



## MEMORANDUM

TO: Anne Hurlburt, Administrator, City of Scandia

FROM: Jyneen Thatcher, Natural Resource Specialist

DATE: November 29, 2011

RE: Final comments, Draft EIS- Zavoral Pit

As a follow-up to the most recent PAC meeting and presentation of the draft EIS, the following comments are provided to further explain the concerns I raised at that meeting, as well as other issues that have been raised.

- 1) My comment on wetland restoration versus replacement probably deserves more explanation. Under the Minnesota Wetland Conservation Act, unauthorized wetland impacts require restoration to pre-impact conditions, unless the overseeing agencies agree that replacement (creating wetland elsewhere, or purchasing wetland bank credits) is an acceptable option. On this site, considering the various values attributed to the seepage wetlands, I do not believe that replacement would be acceptable. Therefore, if the water use (or other land use activities) results in diminished flow to the wetlands causing a change in the size of the seepage wetlands, my recommendation for enforcement action would be to halt the water use (or other causative actions) to enable the seepage to return to normal. While the studies have indicated the seeps are unlikely to be impacted, I believe the applicant and other concerned parties should be aware of the enforcement actions that will be implemented if the modeling is incorrect.
- 2) The plans indicate that surface water will be encouraged to infiltrate, rather than be directed to surface runoff systems. During the time that the site is disturbed (during active mining) the seeps should be monitored for the presence of fine sediments. While some fine sedimentation is normal, increased hydraulic head over a concentrated infiltration point can lead to the fine particles being forced into and through the groundwater system. Keeping the ponding areas as broad and shallow as possible will minimize this possibility; deep-rooted native vegetation will also help minimize the possibility.
- 3) The mitigation plan refers to development of a long-term stewardship plan for the site. Considering the options available to the landowner, after the mining contract is completed, the stewardship plan will need to respond to whichever use the site is put to. At a minimum, the stewardship plan should address leaving the site in a stable condition, and compliant with local ordinances and standards. In particular, it should acknowledge that the new conditions (such as depth to bedrock as relates to septic systems or preservation of specific ecosystems) must be accepted as an existing condition and not eligible for variances.
- 4) If a fast-track operation (Alternative 3) is approved, the seepage wetland monitoring period should be extended for an additional three years, to allow for full recovery of the seeps. Furthermore, if the site is eventually developed as residential properties, I suggest that the monitoring continue to assure that residential wells also have no effect on the base flow to the seeps.
- 5) The mitigation plans raise the question of engineered soil on the prairie areas as an alternative to imported soil. I have no objection to the use of engineered soil, as generally described in this draft document. In many ways, that would be preferable to the negatives associated with imported soils, including introduction of weed seeds and the potential for additional noise and site disruption.

- 6) The reclamation plan proposes a dry prairie plant community as final goal. I agree that it would be appropriate for the conditions expected, but caution that reconstruction with dry prairie species frequently takes longer to reach acceptable performance standards than mesic prairie. This time delay should be acknowledged in planning the schedule for review and approval of each phase of reclamation.
- 7) Lastly, in the PAC presentation, the slide titled “Water-related Land Use Management Districts” included this office (WCD) as an agency with requirements. Please note that the WCD does not have enforcement or regulatory authority, other than in our role under the Wetland Conservation Act. We do provide recommendations to many agencies who have such authority, and are flattered that our recommendations are viewed so highly.

Please feel free to contact me if you need clarification on any of these comments.