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To: W.N. Mobley
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NUCLEAR SAFETY LIMITS FOR THE POWDER
RECOVERY HOOD, ROOM 234, 234-5 BUILDING

Since the operation of the Powder Recovery Hood in Room 234 of the 234-5 Building involves the handling of plutonium compounds, it is necessary to establish allowable plutonium concentration limits to insure the nuclear safety aspects of the operation.

It is understood that no plutonium metal or plutonium compounds will be stored or processed in Room 234 with the exception of those processed and stored in the Powder Recovery Hood. With this supposition and using the principles and information set forth in GEH-13844, "Nuclear Safety of DP-West Operations", R.E. Schreiber to R.D. Baker, 9-9-48 and in HW-24514, "Critical Mass Studies of Plutonium Solutions", F.E. Krussi, et al, 5-19-52, in the analysis of the physical arrangement of the hood, the following batch size limitations are given.

The maximum allowable concentration in the Powder Recovery Hood including the reactor vessel shall be 2000 grams of plutonium in the form of powder and liquid solution provided that the amount of plutonium in liquid solution shall not exceed 400 grams.

Approved

W.J. Ozeroff
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MASTER

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