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DISTRIBUTION: Docket No. 50-320 TMIPO R/F TMI Site R/F

BJSnyder LBarrett RWeller. **OLynch**

WTravers

MEMORANDUM FOR: Walt Pasciak, Leader

Radiological Impact Section Radiological Assessment Branch

Division of Systems Integration, NRR

FROM:

Rick Weller. Leader Safety Review Section TMI Program Office, NRR

SUBJECT:

RADIOLOGICAL ASSESSMENT OF TMI-2 PROCESSED WATER

DISPOSITION ALTERNATIVES

Per our meeting on 2/4/82 I am requesting your assistance in determining the potential radiological impacts associated with several alternatives for TMI-2 processed water disposition. Specifically, I am interested in obtaining estimates of population and maximum individual doses resulting from various disposal alternatives as input to our ongoing evaluations of this important issue.

A preliminary outline of alternatives being considered in a technical assistance contract with Waste Management Group, Inc. (WMG) is attached for your information. I have circled those alternatives for which assistance from your section is requested. Although not included here, I also expect to include approximately two accident scenarios for your evaluation.

I will begin forwarding information, including source terms, as I receive it from WMG (expected 4 - 6 weeks). Consistent with our agreement we will expect (barring unanticipated problems) your input within two weeks of our forwarding the required source term information.

Thank you again for your assistance in this effort. Bill Travers and I will be your contacts on this subject.

> Rick Weller, Leader Safety Review Section TMI Program Office, NRR

Enclosure: As stated

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DATE 2/10/82 2/10/82	

NRC FORM 318 (10/80) NRCM 0240

OFFICIAL RECORD COPY

Reuse/Recycle* Reuse at TMI-2** - ELECTROUSIS LIVE MITTERWANIE Reuse at TMI-1 Reuse at Other PWR's** c. Reuse at DOE Facilities** d. Long Term On-Site Storage*. 2. Bulk Liquid Storage ✓ Cement Slab Storage 3. Treatment CECE Process** ' bf. Distillation Process** Controlled Discharge to the Susquehanna River 4. Controlled High Volume Release Controlled Annual Releases Ocean Disposal 5. Bulk Liquid Release** Packaged Solid Disposal Forced Evaporation 6. Open Cycle Evaporation at TMI-2 Open Cycle Evaporation at Off-Site Facility TMI Cooling Tower Evaporation 7. Pond Evaporation / On-Site Ponds Off-Site Pond (Nevada Test Site) Near Surface Land Disposal / 8. Land Burial at Commercial Sites Land Burial at DOE Site (Hanford) Liquid Dispersal in Cribs (Hanford) c. Land Spraying (Nevada Test Site) Deep Land Disposal 9. Deep Well Injection at TMI Site** Commercial Deep Well Injection (Off-Site) b.

Deferral as opposed to disposal options.

Hydrofracturing at ORNL**

High Altitude Release to Atmosphere**

c.

d.

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DOE Facility Deep Well Injection (NTS or INEL)