

3871

OH.46-1

OH.46

MEMORANDUM

TO: FILE

DATE 12/9/87

FROM: A. Walls

SUBJECT: Elimination

SITE NAME: Metch and Merryweather

ALTERNATE NAME:

CITY: Cleveland STATE: OH

OWNER(S)

Past: Metch and Merryweather Current:
Owner contacted [] yes [x] no; if yes, data contacted

TYPE OF OPERATION

- [x] Research & Development
[] Facility Type
[] Production scale testing
[] Pilot Scale
[] Bench Scale Process
[] Theoretical Studies
[] Sample & Analysis
[x] Tests
[] Production
[] Disposal/Storage
[] Manufacturing
[] University
[] Research Organization
[] Government Sponsored Facility
[] Other

TYPE OF CONTRACT

- [] Prime
[] Subcontractor
[] Purchase Order
[] Other information (i.e., cost + fixed fee, unit price, time & material, etc)

Contract/Purchase Order #

CONTRACTING PERIOD: one day Jan. 1950

OWNERSHIP:

Table with 7 columns: AEC/MED OWNED, AEC/MED LEASED, GOVT OWNED, GOVT LEASED, CONTRACTOR OWNED, CONTRACTOR LEASED. Rows include LANDS, BUILDINGS, EQUIPMENT, ORE OR RAW MATL, FINAL PRODUCT, WASTE & RESIDUE.

One day of Testing on 18" of Uranium Billet

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 Natural Uranium metal

Quantities (on the basis of records reviewed)

- None
- Production Quantities
- Small Amounts

Comment 18 inch B. Het of Uranium

OTHER PERTINENT FACTS:

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

Comment _____

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
- Some
- Sufficient

PROBABILITY OF FINDING ADDITIONAL RECORDS:

- Low
- Possible
- High

RECOMMENDATIONS:

- Eliminate
- Consider for Remedial Action
- Collect More Data

Comment The operation involved only one uranium B.Het and was closely monitored by the Health and Safety division. No need for further FUSRAP investigations

REFERENCES:

one memo in OH-46
attached list

SUMMARY

The REC used this facility to test cold saw cutting of uranium. The operation was monitored by REC and the results indicate no potential for residual activity. The site is eliminated.

NOTCH AND MERRYWEATHER

HISTORICAL RECORDS

FILE#	DATE	FROM	TO	SUBJECT	SITES	REC. #
DH.46	01/13/50	BRESLIN, A.	HARRIS, W.	COLD SAW OPERATION AT NOTCH AND MERRYWEATHER	NOTCH AND MERRYWEATHER	1817

N.Y. 100
EML

OH. 46

Breslin:

W. B. Harris, Chief, Industrial Hygiene Branch,
Health and Safety Division
A. J. Breslin, Mechanical Engineer, Industrial Hygiene
Branch
COLD SAW OPERATION AT NOTCH AND KERRYWEATHER

January 13, 1950

REFER TO
SYMBOL: DR:AWB

On January 4, 1950 the writer accompanied Messrs. Stroke and Babcock of the Technical Advisors and Production Division respectively on a visit to Notch and Kerryweather whose engineers wished to test the practicability of cold sawing uranium billets. The presence of a Health and Safety Division representative was required to:

1. Insure that the tests were made in accordance with accepted H & S precautions.
2. Supervise the decontamination of the equipment used.
3. Evaluate the potential hazards involved in the operation with a view toward designing satisfactory ventilation control if necessary.

Eight samples were collected within 18 inches of the billet during actual cutting. All samples show a concentration of considerably less than the limit of detection of our counter technic. The samples were all reported as less than 10% of the permissible uranium limit (50/m³).

The reason for this extremely low concentration is suggested by an explanation of the operation. The cut is made with a circular saw with a 2 ft. diameter. Because the saw, which has very coarse teeth, cuts at a slow speed, 15 sfm, the chips produced are consistently large. There is no instantaneous chip oxidization which manifests itself in sparking in other cutting methods. Copious amounts of Masco coolant, a water soluble oil, are used to cool both the saw blade and the chips.

Thus it can be concluded that if this saw is used in our production plants under the same conditions as in this test, no ventilation control will be required.

Since there were no fine particles of metal produced, decontamination consisted of removing all visible chips from the machine. The saw was partially disassembled to facilitate cleaning. After superficially scraping the bulk of the chips from all surfaces, the machine was washed with a hose. Finally, a cloth was used to wipe off the exposed surfaces. Considerable time was required to seek out and remove all the chips. For this purpose a G.M. meter was used as a detector.

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W. B. Harris

January 13, 1950

A. J. Breslin

COLD GAS OPERATION AT DUTCH AND HERRYWEATHER

REFER TO

SYMBOL: RE:AJB

At the completion of cleaning, the machine was thoroughly checked with the G.M. meter. The meter registered less than twice background (less than 0.09 mrep) on all parts of the machine except a chip pan underneath. The level was less than three times background in that area (less than 0.15 mrep).

CC: F. Stroke, Technical Advisors
A. Babcock, Production

Division File