

WATER POLLUTION CONTROL BUREAU

STATE OF NEW MEXICO

ENVIRONMENTAL IMPROVEMENT DIVISION

P.O. Box 968, Santa Fe, New Mexico 87503

(505) 827-5271

Thomas E. Baca, M.P.H., Director

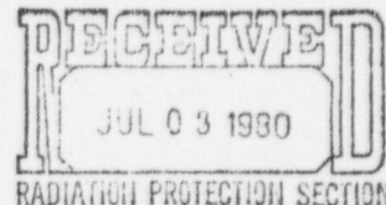
Bruce King  
GOVERNOR

George S. Goldstein, Ph.D.  
SECRETARY

Larry J. Gordon, M.S., M.P.H.  
DEPUTY SECRETARY

7/3/80

July 1, 1980



Mr. Robert E. Bohm  
Project Manager  
Gulf Mineral Resources  
Mt. Taylor Project-Mill  
1720 S. Bellaire St.  
Denver, Colorado 80222

Dear Mr. Bohm:

Pursuant to Karen Rasmussen's request that I follow up in writing our telephone conversations of June 30, 1980, the following is submitted.

As I indicated to you on the telephone, members of my staff as well as consultants employed by this Division do not feel that the issues regarding joints and fractures in the proposed tailings area have been adequately resolved at this time. One possible solution to this problem would be for Gulf to perform inclined drilling at the site. However, you have indicated that due to management decisions and time constraints you would find it very difficult to perform these types of investigations at this time.

I therefore suggested to you that you consider committing, in your discharge plan, to lining with an impermeable membrane an area that would contain at least the volume of fluid accumulated during the first five year period which would be covered by a discharge plan approval. As I indicated to you, such a commitment would satisfy the present concerns that we have regarding the joints and fractures issue.

If you were to receive an approved discharge plan and radioactive material license, it is my understanding that there would be at least a 24-month mill construction period. During this construction period Gulf could, if it chose, perform additional tests to demonstrate that seepage due to joints would not be a problem. Gulf would then be in a position to petition the Division for a modification of the discharge plan in accordance with Section 3-109.F. of the regulations to delete the synthetic liner and go back to a commitment to a clay liner. After public notice of that proposed modification and opportunity for public hearing on that one issue, and upon successful demonstration by Gulf that the synthetic membrane liner is not necessary to protect ground water quality, the Division could approve the proposed amendment.

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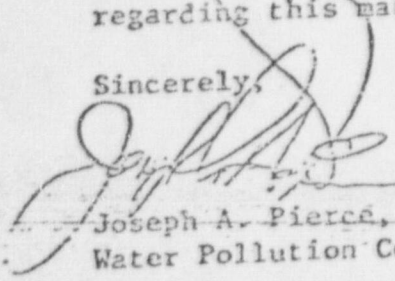
If Gulf chooses to pursue this suggested alternative, I recommend that the following information regarding a synthetic liner be provided along with the commitment.

Synthetic Liner Details Needed:

1. Type and thickness of proposed liner.
2. Total acreage of lined area.
3. Plan view drawing showing location of lined area and monitoring wells.
4. Typical design drawings to include generalized cross sections and installation details. Details should be provided on how the liner would be secured around the liner perimeter.
5. A statement describing the chemical compatibility of the waste fluid and liner material.
6. Description of installation methodology, and quality assurance and inspection procedures.
7. Details of shallow monitoring system to include well construction (e.g. bore hole depth, type and diameter of casing proposed, etc.), well spacing, monitoring technique (e.g. neutron logging), monitoring frequency.

If after reviewing this correspondence, you find that you have further questions regarding this matter, please do not hesitate to contact me.

Sincerely,



Joseph A. Pierce, Chief  
Water Pollution Control Bureau

JAP:fmg