DSPd 2481

ChemRisk/Shonka Research Associates, Inc., Document Request Form

(This section to be completed by subcontractor requesting document)

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J. Lamb / 1034A

Requestor — Document Center (is requested to provide the following document)

Date of request 12/8/95 Expected receipt of document 1/8/95

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Signature

[redacted] [redacted]

THIS DOCUMENT CONSISTS OF 3 PAGES
No. 4 OF 6 COPIES. SERIES A

~~CDR-B-57504~~
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2481

INTER-COMPANY CORRESPONDENCE

(INSERT NAME) COMPANY CARBIDE AND CARBON CHEMICALS DIVISION Union Carbide and Carbon Corporation LOCATION Post Office Box P OAK RIDGE, TENN.

51-5790

TO LOCATION: Mr. R. B. Korsmeyer, K-1401

DATE: October 4, 1950

ANSWERING LETTER DATE

ATTENTION COPY TO: Messrs. S. Cromer K-25RC, S. H. Smiley, J. L. Waters, File (2)

PLANT ... REC. C-77133 FILE X-REF. X-REF.

SUBJECT: Layout Study For A New UF_6 Manufacturing Facility

KDD-256

This document has been approved for release to the public by: [signature] Technical Information Officer, Oak Ridge K-25 Site — Date 1/24/96

KDD 256 4 A

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The attached drawing (S-1421) summarizes the recent layout studies of a contemplated new facility to produce approximately 18,000 pounds of UF_6 per day (6 TU/D). Provisions are made for essentially unlimited future expansion of the plant.

Allocation of space is included for the following:

1. HF unloading, storage, vaporization, recovery, and recirculation.
2. Fluorine generation, purification, recirculation, and recovery.
3. Hydrogen generation, purification, and recirculation.
4. Electrolyte preparation and recovery, cell conditioning, and cell maintenance.
5. UO_3 storage and grinding.
6. UO_3 to UO_2 reduction in vibrating reactors, UO_2 to UF_4 hydrofluorination in vibrating reactors, and UF_4 to UF_6 fluorination in tower reactors.
7. Product removal facilities, including:
   a. Compressors and condensers for production of UF_6 of one assay.
   b. Six cold traps for removal of UF_6 of two different assays from purge gases (three of the traps to be installed during future expansion).
   c. Refrigeration equipment for the cold traps.
   d. A surge-relief tank for UF_6 equipment.
   e. Vaporizers for five different assays of UF_6 (a total of twelve vaporizers).
   f. Storage of UF_6 cylinders.

[redacted] UNCLASSIFIED Sam W. Wohlfort 10/11/94 [redacted] 10/24/94

Carbide and Carbon Chemicals Corporation Operating Contractor for the U.S. Atomic Energy Commission.

[redacted]

WCX-80 (1-50)

THIS FORM FOR INTER-COMPANY CORRESPONDENCE ONLY

[redacted]

[redacted]

To: Mr. R. B. Korsmeyer

October 4, 1950

8. Transformers, rectifiers, and load centers.

9. Central control room.

10. Offices, laboratories and locker rooms.

11. Overhead crane service where needed, and an indoor rail siding.

12. Ventilation equipment exhausting to stacks.

J. E. Moore

J. E. Moore

JEM:lkg

[redacted]