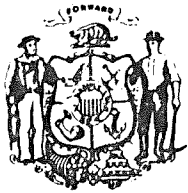


RIC



State of Wisconsin

DEPARTMENT OF NATURAL RESOURCES

Carroll D. Besadny
Secretary

BOX 7921
MADISON, WISCONSIN 53707

May 30, 1985

IN REPLY REFER TO:

Mr. George L. Bain
Hatcher Inc.
9025 Forest Hill Avenue
P.O. Box 3527
Richmond, Virginia 23235

Dear Mr. Bain:

Terry Evanson and I have reviewed your changes to the Freeman Chemical Company groundwater monitoring program outlined in your letter of March 27 and May 1, 1985. We agree that the following changes and improvements are acceptable.

1. Monitoring wells 7 and 10 will not be sampled in the future. These are the deeper wells of the piezometer nest 7/8 and 10/11. Should contamination show up in the shallower wells of the set, the deeper wells will be sampled. However, it maybe useful to monitor water levels in these wells to contribute to the determination of the vertical gradients.
2. Restricting future measurements in the piezometer nest 2/3 to the shallow well PZ-3 is acceptable. Since PZ-2 is screened in both the Niagara dolomite and the glacial drift, the portion of the aquifer being measured is in question. It maybe more useful to abandon PZ-2 and place a new well screen entirely in the dolomite.
3. It makes sense not to monitor Well 15 since it is dry most of the time.
4. Private Well #1 need not be monitored as long as PZ-16 shows no detectable levels of contamination.
5. We believe monitoring PZ-6 is more useful than PZ-9 since PZ-6 is a perimeter well between the Freeman facility and the Laubenstein well and contains higher levels of contamination. PZ-9 is the center well that I understand has algal growth in it. In your May 1 letter, you agreed to make the switch.
6. It is important to test for all primary pollutant volatile organic chemicals in the monitoring wells since biodegradation can change material originally discharged into a new product. For example, perchloroethylene can be degraded under anaerobic conditions to trichloroethylene, dichloroethylene and vinyl chloride. I understand that all samples are scanned for VOCs (plus xylene and styrene) and those detected are quantified.

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MADISON, WISCONSIN

Mr. George L. Bain - May 30, 1985

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7. It may not be possible to find any definable contaminant plume through EM measurements at the previous dump grounds to the southwest of the plant site and across the railroad tracks. However, if contamination is detected it may help considerably. One piezometer is most useful at this point.
8. The latest groundwater monitoring data I have is dated 7/31/84. If you have more recent data, please send it to me.

The Department's reply to the proposed remedial actions presented in the summary report of January 11, 1985 will be forthcoming. The complexity of the review has delayed the development of the complete reply.

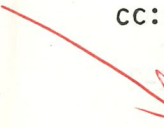
Thank you for keeping the Department informed of your progress at Saukville. If you have any questions regarding this program, please call me at (608) 266-7017.

Sincerely,
Bureau of Solid Waste Management



Kenneth A. Satyshur, Ph.D., Chemist
Hazardous Waste Management Section

KAS:cn

cc: Russell Cerk - V.P., Freeman Chemical
Ronald Horn - Freeman Chemical
Richard Thompson - V.P., Waters Instruments Inc.
 **Roger Klett** - SED
Mark Giesfeldt - SW/3

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