

Exhibit 14

Excerpt from October 12, 2000 memo from Foth & Van Dyke to FMC

(See Appendix A of the 2000 FMC Annual Report for the memo in its entirety)

Foth & Van Dyke/SRK Consulting Memorandum

October 12, 2000

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Master File

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RE: Flambeau Project --Backfilled Pit Water Quality Assessment

1. Overview

Backfilling of the Flambeau pit was completed in the fall of 1997. Since that time, groundwater elevation and quality in and around the backfilled pit, and surface water quality data in the Flambeau River, have been collected. This memorandum consists of an evaluation of the data obtained since the pit was backfilled to assess the current and future performance of the reclaimed mine site with respect to compliance with groundwater quality permit standards and the protection of water quality in the Flambeau River.

As part of the permitting effort for the Flambeau Project, assessments were completed to determine if the reclaimed site would:

- ♦ comply with permitted groundwater quality standards at the compliance boundary; and
- ♦ protect surface water quality in the Flambeau River.

The original assessment, which was based on predicted post-mining hydrologic conditions, concluded that the Flambeau River would act as a hydrologic boundary for pore water migrating from the pit backfill and that backfill pore water would not migrate to the downgradient compliance boundary. In addition, the original analysis showed that the flux of backfill pore water into the river would be so small relative to the flow in the river that surface water quality would not experience a measurable change. This memorandum concludes that recent environmental monitoring data from the reclaimed site remain consistent with the original analysis.

Trends in the data collected through April 2000 for the backfill pore water indicate that the pH, alkalinity, and major element chemistry are stable, with possible slight increases in pH.

Calculations of dissipation times confirm that the carbon dioxide levels in the backfill are stable, and will change only over hundreds of years. Given the stable pH, alkalinity, and major ion chemistry, future increases in iron and manganese concentrations are unlikely. However, trends in redox potential cannot be discerned yet, because results from only one round of measurements are available. Increases in iron concentrations would be expected if redox potential decreases.

Data collected in April 2000 from monitoring of the pit backfill shows that carbon dioxide and alkalinity measurements are closely correlated, and that alkalinity measurements are more repeatable. Although measured CO₂ concentrations are well above atmospheric levels, they overlap the range of natural soil and groundwaters elsewhere.

Analysis of the data collected through April 2000 shows that backfill pore water is in equilibrium with calcite and gypsum, indicating that complete neutralization of the acidity originally present in the backfilled material has occurred. Iron and manganese concentrations in the backfill pore water are above those predicted by the 1997 geochemical modeling. The combination of higher than expected redox potential and higher than expected carbon dioxide may be responsible for the elevated iron concentrations. Slow equilibration of manganese, or formation of a carbonate solid-solution phase (rather than a pure manganese-carbonate like rhodochrosite), may be responsible for the elevated manganese concentrations.

Finally, the memorandum concludes that, with the exception of two minor items, monitoring of groundwater within and around the backfilled pit should continue to be performed in accordance with the program contained in the project's approved monitoring plan (Foth & Van Dyke, 1991). Also, an annual review of the data should be included in the project's annual report to determine if conditions affecting the conclusions reached in this memorandum remain consistent. As additional data are collected and the continuation of stable conditions is documented; per the approved monitoring plan, consideration can be given to reducing the frequency of monitoring within the backfilled pit.

Overall, the water level trends indicate that the groundwater system is recovering and that the groundwater flow system is equilibrating to a condition that is similar to the pre-mining condition. The data collected to date also indicate that, as predicted at the time of permitting, pore water from the pit backfill is migrating toward the river. This conclusion is supported by the groundwater quality data collected from monitoring wells that surround the pit (Flambeau, 2000).

Groundwater elevation and quality data will continue to be collected in and around the backfilled pit in accordance with the project's monitoring plan. As the groundwater system recovers, the groundwater elevation and quality data will be evaluated to assess long term patterns of migration from the pit backfill.

Trend graphs of groundwater quality provided in Flambeau (2000) were also reviewed for this assessment. With the exception of well MW-1000PR, none of the wells show a noticeable increase in constituent concentrations relative to historical trends. MW-1000PR does show an increase in conductivity, alkalinity, hardness, iron, manganese, sulfate, and total dissolved solids. This increase is consistent with the original conceptual model developed at the time of permitting. Well MW-1000PR is screened within a weathered and highly fractured schist with disseminated pyrite that forms a strong hydraulic connection to the backfill. As the system has recovered, pore water has begun migrating through this fracture zone from the backfill toward the Flambeau River and well MW-1000PR. As such, this well is expected to yield water quality data and trends that are in fact similar to the backfill pore water quality discussed in Sections 3 and 4 above.

Surface water quality trends for the Flambeau River presented in Flambeau (2000) for sampling points SW-1 and SW-2, which are located upstream and downstream, respectively, of the backfilled pit, were also reviewed. The surface water quality trends show no change in water quality relative to historical trends. This data supports the original conceptual model (Foth & Van Dyke, 1989) that the small amount of pore water predicted to discharge into the Flambeau River will not affect water quality in the river.

As the groundwater system fully recovers, the gradient between the backfilled pit and river will increase, leading to a greater flux of pore water to the river. To assess this future condition, the volumetric flux from the backfill under completely recovered conditions has been calculated using Darcy's law. Using post-mining steady-state predictive results from the regional groundwater flow model (Engineering Technologies Associates, 1998), the following parameters were used in the Darcy calculation:

- ♦ the permeability (K) of the backfill is 0.028 ft/d;
- ♦ the hydraulic gradient (I) between the western end of the pit and the Flambeau River is 0.03 ft/ft; and
- ♦ the cross-sectional area (A) is equal to the approximate pit width (w) of 650 ft and thickness of the upper Precambrian aquifer (b) of 100 ft.

Based on these parameter values, the flux of pore water ($Q = K \cdot I \cdot A$) to the river was calculated to be 64.6 cubic feet per day (cfd), or 6.3×10^{-4} cubic feet per second (cfs). The average flow in the Flambeau River is 1,749 cfs. The 10-year, 7-day low flow in the Flambeau River is 412 cfs. Given these flow values, the concentration reduction factor for mixing the pore water with the flow in the river is arrived at by dividing the pore water flux by the flow in the river, and ranges from 0.0000015 under low flow conditions to 0.0000037 under average flow conditions. The incremental increases in solute concentrations in the river due to the pore water flux can then be estimated by multiplying the concentration reduction factor by the pore water concentration.

Using the April 2000 highest measured pore water concentrations at well nests MW-1013 and MW-1014, or monitoring well MW-1000PR, the range of the incremental increase in the river under fully recovered groundwater conditions are as shown in Table 8.

Based on the surface water quality trends presented in Flambeau, 2000, the background copper concentration in the Flambeau River is on the order of 0.004 mg/L. The potential increase in copper concentration is orders of magnitude below existing conditions, and would be immeasurable. Background concentrations for iron, manganese, and sulfate are provided in the project's *Environmental Impact Report* (Foth & Van Dyke, 1989a). The background concentration of iron in the Flambeau River ranged between 0.16 mg/L and 0.54 mg/L. The potential increase in iron concentration is orders of magnitude below this range, and would be immeasurable. Likewise for manganese, the background concentration ranged from <0.05 mg/L to 0.08 mg/L. The potential increase in manganese is several orders of magnitude below background, and would be immeasurable. Finally, with respect to sulfate, the background concentrations ranged between <5 mg/L and 15 mg/L. Again, the potential increase in sulfate is orders of magnitude below background and would be immeasurable.

In summary, the potential for backfill pore water to impact water quality in the Flambeau River is virtually non-existent because the potential incremental increases are orders of magnitude below background. Finally, note that the above analysis is conservative, since attenuating reactions such as adsorption are not considered.

6. Summary

As part of the permitting effort for the Flambeau Project, assessments were completed to determine if the reclaimed site would comply with permitted groundwater quality standards at the compliance boundary and protect surface water quality in the Flambeau River. The original assessment relied on predicted post-mining hydrologic conditions to conclude that the Flambeau River would act as a hydrologic boundary for pore water migrating from the pit backfill and that backfill pore water would not migrate to the downgradient compliance boundary. In addition, the original analysis showed that the flux of backfill pore water into the river would be so small relative to the flow in the river that surface water quality would not experience a measurable change.

Environmental monitoring data from the reclaimed site supports the original analysis. This conclusion is based on the following:

- ♦ Groundwater elevation measurements show that regional groundwater, including backfill pore water, is again flowing toward the Flambeau River as predicted.
- ♦ Backfill pore water is in equilibrium with calcite and gypsum, indicating complete neutralization of the acidity.
- ♦ Consistent results in samples collected from 1998 through 2000 demonstrate that the concentrations of solutes in the backfill pore water are stable.
- ♦ Groundwater quality from the western end of the backfilled pit has, as expected, a signature that is consistent with the backfilled pit pore water, while all other monitoring wells show no change in water quality relative to historical trends.
- ♦ Surface water quality data show that the pit backfill is not affecting water quality in the Flambeau River.
- ♦ Calculations also show that after the hydrogeologic system is completely recovered, the flux of pore water from the backfill will be negligible with respect to its potential impact on water quality in the Flambeau River.

Given the hydrologic conditions at the site, the environmental monitoring data show that the Flambeau Mine is in compliance with groundwater quality permit conditions and that water quality in the Flambeau River is protected.

7. Recommendations

Based on the above assessment and conclusions, SRK and Foth & Van Dyke recommend that:

- ♦ Flambeau continue to monitor Flambeau River water quality for iron, manganese, and sulfate to provide current data on concentrations of these parameters.
- ♦ With the exception of the two items listed below, monitoring of groundwater within and around the backfilled pit should continue to be performed in accordance with the program contained in the project's approved monitoring plan (Foth & Van Dyke, 1991). An annual review of the data should be included in the project's annual report to determine if conditions affecting the conclusions reached in this memorandum remain consistent. As additional data are collected and the continuation of stable conditions is documented, consideration can be given to reducing the frequency of monitoring within the backfilled pit.
- ♦ CO₂ sampling be performed according to the April 2000 method for one more sampling period. If CO₂ and alkalinity data continue to be correlated, CO₂ sampling and analysis should be discontinued, with alkalinity data used to assess any future changes in the effects of CO₂ pore water quality in the backfilled pit.
- ♦ Eh measurements should be taken each quarterly sampling event until trends, or lack thereof, become evident.