Agency Comments on the Draft Scoping Decision Document and Scoping EAW Bryan Rock Products, Inc. Waterford Township Quarry			
Commentor	**Applicable EIS Section**	**Comment/Concern**	**Response**
Sciota Township Board	**Land Use**	Page 14, Item i, A seasonal Snowmobile trail exists on neighboring land to the proposed mine site. The trail usually runs adjacent to the south side of County Ditch No. 2. The trail crosses Arkansas Ave near the Tributary No, 1 culvert and continues along the ditch to a private bridge crossing the North Branch Chub Creek. Mine operators should discuss the trail location with local snowmobile organizations.	Section 4.1 and Section 5.1. g. of the SDD is revised. The EIS will incorporate a discussion of the seasonal snowmobile trail in the land use section.
	Water Resources	Page 29, Item 12, identifies the 19.84 acres of wetlands that are located just west of the quarry property. Page 35, – "There will be no direct impacts to wetlands. An assessment of the potential for indirect impacts to wetlands as a result of dewatering will be completed in the EIS. A wetland monitoring and mitigation plan will be developed in the EIS."	comment noted.
	Water Resources	Page 29-30, Item 12 identifies the location of County Ditch #2. The EAW states: "The Project proposes to discharge a portion of the dewatering discharge to the public drainage system. A public drainage system permit will be required. The EIS will evaluate the volume and rate of discharge and include an analysis of potential downstream impacts." Sciota Township is very concerned about the multiple potential downstream impacts to Sciota Township properties.	Comment noted. Downstream impacts, including through Sciota Township, will be evaluated in the EIS as indicated in Section 5.1.c. and Table 7.1 of the SDD includes a Dakota County public water drainage system permit to be applied for if required.
	Water Resources	Page 29-32, County Ditch #2 is referenced in multiple paragraphs, while Tributary No. 1 is referenced in other paragraphs. On page 33 a statement is made indicating they are the same. Consistency needs to be used.	Section 4.1 of the SDD is revised to address this comment. The EIS will incorporate a consistent nomenclature for the drainage network in the area.
	Land Use	Page 33, Winter discharge policies need to address safety impacts to snowmobile trail use.	Sections 4.1 and 5.1 of the SDD are revised. The EIS will address winter discharge policies as they pertain to snowmobile trail use.
	Hazardous Materials/Solid Waste	Page 40, EIS Applicability: Existing Contamination or Potential Environmental Hazards: Item b. – one paragraph states they intend to process and recycle waste concrete and asphalt. ---- This is not a mining activity and should be regulated by a commercial activity permit. Materials will be hauled into the site? Will this produce more traffic? What contaminated or hazardous material prevention protocols will be in place? How long will materials remain on site?	Concrete and asphalt recycling is considered an accessory use to the mining activity per the Waterford Township Zoning Ordinance Section 7.23 Item C. Mineral Extraction Performance Standards. Concrete and asphalt recycling may be considered for approval as part of the mineral extraction permit.
	Water Resources	Page 31, Item 12, ii 3) Identification of on-site or nearby wells indicates "A well survey will be completed as part of the EIS." Those completing the well survey should be aware that about 40% of the households in Dakota County that have private drinking water wells have wells that were installed prior to the well code (1974) and therefore do not have well construction records. Every dwelling should be assumed to have at least one drinking water well. Pre-code wells tend to be shallower than post-code wells and are more susceptible to well interference. In Dakota County, pre-code wells are more susceptible to contamination from surface sources, but are less likely to have levels of geogenic iron or sulfur that would require installation of an iron removal system. The well survey should also include agricultural irrigation wells. These are generally documented in the Minnesota Well Index and Dakota County's independent Well and Water Management System. (Figure 12, Well Location Map, does include irrigation wells and presumed domestic wells in addition to domestic wells with identification numbers.)	Thank you for the additional information. In conducting the well inventory described in Section 5.1 b., it will be assumed that every dwelling has at least one drinking water supply well (as indicated on Figure 12 of the Scoping EAW) even if well construction records are not available.

	Water Resources	Page 34-35, Item 12, iii Water appropriation notes “Potential environmental impacts related to quarry dewatering include water quantity impacts to surrounding residential drinking water supply wells and to surrounding irrigation wells. Dewatering also has the potential for indirect impacts to the wetland complex located west of the Site, and to surrounding agricultural crop lands and sod fields.” “There are potential environmental impacts associated with the management of the dewatering discharge. Some of the water pumped to dry mine the active quarry area will be utilized in the aggregate washing operations. As the volume of water for dewatering increases, some of the water will be used to supply adjacent irrigation systems. A portion of the water may be used to mitigate the potential for indirect impacts to the adjacent wetland complex. Excess water from the dewatering process that is not utilized for aggregate washing or mitigation, is proposed to be treated in a sedimentation basin and discharged off-site to Tributary No 1 to North Branch Chub Creek through a control structure(s).” Sciota Township is very concerned with how Rock Products will handle well interference issues. Will impacted well owners face extended litigation or will Bryan Rock Products be a good neighbor?	The EIS will include mitigation options if EIS studies identify the potential for well interference issues. In addition to the Minnesota DNR's well interference resolution process, (an overview of the process is available online at https://www.dnr.state.mn.us/waters/watermgmt_section/appropriations/interference.html), mitigation may incorporate strategies such as water level monitoring and well interference agreements that establish what to do if there is an impact to water supply. The well interference agreements are typically offered to residents as a condition of the Water Appropriation Permit but can also be a condition of the Township's Mineral Extraction Permit.
	Water Resources	Page 36, Item 4, should include the potential effects of a lowered water table on sinkhole development. The EIS should include estimates and maps of areas that might subside, how deep the subsidence might be and how Rock Products proposes to mitigate the issue where it occurs.	Section 5.1.d. of the SDD is revised to include an analysis of the potential effects of lowering the groundwater table on the development of karst (also referred to as subsidence or sinkhole) features.
	Syntax	Page 37, Item 13, Table 13-1 – “Dabbles” should be “Dubbels”.	This error will be included in the official record and corrected in the EIS.
Sciota Township Board	**Transportation**	Page 60, Item 20, 5 b) Impact of traffic congestion, second paragraph – This paragraph discusses the County paving Arkansas Avenue and turning it back to township control. It indicates Waterford Township would prefer that the County retain jurisdiction. Sciota Township would also prefer that the County retain jurisdiction.	Thank you for the comment. It will be included in the official record.
	Transportation	Page 61, Item 20, 5 c) Identify measures… If the County turns Arkansas Avenue back to Waterford and Sciota Townships, then Sciota Township would need to be a party to a Paving and Road Maintenance Agreement with Rock Products or any successor quarry owner or operator. Thank you for your consideration of these issues.	Thank you for the comment. It will be included in the official record.
U.S. Army Corps of Engineers	**Water Resources**	If the proposal involves activity in navigable waters of the United States, it may be subject to the Corps of Engineers’ jurisdiction under Section 10 of the Rivers and Harbors Act of 1899 (Section 10). Section 10 prohibits the construction, excavation, or deposition of materials in, over, or under navigable waters of the United States, or any work that would affect the course, location, condition, or capacity of those waters, unless the work has been authorized by a Department of the Army permit. If the proposal involves discharge of dredged or fill material into waters of the United States, it may be subject to the Corps of Engineers’ jurisdiction under Section 404 of the Clean Water Act (CWA Section 404). Waters of the United States include navigable waters, their tributaries, and adjacent wetlands (33 CFR § 328.3). CWA Section 301(a) prohibits discharges of dredged or fill material into waters of the United States, unless the work has been authorized by a Department of the Army permit under Section 404.	Thank you for the comments. Table 7.1 of the SDD is updated to include a US Army Corps of Engineers Clean Water Act Permit to be applied for if needed.

Dakota County	**Water Resources**	Dakota County holds concerns the project's dewatering and discharge into County Ditch #2 could damage the ditch and/or exceed the ditch's capacity. Clarification should be provided on how the public ditch will be protected from damage.	As identified Section 5.1 item c, the EIS will evaluate the potential effects of dewatering discharge to County Ditch 2 and further downstream and develop a plan through discharge control, on site storage during peak flows, or reuse of dewatering discharge (example divert to irrigators to avoid or mitigate potential downstream impacts). The EIS will evaluate appropriate monitoring strategies that could be incorporated into permitting.
	Water Resources	The elevated nitrate and chloride detected in the environmental wells on the site is likely due to row crop agriculture and manure spread on the site. Manure was evident to the County Well Inspector during inspection of the well drilling and installations. The property owner has planted cover crops which can reduce the leaching of nitrate to groundwater in some cases. The elevated level of nitrate and chloride in the pumped ground water from the site's dewatering well may be undesirable for the adjacent wetland complex or to supply water to the adjacent irrigation systems as mentioned in the report (pages 32, 34, 35, and 39) depending on the crops planted, timing of irrigation water requirements during the growing season and amount of precipitation. a.The project proposes to discharge a portion of the dewatering discharge to the public drainage system, which then flows to Chub Creek. Background nitrate concentrations from on-site wells showed a range of 23 – 52 mg/L, which is significantly higher than the national drinking water standard of 10 mg/L. The EIS should evaluate potential impacts of natural resources and aquatic habitat if water at such high nitrate levels are discharged into the Creek. Recommend the EIS consider potential treatment of the discharge water to minimize negative impacts of pollutants. b. The project proposes to utilize some of the dewatering discharge to supply adjacent irrigation systems. If this is completed, it is recommended that farmers utilizing the discharge follow all Best Management Practices, to include crediting nitrate from the irrigation water to their field to reduce nitrate loads to the groundwater.	Thank you for your comments. Section 5.1.c. of the SDD is revised to include an evaluation of how the Project may impact existing groundwater impairments, including mitigation options considered within the EIS study. This would include both potential water quality impacts associated with discharge to wetlands, the county ditch, and as a source of irrigation water.
	Water Resources	The groundwater model calibration uses water levels from the MN Water Well Index (MWI) as stated on page 17. The water levels in the MWI database are from the original well records when a water well was constructed. Well records were not required to be submitted to the State of MN until 1974, if the model is using water levels from water well records that are decades or more old, the water level measurement is unlikely to reflect water levels today. Water levels could be measured in domestic and irrigation wells with the well owner's permission within the model boundary to create a more realistic and accurate groundwater model.	As indicated on page 21 of the Hydrogeologic Investigation Report by Barr Engineering dated April 25, 2023, hydraulic heads from 93 wells in the MWI data base were used as calibration targets. The report indicates that because there is less confidence in the quality of the MWI data (due to a number of factors such as inaccurate land surface elevations, non-equilibrium conditions at time of measurement, and the large range of measurement times) than the heads measured at on-site monitoring wells, a weighting process was utilized to analyze the data. The weighting process is a statistical analysis that allows consideration of all available data while providing an adjustment for confidence level. This approach is standard industry practice in model development.
	Water Resources	The project proposes dewatering, eventually lowering the water table 125-135 feet (page 34). The groundwater model included in the EIS will need to evaluate and propose mitigation strategies to minimize impacts to adjacent wetlands and private wells in the area. This should include evaluation of any impact to any nearby Wetland Banks to ensure lowering of groundwater levels do not impact the ability for the County to meet established requirements.	Dewatering will eventually lower the water level in the actual mine sump 125 to 135 feet. The water level decline in the surrounding area will be less. The EIS will evaluate the potential water table decline relative to the distance from the site as a result of the dewatering. The EIS will also evaluate potential mitigation strategies for impacts identified in the study which will include mitigation for private wells and for wetlands, including wetland banks as applicable, as indicated in Section 5.1 of the SDD.

	Water Resources	A non-community water supply well for potable water for the transient population will be needed at the site to provide drinking water to the estimated 10 employees, as stated on page 40, and visitors to the site such as truck drivers. The pumping well cannot be used for drinking water because it is completed in the Prairie du Chien aquifer, which is not permitted for use for drinking water in this area of the County because there is less than 50 feet of cover over the top of the aquifer.	Thank you for the comment. It will be included in the official record.
	Hazardous Materials/Solid Waste	It is recommended that all fuel storage be managed in designated areas with no less than 10 feet separation between bedrock and/or the water table (page 40).	Thank you for the comment. Section 4.1 of the SDD is revised to include additional information in the EIS on this topic. Fuel storage is planned to be located over ten-feet above the water table. However, bedrock is located near the surface across the site and maintaining a ten foot separation to bedrock is not feasible. Fuel storage will include spill prevention practices and will comply with Minn. Rules 7151, pertaining to Aboveground Storage of Liquid Substances regarding fuel storage including secondary containment as required.
	Water Resources	The following information needs to be further clarified: Water quality test results from the production well, PW-1, do not appear to be provided.	Thank you for the comment. Water quality samples were only collected from the monitoring wells. Water quality samples were not collected from the pumping well PW-1. The purpose of PW-1 was to collect information on aquifer characteristics and hydrogeologic conditions to be utilized in groundwater model development. Water quality monitoring was conducted in the on-site monitoring wells installed for that purpose (as well as for collecting water level measurements).
	Project Description	Please clarify if the unmined phases will be utilized for irrigated row crop agriculture, manure application, and cover crops.	Agricultural land uses are expected to continue on unmined areas of the site. The area available for agricultural activity will decrease as the mine develops over time.
	Water Resources	Additional well information for the area is included in the attached shapefiles. BryanRockWells.shp contains the wells within 12,000ft of MN unique well number 860531 that we are aware of and may or may not have drilling records for (available upon request). UndocumentedWells.shp contains locations where wells are likely based on historical evidence of habitation. As a delegated well program, Dakota County may have additional well information not available through the MWI. Two cursory takeaways from the well inventory: a. Of the roughly 150 wells with available depth information, there are roughly 84 with either a casing depth or total depth less than 126ft deep (the approximate maximum drawdown depth). b. There are roughly 75 wells with no depth information. These wells may predate the well code, and are often finished at shallower depths.	Thank you for sharing this additional information. It will be helpful when assessing potential impacts to groundwater wells within the project area. The evaluation of potential impacts to individual wells includes more than just depth. More important is the predicted drawdown depth at the distance that the well is located from the dewatering sump, what hydrostratigraphic unit that the well is finished in, and at what elevation the pump is set at within the well. All of this information will be evaluated in the EIS in order to identify if a well is likely to be impacted by the proposed dewatering and what appropriate mitigation might be. Understanding that wells with no construction logs are likely to be older, shallower wells will also be taken into consideration in the evaluation.
	Project Description	Section 3.3 Alternative Sites: It is stated that an Alternative Site analysis will be excluded from the alternatives studied in the EIS. We recommend Waterford Township include an alternative site analysis into the EIS to assist with your decision making process. It is stated that an Aggregate Resources Inventory of the Seven-County Metropolitan Area indicates that the majority of remaining unencumbered bedrock aggregate resources are located solely within southern Washington and southeastern Dakota County and other alternative sites in the vicinity are likely to have similar environmental effects. However, an analysis of where these resources are located, how “in the vicinity” is defined and whether water resources are abundant at alternative locations compared to the proposed location is relevant and appropriate.	Section 3.0 of the SDD is revised to provide a more thorough discussion of the exclusion of an alternative site analysis in accordance with Minn Rules 4410.2300 Subp. G and Minnesota Environmental Quality Board's May 2010 Guide to Minnesota Environmental Review Rules.

Dakota County SWCD	**Fish and Wildlife Resources**	Section 4.0 Studies and Table 4-1 Draft Scoping Decision Item Summary: Fifteen content topics are listed from A to D to determine the level of evaluation that will occur during the EIS process. For reasons stated below, we recommend Waterford Township change Fish, Wildlife, Plant Communities and Sensitive Ecological Resources to a D criteria level. This topic is currently identified as A level which is defined as "the topic is obviously not relevant or is so minor that it will not be addressed at all in the Draft EIS".	Table 4-1, and Sections 4.1 and 5.1.f. of the SDD is revised to reclassify item 14 (Fish and Wildlife Resources) from A to C, and to include a more detailed description of potential effects to fish and wildlife resources if the EIS studies show that dewatering may have an adverse impact on adjacent wetlands and by extension, wildlife, through potential loss of habitat.
	Permits and Approvals	Item 9 – Permits and approvals required: As noted in Figure 9, Tributary 1 to the North Branch of Chub Creek (Public Ditch), the North Branch of Chub Creek and Chub Creek are designated Minnesota Department of Natural Resources (MDNR) Protected Watercourses. Changing the current or cross-section of MDNR protected watercourses requires approval from the MDNR. Based on the anticipated level of dewatering needed to keep the mining floor operational and the likely need to discharge the groundwater to one of these protected watercourses, a MDNR Protected Waters permit may be required. The Project Site also includes 19.84 acres of delineated wetland and many more acres of wetland are located adjacent to the site and within the Project Area. Approvals may be required under the Minnesota Wetland Conservation Act and the U.S. Army Corps of Engineers Section 404 of the Clean Water Act due to the dewatering that will occur. These three regulatory programs should be included into the list of permits and approvals with a status of "to be applied for if required".	Thank you for your comment. Table 7.1 of the SDD is revised to include the following additional permits and agencies if required. MDNR - Public Water Permit WCA - Wetland Permit USACE - Wetland Permit
	Land Use	Item 10 - Land use: The SEAW did not identify a 67.6 acre State of Minnesota Wetland Bank Easement located approximately ½ mile northwest of the Project Site. In addition, a Wetland Mitigation Bank Prospectus has been submitted for a proposed wetland bank easement of 124 acres located approximately ¾ mile northwest of the Project Site. Wetland bank easements are held by the State of Minnesota through the Board of Water and Soil Resources and involve regulatory components to include meeting performance standards associated with wetland hydrology and plant communities. The EIS will need to identify if dewatering to keep the mining floor operational will impact these performance standards and the plant communities within the wetland bank easement. Due to the unique regulatory component of wetland bank easements, the wetland monitoring and mitigation plan developed during the EIS process will need to consider how wetland bank account holders would be compensated should performance standards and the availability of wetland bank credits be compromised as a result of the project.	Thank you for the comment. Table 4-1 and Section 4.1 of the SDD is revised to reclassify item 10. land use from B to C and to include identification of wetland banks (including proposed wetland banks) in the vicinity of the proposed project. Potential impacts to wetlands and wetland banks will be addressed in more detail through the groundwater modeling study and subsequently water level analyses that will be included in the EIS. If potential impacts are identified, mitigation measures will also be evaluated.

	Water Resources	Item 12 - Water Resources: The SEAW indicates there will be no direct impacts to Project Site wetlands as they are not included in the phased mining operation. However, we can reasonably conclude that a significant amount of groundwater resources will need to be removed to maintain an operational mining floor. This groundwater removal process are likely to impact both Project Site and Project Area wetlands. The SEAW states the Water Resources topic represents a potentially significant issue and the EIS will include further analysis as it relates to six listed topics (listed as 1 thru 6). Number 4 needs to be restated so the EIS includes an analysis of potential effects of a lowered water table at surrounding wetlands in addition to cropland and sod farms. This analysis will be necessary to develop an informative and comprehensive wetland monitoring and mitigation plan.	Section 5.1.f. of the SDD is revised to include an analysis of potential impacts to wetlands located on and near the site.
	Fish and Wildlife Resources	Item 14 - Fish, wildlife, plant communities and sensitive ecological resources (rare features): Minnesota Environmental Quality Board (EQB) guidelines for preparing Environmental Assessment Worksheets provide examples of designated habitat areas that should be considered. The examples within the EQB guidance document includes State Easements. As mentioned, a State of Minnesota wetland bank easement exists in the Project Area and the SEAW does not discuss project related effects to this habitat area. There also are extensive wetland resources both within the Project Site and the Project Area that provide wildlife habitat and may be impacted. Since this wetland bank easement and Project Area wetlands in general were omitted from the SEAW, the information provided within the SEAW does not sufficiently support that no potential exists for significant impacts to fish, wildlife, or ecologically sensitive resources. As mentioned, we recommend Waterford Township change the Fish, Wildlife, Plant Communities and Sensitive Ecological Resource topic identified within the Draft Scoping Decision Document to a level “D”	Table 4.1 and Section 4.1 of the SDD is revised to reclassify item 14 (Fish and Wildlife Resources) from A to C and to include a more detailed description of potential effects to fish and wildlife resources, if the EIS studies show that dewatering may have an adverse impact on adjacent wetlands or wetland banks and by extension, wildlife through potential loss of habitat.
	Water Resources	As stated in the scoping EAW, dewatering activities have the potential to impact nearby irrigation wells and surface water resources. The wetland complex on the western side of the development is mapped as connected with the underlying groundwater system, as are areas surrounding Chub Creek. Pumping tests indicated impacts at WW-02, within the wetland complex. During the EIS process, it will be crucial to identify and understand how local hydrology will be impacted by mining and dewatering activities, and to develop mitigation strategies to limit any negative impacts.	The EIS will evaluate the potential effects to local hydrology systems as indicated in Section 5.1 of the SDD. The EIS will also evaluate potential mitigation strategies for impacts identified in the study.
	Water Resources	Water chemistry testing indicates that groundwater at the site is impaired for nitrate. Dewatered water that is used to wash aggregate and discharged to nearby surface waters or used as irrigation for nearby agricultural fields will also be nitrate impaired. Treatment of this water to reduce Nitrogen would benefit nearby ecosystems and human health. Discharge of dewatering water to the nearby wetland complex may serve as sufficient treatment if wetland plants are able to uptake and store the excess nitrogen. Likewise, using the water for irrigation may offset some fertilizer use. However, the viability of these activities and the management of nitrogen impaired water should be assessed, including the amount of dewatered groundwater available through the life of the project, as well as any regulatory requirements.	Section 5.1.c. of the SDD is revised to include evaluation of potential mitigation of existing nitrate impairments through dewatering discharge management both through discharge to the adjacent wetland complex for treatment and as the potential to offset fertilizer use if used as an alternative irrigation water supply.

Metropolitan Council	**Hazardous Materials/Solid Waste**	Due to the surrounding agricultural contamination sources, hazardous chemicals and explosives associated with construction and mining activities, and the natural gas pipeline that runs through the north of the site there is potential for the project to contaminate local groundwater and surface water. The current and any potential contamination sources deserve consideration, mitigation, and emergency response planning during the EIS process.	Potential contamination of groundwater by hazardous chemicals will be addressed in the EIS including pollution prevention measures and emergency response. Section 4.1 of the SDD is updated to reflect that more detail will be provided in the EIS regarding potential impacts related to the natural gas pipeline located adjacent to the mine.
	GHG	Soil disturbance, loss, and removal results in carbon emissions. The project will remove multiple feet of topsoil across the site, over the course of the project. These emissions should be estimated for greenhouse gas accounting and mitigation efforts. Reclamation site design should identify opportunities to enhance carbon storage through tree planting and wetland expansion. Looking for opportunities to limit carbon loss and emissions through the EIS process would benefit the project.	Section 4.1 of the SDD is revised to reflect that additional detail in the project description and reclamation plan will be provided that will include a discussion of potential carbon emission reduction measures that can be incorporated into site operations and reclamation to reduce carbon emissions.
	Land Use	Site activities should align with water resource and drinking water protection goals in the Waterford Township comprehensive plan including to protect habitat and biodiversity, and to protect wetland areas to promote water quality, recreation, groundwater recharge and other community benefits.	The land use section of the EIS will include a discussion of the compatibility with the Waterford Township Comprehensive Plan and how the mine operations and reclamation aspects of the project align with Township goals and natural resource protection.
	Other Potential Environmental Impacts	Figures 2, 7, 11, and C3 (Mine Operations Plan) show a pipeline running through the far northern edge of the project site, but it is not mentioned in the text of the EAW. The EIS should include text describing the pipeline and discuss any possible effects on it from mining operations, especially blasting, and any mitigation measures needed.	Section 5.6 of the SDD is revised to reflect that more detail will be provided in the EIS regarding potential impacts on the pipeline (natural gas) from blasting activities and any mitigation measures needed.
	Project Description	Page 5, Project Description. The Reclamation Plan should be included for evaluation with the EIS when it is published.	Section 4.1 of the SDD is revised to reflect that more detail regarding the Reclamation Plan will be included in the EIS.
	Land Use	Page 14, Land Use. Since this section discusses parks that are located up to 3 miles away from the project site, Bryan should mention that the City of Randolph is located about 3.5 miles east of the site.	The location of the City of Randolph with respect to the Project Area is noted in the SEAW (Figure 1).
	Geology	Page 24, Geology. The EIS should look at the possibility that nearby springs will be impacted by the proposed dewatering and consider options to protect any springs that are identified as being at risk from the dewatering. Springs exist 1.7 miles southeast of the site near the Cannon River. It is possible that the proposed dewatering could pirate the flow of the springs.	The springs on the DNRs spring inventory map (accessed November 1, 2023) are located over two miles from the proposed dewatering limits. As described in Section 5.1 of the SDD, the EIS will identify the area of potential impact based on groundwater modeling and address potential impacts to water resources, which would include springs. However, based on preliminary evaluation of worst case drawdown effects, it is anticipated that the springs will be located outside of the potential area of impact.
	Water Resources	Page 30, Surface Waters. This section states that the Project proposes to discharge a portion of the dewatering discharge to the public drainage system. It will be important for the EIS to address this topic in detail in order to understand the potential impacts to the drainage system from increased volume and flow, and the effects to rivers and streams downstream of the Project. Will the water discharged to surface waters be compensatory to the amount of flow lost due to groundwater dewatering? Will any monitoring of nearby surface waters occur? It will also be important to understand how much groundwater will be removed and discharged to surface waters, and whether or not this volume is sustainable for the aquifer, and if the possibility of infiltrating this water back into the ground has been sufficiently explored.	Section 5.1 in the SDD describes the studies that will be included in the EIS to evaluate the management of dewatering water including the reuse as irrigation water, mitigation to adjacent wetlands, downstream impacts to the public drainage system, and mitigation measures as may be appropriate, such as infiltration, based on the findings of the studies. Water level monitoring will be conducted and a water level monitoring plan will be further defined as part of the EIS work as described in Section 4.1.e of the SDD.

MDNR Division of Waters	**Water Resources**	Page 31, Depth to Groundwater. Since the project proposes to conduct dry mining to a depth of 145 feet below ground surface, and the groundwater table is between 5 feet and 35 feet below ground surface, all of the surface waters near to this site could potentially be dewatered by the proposed dewatering of the quarry. A groundwater model will need to be compiled, with coordination from the DNR Groundwater Unit to better understand these impacts, and thoroughly explore them in the EIS.	Section 5.1 in the SDD describes the development of a site-specific groundwater model that has been developed to evaluate groundwater in the EIS. The Project proposer has coordinated with the DNR Groundwater Unit and has submitted to the DNR for review and comment the workplan for the hydrogeologic investigation, the results of the investigation, and the construction of the groundwater model (which were also included in the SEAW). The Project Proposer will continue to coordinate with the DNR throughout the EIS process.
	Water Resources	Page 34, Water Appropriation. We appreciate the proposal suggesting that the appropriated water will be piped to irrigation systems that will lose their water supply because of the dewatering. It is also possible that the public ditch and Chub Creek {located south of the site) will both be impacted by the dewatering. In such a situation, appropriate water will need to be discharged to both water courses in order to maintain their flows. Please be aware that it is possible that nearby homes would be deprived of their water supply by the proposed dewatering. Domestic water supply is a high priority water use in Minnesota. The DNR is not allowed to issue a DNR Water Appropriation Permit for a lower priority use that would deprive a home, or a city, of its water supply.	At this point the dewatering scenarios have not been completed to determine if irrigation wells will be significantly impacted by dewatering, however, it is anticipated that at least two irrigation wells located in close proximity to the quarry limits will eventually experience well interference and supplying these wells with dewatering discharge is a mitigation measure that will be evaluated in the EIS. Section 5.1 b of the SDD describes the well inventory that will be conducted and an evaluation of residential supply wells located within the potential area of impact. Mitigation, such as a well maintenance agreement, may be offered to potentially affected well owners and will be described in the EIS as well as a description of the state's water use priority for drinking water supply and agricultural use over mine dewatering. Section 5.1.c of the SDD describes evaluation of potential effects to the public ditch and Chub Creek.
	Water Resources	Page 34, Water Appropriation. Minnesota Statutes 103G.301requires the DNR to assess fees for projects where the proposed volume of appropriation exceeds 100 million gallons of water per year. The fees include the cost of staff time, mileage, equipment costs, and other costs that are associated with the DNR investigations on the impact of the proposed appropriation.	Thank you for the information, comment noted.
	Water Resources	Page 35, Other Surface Waters. Open-pit mines heat and cool at different rates than groundwater and the interaction between surface water reservoirs and groundwater can create temperature regime alterations that affect important aquatic communities, such as fish and mussels. It will also be important to understand how changing the baseflows of surrounding streams through dewatering might in turn affect local fish and wildlife communities within those streams.	The changes referenced in the comment are mainly related to the heating of water in the pit due to insolation (sunlight warming the water similar to a lake). There would be no "lake" conditions that would contribute to increased temperatures during dewatering or dewatering discharge to the adjacent wetlands or ditch. Under typical conditions, the proposed discharge will consist of relatively cool water derived immediately from groundwater with an average temperature slightly above 48 degrees Fahrenheit. This temperature is similar to the baseflow that would normally discharge to the stream from groundwater. The ditch and streams in question are warm water streams that do not have temperature sensitive species (e.g. trout) in the vicinity of the project. Nonetheless, discharge of cool water into these streams would generally be considered an environmental benefit to habitat, species, and water quality. Because the discharge is unlikely to result in changes from the current conditions, and may even result in a potential environmental benefit, the effects of discharge temperature are not likely to be significant (e.g. type of effect per MN Rules 4410.1700) and will not be the subject of further evaluation in the EIS.
	Fish and Wildlife Resources	Page 46, Rare Species. Please note that tree and shrub removal is prohibited April through July to avoid impacting the state listed as endangered, loggerhead shrike. This is a requirement, not a recommendation. Vegetated berms and setback areas that are maintained or managed during the existence of the mine should incorporate this requirement into maintenance timing.	Section 4.1 of the SDD is revised so that the prohibition on tree and shrub removal (April - July) will be incorporated into the Fish and Wildlife Resources section of the EIS.

	Visual	Page 47, Visual. Animals depend on the daily cycle of light and dark for behaviors such as hunting, migrating, sleeping, and protection from predators. Light pollution can affect their sensitivity to the night environment and alter their activities. In addition to the undesirable effects of upward facing lighting, the hue of lights can also affect wildlife. LED lighting has become increasingly popular due to its efficiency and long lifespan. However, these bright lights tend to emit blue light, which can be harmful to birds, insects, and fish. The DNR recommends that any projects using LED luminaries follow the MnDOT Approved Products for luminaries, which limits the uplight rating to 0, and the maximum nominal color temperature to 4000K. It will also be important that lights are turned off outside of operating hours, especially during the spring and fall bird migration events from March 15th through May 31st\ and August 15th through October 31st.	Section 5.3 of the SDD is revised to address potential effects to wildlife from the use of lights during non-daylight hours.
	Air	Page 49, Dust and Odors. This section discusses fugitive dust associated with mining, processing, stockpiles, and road transport. Products containing calcium chloride or magnesium chloride are often used for dust control. The DNR advises that chloride products that are released into the environment do not break down and can accumulate to levels that are toxic.	Thank you for the information, comment noted.