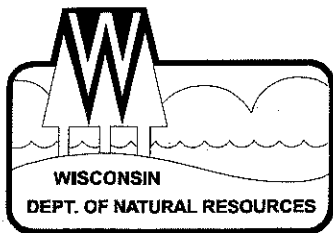


FILE



State of Wisconsin \ DEPARTMENT OF NATURAL RESOURCES

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May 17, 2000

Ms. Jana Murphy  
Flambeau Mining Company  
N4100 Highway 27  
Ladysmith, WI 54848

Dear Ms. Murphy:

This letter is to clarify the Department's interpretation of the groundwater quality standards applied to the Flambeau Mining Company project site pursuant to the mining permit issued to Flambeau. The Department and Flambeau Mining Company have had a number of discussions over the past several years concerning the appropriateness of the standards specified in the permit. This letter will summarize the issue and present my understanding of its current status.

Shortly after initiation of construction activities at the Flambeau Mine it was pointed out that background groundwater quality for some parameters in a number of monitoring wells exceeded the standards established in the mining permit. Subsequently, on August 17, 1994, Flambeau Mining Company submitted a letter to the Department relating to the issue of the groundwater standards that apply to the Flambeau mining site. In that letter Flambeau suggested that new standards be established for iron and manganese and that alternative concentration limits be specified for iron, manganese and total dissolved solids at certain monitoring wells.

The Department does not agree that the standards for iron and manganese need to be revised as suggested in the August 17, 1994 letter. This is the case because we do not believe it is appropriate to include the data from monitoring well MW-1005 in the calculation of baseline conditions for the site. The water quality measured in MW-1005 is clearly anomalous and inclusion of that well skews the designation of baseline water quality for the remainder of the site and hence would inappropriately influence the designation of an alternate groundwater standard. We understand that Flambeau generally agrees with the Department's conclusion. However, we also acknowledge that Flambeau believes a more rigorous statistical analysis of the baseline levels of iron and manganese would be a better approach to establishment of groundwater standards for those parameters rather than the approach used in support of the mining permit.

Given the above discussion, I would like to restate the Department's interpretation of the groundwater standards specified in the mining permit and the applicability of various provisions in Chapter NR 182 concerning application of the groundwater standards. First, if the mean background concentration of a parameter exceeded the secondary standard for that parameter, the groundwater standard applicable at the compliance boundary shall be the mean background concentration. This is reflected in the mining permit through designation of site-specific standards for manganese. Second, if the background or baseline concentration of a parameter at a given monitoring location exceeded the standard for that parameter, that

background concentration shall serve as the base level against which future concentrations measured at that monitoring point are compared for determining statistical significance as required in Ch. NR 182. In other words, if the background concentrations at a specific monitoring well exceeded the specified standard, that fact will be taken into consideration when evaluating the significance of future monitoring results that may indicate an exceedance of the project's groundwater standards at that location.

As indicated above, in its August 17, 1994 letter to the Department, Flambeau suggested that alternative concentration limits be designated for certain parameters at a number of monitoring wells. The proposed alternative concentration limits were summarized in Table 2 of that letter. The Department agrees with the alternative concentration limits suggested for monitoring wells, MW-1002, MW-1004, MW-1004P, MW-1005, and MW-1005S. However, we do not believe that the alternative concentration limits suggested for monitoring wells MW-1000R and MW-1000P are necessary and we feel that the proposed alternative concentration limit for iron at well MW-1005P should not have included the clearly anomalous value from August 1990. By your letter of April 25, 2000, a revised alternative concentration limit for well MW-1005P was proposed and the Department concurs with that recalculated limit. Therefore, for the six monitoring wells (MW-1002, MW-1004, MW-1004P, MW-1005, MW-1005S and MW-1005P) specified above, evaluation of groundwater monitoring results, including determination of statistical significance and the need for implementation of portions of the contingency plan, should be conducted in the context of these alternative concentration limits in addition to the groundwater standards delineated in the mining permit. The alternative concentration limits for the six wells are summarized in the following table.

Flambeau Mine - Alternative Concentration Limits for Groundwater Monitoring (mg/L)

Monitoring well	Iron	Manganese	TDS
MW-1002		0.21	
MW-1004		0.28	1,234
MW-1004P	0.60		
MW-1005	27.6	1.31	1,000
MW-1005S	4.88	0.32	
MW-1005P	1.4		

Please feel free to contact me if you have any questions or need additional clarification concerning this matter.

Sincerely,



Lawrence J. Lynch, P.G., Mining Team Leader  
Bureau of Waste Management

LJL:pc

cc: J. Sevick - Foth & Van Dyke  
Ken Markart - NOR (Rhineland)