

DOCKE. NO. 70-820

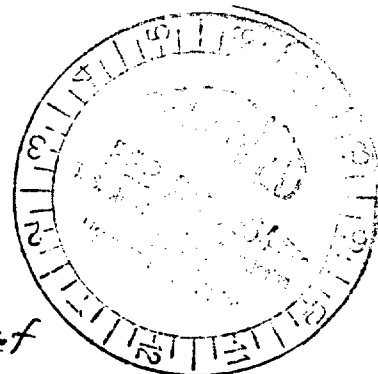
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13 pgs

Feb. 19¹⁹, 1964

Mr. Eber R. Price
Assistant Director
Division of Licensing & Regulation
U.S. Atomic Energy Commission
Washington 25, D.C.



Attention: Mr. Robert L. Layfield, Acting Chief
Source & Special Nuclear Material Branch
Division of Licensing & Regulation

Subject: Application for Source & Special Nuclear Material Licen.
for United Nuclear Corporations Scrap Plant Facilities
at Wood River Junction, Rhode Island

Gentlemen:

This is to supplement and revise our earlier letters on the above subject. Also included are confirmations of related agreements made in our discussions.

1. Revisions or additions will be made to the assay tank system to insure a maintenance of a minimum surface to surface distance of 24" between the tanks.

2. Sheet number A-706 is to be added to the list of drawings which we request withholding from public disclosure (reference: supplemental submission of Jan 31, 1964).

ACKNOWLEDGED

857

b-157

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3. Sketches RM-2, RM-3, RM-4, RM-5, RM-6 are to be added to the list of drawings which we request withholding from public disclosure. These sketches are in Nuclear Safety Calculations and Reference Sheets, Appendix 1A.

4. On Sheet No A-903. We are not going to install the two valves on the discharge line from Condenser I-E-1.

5. Section 302.2.7 Head Ends Calorimer.

Calorimer

after first sentence, insert: "The two trays are covered with loose fitting lids."

and at the end of the paragraph add: "The trays will be removed and any material remaining in the retort tube will be removed and put into the trays. This will complete the cycle of operation."

6. The following typographical corrections are to be made:

a) Nuclear Safety Calculations and Reference Sheets, p. 148; 3. b); change $< 12'$ to $> 12'$

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6. (cont.)

b) 302.6.1 general

Delete the word "normally" in the ~~2nd~~ ^{1st} sentence.

c) page 2 of section 700; last paragraph:

reference to 501.3 should be reference to 504.3

d) 302.2.4 Hood 1-L-9A

reference to 302.5.3 should be reference to 302.2.3

7. Page 13 of section 300; fourth paragraph should read: "The solution containing the dissolved U-Al alloy is air blown through Filter 1-F-24A (7 $\frac{1}{4}$ " x 7 $\frac{1}{4}$ " x 6") to the assay tank (1-D-34) for sampling and weighing".

8. On revised page 30 of section 300 (submitted of Feb 18, 1964):

Add to e) General:

5. Immediately after ~~shutdown~~ turning ^{steam} off in shut down, the drain valve from the shell side will be opened.

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9. Page 15 of Section 300

Cyclone 1-X-2

Add to last sentence of 2nd paragraph:
"but for additional safety this tank is more than 24" from the dissolver legs."

10. The equivalent feature ^{of item 9} is present in the lined dissolver

^{Incoming}
11. "Shipments of solid scrap will be visually inspected, sampled and analyzed; ~~this~~ ~~confirm~~ information thus gained will be compared against shipper's material transfer statements.

12. Page 1 of Section 700; BE Permit 1483

Delete: "or solutions"

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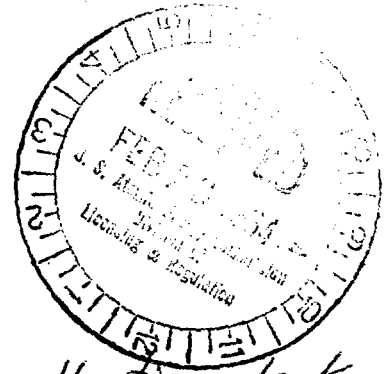
Also, see attached separate writeups of
additions, revisions and corrections

Yours truly,
W. J. Walker

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301

General Considerations
Conditions



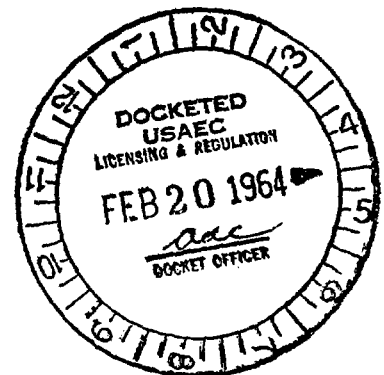
Add:

6. To prevent employees from collecting leaks and overflows of special nuclear materials in unsafe containers the following steps will be taken:

- a) Each new employee will be instructed not to use unsafe containers for such purposes
- b) Any containers such as waste paper, mop buckets, etc., used in the process area are limited to safe geometry or have holes such that a safe slab or volume is maintained.
- c) Special instructions are provided to the employees for cleanup.

Change:

3, c) weekly to monthly



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302.2.3 Hood 1-L-14

Add to the paragraph Ball Milling

The dummy ball mill will be painted red or otherwise distinctively marked for positive identification.

Also the 3rd sentence should be changed to read as follows: "For materials having a density greater than this a maximum of 2 mills spaced 1 foot from two other mills together will be used; in addition, a mass limit of 4 Kg U²³⁵ per ball mill will be maintained.

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304.10 Product Blending (Equipment Number 1-L-6,
1-M-1, 1-L-14, and 1-K-4; Sheet numbers A-705
and A-709)

Add to the second paragraph:

No water lines will be connected to glove
box 1-L-6 and other hydrogenous or moderating
materials will be excluded from glove box
1-L-6.

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501 RECEIVING AND STORING PROCEDURE

REPLACE THE LAST TWO SENTENCES OF THE SECOND PARAGRAPH WITH:

THE CONTAINERS ARE THEN TAKEN TO A PROPER STORAGE AREA WHERE THE ENTIRE SHIPMENT IS STORED EITHER:

- a) 12 FEET (OR A DISTANCE ACROSS AN ORTHOGRAPHIC PROJECTION OF EITHER AREA ON A PLANE PERPENDICULAR TO A LINE JOINING THEIR CENTERS WHICHEVER IS GREATER) FROM ANY OTHER SPECIAL NUCLEAR MATERIAL, OR
- b) SEPARATED FROM OTHER SPECIAL NUCLEAR MATERIAL BY AN 8" THICK ^{SOLID} CONCRETE WALL

INCOMING MATERIALS WILL NORMALLY BE STORED OUTSIDE IN THE AS RECEIVED CONTAINER. IN SOME CASES THE CONTAINERS MAY BE STORED INSIDE IN ACCORDANCE WITH THE CRITERIA FOR OUTSIDE STORAGE. IF THE MATERIAL IS REMOVED FROM THE CONTAINER IT WILL BE STORED IN AN APPROVED STORAGE LOCATION ACCORDING TO PROCEDURES DESCRIBED ELSEWHERE IN THIS APPLICATION.

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PARAGRAPH 504.2.1 ELEVEN LITER BOTTLE STORAGE RACK

ADD TO THE SECOND PARAGRAPH:

THE RACK WILL BE DESIGNED TO MINIMIZE
ANY ACCIDENTAL DISPLACEMENT OF THE RACK
OR BOTTLES IN STORAGE.

503.1 General

Delete from the second paragraph the words "and/or ~~from~~ by limited safe mass amounts in each container with limited safe array spacing."

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504.3 Equipment and nuclear safety, storage shelves
for Uranium Alloys Compounds or solutions

Change the maximum quantity of uranium
~~to~~ metal (or alloys) per container to 10
Kg U²³⁵.

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~~PAGE~~

701 SUMMARY LISTING

REPLACE THE LAST PARAGRAPH WITH THE
FOLLOWING:

SINGLE LAYER SHIPMENTS ARE SPECIFIED
FOR ALL OF THE ABOVE. "DO NOT DOUBLE
STACK" WILL BE STENCILED ON EACH OUTSIDE
CONTAINER. EXCEPT FOR EXCLUSIVE USE SHIPMENTS
CARRIER CERTIFICATION WILL BE OBTAINED FROM
EACH CARRIER ENROUTE THAT HE WILL NOT CO-MINGLE
ANY SHIPMENT WITH ANY OTHER SHIPMENT OF
RADIOACTIVE OR SPECIAL NUCLEAR MATERIAL. THIS
CERTIFICATION WILL INCLUDE HANDLING PROCEDURES
AT TRANSHIP POINTS.