

PA.18-1

MEMORANDUM

TO: FILE PA.18

DATE July, 9/1990

FROM: D. Tenney

SUBJECT: FUSRAP Considered Site Recommendation

Approved 7/25/90
W. A. [Signature]

SITE Babcock and Wilcox, Co.
NAME: Tubular Products Division

ALTERNATE NAME:

CITY: P.O. Box 401, Bensenville STATE: PA

OWNER(S)

Past: B&W Current: B&W
Owner contacted yes no; if yes, date contacted June 7, 1988

TYPE OF OPERATION

- Research & Development
- Production scale testing
- Pilot Scale
- Bench Scale Process
- Theoretical Studies
- Sample & Analysis
- Production
- Disposal/Storage

- Facility Type
- Manufacturing
- University
- Research Organization
- Government Sponsored Facility
- Other

TYPE OF CONTRACT

- Prime
- Subcontractor
- Purchase Order
- Request for quote
- Other information (i.e., cost + fixed fee, unit price, time & material, etc)
\$20⁰⁰ purchase of 3 sources (ORNL to B&W)

Contract/Purchase Order # N/A

CONTRACTING PERIOD: No evidence

OWNERSHIP:

	AEC/MED OWNED	AEC/MED LEASED	GOVT OWNED	GOVT LEASED	CONTRACTOR OWNED	CONTRACTOR LEASED
LANDS	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
BUILDINGS	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
EQUIPMENT	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
ORE OR RAW MATL	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
FINAL PRODUCT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
WASTE & RESIDUE	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

AEC studying fabrication of metal techniques to reduce soap reprocessing
Consider picking of pellets prior to extrusion to tubes

AEC/MED INVOLVEMENT AT SITE

Control

- AEC/MED managed operations
- AEC/MED responsible for accountability
- AEC/MED overviewed operations (?)
- Contractor had total control
- unknown

Health Physics Protection

- Little or None
- AEC/MED responsibility
- Contractor responsibility

MATERIALS HANDLED:

Type (on basis of records reviewed)

- No Radioactive
- Natural Radioactive from Feed Materials Production
 - Ore
 - Refined Source Material
 - Residue
- Natural Radioactive Material from Non-Nuclear Activities
- Man-Made
- Other

Comment No evidence that metal pellets were actual handled as proposed; one record indicates that 3 small sources containing gram quantities of Uranium + Thorium were transferred from ORNL to B+W in 1955. No evidence exists to if the material went to this location. B+W

Quantities (on the basis of records reviewed) had

- None
- Small Amounts
- Production Quantities

Comment 3 small sources — Metal fabrication never was conducted

ORNL + B+W sources: 1) 50 gm Th and 2 gm U, 2) 31 gm Thorium, and 3) 30 gm Th

OTHER PERTINENT FACTS:

- Facility was Licensed
 - During AEC/MED-Related Operations
 - For Similar Activities
 - For Other Activities

Comment AEC Source Material License C-3326 for small sources.

- Commercial Production Involving Radioactive Material during AEC/MED Operations
- Facility was Decontaminated and Released
 - Availability of Close Out Records
 - None
 - Some
 - Sufficient

Radioactive Status:

	YES	MAYBE	PROBABLY NOT	NOT
Contaminated Potential for Exposure (accessible)	---	---	---	X
	---	---	---	X

QUANTITY OF RECORDS AVAILABLE:

Very Little ~~Small~~ Some ^{2 historical} _{2 current} Sufficient

PROBABILITY OF FINDING ADDITIONAL RECORDS:

Low Possible High

RECOMMENDATIONS:

Eliminate
 Consider for Remedial Action
 Collect More Data

Comment In a Feb 1989 letter to DOE, BWS staff indicated that they had no records of radioactive material being processed. Supervisory personnel during the time period in question also stated that no radioactive material was handled by the extrusion department.

- REFERENCES: 1) Letter from Mallinckrodt Chemical Works to B&W Company dated April 19, 1955
2) AEC ~~Memorandum~~ letter to Carbide and Carbon Chemicals Co. of March 28, 1955
3) DOE letter (Fior) to V. Petruska of B&W Co. dated June 7, 1988
4) B&W letter (L. Zaczarczuk) to A. Wallis DOE dated February 24, 1989.

SUMMARY

Mallinckrodt held discussions with B&W in late 1955 and early 1956 to discuss development of metal firing (firing of bullets). No evidence exists to suggest that work was conducted. Company statements support that no such work was conducted. Also, 3 small plate sources containing approximately 110 gm of Th and 10 gm U were supplied to B&W by ORNL under an AEC source material license. Based on the company's statement, the small licensed quantities of ^{radioactive} material should be eliminated due to ~~the~~ no potential for contamination.

7/9/90

Input for Elimination from Consideration from FUSRAP

Site Name(s): Babcock and Wilcox, Tubular Products Div.
Location: Beaver Falls, PA

Owner: Babcock and Wilcox, Inc.
Address: P.O. Box 401, Beaver Falls, PA

Summary of MED/AEC Activity: Historical information indicates that discussions were held with Babcock and Wilcox in 1954 and 1955 concerning developmental work in the piercing of billets for extrusion to tubes for Mallinckrodt. No evidence exists to indicate that work was actually performed.

Quantity and Materials Handled: There is no evidence of uranium metal. (Babcock and Wilcox did receive a Source Material License C-3326 to possess title to three small clad sources containing approximately 110 grams of thorium and 2 grams of uranium).

Basis for Decision: Babcock and Wilcox has provided a statement, based upon recent conversations with supervisory personnel working in the extrusion department during the 1950's through the 1960's, that radioactive material was not processed at the facility. The Babcock and Wilcox statement supports the conclusion that no metal extrusion work was performed. Based on the available information, Babcock and Wilcox Tubular Products Division is eliminated from consideration under FUSRAP, since there is little or no potential for contamination.