maiden name/legal name change/other):

Mr./Mrs./Ms. First Name Middle Initial Last Name

C.3 **Social Security Number of Employee:**

C.4 **Address of Employee** (if living):

Street Apt # P.O. Box

City State Zip Code

C.5 **Telephone Number of Employee:**

C.6 **Email Address of Employee:**

C.7 **Employment Information Related to Petition:**

C.7a Employee Number (if known):

C.7b Dates of Employment: Start 1936 End 1972

C.7c Employer Name: Bliss and Laughlin Steel

C.7d Work Site Location: 110 Hopkins Street
Buffalo, New York 14220

C.7e Supervisor's Name:

Sign Part G of the original petition.

Name or Social Security Number of First Petitioner:

Formerly Utilized Sites Remedial Action Program

Administrative Record File

for the Bliss & Laughlin FUSRAP Site, Buffalo, New York

Army Corps
Engineers®

125760

RADIOLOGICAL SURVEY OF THE EXTERIOR PORTIONS OF THE FORMER BLISS AND LAUGHLIN STEEL COMPANY FACILITY BUFFALO, NEW YORK

INTRODUCTION AND SITE HISTORY

National Lead of Ohio (NLO) operated the Fernald Site in Ohio under contract to the Atomic Energy Commission (AEC). In the fall of 1952, the Bliss and Laughlin Steel Company, located in Buffalo, New York, performed machining and straightening operations on uranium rods under subcontract to NLO. The finished rods were shipped directly to the Fernald site; turnings were returned by the AEC, to the Lake Ontario Ordinance Works (LOOW) for packaging and ultimate disposal or recycle. Available records indicate uranium machining occurred at the site during September and October of 1952, and that 53 drums of turnings were generated by the Bliss and Laughlin activities.[1] It is unknown whether these records described the full extent of the Bliss and Laughlin work; no records, indicating the total quantity of uranium handled at this site, have been located. There is also mention of possible earlier AEC work at the site (the nature of which is unknown[1]) in an October 1951 correspondence, which indicated that several drums of dry uranium oxide had been accumulated. In 1972 the facility was sold to Ramco Steel, Inc., the current owner is Niagara Cold Drawn Corporation.

Based on the operations performed at this site, the potential radiological contaminant would be processed natural uranium, i.e. uranium chemically separated from its long-lived daughter products and in its naturally occurring isotopic abundances. Surveys of the facility, conducted by NLO at the time of the rod turning operations, identified contamination on the turning machines. The machinery used for this work has been replaced, disposition of the old equipment is not known. No records indicating the radiological conditions of the site following the uranium machining, have been located.

As a result, the U.S. Department of Energy's Office of Environmental Restoration and Waste Management (DOE/EM) recommended that the current radiological conditions be determined and requested that the Environmental Survey and Site Assessment Program (ESSAP) of the Oak

WI-95-062

134439 125032

1.0 PURPOSE

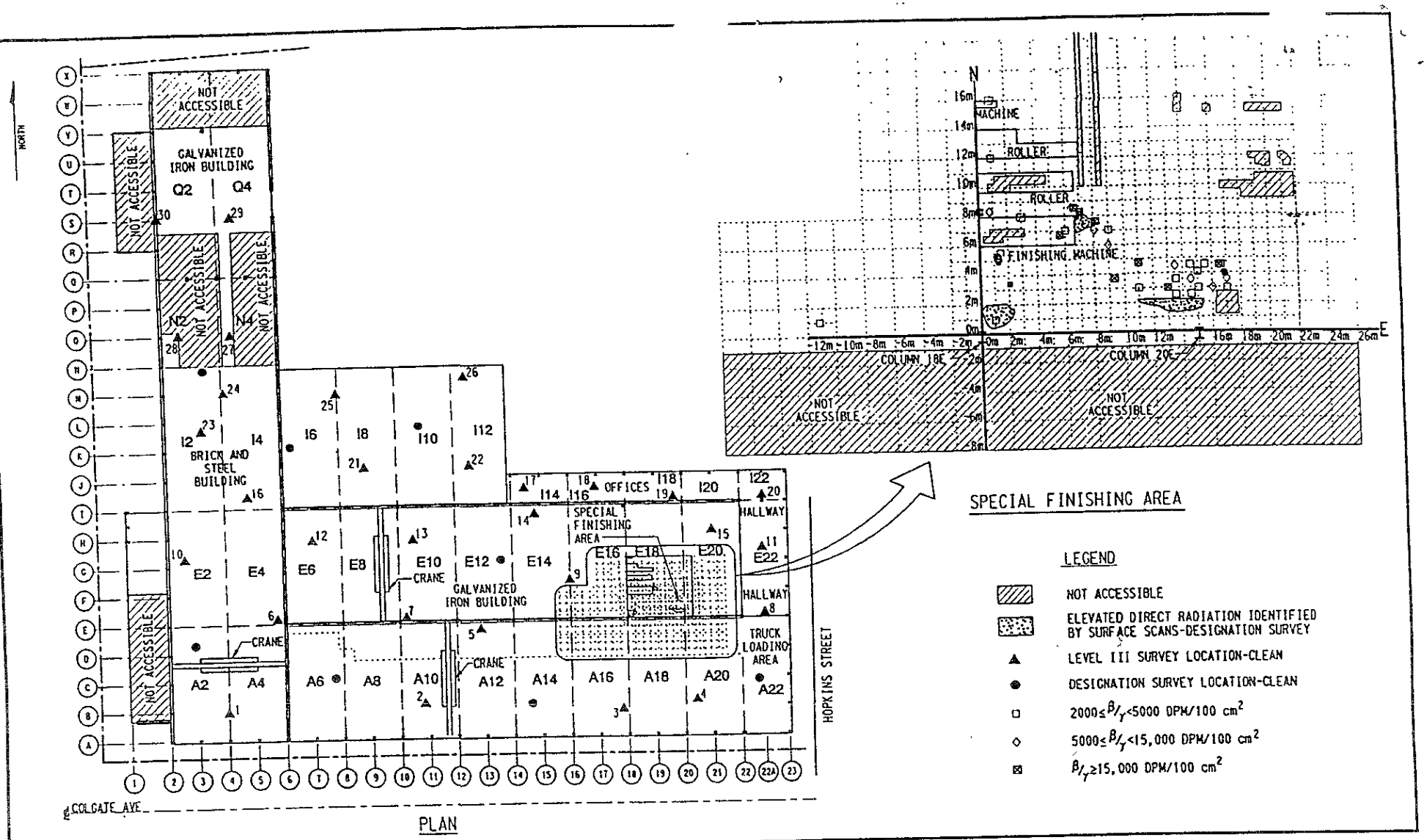
This Work Instruction (WI) provides the site-specific health and safety plan for the remedial action at the Former Bliss and Laughlin site located in Buffalo, New York. The instructions provided are adequate to maintain the health and safety of the workers performing the characterization and subsequent cleanup and to protect the general public and the environment. This document contains all the program elements required by 29 CFR 1910.120(b)(4) for a site-specific health and safety plan. The scope of the remedial action involves the cleanup of the radiological and chemical contaminants found at the site as a result of Manhattan Engineering District (MED) work which took place at the facility in the 1950's. Chemical contaminants incidental to the facilities operation and co-mingled with the MED contaminants will be remediated within the scope of this work.

1.1 Site Description

The site is located at 110 Hopkins Street in Buffalo, New York and is presently owned by the Niagara Cold Drawn Corporation (Figure 1). In the fall of 1952, the former Bliss and Laughlin Steel Company performed machining and straightening operations on uranium rods. The finished rods were shipped directly to the Fernald site in Ohio; turnings were returned by the Atomic Energy Commission (AEC) to the Lake Ontario Ordinance Works (LOOW) for packaging and ultimate disposal or recycle. Available records indicate uranium machining occurred at the site during September and October of 1952 and that 53 drums of turnings were generated by Bliss and Laughlin activities. Correspondence dated October 1951, indicates the accumulation of four drums of dry uranium oxides; the nature of the work associated with these uranium oxide drums is unknown. These records probably do not describe the full extent of Bliss and Laughlin activities as no records indicating the total quantity of uranium handled at the site have been located.

Based on the operations performed at this site, the potential radiological contaminant would be processed uranium (i.e.; uranium chemically separated from its long-lived daughter products and in its naturally occurring isotopic abundances). Surveys of the facility, conducted by National Lead of Ohio at the time of the rod turning operations, indicated contamination on the turning machines. The machinery used for this work has been replaced; disposition of the removed machinery is unknown. No records indicating the radiological conditions of the site following uranium machining have been located.

Health Physicists from the Oak Ridge Institute for Science and Technology (ORISE) conducted a radiological survey of the plant in March of 1992. Localized Contamination was found in that portion of the facility known as the "special finishing" area (Figure 2). Total beta activities in the special finishing area ranged from



1285 002.DGN

Figure 1
Bliss and Laughlin Steel with Reference Grids and Survey Locations

POST-REMEDIAL RADIOLOGICAL DOSE AND RISK ASSESSMENT FOR THE BLISS & LAUGHLIN SITE BUFFALO, NEW YORK

Prepared for:
U. S. Army Corps of Engineers, Buffalo District

Prepared by:
URS Group, Inc.
3065 Southwestern Blvd., Suite 202
Orchard Park, New York 14127

March 5, 2002

1 INTRODUCTION

Radiological dose and risk assessments were performed for the Bliss & Laughlin site in order to determine the potential dose and risk due to residual radioactive materials from work conducted under contract to the Manhattan Engineer District (MED). The U.S. Army Corps of Engineers (USACE) determined that Subpart E of 10 CFR 20 is relevant and appropriate in considering the remediation of the Bliss & Laughlin Site. Under these criteria, a site is considered acceptable for unrestricted use if the residual activity that is distinguishable above background radiation results in a total effective dose equivalent (TEDE) to an average member of the critical group that does not exceed 25 mrem/y and the residual radioactivity has been reduced to levels that are as low as reasonably achievable (ALARA). To assure compliance with the selected ARAR (10 CFR 20 Subpart E), two post-remedial dose assessments were performed for the Bliss & Laughlin Site. The first assessed the dose and radiological cancer risk to a resident (subsistence) farmer located on the site, (assuming the buildings would be removed and the property redeveloped in the future), and the other determined the dose and risk to a worker in the facility. These assessments were developed using the U.S. Department of Energy (DOE) RESRAD computer code version 6.1 and RESRAD-Build version 3.1. The details of the assessments are presented in subsequent text.

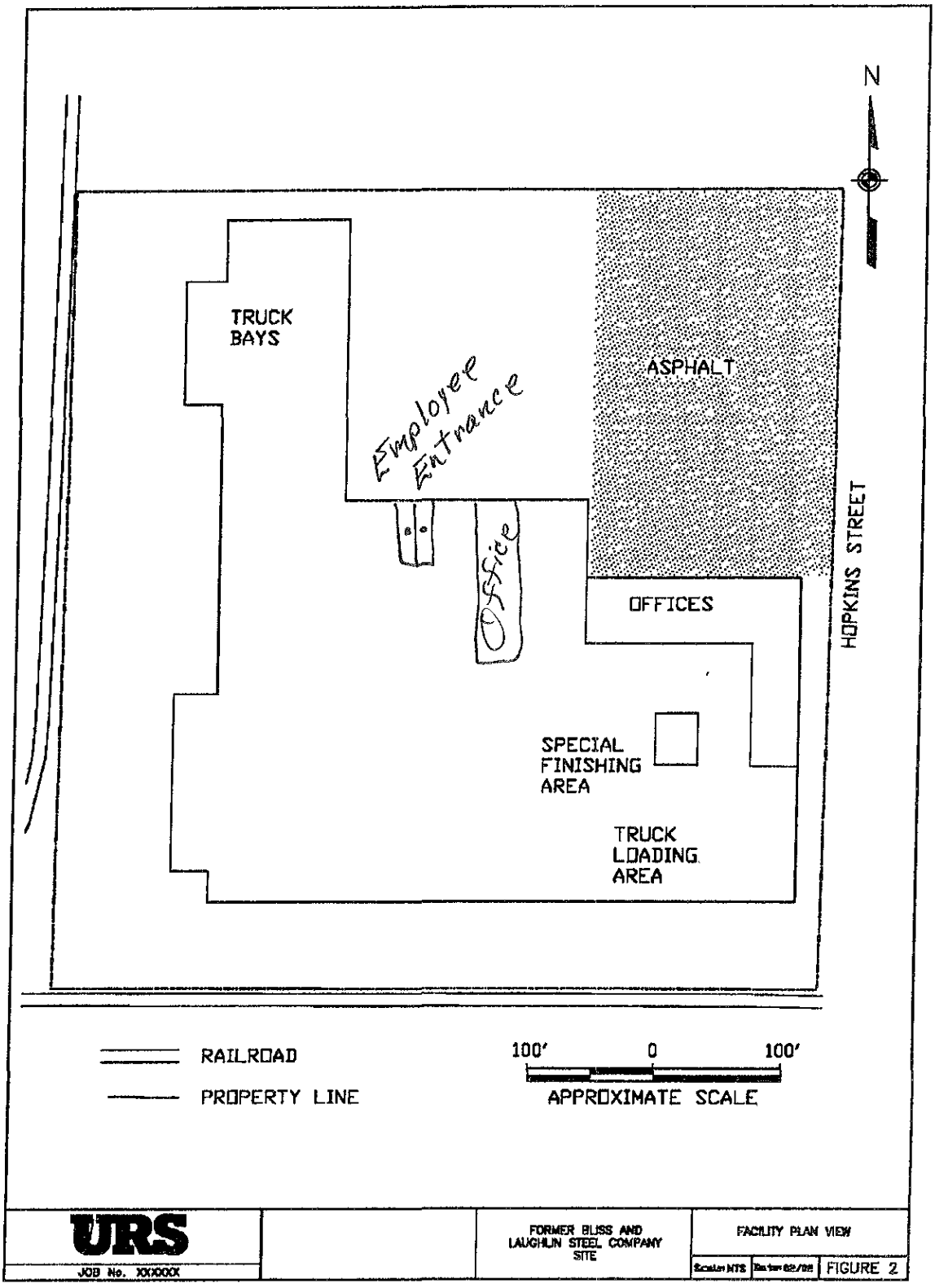
1.1 SITE DESCRIPTION AND HISTORY

Bliss & Laughlin is located at 110 Hopkins Street, Buffalo, New York. The location of the site is shown in Figure 1. The site consists of a single building with a floor area of about 12,000 m^2 surrounded by approximately 15,000 m^2 of grounds. The plot plan is shown in Figure 2. In 1952, Bliss & Laughlin Steel Company performed machining and straightening operations on uranium rods for National Lead Company of Ohio, a prime contractor for the Atomic Energy Commission (AEC). The site, now owned by Niagara LaSalle Cold Drawn Corporation, is currently used for the forming of steel products and is an active industrial site with equipment such as rolling mills.

Historical records indicate that machining operations involving uranium rods were performed in a section of the building called the "Special Finishing Area," which

occupies a nominal 300 square meters of floor space. The floor of the special finishing area is concrete and contains shallow utility trenches. There are no floor drains. The floor surfaces are generally rough and pitted and are covered with a thin layer of oil absorbent material and dried oil and grease. Machining and material storage racks are present in various areas of the floor. The ceiling is approximately 12 meters high and is supported by a framework of steel trusses. The machining area of the building does not have any interior walls or partitions.

Please note important location of office in the Mill



URS		FORMER BLISS AND LAUGHLIN STEEL COMPANY SITE	FACILITY PLAN VIEW
JOB No. XXXXXX			Scale: NTS Date: 02/08 FIGURE 2

The USACE selection of values for RESRAD input parameters for assessing dose and risk at the Bliss & Laughlin site follows this hierachy: (1) site-specific values, (2) values recommended by USEPA, (3) RESRAD defaults. Based upon the *Soil Survey of Erie County New York* done by the United States Department of Agriculture, Soil Conservation Service, December 1986, the area surrounding the Bliss & Laughlin site is Urban Land. This classification is a miscellaneous one in which 80 percent or more of the soil surface is covered by asphalt, concrete, buildings, or other impervious structures. However, immediately adjacent the land is classified as Niagara Silt Loam. This classification is most closely related to silty clay loam. Therefore, the RESRAD parameters relating to soil type were changed appropriately or RESRAD default values were used. In addition, climatic data was obtained from the National Weather Service for the Buffalo area and used in the model. These values as well as all other inputs for the computer code are provided in Appendix C.

2.2 INDUSTRIAL WORKER

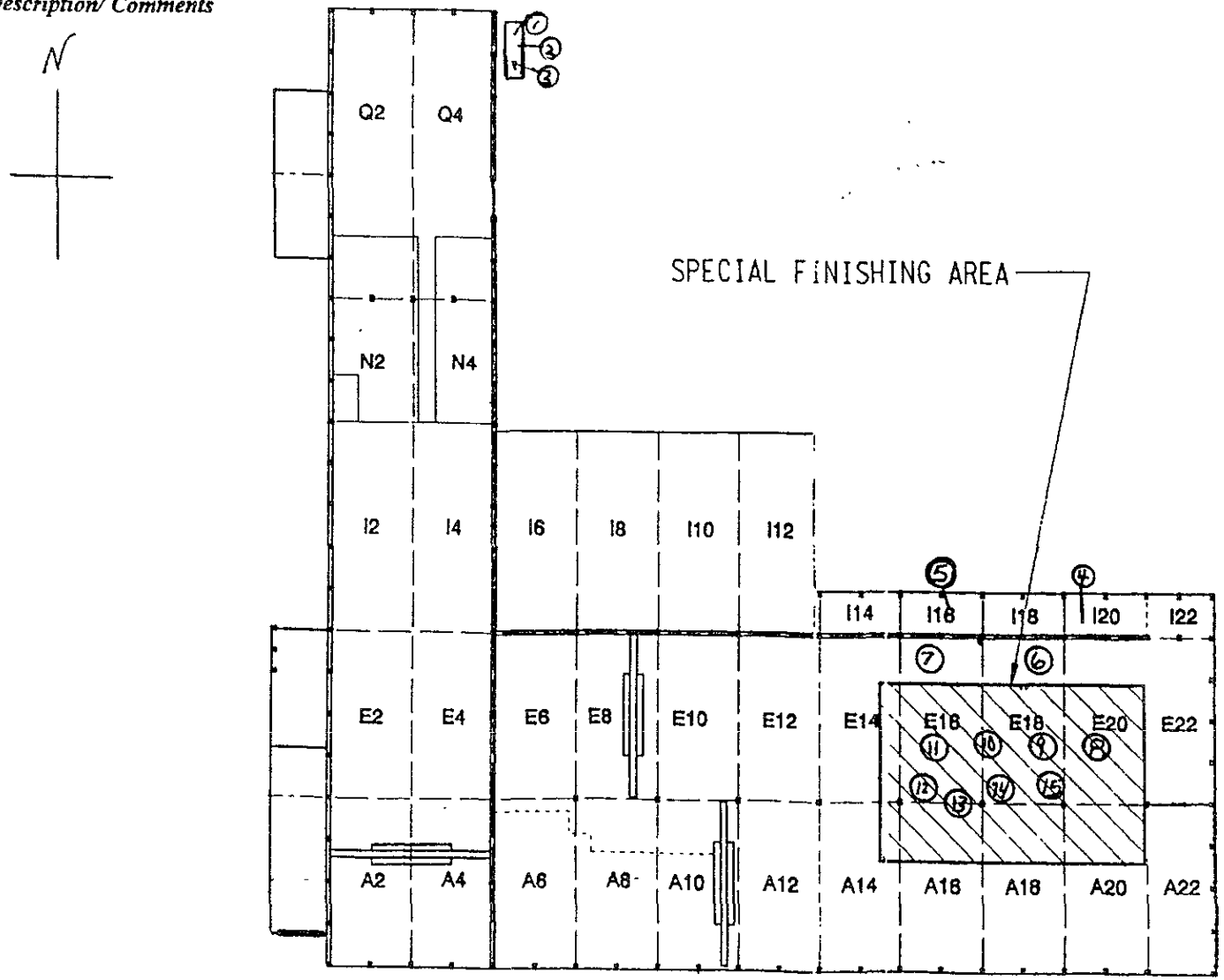
In order to determine the radiological dose to the industrial worker, a series of assumptions were made. The scenario that would result in the largest dose to a worker would be when he works in the facility immediately adjacent to the contamination for nine hours a day. The worker would be exposed to several pathways. These pathways are external radiation, deposition of particles on their skin, immersion in a radioactive cloud, inhalation and ingestion of radionuclides. The radon pathway was not assessed, as previously justified. The pathways are listed in Appendix A.

In reviewing the Final Status Survey Report, two areas of contamination were identified to include in the RESRAD-Build model. The first is the contamination of the Special Finishing Area floor. The second is the trusses above this area. The Special Finishing Area is 300 m^2 and there are 16 linear meters of trusses in this area. The total length of the trusses was converted into a respective circular area directly above the receptor. The trusses were assumed to be 8 cm in width and cross members 5 cm, which gives a combined truss area of 2.08 m^2.

FUSRAP Survey Information Sheet

J. -051-F2
Version 2 (9/5/97)

Survey Drawing/ Description/ Comments



General Information

Survey #: 98-039

Site / WBS#: Bliss & Laughlin

Tech(s): C. James

Page: 2 of 2

Comments: Weekly Survey

Formerly Utilized Sites Remedial Action Program

Administrative Record File

for the Bliss & Laughlin FUSRAP Site, Buffalo, New York

US Army Corps of Engineers®

DOE F 1325.8
(8-89)
EFG (07-90)

United States Government

095784

Department of Energy

Memorandum

DATE: OCT 0 8 1992

1992 OCT 13 PM 1:31

REPLY TO ATTN OF: EM-421

SUBJECT: Authorization for Remedial Action at the Former Bliss & Laughlin Steel Company Site, Buffalo, New York

TO: Manager, DOE Oak Ridge Field Office

This is to notify you that the Former Bliss & Laughlin Steel Company site in Buffalo, New York, is designated for remedial action under the Formerly Utilized Sites Remedial Action Program (FUSRAP). This notification does not constitute a FUSRAP baseline change control approval. Approval of the baseline change will be accomplished through the normal baseline change control procedures.

The site was used by the former Atomic Energy Commission for the machining and shaping of uranium metal during the 1950s. A radiological survey found residual uranium within one of the buildings. Because of the limited extent of the contamination, the site may be remediated using the expedited cleanup process now under development.

R. P. Whitfield
Deputy Assistant Secretary
for Environmental Restoration

Designation Summary
Bliss & Laughlin, Buffalo

1

INTRODUCTION

The Department of Energy (DOE), Office of Environmental Restoration, has reviewed the past activities of the Manhattan Engineer District (MED) at the former Bliss & Laughlin Steel Company Site in Buffalo, New York, and has completed a radiological survey of the site (Burger, et al 1992). DOE has determined that the residual radioactive materials inside and outside the building exceed current guidelines (USDOE 1987, 1990) for use without radiological restrictions.

Based on a review of the available historical documentation and the results of the survey, the DOE has concluded that this site shall be designated for remedial action under the Formerly Utilized Sites Remedial Action Program (FUSRAP). The site has been assigned a low priority as the survey results indicate that the residual radioactivity is limited in extent and poses no immediate risk to workers. The remainder of this report summarizes the site information and the designation decision.

BACKGROUND

Site Function:

The following discussion is based upon the Authority Review (Williams 1992).

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.

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.

Site Description:

The following discussion is based upon the survey report (Burger, et al 1992).

The former Bliss and Laughlin facility at 110 Hopkins Street consists of a single large building, with a floor area of about 12,000 m^2 (Figures 1 and 2). There have been only minor changes to the main structure, since the uranium operations in the 1950's. Equipment inside the building has been rearranged or replaced to varying degrees. The current facility occupants indicate that machining operations, such as were performed on the uranium rods, would have been located in the "special finishing" area occupies about 300 m^2 of floor space. The floor is concrete and contains several shallow utility (water, electricity, lubricant, and pneumatic) trenches; there are no drains in this area. Floor surfaces are generally rough and "pitted" and are covered with a thin layer of oil absorbent material and dried oil and grease. Machining equipment and material storage racks prevent access to some floor surface areas. Ceilings are approximately 12 m high and supported by a framework of trusses. The machining area of the building is open (without inside walls or partitions). 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.

Owner History:

The following discussion is based on the authority review (Williams, 1992).

The site was owned by Bliss & Laughlin Steel Company. Ramco Steel Incorporated purchased the facility in 1972. As of March 1992, the current owner and occupant is the Niagara Cold Drawn Corporation.

Radiological History and Status:

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^3), above the guidelines of the day which restricted exposure to 70 dpm/M^3. The Medart rod turning machine gave very high readings, approximately 20,000 dpm/M^3 on average with a maximum reading of 205,000 dpm/M^3. 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.

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 above DOE Guidelines (DOE, 1987).

Authority Review:

In 1992, the DOE determined that it had the authority to conduct remedial action at the site (U.S. DOE 1986; Williams 1992). This determination based upon the following significant factors.

- Available records suggest that Bliss & Laughlin was directly supervised by the AEC prime contractor. AEC staff apparently approved the arrangements to use the facility.
- 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.
- 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.
- AEC staff arranged for transportation of raw materials, wastes, and products to and from the site.
- A radiological survey has established that uranium is present within the facility in excess of levels specified in DOE Order 5400.5, Chapter IV.

DESIGNATION DETERMINATION:

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.

REFERENCES:

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.

United States Department of Energy (USDOE, 1986): Formerly Utilized Sites Remedial Action Program, Summary Protocol, Identification - Characterization - Designation - Remedial Action - Certification. Office of Nuclear Energy, January.

USDOE, 1987: U.S. Department of Energy Guidelines for Residual Radioactive Material at Formerly Utilized Sites Remedial Action Program and A Remote Surplus Facilities Management Program Sites. Revision 2, Office of Nuclear Energy, March.

USDOE, 1990: Radiation Protection of the Public and the Environment. DOE Order 5400.5. Office of Environment, Safety, and Health, February 8.

Williams, W.A., 1992: Authority Review for the Bliss & Laughlin Steel Company in Buffalo, New York. USDOE, July 22.

095786

ORISE 92/G-6

RADIOLOGICAL SURVEY OF THE FORMER BLISS AND LAUGHLIN STEEL COMPANY FACILITY BUFFALO, NEW YORK

Prepared by

J. D. Berger

Environmental Survey and Site Assessment Program
Energy/Environmental Systems Division
Oak Ridge Institute for Science and Education
Oak Ridge, Tennessee 37831-0117

Project Staff

D. A. Gibson R. B. Slaten

Prepared for

Department of Energy
Office of Environmental Restoration

JUNE 1992

This report is based on work performed under contract number DE-AC05-76OR00033 with the U.S. Department of Energy.

095786

RADIOLOGICAL SURVEY OF THE FORMER BLISS AND LAUGHLIN STEEL COMPANY FACILITY BUFFALO, NEW YORK

INTRODUCTION AND SITE HISTORY

In the fall of 1952, the Bliss and Laughlin Steel Company, Buffalo, New York, performed machining and straightening operations on uranium rods. The finished rods were shipped directly to the Fernald site in Ohio; turnings were returned by the Atomic Energy Commission (AEC) to the Lake Ontario Ordnance Works (LOOW) for packaging and ultimate disposal or recycle. Available records indicate uranium machining occurred at the site during September and October of 1952, and that 53 drums of turnings were generated by the Bliss and Laughlin activities[1]. It is unknown whether these records described the full extent of the Bliss and Laughlin work; no records, indicating the total quantity of uranium handled at this site, have been located. There is also mention of possible earlier Atomic Energy Commission work at the site (the nature of which is unknown[1]) in an October 1951 correspondence, which indicated that several drums of dry uranium oxide had been accumulated. In 1972 the facility was sold to Ramco Steel, Inc.; the current owner is Niagara Cold Drawn Corporation.

Based on the operations performed at this site, the potential radiological contaminant would be processed natural uranium, i.e. uranium chemically separated from its long-lived daughter products and in its naturally occurring isotopic abundances. Surveys of the facility, conducted by National Lead of Ohio at the time of the rod turning operations, identified contamination on the turning machines. The machinery used for this work has been replaced; disposition of the old equipment is not known. No records, indicating the radiological conditions of the site following the uranium machining, have been located. The U.S. Department of Energy's Office of Environmental Restoration and Waste Management recommended that the current radiological conditions be determined; the Environmental Survey and Site Assessment Program (ESSAP) of Oak Ridge Associated Universities/Oak Ridge Institute for Science and Education

(ORAU/ORISE) was requested to perform a survey of the site. This report describes the procedures and results of that survey.

PROJECT ORGANIZATION AND RESPONSIBILITY

DOE Headquarters provides overview and coordination for all FUSRAP activities. DOE Oak Ridge (DOE-OR) is responsible for implementation of FUSRAP and The Former Sites Restoration Division of DOE-OR, manages the daily activities.

Under the FUSRAP protocol, an initial investigation/survey of a potential site is performed by ORISE or Oak Ridge National Laboratory (ORNL), under contract to DOE Headquarters. If appropriate, DOE Headquarters designates the site into FUSRAP based upon the results provided by the initial investigation/survey. DOE's Project Management Contractor (PMC) for FUSRAP is Bechtel National, Inc. (BNI). BNI is responsible for planning and implementation of FUSRAP activities and managing any required remedial actions. The final phase for a FUSRAP site is independent verification, which is provided by ORISE or ORNL, after remedial action is complete. This verification activity provides independent (third party) data to assist DOE in evaluating the accuracy of the post-remedial action status of the site, as presented by the PMC, and in assuring that the documentation accurately and adequately describes the condition of the site. DOE Headquarters uses the information developed by the remediation and verification activities to certify that a site can be released for use, without restrictions.

FACILITY DESCRIPTION

The former Bliss and Laughlin facility at 110 Hopkins Street consists of a single large building, with a floor area of about 12,000 m^2 (Figures 1 and 2). There have been only minor changes to the main structure, since the uranium operations in the 1950's. Equipment inside the building has been rearranged or replaced to varying degrees. The current facility occupants indicate that machining operations, such as were performed on the uranium rods, would have

been located in the "special finishing" area, but machining is no longer performed in this section of the facility. The "special finishing" area occupies about 300 m^2 of floor space (Figure 3). The floor is concrete and contains several shallow utility (water, electricity, lubricant, and pneumatic) trenches; there are no drains in this area. Floor surfaces are generally rough and "pitted" and are covered with a thin layer of oil absorbent material and dried oil and grease. Machining equipment and material storage racks prevent access to some floor surface areas. Ceilings are approximately 12 m high and supported by a framework of trusses. The machining area of the building is open (without inside walls or partitions).

PROCEDURES

On March 14, 1992, representatives of the ORISE Environmental Survey and Site Assessment Program (ESSAP), assisted by W. A. Williams of the DOE Office of Environmental Restoration, conducted a radiological survey at the former Bliss and Laughlin Steel Company facility. The survey was initially conducted in accordance with a plan prepared by the ESSAP and approved by DOE/EM. Positive findings of residual contamination exceeding guidelines established the possible eligibility under FUSRAP; initial plans were then modified and the number of surface activity and exposure rate measurements was reduced. Additional information, concerning major instrumentation and survey and analysis procedures, is provided in Apperdices A and B.

OBJECTIVE

The objective of the survey was to determine the radiological status of the site, relative to the FUSRAP guidelines and DOE Order 5400.5, Chapter IV[2]. The results will be used by DOE/EM to determine whether there is a need for further actions under FUSRAP.

Please note important location of 095786 office in the Mill

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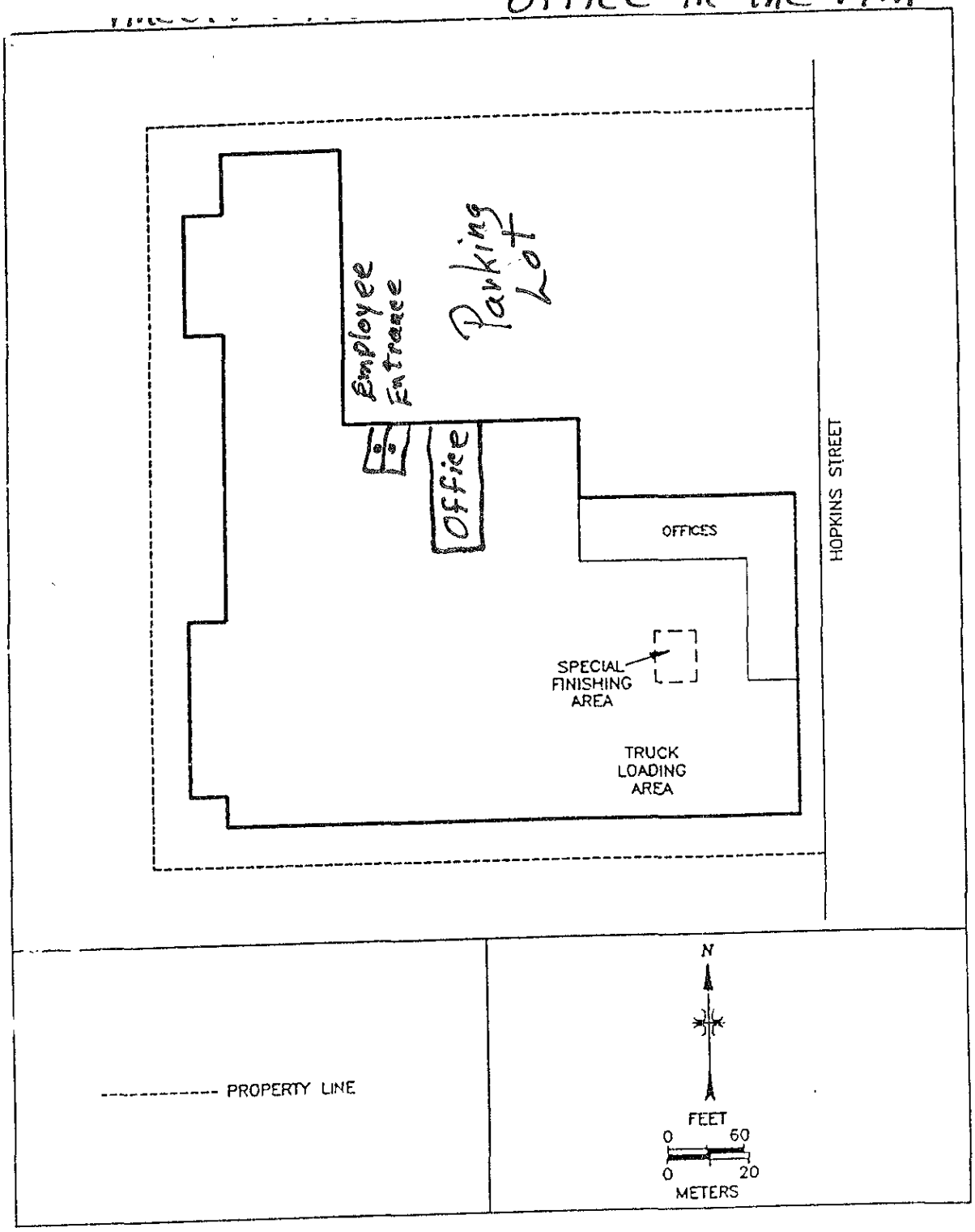

FIGURE 2: Plot Plan of Former Bliss and Laughlin Steel Company Facility

Please note important location of 095786 office in the Mill.

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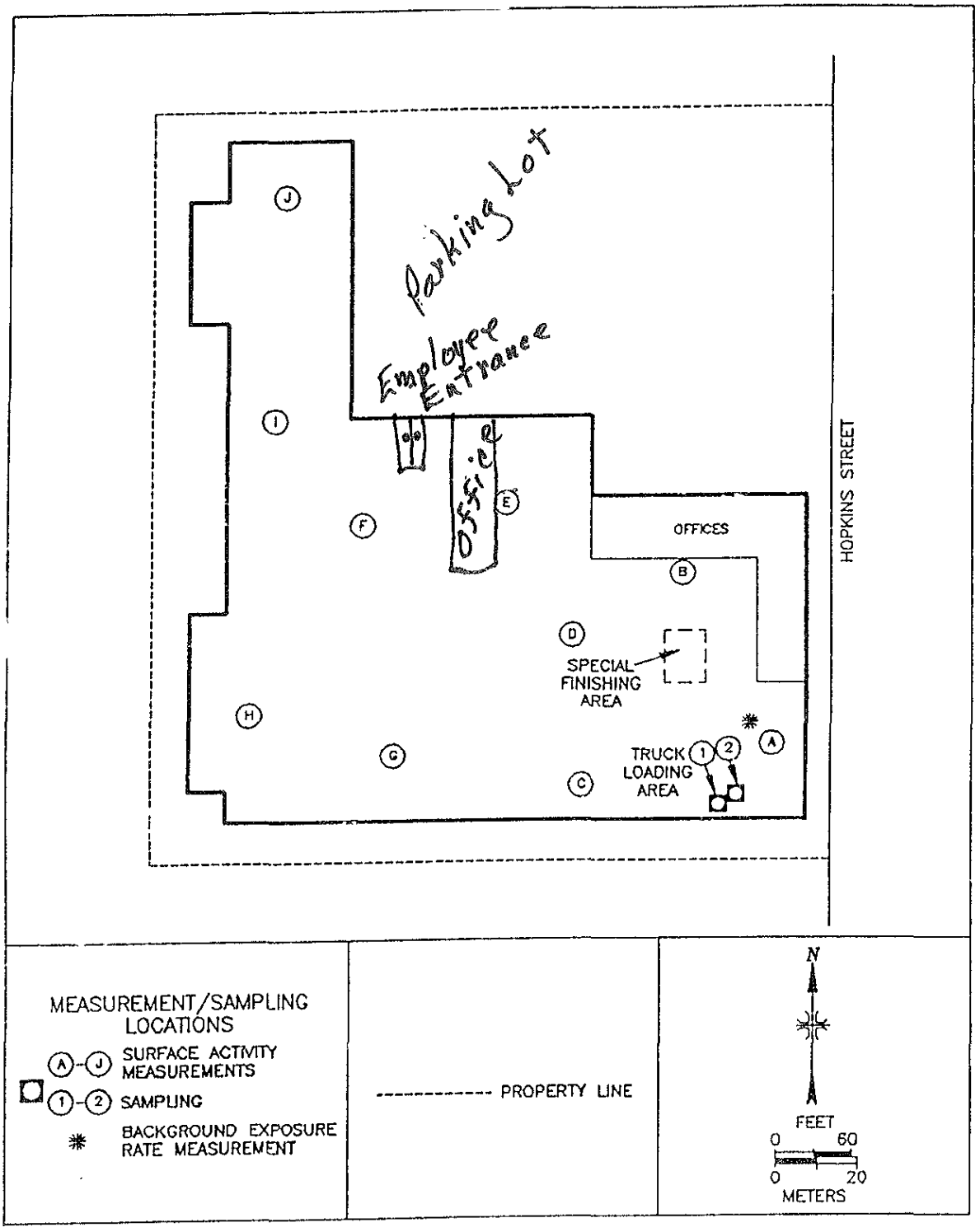

FIGURE 5: General Building Area – Measurement and Sampling Locations

126361

PROJECT SUMMARY

SITE CHARACTERIZATION AND REMEDIAL ACTION AT THE FORMER BLISS AND LAUGHLIN STEEL COMPANY SITE

PROPOSED ACTIONS: Planned activities consist of site characterization in late February 1995 and future remedial action, if necessary, in July 1995. Planned activities at the site to further define the nature and extent of contamination prior to remediation will involve the collection of samples to assist in the characterization of potential waste material, and performance of a radiological survey to verify previous characterization results. A survey of the accessible overheads around the special finishing area will be conducted. A less intensive survey will be performed throughout the remainder of the building, with emphasis on adjacent areas, high traffic areas, and likely areas of contamination, such as areas which have had the floor re-finished or at slab joints. This will consist of collecting core samples by drilling through the concrete slab in re-finished areas and slab joints. Dust samples will be collected from the overheads and the material in floor trenches. Remedial activities may consist of decontamination of interior building surfaces and potential removal of soil beneath the concrete floors.

LOCATION: The former Bliss and Laughlin Steel Company site is located at 110 Hopkins Street in Buffalo, New York and is presently owned by Niagara Cold Drawn Corporation (NCDC).

DISCUSSION: In the fall of 1952, the Bliss and Laughlin Steel Company performed machining and straightening operations on uranium rods. The finished rods were shipped to the Fernald Site in Ohio; turnings were returned by the Atomic Energy Commission (AEC) to Lake Ontario Ordinance Works (LOOW) for packaging and ultimate disposal or recycling.

The former Bliss and Laughlin site consists of a single large building with a floor area of about 12,000 cubic meters. There have been only minor changes to the structure since the 1950's. The floor is concrete and contains several shallow trenches. Floor surfaces are generally rough, pitted, and covered with a thin layer of oil absorbent material, dried oil, and grease. Machining equipment and material storage racks prevent access to some floor surface areas. Ceilings are approximately 12 meters high and supported by a framework of trusses. The machining area of the building is open (i.e. without inside walls or partitions).

DETERMINATION: DOE has determined that the proposed action would have no effect on any archaeological sites or relics or historic properties included or eligible for inclusion in the National Register of Historic Places. DOE requests your concurrence in this determination.

126361

PROJECT SUMMARY

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management, as a chief timekeeper for Bliss and ~~Lockland~~ Laughlin Steel, in a contaminated facility, located at 110 Hopkins Street, Buffalo, New York. This facility was contaminated with excess levels of uranium, as stated in the July 1992, memo issued by the DOE. It was determined that residual uranium was far above DOE guidelines. Please note that these exposure studies were based on a 40-hour workweek, whereas my father, being a salaried employee, typically worked 48 to 60 hours a week, including almost every Saturday. As such, the presumption of his exposure was far greater than most, if not all the mill workers that were there at the time, and considerably greater than the exposure assumption used in the dose reconstruction analysis. This is a mistake. It's stated in all reports my father's office consisted of two upright, permanent structured walls, and two portable, upright walls, approximately seven feet high. There was no permanent ceiling enclosing his office, only the mill roof. There was no separate controlled ventilation. He breathed the same contaminated air, and was exposed to the same occupational radiation as all other mill workers. However, his exposure was repeatedly compounded by his 48 to 60-hour workweek, not the dose reconstruction analysis figure of only 40 hours per week. Again, this

FINDINGS OF FACT

1. I filed a claim for survivor benefits on each filed claims for survivor benefits on 2

2.

3. had covered employment and worked at Bliss and Laughlin Steel in Buffalo, New York, from '36 to 72.

4. was diagnosed with squamous cell carcinoma of the lower lip. was diagnosed with adenocarcinoma of the rectum. The rectal cancer metastasized to the brain, lungs, peritoneal cavity, abdominal wall and liver.

5. The diagnosis of cancer was after began covered employment.

6. NIOSH reported annual dose estimates for the squamous cell carcinoma of the lower lip and adenocarcinoma of the rectum from the date of initial radiation exposure during covered employment, to the date of the cancers' first diagnoses. A summary and explanation of information and methods applied to produce these dose estimates, including involvement through interviews and review of the dose report, are documented in the "NIOSH Report of Dose Reconstruction under EEOICPA," dated 3/31/08.

7. The probability of causation value was less than 50%, and showed that the squamous cell carcinoma of the lower lip, adenocarcinoma of the rectum and adenocarcinoma of the transverse colon were not "at least as likely as not" related to employment at the covered facility. This calculation took into account the fact that there was more than one primary cancer.

CONCLUSIONS OF LAW

does not qualify as a covered employee with cancer under 42 U.S.C. § 7384l(9)(B), as he does not meet the requirements shown in 42 U.S.C. § 7384n(b).

The National Institute for Occupational Safety and Health performed dose reconstruction estimates in accordance with 42 U.S.C. § 7384n(d) and 42 C.F.R. § 82.10. The Department of Labor completed the Probability of Causation calculation in accordance with 42 U.S.C. § 7384n(c)(3) and 20 C.F.R. § 30.213, which references Subpart E of 42 C.F.R. Part 81. The calculation was based on

multiple primary cancer sites, and was completed in accordance with 42 C.F.R. § 81.25.

It is recommended that ..... claims for survivor benefits under the EEOICPA be denied as ..... does not fully qualify as a covered employee and, as ..... survivors, ... are thus not entitled to the compensation outlined under 42 U.S.C. § 7384s.