John: Here's your copy. One is in the Reading file.
Diane

File Containment Purge

ROUTING AND TRANSMITTAL SLIP Date 03/07/80

TO: (Name, office symbol, room number, building, Agency/Post)	Initials	Date
1. Richard H. Vollmer		
2.		
3.		
4.		
5.		

Action	File	Note and Return
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Coordination	Justify	

REMARKS

SUBJECT: SEAL INTEGRITY

Attached is the input I received from Herb Conrad on their evaluation of the seal integrity for containment. As you can see, the manpower effort put into this since early December has produced a paragraph which is worthless. I discussed with Herb Conrad the need to give us documentation as to the integrity of the seals.

DO NOT use this form as a RECORD of approvals, concurrences, disposals, clearances, and similar actions

FROM: (Name, org. symbol, Agency/Post)	Room No.—Bldg.
John T. Collins	TMI
	Phone No. 49-28976

5041-102

OPTIONAL FORM 41 (Rev. 7-76)
Prescribed by GSA
FPMR (41 CFR) 101-11.206

☆U.S. GPO: 1978—261-647/3310

Environmental Deterioration of Seal Materials

5.1 (5) In an attempt to quantify the effects of the containment environment on seal and gasket materials integrity the staff has consulted with experts in the field of radiation effects on polymeric and elastomeric materials at Sandia Laboratory, Albuerque and at Temple University. The greatest uncertainty as to the long term integrity of seal materials is the possible presence of aggressive species such as ozone and oxides of nitrogen in the containment atmosphere. If these are present, the integrity of the seals can not be assessed without conducting environmental tests on seal materials.

However, even in the case where ozone and oxides of nitrogen are assumed to not be present, the radiation levels approach the thresholds for damage to some seal materials based on existing data.

Therefore, the staff finds that the uncertainties involved in the consideration of the factors affecting seal integrity are such that seal deterioration must be considered as a potential pathway for uncontrolled releases to the environment.