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C. O. P. Y.
UNITED STATES
ATOMIC ENERGY COMMISSION
SCHENECTADY, NEW YORK

ADDRESS ONLY TO:
THE MANAGER
GENERAL ATOMIC ENERGY COMMISSION
P. O. BOX 144
SCHENECTADY, NEW YORK
AND NEW YORK

TPM:CHM

April 10, 1952

General Electric Company
Knolls Atomic Power Laboratory
Scheneectady, New York

Attention: Mr. W. H. Milton, Jr.

Subject : AEC REQUIREMENTS FOR FABRICATION OF URANIUM
TUBING AT OUTSIDE VENDORS

Special Reports of
Final Examination
Unclassified

By: K. A. Walker
Date: 1950
P. F. Brown

Gentlemen:

There are given below the minimum security, accountability and health-safety regulations which this office feels must be complied with, by an outside vendor who undertakes fabrication of enriched uranium tubing for KAPL. Since there are alternate methods which would provide compliance with such regulations, the vendor should be advised that consideration will be given to methods other than those listed below. It is requested that Metals & Controls Company, Attleboro, Massachusetts, and Baker & Company, Newark, New Jersey, be advised of these regulations in order that reasonable cost estimates covering the fabrication of enriched uranium tubing can be prepared and submitted to KAPL at an early date.

SECURITY

1. All personnel associated with this project are required to have "Q" clearance.
2. All work is to be conducted in an exclusion area. A general description of an exclusion area is as follows:

A suitable area could be established by setting apart a separate area of a present structure or by utilizing a separate building. This area is required to be enclosed from floor to ceiling by a clearly defined perimeter, where walls, floors and roofs will serve as barriers. They should be constructed of transite, gypsum or equivalent material.

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- 9. All enriched uranium will be secured in the vault when not in use. (It is realized that there will be material holdup in machines.)
- 10. Classified documents will be stored in suitable repositories within the area.
- 11. No classified documents or material will be removed from the area without the authorization of a designated key person in the area.

Special Review
Final Determination
Unclassified

By: K. A. Walter
Date: 1980
P. E. Brown

ACCOUNTABILITY

- 1. Strict accountability control must be exercised by the vendor as directed by Schenectady Operations Office.
- 2. One key person is to be appointed Accountability Representative responsible for knowing the status of the uranium on hand and carrying out the accountability program.
- 3. Records consistent with good accounting practice must be maintained to the nearest milligram of specific lots of material from the time of receipt until it leaves the vendor's plant in a finished shape.
- 4. Tentatively the uranium is to be weighed before and after each operation in order to determine material holdup resulting from each operation. (Data to be obtained from the development program using normal uranium may negate the requirement to weigh before and after each operation.) This is important to accountability control and to prevent accumulation of amounts greater than 500 grams per cubic foot.
- 5. On the last day of each month the Accountability Representative will be required to prepare a material balance report giving the status of all material, including such items as total amount on hand broken down into unprocessed material, scrap (trimmings, holdup in machines), as well as shipments and receipts during the month. This report to be submitted to Schenectady Operations Office is to be on a gram basis.

HEALTH-SAFETY

- 1. All personnel who enter or work in the exclusion area should wear protective laboratory coats and work shoes or shoe covers; personnel handling uranium should wear gloves. No smoking or eating should be allowed in the area. Other normal safety precautions should be observed such as eye or respiratory protection when needed.

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