

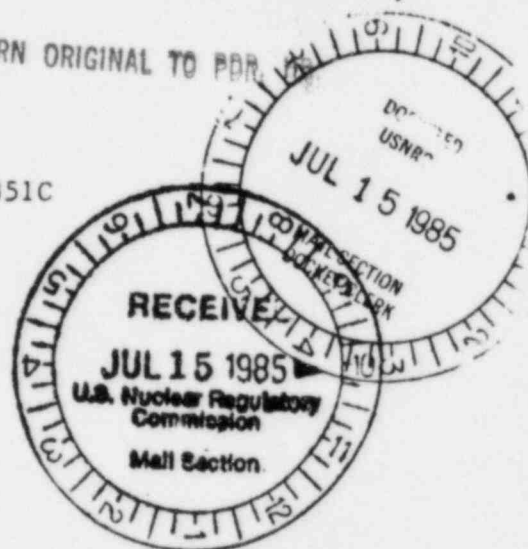
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MEMORANDUM

TO FILE: Getty Petrotomics, Permit Nos. 342 and 351C
FROM: Susan Hogg, Hydrologist *SH*
DATE: July 1, 1985
SUBJECT: Hydrologic Monitoring Data
CHECKED BY: *W&K*

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Introduction

The NRC has requested LQD review of a revised groundwater monitoring plan for the tailings reservoir at the Getty Petrotomics Uranium Mining and Milling operation in the Shirley Basin. Upon initiation of this review, however, it became apparent that the LQD does not have in its files any hydrologic monitoring data at all from the Petrotomics permits. This memo discusses the situation and outlines the data required to bring the Petrotomics permits up to speed from a hydrologic viewpoint.

Discussion

Although Petrotomics has apparently been collecting hydrologic monitoring data, none of this data has ever been submitted to this office for review. Before any decisions can be made regarding a revised monitoring plan, it is necessary to review this data and evaluate the current situation at the Petrotomics mine. The following describes what I believe the monitoring requests are:

1. According to the original permit issued in 1978, the following sites were required to be monitored:

Groundwater:

Wells No. 373, 2205, 31943 -

All monitored for potentiometric head (water level) semi-annually.

Wells No. 2205, 31943 -

Monitored for all Guideline No. 4 (old Guideline) parameters for the first 2 samples and then Ra226, U3O8, NH3, Conductivity, Temperature, pH.

Surface Water:

Dump settling reservoir outlet (Sand Draw)

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Monitored for all Guideline No. 4 (old Guideline) parameters for first 2 years, then pH, conductivity, and Total Suspended Solids, on an annual basis.

2. The 1984 Annual Report indicates the following environmental monitoring sites:

Groundwater:

Well No. SW-2205
AC-1
CW
UW46559
4-SC
40-SC
41-SC
Domestic Well 3945

Plus: NRC Well RTH4
NRC Well RTH5
NRC Well RTH2

Surface Water:

Sand Draw
Heward Reservoir 8340
Moss Agate Reservoir 8341

3. Tailings Reservoir Monitoring Wells

These wells were apparently installed at the NRC's request to monitor seepage from the tailings reservoir. LQD has data for 1980 on these wells. The data are contained in the report "Preliminary Report on the Evaluation of the Ground-Water Hydrology in the Vicinity of Petrotomics' Tailings Reservoir Shirley Basin, Wyoming" by Hydro-Engineering, 1981". LQD received this document from NRC, June 14, 1985. The following wells have apparently been monitored in connection with the seepage monitoring:

Well No.: 1-SC
2-SC
3-SC
*4-SC
5-SC
8-SC
39-SC
*40-SC
*41-SC
42-SC
43-SC
44-SC
45-SC
*1-AC
1-DC

*Presumably, these are the same wells listed under the Annual Report Environmental monitoring sites discussed above.

MEMORANDUM

July 1, 1985

Page 3

No information is available in the LQD files concerning completion details of any of the above wells except for that contained in the 1981 Hydro-Engineering Report.

Recommendation and Conclusions

I recommend that monitoring data for both surface and groundwater sites be obtained from Petrotonics as soon as possible. Both quantity (water levels for wells) and quality data should be submitted for all of the above listed monitoring sites from 1980 on. Following receipt and review of the data, an assessment will be made of the current hydrologic situation at Petrotonics. At that point, a revised/updated groundwater monitoring plan will be able to be developed in conjunction with the NRC.

SH:jls

cc: Roy Spears
Cindy Bosco
Kathy Ogle
Bill Kearney
Tim Richmond