**CITY OF SCANDIA**
**RESOLUTION NO. 04-21-09-02**

**RESOLUTION ADOPTING FINAL EIS SCOPING DECISION FOR THE ZAVORAL MINING AND RECLAMATION PROJECT, LOCATED IN SECTIONS 18 AND 19, TOWNSHIP 32 NORTH, RANGE 19 WEST IN THE CITY OF SCANDIA, MINNESOTA**

**WHEREAS,** the City of Scandia was the Responsible Governmental Unit in the preparation of the Environmental Assessment Worksheet (EAW) for the proposed Zavoral Mining and Reclamation Project, located in Sections 18 and 19, Township 32 North, Range 19 West in the City of Scandia; and

**WHEREAS,** the EAW was based on operation of a gravel mine and processing operation on a dormant, un-reclaimed 56-acre gravel mine located within a 114 acre site on St. Croix Trail North (State TH 96) near its intersection with State TH 97, and a portion of the site is located in the St. Croix River District Zone; and

**WHEREAS,** the comments received indicated that the proposed Zavoral Mining and Reclamation Project is lacking sufficient information to determine the potential for, or significance of, the possible environmental effects of the proposed project, and that additional appropriate studies could be reasonably obtained; and

**WHEREAS,** the City concurs with the comments received that the EAW does not contain the information necessary to make a reasoned decision about the potential for, or significance of, possible environmental impacts, and that such information is necessary to allow the City to decide whether the project has the potential for significant environmental effects as described in Minnesota Rules 4410.1700, Subpart 7; and

**WHEREAS,** the City Council of the City of Scandia made a positive declaration on the need for an Environmental Impact Statement (EIS) for the Zavoral Mining and Reclamation Project on March 3, 2009; and

**WHEREAS,** the City completed a Draft Scoping Decision Document for the EIS, and held a public hearing on the Draft Scoping Decision Document on April 7, 2009 as described in Minnesota Rules 4410.2100; and

**WHEREAS,** the relevant comments from the public hearing and written comments have been incorporated in the Final Scoping Decision Document;

**NOW, THEREORE, BE IT RESOLVED** that the City Council of the City of Scandia adopts the Final Scoping Decision Document, included as "Attachment A" to this resolution, as the basis for the work plan for the EIS for the Zavoral Mine and Reclamation Project.

**PASSED** by the City Council of the City of Scandia this 21st day of April, 2009.

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Dennis D. Seefeldt, Mayor

ATTEST:

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Anne Hurlburt, Administrator

Attachment A, Resolution 04-21-09-02
CITY OF SCANDIA
Washington County, Minnesota

**Zavoral Mining and Reclamation Project**
**Final Scoping Decision Document**

# I. Introduction and Purpose

Tiller Corporation is proposing to operate a gravel mine and processing operation on a dormant, un-reclaimed gravel mine site in the City of Scandia—called the Zavoral Mining and Reclamation Project. The 114-acre site is located along St. Croix Trail North (State Trunk Highway 95 [TH 95]) near its intersection with State Trunk Highway 97 (TH 97). A portion of the site is located in the St. Croix River District Zone. While, the area proposed for sand and gravel mining and related processing activities is located outside the limits of the St. Croix River District zone, the application proposes reclamation activities within the River District Zone. The site was mined by multiple operators before it was taken out of production in the 1980's. No environmental review was required for that operation.

The proposed project required completion of an Environmental Assessment Worksheet (EAW) to comply with Minnesota Rules 4410.4300. The City of Scandia was the Responsible Governmental Unit (RGU) for the EAW. On March 3, 2009, the Scandia City Council approved the Findings of Fact and Record of Decision that concluded that an Environmental Impact Statement (EIS) is needed to determine the project's potential for significant environmental impacts.

The EAW for the Zavoral site was submitted to the City on November 25, 2008. The site is within the General/Rural Agricultural Area on the City's 2020 Comprehensive Plan and Land Use map, which was the current plan at the time of the EAW submittal. The proposed use is consistent with the 2020 Comprehensive Plan and Zoning Ordinance. The City's 2030 Comprehensive Plan, adopted on March 17, 2009 proposes Mining as a specific land use designation. The Zavoral site is not included in the areas designated for Mining in the 2030 Plan. However, since the EAW was submitted under the 2020 Comprehensive Plan, the EAW must be reviewed under that plan.

The Record of Decision noted that the City received a large number of comment letters from agencies and individuals that identified over a dozen issues that were not adequately addressed in the EAW. The City determined that the EAW did not provide the information necessary to allow the City to make a decision about the potential for and significance of potential environmental impacts of the proposed Zavoral Mining Project. Many of the identified issues relate to the project's location and potential impacts to the St. Croix River, National Scenic Riverway, and other unique and sensitive resources. Minnesota Rules 4410.1700, Subpart 2a indicates that if the RGU determines that information necessary to a reasoned decision about the potential for, or significance of, one or more possible environmental impacts is lacking, but could reasonably be

obtained, the RGU may make a positive declaration of the need for an EIS, and include within the scope of the EIS appropriate studies to obtain the necessary information.

The Notice of Decision for the EAW was published in the EQB Monitor on March 23, 2009. The City of Scandia will be the RGU for the EIS for the Zavoral Mine and Reclamation Project pursuant to Minnesota Rules 4410.0500 , Subpart 1. The EIS will need to meet the requirements of Minnesota Rules 4410.0200 to 4410.7800 (Minnesota Environmental Quality Board rules), which govern the Minnesota Environmental Review Program.

This Scoping Decision Document (SDD) identifies the issues and alternatives that will be examined in depth in the EIS. The document reflects the comments the City received from agencies and the public at a public hearing on the Draft SDD held on April 7, 2009 The SDD also presents a tentative schedule of the environmental review process, and discusses permits needed for the project in relationship to the EIS.

## II. Project Alternatives

The MEQB rules require EIS studies to include at least one alternative in each of the following categories, or provide a description of why no alternative is included in the EIS (MN Rule 4410.2300, Item G):

- Alternative sites
- Alternative technologies
- Alternative designs or layouts
- Modified scale or magnitude
- Alternatives that incorporate reasonable mitigation measures identified through the scoping process

Minnesota Rules part 4410.2300, subpart G also states that an alternative may be excluded from analysis in the EIS under the following conditions: (1) when it does not meet the underlying need for or purpose of the project, (2) it would likely not have any significant environmental benefit compared to the project as proposed; or (3) another alternative, of any type, that will be analyzed in the EIS would likely have similar environmental benefits, but substantially less adverse economic, employment or sociological impacts.

The Zavoral Mining and Reclamation Project EIS will include up to four alternatives, as described below. Each alternative will include a detailed description of the site operations, including type and quality of material to be extracted, depth of proposed mining activities, potential impacts, and mitigation strategies.

<u>Alternative #1—Applicant's Preferred Alternative</u>
The project proposer, Tiller Corporation, is proposing to re-open and expand the dormant aggregate mine and ancillary operations on the Zavoral property. The Zavoral Mine and Reclamation Project Area location is shown on Figure 1. The proposed project does not include

mining into the ground water. The site was mined by multiple operators before it was taken out of production in the 1980's.

The site proposed for mining and processing is within the Agriculture Zoning District under the City's current Comprehensive Plan. Mining is an allowed use within the Agriculture zone. A portion of the site is located within the St. Croix National Scenic Riverway. Reclamation activities are proposed within this area. Mining is not allowed within the Riverway Zone.

The proposed project area includes 114 acres. Mining activity has previously disturbed approximately 56 acres. The site was actively mined in the 1960's through the 1980's. Mining operations included stripping, extraction, crushing, washing, hot mix asphalt production, stockpiling and hauling from the site. The operation was taken out of production without reclamation in the 1980's. All processing equipment has been removed from the site, but it has not been reclaimed. The site has recently been used as a source of aggregate from stockpiles located throughout the site. Much of the material in the stockpiles has been removed over the last eight to ten years, but there are irregular landforms because the site has not been reclaimed.

The proposed project will involve mining and restoration of 64 acres located predominately on the previously disturbed portions of the site. The active mining area will include mining to an additional depth of about 15 feet, and expanding the limits of mining by about 8 acres. In addition, Tiller Corporation is proposing to restore approximately 4 acres of the previously mined area located within the St. Croix Riverway and scenic easement area. Figure 2 illustrates the previously disturbed and undisturbed mining and reclamation area.

Tiller Corporation is proposing the following activities at the Zavoral site:

- Clearing and grubbing the site of vegetation, as necessary
- Removal of overburden from areas to be mined, and stockpiling the material on the site for potential future use in reclamation
- Excavation of raw aggregate materials
- Crushing, washing, and stock piling of aggregate materials
- Transporting finished aggregate materials internally for subsequent processing and to construction sites beyond the Zavoral Mine area
- Fuel storage and storage of related materials such as oil, anti-freeze, grease, and hydraulic fluid
- Reclamation activities, including grading, placing topsoil and seeding.

Mining operations will be conducted on a seasonal basis, typically from April through mid-November. The site is proposed to be worked in phases, with the duration of the project expected to be approximately 10 years.

When an area has been stripped of vegetation and overburden, aggregate will be excavated using front-end loaders. The raw material will be transported to a wash plant. At the plant the material is fed through a series of crushers, screens, conveyors, wash decks and classifiers to produce the commercial grade construction aggregates. The finished products are stockpiled adjacent to the plant until they are hauled off-site by trucks to various construction sites, or internally

transported and stockpiled. Portable processing equipment will be brought to the site as needed, and removed from the site after a sufficient volume of material has been processed and stockpiled. When the stockpiled aggregates are nearing depletion, the portable equipment will be brought back to the site to replenish the stockpiles.

Water is an important tool for the processes that are proposed to occur at the site. Water is used to wash the aggregate, equipment, and suppress dust. Water for these activities will be secured from the existing production well on the site. Surface water collected in the sediment ponds on the project site may also be recycled and re-used at the site.

The project that was evaluated in the EAW proposed bringing concrete and asphalt materials from other sites to this site for recycling. Recycling involves transporting, crushing, washing and mixing these materials with the aggregate materials mined at the site, and transporting the recycled materials to other sites in the region. Tiller Corporation's letter to the City (April 7, 2009) indicates that the proposed recycling activities will be removed from the project. Therefore, these activities and potential impacts will not be evaluated in the EIS.

The proposed mining operations will result in lowering and a reconfiguration of the surface topography, and the reconfiguration and redirection of the existing surface drainage system.

In general, the reclamation is proposed to progress in increments. Reclamation will proceed as areas of mining are completed. The reclamation plan proposes that perimeter areas be sloped and the interior areas backfilled and graded to restoration grades. Topsoil would be applied to these areas and vegetation established to reduce erosion. The project analyzed in the EAW proposed that the previously-mined area within the St. Croix Riverway be restored during the final phase of mining operations at the site. Tiller Corporation's letter to the City (April 7, 2009) proposed revising the restoration and phasing plan to include restoration of the area within the St. Croix Riverway and scenic easement areas during the first years of operation. The EIS will therefore evaluate the project that includes restoration of the St.Croix Riverway and scenic easement areas during the first five years of mining operations on the Zavoral site.

Mining is proposed to begin when the environmental review process has been completed, and the project proposer has obtained the necessary Conditional Use Permit and Annual Operating Permit from the City of Scandia.

<u>Alternative #2--No-Build Alternative</u>

The No-Build Alternative will be described in the EIS. The No-Build Alternative will describe the potential impacts, outcomes, constraints, benefits and disadvantages, and economics if the existing land uses on the Zavoral site were to continue. The description will be based on the existing and allowed use of the site for Agricultural and Rural Residential purposes, and will make projections or forecasts based on this use, to identify the No-Build Alternative effects and impacts. The No-Build Alternative does not include the Reclamation Activities on previouly mined areas that are included in Alternative #1.

Scale of Magnitude Alternatives

Two alternatives will be considered that propose a different scale or project magnitude. The Alternatives include the same project area as described for the Preferred Alternative. Each varies from the preferred alternative in the following respects:

Alternative #3—Mining and Reclamation Activities--Evaluate of Impacts of Washing
This Alternative will focus on the impacts of the washing activities at the site—particularly impacts to groundwater, groundwater-dependent resources, springs and wells. It will identify and compare the impacts and mitigation options for the project with various levels of water use for washing to the impacts of the Preferred Alternative that includes the maximum level of washing that is expected to occur at the site.

Alternative #4—Mining and Reclamation Activities—Evaluate Impacts and SeasonalScheduling of Processing Activities

This Alternative will focus on the impacts of the processing activities that are proposed to be part of the site operations—including screening, sorting, and primary and secondary crushing. It will identify and compare the impacts of each of these activities to the impacts of the Preferred Alternative that includes all of these activities at the site. It will look at options for scheduling the processing activities, to avoid times of impacts to recreational use or other impacts. Noise and dust impacts are expected to be issues of particular focus for potential impacts and mitigation.

Alternative Sites

Off-site alternatives are not being investigated because they do not meet the project purpose and need of making use of significant aggregate resources that are found within the Zavoral Mine site. Site Alternatives are limited to the presence of the natural resource. This resource is located within the Metropolitan Area, and may cost-effectively serve the needs of the region. A regional study by the Metropolitan Council, Department of Natural Resources and the University of Minnesota in 2002, titled Aggregate Resources Inventory of the Seven-County Metropolitan Area identified significant aggregate resource areas within the Metro Region, including the general area in which the Zavoral Mine and Reclamation Project is located, and describes the Region's need for these resources in the future.

Technology Alternatives

Technology alternatives are not within the scope of the Zavoral Mine and Reclamation Project and will not be considered in the EIS. Best practicable technologies for the various activities will be utilized as part of the preferred alternative.

Modified Scale Alternatives

Modified design or layout alternatives will not considered in the EIS. The area represented as the Preferred Alternative (Figure 1) may be modified depending upon the results of the analysis that will be completed for the EIS and the permit requirements for operations on the site.

Project Site with Reasonable Mitigation Measures

MEQB rules require consideration of mitigation measures identified through comments on the EAW. The EIS will consider all relevant mitigation measures suggested through public and agency comments and will recommend incorporation of reasonable mitigation measures into project design and permitting as warranted.

## III. EIS Issues

MEQB guidance documents indicate that the purpose of scoping is to streamline the EIS process by identifying only potentially significant and relevant issues, and defining alternatives to be analyzed in the EIS. Issues that were not adequately addressed in the EAW and require additional data gathering and analysis in the EIS were identified in the Findings of Fact and Record of Decision for the Zavoral Mining and Reclamation Project (March 3, 2009). These issues are discussed in further detail below, including the potential significance of each issue and the extent of analysis needed so that each issue is adequately addressed in the EIS. Mitigation measures, permitting and approvals, public comments, and the results of analyses, existing data, and separate studies will all be addressed in the EIS, to fully disclose the potential impacts from the alternatives.

EAW Items Screened and Removed from Further Review

The following items were adequately assessed in the EAW and were found to be not relevant or so minor that they will not be addressed in the EIS:

- Water surface use (Item 15) –impacts to boating and recreational use
- Water quality: wastewaters (Item 18)—impacts to municipal or on-site sewage treatment systems
- Vehicle-related air emissions (Item 22)
- Archaeological, historical or architectural resources (Item 25a)
- Prime or unique farmlands (Item 25b)
- Impact on infrastructure and public services (Item 28)

Topics to be Included in the EIS (Item numbers below are those used in the EAW):

*Item 9—Land Use/Potential Environmental Hazards/Reclamation Plan*

The general description of the local government land use plans and policies included in the EAW was adequate.

The analysis in the EIS should address the following land use issues for this item:

Land Use

- Assess the impacts of each of the alternatives on the current and future land use in the area that will be impacted by the project—primarily the City of Scandia and St. Croix Wild and Scenic Riverway District.

Reclamation Plan

- Describe the reclamation plans for each alternative in detail. The reclamation plan shall include the detailed plans for grading, plant communities to be established on the site, phasing and timing of reclamation activities, planting schedules, habitat reconstruction and invasive species management, and monitoring and maintenance to ensure the success of reclamation efforts.
- Evaluate the compatibility of the alternatives with existing and future land uses, and the potential impacts of the reclamation plans on habitat areas and future land use in the area.
- Coordinate and consult with the Minnesota DNR, National Park Service, City of Scandia, and others to develop the reclamation plans. Consideration should be given to reclamation requirements for areas within the St. Croix River District, which may be different from those for site areas outside the District.

Economic Impacts

- Determine the area(s) and types of potential economic and social impacts of the proposed project
- Quantify and analyze the social, economic and environmental impacts of each alternative on the local community, including impacts to the following:
    - local economy
    - tourism (including impacts to the St. Croix Riverway and City of Scandia)
    - property values
    - public services such as police, fire or other costs to city services
- Identify strategies that will be implemented to avoid, minimize or mitigate for the potential impacts.
- Identify coordination completed with the City of Scandia, National Park Service, Washington County, and others to complete the analysis and identify mitigation strategies

*Item 10—Cover Types*

The EAW did not identify existing wetland cover types in the project area and indicate the proposed project's potential impacts to this cover type.

The analysis in the EIS should indicate the existing area of all cover types in the project area, and the acreages of cover types that would result from each of the alternatives.

*Item 11—including 11a—Fish, Wildlife, and Ecologically-Sensitive Resources and Item 11b—Threatened and Endangered Species*

The EAW included a list of threatened and endangered plant and animal species based on published lists from the Minnesota DNR's Natural Heritage Program. The lists noted a number of sensitive resources and threatened species within the project area and the area of potential impact. The Carnelian-Marine St. Croix Watershed District (CMSCWD) noted that 65 occurrences of rare features (plants, animals and habitat areas) have been documented with a 1 mile radius of the proposed project. CMSCWD noted that no known focused field surveys have been conducted for rare elements within or near the project boundaries and that the high concentration of rare elements within one mile of the project site suggests that the likelihood of rare features within the project area is high. The analysis in the EIS should include the following:

- Determine the area of potential impacts of the proposed project and the alternatives on natural habitats and protected species.
- Complete a biological assessment and Protected Species Field Survey of the project area and the area of potential impacts. The survey of plants, animals and land and water habitats should be completed by surveyor pre-qualified by the DNR. The assessment would identify and map the presence of all ecologically sensitive resources (rare, threatened and endangered plant and animal species and habitats) in the project area, along Zavoral's stream and surrounding areas that are potentially impacted by the project. The assessment would assess the quality and characteristics of the resources in relation to the proposed project and potential impacts. The Draft EIS should include exhibits showing the location of the species or habitats.
- Analyze the potential impacts of each of the alternatives on the sensitive resources (species and habitats), and the reversibility of the potential impacts.
- Identify strategies that will be implemented to avoid, minimize or mitigate for the potential impacts.
- Identify coordination completed with the Minnesota DNR, U.S. Fish and Wildlife Service, or other agencies to complete the biological assessment and Protected Species Survey, discuss proposed project activities and reclamation plans and address potential impacts by avoiding, minimizing or reducing the project impacts and incorporating appropriate elements in the reclamation plan for the site.

*Item 12—Physical Impacts on Water Resources*

The EAW did not adequately identify the wetland resources and other surface waters within the proposed project area and the area of potential impacts.

The analysis in the EIS should include the following:

- Identify and map the presence of all surface water resources in the project area and area of potential impact of each of the alternatives (rivers, streams, wetlands,

lakes). The Draft EIS should include exhibits showing the location of these resources.

- Analyze the current quality and regulatory status of these resources, potential physical impacts of each of the alternatives on the resources, and the reversibility of the potential impacts.
- Identify mitigation strategies that will be implemented to address the potential impacts.
- Identify coordination completed with the Washington Conservation District, Carnelian-Marine Watershed District or other agencies to complete the mapping, assessment and mitigation strategies.

*Item 13—Water Use*

The EAW indicates that an existing production well on the Zavoral property would be used as the water supply well for the preferred scenario. The EAW does not analyze the potential impacts of the water use on groundwater resources, groundwater-dependent resources, or local wells in the project area or area of potential impact.

The analysis in the EIS should include the following:

- Identify the quantity and source(s) of water to be used for washing, processing and dust control activities.
- Identify existing or proposed production well construction details including locations, well depths, screened intervals, and the geologic logs.
- Quantify the potential water use under each of the proposed scenarios, and diurnal or seasonal variation in water use
- Identify the potential impacts of water use on groundwater resources, groundwater-dependent resources and local wells in the project area or area of potential impact under each of the proposed scenarios.
- Develop a ground water monitoring plan that will be used to identify any potential impact to the groundwater resources as a result of the water use, and proposed mitigation strategies for any potential impacts.
- Develop a plan for abandoning the existing well and proposed monitoring wells on the site when no longer needed.

*Item 14—Water-Related Land Use Management Districts*

The project area includes a portion of the St. Croix River District. The project has the potential for impacts to the River District and the federally-designated National Scenic Riverway. The EAW analysis was limited to a discussion of the restoration proposed within the River District under the preferred alternative.

The analysis in the EIS should include the following for each of the alternatives included in the EIS:

- Identify potential adverse effects on the natural, cultural and recreational values of the Riverway. Potential adverse effects may include impacts to the use, purpose,

and values of the Riverway District, alteration of the setting, or deterioration of water quality.

- Consult with the National Park Service (managing agency for the Riverway and District) regarding the impacts analysis and identification of strategies to avoid, minimize and mitigate for the impacts
- Identify the measures that will be utilized to avoid, minimize or mitigate the identified impacts.

*Item 16—Erosion and Sedimentation*

The EAW included a general discussion of erosion and sedimentation, and potential controls and best management practices that could be implemented to avoid or minimize the impacts of erosion and sedimentation resulting from the preferred alternative.

The EIS analysis should include the following:

- Identify the area of potential impacts of erosion and sedimentation from the proposed project under each of the alternatives.
- Analyze the potential impacts of erosion and sedimentation on each of the resources within the project area and area of potential impact under each of the alternatives, particularly including impacts high quality and unique resources, such as to the St. Croix River, Zavoral Creek, other streams on the site, seeps, wetlands and aquatic habitats.
- Identify specific measures that will be implemented to avoid, minimize or mitigate for the identified impacts.

*Item 17—Surface Water Quality and Quantity*

The EAW indicated the direction of stormwater runoff from the site, and indicated that a stormwater pollution prevention plan would be completed to obtain an NPDES permit. The EAW did not identify all of the waters that would receive stormwater runoff from the site, including Zavoral's Creek, other creeks on the site, and areas wetlands. The project site is located in the subwatershed of Zavoral Creek, a trout stream that is a tributary to the St. Croix River. The St. Croix is an Outstanding Resource Value Water in both Minnesota and Wisconsin, has been identified by the MPCA as an impaired water. Lands adjacent to the creek and other portions of the subwatershed area contain unique and high-value resources that have been identified by the Carnelian-Marine Watershed District and other agencies. The EAW did not quantify the runoff or impacts of runoff on the quality of the receiving waters to these resources.

The EIS analysis should include the following:

- Identify all of the surface waters that will receive runoff from the site, and the quality of those waters.
- Quantify the expected runoff from the site and impacts on the quality of receiving waters under each of the alternatives, including impacts of pollutants such as phosphorus, Total Suspended Solids (TSS), heavy metals, polycyclic aromatic

hydrocarbons (PAH's), volatile organic compounds (VOC's) and temperature (temperature is a pollutant for trout streams and other cold water resources).

- Identify potential impacts to waters of Special Concern, including the St. Croix River and Zavoral's Creek.
- Identify the location and quantify the potential impacts of the sedimentation ponds proposed on the site, including impacts of sediments, nutrients and temperature to downstream water resources.
- Identify specific measures that will be used to monitor potential impacts and avoid, minimize or mitigate the impacts of stormwater runoff to the receiving waters.

*Item 19—Geologic Hazards and Soil Conditions*

This element of the EIS should include analysis of impacts to ground water resources within the project area and area of potential impact. The proposed project area includes groundwater dependent resources (trout stream, seepage wetlands), and residents in the area use shallow groundwater resources for domestic wells. The EAW did not identify these resources or analyze the potential impacts of the project on groundwater-dependent resources and wells in the area.

The EIS should include the following;

- Identify and map the groundwater resources and groundwater-dependent resources (springs, wetlands and creeks) within the project area and area(s) of potential impacts.
- Identify existing and proposed wells, quantify proposed water use and aquifer source.
- Identify and map the direction of groundwater flow in the unconsolidated and bedrock aquifers within the project area and area of potential impact.
- Identify and map local potable water supplies (all residential and/or commercial wells or spring boxes) within the area of potential impact. The inventory should include geologic logs and well or spring construction details for the purpose of identifying the aquifers utilized.
- Model potential impacts to groundwater levels and flow directions, and related groundwater-dependent resources under each of the alternatives.
- Identify the potential for contamination and impacts to the quantity and quality of groundwater resources, groundwater-dependent resources, and private wells that may result from each of the alternatives--including potential impacts from pollutants such as phosphorus, PAH's,VOC's and heavy metals.
- Develop a ground water monitoring plan and strategies to avoid, minimize or mitigate for the potential impacts.

*Item 20b and c—Solid Waste, Hazardous Waste, Storage Tanks*

Based on the analysis completed for Item 19, this section should identify:

- Identify any potential impacts of toxic waste, hazardous waste or storage tanks at the site on surface water resources, groundwater resources, groundwater-dependent resources or local wells under each of the alternatives.
- Identify strategies that will be implemented to monitor groundwater resources and avoid, minimize or mitigate for the potential impacts.

*Item 21—Traffic*

The EAW included a traffic analysis for the preferred alternative, but did not evaluate impacts to recreation traffic on TH 95 and TH 97, including access to the Riverway and State Parks, pedestrian and bicycle facilities in the project area.

The EIS should include the following:

- Revise the traffic analysis to include all of the alternatives and address safety issues. Safety issues include sight lines and stopping distances for traffic on TH 95.
- Analyze and evaluate traffic conditions under each of the alternatives, and potential conflicts with recreational traffic and impacts to recreation traffic in the area.
- Identify current and anticipated bicycle and pedestrian facilities in the project area and area of potential impacts, and analysis of impacts to these facilities under each of the scenarios.
- Identify measures to avoid, reduce or mitigate for the potential impacts.
- If the preferred alternative would sever an existing major route for non-motorized traffic, the proposed project needs to provide a reasonable alternative route, or demonstrate that such a route exists.

*Item 23—Stationary Source Air Emissions*

The EAW included a general discussion of potential types and sources of air emissions under the preferred alternative, but did not quantify the emissions or analyze potential impacts on resources within the project area or area of potential impacts.

The EIS should include:

- Identify the area that may be impacted by air emissions from the proposed project under each of the alternatives.
- Identify and quantify the type, sources and composition of emissions from all sources at the site, including fugitive dust sources, under each of the alternatives.
- Quantify the impacts of the air emissions on air quality and water quality, specifically including impacts to the St. Croix Wild and Scenic Riverway.
- Identify pollution prevention techniques and strategies that will be used to avoid, minimize and mitigate for the identified impacts.

*Item 24—Odors, Noise and Dust*

The EAW indicated that the project will operate within air emissions and noise limits established by the MPCA. It listed some strategies that will be used to reduce noise and dust impacts under the preferred alternative. It did not quantify the current noise conditions in surrounding areas and the noise and dust that will be created by operations at the site, or the impacts of noise and dust on the surrounding area.

The EIS should include the following:

Noise

- Describe the noise sensitive areas and habitats (both land-based and river-based receptors, such as residences, parks, recreation areas such as the St. Croix River, Wisconsin bluff areas, and sensitive wildlife habitats), including information on the number and types of activities that may be affected.
- Quantify the current ambient noise levels near the site in the identified noise-sensitive areas: on the St. Croix River (where use by recreationists is expected); at the National Park Service primitive camp sites along the Riverway; on adjacent residential properties; on the recreational trails paralleling TH 95 and TH 97.
- Develop a model that will predict future noise levels and account for site-specific conditions such as topography, equipment placement, truck traffic, and operating hours.
- Quantify the extent of the impact (in decibels) in each sensitive area, under each of the alternatives, including noise from mining, processing operations and truck traffic.
- Analyze expected noise under each of the alternatives based on noise standards for each land use.
- Identify noise mitigation strategies as needed to avoid, minimize or mitigate for identified noise impacts.

Dust

- Quantify non-stationary dust that will be generated from site operations, such as truck traffic.
- Analyze impacts of dust pollution on surrounding areas and resources, including the St. Croix River.
- Identify strategies to avoid, reduce or mitigate for identified impacts of dust generated by operations under each of the alternatives.

*Item 26—Visual Impacts*

The EAW stated that the site will not be visible from the St. Croix River, but did not provide an analysis to support this claim. It did not indicate whether equipment or structures on the site would be visible from the St. Croix Riverway, or other recreational and scenic areas.

The EIS should include a viewshed analysis that addresses the following:

- Identify location and maximum potential height of equipment, stockpiles and other site elements that may be visible from adjacent areas
- Identify the key view areas, through coordination with the National Park Service, City of Scandia, and others as needed. Key view areas are likely to include neighboring residences, the St. Croix River, nearby bluff areas in Wisconsin, and TH 95 and TH 97.
- Develop a model in ArcGIS or other software that models site specific conditions such as topography, vegetation, seasonal conditions, proposed lighting and equipment and stockpiles on the site.
- Accurately represent the views of the site from key view areas through drawings, photos or other imaging methods that clearly shows the views of the site so that they may be easily understood by reviewing agencies and the public.
- Complete a written analysis describing the visual impacts of the site.
- Identify the strategies to avoid, minimize or mitigate visual impacts to key viewing areas.

*Item 27—Compatibility with Plans and Land Use Regulations*

The EAW focused its analysis on impacts to City of Scandia plans and land use regulations. The EIS should also analyze the relationship of the proposed project to the water resource plans of the Carnelian-Marine Watershed District and St. Croix Riverway Management Plan (2002).

*Item 29—Cumulative Impacts*

## IV. This section should identify the potential cumulative impacts of all alternatives analyzed for the EIS. It should address the potential impacts of any related or anticipated future project in the area.Phased or Connected Actions

There are no phased elements or connected actions associated with the project.

## V. EIS Schedule

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| March 23, 2009 | Record of Decision and Positive Declaration for EIS for Zavoral Mine and Reclamation Project published in EQB Monitor |
| April 7, 2009 | Public Scoping Meeting |
| April 21, 2009 | Final Scoping Decision |
| May-Oct., 2009 | Draft EIS preparation |

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| Nov-Dec., 2009 | Draft EIS Comment Period and Public Meeting<br>The Draft EIS will be noticed in the EQB Monitor, and mailed to the EQB's distribution list, which includes local, state and federal agencies and others. Copies will be available at the City for review. The City will schedule a Public Meeting to hear comments on the EIS. |
| Jan.-March, 2010 | Final EIS Preparation |
| April, 2010 | Final EIS Adequacy Determination<br>The City (RGU) will determine whether the EIS is adequate, based on the comments received, responses to comments, public meeting comments, and criteria prescribed in Minnesota Rules 4410.2800, subpart 4. |

## VI. Special Studies or Research

Special studies that will be completed for the EIS are described under each Item discussed in section III above. These will detailed include surface water and ground water analyses; air, noise and dust analyses; and a detailed visual impacts analysis.

## VII. Governmental Permits or Approvals

The EIS will identify all permits and approvals potentially required for this project. The EIS will not necessarily contain all information required for a decision on those permits. No permits have been designated to have all information developed concurrently with the preparation of the EIS. No permits will require the preparation of a record of decision pursuant to Minnesota Rules 4410.2100, Subpart 6D. Coordination with Carnelian-Marine Watershed District, Washington County, the Minnesota DNR, MPCA, National Park Service, and U.S. Army Corps of Engineers and other permitting and reviewing agencies was initiated during the EAW process and will occur throughout the EIS process.