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UNITED NUCLEAR CORPORATION (UNC), WOOD RIVER JUNCTION, RHODE ISLAND
ALL-PURPOSE HOOD (1-L-18) - DOCKET NO. 70-820, DECEMBER 17, 1964

SYMBOL: DML:RHO

UNC has submitted the subject license amendment application to permit reworking of residues, small scale pilot plant and other operations. The basic equipment in the hood are three 4 inch I.D. pyrex glass columns, centrifugal pump (<4.8 l), filter, and a hot plate. Portable containers will be safe volume equipment, such as 4 l beakers or filter assemblies. Air and ammonia lines permit the addition of either or both of these gases to the columns. A solution charge funnel mounted exterior to the hood is connected to the suction side of the pump. A recycle line has been connected to Tank 1-D-43 which in turn connects to the assay tanks. The safe spacing of equipment is based on solid angle calculations.

In order to continue our review of the subject license amendment application, we recommend the following be sent to the applicant:

- "1. It appears that a valve should be installed between the funnel and main inlet line to the pump to prevent uranium bearing solution from leaking through a column discharge valve to the floor and, also, to permit efficient operation of the centrifugal pump. Nuclear safety may or may not be involved in this misoperation.
- "2. Specify the minimum spacing the physical barriers will provide between Buchener funnels under the columns and between the hot plate and filter.
- "3. Specify the inside diameter of Tank 1-D-43."

bcc: R. L. Layfield
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