DOE F 1325.8 (12-84) 5023 11 18

United States Government Aerospace Department of Energy

memorandum

06,21,93

DATE: JUL 28 1986 CO.13-2 CO.13

REPLY TO ATTN OF: NE-23

SUBJECT: Commercial Facilities Used by National Lead Company of Ohio in Support of FMPC Operations

TO: Robert E. Lynch
Procuremnent and Contracts Division, AD-42
Oak Ridge Operations Office

The Division of Facility and Site Decommissioning Projects (DFSD) is responsible for managing the Department's Formerly Utilized Sites Remedial Action Program (FUSRAP). The purposes of FUSRAP are (1) to identify facilities formerly operated for or by the Manhattan Engineer District (MED) and Atomic Energy Commission (AEC) which may have been radioactively contaminated as a result of these operations, (2) to determine if the facilities require remedial action, and (3) where DOE has authority, to conduct the remedial action. Authority for remedial action under FUSRAP is derived from the Atomic Energy Act of 1954, as amended, and in some specific cases from congressional direction. The program is limited to only those sites that have been released from DOE control and for which no other DOE program or office has authority.

As part of this program, DFSD has identified 83 subcontractors and vendors that did work involving the processing or handling of radioactive material for the National Lead Company of Ohio (NLO) in support of the DOE Feed Materials Production Center (FMPC) located near Fernald, Ohio. NLO is a DOE prime contractor. The subcontracts and purchase orders referred to above were entered into under authority provided in NLO's contract with the AEC. The original AEC contract is now identified as DOE Contract No. AC05-76OR01156. It is my understanding that this contract is now terminated but has not been closed out.

When an active contract exists under which radiological characterization and any required remedial action can be accomplished, it is the Department's policy to conduct the necessary actions under that contract. In this regard, I am forwarding the attached material for your consideration and initiation of appropriate action to determine the need for and to conduct remedial action, if such is required to comply with the current radiological standards.

The initial information concerning NLO subcontractors and vendors that did work involving radioactive materials in support of the FMPC was provided by NLO in a letter dated October 12, 1976 (Enclosure 1). Subsequent record searches were conducted to identify additional sites that might have been used and to obtain the information necessary to determine the potential for residual radioactive contamination that might still be present on the properties where work under these subcontracts and purchase orders was carried out.

The findings derived from these record searches support our belief that there is a potential for contamination at several of the sites and that, with the few exceptions discussed below, there is liability under terms of the contract for action necessary to insure compliance with current radiological standards. In general, the findings that are the principal cause for concern are:

a. Widespread use of commercial subcontractor and vendor facilities by NLO to perform work involving the processing or handling of radioactive material was verified. In many instances, the work was performed by NLO personnel using subcontractor/vendor facilities and equipment.

b. Although an extensive health and safety program is indicated, very little radiological data is available to access the potential for residual radioactive contamination that might exceed today's standards.

c. Some of the radiological data that is available and information obtained from former AEC and NLO personnel indicate that, even though sites were decontaminated at the completion of operations, residual contamination would probably exceed current standards, particularly at those sites that performed extensive metal fabrication work with uranium and thorium metals.

A summary of major findings from records assembled to date is provided in Attachment 2.

Information on 65 of the 83 subcontractors and vendors referred to above is provided in Attachments 3 and 4. The remaining 18 were also AEC prime contractors considered under FUSRAP or were licensed by the AEC, thus under the jurisdiction of the Nuclear Regulatory Commission.

Attachment 3 provides a summary of the information assembled to date on 53 of the 65 subcontractors and vendors identified therein. Attachment 4 contains information on the 12 remaining sites identified in the NLO letter, Attachment 1, for which no additional information has been found relative to support of FMPC operations.

As indicated above, I am referring these formerly utilized sites for your consideration and appropriate action under the contract with the National Lead Company of Ohio in accordance with current Departmental policy. The documentation from which the information provided herewith was obtained will be made available upon request.

If you require additional assistance or would like to discuss the possibility of accomplishing the necessary radiological characterization and cleanup under FUSRAP, please contact me at FTS 233-4716.

NE-23
DeLaney
7/25/86

Edward G. DeLaney, Director
Division of Facility and Site
Decommissioning Projects
Office of Nuclear Energy

4 Attachments

cc:
Office of Defense Waste and
Transporation Management, DP-12
R. Berube, EH-24
D. Monti, EH-23

bcc:
Aerospace

NE-20 RF
NE-23 RF
DeLaney RF
NEG (4)

NE-23:EDeLaney:ph:353-4716:7/25/86:IBM:204/71:3.2.3.2

CONTRACT # AT(50-1)-1157

ENCLOSURE 1

NATIONAL LEAD COMPANY OF OHIO
A SUBSIDIARY OF NL INDUSTRIES, INC.

P. O. BOX 39158 CINCINNATI, OHIO 45239

PHONE: AREA CODE: 513-738-1151

OCT 12 1976 5844

Mr. H. D. Fletcher, Director
Uranium Enrichment Operations Division
Oak Ridge Operations Office
U. S. Energy Research & Development Adm.
P. O. Box E
Oak Ridge, Tennessee 37830

Dear Mr. Fletcher:

ERDA RESURVEY PROGRAM

Ref.: Letter, Fletcher to Audia, 9/27/76, same subject

Per your request, we have reviewed our contract files, in addition to other sources, for the names of companies who have performed work at our request. It does not include material shipped from here on a production order from the AEC or ERDA.

Identification as to type of agreement and type of work is listed. The dates are only guidelines and may not include every time material was processed.

Very small test samples (such as contaminated MgF_2) were sent out for possible sale to various companies. They are also excluded.

If you desire other information, please let us know.

Sincerely,

S. F. Audia
Manager

CEP/rhg

Attachment

cc: W. J. Adams
H. D. Fletcher
W. J. Grannen
L. M. Levy
R. C. Heatherton
C. E. Polson
Central Files

✓ sites already done by DOE

PROCESSORS OF RADIOACTIVE MATERIALS - WORK REQUESTED BY NLO

COMPANY NAME AT TIME OF REQUEST	LOCATION	APPROX. DATE	CODE
✓Allegheny-Ludlum Steel Corp. (4)	Watervliet, N. Y.	3/52	PM ✓
American Machine & Foundry (4)	Brooklyn, N. Y.	10/52, 7/53,	TM ✓
Landis Machine Tool Co. (2)	Waynesboro, Pa.	9/52	TM ✓
Bethlehem Steel Corp. (Lackawanna) (4)	Buffalo, N. Y.	2/52	PM ✓
Besley - Wells (2)	S. Beloit, Wisc.	5/53	TM ✓
Dorr Corp. (Door Oliver) (2)	Westpoint, Conn.	1/55	TO ✓
Oregon Bureau of Mines (3) is the same as U.S.	Albany, Oregon	10/54 - 6/55	PM ✓
Superior Steel Co. (2)	Carnegie, Pa.	12/55-1/57	PM
Atlas Steels, Ltd., (2)	Welland, Ont.	2/57, 11/57	TM ✓
Armour Research Foundation (1)	Chicago, Ill.	9/57	TO ✓
Albacraft Laboratories (1)	Oxford, Ohio	3/57	PM ✓
Chambersburg Engr. Co. (2)	Chambersburg, Pa.	3/57	TM ✓
Knoxville Iron Co. (1), (2)	Knoxville, Ky.	10/57 - 10/58	* ✓
Podbeilniac Corp. (2)	Chicago, Ill.	2/57	TC ✓
Associated Aircraft Tool & Mfg. Co. (1)	Hamilton, Ohio	2/56 - 3/57	PM ✓
Magnus Metals (1)	Cincinnati, Ohio	12/57, 3/58	TM ✓
Simonds Saw & Steel Co. (1)	Lockport, N. Y.	7/52 - 7/57	PM ✓
Watertown Arsenal (3)	Watertown, Mass.	11/57	TM ✓
Vitro Rare Metals Co. (1)	Cannonsburg, Pa.	8/54-8/56	PO
Ohio State University (1)	Columbus, Ohio	12/56, 5/59	TC ✓
Tube Reducing Corp. (2)	Wallington, N.J.	1/58	TM ✓
American Bearing Corp. (1)	Indianapolis, Ind.	7/58	TM ✓
Ajax-Magnethermic Corp. (2)	Youngstown, Ohio	10/58, 11/61	TM ✓
Westinghouse Electric (2)	Bloomfield, N. J.	5/58, 6/59	TM
Oregon Metallurgical Corp. (1)	Albany, Oregon	11/58	PM ✓

COMPANY NAME AT TIME OF REQUEST	LOCATION	APPROX. DATE	CODE
U. S. Steel, Nat'l Tube Div. (2)	McKeesport, Pa.	4/59, 2/60	TM ✓
Sutton, Steele and Steele (2)	Dallas, Texas	11/59	TM ✓
North Carolina State College (1)	Chapel Hill, N. C.	1958	TO
Hunter Douglas Plt. of Bridgeport Brass (2)	Riverside, Calif.	8/59	TM ✓
Bridgeport Brass Co. (4)	Adrian, Mich.	2/59	PM ✓
Petrolite Corp. (2)	St. Louis, Mo.	9/59	TOC ✓
Heald Machine Co. (2)	Worchester, Mass.	3/60, 5/60	TM ✓
Dubois Chem. (2)	Cincinnati, Ohio	5/60	TM ✓
Pioneer Division, Bendix Aviation (2)	Davenport, Iowa	6/60; 9/60	TC ✓
American Machine & Metals, Inc. (2)	E. Moline, Ill.	5/60	TO ✓
Stauffer Metals, Inc. (2)	Richmond, Calif.	4/61	TM ✓
Ithaca Gun Co. (2)	Ithaca, N. Y.	9/60, 8/61 11/61	TM ✓
.W. LeBlond Mach. Tool Co. (2)	Cincinnati, Ohio	11/61	TM ✓
merican Mfg. of Texas (2)	Ft. Worth, Tex.	7/61, 8/61, 8/62; 4/63	TM ✓
leason Works (2)	Rochester, N. Y.	10/61	TM ✓
ood Machinery & Chem. Corp. (2)	Nitro, W. Va.	1962	TOC ✓
liver Corp. (2)	Battlecreek, Mich.	4/62	TO ✓
attelle Memorial Inst. (4)	Columbus, Ohio	12/62	TM
itional Lead Co., Nuclear Division (2)	Albany, N.Y.	7/62	TM
iversity of Florida (1)	Gainesville, Fla.	10/63 - 11/69	TM
ncinnati Milling Machine (2)	Cincinnati, OHio	10/63	TM ✓
England Lime Co. (2)	Canaan, Conn.	6/63	TOC ✓
I. Hayes, Inc. (2)	Cranston, R. I.	1/64	TM ✓
arles Taylor & Sons (2)	Cincinnati, Ohio	8/64, 1/65	TO ✓

COMPANY NAME AT TIME OF REQUEST	LOCATION	APPROX. DATE	CODE
Southern Research Institute (1)	Birmingham, Ala.	12/64, 9/65	TM
University of Denver Research Institute (1)	Denver, Colo.	2/65	TM
New England Materials Lab., Inc. (2) (also called Teledyne Mat. Res.)	Medford, Mass.	1/65; 4/67	TM
Tocco Heat Treating Co. (2)	Cleveland, Ohio	4/67; 2/68	TM
Fenwal, Inc. (2)	Ashland, Mass.	5/67; 11/67	TC
Robbins & Myers Co. (2)	Springfield, Ohio	1975	TOC

CODE: P = PRODUCTION QUANTITITES

T = TEST QUANTITIES

C = CONTAMINATED MATERIAL (TBP, MgF_2, SLUDGE)

M = RADIOACTIVE METAL

O = OTHER THAN METAL (RADIOACTIVE)(UF_4, ThO_2)

* = CONTAMINATED SCRAP IRON

(1) = Sub-Contract

(2) = Purchase Order

(3) = Interagency Agreement

(4) = Prime AEC Contract

NLO SUBCONTRACTORS/VENDORS UNDER PRIME CONTRACT NO. AT(30-1)-1156 (Cont'd)

	SUBCONTRACTOR/VENDOR	PERIOD OF OPERATION	PROCUREMENT INSTRUMENT	RADIOACTIVE MATERIAL INVOLVED
8.	Petrolite Corporation St. Louis, MO	September 1959	Purchase Order	Test Quantities of Contaminated Material Other than Metal
9.	Robbins & Myers Company Springfield, OH	1975	Purchase Order	Test Quantities of Contaminated Material Other than Metal
10.	Charles Taylor & Sons Cincinnati, OH	August 1964 and January 1965	Purchase Order	Test Quantities of Contaminated Material Other than Metal
11.	University of Denver Research Institute Denver, CO	February 1965	Subcontract	Test Quantities of Metal
12.	University of Florida Gainesville, FL	October 1963 - November 1969	Subcontract	Test Quantities of Metal

NOTES: Periods of Operation are approximate.

(1) American Machine & Foundry was also a major DuPont subcontractor that did work in support of Savannah River Plant operations.

(2) The only documents found indicate NLO Health & Safety Division was involvement with a polonium spill at this firm.

(3) Documents found indicate that this firm operated under AEC Special Nuclear Material license during the period January 1958 through November 1962. Uranium metal containing 20% U-235 was authorized for use in the Corporation's Albany Plant for alloying uranium and zirconium metal.