

DML:RDS  
70-820

OCT 12 1964

United Nuclear Corporation  
Fuels Division  
New Haven 4, Connecticut

Attention: Mr. John Lindberg  
Vice President

Gentlemen:

This refers to your application for amendment of License  
SNM-777 dated September 15, 1964, and to our discussions  
of the application on October 1, 1964. The application  
involves revisions of the General Information & Procedures  
Manual, Health Physics Manual, and Emergency Control Plan.

To aid in our review of this application, please furnish  
the information requested in the attachment to this letter.

Sincerely yours,

Donald A. Nussbaumer, Chief  
Source and Special Nuclear  
Materials Branch  
Division of Materials Licensing

Attachment

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*(withheld per AEC) (sent to PDR 10-15-64 per AEP)*

OFFICE ▶	CLuke, DML	DML	DML DN	<i>[Signature]</i> 10/9/64		
SURNAME ▶		RDSmith:jb	DNussbaumer 10/9/64			
DATE ▶						

C-52

1. In our meeting of October 1, we discussed the responsibility and authority of the various positions noted on the organization chart which you brought to the meeting. As you know, this chart differed in some respects from the one included in your application for license amendment. Please furnish a copy of the new chart and provide a clear statement of the responsibility and authority of each of the positions indicated on the chart. Please provide also the minimum qualifications for each of the positions on the chart.
2. Section 207.1 of your application for license amendment suggests that "significant" changes in existing equipment or procedures will be submitted to AEC for review and approval before such changes are made. We do not propose to require AEC approval of detailed plant operating procedures as a condition of your license. However, we do plan to require AEC approval of (1) significant changes in the process or in equipment, and (2) administrative (management) procedures for modification of either equipment or detailed plant operating procedures. We request that you define the term "significant", as used in your Section 207.1, and describe your administrative arrangements for control of all changes.
3. Please furnish a general description of your arrangements and objectives for the training of employees in nuclear safety, health physics and plant procedures prior to their working with special nuclear material. A system of continuous training and assessment of employee capability and performance was mentioned in the October 1 meeting. Please furnish a general description of this system.
4. Systems for labelling of portable containers and for control of movement and storage of special nuclear material were discussed during the October 1 meeting. Please state the criteria upon which these systems are based, the bases for these criteria, and supply a general description of these systems.
5. Describe the performance criteria of the equipment you will have available for conducting surveys to determine concentrations of airborne radioactivity and radiation levels and indicate the bases for these performance criteria.
6. Please describe your provisions for assuring that containers used for contaminated materials and equipment are adequate from the standpoint of avoiding criticality and from the standpoint of health physics control.
7. Please furnish the basis for those special cases you refer to in which glove boxes will not be operated under negative pressure.
8. The Emergency Control Plan as written contains both plans and procedures for dealing with emergencies. We suggest that the Emergency Control Plan be revised so that it represents a plan which states primary objectives and the means and capabilities for achieving these objectives. The details of implementing the plan should be covered in written procedures for the use of appropriate personnel and should not be made a part of the Emergency Control Plan submitted to AEC. However, the plan should indicate that specific written emergency procedures have been prepared. In revising the Emergency Control Plan, please indicate consideration given to the following:

- a. Training and orientation given to local fire departments and to the plant brigade in order to familiarize them with special precautions to be taken in fighting fires involving special nuclear material.
  - b. Arrangements made with nearby hospitals and ambulance services for care of injured persons.
  - c. The performance criteria of emergency equipment to be located at the Emergency Assembly Point, including the bases for such criteria.
  - d. The criteria for making a decision to re-enter the plant after an emergency evacuation and a criticality accident.
9. During our discussion on October 1, you indicated that extraordinary deterioration of Raschig rings had occurred after a short period of use. Please discuss your plans for coping with this problem.
  10. During our meeting on October 1, we discussed the possibility of uranium bearing solutions being accidentally transferred from the safe geometry 1-D-36 tank to an unsafe geometry vacuum tank. Please provide your plans for dealing with this possibility as well as other similar situations which may exist in the plant.
  11. Please provide the interaction criteria which you will follow in the placement of overflow and vent bottles in terms of proximity to process equipment.
  12. Please submit your criteria for the emergency storage of special nuclear material.
  13. With respect to the use of the pickle liquor adjustment tank (1-D-12), please provide the means by which you assure against accidental addition of materials other than pickle liquor to this tank.

In addition to the questions raised above, we wish to make the following observations:

1. Your Health Physics Manual mentions the use of respirators. Please note that allowance for use of the respirators must be approved in accordance with Section 20.103 of Part 20.
2. During our meeting of October 1, we discussed the possibility that organic materials when stored in the 11-liter plastic bottles may cause warping or softening of such bottles, thereby resulting in a change in the bottle dimensions.