

July 2013 version

# Environmental Assessment Worksheet

This Environmental Assessment Worksheet (EAW) form and EAW Guidelines are available at the Environmental Quality Board's website at:

<http://www.eqb.state.mn.us/EnvRevGuidanceDocuments.htm>. The EAW form provides information about a project that may have the potential for significant environmental effects. The EAW Guidelines provide additional detail and resources for completing the EAW form. **Cumulative potential effects** can either be addressed under each applicable EAW Item, or can be addresses collectively under EAW Item 19.

**Note to reviewers:** Comments must be submitted to the RGU during the 30-day comment period following notice of the EAW in the *EQB Monitor*. Comments should address the accuracy and completeness of information, potential impacts that warrant further investigation and the need for an EIS.

## 1. Project title: KMM Burnsville Quarry PUD Amendment

2. Proposer: Kraemer Mining & Materials Inc.

Contact person: Kirsten Pauly, Sunde Engineering

Title: President

Address: 10830 Nesbitt Avenue South

City, State, ZIP: Bloomington, MN 55473

Phone: 952-881-3344

Fax: 952-881-1913

Email: [kpauly@sundecivil.com](mailto:kpauly@sundecivil.com)

3. RGU: City of Burnsville

Contact person: Gina Aulwes

Title: Consulting Transportation Planner

Address: 100 Civic Center Drive

City, State, ZIP: Burnsville, MN 55337

Phone: 952-890-0509

Fax: 952-890-8065

Email: [gina.aulwes@bolton-menk.com](mailto:gina.aulwes@bolton-menk.com)

## 4. Reason for EAW Preparation: (check one)

### Required:

EIS Scoping

Mandatory EAW

### Discretionary:

Citizen petition

RGU discretion

Proposer initiated

**If EAW or EIS is mandatory give EQB rule category subpart number(s) and name(s):**

Minn. Rule 4410.4300 Subp. 12. Item B

Nonmetallic minerals, other than peat, which will excavate 40 or more acres of land to a mean depth of ten feet or more during its existence. The local government unit shall be the RGU.

**5. Project Location:**

County: Dakota

City/Township: Burnsville

PLS Location ( $\frac{1}{4}$ ,  $\frac{1}{4}$ , Section, Township, Range): The Site is located in portions of Section 28, 29, 32, and 33; Township 27N Range 24W. The Eastern Expansion Area is located in part of the NE  $\frac{1}{4}$  of Section 33, Township 27N, Range 24W. The Southwestern Expansion is located in part of the NW  $\frac{1}{4}$  of the SW  $\frac{1}{4}$  of Section 33, Township 27N, Range 24W and part of the NE  $\frac{1}{4}$  SE  $\frac{1}{4}$ , Section 32, Township 27N, Range 24W.

Watershed (81 major watershed scale): MDNR: Minnesota River – Shakopee (33) MPCA: Lower Minnesota River (07020012)

**GPS Coordinates:**

Center of each area in NAD 1983 UTM Zone 15N:

Eastern Expansion Area: 4959361.2342 N 476880.8172E

Southwestern Expansion Area: 4958700.4908 N 475367.7702 E

**Tax Parcel Numbers:**

Eastern Expansion Area: 020330010010, 020330010030, 020330010052, and 020330001010 (also denoted as 020330001020 by Dakota County)

Southwestern Expansion Area: 020321076010 and 020330071011

**At a minimum attach each of the following to the EAW:**

- County map showing the general location of the project;
- U.S. Geological Survey 7.5 minute, 1:24,000 scale map indicating project boundaries (photocopy acceptable); and
- Site plans showing all significant project and natural features. Pre-construction site plan and post-construction site plan.

The following figures are attached to this EAW:

- Figure 1: General Location Map
- Figure 2: USGS Quad Map Excerpt
- Figure 3: Site Plan
- Figure 4: Land Use
- Figure 5: 2040 Plan Excerpt -Future Land Use
- Figure 6: Zoning Map Excerpt
- Figure 7: FEMA Flood Map
- Figure 8: Burnsville 2008 Wetland Inventory
- Figure 9: Site Wetland Basins
- Figure 10: Wells, Well Head Protection Area and Drinking Water Supply Management Area
- Figure 11: Potential Contaminant Sources

The following attachments are attached to this EAW:

- Attachment 1: October 10, 2019 Technical Memorandum KMM Simulations of Proposed Future Kraemer Burnsville Quarry Mine Expansion, Barr Engineering
- Attachment 2: MDNR Natural Heritage Review
- Attachment 3: State Historic Preservation Office Correspondence
- Attachment 4: February 2018 Technical Memorandum Burnsville Vibration Monitoring Barr Engineering

## **6. Project Description:**

- a. Provide the brief project summary to be published in the EQB Monitor, (approximately 50 words).

Kraemer Mining and Materials Inc. is proposing a 72 acre expansion of its existing quarry located in Burnsville, MN. The quarry has operated since the late 1950's. The proposed expansion involves two areas located within the site's property boundaries. The two expansion areas were previously utilized by ancillary activities of the operation but are outside the current extraction limits.

- b. Give a complete description of the proposed project and related new construction, including infrastructure needs. If the project is an expansion include a description of the existing facility. Emphasize: 1) construction, operation methods and features that will cause physical manipulation of the environment or will produce wastes, 2) modifications to existing equipment or industrial processes, 3) significant demolition, removal or remodeling of existing structures, and 4) timing and duration of construction activities.

Kraemer Mining and Materials, Inc. (KMM) is proposing a 72-acre expansion of its existing limestone/dolomite quarry (KMM quarry) located in Burnsville, MN (Project). The KMM quarry has operated since the 1950's and is currently operating under a Planned Unit Development (PUD) originally issued by the City of Burnsville in 1994 and most recently amended in 2016. The Project will require an amendment to the current PUD.

The KMM quarry is located on property that encompasses approximately 578 acres (Site). The Project proposes to expand the mine limits in two specific areas within the Site described as the "Eastern Expansion Area" and the "Southwestern Expansion Area". The Eastern Expansion Area encompasses 46 acres and the Southwestern Expansion Area encompasses 26 acres. The two expansion areas are collectively referred to as the "Expansion Areas". The Expansion Areas are located completely within the KMM owned property. Figure 1, General Location Map, Figure 2, USGS Quad Map Excerpt, and Figure 3, Site Plan illustrate the location of the Project with respect to the surrounding area.

Currently, permitted quarry extraction limits established in the PUD encompass approximately 340 acres of the Site. Portions of the Site located outside of the quarry extraction limits are used for ancillary activities related to the mining operation, stormwater and quarry dewatering management, and buffer and setback areas. Cemstone operates a ready-mix plant on the Site that is partially located within the Southwestern Expansion Area. The ready-mix plant is operated through a lease agreement with KMM. The plant will be removed or relocated as needed to accommodate mining, which is currently anticipated to be mined towards the end of operations. The removal of the buildings and ancillary equipment associated with the ready-mix plant will be performed in accordance with all applicable guidelines and regulations. The Site also includes an approximately 40-acre parcel located in the northeastern portion of the quarry that is

subject to a Conditional Use Permit (35W CUP) that allows grading and filling in this area of the Site.

The KMM quarry produces construction aggregates from the Prairie du Chien Group. Mining operations include removing overburden, blasting bedrock limestone, excavation, processing (crushing, washing and screening), stockpiling, loading, and hauling operations. The Project will not change any of the current site activities or production levels.

In addition to the PUD, the KMM quarry operates under a number of permits including the Minnesota Department of Natural Resources (MDNR) Water Appropriations Permits for water level control and aggregate washing, a Minnesota Pollution Control Agency (MPCA) Air Emission Permit, and a National Pollutant Discharge Elimination System/State Disposal System (NPDES) Permit. The Project will not affect overall quarry operations or production limits. The Site will continue to operate under existing permits. Amendments are not anticipated to be required as a result of the Project, including the Water Appropriations Permit. The Project does not change the point of taking or total annual appropriation volume limits. Further information regarding water appropriations can be found in Attachment 1, "Simulations of Proposed Future Kraemer Burnsville Quarry Mine Expansion" from Barr Engineering.

The Project proposes to expand the current extraction limits. Expansion Areas are located immediately adjacent to current extraction limits. These areas will be mined in the same general manner as the existing quarry. No new construction activities and no new infrastructure will be required. All aggregate materials will be processed using the existing processing plants and plant configurations. All materials will be transported from the mine using the existing scale system and internal and external access roads, minimizing potential for impacts associated with expanded mine limits. There will be no remodeling of existing structures as a result of the Project. Remnant items of KMM's old processing plant will continue to be removed from the Eastern Expansion Area, irrespective of this amendment. The expansion will modify the phasing plans for the quarry and extend the

duration of mining by approximately 10-15 years, as determined by the market for aggregate materials in the area.

c. Project magnitude:

Total Project Acreage	72
Linear project length	N/A
Number and type of residential units	N/A
Commercial building area (in square feet)	N/A
Industrial building area (in square feet)	N/A
Institutional building area (in square feet)	N/A
Other uses – specify (in square feet)	Quarry - 3,136,320 square ft
Structure height(s)	N/A

d. Explain the project purpose; if the project will be carried out by a governmental unit, explain the need for the project and identify its beneficiaries.

The Project will provide additional high quality aggregate materials for use in asphalt, ready mix, and numerous other aggregate applications. Aggregate resources are becoming depleted in many areas within the metropolitan area. Sources of high quality aggregate materials with favorable transportation logistics are a regional asset. High quality construction aggregates are an essential component of road, infrastructure, buildings, and other public and private improvements. Consumption of construction aggregates in the United States is often estimated at 10 tons or more per person per year.

e. Are future stages of this development including development on any other property planned or likely to happen?  Yes  No

If yes, briefly describe future stages, relationship to present project, timeline and plans for environmental review.

f. Is this project a subsequent stage of an earlier project?  Yes  No

If yes, briefly describe the past development, timeline and any past environmental review.

Mining activity began in the 1950's, prior to the development of the environmental review program. The Project is a continuation of the mining operations within the Site.

**7. Cover types:** Estimate the acreage of the site with each of the following cover types before and after development:

	Before	After		Before	After
Wetlands	0	0	Lawn/landscaping	8.4	0
Deep water/streams	0	0	Impervious surface	7.3	0
Wooded/forest	4.3	0	Stormwater Pond/Ditches	2.3	0
Brush/Grassland	0	0	Other (describe)	49.7*	72**
Cropland	0	0			
			TOTAL	72	72

\*Barren surface for material storage (compost, topsoil, bedrock, crushed aggregate, fill, etc.)

\*\* Reclaimed Mine Area – mix of quarry lake and upland areas for future development.

**8. Permits and approvals required:** List all known local, state and federal permits, approvals, certifications and financial assistance for the project. Include modifications of any existing permits, governmental review of plans and all direct and indirect forms of public financial assistance including bond guarantees, Tax Increment Financing and infrastructure. *All of these final decisions are prohibited until all appropriate environmental review has been completed. See Minnesota Rules, Chapter 4410.3100.*

The Site currently operates under a number of permits. The Project will require an amendment to the existing PUD. No other permit amendments will be necessary.

Unit of government	Type of application	Status
City of Burnsville	Amendment to PUD	Applied for
MDNR	Water Appropriation Permits	Obtained
MPCA	NPDES/SDS	Obtained
MPCA	Air Permit	Obtained

**Cumulative potential effects may be considered and addressed in response to individual EAW Item Nos. 9-18, or the RGU can address all cumulative potential effects in response to**

**EAW Item No. 19. If addressing cumulative effect under individual items, make sure to include information requested in EAW Item No. 19.**

**9. Land use:**

**a. Describe:**

- i. Existing land use of the site as well as areas adjacent to and near the site, including parks, trails, prime or unique farmlands.

Land uses associated with the Expansion Areas include material storage, yard waste compost facility, ready mix plant, and ancillary operations to the quarry operations. A City of Burnsville municipal water supply intake is also located within the KMM quarry. Land use on areas adjacent to the Site include the Burnsville Landfill immediately to the west, the inactive Freeway Landfill and active waste transfer station to the north/northeast, open space associated with the Minnesota River to the north, the 35W corridor to the east, and a variety of smaller properties with industrial land uses to the east and south of the Site including Commercial Asphalt Co., the Former Knox Lumber site, City Carbon Injection, and the former Volkswagen dealership.

Nearby parks and trails include the Minnesota Riverfront Park and Cliff Fen Park, located east of the Site, across the 35W corridor. These parks are connected to trails running through the MN Valley National Wildlife /Recreational Area. The Sue Fischer Memorial Park, Archer Park, and the Rudy L Kraemer Nature Preserve are located southwest of the Site across the Highway 13 corridor. Figure 4, Land Use Map, is an aerial photograph with the existing land uses of the Site and the surrounding area identified.

- ii. **Plans. Describe planned land use as identified in comprehensive plan (if available) and any other applicable plan for land use, water, or resources management by a local, regional, state, or federal agency.**

The proposed use and planned future land uses of the Site and surrounding area are illustrated on Figure 5, 2040 Plan Excerpt-Future Land Use. The Site and surrounding properties are guided Minnesota River Quadrant (MRQ) by the City of Burnsville's 2040

Comprehensive Plan (2040 Plan<sup>1</sup>) Future Land Use Guide Plan. The 2040 Plan was submitted to the Metropolitan Council for final review, with formal adoption by the Burnsville City Council on July 16, 2019. The MRQ encompasses the area of the city located south of the Minnesota River, east of the City of Savage border, west of I-35W, and north of Highway 13. The 2040 Plan includes a vision for a quarry lake surrounded by development and open space; and allows for flexibility of the land uses over time as sites within the MRQ become ready for development and/or redevelopment. The proposed use conforms with the vision for the MRQ and long term land use plans.

The 2040 Plan identifies potential road network improvements within the vicinity of the Site. The 2040 Plan explored two 35W interchange concepts. One concept keeps the two existing 35W interchanges at Highway 13 and Cliff Road. The second concept replaces these two interchanges with a single new interchange in between them. Through traffic operational analysis, the City determined the level of development that can occur in the MRQ is the greatest with two interchanges. If future development is to take place in the Freeway Landfill Superfund Site, then two interchanges are preferred.

The Cliff Road West Relocation Project, which will link the future TH 13/CSAH 5/Kenwood Trail interchange with the 35W/Cliff Road Interchange, is also discussed in the 2040 Plan. This link is needed to relieve severe congestion on TH 13 west of 35W and to provide improvements for freight access to 35W from the MRQ. The plan relocates Cliff Road to the south, with the alignment running adjacent to the existing Union Pacific Rail from 35W to Dupont Avenue with a future extension and crossing of the UP railroad tracks to CSAH 5 at TH13. The City is moving forward with a segment of the Cliff Road West Relocation and has initiated design work on the Cliff Road/ I-35W south ramp realignment project. This segment of the project is scheduled for construction in 2022.

---

<sup>1</sup> July 16, 2019, 2040 Comprehensive Plan, City of Burnsville available on line at <http://www.burnsville.org/434/2040-Comprehensive-Plan-Update>

The 2040 Plan provides a framework for redevelopment of the quarry within the MRQ district once resources have been exhausted. The future land use plan envisions trails and parks within the MRQ capitalizing on the future quarry lake and riverfront access. Future development has the potential for trail connections to the Mn Valley National Wildlife Refuge to the east and to future trails and development of the Burnsville Landfill property to the West. The Metropolitan Council's Regional Bicycle Transportation Network identifies the 35W corridor as a Tier 1 Corridor with the centerline identified east of 35W. The regional plan also identifies the Minnesota River corridor as a Tier 2 corridor with the centerline running just north of the Minnesota River.

**iii. Zoning, including special districts or overlays such as shoreland, floodplain, wild and scenic rivers, critical area, agricultural preserves, etc.**

The Site is zoned I-2/PUD, General Industry/Planned Unit Development and the eastern portion of the Site is in the Gateway District. The adjacent property to the west is the Burnsville Sanitary Landfill, which is zoned CRD/PUD-Commercial Recreation/Planned Unit Development. The land to the north is the Freeway Landfill Superfund site, which is zoned I2/PUD and Gateway District, similar to the Site. There are four small properties (Luther Co. LP at 12020 Embassy Road; Commercial Asphalt Co. at 920 Cliff Road W; Former Knox Lumber site at 801 Cliff Road West; and City Carbon Injection building site at 12200 Dupont Avenue South), which abut the southeast part of the Site and are zoned GIM/GW, Gateway Industrial Medium/Gateway District.

Current zoning districts associated with the Site and surrounding area are illustrated on Figure 6, Zoning Map Excerpt. The Expansion Areas are zoned PUD over an I2-General Industry district. The City of Burnsville's zoning map includes additional districts described as "Other." Other districts that extend or overall the primary zoning within the Site include:

Shoreland District: The Minnesota River is located north of the Site and Black Dog Lake is located east of the Site. The Shoreland District extends 300 feet from the river and 1,000 feet from Black Dog Lake. The Expansion Areas are located outside of the Shoreland District. (The Black Dog Lake Shoreland District falls just outside of the northeastern corner of the Eastern Expansion Area's proposed excavation area.)

Gateway District: The Eastern Expansion Area is located within the Gateway District.

PUD – Planned Unit Development: The Expansion Areas are located within a PUD Planned Unit Development area, and the Project will require an amendment to the existing PUD.

Drinking Water Protection: The Expansion Areas are located within the City of Burnsville's Drinking Water Supply Management Area (DWSMA), associated with the city water intake located on the southeastern quarry floor. Portions of the existing quarry and most of the Eastern Expansion Area fall under Wellhead Protection Area (WPA) ID# 64401.

Floodplain Designation: Much of the Eastern Expansion Areas and all of the Southwestern Expansion Area are within the flood fringe district as shown on Figure 7, FEMA Flood Map Excerpt. This is the same designation as the existing quarry area. KMM will continue to operate with the existing and expanded flood control dikes as needed.

- b. Discuss the project's compatibility with nearby land uses, zoning, and plans listed in Item 9a above, concentrating on implications for environmental effects.**

The quarry operations are compatible with the existing surrounding industrial land uses. The expansion is consistent with the current "General Industry" zoning district. The PUD overlay allows uses that are consistent with those in the underlying zoning district, while allowing flexibility in the performance standards associated with

traditional zoning and maximizing the development potential of land. The PUD overlay remains sensitive to its unique and valuable natural characteristics. The Project adds potential value for final end use development of the adjacent Freeway Landfill and mixed use development on the Site itself, consistent with the city's long range planning for the MRQ.

The City of Burnsville has adopted design guidelines for the Gateway District in order to guide planning, design, and infrastructure related to future development along the gateway corridor. Planning for future quarry reclamation and redevelopment into the final end uses is an integral part of the Gateway District planning efforts.

The area known as the MRQ has long been a heavy industrial area serving the Minneapolis/St. Paul region even prior to incorporation of Burnsville as a city in 1964. The quarry has been operating this area since 1959. The nearby Freeway Dump had been operating since around 1960. The Freeway Dump stopped accepting waste in 1969. In 1993, the driving range use was undertaken. In 1969, the city issued a Conditional Use Permit (CUP) for Freeway Landfill and the MPCA granted a license in 1971. Freeway Landfill stopped taking waste in 1990 and was added to the Federal Superfund Site listing in 1986.

The Project is compatible with surrounding parks and trails. Nearby parks and trails are separated by physical barriers (the 35W and TH 13 corridors) and visual barriers (screening berms). The Project will not negatively impact the potential future development of parks and trails intended to be focused on the amenities of the future quarry lake and the Minnesota River, or the connection of trails to adjacent properties to the north (Freeway Landfill) or to the west (Burnsville Landfill). The Project will not impede the development of future regional bicycle routes.

The Project supports the future development of the MRQ consistent with the land use plans in the 2040 Plan, including planned future transportation improvements described in Section 9.a.(ii) above. Future development is readily adaptable to either a

one interchange, or a two interchange design. The Project does not create any negative impact to the Cliff Road realignment or extension.

The existing quarry is located within the Drinking Water Protection Area associated with the city water intake on the existing quarry floor. Previous mining activity created the drinking water supply sump. The expansion will not impact the city water intake. The Union Pacific rail line is currently located adjacent to the southern boundary of the KMM property and the City's drinking water intake. The rail is separated from the quarry and sump by a paved road. The Project will not change this existing condition. The Southwestern Expansion Area proposes an approximately 200 foot setback between the edge of the quarry and the railroad right of way, increasing the distance between the rail and the quarry sump as mining moves to the west from its current extents. The setback area provides buffer between the rail and the paved road and provides sufficient room for end use development of a trial system.

KMM operates under a Storm Water Pollution Prevention Plan (SWPPP) and Spill Prevention, Control and Countermeasure (SPCC) program with routine inspections. KMM also keeps spill kits near the city water intake (along with other areas) and routinely inspects and maintains them. In addition, the UP railroad operates under an Emergency Response Plan developed to safely and efficiently respond to a railroad emergency, including agreements with emergency organizations. The UP offers free responder training or assistance to public responders. In the event of a derailment, KMM will cooperate with the UP's emergency response activities.

The extraction of aggregates is permitted within the flood fringe district.

The Site is consistent with the 2040 Plan and the long term vision for development and redevelopment of the area. The MRQ concept guides future land uses along the 35W corridor and north of the rail line for a broad mix of business, office, industrial, park, quarry lake, and trails. Land uses adjacent to the future accessible natural amenities (river and the quarry lake) are guided for residential and mixed-use. The Project will result in an increase in the size of the future quarry lake, predominantly in the

Southwestern Expansion Area, where future industrial land use will be converted to quarry lake. In the Eastern Expansion Area, structural fill will be utilized to reclaim portions of this area back to grades suitable to support future development above the floodplain. Reclamation plans align with the MRQ guided land uses for a broad mix of business, office, industrial, park, quarry lake, and trails.

Recent efforts have been made by the City of Burnsville to reclaim the area previously utilized as land intensive regional uses to uses that add value not only in terms of increased tax base, but also in quality of life, community amenities, and economic opportunities.

There are some implications for environmental effects associated with the adjacent Freeway Landfill and Freeway Dump that have been identified. According to the MPCA<sup>2</sup>, when the Freeway Landfill began operating, there were few restrictions on what types of waste could be disposed of. A variety of chemicals and substances that would not be allowed under current regulations were legally dumped in the landfill. The landfill was constructed over wetland areas. Current pumping operations at the quarry have been artificially keeping the water table beneath the garbage in the fill areas. However, once the quarry resources are depleted groundwater pumping for water level control will cease, filling up the quarry lake as part of reclamation and preparation for final development. Groundwater is expected to saturate the lower portions of garbage within the landfill and dump areas. This will increase the potential for groundwater contamination and leaching of contaminants from the buried garbage. The city's drinking water supply intake is located to the south within the quarry.

In 2005/2006, the city began working with the MPCA to reach a plan for proper closure of Freeway Landfill. The concept at the time allowed for some industrial/commercial development on a portion of the Freeway Landfill property upon remediation. In 2009, the city completed a joint project with the MDNR, KMM, and the City of Savage to harvest drinking water from the quarry.

---

<sup>2</sup> Retrieved online at <https://www.pca.state.mn.us/waste/freeway-landfill-and-dump>

The MPCA reported to the City Council at the February 12, 2019 Work Session, that the Freeway Landfill has been the highest or the second highest priority closed landfill in the state. Several closure alternatives have been developed for consideration. The city's primary goal associated with existing and future uses within the MRQ is to protect the environment including drinking water sources. Secondary is the city's goal of realizing redevelopment of the MRQ including the final development of the Site and the adjacent Freeway Landfill and Freeway Dump.

The manner in which the Freeway Landfill is closed will affect the character, value, and ultimate end use development of the Site. While the various Freeway Landfill and Freeway Dump closure alternatives are beyond the scope of this EAW, it is important to note that the proposed Expansion Areas will not interfere with or adversely impact the ability for the State to properly close the Freeway Landfill and Dump. The Project will provide an opportunity for selecting a closure alternative that is much more aligned with the city's long range vision of the MRQ with Freeway Landfill being completely remediated and mixed-use development maximizing the land use and capturing the riverfront as a community asset.

- c. Identify measures incorporated into the proposed project to mitigate any potential incompatibility as discussed in Item 9b above.

The Project has been designed to minimize the potential for land use conflicts, including reclamation of a portion of the Eastern Expansion Area to development consistent with the final land use plans applicable to the Site. Reclamation of the Site will result in a highly desirable development area adjacent to the reclaimed lake. The quarry lake can continue to serve as a city water intake post reclamation.

#### **10. Geology, soils and topography/land forms:**

- a. Geology - Describe the geology underlying the project area and identify and map any susceptible geologic features such as sinkholes, shallow limestone formations, unconfined/shallow aquifers, or karst conditions. Discuss any limitations of these features for the project and any effects the project could have on these features. Identify any

project designs or mitigation measures to address effects to geologic features.

The geology of the Site consists of near surface deposits of the Prairie du Chien Group, which contains two formations, the upper Shakopee Formation and the lower Oneota Dolomite. Both formations consist largely of carbonate components, characterized by beds of dolostone, which is commonly referred to as limestone. The top of the limestone represents an erosional surface with overburden depths varying from approximately 0-65 feet across the site. Exploratory drilling of these deposits performed throughout the Site with depths extending through the Prairie du Chien Group and quarrying of the existing area has shown no sinkholes or karst conditions. For mining operations, the shallow limestone formation is a benefit rather than a limiting feature of the Project. As a result, the geologic features of the Site and Expansion Areas are highly suitable for the proposed use of quarrying. The proposed areas for expansion generally contain limestone that is located near to the surface, and which is highly suitable for quarrying purposes. The Site is highly desirable for quarrying given the near surface limestone, located on the expansion area and location within the metro area market.

The Prairie du Chien Group is underlain by a thick sequence of sedimentary rock units including the Jordan Sandstone, St. Lawrence Formation, Tunnel City Group, Wonewoc Sandstone, Eau Claire Formation, and the Mt. Simon Sandstone all lying above older Precambrian sandstone, igneous, and metamorphic basement rocks.

The entire Site (including the proposed Expansion Areas) has been designated by the MN Geological Survey as having a sensitivity rating (of the Prairie du Chien-Jordan Aquifer) to pollution of high to very high. These ratings correspond to estimated travel times for contaminants to reach the aquifer of weeks to years and hours to months, respectively<sup>3</sup>. Quarry activity can alter travel times when topsoil and bedrock are removed and/or with quarry dewatering.

---

<sup>3</sup> Balaban, N.H.; Hobbs, H.C. (1990). C-06 Geologic atlas of Dakota County, Minnesota. Minnesota Geological Survey. Retrieved from the University of Minnesota Digital Conservancy, <http://hdl.handle.net/11299/58494>. Plate 7

KMM operates the quarry in a manner that protects groundwater. All fuel storage is conducted in accordance with MPCA regulations and secondary containment is provided as required. The Site operates under a SWPPP and a SPCC. Spill kits are routinely inspected and maintained and located throughout the quarry. Routine Site inspections are conducted including inspection of fuel storage areas and fueling areas. KMM also conducts annual training with employees on the SWPPP and SPCC plans, covering surface and groundwater protection measures including good housekeeping, proper storage and handling of fuels, fueling procedures, and spill response.

- b. Soils and topography - Describe the soils on the site, giving NRCS (SCS) classifications and descriptions, including limitations of soils. Describe topography, any special site conditions relating to erosion potential, soil stability or other soils limitations, such as steep slopes, highly permeable soils. Provide estimated volume and acreage of soil excavation and/or grading. Discuss impacts from project activities (distinguish between construction and operational activities) related to soils and topography. Identify measures during and after project construction to address soil limitations including stabilization, soil corrections or other measures. Erosion/sedimentation control related to stormwater runoff should be addressed in response to Item 11.b.ii.**

The NRCS soil survey maps the soil in the Expansion Areas as “Pits, limestone quarry”. Although not part of the past extraction area, the Expansion Areas have been used for processing and other ancillary activities for the past six decades which have resulted in the disturbance and/or removal of the original soils.

The topography of the Eastern Expansion Area is relatively flat, ranging in elevation from approximately 690 to 760 feet above mean sea level (msl) across the majority of the area, and dropping in elevation to the north. There are stormwater ponding areas located along the northern boundary of the expansion area. The topography of the Southwestern Expansion Area is also relatively flat. Based on the Bloomington, Minnesota 1954 USGS Quadrangle Map that reflects topography from 1947 and 1954, the original topography of the Southwestern Expansion Area ranged in elevation from approximately 705 to 720 feet msl. Subsequent ancillary activity has altered the original topography with small screening

berms, grading for compost and ready-mix plant activities, and stormwater management. Elevations currently range from approximately 700-724 feet above msl. The Southwestern Expansion Area drains to a stormwater pond just north of the expansion limits. Material stockpiles of various commodities are located across both Expansion Areas.

There are no special site conditions relating to erosion potential or other soils limitations, such as steep slopes or highly permeable soils. The Site operates under an MPCA NPDES stormwater permit, which implements Best Management Practices (BMP) for erosion and sedimentation control through a SWPPP.

Possible soil stability issues are limited to site reclamation in the Eastern Expansion Area where mined areas will be backfilled with an engineered fill to prepare the site for future development. A geotechnical engineer will develop backfilling plans and specifications including a construction monitoring plan. The backfilling plans and specifications will be designed by the geotechnical engineer to provide a suitable structural foundation for the future building needs at an acceptable factor of safety. The plans and specifications will include acceptable soil types, gradations, placement, compaction, testing protocol, construction monitoring, and reporting requirements as deemed necessary by the geotechnical engineer. The plan and documentation will illustrate that the soils can support future development, including large multiple story buildings and infrastructure.

The final engineering plans and specifications will be developed for reclamation prior to reclamation activities commencing in this area. KMM currently plans to maintain a limestone rim between the current area and the proposed eastern expansion. This plan will be finalized prior to mining commencing in the area and tied into the engineering plan.

The estimated volume and acreage of soil excavation (overburden) in the Eastern Expansion Area is 1,300,000 cubic yards of overburden across 46 acres. The estimated volume and acreage of soil and storage stockpile excavation in the Southwestern Expansion Area is 600,000 cubic yards across 26 acres.

NOTE: For silica sand projects, the EAW must include a hydrogeologic investigation assessing the potential groundwater and surface water effects and geologic conditions that could create an increased risk of potentially significant effects on groundwater and surface water. Descriptions of water resources and potential effects from the project in EAW Item 11 must be consistent with the geology, soils and topography/land forms and potential effects described in EAW Item 10.

**11. Water resources:**

- a. Describe surface water and groundwater features on or near the site in a.i. and a.ii. below.
  - i. Surface water - lakes, streams, wetlands, intermittent channels, and county/judicial ditches. Include any special designations such as public waters, trout stream/lake, wildlife lakes, migratory waterfowl feeding/resting lake, and outstanding resource value water. Include water quality impairments or special designations listed on the current MPCA 303d Impaired Waters List that are within 1 mile of the project. Include DNR Public Waters Inventory number(s), if any.

There are no lakes, streams, WCA regulated or jurisdictional wetlands, or county/judicial ditches located within the Expansion Areas. Figure 8, City of Burnsville 2008 Wetlands, is an excerpt of the city or Burnsville's wetland inventory. The figure shows wetlands located on the Site and surrounding area. Wetland basins within the Site itself have been field delineated as part of on-going quarry operations. Figure 9, Site Wetland Basins, illustrates the location of the on-site field-delineated wetlands and their regulatory status based on a 2016 Wetland Conservation Act (WCA) Notice of Decision<sup>4</sup> and a 2016 Army Corps of Engineers (ACOE) jurisdictional determination.<sup>5</sup> A field delineated WCA incidental (nonregulated)/USACE nonjurisdictional wetland (Figure 9, Wetland G) extends slightly into the Southwestern Expansion Area. There are no other wetland basins in the Expansion Areas.

Permits were issued for wetland impacts and associated mitigation as needed in conjunction with existing quarry operations. A wetland bank was created and used for

---

<sup>4</sup> 5/18/2016 Minnesota Wetland Conservation Act Notice of Decision City of Burnsville KMM West Property.

<sup>5</sup> July 20, 2016 Approved Jurisdictional Determination ACOE to KMM.

the mitigation of wetlands and is located north of the quarry and south of the Minnesota River.

There are a number of wetlands surrounding the Site. Some are isolated basins and others are associated with the floodplain of the Minnesota River. The Black Dog Lake calcareous fen complex is located within one mile of the Eastern Expansion Area. Portions of the fen are designated Outstanding Resource Value Waters and Prohibited Water. The area of the Black Dog fen is owned by Xcel Energy and managed by the US Fish and Wildlife Service (USFWS) as part of the Minnesota Valley National Wildlife Refuge Black Dog Preserve. The fen is located east of the 35W corridor. Stormwater from the Site does not flow to the fen. Stormwater from the Site stays west of 35W. Stormwater from the Eastern Expansion Area generally flows to a large basin on the northern portion of the Site, where it is periodically pumped into KMM's water discharge system and routed through sedimentation ponds.

There are no DNR Public Waters within the Site itself. Public waters within one-mile of the Site from the DNR Public Waters Inventory are listed on Table 10-1. The public waters located in Hennepin County are located north of the Minnesota River. Public waters will not be impacted as a result of the proposed expansion.

Table 10-1 DNR Public Waters Within One Mile of the Site.

DNR Public Water Inventory ID	
Dakota County	
Minnesota River	Watercourse
83P (Black Dog Lake)	Basin
112 W	Wetland
111 W	Wetland
Hennepin County	
Nine Mile Creek	Watercourse
13P	Basin
1074P	Basin
1075P	Basin
1076P	Basin

Impaired waters are located within one mile of the Site. The MPCA's 2018 TMDL 303d list of impairments<sup>6</sup>, approved by the EPA on January 28, 2019 for the reach of the Minnesota River adjacent to the Site identifies aquatic consumption and aquatic life impairments which include the following:

Aquatic Consumption:

- Mercury in Fish Tissue
- Mercury in water column
- PCB in Fish Tissue

Aquatic Life:

- Dissolved Oxygen
- Nutrient/eutrophication biological indicators
- Turbidity

---

<sup>6</sup> Retrieved on line at <https://www.pca.state.mn.us/sites/default/files/wq-iw1-04j.pdf>

The only other impaired water within one mile of the Site is Nine Mile Creek, located north of the MN River, outside of the watershed of the Project.

- ii. **Groundwater – aquifers, springs, seeps. Include: 1) depth to groundwater; 2) if project is within a MDH wellhead protection area; 3) identification of any onsite and/or nearby wells, including unique numbers and well logs if available. If there are no wells known on site or nearby, explain the methodology used to determine this.**

The general direction of groundwater flow in the Prairie du Chien aquifer is to the north, towards the Minnesota River. Locally, the direction of groundwater flow and the depth to groundwater at the Site is influenced by dewatering associated with the current and previous quarry operations and pumping associated with the City of Burnsville's water supply sump located in the southeastern portion of the existing quarry. Groundwater from the Expansion Areas flows towards the existing quarry sump(s). The elevation of the groundwater ranges from approximately 700 feet above msl along the outside perimeters to approximately 625 feet above msl adjacent to the existing quarry highwalls across both Expansion Areas. This corresponds to depths between the existing grade and the groundwater of 25-75 feet.

The entire Site is located within the Burnsville DWSMA. Figure 10, Well Head Protection Area/Drinking Water Supply Management Area, illustrates the extent of the WPA and DWSMA with respect to the Expansion Areas.

There are a number of wells located on the Site and in the surrounding area. Figure 10 also illustrates well locations within 500 feet of the Site. Wells on surrounding properties include monitoring wells associated with the old Knox Lumber site, the Freeway Landfill, Freeway Dump, and the Burnsville Landfill. The Minnesota Well Index indicates that there are some private industrial, commercial, and domestic water supply wells located within one mile of the Site, although the area is served by municipal water. Private supply wells are all located upgradient of the quarry.

The depth of mining in the Expansion Areas will be consistent with the rest of the quarry. The quarry depth is based on engineering studies developed to manage water appropriations within the permitted appropriation volumes and varies across the Site. The Barr Engineering Report (Attachment 1) evaluated potential impacts to the city water supply sump. With the proposed changes to the current sump (currently planned with or without the Project), the Project will not negatively impact the city water supply yields.

- b. Describe effects from project activities on water resources and measures to minimize or mitigate the effects in Item b.i. through Item b.iv. below.
- i. Wastewater - For each of the following, describe the sources, quantities and composition of all sanitary, municipal/domestic and industrial wastewater produced or treated at the site.

The Project will not create any new wastewaters. Wastewaters associated with the existing operations include small amounts of domestic wastewater generated at the main office. This building is served by municipal sewer and water. Industrial process water is generated from the aggregate wash plant. Washwater is recycled through the plant and is not directly discharged from the Site.

Dewatering discharge is routed through a series of sedimentation basins and then discharged to the Minnesota River. Weekly monitoring of the dewatering discharge is conducted in accordance with the MPCA NPDES permit (MN0002224). Monitoring results are reported to the MPCA and results are within permit limits. Monitoring parameters include:

- Flow
- Nitrite Plus Nitrate, Total (as N)
- Nitrogen, Kjeldahl, Total
- Nitrogen, Total (as N)
- Oil and Grease, total recoverable (Hexane Extraction)
- pH

- Phosphorous, Total (as P)
- Total Suspended Solids (TSS)

The NPDES permit is subject to a permit reissuance every five years. The SWPPP, which is an NPDES permit requirement, will be updated to reflect the additional mining areas prior to initiating mining in the expansion areas.

- 1) If the wastewater discharge is to a publicly owned treatment facility, identify any pretreatment measures and the ability of the facility to handle the added water and waste infrastructure.

The Project will not generate additional wastewater.

- 2) If the wastewater discharge is to a subsurface sewage treatment systems (SSTS), describe the system used, the design flow, and suitability of site conditions for such a system.

Not Applicable.

- 3) If the wastewater discharge is to surface water, identify the wastewater treatment methods and identify discharge points and proposed effluent limitations to mitigate impacts. Discuss any effects to surface or groundwater from wastewater discharges.

Wastewater from the aggregate washing process is treated in on-site sedimentation basins, recycled back through the washplant, and is not directly discharged from the Site. Sediment is removed from ponds on a periodic basis and sold as agricultural liming materials or used in reclamation activities.

- ii. Stormwater – Describe the quantity and quality of stormwater runoff at the site prior to and post construction. Include the routes and receiving water bodies for runoff from the site (major downstream water bodies as well as the immediate receiving waters). Discuss any environmental effects from stormwater discharges. Describe stormwater pollution prevention plans including temporary and permanent runoff controls and potential BMP site locations to manage or treat stormwater runoff. Identify specific erosion control, sedimentation control or stabilization measures to address soil limitations during and after project construction.

The Project will not result in any significant change to stormwater runoff quantity or quality. Currently, the majority of stormwater in the Eastern Expansion Area drains to a temporary sedimentation and detention ponding area located in the northern portion of the Site. This pond was constructed in conjunction with the 35W CUP grading project to provide treatment of stormwater runoff associated with the grading project. Stormwater is pumped from the pond to the quarry floor, where it is routed through the stormwater treatment/sedimentation ponds prior to discharge. A small portion of stormwater from this area drains to the east to an intermittent ditch that also receives runoff from Cliff Road and ultimately drains to the Minnesota River. During mining berms, diversions, and/or temporary ponds will be established as necessary to route all stormwater from the Eastern Expansion Area internally through the existing stormwater management system.

Current stormwater runoff in the Southwestern Expansion Area generally flows to the north to an existing sedimentation and detention basin, located just north of the expansion area, developed to treat stormwater runoff from the compost area. This pond has a piped outlet into a second stormwater basin that is located further to the northwest. This pond discharges into a ditch system (West Ditch), that runs along the western property line of the Site, eventually entering the Minnesota River. The West Ditch is subject to ACOE jurisdiction. There is also a stormwater pond located on the ready-mix plant site. During mining diversion berms and swales will be utilized as necessary to route all stormwater from active mining areas within the Southwestern Expansion Area internally through the existing stormwater management system. All stormwater from the Expansion Areas will be managed in accordance with the NPDES Permit for Nonmetallic Mineral Mining and Associated Activities.

The mining activity is conducted under an MPCA NPDES Permit (MN 0002224). Grading activity on the 35W CUP Site (approximately the northern 40 acres of the Eastern Expansion Area illustrated on Figure 2, USGS Quad Map Excerpt) is conducted under a MPCA NPDES for Construction Activity (CSC0010109). Both permits require

a SWPPP, which has been prepared and implemented by the operator, including routine training of applicable staff. The composting operation and the ready-mix plant, located on the Southwestern Expansion Area, are currently leased to third parties. When these ancillary uses convert to mining activities, KMM's mining SWPPP will be updated to accommodate the Expansion Areas. As mining lowers the elevation of the Expansion Areas, stormwater will drain into the quarry floor and will be managed internally in various treatment areas within the quarry, just as it is today. BMPs are incorporated by KMM as Site conditions warrant. BMPs include the utilization as applicable of diversion/perimeter berms, temporary seeding, pile location, silt fence, seeding/vegetation, temporary ponding, and good housekeeping.

Reclamation will include the creation of approved edge treatments around the perimeter of the quarry lake. Reclamation will return a portion of the Eastern Expansion Area to an elevation above the regional floodplain in preparation for final development associated with the MRQ. Stormwater management will be designed in accordance with requirements in effect at the time that final development plans are prepared, and end uses development occurs.

- iii. **Water appropriation** - Describe if the project proposes to appropriate surface or groundwater (including dewatering). Describe the source, quantity, duration, use and purpose of the water use and if a DNR water appropriation permit is required. Describe any well abandonment. If connecting to an existing municipal water supply, identify the wells to be used as a water source and any effects on, or required expansion of, municipal water infrastructure. Discuss environmental effects from water appropriation, including an assessment of the water resources available for appropriation. Identify any measures to avoid, minimize, or mitigate environmental effects from the water appropriation.

The Site currently operates underwater appropriation permits from the MDNR. The Project does not propose any increase in appropriation to the existing permits. Barr Engineering developed a site-specific groundwater flow model for the Site. By managing mine operations including phasing, depth of dewatering, water infiltration locations, and timing and content of reclamation backfill; dewatering volumes can be

maintained at currently approved levels and adjacent water features will not be impacted by the proposed expansion. As such, an amendment to the appropriation permit will not be required for the Project.

The City of Burnsville has been using and distributing groundwater from the Quarry for public water supply since 2009. Groundwater withdrawals for the water supply influence groundwater withdrawal for quarry dewatering. Barr Engineering prepared a detailed groundwater model of dewatering associated with the proposed Expansion Areas and prepared a report titled *Simulations of Proposed Future Kraemer Burnsville Quarry Mine Expansion*, which is included as Attachment 1 of this EAW. The report concluded the following:

1. Quarry expansion on the east and southwest peripheries of the Quarry can be undertaken while maintaining the total dewatering from mining within current water appropriations permit levels. Amendment of the current MDNR water appropriations permit is not needed.
2. The proposed expansion can be done in conjunction with the deepening of the south reservoir to increase the available water to the city.
3. Dewatering is not expected to have an impact on the Savage Fen.
4. An infiltration trench, located between the Eastern Expansion Area and the westernmost portion of Black Dog Fen (Unit a) will prevent reductions in groundwater levels that may result from the Eastern Expansion Area, Southwest Expansion Area and the deepening of the south reservoir, used for water supply by the City of Burnsville. This same type of mitigation is currently approved for use at the Unimin (now Covia) facility near Mankato, MN.
5. Flow from the infiltration trench is circulated back into the east mine expansion area. Modeling results indicate that flow from the infiltration trench will not flow to the south reservoir.

iv. Surface Waters

- a) Wetlands - Describe any anticipated physical effects or alterations to wetland features such as draining, filling, permanent inundation, dredging and vegetative removal. Discuss direct and indirect environmental effects from physical modification of wetlands, including the anticipated effects that any proposed wetland alterations may have to the host watershed. Identify measures to avoid (e.g., available alternatives that were considered), minimize, or mitigate environmental effects to wetlands. Discuss whether any required compensatory wetland mitigation for unavoidable wetland impacts will occur in the same minor or major watershed, and identify those probable locations.

The Expansion Areas do not contain WCA regulated or USACE jurisdictional wetlands and no direct impact to wetlands will occur as a result of the Project. Although there will be no increase in water appropriations, expanding the mine limits will result in the area of effective dewatering moving closer to wetland resources. The potential for indirect impacts to adjacent wetlands, particularly the Black Dog Fen to the east and the Savage Fen (located over one mile southeast of the Site), was evaluated as part of the groundwater modelling work. No impact is anticipated to the Savage Fen or Black Dog Fen with appropriate mitigation from KMM's proposed expansion and method of quarrying. Barr's conclusions regarding potential impacts to the fen based on their modelling work state; "*Dewatering is not expected to have an impact on the Savage Fen*" and "*An infiltration trench, located between the east mine expansion area and the western-most portion of Black Dog Fen (unit a) will prevent reductions in groundwater levels that may result from the east expansion area and the deepening of the south reservoir, used for water supply by the City of Burnsville. This same method is currently approved for use at the Unimin (now Covia) facility near Mankato, MN.*"

KMM is proposing to reintroduce a portion of the groundwater dewatering discharge to an infiltration device to be located between the Black Dog Fen and the eastern expansion area to fully mitigate any potential impacts to the fen from either quarrying of the area or additional pumping from the City Sump.

- b) Other surface waters- Describe any anticipated physical effects or alterations to surface water features (lakes, streams, ponds, intermittent channels, county/judicial ditches) such as draining, filling, permanent inundation, dredging, diking, stream diversion, impoundment, aquatic plant removal and riparian alteration. Discuss direct and indirect environmental effects from physical modification of water features. Identify measures to avoid, minimize, or mitigate environmental effects to surface water features, including in-water Best Management Practices that are proposed to avoid or minimize turbidity/sedimentation while physically altering the water features. Discuss how the project will change the number or type of watercraft on any water body, including current and projected watercraft usage.

The Project will not alter surface water features other than on-site stormwater ponds and ditches, which were designed and constructed to manage current site activities, such as the compost area, stockpile and storage areas and the ready-mix plant. There is also one city owned stormsewer system that drains a segment of Cliff Road and discharges onto KMM property within the Eastern Expansion Area that will be routed to the ditch a running along the east side of the KMM property prior to commencing mining in this area. As the land uses within the Expansion Areas are converted to mining, stormwater will be managed internally and routed through the stormwater system to eliminate off-site impacts, increases to turbidity, or sedimentation of off-site wetlands or the Minnesota River. The project does not have the potential to create significant impacts to nearby surface water features.

## **12. Contamination/Hazardous Materials/Wastes:**

- a. Pre-project site conditions - Describe existing contamination or potential environmental hazards on or in close proximity to the project site such as soil or ground water contamination, abandoned dumps, closed landfills, existing or abandoned storage tanks, and hazardous liquid or gas pipelines. Discuss any potential environmental effects from pre-project site conditions that would be caused or exacerbated by project construction and operation. Identify measures to avoid, minimize or mitigate adverse effects from existing contamination or potential environmental hazards. Include development of a Contingency Plan or Response Action Plan.

There are no known existing contamination or environmental hazards within the Expansion Areas. Current and past land uses in these areas include ready-mix plants,

yard waste composting, aggregate processing, and stockpile areas. These activities have been conducted under required permits from the Minnesota Pollution Control Agency.

The MPCA's "What's in My Neighborhood" database indicates that Edward Kraemer & Sons Inc. (now KMM quarry) previously reported and remediated three petroleum leaks. Leak Site LS0004804 was closed in 1994, Leak Site LS0005640 in 1995, and Leak Site LS0011084 in 1998. These leak sites are now closed and none of them were located in the Expansion Areas.

KMM quarry is currently listed as a Minimal Quantity Hazardous Waste Generator. Dakota County inspects KMM on an approximately 3 year cycle. The Site has two underground fuel storage tanks and miscellaneous barrels of oil, lubricant, and batteries that are necessary features of the KMM maintenance building. Proper storage and containment measures are followed, and inspections are conducted by trained personnel on a weekly basis to ensure good housekeeping and compliance. The Site operates under an SPCC and maintains appropriate employee training and spill response materials. KMM has an agreement with Bay West to provide spill response and clean up in the event a spill that exceeds the capabilities of KMM staff and equipment. Expansion Areas are currently included in the SPCC and the plan is updated as needed.

Other adjacent lands in close proximity to the Expansion Areas include some areas of likely environmental hazards. These include the Freeway Landfill to the north and the Freeway Dump just east of 35W. The Freeway Landfill is a closed landfill and superfund site, which is associated with a number of environmental concerns, including potential for groundwater contamination once dewatering of the quarry ceases. The MPCA is currently working on addressing these concerns, as well as closure of the Freeway Dump through their closed landfill program. Other industrial uses adjacent to the Expansion Areas include the Burnsville Landfill, a mixed

municipal solid waste landfill with an active groundwater quality monitoring network, an asphalt plant, ready mix plants and the quarry itself. The MPCAs database, “What’s in my Neighborhood”<sup>7</sup>, indicates that there have been reported petroleum spills and leaks with subsequent clean up and closure associated with some of these sites. There are also registered above ground and/or underground storage tanks associated with many of these adjacent sites. The Project is not expected to impact any of these existing conditions. Figure 11, Potential Contaminant Sources within 500 feet, shows sources of potential contamination on the Site and surrounding area based on the MPCA’s “What’s in My Neighborhood” database.

- b. **Project related generation/storage of solid wastes - Describe solid wastes generated/stored during construction and/or operation of the project. Indicate method of disposal. Discuss potential environmental effects from solid waste handling, storage and disposal. Identify measures to avoid, minimize or mitigate adverse effects from the generation/storage of solid waste including source reduction and recycling.**

No new solid wastes will be generated by the proposed expansion. Byproducts of aggregate production will be used in reclamation of the Site.

- c. **Project related use/storage of hazardous materials - Describe chemicals/hazardous materials used/stored during construction and/or operation of the project including method of storage. Indicate the number, location and size of any above or below ground tanks to store petroleum or other materials. Discuss potential environmental effects from accidental spill or release of hazardous materials. Identify measures to avoid, minimize or mitigate adverse effects from the use/storage of chemicals/hazardous materials including source reduction and recycling. Include development of a spill prevention plan.**

Explosives associated with blasting of limestone will be used in the Expansion Areas in the same type and manner as current operations. Blasting is discussed further under item 20. Explosives or other hazardous materials will not be stored in the Expansion Areas or on the Site.

---

<sup>7</sup> <https://www.pca.state.mn.us/data/whats-my-neighborhood>

- d. Project related generation/storage of hazardous wastes - Describe hazardous wastes generated/stored during construction and/or operation of the project. Indicate method of disposal. Discuss potential environmental effects from hazardous waste handling, storage, and disposal. Identify measures to avoid, minimize or mitigate adverse effects from the generation/storage of hazardous waste including source reduction and recycling.

The Expansion Areas will not directly generate hazardous waste. Very small amounts of hazardous waste are generated at the shop for maintenance activities. The Site has been designated by Dakota County as a Minimal Quantity Hazardous Waste Generator. This designation is denoted by KMM's minimal generation of selected categories of hazardous waste that are handled, transported, and disposed by third parties from the Site in accordance with state and federal regulations. Dakota County conducts site inspections approximately every three years to ensure its status as a Minimal Quantity Hazardous Waste Generator has not changed.

**13. Fish, wildlife, plant communities, and sensitive ecological resources (rare features):**

- a. Describe fish and wildlife resources as well as habitats and vegetation on or in near the site.

There are no fish or wildlife resources on the Expansion Areas. These areas have been highly utilized with ancillary mining uses for many years and do not contain habitat suitable for rare features. There is only a minor amount of vegetation primarily used for screening existing site operations, or along stormwater ditches located on the Expansion Areas. Near the Site, the Minnesota River corridor contains fish and wildlife resources and is not anticipated to be impacted as a result of the proposed expansion.

- b. Describe rare features such as state-listed (endangered, threatened or special concern) species, native plant communities, Minnesota County Biological Survey Sites of Biodiversity Significance, and other sensitive ecological resources on or within close proximity to the site. Provide the license agreement number (LA-\_\_\_\_) and/or correspondence number (ERDB 20190202) from which the data were obtained and attach the Natural Heritage letter from the DNR. Indicate if any additional habitat or species survey work has been conducted within the site and describe the results.

The MDNR Natural Heritage Review identified the following rare features to occur within an approximately one-mile radius of the Site. A copy of the DNR review letter is included as Attachment 2.

1. Calcareous Fens: a rare type of wetland which supports a number of state listed threatened plant species including Sterile sedge, valerian and whorled nutrush. The Black Dog Fen is located approximately less than one mile east of the Eastern Expansion Area and the Savage Fen is located just over 1.5 miles from the Southwestern Expansion Area. The Black Dog Fen is located on the other side of I-35W from the Site.
  2. Blanding's Turtles: a state listed threatened species
  3. Several state-listed fish, mussels, and amphibians have been documented that are associated with the Minnesota River in the vicinity of the Project.
- c. Discuss how the identified fish, wildlife, plant communities, rare features and ecosystems may be affected by the project. Include a discussion on introduction and spread of invasive species from the project construction and operation. Separately discuss effects to known threatened and endangered species.

1. Calcareous Fens: The fens are located across major transportation corridors from the Site. No direct impacts to the fens will occur as a result of the Project. Indirect impacts may result if dewatering activity would lower groundwater levels for an extended period of time, interrupting a consistent supply of groundwater flow to the fens.

2. Blanding's Turtles: The MDNR review letter indicates that although Blanding's Turtles have been reported in the vicinity of the Site, due to the previous land uses in the immediate area, impacts to the Blanding's turtle are unlikely. Although unlikely, Blanding's Turtles may be impacted if they are nesting in areas that could be disturbed

from mining equipment or if they are travelling to the or from their nesting grounds across an active mining area.

3. Fish, mussels, and amphibians could potentially be impacted if discharges into the Minnesota River have a negative effect on water quality, especially a high suspended solids load causing increased siltation.

**d. Identify measures that will be taken to avoid, minimize, or mitigate adverse effects to fish, wildlife, plant communities, and sensitive ecological resources.**

1. Calcareous Fens: The potential for indirect impacts to surrounding calcareous fens as a result of the combination of dewatering of the Expansion Areas and of increased sump depth and pumping of the city's water supply, was evaluated as part of the hydrogeologic investigation and groundwater modelling conducted by Barr Engineering (Barr). Barr's Technical Memorandum concludes that KMM can operate without impact to the fens; "*Dewatering is not expected to have an impact on the Savage Fen*" and "*An infiltration trench, located between the east mine expansion area and the westernmost portion of Black Dog Fen (unit a) will prevent reductions in groundwater levels that may result from the east expansion area and the deepening of the south reservoir, used for water supply by the City of Burnsville. This same method is currently approved for use at the Unimin (now Covia) facility near Mankato, MN.*"

As stated previously, the Barr Technical Memorandum concludes that no significant impacts to fens will occur as a result of the proposed expansion. Even without mitigation, impacts to the Savage Fen are not expected. To remove the potential for indirect impacts to various units of the Black Dog Fen, KMM is proposing to construct and operate an infiltration device to reintroduce the dewatering discharge back into the aquifer. Modeling concludes that with utilization of an infiltration trench (or similar methods) potential impacts to the Black Dog Fen can be mitigated. Groundwater level monitoring will be performed to ensure that the dewatering does not create adverse impacts.

2. Blanding's Turtle: In the unlikely event that a Blanding's Turtle is found on the Site, turtles which are in imminent danger should be moved, by hand, out of harms' way. Turtles which are not in imminent danger should be left undisturbed. Any erosional control netting used on Site will be limited to wildlife friendly options. If a Blanding's Turtle is spotted in the Site, the operator will be instructed to follow the MDNR recommendations for avoiding and minimizing impacts for areas inhabited by Blanding's Turtles, included in Attachment 2.

3. Fish, Mussels and Amphibians associated with the Minnesota River: The Site will continue to operate under a MPCA NPDES Permit. The permit requires weekly monitoring of the dewatering discharge to the Minnesota River and establishes permit limit of 30 mg/l calendar month average and 60 mg/l daily maximum. The discharge is also routinely monitored for Nitrogen, pH, oil, and grease. The Site is inspected on a regular basis to monitor the effectiveness of BMP's implemented at the site to minimize or eliminate erosion and sedimentation and contamination of stormwater that could enter the Minnesota River, in accordance with the SWPPP and SPCC plans for the Site. Employees undergo routine training on pollution prevention. Because the Site operates in accordance with the discharge requirements from the MPCA permit, no adverse impacts to listed species are anticipated.

**14. Historic properties:**

Describe any historic structures, archeological sites, and/or traditional cultural properties on or in close proximity to the site. Include: 1) historic designations, 2) known artifact areas, and 3) architectural features. Attach letter received from the State Historic Preservation Office (SHPO). Discuss any anticipated effects to historic properties during project construction and operation. Identify measures that will be taken to avoid, minimize, or mitigate adverse effects to historic properties.

There are no known historic structures, archeological sites or traditional cultural properties on or in close proximity. A Phase 1 Archaeological Assessment of the western portion of the Site, including the entire Southwestern Expansion Area, was conducted in 2014 as part of the federal wetland permitting work associated with

this area<sup>8</sup>. The report noted that the western portion of the Site that had not been quarried, but had been impacted by fairly extensive grading, road construction, and landscaping. The results were negative with respect to any archeological sites. The report concluded that “the negative results of this survey indicate that future expansion of mining activity in the inspected areas can take place without any threat to archaeological resources.”

The Eastern Expansion Area has also been similarly disturbed by past land use. The southern portion of the Eastern Expansion Area was graded and used as the processing and stockpile area for several decades until recently when this activity was relocated to the floor of the quarry. The northern portion of the Eastern Expansion Area has been subject to extensive grading and filling activity, associated with the 35W CUP. As a result, the Eastern Expansion Area also lacks archaeological potential.

A search of the State Historic Preservation Office (SHPO)’s database was conducted for sites on or near the vicinity of the Site. No archaeological or historic properties were identified in the given area. Project information and the report for the Southwestern expansion area was provided to SHPO for initial review. SHPO concluded that there are no properties listed in the National or State Registers of Historic Places, and that there are no known or suspected archeological properties in the area that will be affected by this Project. A copy of the SHPO correspondence is included as Attachment 3. SHPO will have the opportunity to further review and comment on the EAW during the 30 day public comment period.

#### **15. Visual:**

**Describe any scenic views or vistas on or near the project site. Describe any project related visual effects such as vapor plumes or glare from intense lights. Discuss the potential visual effects from the project. Identify any measures to avoid, minimize, or mitigate visual effects.**

The proposed Expansion Areas are immediately adjacent to, and an extension of, the current extraction limits. The same processing areas that are currently used at the Site

---

<sup>8</sup> Harrison, Christina, Archaeological Research Services. Report on Phase 1 Archaeological Assessment Kraemer Mining and Materials Property in Burnsville, Dakota County, Minnesota. Undated.

will be used for materials extracted from the Expansion Areas. The processing areas are recessed on the quarry floor approximately, 100 feet below the surrounding grade. The Project will not create any significant changes to viewsheds in the area, including from the Minnesota River and adjacent roadway corridors.

**16. Air:**

- a. Stationary source emissions - Describe the type, sources, quantities and compositions of any emissions from stationary sources such as boilers or exhaust stacks. Include any hazardous air pollutants, criteria pollutants, and any greenhouse gases. Discuss effects to air quality including any sensitive receptors, human health or applicable regulatory criteria. Include a discussion of any methods used assess the project's effect on air quality and the results of that assessment. Identify pollution control equipment and other measures that will be taken to avoid, minimize, or mitigate adverse effects from stationary source emissions.

Mining has the potential to create air emissions, primarily from fugitive dust sources created by vehicle travel on unpaved haul roads and processing equipment. The Project will not result in the increase of stationary source air emissions. Material mined from the Expansion Areas will be hauled to the existing plant located on the floor of the quarry for processing. The processing equipment is operated under an Air Emission Permit (03700115-002) issued by the MPCA. The permit regulates operating parameters and requires routine performance testing, record keeping and monitoring to ensure compliance with the state and federal ambient air standards. No changes to this permit are required as a result of the Project. Recent detailed modeling completed for the air permit demonstrates Site compliance with the National Ambient Air Quality Standards.

The Site operates under a Fugitive Dust Control Plan (FDCCP). Fugitive dust is controlled by paving sections of the main quarry access road within the Site. KMM utilizes a vacuum sweeper on a regular basis to sweep the paved portions of the Site's haul roads and access points. KMM operates a 5,000 gallon articulated water truck for regular watering of unpaved haul roads, and during the winter months uses a snow spreading technique. Processing activities and material stockpiles are predominantly

located on the floor of the mine, where the recessed nature of the floor provides a topographic barrier that helps to prevent fugitive dust that may be generated from processing and stockpiling operations from travelling off-site. KMM also has MPCA approval to use Magnesium Chloride as needed on internal haul roads.

- b. **Vehicle emissions** - Describe the effect of the project's traffic generation on air emissions. Discuss the project's vehicle-related emissions effect on air quality. Identify measures (e.g. traffic operational improvements, diesel idling minimization plan) that will be taken to minimize or mitigate vehicle-related emissions.

Annual increase to vehicle emissions will not occur as a result of the Project. Vehicular traffic associated with hauling material from the Expansion Areas will utilize existing access roads.

- c. **Dust and odors** - Describe sources, characteristics, duration, quantities, and intensity of dust and odors generated during project construction and operation. (Fugitive dust may be discussed under item 16a). Discuss the effect of dust and odors in the vicinity of the project including nearby sensitive receptors and quality of life. Identify measures that will be taken to minimize or mitigate the effects of dust and odors.

The Project will not generate any odors. Fugitive dust control is addressed in Section 16.a above.

## **17. Noise**

Describe sources, characteristics, duration, quantities, and intensity of noise generated during project construction and operation. Discuss the effect of noise in the vicinity of the project including 1) existing noise levels/sources in the area, 2) nearby sensitive receptors, 3) conformance to state noise standards, and 4) quality of life. Identify measures that will be taken to minimize or mitigate the effects of noise.

The Project will not generate new sources of noise. The majority of all sound producing quarry activities will take on the quarry floor; including excavating, processing, stockpiling, and loading. There are no nearby sensitive receptors, as the mine is located in an industrially developed area and the I-35W highway corridor. Site operations are subject to the Minnesota Noise Standards and the closest surrounding receptors are industrial in nature. The Site is

subject to Noise Area Classification (NAC3) at these industrial receptors. NAC 3 has the least restrictive noise standards. The closest residential receptors (NAC1) are located over one half mile from the Expansion Areas and separated by the Highway 13 corridor.

The Project will not result in any notable change to sound levels currently produced at the Site. Existing conditions are well documented. A detailed study was conducted for the City of Burnsville in 2018 by Barr Engineering (2018 Blasting Report), which concluded that both noise and vibration were within the federal guidelines for safe blasting (Attachment 4). The report indicates that the highest recorded noise reading at a residential seismograph was 94.7 dB, well below the federal guidelines of 133 dB. All blasts will be designed to be well within the federal guidelines.

The location of blasting in the Expansion Areas will move closer to some receptors and further away from others. Blast design will be adjusted accordingly as mining moves closer or further from receptors, just as it is in the current operation. All blasting is performed by licensed blasting professionals and is designed to meet the guidelines for safe blasting from the Office of Surface Mining (formerly United States Bureau of Mines (USBM)) contained in USBM RI8507. These guidelines include noise acceptable sound energy levels (noise) from each blast. Each blast is designed by the licensed blasting professional to be below the standards for the nearest off site receptor using the squared distance formula. The distance to the nearest receptor is one of the criteria incorporated into the blasting design. As blasting gets closer to a receptor, the amount of energy used for the blast is reduced. Since each blast will be designed to be below the standard at the nearest off site receptor just as they are today, the noise levels associated with blasting is expected to be essentially the same as current conditions. Sound level produced from blasting is not anticipated to have any negative impact to surrounding receptors.

## **18. Transportation**

- a. Describe traffic-related aspects of project construction and operation. Include: 1) existing and proposed additional parking spaces, 2) estimated total average daily traffic generated, 3) estimated maximum peak hour traffic generated and time of occurrence,

4) indicate source of trip generation rates used in the estimates, and 5) availability of transit and/or other alternative transportation modes.

The Project will not require additional parking spaces. There are currently 32 paved and marked parking spaces near the office. Additional unpaved parking is available if/as needed in various areas of the quarry. Existing traffic levels at the Site are determined by market demand and production limits established in the MPCA Air Permit, which is 3,750,000 tons per year.

The Project will not result in any change to total average daily traffic or maximum peak hour traffic levels which are dictated by the aggregate and transportation market demand. Existing estimated total average daily traffic generated is based on the past several years of production with an average of approximately 65,000 loads (130,000 trips) and 50,000 employee/vendor/other trips per year resulting in an estimated ADT of 493 trips per day. Traffic is seasonal with higher levels generated during the construction season, generally April – November, but sales occur throughout the year. Estimated maximum peak hour traffic is approximately 92 trips/hour occurring between 7-8 am. Peak traffic is based on 10% of the average daily traffic generated during the primary hauling season. Hauling aggregates from the quarry to the end user is the only feasible transit option available at this time.

The Southwest Expansion Area is located near the Union Pacific rail line. The mine limits of the Southwestern Expansion area are setback from the railroad right of way approximately 200 feet. End Use Plans consider this boundary to be Quarry Lake with sufficient room to construct a trail and/or pedestrian way. Possible impacts and associated mitigation have been addressed in section 9.3.b.

- b. Discuss the effect on traffic congestion on affected roads and describe any traffic improvements necessary. The analysis must discuss the project's impact on the regional transportation system.

*If the peak hour traffic generated exceeds 250 vehicles or the total daily trips exceeds 2,500, a traffic impact study must be prepared as part of the EAW. Use the format and procedures described in the Minnesota Department of Transportation's Access Management Manual, Chapter 5 (available at: <http://www.dot.state.mn.us/accessmanagement/resources.html>) or a similar local guidance.*

The Project will not generate additional peak hour traffic or congestion of nearby roads. No traffic improvements are necessary and there will be no anticipated impacts to the regional transportation system. The proposed expansion will not generate any new traffic and will operate under the existing caps from the MPCA air permit. The proposed expansion will not alter or change the proposed plans for the city to realign the Cliff Road and I-35W South intersection. Realignment will be to the south and will have minimal impact to the existing operation and no impact to the proposed Project.

- c. Identify measures that will be taken to minimize or mitigate project related transportation effects.

The Project does not have the potential to create project related traffic impacts and no mitigation measures are proposed.

**19. Cumulative potential effects:** (Preparers can leave this item blank if cumulative potential effects are addressed under the applicable EAW Items)

- a. Describe the geographic scales and timeframes of the project related environmental effects that could combine with other environmental effects resulting in cumulative potential effects.

The environmentally relevant area associated with potential cumulative effects encompasses the immediately adjacent properties. There is an extended timeframe associated with this Project simply due to the nature of mining operations. The Project will add an additional estimated 10 – 15 years to the life of the quarry, depending upon market demand.

- b. Describe any reasonably foreseeable future projects (for which a basis of expectation has been laid) that may interact with environmental effects of the proposed project within the geographic scales and timeframes identified above.

There are three other proposed projects in the environmentally relevant area that could result in potential cumulative effects. These include the proposed vertical expansion of the Burnsville Landfill, proposed modifications to the Burnsville water supply sump located at the southeast end of the existing quarry, and MPCA closure activities associated with the Freeway Landfill and the Freeway Dump.

- c. Discuss the nature of the cumulative potential effects and summarize any other available information relevant to determining whether there is potential for significant environmental effects due to these cumulative effects.

The proposed vertical expansion of the Burnsville Landfill will not interact with the Project in a manner that will amplify or cause cumulative effects. Existing conditions are considered background for cumulative effect analysis and in this instance, the vertical expansion of the Burnsville Landfill and the proposed expansion of mining limits have no impact to existing conditions typically subject to cumulative effects (such as traffic, air emissions, noise, etc.). However, when evaluated in consideration of the proposed Freeway Landfill and Freeway Dump closures, the vertical expansion of the Burnsville Landfill and the proposed expansion of the KMM quarry provides an opportunity to pursue a closure alternative of the Freeway Landfill and Freeway dump. That involves relocating the Freeway waste to the Burnsville Landfill, transporting the waste through the KMM quarry, and enhancing the overall end use development potential of the quarry and Freeway properties, while protecting the Burnsville water supply from potential groundwater contamination once quarry dewatering ceases and groundwater levels rise. This provides for a future outcome that is consistent with the city's MRQ end use vision.

Design of the potential modification to the Burnsville water supply sump in the KMM quarry has not been completed, however, it is anticipated that it will involve lowering of a portion of the sump to ensure long-term viability of their water supply. The use of

the quarry sump by the City of Burnsville (to supply water to Burnsville, Savage, Lakeville and Egan) has decreased the need to pump from municipal wells located near the Black Dog and Savage Fens, resulting in a likely increase in groundwater discharging to the fens. In addition, improving the Burnsville water supply sump has the result of reducing dewatering needed for water level control in the quarry, thus allowing an expansion of the areas of dewatering without the need to increase the existing water appropriation. Groundwater modelling included an analysis of the cumulative effects of lowering the intake sump and increased pumping for city water supply and the horizontal expansion of dewatering within quarry Expansion Areas. Barr's Technical Memorandum concludes that an infiltration trench can provide an effective hydraulic barrier for both the city's pumping and KMM's dewatering needs.

**20. Other potential environmental effects:** If the project may cause any additional environmental effects not addressed by items 1 to 19, describe the effects here, discuss the how the environment will be affected, and identify measures that will be taken to minimize and mitigate these effects.

The Project involves blasting which is necessary to quarry bedrock limestone for aggregate materials. The three environmental effects that can result from blasting include; ground vibration, airblast, and flyrock.

“Ground vibration” is measured in inches per second and is a measure of the vibration of individual rock particles. Blasting creates ground vibration and airblast, which can be felt and heard on surrounding properties. The majority of energy in a well-designed blast is absorbed as it fractures, and moves the rock away from the mine face into a pile for loading. Displacement of rock associated with the blast is limited to only a few feet of the blast hole. Ground vibrations decrease by a mathematical formula very rapidly as the distances from the source increase.

“Airblast” is a term that describes air movement (pressure change) created by the breaking and movement of the rock through the expansion of the blasting agents. This pressure change, travelling through the air, transmits noise from a blast; although most

of the energy is below the frequency range of human hearing. Airblast is measured in decibels. Even though the airblast may not be audible, it may be felt. The lower frequency air pressure may cause windows to rattle, which is then a sound that is noticed by the receptor.

“Fly rock” is a term used to describe pieces of rock that could be ejected from the blast area. Fly rock is controlled by properly engineering the blast design, proper explosive volume per volume of rock to be moved and by providing sufficient stemming materials, (rock fill located in the top of the drill holes to contain the blast).

Blasting standards have been established by the United States Bureau of Mines (USBM). Structural damage can occur if particles vibrate at levels greater than current blasting standards. Blasting has been occurring at the quarry since its inception, so this is not a new environmental effect. A detailed study on the effects of blasting at the existing quarry operation was conducted for the City of Burnsville by Barr Engineering in 2018 (Barr Blasting Report). It has been determined that the blasting is in compliance with both MDNR and USBM standards and guidelines for safe blasting at residences and structures. A copy of the text portion of the Burnsville Vibration Monitoring Technical Memorandum<sup>9</sup> is included as Attachment 4.

Blasting standards have been developed to be protective of surrounding structures, including buried utilities and wells. A research study was conducted by the MDNR that included the KMM Burnsville quarry.<sup>10</sup> The study assessed the effects of blasting on wells, including water quality looking at an increase in turbidity as a result of the blasting and on the structural integrity of the well itself. The quarry produces

---

<sup>9</sup> 2018, Technical Memorandum, Burnsville Vibration Monitoring from Barr Engineering to Ryan Peterson, City of Burnsville.

<sup>10</sup> 2005 Hydraulic Impacts of Quarries and Gravel Pits. Minnesota Department of Natural Resources

approximately 1.5 million tons of aggregate materials annually, for which blasting is employed. The study concluded the following with respect to turbidity:

*“Turbidity Impacts. Turbidity monitoring in the wells at these sites showed no impact from blasting. One of the tools purchased for this project, a down-hole camera (a camera designed to video the inside of water wells) was used to inspect the wells. The camera allowed staff to visually inspect the condition of well casings. No damage from blasting or quarry operations was visible in any of the wells, including those within 20 ft to 200 ft of the quarry face.”*

All blasting is performed by licensed blasting professionals and each blast is monitored with seismographs, placed at the nearest off-site receptors. The seismograph results are used to verify compliance with the blasting standards and to design subsequent blasts, taking site conditions and location of receptors into account. Aggregate quarry blasts consist of a number of smaller blasts, each separated by a period of milliseconds to minimize overall ground vibration and noise impacts. Each blast is designed to focus the majority of the energy on carefully fragmenting the rock for crushing. The total blast period lasts approximately 1.5 seconds and is conducted on average 1-2 times per week during the production season. No significant adverse environmental effects are anticipated as the result of continued blasting at the quarry in the Expansion Areas.

All blasting is performed by licensed blasting professionals and is designed to meet the guidelines for safe blasting from the Office of Surface Mining (formerly USBM) contained in USBM RI8507. Blasting in the Expansion Areas will move the blasting activity closer to some receptors and further from others just as is the case with the current operations. Each blast is designed by the licensed blasting professional to be well below the standards for the nearest off site receptor. The design uses the squared distance formula and takes into account the distance to the nearest receptor in the blast design. As blasting moves closer to an off-site structure, the amount of energy in each blast is adjusted to control ground vibrations to levels that will not damage

surrounding structures. Results from each blast are analyzed and the results used to design a subsequent blast.

The 2018 Blasting Report concluded that both noise and ground vibration are within the limits established by the USBM for safe blasting. The highest recorded vibration reading at the residential seismograph was 0.030 inches/second which is below the guidelines upper limit of 0.75 inches/second for modern homes and 0.50 inches/second for older homes. No change from the current condition is anticipated and blasts will be designed to be well within the guidelines.

**RGU CERTIFICATION.** (The Environmental Quality Board will only accept **SIGNED** Environmental Assessment Worksheets for public notice in the EQB Monitor.)

I hereby certify that:

- The information contained in this document is accurate and complete to the best of my knowledge.
- The EAW describes the complete project; there are no other projects, stages or components other than those described in this document, which are related to the project as connected actions or phased actions, as defined at Minnesota Rules, parts 4410.0200, subparts 9c and 60, respectively.
- Copies of this EAW are being sent to the entire EQB distribution list.

Signature



Date

1/27/2020

Title

Public Works Director