

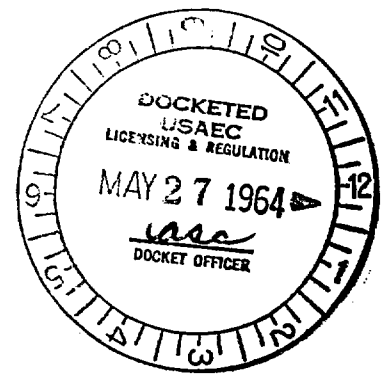
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THIS IS UNITED NUCLEAR DALLING MAY 26, 1964

MR DONALD A. NOOSBAUMER, CHIEF
SOURCE & SPECIAL NUCLEAR MATERIALS BRANCH
DIVISION OF LICENSING & REGULATION
UNITED STATES ATOMIC ENERGY COMMISSION
WASHINGTON, D. C.



UNITED NUCLEAR CORPORATION REQUESTS EXTENSION OF ITS LICENSES SNM-38, SNM-308 AND SNM-777 FOR ITS PLANTS AT HEMATITE, MISSOURI, NEW HAVEN, CONNECTICUT AND CHARLESTOWN, RHODE ISLAND, TO PERMIT SHIPMENT OF URANIUM-BEARING SOLUTIONS UNDER THE FOLLOWING CONDITIONS.

1. THE SOLUTIONS WILL INCLUDE PICKLE LIQUORS, ELUTRIATION SOLUTIONS, LABORATORY WASTES AND OTHER SOLUTIONS WITH U-235 CONCENTRATIONS LESS THAN 5 GRAMS PER LITER (OR)X LESS THAN 5200% PER 10 GPM, PART 71, PARAGRAPH 71.41 (B) AND TOTAL CONTENT LESS THAN 800 GRAMS U-235 PER DRUM.
2. THE URANIUM CONTENT WILL BE DETERMINED BY TAKING A COMPOSITE CHEMICAL SAMPLE OF SIX 55-GALLON CONTAINERS.
3. THE SOLUTIONS WILL BE PACKAGED FOR SHIPMENT AND STORAGE IN 55-GALLON POLYETHYLENE DRUMS INSERTED INTO 55-GALLON CAPACITY METAL DRUMS. THE POLYETHYLENE DRUM IS AN ICC 2S CONTAINER AND THE METAL DRUM IS AN ICC 3A CONTAINER. BUREAU OF EXPLOSIVES PERMIT NO. BA-93 IS CURRENTLY IN FORCE FOR THIS TYPE SHIPMENT.

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4. EVAPORATION OF THE LIQUIDS IS PRECLUDED SINCE THE POLYETHYLENE DRUMS ARE LIQUID TIGHT.
5. PRECIPITATION IN THE CASE OF PICKLE LIQUORS AND ELUTRIATION SOLUTIONS IS PRECLUDED DUE TO EXCESS ACID REMAINING IN THE PICKLE LIQUOR AND THE LOW CONCENTRATION OF THE MATERIAL PRESENT IN THE ELUTRIATION SOLUTIONS (ALL CONCENTRATIONS EXPERIENCED TO DATE WERE LESS THAN 2 GRAMS PER LITER).
6. SINCE PRECIPITATION IN LABORATORY WASTE DRUMS CANNOT BE ASSURED DUE TO THE VARIOUS QUANTITIES AND TYPES OF ANALYTICAL REAGENTS USED IN PROCESS THIS TYPE OF SOLUTION WILL BE LIMITED TO A CONCENTRATION OF NOT MORE THAN 2 GRAMS U-235 PER LITER OR 350 GRAMS PER CONTAINER, WHICHEVER IS LESS. IN ADDITION, 1 GRAM OF CADMIUM NITRATE WILL BE ADDED PER GRAM OF U-235 TO THE LABORATORY WASTE SOLUTIONS.
7. LICENSE AMENDMENT IS REQUESTED TO COVER UNLIMITED QUANTITE SHIPMENTS OF THE ABOVE BASIS.

HERBERT S. KALISH

COMMERCIAL FUEL MANAGER

FUELS DIVISION

UNITED NUCLEAR CORPORATION

NEW HAVEN, CONN

TIME 5-03 PM

CORRECTION FIRST PARG. FIRST LINE SHOULD BE LAST LINE

LAST LINE OF FIRST PARG. SHOULD BE LAST LINE LAST WORD FOLLOWING

TWX INCORPORATED