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Subject:	some brief comments on the draft "Standards & Criteria"
Date:	Monday, January 27, 2014 4:35:47 PM

The Environmental Quality Board has solicited comments on a draft document entitled "*Tools to Assist Local Governments in Planning for and Regulating Silica Sand Projects*." (draft dated December 13, 2013.)

An earlier draft was denounced in strong terms as inadequate in all comments except those from the silica sand mining industry. The December 13 draft is recognized as an improvement, but is still highly unsatisfactory in various respects.

A key point made by various commenters, and with which I agree, is that information should be provided to empower local governments to make a variety of decisions, from encouraging the industry to grow in their jurisdictions, to banning it categorically. I see little in the draft that would help local officials evaluate their legal and technical alternatives across such a spectrum. Rather, it seems mostly limited to a conventional "permit and regulate" approach.

With regard to transportation issues, the contribution from MNDOT seems written almost exclusively from an industrial point of view. For example, an earlier memo from Mr. Christianson says: "*New mine operations and processing plants have the potential of pumping tens of millions of dollars per year into the local economy, but require rail access to be economic*." Following this is a description of a "*Minnesota Rail Service Improvement Program*" offering loans and grants to "*maintain and upgrade lines....*"

Much needed in the guidance document is a discussion of the rules for public notice of projects under this program, whether MNDOT would pursue such a project contrary to the wishes of local governments, and so on. It should be noted that once built, rail lines are largely under federal jurisdiction and beyond effective control of state and local jurisdictions. Could MNDOT connive with industrial interests to advance rail expansion projects contrary to the perceived interests of local governments?

Also needed and lacking is some discussion of the emissions and air quality impacts of locomotives and other railway equipment. Locomotive engines have not been subject to the same regulatory pressures as have on-and off-road Diesels, and often have very high emissions. This is especially true of older switching (shunting) equipment. Thus, increased rail operations could potentially have a disproportionate air quality impact. Approaches to addressing this should be presented in the guidance document.

The discussion of "*Air monitoring and Data Requirements*" lacks an accurate discussion of the health impacts of various particle size ranges and how these are, or are not measured. Needed is a discussion of the relationship between size and surface area, particle numbers, atmospheric residence time, and health impacts. People should not be left with the impression that mass (weight) is an adequate way to assess the presence and impacts of the smaller size ranges of particles.

The State is proposing monitoring approaches that are not sensitive to (do not

capture) particles below approximately 0.3 micron. But this limitation is not being disclosed in the draft materials. A clear discussion should be provided of the capabilities and limitations of the proposed monitoring schemes, and a discussion of how particles in the "nano" or "ultrafine" size ranges (0.1 to 0.001 micron) might be measured.

There should be a clear explanation that health impacts tend to be most profound in the "nano" size range, but that particulate matter in this size range is not now subject to state or federal ambient air quality standards. Local officials might reasonably conclude that this would justify a "just say no" response.

Also needed is a discussion of the air monitoring capabilities and responsibilities of the MPCA and MDH. Local governments should not be left with the impression that the entire responsibility falls on them.

I am concerned that he advisory committee membership as selected may lack expertise in air quality issues on the public interest side of the table, which might tend to empower the industrial representatives to dominate the outcomes.

The Standards & Criteria document might benefit from some discussion of appropriate scoping for environmental review of silica sand mining projects, and particularly how the required evaluation of alternatives might be made a serious, as opposed to token, part of the review.

Obviously, there is a lot more to be said about all this.....

Respectfully submitted,

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