

Comments to FEIS for Proposed Zavoral Mine  
Submitted by Laurie Allmann to the City of Scandia, MN  
September 10, 2012

Dear Mayor and City Councilmembers,

Thank you for the opportunity to comment on the FEIS for the proposed Zavoral Mine. I offer these comments with the following understandings:

- 1) AECOM's client on this document is the City of Scandia, and not Tiller Corporation. As the project proposer, it is Tiller's responsibility to pay the cost of the EIS, but this does not entitle the corporation to any special consideration in determination of the adequacy and/or completeness of this document.
- 2) In its contract with the City of Scandia, AECOM does not warrant the accuracy of the information it provides in this FEIS. The City's contract with AECOM states "The project documents prepared or furnished to Client by Consultant under this Agreement may be based on information obtained from sources outside Consultant's control. **Other than the application of prudent professional care in their evaluation, the Consultant does not warrant, expressed or implied, the accuracy thereof.**" This clause in the contract has two important implications for reviewers of the document: 1) the accuracy of information provided by AECOM cannot not be assumed or relied upon, and 2) AECOM may be held accountable for demonstrating a reasonable standard of "prudent professional care in their evaluation" of information provided in the FEIS.
- 3) The City does not face an easy task, since AECOM's experts are no more credentialed than many of those providing comments to the FEIS. Please allow the incoming comments on the FEIS (and those already in the public record) to inform your perspective, and challenge AECOM to fully and objectively relate all relevant environmental impacts of the proposed mine. Consider that a major portion of AECOM's global business is related to the design of new and expanded mining operations, as described on its corporate website: *At AECOM...we work with project delivery teams to develop environmental strategies that can minimize regulatory delays and environmental compliance costs...*  
(<http://www.aecom.com/What+We+Do/Mining/Practice+Areas/Overview>)

## COMMENTS on FEIS

The FEIS conclusion that "No impacts that reached the level of significant impacts were identified in association with the project" is insufficiently justified. The standard being applied throughout the FEIS for "significant" impacts is arbitrarily limited in ways not supported by Minnesota state statute, guidelines established by the Minnesota Environmental Quality Board, and/or stipulations of the National Environmental Policy Act (NEPA).

The criteria for significant impacts cited by AECOM on page 12 of the “Responses to Comments” (from MN Rules, Minn.\$. 4410.1700) are intended to offer guidance for an RGU that is considering whether or not to order an EIS. They are not the standards to be applied *within* an EIS, by which the preparer (in this case, AECOM) deems whether a given impact is (or is not) significant. The determination of “significant impact” within an EIS is not limited to these criteria. In particular, the National Environmental Policy Act (NEPA) may be used as basis for the determination of whether or not a given environmental impact is considered “significant.” According to NEPA guidelines (quoted below), significance is also guided by the following considerations of context and intensity, wherein:

“*Context* means that the significance of an action must be analyzed in several contexts such as society as a whole (human, national), the affected region, the affected interests, and the locality. Significance varies with the setting of the proposed action. For instance, in the case of a site-specific action, significance would usually depend upon the effects in the locale rather than in the world as a whole. Both short- and long-term effects are relevant.

*Intensity* refers to the severity of impact. Responsible officials must bear in mind that more than one agency may make decisions about partial aspects of a major action. The following should be considered in evaluating intensity:

- Impacts that may be both beneficial and adverse. A significant effect may exist even if the federal agency believes that on balance the effect will be beneficial.
- The degree to which the proposed action affects public health or safety.
- Unique characteristics of the geographic area such as proximity to historic or cultural resources, park lands, prime farmlands, wetlands, wild and scenic rivers, or ecologically critical areas.
- The degree to which the effects on the quality of the human environment are likely to be highly controversial.
- The degree to which the possible effects on the human environment are highly uncertain or involve unique or unknown risks.
- The degree to which the action may establish a precedent for future actions with significant effects or represents a decision in principle about a future consideration.
- Whether the action is related to other actions with individually insignificant but cumulatively significant impacts. Significance exists if it is reasonable to anticipate a cumulatively significant impact on

the environment. Significance cannot be avoided by terming an action temporary or by breaking it down into small component parts.

-The degree to which the action may adversely affect districts, sites, highways, structures, or objects listed in or eligible for listing in the National Register of Historic Places or may cause loss or destruction of significant scientific, cultural, or historical resources.

-The degree to which the action may adversely affect an endangered or threatened species or its habitat that has been determined to be critical under the Endangered Species Act of 1973.

- Whether the action threatens a violation of federal, state, or local law or requirements imposed for the protection of the environment.”

Many of the public and agency comments received on the DEIS relate broadly to this issue, calling upon AECOM to give more consideration of these context and intensity-related issues in its evaluation of the significance of impacts. Yet, in its responses, AECOM rejected such feedback. As a result, the FEIS does not offer a realistic assessment of the level and scope of impacts that will likely be experienced if the mine is approved.

**Specifically, the FEIS for the proposed Tiller/Zavoral Mining Project fails to apply a reasonable standard for “significant impact” in the following instances:**

Inadequate consideration of context in evaluating significance of noise impacts

In response to comments to the DEIS, AECOM states that Minnesota state noise standards are the enforceable limits currently available to the city of Scandia. These noise standards were used in AECOM’s determination of “no significant impacts.” But the Council of Environmental Quality regulations (40 Code of Federal Regulations [CFR] 1508.27) also define impact levels based on the considerations of context and intensity. Context, in this case, is the St. Croix Scenic Riverway, a National Park with relevant noise standards outlined in its management plan. The National Park Service recommends that natural, ambient sound be used as the standard by which impact is measured. If this standard is appropriately applied, the noise produced by the mine would be considered a significant impact.

Inadequate consideration of cumulative impacts

The phrase “Cumulative Impacts” is defined in Minnesota Administrative Rules 4410.0200, Subp. 11 as “the impact on the environment that results from incremental effects of the project in addition to other past, present, and reasonably foreseeable future projects regardless of what person undertakes the other

projects. Cumulative impacts can result from individually minor but collectively significant projects taking place over a period of time.”

The items discussed under 4.17 Cumulative Impacts relate to other possible future projects in the vicinity of the mine, but nowhere in the FEIS is there a reasoned discussion of the collective impacts (however minor) *of the Tiller/Zavoral mine itself* which, combined, may be considered significant.

Throughout the FEIS, AECOM evaluates the various individual issues included in the EIS scope. It establishes and applies standards for significance of impacts for each issue. When each individual issue was not considered by AECOM to rise to the level of “significant environmental impacts,” the conclusion is made that these impacts, in the aggregate, are not significant.

But the environmental review law specifically requires and provides basis for analysis of these effects in the aggregate. For example, what is the **combined impact** of increased noise, permanent alteration of topography, fragmentation of forest cover that offers habitat for resident and migratory birds, increase in traffic entering from the “mine side” of the intersection at 97/95, the risk of slope failure, the increased risk represented by a proposer who has violated environmental rules at another mining operation resulting in degradation of a tributary to the St. Croix? Does this not represent a significant risk to community assets? Seen in the aggregate, and in the context of the immediately surrounding natural features (including a National Park, Wildlife Management Area, trout stream), is this combined impact “**significant**”? The EIS provides no analysis.

#### Mis-representation of No-Build Alternative as regards Traffic

In its Responses to Comments (p 3) AECOM states that “Traffic analyses commonly use the term “generate” to refer to trips originating from or terminating at a site.” By this definition, the No-Build Alternative cannot be said to generate traffic of over 500 trips per day for 20-30 years. Tiller’s truck traffic from other mining operations would not originate from or terminate at the Zavoral site. Correcting this mis-information may result in a re-consideration of the significance of the proposed mining operation as related to traffic issues. It is wrong to attribute other mine-related traffic on the roadways to the “no-build alternative.”

#### Inadequate consideration of potential long-term effects

In assessing likely impacts, the FEIS fails to consider the permanent nature of a conditional use permit, and the reasonable likelihood that the applicant (Tiller) or a future mining operation will re-open or expand operations at the site. Given that the applicant is seeking a

Conditional Use Permit (rather than a time-limited interim permit) and given that the applicant's customary business practice is to expand operations from that initially proposed for a site, the existence of a high quality frac sand resource at the site, and the intense and growing market demand for frac sand, the FEIS assessment of potential cumulative effects should reasonably include potential for a future frac sand mine at the Tiller/Zavoral site, and a longer time frame. The operation of the mine at this location would represent a departure from the current approved Scandia comprehensive plan, potentially causing a permanent change in the zoning of the site. The NEPA language regarding consideration of "intensity" of impacts relates to such a possibility: "The degree to which the action may establish a precedent for future actions with significant effects or represents a decision in principle about a future consideration."

#### Insufficient rationale for failure to consider modified scale alternatives

In its response to comments on the DEIS calling for a modified scale alternative eliminating mining of the 9-acre wooded, previously unmined area of the project, AECOM asserts that such a reduction in project scale was excluded from evaluation in the EIS because "mining that area is a prerequisite to reclamation for the Project because revenue from the aggregate resource would be used to fund the proposed reclamation." This rationale falls short of reasonable. In reality, a smaller scale project would mean a smaller profit for the applicant, but would not by necessity preclude reclamation. To eliminate this modified scale alternative (or the 100' buffer alternative) based on the assertion that a smaller scale would not meet the purpose and need of the project is also a red herring, since the RGU is not obligated to help a proposer to maximize profits. In fact, in the Minnesota Environmental Quality Board's Guide to Minnesota Environmental Rules, relative to excluding alternatives, it specifically states that "cost-related factors cannot overrule environmental considerations." The fact that Tiller Corp says the size of the mining area is "critical to the success of the project" is not a surprise, but that doesn't mean that AECOM (whose client in preparation of the EIS is the City of Scandia) needs to represent that assertion as fact.

Environmental considerations here are not limited to potential impacts on "rare, threatened or endangered species," as AECOM suggests. The EIS could and should consider the context of surrounding high value natural resources, and importance of this site in the overall ecological integrity of the area. For a rationale to consider the modified scale alternative, one need not look further than the City of Scandia's Development Code, the stated intent and purpose of which includes "To preserve and protect the City's rural character, natural landscape, and natural and scenic beauty."

Please ask AECOM to remedy these shortcomings of the FEIS. Thank you for your consideration.

Laurie Allmann