

3pgs

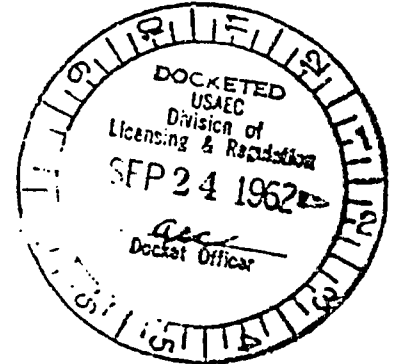
DOCKET 70-36  
**UNITED NUCLEAR**  
CORPORATION  
CHEMICALS DIVISION

*4/14*  
300 North Second Street  
St. Louis 7, Missouri  
Chestnut 1-4522  
PLANT

HEMATITE, MISSOURI

September 20, 1962

Mr. Donald A. Nussbaumer  
U. S. Atomic Energy Commission  
Div. of Licensing & Regulation  
Washington 25, D. C.



Subject: SNM33 - Storage of Uranium Compounds

Dear Mr. Nussbaumer:

We request modification of our license, SNM33, to permit storage of low enrichment (less than 6%  $U^{235}$ ), dry, uranium compounds in the following areas:

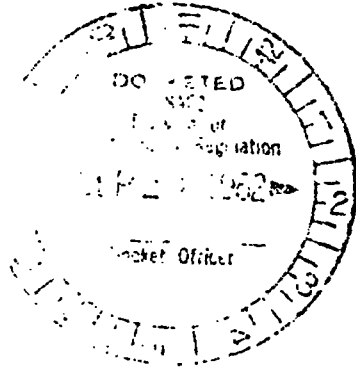
<u>Area</u>	<u>Number of Containers</u>
Bldg. 255-1 <i>R&amp;D Equipment</i>	75
Bldg. 255-2 <i>Cell Plant</i>	60
Bldg. 240-3 <i>Green</i>	15
Bldg. 240-4 <i>Blue</i>	20
Outdoors	250

The containers used for storage will be 5-gal. pails and 15-gal. clamp top drums, both equipped with sealing gaskets to prevent the entrance of moisture. No container will contain more than one limited safe mass as listed in Table XIV, K-1019 Revision Five. Containers will be stored in a single layer, square pitch array. 5-gal. pails will be stored not less than 1-1/2 feet apart, surface to surface, and 15-gal. drums will be stored not less than 2 feet apart, surface to surface. It is believed that this is a safe spacing for an infinite array since Table XII required only a two foot spacing for 30-gal. and 55-gal. drums containing not more than a single limited safe mass. Solid angle calculations show that an exposure of less than 2.4 steradians can be expected for 49 drums without including the partial shielding effect of drums in the array.

ACKNOWLEDGED



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The areas used for storage are shown on the attached drawing, sketch number 251-1-4.

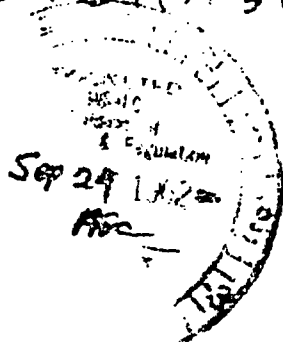
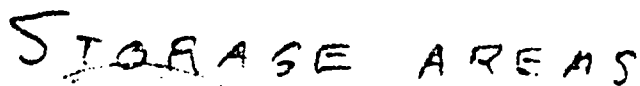
Outdoor storage is not contemplated on a routine basis, but rather to provide temporary storage when other locations are filled. When drums are stored outdoors, they will be covered with a polyethylene bag to protect them from moisture.

LJS/wt  
Enc.

*L. J. Swallow*  
L. J. Swallow EDN

ACKNOWLEDGED

DRUM STORAGE AREAS  
SKETCH No. 251-1-4



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