

## Potential Conditions for the AOP—REVISED FOR 1.2.13 DISCUSSION

### Water Quality monitoring

- The City, its consultants and the Technical Evaluation Panel shall annually review the wetland boundaries of all wetlands within the project area (Wetlands A, B and C as shown in the CCES wetland delineation report dated January 14, 2011) to determine if mining activities have any impact on the wetlands, including the black ash seepage swamps. The timing of the field review shall occur within the growing season, as defined in the North Central and Northeast Regional Supplement to the U.S. Army Corps of Engineers Wetland Delineation manual, and shall be coordinated with the applicant and occur when active mining operations are in effect.
- If a change to any of the wetland boundaries is observed that cannot be attributed to climatic influences or other local disturbances, the City shall require that quantitative monitoring (including, but not limited to, the installation of shallow monitoring wells and piezometers) be initiated for all wetlands within the project area. This monitoring could include the installation of wetland hydrology monitoring equipment along multiple transects across each wetland boundary. The City may conduct this comprehensive monitoring to verify whether the Zavoral Mine is causing the changes to the wetlands. If the City determines that the Zavoral Mine is impacting the wetlands, the quantitative data will be used by the City in consultation with the Technical Evaluation Panel to prepare a Restoration Order and calculate the required replacement for unpermitted wetland impacts.
- The applicant shall provide the wetland delineation boundary data to the City or its consultant in a Geographic Information System format (such as an ArcGIS shapefile) that was obtained as part of the wetland delineation conducted by Critical connections Ecological Services (CCES) in October, 2010.
- The WCD shall complete twice annual macro-invertebrate monitoring on Zavoral Creek and report the results to the City annually for use during the review of the AOP for the project.
- The WCD shall collect and analyze the data from the monitoring stations on Zavoral Creek and below Crystal Springs to determine the effect, if any, to surface waters due to the Zavoral Mine operation. The WCD shall notify the City if a negative impact is identified. The results of the analysis shall be provided at least annually to the City for use during the review of the AOP for the project.

### Dust Control/Air Quality

- The applicant shall perform employee exposure monitoring on this site at least once per season and submit the results (with employee personal information redacted) to the City for review with the AOP application submittal. The monitoring shall be specific for respirable dust and respirable silica, shall include mining, loading and hauling personnel, and shall represent worst-case exposure conditions.
- The applicant shall limit vehicle idling times for the site and approach area to no more than 30 minutes.



- The City shall establish air monitoring stations at a **minimum of five locations**: upwind of mining and loading operations, downwind of mining and loading operations, **at the site entrance**, downwind of the site entrance, and downwind of one location on the haul route. The City may establish additional monitoring locations based on City or public concerns.
- The air quality monitoring plan shall include the collection of the following samples at each sampling location: Airborne particulate matter PM10 (monitor using a fibrous aerosol monitor fitted with a PM10 impactor); Respirable dust (using cyclones/37mm PVC cassettes and lab analysis [NIOSH method 0600/7500; mod OSHA ID-142]); Respirable silica, quantitative (using cyclones/37mm PVC cassettes and lab analysis); Diesel particulates (37 Quartz Fiber NIOSH 5040) and Nitrogen dioxide (TEA Tude, OSHA ID-1820; or equipment and methods that meet current OSHA or State standards.
- The City and its consultant shall analyze and compare the air monitoring results to current State and Federal Ambient Air Quality Standards, ACHIG TLV or OSHA PELs or current applicable standards.
- If sample results indicate levels above generally accepted or mandated action levels, the applicant shall stop all work on the site, review operating procedures and modify Project operations as necessary to reduce emissions. The City shall complete additional monitoring immediately after new procedures are in place to confirm that an acceptable reduction in emissions has occurred.

#### Noise

- Noise monitoring shall include identification of one or two worst-case representative residential locations for each phase of mining and conduct at least one hour of monitoring at each location during operations in the morning and one hour of monitoring during operations in the afternoon annually.
- Noise monitoring shall include at least one hour of monitoring at a representative location along the Scenic Riverway annually during mining operations.
- A noise monitoring event will be conducted within three weeks of the beginning of each mining phase, weather permitting, and once per operating month thereafter. Monitoring shall be conducted in accord with Minnesota Rules.
- The City shall notify residents of monitoring periods and request access to properties as necessary to conduct monitoring activities.
- **If monitoring results indicate levels above state standards, the applicant shall stop all work on the site, review operating procedures and modify Project operations as necessary to reduce noise to permitted levels. The City shall complete additional monitoring immediately after new procedures are in place to confirm that an acceptable reduction in noise has occurred.**



Reclamation Plan

- The applicant shall submit to the City monthly reclamation activity progress reports during the growing season for the first two years post-seed installation of reach monitoring area in addition to the annual monitoring reports.
- The WCD shall inspect the Project site on an as-needed basis, as requested by the City, to ensure compliance with the reclamation-related conditions of the CUP and the Zavoral Reclamation Plan. The applicant shall pay the costs to review the reclamation plan and conduct site visits.
- The WCD shall monitor the transplanted trees. The applicant shall achieve a survival rate of at least 80% for all transplanted trees. The applicant shall provide the city with the quantity, location, species, and proposed maintenance plan for all trees transplanted as part of the Reclamation Plan. The applicant shall replace trees as needed to achieve the 80% survival rate. The City and WCD shall approve the selection of replacement tree species.

Traffic

- The City's consultant shall complete a 14-hour video log of the TH 97 and 95 intersection that shall include the new access to the Zavoral site and count the numbers of trucks entering and exiting the site. The City's consultant shall review the log, and will provide a summary of the observations related to traffic operations to the City, and identify any issues or problems related to the conditions required for operations. If issues are identified, the City may order additional video traffic counts.
- The City shall review the crash records for the roadways in the area that will be used for truck-hauling to identify areas every six months, to identify safety issues. The City shall contact Mn/DOT to discuss safety issues if identified.

Adopted by the Scandia City Council this \_\_\_<sup>th</sup> day of February, 2013.

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Randall Simonson, Mayor

ATTEST:

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Kristina Handt, Administrator/Clerk