

**FINDINGS OF FACT AND CONCLUSIONS
FOR
THE ENVIRONMENTAL ASSESSMENT WORKSHEET
FOR
GREAT PLAINS SAND NON-METALLIC MINERAL MINING OPERATION
LOUISVILLE AND SAND CREEK TOWNSHIP, SCOTT COUNTY**

In consideration of the comments received and reviewed, and subsequent information provided by the developer and the County's consultant, staff recommends the following Findings of Fact and Conclusion:

A. The type, extent, and reversibility of effects:

The primary permanent change related to this project is that the proposed mining operation will irreversibly change the character of the project site by mining out approximately 100 feet of existing soil and underlying sandstone across the majority of the site leaving a large deep open water feature surrounded by fill soil. The developer has provided engineering methodologies for the proposed reclamation plan and indicated that they will retain appropriate geotechnical engineers to direct and monitor site reclamation to assure developable areas consistent with applicable County Ordinances and the Comprehensive Land Use Plan.

The resulting exposure of the Jordan aquifer in the form of a 35-40 acre lake has been analyzed in terms of permanent changes to area water quality. As noted in the EAW, this area has been identified as highly susceptible to ground water contamination. By exposure of the aquifer to the surface it is a certainty that the aquifer will be exposed to surface contamination. Submitted modeling demonstrated a concern for the Bennet well and a monitoring and mitigation plan has been proposed.

Respirable silica dust is a known carcinogen. The proposed mining operation will result in increased risk of exposure to this carcinogen. There is an unquantifiable potential for long term adverse health impacts due to exposure to respirable silica dust. The extent and significance of this exposure is directly related to the practices employed by the mining operation to control releases of respirable dust. The submitted mining operational plan demonstrates conformance to best management practices for the reduction of fugitive dust. A monitoring and mitigation plan has also been provided.

The proposed mining operation will permanently modify the land form on this property adjacent to the National Wildlife Refuge. Long term and temporary effects or impacts from the mining operation itself have been identified as a significant concern by the U.S. Fish and Wildlife Service (U.S.F.W.S.) and organizations interested in the natural and recreational assets of the Refuge.

Impacts identified through the EAW for which further analysis or details on mitigation are recommended by Staff before proceeding to the Interim Use Permit IUP process:

Issues which could be addressed by the developer prior to submittal of an IUP. Section 10-3 of Scott County Zoning Ordinance No. 3 lists the information required for a Mining IUP application. In order for the County to deem an application for this proposed mining operation complete (per Section 2-7-3.3 of the Ordinance), the following information can therefore be addressed through the IUP, by requiring that it be submitted for the application:

- (1) A reclamation implementation plan including geotechnical monitoring and supervision by qualified experts.
- (2) An end land use plan that demonstrates that a frontage road can be laid out in a location that provides logical connections to adjacent properties and meets the County's and Township's specifications.
- (3) A staged reclamation plan with staged securities to assure that the site can be reclaimed to an acceptable condition suitable for development consistent with the County's Comprehensive Land Use Plan regardless of what stage in mining the site is at when mining ceases.
- (4) Sufficient geotechnical documentation to demonstrate the long term stability of exposed sandstone walls above and below the water table that will be subject to wind and wave erosion as well as acid rain which may affect the integrity of the cemented grains of silica sand.
- (5) Documentation for review by the Township Road authorities and Union Pacific Railroad related to the impact of the proposed mining and blasting adjacent to the Township road and rail line.
- (6) The environmental review process has identified impacts of: dust, noise, blasting, groundwater, truck volume, and reclamation staging that will require monitoring and mitigation plans as part of the Interim Use permit. These monitoring and mitigation plans should be included in the Mining Interim Use application submittal.
- (7) The U.S.F.W.S. has suggested the need for additional analysis of noise impacts to the National Wildlife Refuge and recommended pre-emptive construction of a noise barrier. Modification of the initial noise berms has been proposed by the developer and should be further addressed during the IUP application process.

Issues which Staff believes fall into the scope of an EIS because of the need to collect additional complex data and involve review by numerous regulatory bodies:

None.

B. The cumulative potential effects of related or anticipated future projects:

Concurrent mining of exportable silica sand from two large proximate mining operations has the potential for contributing to area noise, dust and traffic (both truck and rail). The significant alteration of land features will also permanently eliminate some options for future road connectivity and development.

C. The extent to which effects can be mitigated by ongoing public regulatory

authorities: ("provided that the RGU may rely only on mitigation measures that are specific and can reasonably be expected to be effective.")

Several issues were identified in the EAW and subsequent received comments and responses from the developer and in discussions between the Townships and County staff during the EAW process. One of the issues raised by MNDOT was their request to close the middle access to the site, address near term increased traffic needs at the northern access and establish a schedule for it to also be removed, when alternative access can be provided to the northern parcels. Scott County should continue to coordinate with MndOT and the Townships on improvements to the transportation corridors in this area. These issues can be addressed during the IUP process.

It is recommended that the Development Review Team (DRT) process be used to involve the Townships, U.S. Fish and Wildlife Service, MndOT, MPCA and others as needed to assist the County in working with the mining operators to develop effective monitoring and mitigation plans to address the concerns noted. It is further recommended that a Great Plains Sand Advisory Committee be established to review and advise the County on an ongoing basis to address concerns, consider modifications, and deal with other matters associated with these unique mining operations. It is believed that with the flexibility of such a committee combined with existing regulatory controls that all anticipated effects can be prevented or mitigated. It is also being recommended that the IUP include conditions that if/when the state establishes more stringent or specific standards for silica dust (related to public health) that the developer will be required to comply with these more stringent standards and that a “grandfather” status not be allowed.

Finally, it is recommended that the IUP include a condition that the developer prepares reports for committee review at a frequency defined through the IUP. The reports shall provide:

1. a summary and discussion of permit compliance;
2. all well monitoring data collected;
3. all blasting activity monitoring data collected;
4. all noise monitoring data collected;
5. a summary and discussion of restoration activities;
6. a projection of mining advancement and reclamation for the coming year;
7. a summary and discussion of all citizen complaints;
8. any modifications to monitoring or mitigation plans;
9. a discussion of bonding or securities to cover complete restoration; and
10. any other topics deemed necessary as part of the IUP or as established by the Great Plains Sand Advisory Committee.

D. The extent to which effects can be anticipated and controlled as a result of other studies undertaken by public agencies or the project Proposer, or of previous EISs.

A proposed silica sand mining operation (Merriam Junction Sands) north of this project location has been proposed and an Environmental Impact Statement is being prepared for that project. Many of the issues identified as concerns for the subject project will be examined and dealt with in more depth in the EIS for Merriam Junction Sands. Both projects will involve blasting with the potential for related concerns and both will have the potential for generation of nuisance dust including carcinogenic respirable silica dust. There will be a need to accurately determine the sources of such problems and appropriately resolve them. It is suggested that the IUP for this project be left open to the possibility to amend or add conditions deemed to be appropriate following the conclusion of the Merriam

Junction Sands EIS and that they may also be adjusted as needed and deemed appropriate by the County in the future.

It is recommended as noted that a Great Plains Sand Advisory Committee be established to assist the County with the regulatory and long range planning aspects associated with silica sand mining.

E. It is, therefore, concluded that an Environmental Impact Statement is not needed.

Staff and the Townships are recommending that an EIS is not appropriate for this project to address remaining questions. Staff and the Townships suggest that outstanding issues be addressed through the IUP and with the creation of a Great Plains Sand Advisory Committee comprised of both Townships, Mining company representation and Scott County staff as appropriate. This committee would provide technical support to the County Board on matters related to Great Plains Sand mining project in the County and would be funded by escrows managed by the County and maintained by the silica sand mining operations. This committee would have the ability to obtain the assistance of outside professional technical consultants as needed.

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