



CITY HALL

207 Lafayette Street
P.O. Box 378
Winona, MN 55987-0378
FAX: 507/457-8212

June 21, 2012

Planning Commissioners
Winona, Minnesota 55987

Dear Commissioner:

The next meeting of the Planning Commission will be held on **Monday, June 25, 2012, at 4:30 p.m. in the Council Chambers** of the Winona City Hall.

1. **Call to Order**
2. **Approval of Minutes – May 29, 2012**
3. **Sand Moratorium Study: Biesanz Stone Company Analysis**
4. **Other Business**
5. **Adjournment**

Sincerely,

A handwritten signature in black ink, appearing to read "Carlos Espinosa".

Carlos Espinosa
Assistant City Planner

PLANNING COMMISSION MINUTES

DATE: May 29, 2012

TIME: 4:30 p.m.

PRESENT: Chairperson Porter; Commissioners Boettcher, Gromek, Davis, Ballard, Buelow, and Olson

STAFF PRESENT: City Planner, Mark Moeller; and Assistant City Planner, Carlos Espinosa

The meeting was called to order at 4:30 PM by Chairman Porter.

Approval of Minutes – April 23, 2012 and May 14, 2012

The minutes from the Commission's meeting of April 23rd and May 14th were reviewed. Following a motion by Commissioner Gromek and a second by Commissioner Ballard, the minutes were unanimously approved as submitted.

Sand Moratorium Study: Habitat, Wetlands and Quality of Life

Chairperson Porter noted that since the primary purpose of today's business is to continue discussions relative to the sand moratorium issue, he would begin by inviting comments that any person present wishes to present.

James Johnson, 802 West Broadway, noted concerns with air quality and referenced Halburton Company technical data sheets that noted air quality concerns with silica sand. As related to the recent conditional use permit approval of the barge loading operation at the Commercial Harbor, he questioned how dust would be monitored and managed.

Marie Kovacs, 133 Whispering Lane, referenced the Rochester extraction ordinance and noted that Kim Sharpe, a resident in Knopp Valley had developed a draft set of standards that she felt would be workable as part of the Conditional Use process in Winona.

She concluded by noting concerns she had with Commission minutes of May 14th. In those, reference was made to her presentation of a "laundry list" of concerns. She would like that terminology removed from the minutes.

Jeff Falk, Wisconsin, referenced dust issues that Chippewa Falls has been dealing with and its silica sand mining operations. It was suggested that the City look at what that City has done in terms of addressing the issue.

Joe Morse, 23375 Buffalo Ridge Road, Winona, stated that he felt the term "quality of life" should be properly defined before the study process begins. Although the term could mean different things to different individuals, he felt that all could agree on a common definition.

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Greg Schoop, Wisconsin, stated that given his personnel health issues with autoimmune deficiency, he was particularly concerned with any factor that would negatively impact air quality within the City. As such, he suggested that the Commission look closely at the impacts resulting from increased truck traffic, the enclosure of trailers and loading areas, and street dust be considered.

Chairman Porter thanked those who had submitted comments and then called on Carlos Espinosa, Assistant City Planner, to provide a background of information to be considered this afternoon.

Mr. Espinosa began by presenting a PowerPoint presentation that he had prepared relative to frac sand operations within the City to Council a number of weeks ago. He noted that his purpose in doing so was to ensure that the Commission had a solid base of information relative to what is now occurring within Winona pertaining to the industry.

Following the PowerPoint presentation, Mr. Espinosa summarized the Commission's agenda package.

Following the Commission's last meeting Mr. Espinosa noted that he had provided a more specific timeline of activities to be achieved through the moratorium. Given this schedule, the process would include two general discussion round tables that would address state permitting and preliminary recommendations to be made to Council. As noted from the schedule, it was hoped that final recommendations could be submitted to Council in mid December in order to allow Council review and consideration after the 1st of the year. Until then, Commission meetings would be designed to address specific issue areas such as air permitting, environmental review, traffic impacts, road wear, etc.

Mr. Espinosa stated that the key to the study process would be an open public meeting to include a number of governmental entities who would discuss various aspects of frac sand and silica sand mining. He was continuing to work on coordinating this meeting and hoped that it would come together in mid June. Following this meeting, it was his hope that individuals representing governmental entities would be willing to come back to Winona to meet with the Commission in addressing specific concerns.

In addressing the timeline, Chairman Porter noted that the agency meeting could be held at any time of the week and could occur outside of regular meetings. Other than that, the consensus of the Commission was that the timeline looked acceptable.

Mr. Espinosa then reviewed the second part of the Commission's agenda involving City and County Extraction Regulations. As part of the Commission's agenda package, he noted that he had provided a side by side comparison of present City and present County Extraction Ordinance provisions. Given this, he had provided a listing of recommended additions to the City's Ordinance from the County's Ordinance as well as County special conditions for sand mining operations that could be added to the City's Ordinance. Additionally, he had added a listing of County regulations that would not be recommended to be added to the City's Ordinance. Rationale for these exclusions was outlined in the staff report.

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In providing direction to the Commission, staff was suggesting that it consider recommended additions to the City's Extraction Ordinance this afternoon. Should it find that recommendations, as presented by staff are acceptable, the Commission should direct staff to prepare draft ordinance language to be considered at the Commission's next meeting.

Commissioner Buelow noted that, in Mr. Espinosa's earlier presentation, a total of 80,200 vehicles had passed over the interstate bridge during a one week period in August of 2011. Although certain violations were noted, he asked how many of these were related to truck activity. Mr. Espinosa replied that he could get this number.

It is noted that the City's Extraction Ordinance requires a \$25,000 performance bond to ensure the proper implementation of a reclamation plan. It was felt that this may not be an adequate number to address all situations. Mr. Espinosa stated that as opposed to the City's requirement, the County uses a factor of 110% of the estimated reclamation expense to define the performance bond. As referenced in the agenda package, the county standard was being recommended as a change to the City Ordinance.

In response to a question, Mr. Espinosa noted that the 30 foot setback requirement of stock pile and extraction activities from street right-of-way was simply designed to ensure that the mining operation does not directly impact road right-of-way.

Commissioner Boettcher asked if the purposed hours of operation for mining activities varied from that permitted under the recently enacted sand processing Conditional Use Permit. Mr. Espinosa replied that it did.

Commissioner Davis stated that although reclamation was a good idea, she felt that the activity needed to be implemented/completed within a reasonable amount of time following closure of a mine, or a portion thereof. Mr. Espinosa agreed and noted that, since mining operations also require Conditional Use Permit, the Board of Adjustment could consider this issue and establishing conditions for the use.

Following further discussion, it was recommended that staff be directed to prepare a modified extraction ordinance to include recommended changes as found in the Commission's agenda package this afternoon. Mr. Espinosa stated that the draft ordinance would be presented at a future meeting for consideration.

At this point, Chairman Porter again opened the floor to comments that any citizen desired to make.

Jane Cowgill, 317 Walnut Street, suggested that a first order of business was to consider whether sand mining and processing operations should be permitted in the City at all. Given quality of life discussions compounded by known health warnings concerning silica sand operations, she suggested that it best be prohibited rather than simply regulated.

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Marie Kovecs suggested that until such time that the Commission fully understands the health implications of silica sand mining and processing operations, she failed to see how adequate standards could be developed to address those concerns. She also referenced the fact that mining operations should include a full understanding of soil and hydrology information and suggested that potential soil impact be reviewed by the Winona County Soil and Water Conservation District. She further noted transportation issues and suggested that any Conditional Use Permit, whether for mining or processing operations, include a traffic impact study. She suggested that the initial application for any Conditional Use Permit include a full description of a site's environmental setting.

Dale Shalow suggested that the Commission not leave all of its decisions in the hands of state government. He encouraged the City to develop its own standards and to monitor and manage those standards. He also referenced a recent sand spill into the St. Croix River and noted that a number of mines had been permitted within Wisconsin.

Joe Morris noted that in addressing air quality issues, the State of Minnesota does not have adequate funding to undertake its own monitoring efforts. Although standards may look adequate on paper, he still had concerns about how each issue such as air quality would be managed.

Mr. Morris further asked what the term "reclamation" would mean and proposed mining ordinance language. He asked how areas can actually be reclaimed once they have been disturbed. The approval of any Conditional Use Permit needs to be specific in this. He also asked who would pay for road upgrades within the City resulting from increased truck traffic.

Jane Cowgill asked if it would be possible to bring in other experts other than those representing state agencies into the discussion. Chairman Porter stated that although possible, he was unaware of any City funds for this. However, should someone bring in such experts, the Commission would be more than willing to hear what they had to say.

Following closure of the open mic session, it was moved by Commissioner Gromek and seconded by Commissioner Boettcher to formally direct staff to prepare an amended draft mining ordinance that would reflect those recommendations as included in the Commission's agenda package this afternoon. When the question was called, the vote of the Commission was unanimous to approve the motion.

Again, Mr. Espinosa stated that the draft ordinance would be provided to the Commission at a future meeting.

In response to a question by Commissioner Gromek, Mr. Espinosa noted that, as related to sand processing operations, the quantity of water used is regulated by the State DNR. Chairman Porter stated that it was his observation that many of these operations used closed loop systems in recycling water.

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Other Business

Commissioner Boettcher stated that it appeared a new building was being constructed near the Pelzer Street Bridge. Mr. Espinosa replied that he believed this was a single family home.

It was moved by Commissioner Davis and seconded by Commissioner Boettcher to remove the term "laundry" from the Marie Kovecsi's comments presented on page 4 of the May 14, 2012 minutes. When the question was called, the vote of the Commission was unanimous to approve the motion.

Adjournment

There being no further business to come before the Commission, the meeting was adjourned.

Mark Moeller
City Planner

PLANNING COMMISSION

AGENDA ITEM: 3. Sand Moratorium Study: Biesanz Stone Company Analysis

PREPARED BY: Carlos Espinosa

DATE: June 25, 2012

Agenda Item

Commissioners please see the following Biesanz quarry analysis. Although the packet is very large, the report itself is only 15 pages. The remainder of the packet consists of attachments.

Commissioners should review the report and the proposed non-conformity agreement contained within. Staff is specifically seeking Commissioner's input on the nonconformity agreement before it is brought to Council.

A draft of the proposed amendments to the City's Extraction Ordinance will be on the agenda at the Commission's July 9th meeting.

Public Input

For this agenda item, public input will be permitted before and after Commission discussion (in the same manner as previous meetings). However, because of interest in the agenda item from three particular groups – each will have 10 minutes total to speak to the agenda item. Each group may designate one or two speakers. Speakers may divide up the 10 total minutes between the two public input periods (e.g. 5 minutes prior to Commission discussion, 5 minutes after). The three groups allotted this time to speak are: 1) Representatives of the Blasting Committee, 2) Representatives of CASM, and 3) Representatives from the sand industry.

Meeting attendees not represented by these three groups will have 2 minutes per person to speak.

Winona Frac Sand Moratorium: Biesanz Stone Company Analysis

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History of Site

Uses Prior to Frac Sand

The Biesanz quarry has produced Biesanz stone and various aggregate products (i.e. sand, gravel, and crushed stone) since 1904. The quarry was located in Winona Township prior to being annexed into the City on January 22, 1996. The mining section of the property was zoned A-G (Agricultural) on October 21, 1998. The stone cutting and processing section of the property was zoned M-2 (General Manufacturing) at the same time.

How Frac Sand Use was Established

In spring 2011, the Biesanz quarry began blasting to reach frac sand located in the Jordan sandstone formation. By fall 2011, the Biesanz quarry began extracting “frac” sand. The sand was accessed by blasting in an area already excavated for Biesanz

stone and other aggregate products. The location of the blasting for frac sand is shown below in an image from 2011:



The Biesanz quarry was “grandfathered in” as a legal nonconformity when A-G zoning was applied in October 1998 (see Nonconforming Status/CUP Applicability Section). This “grandfathered” status means that the quarry has been allowed to mine stone and aggregate products (including sand) despite not having a CUP as required for new extraction activities in the A-G zoning district.

Current Sand Operations

General Description of Sand-related Activity

Mined sand from the Biesanz quarry comes from the Jordan sandstone formation. In order to reach the frac sand, blasting through 40-50 feet of material (fractured limestone, sand/rock) has occurred. Once the Jordan formation is reached (and a softer layer of sandstone is extracted from the top of the formation), lower level blasts are utilized to break up deeper sandstone. When the sand is mined, it has a 5-15% moisture content. At the mine site, the sand passes through an initial screener before being sent to a washing site at 6930 West 5th Street in Minnesota City or to 370 West Second Street for shipping.

A simplified description of the mined material and remaining bedrock geology is below:

50' - 100' Oneota Dolomite – Removed from top of mine previous to frac sand
10' Biesanz Stone – Removed previous to frac sand

40' - 50' Sand/Rock Material (Overburden/Aggregate) – Removed to reach frac sand
30' - 40' Jordan Sandstone (Usable frac sand) – Removed for use as frac sand

150' – 200' of material excavated

60 - 80' Jordan Sandstone (Un-usable for frac sand) – Remaining
50' – 75' St. Lawrence Siltstone – Remaining
140' – 180' Franconia Sandstone – Remaining
45 – 60' Ironton and Galesville Sandstone to Winona valley elevation
180' to Winona/Goodview water source (Mt. Simon aquifer)

475' – 575' of bedrock remaining to Mt. Simon public water source

As shown above, 60 -110 feet of material had been removed prior to the blasting to reach frac sand in spring 2011. Since then, approximately 40-50 feet of sand/rock material has been blasted through to reach the Jordan Sandstone formation. Only the top 30 – 40 feet of the Jordan formation has been excavated. Below this depth, the sandstone is not usable as frac sand.

Although it is an important source of water in western Winona County, the Jordan bedrock formation is not a significant source of groundwater in the Winona (City) area adjacent to the Mississippi River Valley. In this area, the Jordan bedrock formation is generally dewatered because the valleys have drained the aquifer of its water and cut off most of its regional recharge. Water for the City of Winona and Goodview instead comes from wells that reach into the Mt. Simon aquifer located 500 feet below the bottom of the Jordan formation. Thus, accounting for mining activity which has already occurred, quarrying at Biesanz remains more than 500 feet away from the Mt. Simon public water source. The potential for contamination of the Jordan aquifer from excavation at Biesanz is minimal for the following reasons:

- No chemicals are used in the extraction of frac sand.
- The quarry is required to implement Best Management Practices designed to reduce the potential for water pollution as part of its MNG490000 water permit from the MPCA (see description on page 7).
- The direction of water drainage from the mine is immediately toward the Mississippi river valley or through springs and seeps along the adjacent valleys. It is unlikely to be able to flow west/south toward Jordan groundwater resources.
- According to geologic maps, there is not a high probability of karst landforms in the quarry area.

- In the Hillsdale township area to the west of the quarry, the Jordan formation is not able to support new private wells constructed according to the State Well Code. New private wells must go deeper to find adequate sources of water. Existing water wells are generally low yield multi-aquifer wells and are unlikely to be affected by the mine's operations because of the non-westerly direction of groundwater flow.

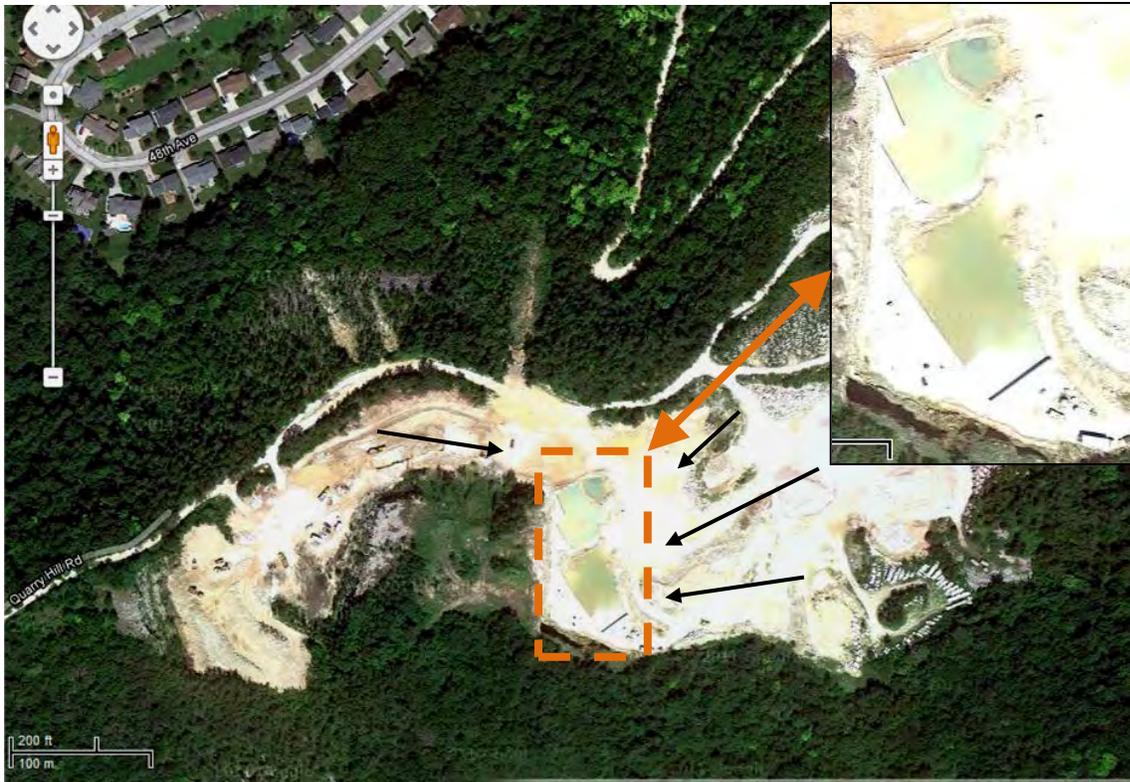
Habitat and Wetlands

The 1996 "Natural Communities and Rare Species" map produced for Winona County by the Minnesota County Biological Survey shows no rare species or animal aggregations in the Biesanz quarry excavation area. The map does show an oak forest natural community to the north and east of the existing excavation area. However, there is no planned excavation in these locations (see Future Excavation Section).

There is no indication of wetlands in the excavation area of the Biesanz quarry. The potential for impacts to wetlands on adjacent properties is addressed in the following excerpt from Biesanz's MPCA MNG490000 stormwater permit (see Attachment B):

"If the site has any stormwater discharges with the potential for significant adverse impacts to a wetland, the Permittee [Biesanz] must demonstrate that the wetland mitigative sequence has been followed" (p. 8).

The mitigative sequence includes avoiding impacts, minimizing unavoidable impacts, and potential wetland replacement. The potential for such adverse impacts to wetlands is reduced by a site drainage design which directs all water runoff from the quarry toward the center of the excavation area as shown on the next page:



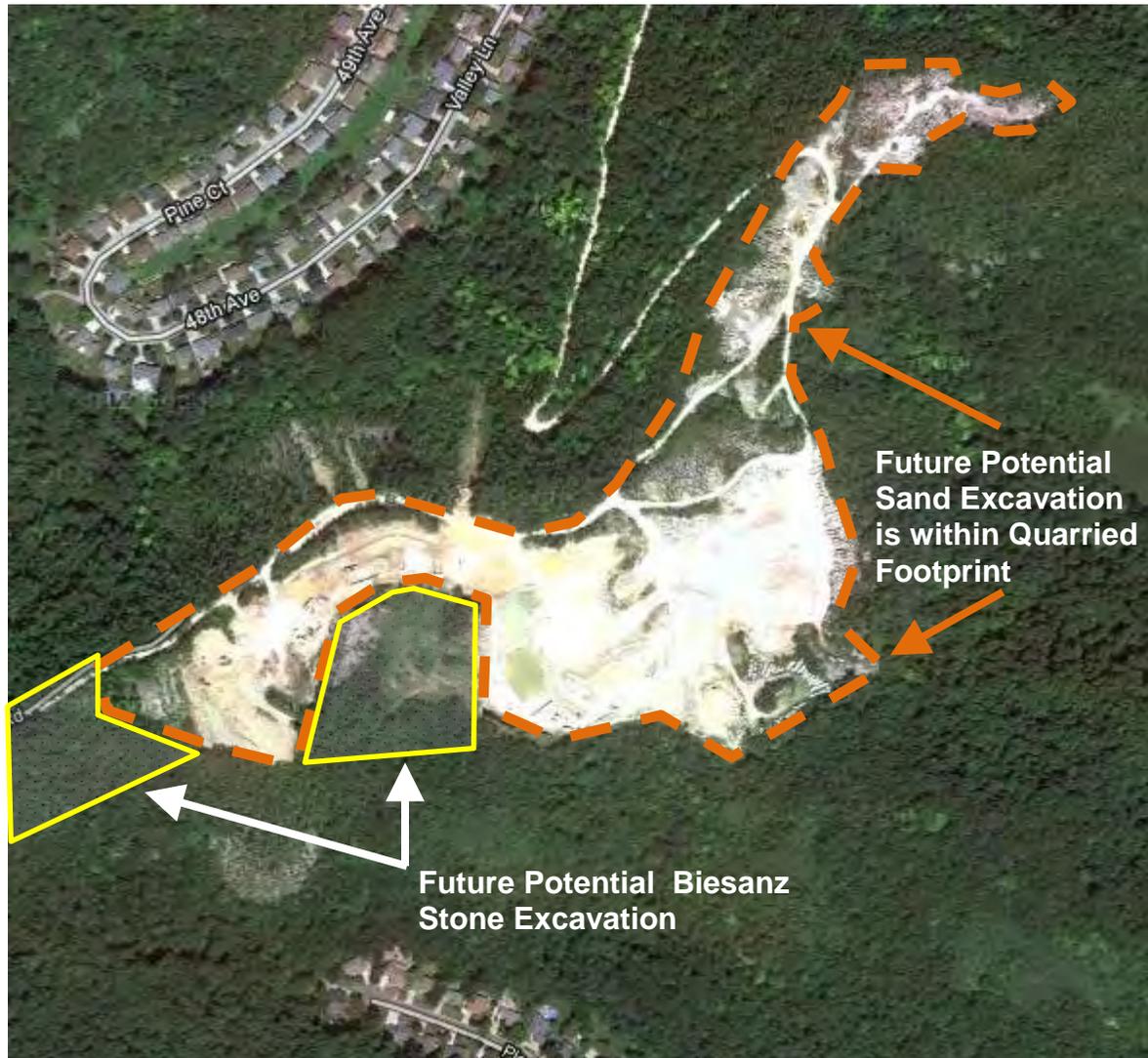
Number of Sand Trucks and Destinations of Trucks

Depending on the day, the maximum number of sand trucks that exit the quarry ranges from 40-120. From the quarry the sand is either transported to Minnesota City via Highway 14/Pelzer and 5th Street (6th Street in Goodview) or to 370 West Second Street via Highway 14, Pelzer, and Riverview Drive. These roads are designated truck routes and have general 2007 traffic volumes ranging from 5,000-9,000 ADT (Average Daily Traffic). However, the same roads have the capacity to carry general volumes of 15,000 ADT (one-lane roads) to 30,000+ ADT (two lane roads – e.g. Pelzer). Thus, the sand generated truck traffic from Biesanz - while it may be noticeable - generally represents a small fraction of the traffic which can be handled by these roads.

There have been questions about the ability of the intersection of Seminary Drive and Highway 14 to handle the trucks entering and exiting the Biesanz quarry. While the intersection is not ideal, it is the historic entrance/exit point for the quarry, additional “trucks entering” signage has been posted for motorists, and trees have been trimmed and removed by MnDOT near the intersection to help improve sight lines. Unilaterally ordering additional improvements to the intersection is not possible because the City does not have jurisdiction over the roads at the intersection. While the City may provide input (because the quarry is in City limits), additional improvements to the intersection are under the jurisdiction of MnDOT and Winona County/Hillsdale Township.

Future Excavation

Potential areas for future excavation are shown below. Additional detail is recommended to be provided in a mine plan. Future excavation is recommended to maintain existing minimum setback distances from neighboring residential properties and not occur in designated areas (see Recommendations Section).



State and Local Regulations that Apply

Zoning

As stated above, the mining area of the Biesanz quarry was zoned A-G Agricultural in 1998. Despite the mine not having a CUP, it is in the correct zoning district for a mine. Any future mines in the City would also be limited to locating in the A-G zoning district.

Comprehensive Plan

The 1997 Comprehensive Plan designates the future land use of the Biesanz Quarry as General Industrial. General Industrial is defined as: "Areas for manufacturing, processing and other activities that may have impacts offsite, and are generally isolated from other uses or buffered from them. Often contiguous to industrial riverfront, but less river-dependent. Sites should have direct access to major regional transportation facilities." As such, the quarry is in-line with the future land use guidance provided in the City's Comprehensive Plan.

Air - Permits Held and Dust Plan Followed

Air permits related to mining are attached to the equipment brought into the mine. These permits require the machinery to be operated in a manner that reduces the creation of dust.

A dust mitigation plan may be required by City Code. The quarry does have such a plan - a copy of it is provided in Attachment A. The plan addresses potential dust creating activities at Biesanz such as:

- Haul roads/traffic on limestone roads - A water truck is available whenever dust generating activities are occurring, vehicle speeds are limited to 15 mph.
- Drilling for blasting - Areas surrounding drilling generally have substantial natural barriers such as hillsides or dense foliage.
- Blasting - Blasting will not occur when winds consistently exceed 25 mph, blasting will not occur within 750 feet of a residential property when winds consistently exceed 15 mph.

In addition, the sand has a 5-15% moisture content when mined. When sand has a moisture content above 3%, a minimal amount of dust (from the sand) is created by activities such as extraction, screening, and transportation.

Water - Permits Held and Best Management Practices Followed

Biesanz holds a MNG 490000 permit from the MPCA which regulates storm water/water runoff from the mining site (see Attachment B). The MNG 490000 permit covers a number of water-related requirements including:

- 1) Limits on stormwater and wastewater discharges
- 2) A response procedure for spills or leaks
- 3) Sampling of stormwater runoff recorded twice annually and sent to the MPCA.

In addition, the quarry is required to produce and adhere to a Pollution Prevention Plan which identifies Best Management Practices (BMPs) that eliminate or minimize potential sources of water pollution. The Pollution Prevention Plan is required to address the following activities:

- Excavation
- Crushing/screening
- Overburden, waste and products stockpiles
- Raw material and final product storage
- Waste products
- Sediment washing
- Material loading/unloading
- Areas where spills and leaks may potentially contribute pollutants to stormwater
- Vehicle and equipment maintenance, washing, and fueling

At the time this report was written, Biesanz was in the process of updating its Pollution Prevention Plan. A copy of the plan will be filed with the City once it is completed.

Performance Standards

The City has performance standards for noise, dust, vibration, fire and explosion hazard, radioactivity, smoke, odors, glare, and liquid and solid wastes. Although all standards apply to the mine, those for noise and dust are probably most applicable to frac sand excavation activities. The performance standard for vibration does not apply to blasting because that activity is covered by separate blasting regulations in Chapter 63 of the City Code.

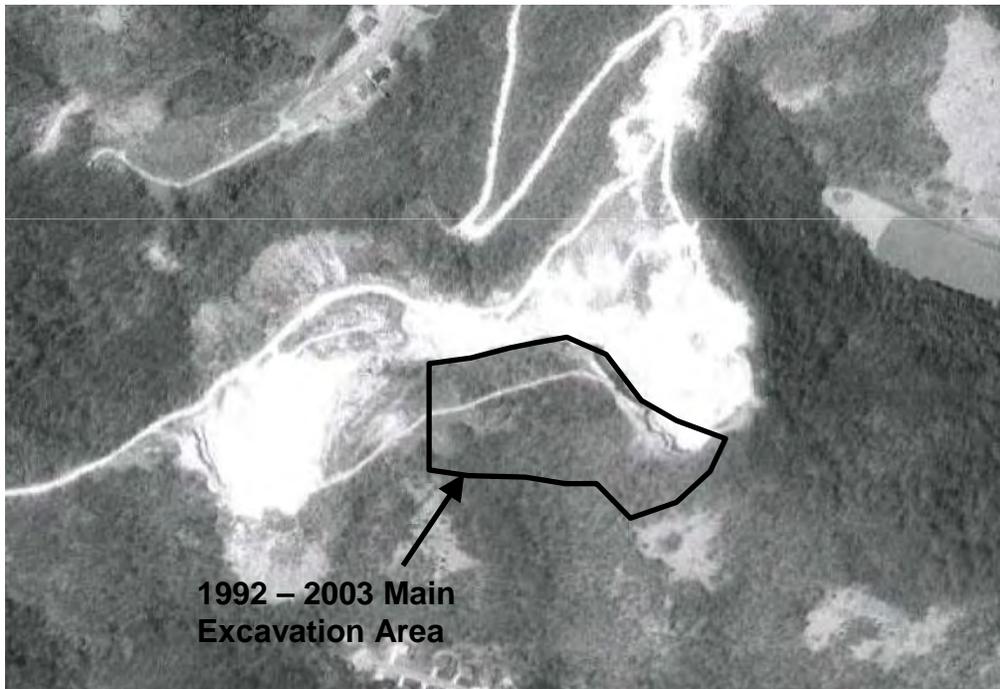
The performance standard for noise requires a significant reduction in noise travelling across the mine's property lines between the hours of 10 p.m. and 7 a.m. (i.e. the mine is required to be much "quieter" at night). One of staff's recommendations is to stipulate specific hours of operation for mining and associated activities in a nonconformity agreement (see page 13).

The performance standard for dust requires all activities to comply with state law and stipulates that a dust control plan may be required by the City. As stated previously, the quarry has a dust control plan provided in Attachment A.

Nonconforming Status/CUP Applicability

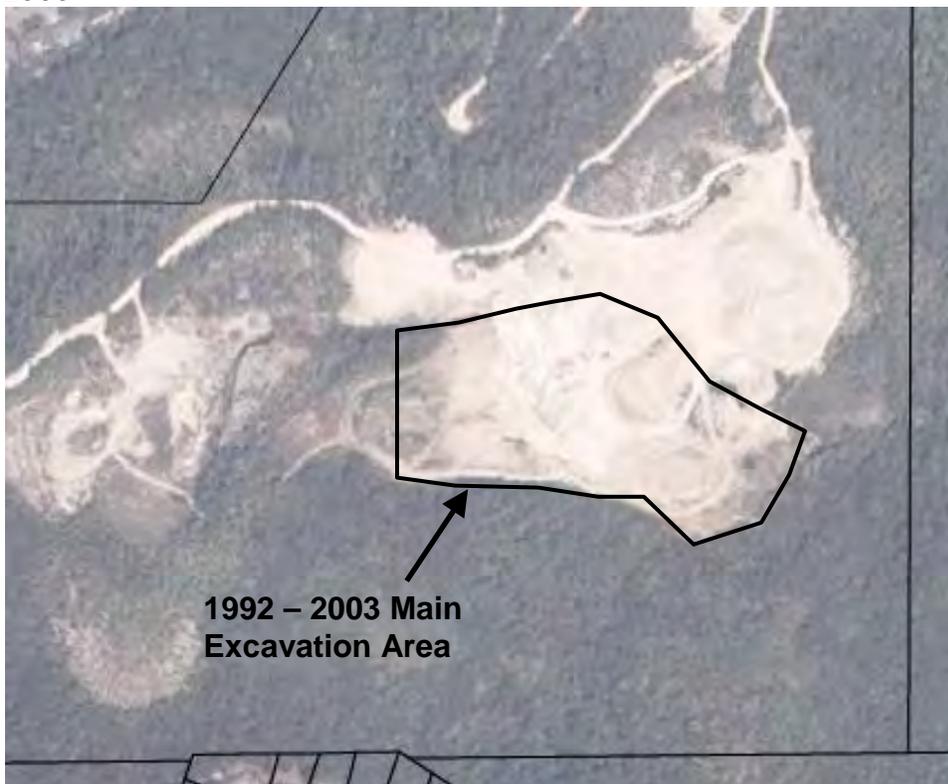
According to City Code, "Extraction Pits" are a conditional use in an Agricultural (A-G) zoning district. The existing mine property is in an A-G district, but does not have a CUP. This means the quarry was "grandfathered" when the quarry was zoned A-G in October 1998. "Grandfathered" is a term for a legal use that does not comply with zoning regulations (also known as a nonconformity). In October of 1998, Biesanz was "grandfathered in" as a legal nonconformity. The closest aerial photo prior to this date is from 1992:

1992



In 2003, the mine had the footprint below. Note the main area of excavation expansion (also shown on the 1992 photo above):

2003



Now, comparing the 2003 image and main excavation area with a 2011 image and the current frac sand excavation area:

2003



2011



These photos show that between 1992 and 2003, the mine expanded to include the area currently being excavated for frac sand. Thus, the 2011 excavation for frac sand occurred in an area which had already been mined for other products. Nonetheless, the quarry became a nonconformity in October 1998. According to City and state statutes, being “grandfathered in” as a nonconformity means that the use can continue, but not expand. However, mines are a unique land use (a “diminishing asset”) that must expand in order to continue at all. As a result, despite being a nonconformity, Biesanz can legally expand (on the same property) without triggering a CUP. In order to regulate expansion of the mine, staff recommends a “nonconformity agreement” be entered into with Biesanz Stone Company (see Recommendations Section).

Additional Equipment

For the purpose of the sand processing and transportation facility CUP adopted in March 2012, “expansion” was defined as including:

- 1) Addition of new equipment
- 2) Increase in land area of use
- 3) Expansion onto a new site

“Addition of new equipment” was included in this definition to exemplify a prohibited expansion for sand processing and transportation facilities. However, the Biesanz quarry is a different type of use (i.e. extraction – diminishing asset vs. processing/transportation – non-diminishing asset). The difference is that additional and different types of equipment are essential to the operation of the mine. If the equipment example were attached to the quarry, it could not continue to operate in its legal grandfathered status – which is to excavate stone and aggregate products.

Recommendations

Minnesota State Statutes 462.357 Subd. 1e (b) states that *a municipality may, by ordinance, permit an expansion or impose upon nonconformities reasonable regulations to prevent and abate nuisances and to protect the public health, welfare, or safety.* To accomplish this, a “nonconformity agreement” between the City and the Biesanz Stone Company is recommended to regulate expansion of the mine. An agreement is recommended instead of a Conditional Use Permit because it is more flexible than a generic CUP (and thus a better fit for an existing grandfathered use). The agreement would be formerly approved by the City Council. Given the above described City and state regulations which already apply to the quarry, the following stipulations are recommended for the agreement:

1. Future excavation shall not occur closer to Knopp Valley or WE Valley residential properties than existing

According to the map below, the footprint of the existing quarry is approximately 610 – 630 feet from residential property lines in Knopp Valley and 460 feet from property lines in WE Valley:

2011



Depending on the mapping application used, the distances between existing excavation and residential properties vary 10 - 20 feet. To account for these differences, future mining shall observe a minimum *600 foot setback* from residential property lines in Knopp Valley and a *450 foot setback* from residential property lines in WE Valley (see Attachment C for a map of these setbacks).

2. Future mining shall not occur in designated areas outside residential setbacks

Excavation shall not occur in designated areas outside the setbacks to residential property specified in number one (see Attachment D for a map of these designated areas). The combination of the residential setbacks and these designated areas basically limits expansion of the mine to those locations specified in the Future Excavation Section above.

3. A maximum depth of mining shall be established at an elevation of 975 feet

Excavation shall not occur below an elevation of 975 feet. This is the approximate elevation of excavation which occurred in 2011.

4. Hours of operation for mining and associated activities shall be 6 a.m. to 10 p.m.

Hours of operation for mining and associated activities shall be 6 a.m. to 10 p.m. These times align with County regulations for mines. Note, this is the maximum permitted time window for mining and associated activities. Typically, hours of operation for mining are much shorter. Performance standards for noise would still apply to the mine.

5. Permits shall be obtained and placed on file

Current site permits shall be placed on file at the City of Winona. This includes the MPCA MNG490000 Nonmetallic Mining and Associated Activities permit, and the Pollution Prevention Plan required as part of this permit.

6. A fugitive dust plan shall be placed on file

A copy of the quarry's most recent fugitive dust control plan shall be submitted to the City of Winona.

7. A mine plan shall be produced

A mine plan which contains the following information shall be submitted to the City of Winona:

- Existing state:
 - Map of 2012 excavated area with contour lines at (5) foot intervals
 - Depths of current excavation
 - Existing vegetation
 - Existing drainage
 - Existing wells

- Planned excavation:
 - Future excavation areas at 4600 Goodview Road mapped with contour lines at (5) foot intervals
 - Approximate timing of future excavation areas
 - Approximate depths of future excavation

8. A reclamation plan shall be produced

A reclamation plan shall be produced in accordance with:

- Applicable standards listed in City Code Section 43.48 (d) – see Attachment E.
- Standards in County Zoning Ordinance 9.10.3 (8.) and 9.10.4 (to be added to City Code as part of moratorium study) – see Attachment F.

In addition, a performance bond equaling 110% of the estimated cost of reclamation for a period equal to the life of the quarry plus two years shall be filed to ensure that the reclamation plan is completed as proposed.

Considering the level of detail required, it is proposed that the Biesanz Stone Company be allowed up to 12 months after the adoption date of the nonconformity agreement to produce the mine plan and the reclamation plan. Following completion of the plans, staff will review the documents for conformance with the nonconformity agreement. Yearly updates on the progress of the plans are to be given along with the notification and community meeting requirements of the Blasting Permit - City Code Sections 63.11 (d) and (e). Changes to the plans (or the nonconformity agreement) that exceed the terms of the nonconformity agreement must be approved the City Council.

9. An EAW shall be required for sand excavation outside 2011 quarried footprint

An EAW shall be required for sand excavation outside the 2011 mine footprint as shown below:



10. Additional requirements as determined by moratorium study shall apply

Any applicable requirements added to the City Code as a result of the completed Sand Moratorium Study shall be incorporated into this agreement as appropriate.

The mine operator is in general agreement with these stipulations. Any additional requirements related to blasting will be established in a separate document. As stated previously, changes that exceed the terms of the nonconformity agreement will require City Council approval.

Attachments:

- A) Dust Mitigation Plan
- B) Biesanz MNG490000 Permit
- C) Map of Proposed Excavation Setbacks to Residential Properties
- D) Map of Proposed Non-Excavation Areas Outside Residential Setbacks
- E) City Code Section 43.48
- F) Winona County Zoning Ordinance 9.10.3(8.) and 9.10.4

6/8/2012

Biesanz Quarry Dust Control Plan**Biesanz Quarry**

The Biesanz Quarry has been in continuous operation since 1904. The Biesanz Quarry is an operating limestone quarry where Biesanz primarily quarries Minnesota Dolomite Limestone. In addition various supplemental quarry products are mined. Stone landscaping products are quarried, various sandstone products are mined, and various types of crushed limestone aggregates are produced.

The general sequence of operations is as follows:

1. Over burden is excavated and stockpiled for later reclamation using hydraulic excavators, wheel loaders, off road haul trucks and dozers.
2. Fractured limestone is drilled and blasted down to the Biesanz stone level. Wheel loaders, hydraulic excavators, and off road haul trucks are used to stockpile this material. A portable rock crusher is used to produce the crushed limestone aggregates from this material. The crushed aggregate materials are stockpiled and loaded into on road dump trucks with wheel loaders when jobs requiring the crushed aggregate come up.
3. The Biesanz stone and stone landscaping materials are wet sawed out in large blocks and removed with large wheel loaders. These blocks are inventoried and stored in the quarry for use in the stone fabrication operations at the Biesanz plant below.
4. Once the Biesanz stone has been removed additional fractured limestone is drilled and blasted down to the sandstone level. Wheel loaders, hydraulic excavators and off road haul trucks are used to stockpile this material for later placement back into the excavation once the sandstone is removed.
5. The sandstone is mined using hydraulic excavators, wheel loaders, and off road hauls trucks.
6. The sandstone is excavated and hauled to a screening area, screened and loaded into on road semis with wheel loaders for shipment off site.

Attached find Appendix A & B maps of the Biesanz Quarry.

In general the areas of the quarry where activities regularly take place on the larger Biesanz property are a substantial distance from any neighboring properties. Additionally areas in the quarry where activity generally takes place have substantial natural or vegetative barriers that act as wind and dust barriers. These barriers generally consist of hillsides and/or dense forest including trees and bushes.

Quarry activities that may cause dust.

1. The majority of dust generated in the quarry comes from rubber tired, wheel loaders, off road haul trucks, on road semis, and various passenger vehicles, regularly traveling on crushed limestone base interior haul roads and access roads on the Biesanz property. These interior roads have substantial natural or vegetative barriers along each side of the roads. These barriers generally consist of hillsides and/or dense forest including trees and bushes. The vehicle speed in the quarry is generally restricted to 15 mph or slower. The main method of dust control on these interior roads is by regularly applying water and maintaining the crushed limestone roads in a stabilized condition.
2. Dust is generated by the operation of rubber tired wheel loaders on crushed limestone that provides for loading, unloading, stacking, and moving of various materials in the general quarry area outside of interior roads. These areas also generally have substantial natural barriers such as hillsides and dense forest around the perimeter of each area. The main method of dust control is by regularly applying water and maintaining these areas in a stabilized condition.

Biesanz Quarry Dust Control Plan

3. Limestone crushing activities in the quarry performed by an outside contractor can generate dust. The portable crushing equipment and operation has its own dust control plan that moves with the portable equipment. The areas where crushing occurs generally have substantial natural barriers such as hillsides and dense forest around the perimeter.
4. Sandstone screening and loading activities can generate dust. The normal moisture content of the sandstone is 5% - 15% so it does not generate dust as it is screened. However the rubber tired loaders that operate to load the screening equipment and then load trucks with the screened materials operate primarily on crushed limestone and sandstone covered surfaces. The main method of dust control is by regularly applying water and maintaining the areas in a stabilized condition. The areas where screening occurs generally have substantial natural barriers such as hillsides and dense forest around the perimeter.
5. The drilling of blast holes in the rock can generate dust. Rock drilling in the quarry is performed by an outside contractor whose employees operate the drilling equipment inside an enclosed cab. No other personal are generally in the immediate area where the drilling is taking place. The areas where the rock drilling takes place generally have substantial natural barriers such as hillsides and dense forests around the perimeter.
6. Blasting activities can generate dust. See the following section regarding blasting of rock and sandstone.
The areas where blasting takes place generally have substantial natural barriers such as hillsides and dense forests around the perimeter.

The access point to the Biesanz Quarry for all quarry hauling in and out, is off of Quarry Hill Road in Hillsdale Township. Quarry Hill Rd. ends at the entrance to the quarry. Quarry Hill is a crushed limestone road and therefore does not require that there be any type of track out devices installed at the quarry entrance point.

There is no public access to the quarry. All visitors to the quarry are required to check in at the Biesanz main offices located on old Goodview Road. Visitors are not allowed in the quarry unaccompanied.

6/8/2012

Biesanz Quarry Dust Control Plan

Biesanz Quarry Watering

The preferred method of dust control in the Biesanz Quarry is watering. Due to the size of the Biesanz properties and the fact that different activities are happening at different time and places within the quarry, watering of the immediate work area where a given activity is taking place as well as the internal access roads providing access into and out of that area is the best way to control dust.

Biesanz and/or outside contractors who are working in the quarry will have a watering truck available in the quarry at all times whenever dust generating activities are underway.

Biesanz employees, as well as outside contractors who are working in the quarry, have immediate responsibility for watering during dust generating activities.

Biesanz management at least daily and more often as circumstances require will monitor dust conditions throughout the quarry to insure that water is applied as needed to control dust.

Water is generally applied so the surface is visibly moist or a visible surface crust is established. In general regular light watering is most appropriate for dust control rather than heavy infrequent watering.

6/8/2012

Biesanz Quarry Dust Control Plan

Blasting of Rock and Sandstone

Blasting activities in the quarry are performed by licensed outside contractors.

The majority of blasting in the Biesanz Quarry involves blasting fractured limestone to access crushed rock materials and landscaping materials and dimensional stone materials.

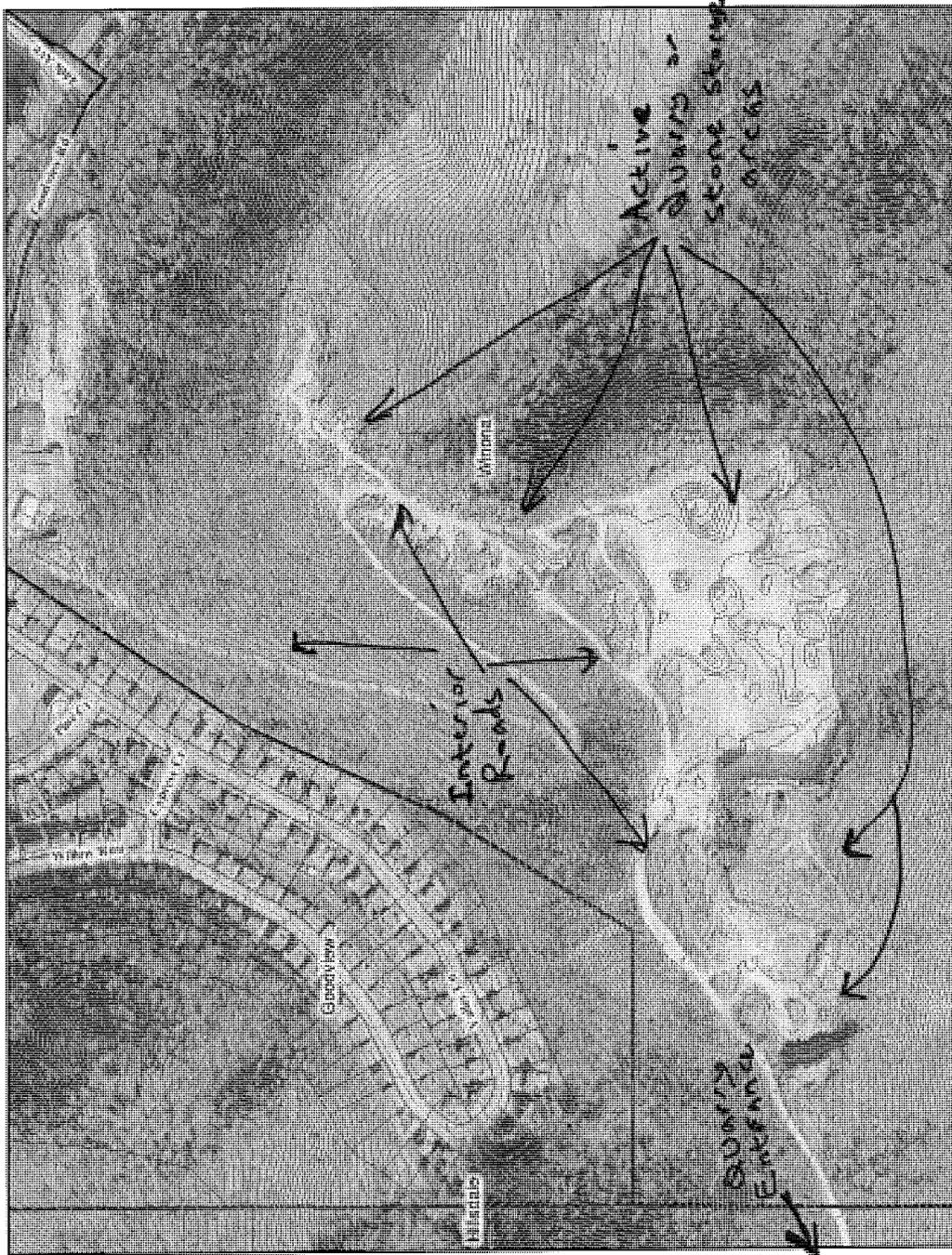
A smaller amount of blasting occurs to break up rock lenses within sandstone materials. The generally existing moisture content of the sandstone in the quarry is 5% - 15% due to storm water run off directed into the quarry as well as direct rainfall. This moisture level minimizes dust during a blast in this sandstone.

The areas where blasting activities take place have substantial natural barriers such as hillsides and dense forests around the perimeter.

1. All blasting is performed as per City of Winona Blasting Ordinance.
2. Blasting days are generally limited to Tuesday through Thursday as weather and quarry circumstances allow, and as per the blasting company's approved blasting plan.
3. No blasting within 750 feet of a residential development when wind gusts are consistently above 15 mph and wind direction is towards these structures.
4. If wind gusts are consistently above 25 mph, blasting operations will stop.
5. The surfaces that the blasting company trucks and the stemming material placement equipment operate on will be stabilized with water as needed.

Appendix A

Biesanz Quarry



0 650 1300 1950 ft.

This map is a user generated static output from an Internet mapping site and is for general reference only. Data layers that appear on this map may or may not be accurate, current, or otherwise reliable. THIS MAP IS NOT TO BE USED FOR NAVIGATION OR IN PLACE OF A SURVEY.

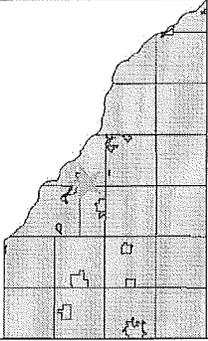
Map center: 44° 3' 13.3" N, 91° 42' 46.4" W

Scale: 1:6,865



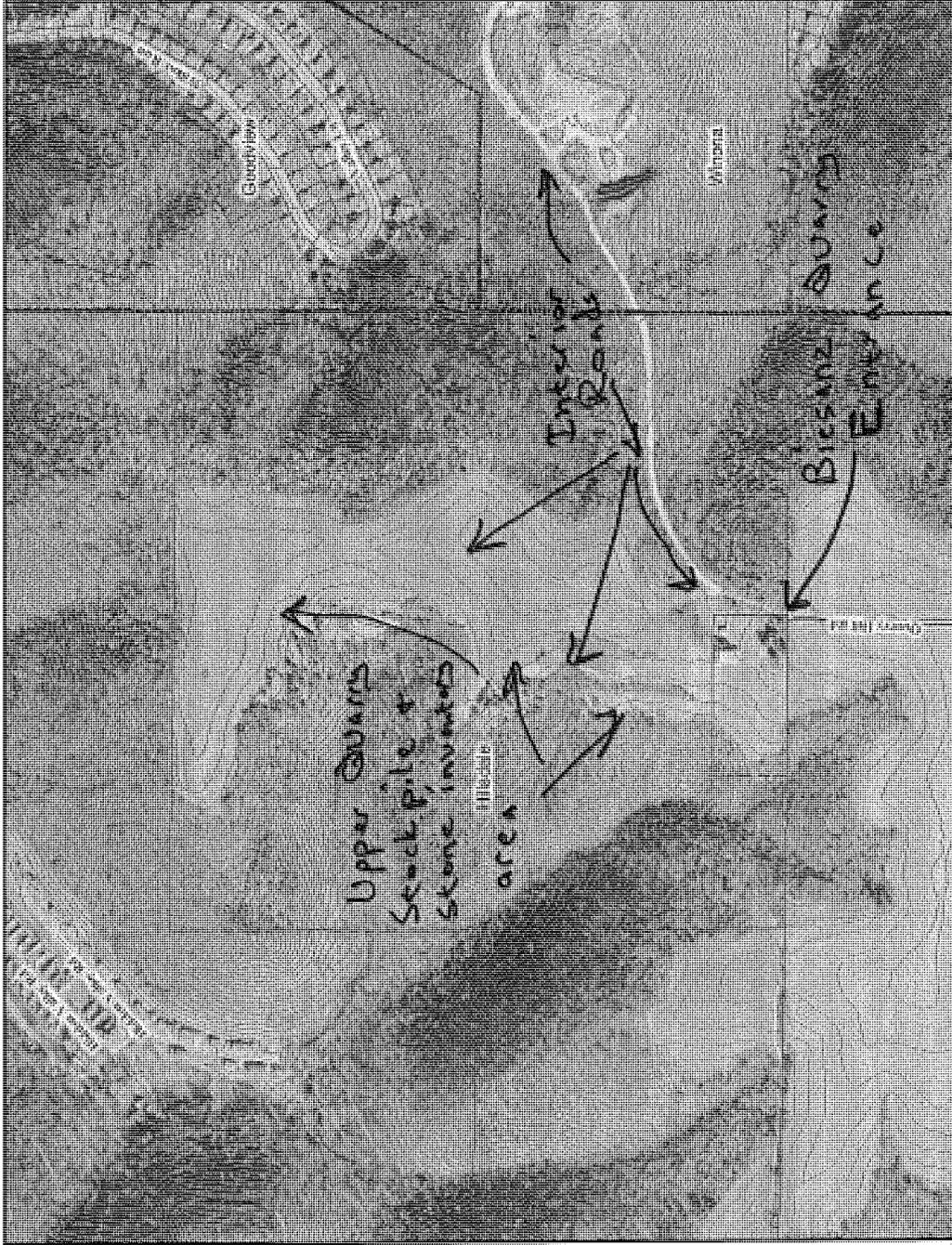
Legend

- 10 ft Contours
- Roads
 - Local Roads
 - Major Collector
 - Minor Arterials
 - Minor Collector
 - Municipal Streets
 - Principal Arterial
 - Private Roads
- Parcel
- Municipality_Labels
- County
- 2010 Imagery



Appendix B

Biesanz Upper Quarry Property



0 850 1700 2550 ft.

This map is a user generated static output from an internet mapping site and is for general reference only. Data layers that appear on this map may or may not be accurate, current, or otherwise reliable. THIS MAP IS NOT TO BE USED FOR NAVIGATION OR IN PLACE OF A SURVEY.

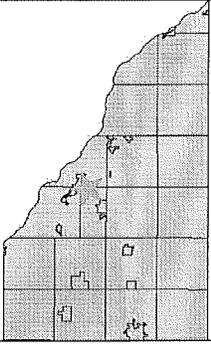
Map center: 44° 3' 8" N, 91° 43' 31" W

Scale: 1:8,665



Legend

- 10 ft Contours
- Roads
 - Local Roads
 - Major Collector
 - Minor Arterials
 - Minor Collector
 - Municipal Streets
 - Principal Arterial
 - Private Roads
- Parcel
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- County
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Minnesota Pollution Control Agency

Duluth Office | 525 Lake Avenue South | Suite 400 | Duluth, MN 55802 | 218-723-4660
800-657-3864 | 651-282-5332 TTY | www.pca.state.mn.us | Equal Opportunity Employer

May 16, 2012

Mr. Darrell Stahlecker, President
Biesanz Stone Co., Inc. Quarry
4600 Goodview Road
Winona, MN 55987

RE: Final Issuance NPDES/SDS General Permit MNG490000
Nonmetallic Mining and Associated Activities
Notice of Coverage-MNG490124
Biesanz Stone Co., Inc. Quarry



Dear Mr. Stahlecker:

Enclosed is a copy of National Pollutant Discharge Elimination System (NPDES)/State Disposal System (SDS) General Permit MNG490000 for Nonmetallic Mining and Associated Activities (Permit). All comments submitted in writing during the public notice period for the general Permit have been considered.

Effective with the date of this Notice of Coverage (NOC), Biesanz Stone Co., Inc. Quarry (Facility) is covered and is authorized to discharge in accordance with the general Permit which expires October 31, 2016. Permit number MNG490124 has been uniquely assigned to your Facility to track compliance with the general Permit terms and conditions. This Permit enables multi-site coverage for eligible activities throughout Minnesota and supersedes the previous Construction Sand & Gravel, Rock Quarrying and Hot Mix Asphalt Production Facilities General Permit MNG490000 that was issued on December 20, 2006.

Description of Permitted Facility

The Facility headquarters is located in Winona, Winona County, Minnesota with permitted activities located throughout Minnesota.

The permit application indicates that the authorized permitted activities currently consist of the following:

Authorized Activity	Number of Sites
Subsector J1	
Construction sand and gravel mining (Standard Industrial Classification [SIC] Code 1442)	1
Industrial sand mining (SIC Code 1446)	0
Subsector J2	
Dimension stone (SIC Code 1411)	1
Crushed and broken limestone mining/quarry area (SIC Code 1422)	1
Crushed and broken granite mining/quarry area (SIC Code 1423)	0
Crushed and broken stone mining/quarry area (not elsewhere classified, SIC Code 1429)	0

Authorized Activity	Number of Sites
Subsector D1	
Hot mix asphalt production areas also known as asphalt paving mixtures and blocks (SIC Code 2951). This includes portable hot mix asphalt plants.	0
Subsector E2	
Concrete block and brick (SIC Code 3271)	0
Concrete products other than block and brick (SIC Code 3272)	0
Ready-mix concrete (SIC Code 3273)	0
Total Authorized Activities	3

Further detail including the discharge location(s) and activity performed at each of the above authorized site(s) is listed in the Summary of Stations attachment enclosed with this NOC.

This Permit complies with Minn. R. 7053.0275 regarding anti-backsliding.

Any point source discharger of sewage, industrial, or other wastes for which a NPDES permit has been issued by the agency that contains effluent limits more stringent than those that would be established by Minn. R. 7053.0215 to 7053.0265 shall continue to meet the effluent limits established by the permit, unless the permittee establishes that less stringent effluent limits are allowable pursuant to federal law, under Section 402(o) of the Clean Water Act, United States Code, title 33, Section 1342.

Limits and Monitoring Requirements:

Please refer to the Limits and Monitoring Requirements attachment of this NOC. These limits and requirements are specific to your Facility and are an enforceable part of your permit.

- All subsectors-Stormwater:** This permit requires semiannual stormwater sampling of total suspended solids (TSS) and, depending on your subsector, iron. Please note that this permit requires the Facility to sample all stormwater discharges at each site; however, if multiple, but separate stormwater discharges at a single site are substantially similar in terms of exposure, best management practices, and pollutants discharged, you may choose one monitoring outfall that is most representative and best allows for obtaining a sample at that site. This is only applicable to a single site. Therefore, each site needs to have at least one stormwater discharge monitoring point; even if you collect and contain stormwater so it will not leave your site, you must still locate the overflow point where the water would discharge in a large storm event. Two samples shall be collected each year at each monitoring outfall and analyzed for each parameter. Please try to collect one sample in the spring and one in the fall. These results will be averaged and reported annually on your eDMR (described in further detail below). See Section 8, Monitoring Requirements, of the Permit to find out what to do if no discharge occurs and for further detail on stormwater monitoring.
- J1 and/or J2 subsectors-Dewatering Effluent:** This permit also requires quarterly effluent sampling and monitoring of flow, TSS and pH for authorized dewatering discharges. These results will be reported each quarter through eDMRs. See Section 8, Monitoring Requirements, items 8.13-8.19, of the Permit for more details on effluent sampling and monitoring.

Mr. Darrell Stahlecker
Page 3
May 16, 2012

Please note that if your facility contains a mine dewatering discharge to surface waters, additional parameters shall be sampled and analyzed prior to permit expiration and submitted with the application for permit re-issuance (samples should be taken during the most recent discharge prior to application for permit re-issuance). These parameters consist of total dissolved solids; hardness; oil & grease surfactants; antimony, arsenic, beryllium, cadmium, chromium, copper, lead, nickel, selenium, silver, thallium, and zinc; aluminum, barium, boron, cobalt, iron, magnesium, manganese, molybdenum, total tin, and total aluminum. See Section 8, Monitoring Requirements, item 8.20, of the Permit for further detail.

Electronic Discharge Monitoring Reports (eDMR)

Discharge monitoring reports (DMR), supplemental forms, and related attachments shall be electronically submitted via the MPCA Online Services Portal. Please note that approved authorization is required before DMRs can be submitted electronically. Guidance on *How to Create a MPCA Online Services Portal Account* along with *On-line eDMR Submittal & Adding Attachments Guidance* is included with this NOC for your convenience. These guidance documents along with others can also be found online at: <http://www.pca.state.mn.us/hqzqb28>. Please visit this website for further detail. Also, please note that when electronically submitted, no paper DMR submittal is required. To begin using the eDMRs, go to: <https://netweb.pca.state.mn.us/private/>.

Site Inventory Form

If authorization to add additional site(s) for coverage under this permit is desired, the permittee must update their Site Inventory Form and submit it to the MPCA at least 10 days prior to initiation of land-disturbing activities at the new site(s) or initiation of operation at a previously developed site(s). This form may also be used to terminate inactive sites from the permit. See Section 2, Authorization, of the Permit for further details.

Pollution Prevention Plan and Inspections

You are required to create a Pollution Prevention Plan that will eliminate or minimize the contact of stormwater with significant materials that may result in pollution in runoff and correctly manage non-stormwater discharges. These plans need to be updated annually at a minimum. See Section 6 of the permit for further detail.

You are required to develop and implement an inspection schedule which must have a minimum of one inspection per calendar month. Each calendar year you must do at least one inspection during a runoff event and, at minimum, one inspection during a snowmelt event. All inspections must be recorded and retained with the Pollution Prevention Plan. See Section 7 of the permit for further detail.

Other

For your convenience, a *Submittals and Actions Checklist* (Checklist) has also been included with this permit. The Checklist generally summarizes the submittal requirements for your facility over the life of the Permit. However, please be aware that the specific requirements for coverage are detailed in the Permit itself and should be reviewed carefully. The Checklist also lists some the MPCA staff assigned to this Permit, should you have any questions.

Submission of an Annual Report is no longer required with this Permit and has been replaced by eDMR submittals.

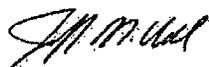
Mr. Darrell Stahlecker
Page 4
May 16, 2012

Please refer to our website at <http://www.pca.state.mn.us/iryp90f> for additional information on the general Permit.

It is the responsibility of the Permittee to maintain compliance with all of the terms and conditions of this Permit.

If you have any questions regarding the terms and conditions of this general Permit, please visit our website and then contact Theresa Haugen at 218-316-3920 or by e-mail at theresa.haugen@state.mn.us

Sincerely,



Jeff Udd, P.E.
Supervisor, Water Quality Permits Unit
Water Section
Industrial Division

JU/TH:img

Enclosures: MNG490000 NPDES/SDS Final Permit
Summary of Stations
Limits and Monitoring Requirements
Submittals and Actions Checklist
Site Inventory Form
How to Create a MPCA Online Services Portal Account Document
On-line eDMR Submittal & Adding Attachments Guidance Document

cc: Mr. Ryan Gavin, Biesanz Stone Co., Inc. Quarry
Mr. Charles W. Biesanz Jr., Biesanz Stone Co., Inc. Quarry
MPCA Permit File

STATE OF MINNESOTA



Minnesota Pollution Control Agency

**Industrial Division
National Pollutant Elimination System (NPDES) /
State Disposal System (SDS) General Permit MNG490000 for
Nonmetallic Mining and Associated Activities**

MODIFICATION DATE: March 20, 2012

EXPIRATION DATE: October 31, 2016

The Permittee is an owner or operator of facilities within the boundary of the state of Minnesota that:

- a. Discharge stormwater from the construction sand and gravel, industrial sand, dimension stone, crushed and broken limestone, crushed and broken granite, crushed and broken stone (not elsewhere classified) mining and quarrying areas, hot mix asphalt production areas, (including portable hot mix asphalt plants), concrete block and brick, concrete products (other than block and brick), and ready-mix concrete, as well as aggregate dredging operations and uncontaminated asphalt and concrete rubble recycling at sites already listed.
- b. Discharge mine site dewatering from construction sand and gravel, industrial sand, dimension stone, crushed and broken limestone, crushed and broken granite, and crushed and broken stone (not elsewhere classified) mining and quarrying areas.
- c. Non-stormwater discharges that meet the requirements of this permit and occur at the above-mentioned facilities.

The state of Minnesota, on behalf of its citizens through the Minnesota Pollution Control Agency (MPCA), authorizes the Permittee to construct, install and operate a disposal system at the facilities named above and to discharge to a receiving water of the state of Minnesota in accordance with the requirements of this permit.

The goal of this permit is to protect water quality in accordance with Minnesota and U.S. statutes and rules, including Minn. Stat. chs. 115 and 116, Minn. R. chs. 7001, 7050, 7052, and 7053; and the U.S. Clean Water Act (CWA).

This permit is effective on the modification date identified above, and supersedes the previous general permit MNG490000 dated January 30, 2012. This permit expires at midnight on the expiration date identified above.

Signature: _____

Jeff Udd, P.E.
Supervisor, Water Quality Permits Unit
Land and Water Quality Permits Section
Industrial Division

for The Minnesota Pollution Control Agency

Submit Reports to:

Attention: WQ Submittals Center
Minnesota Pollution Control Agency
520 Lafayette Rd N
St Paul, MN 55155-4194

Questions on this permit?

- Contact: Theresa Haugen at 218-316-3920
or by e-mail at theresa.haugen@state.mn.us

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Chapter 1. General Non-Metallic Mining and Assoc. Act.

1. Applicability

Activities Covered

1.1 This permit authorizes stormwater discharges associated with the following industrial activities:

- a. Construction sand and gravel (Standard Industrial Classification [SIC] Code 1442) and industrial sand mining areas (SIC Code 1446) - hereinafter Subsector J1.
- b. Dimension stone (SIC Code 1411), crushed and broken limestone (SIC Code 1422), crushed and broken granite (SIC Code 1423), crushed and broken stone (not elsewhere classified, SIC Code 1429) mining and quarrying areas - Subsector J2.
- c. Hot mix asphalt production areas, also known as asphalt paving mixtures and blocks (SIC Code 2951), including portable hot mix asphalt plants - Subsector D1.
- d. Concrete block and brick (SIC Code 3271), concrete products other than block and brick (SIC Code 3272), and ready-mix concrete (SIC Code 3273), including portable concrete plants - Subsector E2.
- e. Materials approved in Minn. R. 7035.2860 (Beneficial Use of Solid Waste) at sites engaged in facility activities associated with all SIC Codes listed in a. through d. above. Any recycling and storage of these materials must meet the requirements of Minn. Rule 7035.2855 (Solid Waste Storage Standards).
- f. Activities associated with the above facilities noted, including maintenance activities and facilities, unless otherwise prohibited in Section 1.5 through 1.11 (Activities Not Covered/Limitations on Coverage) of this permit.

The stormwater discharges identified above include stormwater discharges associated with construction activity and small construction activity, as defined in 40 CFR parts 122.26(b)(14)(x) and (b)(15), respectively.

- 1.2 This permit authorizes non-stormwater discharges to surface waters of the state from dewatering of mine or quarry areas at J1 and J2 Subsectors that meet the effluent limits and requirements in this permit.
- 1.3 This permit authorizes non-stormwater discharges that do not discharge to a surface water of the state provided these discharges are not already authorized in a separate NPDES/SDS permit. Non-stormwater that co-mingles with stormwater is considered a non-stormwater discharge (wastewater) and must be disposed of in compliance with this Permit. To be authorized under this permit, the following discharges must be collected, contained or infiltrate to the ground and Best Management Practices must be implemented to prevent contamination of ground water:
 - a. Wash water from Subsector J1 and J2 facilities.
 - b. Dredging operations from Subsector J1 and J2 facilities.
 - c. Installation, construction, and operation of wet scrubbers at hot mix asphalt production areas, including portable hot-mix asphalt plants (Subsector D1).
 - d. Washing trucks, mixers, transport buckets, forms and/or other equipment at concrete block and brick, concrete products other than block and brick, and ready-mix concrete facilities (Subsector E2).
 - e. Uncontaminated scale deck wash water that does not use detergents, solvents, or degreasers.
 - f. Stormwater and deck wash water collected in holding tanks under scales.
 - g. Wash water associated with cleaning of mobile equipment that does not use detergents, solvents, or degreasers.
 - h. Waters used for dust control on crushers, conveyors, associated equipment, and site roadways.

Chapter 1. General Non-Metallic Mining and Assoc. Act.

1. Applicability

- 1.4 This permit authorizes non-stormwater discharges provided these discharges are not already authorized in a separate NPDES/SDS permit and that appropriate Best Management Practices are utilized to minimize erosion and the discharges of sediment when necessary:
- Emergency fire-fighting activities.
 - Fire hydrant and fire suppression system flushing.
 - Potable water line flushing.
 - Uncontaminated condensate from air conditioners, coolers, and other compressors and from the outside storage of refrigerated gases or liquids.
 - Landscape watering provided all pesticides, herbicides and fertilizers have been applied in accordance with manufacturer's instructions.
 - Pavement wash waters where no detergents are used and no spills or leaks of potential pollutants such as fertilizers, salts, or toxic and hazardous materials have occurred unless all spilled material has been removed.
 - Routine external building wash down that does not use detergents, solvents, or degreasers.
 - Uncontaminated groundwater or spring water.
 - Foundation or footing drains where flows are not contaminated.
 - Incident windblown mist from cooling towers that collects on rooftops or adjacent portions of the facility, but not intentional discharges from the cooling tower (e.g. 'piped' cooling tower blowdown or drains).

- 1.5 Not all activities covered by this permit will be conducted at each site covered under this permit. Therefore, only those provisions of this permit that address activities occurring at a particular site are applicable to that site.

Activities Not Covered / Limitations on Coverage

- 1.6 Except as authorized under Section 1.1 through 1.5, this permit does not authorize the discharge from the following activities:
- Dewatering of mine or quarry areas other than those under Subsector J1 and J2.
 - Surface water discharges of scrubber or other air emissions control wastewater, cooling or boiler wastewater, floor drains from process areas, equipment/vehicle washing, cleaning and maintenance wastewaters, and sewage.
 - Contaminated ground water discharges.
 - Petroleum refineries.
 - Facilities that manufacture asphalt or asphalt emulsions.
 - Industrial sand mines (SIC 1446) that utilize HF flotation.
 - Dredging or filling of wetlands or other surface waters of the state.
 - Discharges of hazardous substances, lubricants, fuel leaks, or fuel spills.
 - Sites for which Environmental Assessment Worksheets or Environmental Impact Statements are required by Minn. R. ch. 116D and/or 42 U.S.C. Sec 4321 - 4370f, until that environmental review is completed.
- 1.7 This permit does not authorize new or expanded discharges that may cause or contribute to a violation of water quality standards unless it meets the requirements of 40 CFR 122.4(i).
- 1.8 This permit does not authorize existing discharges that the MPCA determines will cause or contribute to a violation of water quality standards unless it meets the requirements of 40 CFR 122.44.
- 1.9 This permit does not authorize discharges that adversely impact or contribute to adverse impacts on a listed endangered or threatened species or adversely modify a designated critical habitat. This permit does not replace or satisfy any review requirements for endangered or threatened species, from new or expanded discharges that adversely impact or contribute to adverse impacts on a listed endangered or threatened species or adversely modify a designated critical habitat. The owner must conduct any required review and coordinate with appropriate agencies for any project with the potential of affecting endangered or threatened species, or their critical habitat.

Chapter 1. General Non-Metallic Mining and Assoc. Act.

1. Applicability

- 1.10 This permit does not authorize discharges which adversely affect properties listed or eligible for listing in the National Register of Historic Places or affecting known or discovered archeological sites. This permit does not replace or satisfy any review requirements for historic places or archeological sites, from new or expanded discharges which adversely affect properties listed or eligible for listing in the National Register of Historic Places or affecting known or discovered archeological sites. The owner must be in compliance with the National Historic Preservation Act and conduct all required review and coordination related to historic preservation, including significant anthropological sites and any burial sites, with the Minnesota Historic Preservation Officer.
- 1.11 This permit does not authorize discharges to calcareous fens listed in Minn. R. 7050.0180, subp. 6.b.
- 1.12 Mine site dewatering discharges from Subsectors J1 and J2 to the following receiving waters are not authorized by this permit:
- a. Outstanding Resource Value Waters (ORVWs) as defined by Minnesota Rules 7050.0180 and as listed in Minnesota Rules 7050.0470;
 - b. Department of Natural Resources (DNR)-designated trout waters (trout waters are designated in Minn. R. 6264.0050, subp. 1 and 3); and
 - c. DNR-posted fish-spawning areas.

2. Authorization

Permit Application

- 2.1 Owners and operators of a site or sites with facility activities identified in Section 1 of this permit, and who provide a complete and approvable application for a permit, are eligible for coverage under this permit for those activities.

Notice of Coverage

- 2.2 Permittees requesting initial coverage are covered under this permit when the MPCA notifies them in writing of this coverage.
- 2.3 Additional sites may be covered under this permit provided that the new site(s) meet all applicability criteria in Section 1 of this permit and that all information required by the Site Inventory Report Form is submitted to the MPCA at least 10 days prior to initiation of land-disturbing activities at the new site(s) or initiation of operation at a previously developed site.

Requiring an Individual Permit

- 2.4 If the MPCA finds that the facility site of a permit applicant or a Permittee covered under this permit would be more appropriately covered under an individual permit, the MPCA may require an individual permit for the applicant or the Permittee, in accordance with Minn. R. 7001.0210, subp. 6. In considering whether it is appropriate to issue an individual permit for a site, the MPCA will consider whether the site is contributing, or may contribute, to a water quality standard violation.
- 2.5 This general permit does not cover activities or discharges covered under a pre-existing individual permit unless the MPCA has specifically revoked or terminated that individual permit.

Subsector E2 Application Requirements

- 2.6 Owners and operators of Subsector E2 facilities with wastewater discharges must complete an approvable application for permit coverage 6 months following issuance date of this permit. MPCA will notify the Permittee of coverage in writing and will terminate any associated Industrial Stormwater Multi-Sector General permit, if applicable.

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2. Authorization

Notice of Temporarily Inactive Site(s)

- 2.7 The Permittee(s) must ensure that permanent stormwater BMPs are in place if the site is temporarily inactive.
- 2.8 During the temporarily inactive period, intervention limit monitoring is not required, but the Permittee must indicate on the Comments field of the Discharge Monitoring Report the inactivity. Should the site become active, the Permittee is required to sample in accordance with this Section 8 (Monitoring Requirements) of the permit for the calendar year the site becomes active.

Notice of Inactive Site(s)

- 2.9 The Permittee(s) must ensure stabilization of the site upon cessation of mining activities. Stabilization shall be initiated immediately after the termination of the mining operation and upon completion the area shall be restored to its intended state.
- 2.10 The Permittee(s) must complete the following to achieve final stabilization:
- a. The drainage ways that leave the site must be stabilized to prevent erosion with riprap or other protective material.
 - b. All soils must be stabilized by a uniform perennial vegetative cover with a density of 70 percent over the entire pervious surface area, or other equivalent means necessary to prevent soil failure under erosive conditions.
 - c. Temporary BMPs for erosion prevention, such as synthetic liners and silt fences, must be removed.
 - d. All sediment must be removed from conveyances and from temporary sedimentation basins that are to be used as permanent water quality management basins in order to sufficient return the basin to design capacity. Sediment must be stabilized to prevent it from being washed back into the basin, conveyances or drainage-ways discharging off-site or to surface waters.
 - e. Other BMPs as necessary must be implemented so as to prevent erosion from the site excavation areas and stockpiles that have been used by the Permittee.
- 2.11 In order to have permit coverage terminated and have the Permittee released from inspection, recording and reporting requirements, the Permittee shall ensure and certify on the Site Inventory Form for site(s) where the Permittee no longer conducts the activities authorized by this permit that:
- a. The site closure achieves stabilization, or
 - b. There is no stormwater runoff associated with nonmetallic mining and/or mine dewatering from the site; or
 - c. The Permittee supplies the name and contact information for the new owner or operator that is responsible for the site.

3. Water Quality Based Effluent Limits

- 3.1 A wastewater discharge shall not cause or contribute to a violation of water quality standards unless the discharge meets all requirements of 40 CFR 122.44.
- 3.2 The Permittee shall operate and maintain the facility and shall control runoff, including stormwater, from the facility to prevent the exceedance of water quality standards specified in Minnesota Rules, chs. 7050 and 7060.
- 3.3 The Permittee shall limit and control the use of materials at the facility that may cause exceedances of ground water standards specified in Minnesota Rules, ch. 7060. These materials include, but are not limited to, detergents and cleaning agents, solvents, chemical dust suppressants, lubricants, fuels, drilling fluids, oils, fertilizers, explosives and blasting agents.
- 3.4 The MPCA may modify this permit, require corrective actions or take other actions if it determines that a discharge authorized by this permit is causing or contributing to a violation of water quality standards.
- 3.5 Floating solids or visible foam shall not be discharged in other than trace amounts.
- 3.6 Oil or other substances shall not be discharged in amounts that create a visible color film.

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3. Water Quality Based Effluent Limits

- 3.7 Any outlet pipe, culvert or hose outlets for the discharge shall be located on the ground. The Permittee shall install and maintain outlet protection measures, such as properly sized riprap, splash pads or gabions at the discharge stations (outlets) to prevent erosion.
- 3.8 All water from dewatering or basin draining activities must be discharged in a manner that does not cause nuisance conditions, erosion in receiving channels or on downslope properties, or inundation in wetland causing significant adverse impact to the wetland.

Special Requirements

- 3.9 For stormwater discharges within 2000 feet of Outstanding Resource Value Waters (ORVWs) as defined in Minn. R. 7050.0180, subp.3, 4, 5, 6 and 6a (not including calcareous fens listed in Minn. R. 7050.0180 & Minn. R. 7050.0470 and trout waters as listed in Minn. R. 6264.0050, subp. 2 and 4 - see Section 3.11 below), the Permittee shall maintained at all times an undisturbed buffer zone of not less than 100 linear feet from the receiving water (not including tributaries). Exceptions from this requirement for areas, such as water crossings or limited water access, are allowed if the Permittee fully documents in the Pollution Prevention Plan (Plan, see Section 6) the circumstances and reasons that the buffer encroachment is necessary. All potential water quality, scenic and other environmental impacts of these exceptions must be minimized and documented in the Plan for the site.
- 3.10 For stormwater discharges within 2000 feet of Outstanding Resource Value Waters (ORVWs) as defined in Minn. R. 7050.0180, subp.3, 4, 5, 6 and 6a (not including calcareous fens listed in Minn. R. 7050.0180 & Minn. R. 7050.0470 and trout waters as listed in Minn. R. 6264.0050, subp. 2 and 4 - see Section 3.11 below), the Permittee shall infiltrate stormwater to groundwater. If unable to discharge to groundwater, the Permittee shall implement the following additional Best Management Practices (BMPs) for surface water discharges:
- a. All exposed soil areas with a slope of 3:1 or steeper, that have a continuous positive slope to a ORVW or trout waters must have temporary erosion protection or permanent cover within 3 days after the area is no longer actively being worked. All other slopes that have a continuous positive slope to an ORVW or trout waters must have temporary erosion protection or permanent cover within seven (7) days after the area is no longer actively being worked.
 - b. Temporary sediment basin requirements must be used for common drainage locations that serve an area with five (5) or more acres disturbed at one time.
 - c. The water quality volume that must be treated by the site's stormwater management system shall be one (1) inch of runoff from the new impervious surfaces created at the site.
- 3.11 For stormwater discharges within 2000 feet of those ORVWs identified in Minn. R. 7050.0180 subp. 3, 4, and 5, Minn. R. 7050.0470, and trout lakes identified in Minn. R. 6264.0050 subp.2 the stormwater management system must be designed such that the pre and post project runoff rate and volume from the 1 and 2-year 24-hour precipitation events remains the same.

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3. Water Quality Based Effluent Limits

- 3.12 For stormwater discharges within 2000 feet of trout streams as listed in 6264.0050 subp. 4, the Permittee shall infiltrate stormwater to groundwater. If unable to discharge to groundwater, additional BMPs for temperature controls apply to surface water discharges. The stormwater management system must be designed such that the discharge from the site will minimize any increase in the temperature of trout stream receiving waters resulting from the 1 and 2-year 24-hour precipitation events. This includes all tributaries of designated trout streams within the section that the trout stream is located. Sites that discharge to trout streams must minimize the impact using one or more of the following measures, in order of preference:
- Minimize new impervious surfaces.
 - Minimize the discharge from connected impervious surfaces by discharging to vegetated areas, or grass swales, and through the use of other non-structural controls.
 - Infiltration or evapotranspiration of runoff in excess of pre-project conditions (up to the 2-year 24-hour precipitation event).
 - If ponding is used, the design must include an appropriate combination of measures such as shading, filtered bottom withdrawal, vegetated swale discharges or constructed wetland treatment cells that will limit temperature increases. The pond should be designed to draw down in 24 hours or less.
 - Other methods that will minimize any increase in the temperature of the trout stream.
- 3.13 If the site has any stormwater discharges with the potential for significant adverse impacts to a wetland (e.g., conversion of a natural wetland to a stormwater pond), the Permittee must demonstrate that the wetland mitigative sequence has been followed.
- 3.14 If the potential adverse impacts to a wetland on a specific site have been addressed by permits or other approvals from an official statewide program (U.S. Army Corps of Engineers 404 program, Minnesota Department of Natural Resources, or the State of Minnesota Wetland Conservation Act) specifically for the site, the Permittee may use that permit or other determination issued by these agencies to show that the potential adverse impacts have been addressed. For the purposes of this permit, de minimis actions are determinations by the permitting agency that address the site impacts, whereas a non-jurisdictional determination does not address site impacts.
- 3.15 If there are impacts from the site that are not addressed in one of the permits addressed in Section 3.14 or other determinations (e.g., permanent inundation or flooding of the wetland, significant degradation of water quality, excavation, filling, draining), the Permittee must minimize all adverse impacts to wetlands by utilizing appropriate measures. Measures used must be based on the nature of the wetland, its vegetative community types and the established hydrology. These measures include in order of preference:
- Avoid all significant adverse impacts to wetlands from site discharges.
 - Minimize any unavoidable impacts to wetlands from site discharges.
 - Provide compensatory mitigation when the Permittee determines that there is no reasonable and practicable alternative to having a significant adverse impact on a wetland. For compensatory mitigation, wetland restoration or creation shall be of the same type, size and whenever reasonable and practicable in the same watershed as the impacted wetland.
- 3.16 If a site discharges to a water of the state that appears on the current U.S. Environmental Protection Agency (USEPA) approved list of impaired waters under Section 303 (d) of the Clean Water Act (33 U.S.C. Sec 303 (d)), the Permittee must review whether changes may be warranted in the site's Pollution Prevention Plan (Plan) to reduce the impact of the discharge. If an USEPA approved Total Maximum Daily Load (TMDL) has been developed, the Permittee must review the adequacy of the Plan to meet the TMDLs Waste Load Allocation.

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4. Technology Based Effluent Limits - Stormwater Discharges

Stormwater Management Devices

- 4.1 The Permittee is authorized to use industrial stormwater ponds, sedimentation basins and/or infiltration devices for stormwater management.
- 4.2 When wastewater from activities in Section 1.3 is co-mingled with stormwater, it is considered wastewater, and a surface water discharge is not authorized under this permit. This does not include co-mingling with mine dewatering from Subsector J1 and J2 facilities, which is approved for a surface water discharge under this permit.
- 4.3 If the Permittee provides documentation to MPCA that the stormwater management device was designed by a registered professional engineer to control a 10-year, 24-hour storm event, then no sampling of a discharge is required upon MPCA approval. If the stormwater management device is already in place at an existing facility, the sizing of the device shall be confirmed by a registered professional engineer before the sampling requirement is waived. This does not include non-stormwater discharges, which under Section 1.3 of this permit are not authorized to discharge to surface waters. This waiver is for monitoring only; effluent limits still apply to the discharge and Permittees must maintain compliance with the limits.

Erosion and Sediment Control Practices

- 4.4 The Permittee shall implement sediment control on all down-gradient perimeters before any up-gradient land disturbing activities begin. Use a range of erosion controls within the broad categories of flow diversion (e.g. swales, berms) and structural controls (e.g. sediment traps, dikes, silt fences). The timing of the installation of sediment control practices may be adjusted to accommodate short-term activities. These practices shall remain in place until the site has been stabilized. Short-term activities shall be completed as quickly as possible and the sediment control practices must be installed immediately after the activity is completed. Sediment control practices shall be implemented no later than the next runoff event, even if the short-term activity is not complete.
- 4.5 The Permittee(s) shall plan for and implement appropriate construction phasing, vegetative buffer strips, horizontal slope grading, and other construction practices that minimize erosion. The location of areas not to be disturbed shall be delineated (e.g. with flags, stakes, signs, silt fence etc.) on the development site before work begins.
- 4.6 Temporary stockpiles or stripping/overburden stored outside the pit shall have sediment control mechanisms in place until the material is completely removed. Materials shall not be placed in surface water or stormwater conveyances such as curb and gutter systems, or conduits and ditches.

Vehicle Tracking

- 4.7 Vehicle tracking of sediment onto paved surfaces from the site or operation must be minimized by BMPs such as stone pads, concrete or steel wash racks, or equivalent systems. Street sweeping must be used if such BMPs are not adequate to prevent sediment from being tracked onto the street.

Good Housekeeping

- 4.8 Permittees conducting the industrial activities described in this permit shall keep exposed areas that may contribute pollutants to stormwater sufficiently clean to reduce or eliminate contaminated stormwater runoff.

BMP Maintenance

- 4.9 The Permittee shall maintain all BMPs identified in the Pollution Prevention Plan (Plan, see Section 6) and implemented at the facility, to ensure BMP effectiveness.
- 4.10 The Permittee shall develop a schedule for preventive maintenance of all BMPs. The schedule shall be stored with the Plan.

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4. Technology Based Effluent Limits - Stormwater Discharges

- 4.11 If the Permittee identifies BMPs that are not functioning properly, the Permittee shall replace, maintain, or repair the BMPs within seven (7) calendar days of discovery. If BMP replacement, maintenance, or repair cannot be completed within seven (7) calendar days, the Permittee shall implement effective backup BMPs (temporary or permanent) until effectiveness of the original BMPs can be restored. The Permittee shall document the justification for an extended replacement, maintenance, or repair schedule of the failed BMPs, and store it with the Plan.
- 4.12 The Permittee shall record dates of all maintenance and repairs. The Permittee shall store these records with the Plan.
- 4.13 All silt fences must be repaired, replaced, or supplemented when they become nonfunctional or the sediment reaches 1/3 of the height of the fence. These repairs must be made within 24 hours of discovery, or as soon as field conditions allow access.
- 4.14 If sediment escapes the facility, off-site accumulations of sediment must be removed in a manner and at a frequency sufficient to minimize off-site impacts (e.g., fugitive sediment in streets could be washed into storm sewers by the next rain and/or pose a safety hazard to users of public streets).
- 4.15 Temporary and permanent sedimentation basins must have the sediment removed once the depth of sediment collected in the basin reaches 1/2 the storage volume. Removal must be completed within 72 hours of discovery, or as soon as field conditions allow access.

Spills and Leaks

- 4.16 The Permittee shall develop and implement a spill prevention and response procedure. If the site already has a separate plan (e.g. Prevention and Response Plan as required by Minn. Stat. 115E, or Spill Prevention Control and Countermeasure Plan as required by Federal Law), that plan can be incorporated by reference into the Pollution Prevent Plan (or Plan, see Section 6). In either case, a minimum of the following components shall be included with the Plan, or in a separate document:
- a. The Permittee shall report and document spills or leaks (as defined in Minn. Stat. Section 115.061) that occur in exposed areas, or that drain to a monitoring location.
 - b. Material handling procedures, storage requirements, and cleanup equipment/materials and procedures necessary to recover as rapidly and thoroughly as possible spills or leaks pursuant to Minn. Stat. Section 115.061. All methods and procedures must be made available to appropriate site personnel.
 - c. Contact information for individuals and emergency and regulatory agencies that must be notified in the event of a spill. When a spill or discharge of a potentially polluting material occurs, the Permittee shall immediately notify the Minnesota Department of Public Safety Duty Officer at 1-800-422-0798 (toll free) or 651-649-5451 (metro area) per Minn. Stat. Section 115.061.

Subsector D1 - Hot Mix Asphalt Production

- 4.17 In addition to the requirements in this Section, the Permittee shall use drip pans and splash guards where spills frequently occur at Subsector D1 facilities.

Subsector E2 - Ready-Mix and Other Concrete Operations

- 4.18 In addition to the requirements in this Section, the Permittee shall prevent or minimize the discharge of spilled cement, aggregate (including sand or gravel), kiln dust, fly ash, or settled dust from paved portions of the facility that are exposed to stormwater at Subsector E2 facilities.
- 4.19 The Permittee shall determine the frequency of sweeping or equivalent by the amount of industrial activity occurring at Subsector E2 facilities and the frequency of exposure to stormwater, but it shall be performed at least once per week if cement, aggregate, kiln dust, fly ash, or settled dust are being handled or processed and materials are present on paved surfaces.

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4. Technology Based Effluent Limits - Stormwater Discharges

- 4.20 The Permittee shall include measures in the Plan to ensure that process wastewater resulting from washing trucks, mixers, transport buckets, forms, or other equipment are discharged in accordance with applicable parts of this permit for Subsector E2 facilities.

5. Technology Based Effluent Limits - Non-Stormwater Discharges

Subsector J1 and J2 - Mine Pit Dewatering to Surface Waters

- 5.1 Permittees are authorized to discharge mine site dewatering flow to surface waters if the following conditions are met:
- Discharges only from Subsector J1 and J2 facilities.
 - Discharges meet the effluent limits applied in this permit.
 - The dewatering discharges do not co-mingle with other process wastewater.
 - The Permittee has documented in their Pollution Prevention Plan (Plan, see Section 6) location and initial flow estimates for surface discharge stations.
- 5.2 Dewatering or basin draining must be discharged to a control device on the project site whenever possible, such as a temporary or permanent sedimentation basin or infiltration device. Discharge from the control device must be visually checked to ensure adequate treatment is obtained and that nuisance conditions (see Minn. R. 7050.0210, subp. 2) will not result from the discharge.
- 5.3 If the Permittee provides documentation to MPCA that the control device was designed by a registered professional engineer to control a 10-year, 24-hour storm event, then no sampling of a discharge is required upon MPCA approval. If the control device is already in place at an existing facility, the sizing of the control device shall be confirmed by a registered professional engineer before the sampling requirement is waived. This includes overflows caused solely by direct rainfall and ground water seepage. This does not include non-stormwater discharges, which under Section 1.3 of this permit are not authorized to discharge to surface waters. This waiver is for monitoring only; effluent limits still apply to the discharge and Permittees must maintain compliance with the limits.
- 5.4 If the water cannot be discharged to a control device prior to entering the surface water, it must be treated with the appropriate BMPs, such that the discharge does not adversely affect the receiving water or downstream landowners.
- 5.5 The Permittee(s) must ensure that discharge points are adequately protected from erosion and scour. The discharge must be dispersed over natural rock riprap, sand bags, plastic sheeting, or other accepted energy dissipation measures. Adequate sedimentation control measures are required for discharge water that contains suspended solids.
- 5.6 Any inlet pipe, culvert or hose for the discharge shall be raised above the ground so that the discharge flow does not draw in and transport solids from the sump area.

Subsector D1 - Hot Mix Asphalt - BMPs for Wet Scrubber Wastewater

- 5.7 This permit authorizes hot mix asphalt production areas (SIC Code 2951) that discharge stormwater, and/or install, construct, and operate wet scrubbers at hot mix asphalt production plants. This permit does not authorize the discharge of hot mix asphalt production wet scrubber wastewater to surface waters. Any discharge to surface water will require an individual NPDES permit.

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5. Technology Based Effluent Limits - Non-Stormwater Discharges

5.8 Wastewater from hot mix asphalt production wet scrubbers shall be held within pipes, aboveground tanks or impoundments. Pipes mean hollow cylinders or tubes constructed of non-earthen materials. Tanks mean structures supported by concrete, fiberglass or metal, and which are designed to help liquids. Impoundments mean topographic depressions designed to hold liquid.

Pipes and tanks shall be operated and maintained to prevent leaks. Cracks or other failures in pipes or tanks shall be repaired immediately. If pipes are buried, or pipes or tanks are in contact with the land surface, they shall be inspected at least once before each operating year to locate and repair cracks or other failures.

- 5.9 An impoundment for containment of wet scrubber wastewater shall meet the design criteria specified in this section. Impoundments that do not meet the criteria in this part may be authorized if requested in writing by the Permittee, and approved in writing by the MPCA, at least 90 days before construction of the impoundment begins.
- 5.10 Construction of impoundments in close proximity to drinking water supplies and other areas subject to contamination should be avoided. A minimum separation of four feet between the top of the impoundment seal and the high water table shall be maintained. Drain tile under the impoundment shall not be used to permanently lower the water table. A minimum separation of ten feet between the top of the impoundment seal and bedrock formations shall be maintained. Impoundments shall not be constructed on locations with karst topography.
- 5.11 Impoundments shall be constructed utilizing at least a 30-mil-thick continuous Polyvinyl Chloride (PVC) or High Density Polyethylene (HDPE) liner, or a reinforced Portland cement concrete liner. A PVC or HDPE liner, not replaced on an annual basis, shall be covered with at least one-foot depth of finely textured soil. Liquid depths for impoundments shall be designed for a maximum of six feet.
- 5.12 No PVC or HDPE liner panels shall be used at more than one site without the prior written approval of the MPCA. The Permittee shall remove and properly dispose of used PVC and HDPE liner materials in accordance with applicable solid waste statutes and rules.
- 5.13 The subsoil bed for a PVC or HDPE liner shall be sufficiently prepared to ensure that all holes, rocks, stumps and other debris are eliminated. The subsoil shall be sieved or the area raked after grading to provide a smooth, flat surface free of stones and other sharp objects. The subsoil bed shall be sloped at least 1% upward toward the dike, so as to reduce gas and hydrostatic pressures, and to facilitate pumping of the impoundment.
- 5.14 PVC and HDPE liner panels shall be laid out to minimize seams, with an overlap of four to six inches. The PVC or HDPE liner anchor trench shall have a minimum six inch depth and be placed at least nine to twelve inches beyond the slope break at the dike. PVC and HDPE liners shall be installed under the direct supervision of a person experienced in the proper installation of such liners. This person shall inspect all seams on-site for their acceptability prior to the construction certification.
- 5.15 The design of a reinforced Portland cement concrete liner shall be in accordance with the American Concrete Institute (ACI) Manual of Concrete Practice.
- 5.16 The Permittee shall conduct a water balance on each impoundment, and shall inspect each impoundment for cracks or other failures, at least once each operating year. This water balance and inspection shall be conducted after the spring thaw and before the start of the asphalt plant operating season. The inspector shall prepare a written report of each water balance and inspection. Any cracks or other failures shall be repaired immediately, and certified by an engineer registered in Minnesota, or by a principal executive officer (for a corporation), or by the proprietor (for a sole proprietorship).
- 5.17 The Permittee shall keep signed copies of the impoundment design plans and specifications, construction certifications, water balance and inspection reports, and repair certifications with the asphalt plant at all times.
- 5.18 The Permittee shall divert surface water runoff around impoundments, prevent erosion, and protect the structural integrity of exterior embankments from failure.

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5. Technology Based Effluent Limits - Non-Stormwater Discharges

5.19 The Permittee shall maintain impoundments during the winter so that ice layers and frost action do not damage the liner effectiveness and integrity.

5.20 Sediments that accumulate in hot mix asphalt production wet scrubber wastewater containment structures shall be removed in a manner so as to not damage the integrity and effectiveness of the containment structure. The Permittee may dispose of these sediments at a permitted sanitary landfill, through use as road base or subgrade, or through blending into the paving hot mix asphalt mixture. The Permittee may use one of the following options for sediment disposal if the MPCA authorizes this specific use in writing:

- a. Leave in-place
- b. Use as clean fill, or
- c. Landspread.

The Permittee shall record in writing the volume of sediments removed from asphalt production scrubber disposal systems, and the method and location of the disposal of such materials.

5.21 The Permittee may dispose of hot mix asphalt production wet scrubber wastewater for the purposes of roadbed preparation or dust control, and in accordance with the following requirements:

- a. Wastewater may be applied to the surface of unpaved roads or roadbeds only if the asphalt plant is in the process of relocating, has ceased operation for the remainder of the year, or if alterations to the impoundment are needed.
- b. Wastewater may be applied to the surface of unpaved roads or roadbeds only if that road or roadbed is dry.
- c. Application to haul roads shall be conducted in such a manner to prevent runoff or prolonged ponding.
- d. Only the amount of water needed to control or prevent a dust problem may be applied.
- e. Wastewater used for dust control shall not enter any road ditch, surface water, or wetland.
- f. Wastewater shall not be applied at a rate greater than one gallon per square yard per year.

5.22 Sediments that accumulate in hot mix asphalt production wet scrubber wastewater containment structures shall be removed in a manner so as to not damage the integrity and effectiveness of the containment structure.

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5. Technology Based Effluent Limits - Non-Stormwater Discharges

5.23 Hot Mix Asphalt Ingredients, Burner Fuels and Chemical Additives - If the Permittee proposes to use hot mix asphalt ingredients, burner fuels and/or chemical additives other than those designated below, at a hot mix asphalt production plant with a wet scrubber, the Permittee shall apply in writing to the MPCA for such approval, no later than 60 days before the planned date of utilization of the non-designated material. The Permittee may use these non-designated materials only with the written approval of the MPCA. The designated materials are:

- a. Clay, silt, sand, gravel and crushed stone produced from naturally occurring geologic formations, and without chemical additives.
- b. Recycled hot mix asphalt.
- c. Recycled asphalt saturated felt materials.
- d. Natural gas, butane, propane and methane.
- e. Gasoline, kerosene, diesel fuel, jet fuel and fuel oils (No. 1, No 2, No. 3, No. 4, No. 5, No. 6).
- f. Petroleum derived waste oil as defined in Minn. R. 7045.0020.
- g. On-specification used oil fuel, as defined in Minn. R. pt. 7045.0020, except that total halogens shall not exceed 1,000 parts per million in the used oil fuel.
- h. Asphalt cement (AC).
- i. Hydrated lime.
- j. Anti-stripping agents approved by the MPCA under this permit.
- k. Aluminum chloride flocculants.
- l. Fremont 8201, and anionic polyacrylamide flocculants of similar chemical composition.
- m. Any mixture of the materials listed in subitems (a) through (l).
- n. Portland cement concrete.
- o. Recycled sediments from hot mix asphalt plant scrubber operations.
- p. Fines from hot mix asphalt fabric filter operations.
- q. Silicone.

Subsector E2 - Ready-Mix and Other Concrete Operations Discharges to Groundwater

5.24 This permit is intended to cover process wastewater discharges from concrete product operations. Discharges to groundwater are covered under this permit. Any discharge to surface water will require an individual NPDES permit. Wastewater discharges from facilities described by the following Standard Industrial Classification (SIC) codes are authorized:

- a. Concrete Block and Brick (SIC 3271)
- b. Concrete Products, N.E.C. (Not Elsewhere Covered) (SIC 3272)
- c. Ready-Mix Concrete (SIC 3273)

5.25 Dikes or berms constructed for containment shall be designed so there is no above-ground leakage through or over the dikes and/or berms.

5.26 Containment basins shall:

- a. Be constructed to allow for infiltration of wastewater.
- b. Be constructed to allow for maximum separation distance from groundwater.
- c. Have at least sufficient capacity to contain all wastewater discharges and any precipitation and stormwater runoff resulting from a 10-year, 24 hour storm event.
- d. Not be constructed in areas with standing water.

5.27 Solids shall be removed from seepage areas as needed to maintain the absorptive capacity of the soil and prevent plugging. Solids shall be handled according to Minn. R. 7035.

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6. Pollution Prevention Plan Requirements

- 6.1 The Permittee shall develop and implement a Pollution Prevention Plan (Plan) to address the specific conditions at the site. The goal of the Plan is to eliminate or minimize contact of stormwater with significant materials that may result in pollution of the runoff, as well as identify and correctly manage non-stormwater discharges.
- 6.2 A Plan shall be developed, implemented, and maintained for each site authorized by this permit. A Plan shall be prepared and maintained in an appropriate and functional manner in accordance with relevant manufacturer specifications and accepted engineering practices.
- 6.3 A Plan shall be completed prior to submitting the permit application for authorization of activities by this permit. Permittees authorized under the previous version of this permit shall modify the Plan to comply with the requirements of this permit prior to submitting the permit application.
- 6.4 The Plan shall be used by the Permittee to document all BMPs used to comply with each stormwater control measures required in Section 4 and 5 of this permit. BMPs shall be designed and implemented to address the potential pollutants associated with the activities and materials identified by the Permittee. The documentation shall include the following:
- a. A list of all non-structural BMPs designed and implemented at the site.
 - b. A list of all structural BMPs designed and implemented at the site.
- 6.5 The Plan shall include documentation of an assessment and inventory/list of materials handled and activities conducted at the site that can potentially be a source of pollutants to stormwater discharges. The assessment shall include but is not limited to the activities identified below:
- a. Excavation.
 - b. Crushing/Screening.
 - c. Overburden, waste and products stockpiles.
 - d. Raw material and final product storage.
 - e. Waste products.
 - f. Sediment washing.
 - g. Material loading/unloading.
 - h. Areas where spills and leaks may potentially contribute pollutants to stormwater.
 - i. Vehicle and equipment maintenance, washing, and fueling.
- 6.6 The Plan for each site shall include a site map, which does not need to be a surveyed map, at least to the level of detail indicated on a 7.5-minute U. S. Geological Survey quadrangle map, that identifies:
- a. Location of the site in relation to surface waters (including the name of the surface water; if the name is not known, indicate that on the map).
 - b. Location of all impaired waters within one mile. The Permittee shall include the name of the impaired water and the impairment (e.g. impaired for biota fish, turbidity, nutrients, etc).
 - c. Location of all ORVWS, DNR-designated trout waters, and wetlands within one mile of the site (MN.R. 7050.0180, 6264.0050).
 - d. Directions of stormwater flow indicated by arrows.
 - e. Topography of the area.
 - f. Location of all activities and materials.
 - g. Location of all structural BMPs.
 - h. Location and description of any non-stormwater discharges.
 - i. Dewatering points.
 - j. Water supply wells.
 - k. Surface water supply intakes.

Portable sites can meet the requirements of f. through k. above by developing general plant configuration maps.

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6. Pollution Prevention Plan Requirements

- 6.7 The Permittee shall review the Plan at least annually and modify the Plan, if:
- There is construction or a change in design, operation, or maintenance at the facility that affects stormwater and wastewater management or compliance with this permit.
 - The Permittee has identified a monitoring location from which the discharge flows to, and is within one mile of, an impaired water.
 - A routine inspection, compliance evaluation, or visual inspection identified deficiencies in the Plan and/or BMP.
 - Additional stormwater and/or wastewater control measures and BMPs are necessary to meet applicable water quality standards or to address exceedances of intervention limits.
 - There is an unauthorized discharge from the facility. If the Plan modification is based on a release or unauthorized discharge, include in the modified Plan a description and date of the release, the circumstances leading to the release, actions taken in response to the release, and measures to prevent the recurrence of such releases. Unauthorized releases and discharges are subject to the reporting requirements in Section 9.32 and 9.33.
- 6.8 The Plan must be kept at the site when the site is Active and must be available to the Agency within 72 hours of a request for review. Electronic access of the plan is acceptable if no office is located on-site.
- 6.9 The Plan shall identify the individual(s) responsible for managing, implementing, maintaining, modifying, and ensuring compliance with the site's Plan, as well as personnel responsible for managing and implementing the Plan.
- 6.10 The Permittee must develop and implement an employee training program to inform appropriate personnel of the components and goals of the Plan. The Plan must also identify periodic dates for such training.
- 6.11 Records of all inspections conducted in accordance with permit requirements shall be maintained within the Plan.

Subsector D1 - Hot Mix Asphalt

- 6.12 In addition to the Site Map requirements in Section 6.6 of this permit, Hot Mix Asphalt facilities (Subsector D1) must also identify:
- Petroleum storage.
 - Fuel storage.
 - Recycled Asphalt Pavement storage.
 - Aggregate storage.
 - Recycled concrete, concrete block and brick crushing and storage.
 - Cold patch storage.
 - Release agent storage and application.

Subsector E2 - Ready-Mix and Other Concrete Operations

- 6.13 In addition to the Site Map requirements in Section 6.6 of this permit, Ready-Mix Operations (Subsector E2) must also identify:
- Bag house or other dust control device.
 - Recycle/sedimentation pond, clarifier, or other device used for the treatment of process wastewater.
 - The areas that drain to the treatment device.
 - Description of multiple locations of ready-mix and other concrete operations, if applicable.

7. Inspection Reports

- 7.1 The Permittee shall develop and implement an inspection schedule that includes a minimum of one site inspection per calendar month that the site is an Active Site and staffed. A minimum of one inspection per calendar year shall be conducted during a runoff event.

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7. Inspection Reports

7.2 If the site is Inactive and unstaffed, Temporarily Inactive and unstaffed as defined, or is a site undergoing final stabilization, the Permittee is waived from the requirement to conduct monthly site inspections, but BMPs must be maintained.

7.3 All inspections and resulting maintenance must be recorded and retained within the Plan. Records of each inspection and maintenance activity shall include:

- a. Date and time of inspections.
- b. Name of person(s) conducting inspections.
- c. An evaluation of the facility to determine that the Plan accurately reflects conditions as described in Section 6. At a minimum, the Permittee shall inspect storage tank areas, waste disposal areas, maintenance areas, loading/unloading areas, and raw material, intermediate product, by-product and final product storage areas.
- d. An evaluation of all structural and non-structural BMPs to determine effectiveness and proper function.
- e. An evaluation of the facility to determine whether new exposed significant materials or activities have been added to the site since completion of the Plan.
- f. Recommendations for corrective actions, and corrective actions taken (including dates, times, and party completing maintenance activities).

7.4 In addition to the inspection requirements of this Section, the Permittee shall ensure that one of the required monthly inspections occurs during a snow melt event. The inspection shall include a visual assessment of the runoff to identify any visible sheens or films that indicate the presence of oil or grease in the discharge. If sheens are present in surface discharges, corrective actions to prevent sheen shall be implemented and documented in the Plan.

Subsector D1 - Hot Mix Asphalt

7.5 In addition to the inspection requirements listed in this Section, the operator of a Hot Mix Asphalt Facility shall inspect the following areas:

- a. material storage and handling areas;
- b. liquid storage tanks,
- c. hoppers, and silos;
- d. vehicle and equipment maintenance, cleaning, and fueling areas; and
- e. material handling vehicles, equipment, and processing areas.

Ensure that appropriate action is taken in response to the inspection by using follow-up procedures. Document in the Plan the inspections and follow up actions.

Subsector E2 - Ready-Mix and Other Concrete Operations

7.6 Dust collection and containment systems shall be included in the site inspections.

8. Monitoring Requirements

Stormwater Monitoring

8.1 The Permittee shall monitor each outfall for all parameters specified in the Limits and Monitoring Section of this permit during stormwater runoff from active site operations. The Permittee shall submit the results of intervention limit monitoring required by this permit on the Discharge Monitoring Report form provided by the Agency. The information must be recorded in the specified areas on the form and in the units specified (Minn. R. 7001.1090, subp. 1(D), Minn. R. 7001.0150, subp. 2(B)).

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8. Monitoring Requirements

- 8.2 Two samples shall be collected at each monitoring outfall and analyzed for each intervention limit parameter in a calendar year in order to determine an annual average concentration for each intervention limit parameter. The two samples shall be collected on two separate runoff events, one in the spring and one in the fall, if possible, each calendar year the Permittee is authorized to discharge under this permit. At the Permittee's discretion, more than two samples may be taken during separate runoff events and used to determine the annual average intervention limit(s). For averaging purposes, use a value of zero for any individual sample parameter which is determined to be less than the method detection limit.
- 8.3 If the Permittee is unable to obtain a minimum of two samples, less than two samples may be used to determine the annual average intervention limit(s) for the discharges during the year. However, for each sample that could not be obtained due to weather conditions and/or soil characteristics, the Permittee shall provide an explanation in the Comments section of the Discharge Monitoring Report and submit it to the Agency.
- 8.4 Samples shall be collected during the first 30 minutes of a measurable runoff event at a monitoring outfall and sampling events shall be at least 72 hours apart, to the extent feasible.
- 8.5 The intervention limit monitoring location(s) selected by the Permittee shall be in a location that:
- Is below the most down-gradient BMP from the source of industrial activity or significant materials, but prior to discharging from the Permittee's operational control.
 - Minimizes or eliminates sampling of stormwater from off-site sources (run-on).
 - Yields a sample that best represents the contribution of pollutants the Permittee is required to monitor for in accordance with this permit and that receives discharge from an area of industrial activities, processes, and significant materials exposed to stormwater.
- 8.6 If the Permittee has identified multiple, but separate, stormwater discharges and each area of discharge is substantially similar in terms of exposure, BMPs, and pollutants discharged, the Permittee may choose one intervention limit monitoring location that is most representative and best allows for obtaining a sample. This is applicable to a single site only. Multiple sites may only choose a substantially similar outfall at a single site.
- 8.7 An exceedance of an applicable intervention limit does not constitute a violation under this permit. However, the Permittee is required to perform any necessary corrective action(s) to address stormwater control measures, including the maintenance or implementation of BMPs, when an exceedance of an applicable intervention limit occurs. Failure to respond to an intervention limit exceedance is a violation of the permit.
- 8.8 If the site is Temporarily Inactive during a monitoring permit, intervention limit monitoring is not required, but the Permittee shall indicate on their Annual Report the inactivity and indicate that permanent stormwater BMPs remain in place. Should the site become active, the Permittee is required to sample in accordance with this Section of the permit for the year the site became active.
- 8.9 If stormwater does not discharge to surface waters, no monitoring is required. If there is no discharge during the sampling period, the Permittee shall check the "No Flow" box and note the conditions on the Discharge Monitoring Report Form.
- 8.10 If the Permittee submits documentation in compliance with Section 4.3 of this permit and receives approval from MPCA, discharges from the mine dewatering control devices are not required to be sampled. This shall include overflows caused solely by direct rainfall and groundwater seepage.

Stormwater Limits and Monitoring

- 8.11 Stormwater Limits and Monitoring Intervention Limits
- Subsectors J1, J2, D1, and E2: Total Suspended Solids, 100 mg/L
 - Subsector E2: Iron, 1.0 mg/L

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8. Monitoring Requirements

8.12 Submit the annual Discharge Monitoring Report Form 21 days after the end of each calendar year for the first full year following permit issuance (January 21, 2013).

Mine Dewatering to Surface Waters - Effluent Limit Monitoring

8.13 If dewatering flows do not discharge to surface waters, no monitoring will be required. If there is no discharge during the sampling period, the Permittee shall check the "No Flow" box and note the conditions on the Discharge Monitoring Report Form.

8.14 If the Permittee submits documentation in compliance with Section 5.3 of this permit and receives approval from MPCA, overflows from the mine pit dewatering control devices are not required to be sampled. This shall include overflows caused solely by direct rainfall and groundwater seepage.

8.15 One sample shall be collected quarterly from each monitoring outfall identified and analyzed for each required effluent limit parameters specified in the Limits and Monitoring Section of this permit. The sample(s) shall be collected each calendar quarter the Permittee is authorized to discharge under this permit.

8.16 For active mine dewatering, samples shall be representative of the discharge and collected during any measurable event at an outfall.

8.17 If the discharge event is an overflow caused by a rainfall event, the sample(s) shall be collected within the first 30 minutes of the measurable runoff event. If it is not possible to collect the sample(s) within the first 30 minutes, the sample(s) shall be collected as soon as practicable after the first 30 minutes and documentation must be included with the Comments field of the Discharge Monitoring Report Form that explains why it was not possible to collect the sample(s) within the first 30 minutes.

Non-stormwater Limits and Monitoring

8.18 Mine Dewatering to Surface Waters Limits and Monitoring

a. All Dewatering Activities from Subsector J1 and J2:

- i. Flow, Million Gallons (MG), Calendar Quarter Total, 1 time per quarter
- ii. Flow, million gallons per day (mgd), Calendar Quarter Average, 1 time per day

b. Dewatering from Construction Sand and Gravel (1442)

- i. Total Suspended Solids (TSS), 30 mg/L, Daily Maximum, 1 time per quarter
- ii. pH, 6.5 SU, Calendar Quarter Minimum, 1 time per quarter
- iii. pH, 8.5 SU, Calendar Quarter Maximum, 1 time per quarter

c. Dewatering from Industrial Sand Mining (1446)

- i. TSS, 45 mg/L, Daily Maximum, 1 time per quarter
- ii. TSS, 25 mg/L, Calendar Quarter Average, 1 time per quarter
- iii. pH, 6.5 SU, Calendar Quarter Minimum, 1 time per quarter
- iv. pH, 8.5 SU, Calendar Quarter Maximum, 1 time per quarter

d. Dewatering from Subsector J2 facilities (1411, 1422, 1423, 1429)

- i. TSS, 30 mg/L, Daily Maximum, 1 time per quarter
- ii. pH, 6.5 SU, Calendar Quarter Minimum, 1 time per quarter
- iii. pH, 8.5 SU, Calendar Quarter Maximum, 1 time per quarter

8.19 Submit the quarterly Discharge Monitoring Report Form 21 days after the end of each calendar quarter following permit issuance (first sampling event will be January 1 to March 31, 2012, and is due April 21, 2012).

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8. Monitoring Requirements

Mine Dewatering to Surface Waters - Monitoring for Permit Reissuance

- 8.20 The following parameters shall be sampled and analyzed prior to permit expiration and submitted with the application for permit re-issuance. Samples shall be representative of mine dewatering discharge activity, and must comply with Sections 9.14, 9.16 and 9.17 of this permit:
- Total Dissolved Solids.
 - Hardness.
 - Oil & Grease and surfactants.
 - Antimony, arsenic, beryllium, cadmium, chromium, copper, lead, nickel, selenium, silver, thallium, and zinc.
 - Aluminum, barium, boron, cobalt, iron, magnesium, manganese, molybdenum, total tin, and total aluminum.

9. Total Facilities Requirements

- 9.1 Incorporation by Reference. The following applicable federal and state laws are incorporated by reference in this permit, are applicable to the Permittee, and are enforceable parts of this permit: 40 CFR pts. 122.41, 122.42, 136, 403 and 503; Minn. R. pts. 7001, 7041, 7045, 7049, 7050, 7052, 7053, 7060, and 7080; and Minn. Stat. Sec. 115 and 116.
- 9.2 Permittee Responsibility. The Permittee shall perform the actions or conduct the activity authorized by the permit in compliance with the conditions of the permit and, if required, in accordance with the plans and specifications approved by the Agency.
- 9.3 Toxic Discharges Prohibited. Whether or not this permit includes effluent limitations for toxic pollutants, the Permittee shall not discharge a toxic pollutant except according to Code of Federal Regulations, Title 40, sections 400 to 460 and Minnesota Rules 7050, 7052, 7053 and any other applicable MPCA rules.
- 9.4 Nuisance Conditions Prohibited. The Permittee's discharge shall not cause any nuisance conditions including, but not limited to: floating solids, scum and visible oil film, acutely toxic conditions to aquatic life, or other adverse impact on the receiving water.
- 9.5 Property Rights. This permit does not convey a property right or an exclusive privilege.
- 9.6 Liability Exemption. In issuing this permit, the state and the MPCA assume no responsibility for damage to persons, property, or the environment caused by the activities of the Permittee in the conduct of its actions, including those activities authorized, directed, or undertaken under this permit. To the extent the state and the MPCA may be liable for the activities of its employees, that liability is explicitly limited to that provided in the Tort Claims Act.
- 9.7 The MPCA's issuance of this permit does not obligate the MPCA to enforce local laws, rules, or plans beyond what is authorized by Minnesota Statutes.
- 9.8 Liabilities. The MPCA's issuance of this permit does not release the Permittee from any liability, penalty or duty imposed by Minnesota or federal statutes or rules or local ordinances, except the obligation to obtain the permit.
- 9.9 The issuance of this permit does not prevent the future adoption by the MPCA of pollution control rules, standards, or orders more stringent than those now in existence and does not prevent the enforcement of these rules, standards, or orders against the Permittee.
- 9.10 Severability. The provisions of this permit are severable, and if any provisions of this permit or the application of any provision of this permit to any circumstance, are held invalid, the application of such provision to other circumstances and the remainder of this permit shall not be affected thereby.
- 9.11 Compliance with Other Rules and Statutes. The Permittee shall comply with all applicable air quality, solid waste, and hazardous waste statutes and rules in the operation and maintenance of the facility.

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9. Total Facilities Requirements

9.12 Inspection and Entry. When authorized by Minn. Stat. Sec. 115.04; 115B.17, subd. 4; and 116.091, and upon presentation of proper credentials, the agency, or an authorized employee or agent of the agency, shall be allowed by the Permittee to enter at reasonable times upon the property of the Permittee to examine and copy books, papers, records, or memoranda pertaining to the construction, modification, or operation of the facility covered by the permit or pertaining to the activity covered by the permit; and to conduct surveys and investigations, including sampling or monitoring, pertaining to the construction, modification, or operation of the facility covered by the permit or pertaining to the activity covered by the permit.

9.13 Control Users. The Permittee shall regulate the users of its wastewater treatment facility so as to prevent the introduction of pollutants or materials that may result in the inhibition or disruption of the conveyance system, treatment facility or processes, or disposal system that would contribute to the violation of the conditions of this permit or any federal, state or local law or regulation.

Sampling

9.14 Representative Sampling. Samples and measurements required by this permit shall be conducted as specified in this permit and shall be representative of the discharge or monitored activity.

9.15 Additional Sampling. If the Permittee monitors more frequently than required, the results and the frequency of monitoring shall be reported on the Discharge Monitoring Report (DMR) or another MPCA-approved form for that reporting period.

9.16 Certified Laboratory. A laboratory certified by the Minnesota Department of Health shall conduct analyses required by this permit. Analyses of dissolved oxygen, pH, temperature, specific conductance, and total residual oxidants (chlorine, bromine) do not need to be completed by a certified laboratory but shall comply with manufacturers specifications for equipment calibration and use. (Minn. Stat. Sec. 144.97 through 144.98 and Minn. R. 4740.2010 and 4740.2050 through 4740.2120)

9.17 Sample Preservation and Procedure. Sample preservation and test procedures for the analysis of pollutants shall conform to 40 CFR Part 136 and Minn. R. 7041.3200.

9.18 Equipment Calibration: Flow meters, pumps, flumes, lift stations or other flow monitoring equipment used for purposes of determining compliance with permit shall be checked and/or calibrated for accuracy at least twice annually.

9.19 Maintain Records. The Permittee shall keep the records required by this permit for at least three years, including any calculations, original recordings from automatic monitoring instruments, and laboratory sheets. The Permittee shall extend these record retention periods upon request of the MPCA. The Permittee shall maintain records for each sample and measurement. The records shall include the following information (Minn. R. 7001.0150, subp. 2, item C):

- a. The exact place, date, and time of the sample or measurement;
- b. The date of analysis;
- c. The name of the person who performed the sample collection, measurement, analysis, or calculation; and
- d. The analytical techniques, procedures and methods used; and
- e. The results of the analysis.

9.20 Completing Reports. The Permittee shall submit the results of the required sampling and monitoring activities on the forms provided, specified, or approved by the MPCA. The information shall be recorded in the specified areas on those forms and in the units specified. (Minn. R. 7001.1090, subp. 1, item D; Minn. R. 7001.0150, subp. 2, item B)

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9. Total Facilities Requirements

9.21 Required forms may include: DMRs and Supplemental Forms. Individual values for each sample and measurement must be recorded on the DMR Supplemental Form which, if required, will be provided by the MPCA. DMR Supplemental Forms shall be submitted with the appropriate DMRs. You may design and use your own supplemental form; however it must be approved by the MPCA. Note: Required summary information MUST also be recorded on the DMR. Summary information that is submitted ONLY on the DMR Supplemental Form does not comply with the reporting requirements.

9.22 Submitting Reports. DMRs and DMR Supplemental Forms shall be submitted to:

MPCA

Attn: Discharge Monitoring Reports
520 Lafayette Road North
St. Paul, Minnesota 55155-4194.

DMRs and DMR Supplemental Forms shall be electronically submitted by the 21st day of the month following the sampling period or as otherwise specified in this permit. A DMR shall be submitted for each required station even if no discharge occurred during the reporting period. (Minn. R. 7001.0150, subs. 2.B and 3.H)

Other reports required by this permit shall be postmarked by the date specified in the permit to:

MPCA

Attn: WQ Submittals Center
520 Lafayette Road North
St. Paul, Minnesota 55155-4194

9.23 Incomplete or Incorrect Reports. The Permittee shall immediately submit an amended report or DMR to the MPCA upon discovery by the Permittee or notification by the MPCA that it has submitted an incomplete or incorrect report or DMR. The amended report or DMR shall contain the missing or corrected data along with a cover letter explaining the circumstances of the incomplete or incorrect report.

9.24 Required Signatures. All DMRs, forms, reports, and other documents submitted to the MPCA shall be signed by the Permittee or the duly authorized representative of the Permittee. Minn. R. 7001.0150, subp. 2, item D. The person or persons that sign the DMRs, forms, reports or other documents must certify that he or she understands and complies with the certification requirements of Minn. R. 7001.0070 and 7001.0540, including the penalties for submitting false information. Technical documents, such as design drawings and specifications and engineering studies required to be submitted as part of a permit application or by permit conditions, must be certified by a registered professional engineer.

9.25 Detection Level. The Permittee shall report monitoring results below the reporting limit (RL) of a particular instrument as "<" the value of the RL. For example, if an instrument has a RL of 0.1 mg/L and a parameter is not detected at a value of 0.1 mg/L or greater, the concentration shall be reported as "<0.1 mg/L." "Non-detected," "undetected," "below detection limit," and "zero" are unacceptable reporting results, and are permit reporting violations. (Minn. R. 7001.0150, subp. 2, item B)

Where sample values are less than the level of detection and the permit requires reporting of an average, the Permittee shall calculate the average as follows:

- a. If one or more values are greater than the level of detection, substitute zero for all nondetectable values to use in the average calculation.
- b. If all values are below the level of detection, report the averages as "<" the corresponding level of detection.
- c. Where one or more sample values are less than the level of detection, and the permit requires reporting of a mass, usually expressed as kg/day, the Permittee shall substitute zero for all nondetectable values.

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9. Total Facilities Requirements

9.26 Records. The Permittee shall, when requested by the Agency, submit within a reasonable time the information and reports that are relevant to the control of pollution regarding the construction, modification, or operation of the facility covered by the permit or regarding the conduct of the activity covered by the permit.

9.27 Confidential Information. Except for data determined to be confidential according to Minn. Stat. Sec. 116.075, subd. 2, all reports required by this permit shall be available for public inspection. Effluent data shall not be considered confidential. To request the Agency maintain data as confidential, the Permittee must follow Minn. R. 7000.1300.

Noncompliance and Enforcement

9.28 Subject to Enforcement Action and Penalties. Noncompliance with a term or condition of this permit subjects the Permittee to penalties provided by federal and state law set forth in section 309 of the Clean Water Act; United States Code, title 33, section 1319, as amended; and in Minn. Stat. Sec. 115.071 and 116.072, including monetary penalties, imprisonment, or both.

9.29 Criminal Activity. The Permittee may not knowingly make a false statement, representation, or certification in a record or other document submitted to the Agency. A person who falsifies a report or document submitted to the Agency, or tampers with, or knowingly renders inaccurate a monitoring device or method required to be maintained under this permit is subject to criminal and civil penalties provided by federal and state law.

9.30 Noncompliance Defense. It shall not be a defense for the Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

9.31 Effluent Violations. If sampling by the Permittee indicates a violation of any discharge limitation specified in this permit, the Permittee shall immediately make every effort to verify the violation by collecting additional samples, if appropriate, investigate the cause of the violation, and take action to prevent future violations. Violations that are determined to pose a threat to human health or drinking water supply, or represent a significant risk to the environment shall be immediately reported to the Minnesota Department of Public Safety Duty Officer at 1-800-422-0798 (toll free) or 651-649-5451 (metro area). In addition, you may also contact the MPCA during business hours. Otherwise the violations and the results of any additional sampling shall be recorded on the next appropriate DMR or report.

9.32 Unauthorized Releases of Wastewater Prohibited. Except for conditions specifically described in Minn. R. 7001.1090, subp. 1, items J and K, all unauthorized bypasses, overflows, discharges, spills, or other releases of wastewater or materials to the environment, whether intentional or not, are prohibited. However, the MPCA will consider the Permittee's compliance with permit requirements, frequency of release, quantity, type, location, and other relevant factors when determining appropriate action.

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9. Total Facilities Requirements

9.33 Discovery of a release. Upon discovery of a release, the Permittee shall:

- a. Take all reasonable steps to immediately end the release.
- b. Notify the Minnesota Department of Public Safety Duty Officer at 1(800)422-0798 or (651)649-5451 (metro area) immediately upon discovery of the release. You may contact the MPCA during business hours at 1(800)657-3864 or (651)296-6300 (metro area).
- c. Recover as rapidly and as thoroughly as possible all substances and materials released or immediately take other action as may be reasonably possible to minimize or abate pollution to waters of the state or potential impacts to human health caused thereby. If the released materials or substances cannot be immediately or completely recovered, the Permittee shall contact the MPCA. If directed by the MPCA, the Permittee shall consult with other local, state or federal agencies (such as the Minnesota Department of Natural Resources and/or the Wetland Conservation Act authority) for implementation of additional clean-up or remediation activities in wetland or other sensitive areas.
- d. Collect representative samples of the release. The Permittee shall sample the release for parameters of concern immediately following discovery of the release. The Permittee may contact the MPCA during business hours to discuss the sampling parameters and protocol. In addition, Fecal Coliform Bacteria samples shall be collected where it is determined by the Permittee that the release contains or may contain sewage. If the release cannot be immediately stopped, the Permittee shall consult with MPCA regarding additional sampling requirements. Samples shall be collected at least, but not limited to, two times per week for as long as the release continues.
- e. Submit the sampling results as directed by the MPCA. At a minimum, the results shall be submitted to the MPCA with the next DMR.

9.34 Upset Defense. In the event of temporary noncompliance by the Permittee with an applicable effluent limitation resulting from an upset at the Permittee's facility due to factors beyond the control of the Permittee, the Permittee has an affirmative defense to an enforcement action brought by the Agency as a result of the noncompliance if the Permittee demonstrates by a preponderance of competent evidence:

- a. The specific cause of the upset.
- b. That the upset was unintentional.
- c. That the upset resulted from factors beyond the reasonable control of the Permittee and did not result from operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventative maintenance, or increases in production which are beyond the design capability of the treatment facilities.
- d. That at the time of the upset the facility was being properly operated.
- e. That the Permittee properly notified the Commissioner of the upset in accordance with Minn. R. 7001.1090, subp. 1, item I.
- f. That the Permittee implemented the remedial measures required by Minn. R. 7001.0150, subp. 3, item J.

Operation and Maintenance

9.35 The Permittee shall at all times properly operate and maintain the facilities and systems of treatment and control, and the appurtenances related to them which are installed or used by the Permittee to achieve compliance with the conditions of the permit. Proper operation and maintenance includes effective performance, adequate funding, adequate operator staffing and training, and adequate laboratory and process controls, including appropriate quality assurance procedures. The Permittee shall install and maintain appropriate backup or auxiliary facilities if they are necessary to achieve compliance with the conditions of the permit and, for all permits other than hazardous waste facility permits, if these backup or auxiliary facilities are technically and economically feasible Minn. R. 7001.0150, subp. 3, item F.

9.36 In the event of a reduction or loss of effective treatment of wastewater at the facility, the Permittee shall control production or curtail its discharges to the extent necessary to maintain compliance with the terms and conditions of this permit. The Permittee shall continue this control or curtailment until the wastewater treatment facility has been restored or until an alternative method of treatment is provided.

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9. Total Facilities Requirements

- 9.37 Solids Management. The Permittee shall properly store, transport, and dispose of biosolids, septage, sediments, residual solids, filter backwash, screenings, oil, grease, and other substances so that pollutants do not enter surface waters or ground waters of the state. Solids should be disposed of in accordance with local, state and federal requirements.
- 9.38 Scheduled Maintenance. The Permittee shall schedule maintenance of the treatment works during non-critical water quality periods to prevent degradation of water quality, except where emergency maintenance is required to prevent a condition that would be detrimental to water quality or human health.
- 9.39 Control Tests. In-plant control tests shall be conducted at a frequency adequate to ensure compliance with the conditions of this permit.

Changes to the Facility or Permit

- 9.41 Permit Modifications. No person required by statute or rule to obtain a permit may operate the facility to be permitted, nor shall a person commence an activity for which a permit is required by statute or rule until the Agency has issued a written permit for the facility or activity. (Minn. R. 7001.0030)

Permittees that propose to make a change to the facility or discharge that requires a permit modification must follow Minn. R. 7001.0190. If the Permittee cannot determine whether a permit modification is needed, the Permittee must contact the MPCA prior to any action. It is recommended that the application for permit modification be submitted to the MPCA at least 180 days prior to the planned change.

- 9.42 Construction. No construction may begin prior to permit issuance until the Permittee plans and specifications have been submitted to the MPCA unless:
- the action taken is prohibited by federal law or regulation;
 - the Permittee is a municipality constructing a wastewater system with a design flow of 0.200 million gallons per day or less;
 - the action taken is subject to environmental review under chapter 116D, and prohibited from commencing construction until that process is completed;
 - the action taken is subject to a grant or loan agreement under chapter 446A;
 - the action taken requires a construction storm water permit under rules of the agency; or
 - the action taken requires a subsurface sewage treatment system permit under rules of the agency.

In all cases, the Permittee is prohibited from operating the system or discharging pollutants into the waters of the state until a written permit for the discharge is granted by the agency and until plans and specifications for the disposal system have been approved, unless the MPCA waives the submission of plans and specifications.

Plans, specifications and MPCA approval may not be necessary when maintenance dictates the need for replacement of new equipment, provided the equipment is the same design size and has the same design intent. For instance, a broken pipe, lift station pump, aerator, or blower can be replaced with the same design-sized equipment without MPCA approval.

If the proposed construction is not expressly authorized by this permit, it may require a permit modification. If the construction project requires an Environmental Assessment Worksheet under Minn. R. 4410, no construction shall begin until a negative declaration is issued and all approvals are received or implemented.

- 9.43 Report Changes. The Permittee shall give advance notice as soon as possible to the MPCA of any substantial changes in operational procedures, activities that may alter the nature or frequency of the discharge, and/or material factors that may affect compliance with the conditions of this permit.

Chapter 1. General Non-Metallic Mining and Assoc. Act.

9. Total Facilities Requirements

9.44 Chemical Additives. The Permittee shall receive prior written approval from the MPCA before increasing the use of a chemical additive authorized by this permit, or using a chemical additive not authorized by this permit, in quantities or concentrations that have the potential to change the characteristics, nature and/or quality of the discharge.

The Permittee shall request approval for an increased or new use of a chemical additive at least 60 days, or as soon as possible, before the proposed increased or new use.

This written request shall include at least the following information for the proposed additive:

- a. The process for which the additive will be used;
- b. Material Safety Data Sheet (MSDS) which shall include aquatic toxicity, human health, and environmental fate information for the proposed additive. The aquatic toxicity information shall include at minimum the results of: a) a 48-hour LC50 or EC50 acute study for a North American freshwater planktonic crustacean (either Ceriodaphnia or Daphnia sp.) and b) a 96-hour LC50 acute study for rainbow trout, bluegill or fathead minnow or another North American freshwater aquatic species other than a planktonic crustacean;
- c. A complete product use and instruction label;
- d. The commercial and chemical names and Chemical Abstract Survey (CAS) number for all ingredients in the additive (If the MSDS does not include information on chemical composition, including percentages for each ingredient totaling to 100%, the Permittee shall contact the supplier to have this information provided); and
- e. The proposed method of application, application frequency, concentration, and daily average and maximum rates of use.

9.45 Upon review of the information submitted regarding the proposed chemical additive, the MPCA may require additional information be submitted for consideration. This permit may be modified to restrict the use or discharge of a chemical additive and include additional influent and effluent monitoring requirements.

Approval for the use of an additive shall not justify the exceedance of any effluent limitation nor shall it be used as a defense against pollutant levels in the discharge causing or contributing to the violation of a water quality standard.

9.46 MPCA Initiated Permit Modification, Suspension, or Revocation. The MPCA may modify or revoke and reissue this permit pursuant to Minn. R. 7001.0170. The MPCA may revoke without reissuance this permit pursuant to Minn. R. 7001.0180.

9.47 Total Maximum Daily Load (TMDL) Impacts. Facilities that discharge to an impaired surface water, watershed or drainage basin may be required to comply with additional permits or permit requirements, including additional restriction or relaxation of limits and monitoring as authorized by the CWA 303(d)(4)(A) and 40 CFR 122.44.l.2.i., necessary to ensure consistency with the assumptions and requirements of any applicable US EPA approved wasteload allocations resulting from Total Maximum Daily Load (TMDL) studies.

9.48 Permit Transfer. The permit is not transferable to any person without the express written approval of the Agency after compliance with the requirements of Minn. R. 7001.0190. A person to whom the permit has been transferred shall comply with the conditions of the permit.

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9. Total Facilities Requirements

- 9.49 Facility Closure. The Permittee is responsible for closure and postclosure care of the facility. The Permittee shall notify the MPCA of a significant reduction or cessation of the activities described in this permit at least 180 days before the reduction or cessation. The MPCA may require the Permittee to provide to the MPCA a facility Closure Plan for approval.

Facility closure that could result in a potential long-term water quality concern, such as the ongoing discharge of wastewater to surface or ground water, may require a permit modification or reissuance.

The MPCA may require the Permittee to establish and maintain financial assurance to ensure performance of certain obligations under this permit, including closure, postclosure care and remedial action at the facility. If financial assurance is required, the amount and type of financial assurance, and proposed modifications to previously MPCA-approved financial assurance, shall be approved by the MPCA.

- 9.50 Permit Reissuance. If the Permittee desires to continue permit coverage beyond the date of permit expiration, the Permittee shall submit an application for reissuance at least 180 days before permit expiration. If the Permittee does not intend to continue the activities authorized by this permit after the expiration date of this permit, the Permittee shall notify the MPCA in writing at least 180 days before permit expiration.

If the Permittee has submitted a timely application for permit reissuance, the Permittee may continue to conduct the activities authorized by this permit, in compliance with the requirements of this permit, until the MPCA takes final action on the application, unless the MPCA determines any of the following (Minn. R. 7001.0040 and 7001.0160):

- a. The Permittee is not in substantial compliance with the requirements of this permit, or with a stipulation agreement or compliance schedule designed to bring the Permittee into compliance with this permit;
- b. The MPCA, as a result of an action or failure to act by the Permittee, has been unable to take final action on the application on or before the expiration date of the permit;
- c. The Permittee has submitted an application with major deficiencies or has failed to properly supplement the application in a timely manner after being informed of deficiencies.

10. Definitions

- 10.1 "Act" means the Federal Clean Water Act, as amended, 33 U.S. Code 21251 et seq.
- 10.2 "Active Facility" means a place where work or other activity related to the production of asphalt and ready-mix / concrete products and extraction, removal, or recovery of nonmetallic minerals is being conducted. For surface mines, this definition does not include any land where grading has returned the earth to desired contour and stabilization has begun. This definition is derived from the definition of 'active mining area' found at 40 CFR pt. 440.132(a).
- 10.3 "Agency" means the Minnesota Pollution Control Agency (MPCA). (Minn. Stat. Section 116.36, subd. 2)
- 10.4 "Best Management Practices" or "BMPs" means practices to prevent or reduce the pollution of waters of the state, including schedules of activities, prohibitions of practices, and other management practices, and also includes treatment requirements, operating procedures, and practices to control plant site runoff, spillage or leaks, sludge, or waste disposal or drainage from raw material storage. (Minn. R. 7001.1020, subp.5)
- 10.5 "Commissioner" means the Commissioner of the Minnesota Pollution Control Agency or the Commissioner's designee. (Minn. Stat. Section 116.36, subd. 3)

Chapter 1. General Non-Metallic Mining and Assoc. Act.

10. Definitions

- 10.6 "Construction Activity" for this permit includes construction activity as defined in 40 CFR pt. 122.26(b)(14)(x) and small construction activity as defined in 40 CFR pt. 122.26(b)(15). This includes a disturbance to the land that results in a change in the topography, existing soil cover (both vegetative and non-vegetative), or the existing soil topography that may result in accelerated stormwater runoff, leading to soil erosion and movement of sediment into surface waters or drainage systems. Examples of construction activity may include clearing, grading, filling, and excavating. Construction activity includes the disturbance of less than one acre of total land area that is a part of a larger common plan of development or sale if the larger common plan will ultimately disturb one acre or more.
- 10.7 "Effluent Monitoring Location" for the purposes of this permit means the location(s) within the boundary of the facility where the Permittee will collect mine dewatering and/or authorized non-stormwater discharges. The effluent monitoring location(s) selected by the Permittee shall be in a location that:
- a. Is immediately below the most down-gradient BMP from the specific industrial activity that has a numeric effluent limit, but prior to where the discharge co-mingles with stormwater from other sources.
 - b. Yields a sample that represents the contribution of the pollutants for which the Permittee is required to monitor.
- 10.8 "Energy Dissipation" means methods employed at pipe outlets to prevent erosion. Examples include, but are not limited to: concrete aprons, riprap, splash pads, and gabions that are designed to prevent erosion.
- 10.9 "Erosion Prevention" means measures employed to prevent erosion including but not limited to: soil stabilization practices, limited grading, mulch, temporary or permanent cover, and phasing.
- 10.10 "Facility" for the purposes of this permit, means land that shares a common border and that has a stormwater discharge associated with industrial activity as defined by 40 CFR Part 122.26(b)(14) with the discharge having a common owner/operator.
- 10.11 "Impaired Water" means waters identified as impaired by the Agency, and approved by the USEPA, pursuant to section 303(d) of the Clean Water Act (33 U.S.C. Section 303(d)).
- 10.12 "Impervious Surface" means a constructed hard surface that either prevents or retards the entry of water into the soil and causes water to run off the surface in greater quantities and at an increased rate of flow than prior to development. Examples include rooftops, sidewalks, patios, driveways, parking lots, storage areas and concrete, asphalt, or gravel roads.
- 10.13 "Inactive Facility" means a site or portion of a site where nonmetallic mineral mining and/or milling, asphalt reduction and ready-mix concrete production occurred in the past but is not an Active Facility. The Permittee does not anticipate mining and/or associated activities to occur in the foreseeable future, has requested the permit coverage at this inactive portion be terminated, and the inactive portion is no longer covered by an active mining permit.
- 10.14 "Infiltration Device" for purposes of this permit, means a device to which industrial stormwater runoff is diverted, collected, or conveyed for the purpose of infiltration. This includes all man-made and natural infiltration areas to which runoff are diverted. An infiltration device does not include the parts of the system that diverts, collects, or conveys stormwater. Incidental infiltration from conveyances such as swales or ditches, including those with erosion prevention devices such as vegetation, silt fence, or fiber bails, is not an infiltration device. However, swales, ditches, or similar devices constructed with stop logs, ditch excavation for storage or other retention devices, which are for the purpose of increased infiltration, are infiltration devices. Wetlands (including types 1 through 8) and other natural surface water bodies are not infiltration devices or parts of infiltration device systems, and cannot be used as infiltration devices, unless mitigated in accordance with applicable state rules.

Chapter 1. General Non-Metallic Mining and Assoc. Act.

10. Definitions

- 10.15 "Karst topography" means an area underlain by fractured carbonate bedrock in which erosion has produced geological characteristics such as: sinkholes; springs, subsurface drainage; caves; sinking streams; dissolutionally enlarged joints (grikes) or bedding planes, and bedrock surface channels (karren). Counties known for karst features include parts of Dakota, Rice, Dodge, and Mower, and most of Goodhue, Olmsted, Winona, Wabasha, Houston and Fillmore.
- 10.16 "Mine Pit Dewatering" means any water that is impounded or that collects in the mine and is pumped, drained or otherwise removed from the mine through the efforts of the mine operator. This term shall also include wet pit overflows caused solely by direct rainfall and ground water seepage. However, if a mine is also used for treatment of process generated wastewater, discharges of commingled water from the facilities shall be deemed discharge of process generated wastewater.
- 10.17 "MPCA" means the Minnesota Pollution Control Agency, or Minnesota Pollution Control Agency staff as delegated by the Minnesota Pollution Control Agency.
- 10.18 "Non-Stormwater Discharge" means any discharge not comprised entirely of stormwater.
- 10.19 "Non-Structural BMPs" refers to practices that will reduce or eliminate pollutants to stormwater and do not require installation of permanent structural devices to treat runoff. Examples of non-structural BMPs include but are not limited to parking lot and street sweeping, employee training, changing material handling practices, installation of silt fence, and minimizing materials exposed to stormwater through inventory reduction, tarping, or moving materials indoors.
- 10.20 "Operator" is the person responsible for the overall operation of an industrial facility under Minn. R. pt. 7090.3000. (Minn. R. 7090.0080, subp.10)
- 10.21 "Owner" is the person who owns an industrial facility or part of an industrial facility under Minn. R. pt. 7090.3000. (Minn. R. 7090.0080, subp.11)
- 10.22 "Permittee" means a person or persons, firm, or governmental agency or other institution that is identified on the on the letter authorizing coverage and is responsible for compliance with the terms and conditions of this permit.
- 10.23 "Person" means any human being, any municipality or other governmental or political subdivision or public agency, any public or private corporation, any partnership, firm, association, or other organization, any receiver, trustee, assignee, agent, or other legal representative of any of the foregoing, or any other legal entity, but does not include the MPCA.
- 10.24 "Pollution Prevention Plan" means a plan for stormwater and non-stormwater discharges that include facility-specific activities and actions to, first, identify sources of pollution or contamination at the facility, and second, select and implement BMPs to eliminate or reduce contact of stormwater with significant materials and non-stormwater discharges that may result in polluted runoff from the facility.
- 10.25 "Primary Standard Industrial Classification (SIC) Code" for the purposes of this permit, is the SIC code associated with the industrial activity that generates the greatest revenue. If revenue data is not available, the owner/operator shall base the determination on the number of employees engaged in the industrial activity. If it is not possible to determine the primary SIC code using either of these two methods, the owner/operator shall base the determination on the SIC code with the greatest production. The industrial activity that generates the greatest revenue, employs the most personnel, or has the greatest production, is the industrial activity assigned the primary SIC code.
- 10.26 "Reclamation" means activities undertaken in compliance with applicable mined land reclamation requirements following the cessation of activities associated with extraction, removal and recovery of nonmetallic minerals, intended to return the land to an appropriate post-mining land use.
- 10.27 "Sediment Control" means methods employed to prevent sediment from leaving the site. Sediment control practices include silt fences, sediment traps, earth dikes, drainage swales, check dams, subsurface drains, pipe slope drains, storm drain inlet protection, and temporary or permanent sedimentation basins.

Chapter 1. General Non-Metallic Mining and Assoc. Act.

10. Definitions

- 10.28 "Small Construction Activity" means small construction activity as defined in 40 C.F.R. part 122.26(b)(15). Small construction activities include clearing, grading and excavating that result in land disturbance of equal to or greater than one acre and less than five acres. Small construction activity includes the disturbance of less than one acre of total land area that is part of a larger common plan of development or sale if the larger common plan will ultimately disturb equal to or greater than one and less than five acres.
- 10.29 "Stormwater" means stormwater runoff, snow melt runoff, and surface runoff and drainage. (Minn. R. 7090.0080, subp.12)
- 10.30 "Stormwater Pond" for purposes of this permit means constructed detention or retention facilities for the treatment of stormwater runoff under the requirements of this permit. This includes permanent ponds, dry ponds, flow equalization ponds (followed by other BMPs), and constructed wetlands. However, natural wetlands (including types 1-8) and other natural surface water bodies are not industrial stormwater ponds, parts of ponds or pond systems, and cannot be used as BMPs for stormwater treatment unless mitigated in accordance with applicable state rules.
- 10.31 "Structural BMPs" refers to the installation of devices that will reduce or eliminate pollutants to stormwater through installation of permanent structural devices to treat or control runoff. Examples of structural BMPs include but are not limited to installation of stormwater diversion berms or channels; sedimentation basins (retention or detention basins); oil/water separators; grit chambers; roofs, awnings, or buildings to cover significant material.
- 10.32 "Surface Water or Waters" means all streams, lakes, ponds, marshes, wetlands, reservoirs, springs, rivers, drainage systems, waterways, watercourses, and irrigation systems whether natural or artificial, public or private.
- 10.33 "Temporarily Inactive Facility" means a site or portion of a site where nonmetallic mineral mining and/or milling, asphalt production and ready-mix concrete production occurred in the past but currently are not being actively undertaken and permit coverage is being maintained for the possibility of mining and/or associated activities in the foreseeable future.
- 10.34 "Total Maximum Daily Load" or "TMDL" means the sum of the individual wasteload allocations for point sources and load allocations for nonpoint sources and natural background, as more fully defined in 40 CFR 130.2(i). A TMDL sets and allocates the maximum amount of a pollutant that may be introduced into a water of the state and still assure attainment and maintenance of water quality standards. (Minn. R. 7052.0010 Subp. 42)
- 10.35 "Treatment Works" means any plant, disposal field, lagoon, dam, pumping station, constructed drainage ditch or surface water intercepting ditch, or other works not specifically mentioned herein, installed for the purpose of treating, stabilizing or disposing of sewage, industrial waste, or other wastes. For the purposes of this permit, this includes stormwater ponds, sedimentation basins and/or infiltration devices for stormwater management. (Minn. Stat. Sect. 115.01, subd. 21)
- 10.36 "Upset" means an exceptional incident in which the permit discharge limits are unintentionally and temporarily exceeded due to factors beyond the reasonable control of the Permittee.
- 10.37 "Wasteload Allocation (WLA)" means the portion of a receiving water's loading capacity that is allocated to one of its existing or future point sources of pollution, as more fully defined in Code of Federal Regulations, title 40, section 130.2, paragraph (h). In the absence of a TMDL approved by EPA under Code of Federal Regulations, title 40, section 130.7, or an assessment and remediation plan developed and approved according to part 7052.0200, subpart 1, item C, a WLA is the allocation for an individual point source that ensures that the level of water quality to be achieved by the point source is derived from and complies with all applicable water quality standards and criteria. (Minn. R. 7052.0010 Subp. 42)
- 10.38 "Water Quality Standards" means those provisions contained in Minn. R Chapters 7050 and 7052.

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10. Definitions

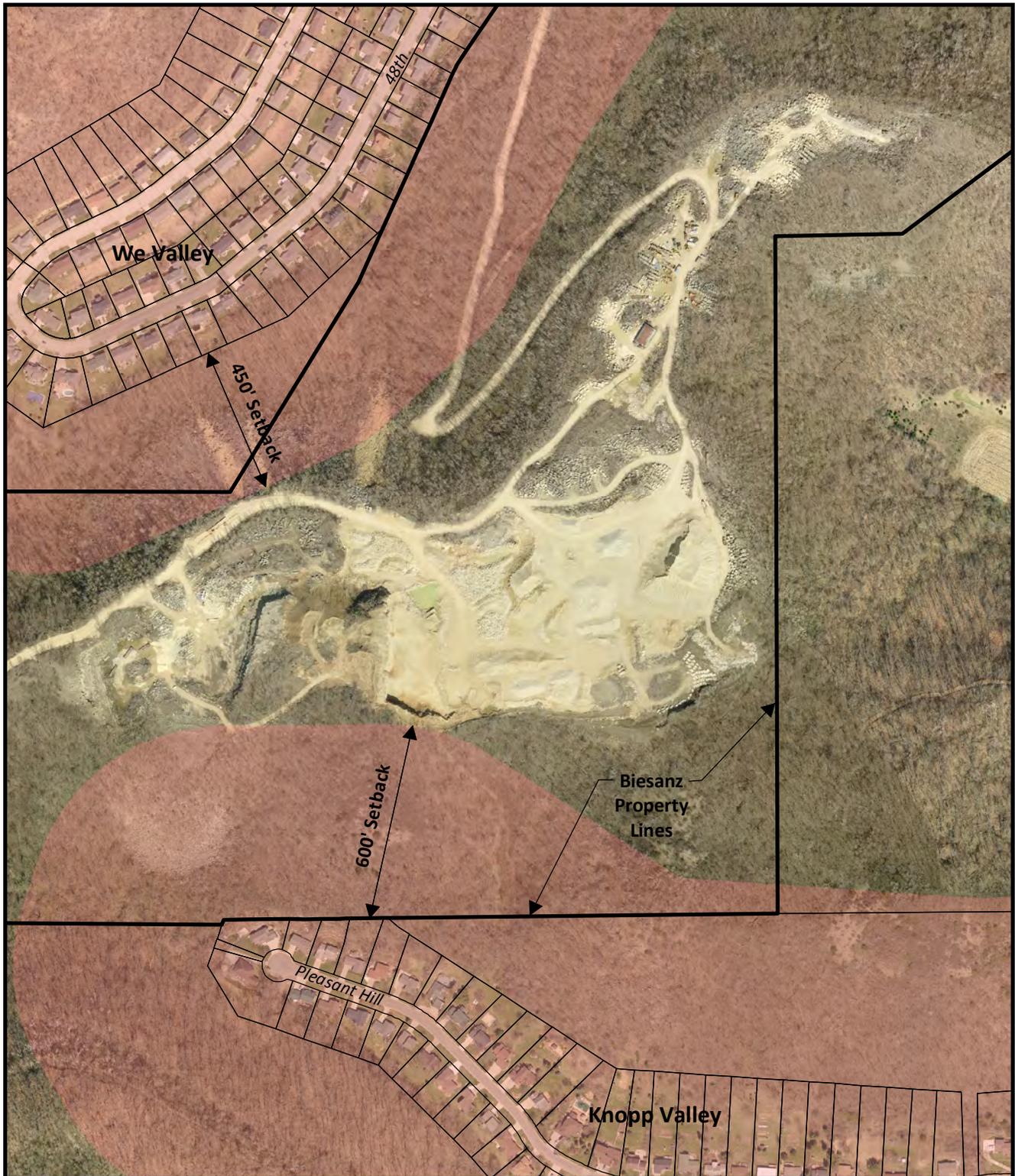
10.39 "Waters of the State" means all streams, lakes, ponds, marshes, wetlands, watercourses, waterways, wells, springs, reservoirs, aquifers, irrigation systems, drainage systems and all other bodies or accumulations of water, surface or underground, natural or artificial, public or private, which are contained within, flow through, or border upon the state or any portion thereof. (Minn. Stat. Sec. 115.01, subd. 22)

10.40 "Wetlands" means those areas that are inundated or saturated by surface water or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas. Constructed wetlands designed for wastewater treatment are not waters of the state. Wetlands must have the following attributes:

- a. a predominance of hydric soils;
- b. inundated or saturated by surface water or groundwater at a frequency and duration to support a prevalence of hydrophytic vegetation typically adapted for life in a saturated soil condition; and,
- c. under normal circumstances support a prevalence of such vegetation. (Minn. R. 7050.0186, subp. 1a.B.)

Proposed Biesanz Excavation Setbacks to Residential Properties

We Valley and Knopp Valley



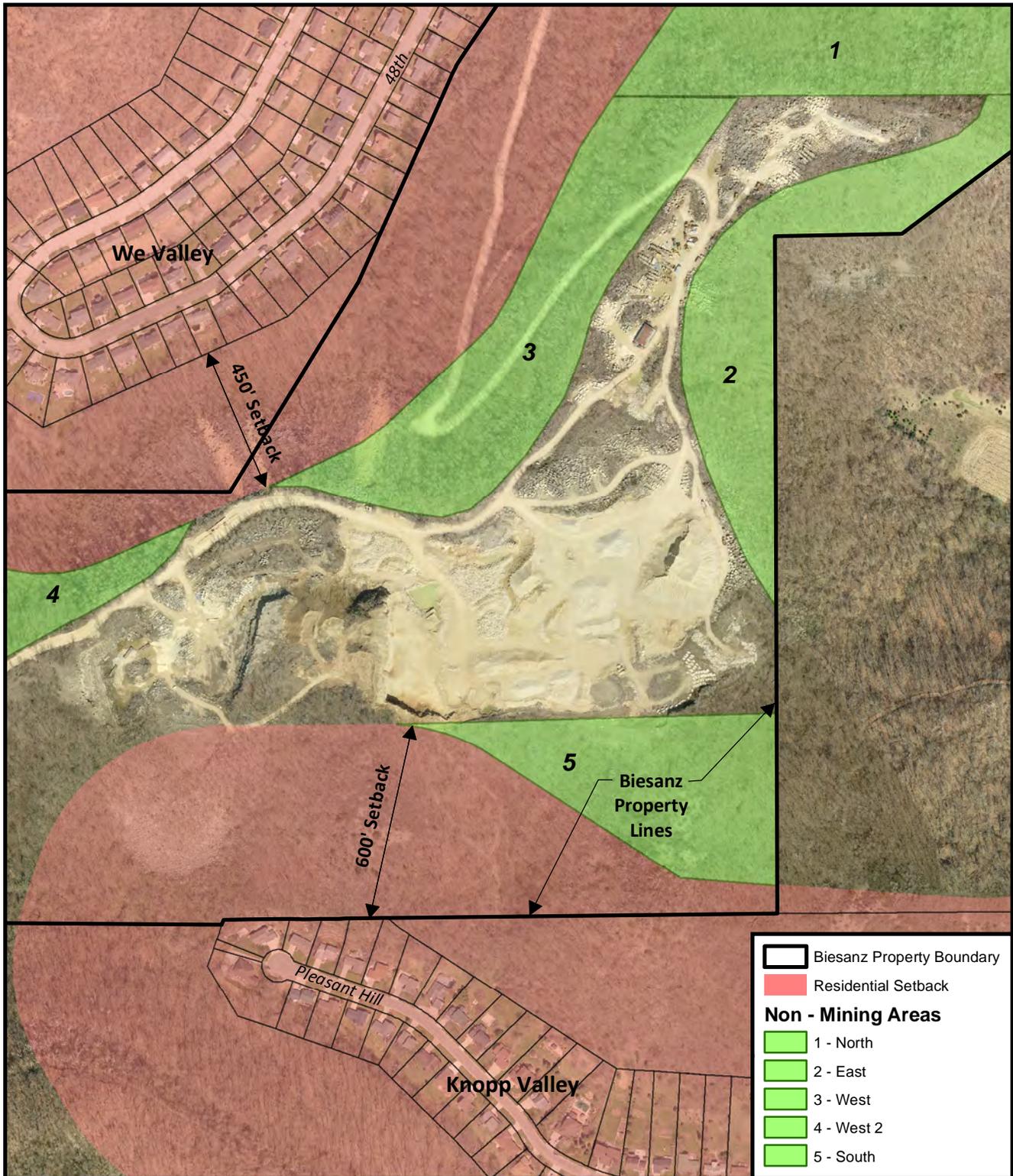
This map was compiled from a variety of sources. This information is provided with the understanding that conclusions drawn from such information are solely the responsibility of the user. The GIS data is not a legal representation of any of the features depicted, and any assumptions of the legal status of this map is hereby disclaimed.

0 250 500 1,000 Feet

Map date June 2012
Aerial photography from Spring 2008

Proposed Non-Excavation Areas Outside Residential Setbacks

We Valley and Knopp Valley



This map was compiled from a variety of sources. This information is provided with the understanding that conclusions drawn from such information are solely the responsibility of the user. The GIS data is not a legal representation of any of the features depicted, and any assumptions of the legal status of this map is hereby disclaimed.



Map date June 2012
Aerial photography from Spring 2008

ARTICLE XII. EXTRACTION PITS

43.48 EXTRACTION PITS.

- (d) Rehabilitation. To guarantee the restoration, rehabilitation, and reclamation of extraction sites, every applicant ~~granted a permit shall furnish a performance bond running to the City in an amount of \$25,000, as a guarantee that such applicant, in restoring, reclaiming, and rehabilitating such land,~~ shall, within a reasonable time and to the satisfaction of the Board, meet the following minimum requirements:
- (1) All excavation shall be made either to a water producing depth, such depth to be not less than 5 feet below the bow watermark, or shall be graded or backfilled with non-noxious, noninflammable and noncombustible solids, to secure (a) that the excavated area shall not collect and permit to remain therein stagnant water or (b) that the surface of such area which is not permanently submerged is graded or backfilled as necessary so as to reduce the peaks and depressions thereof, so as to produce a gently running surface that will minimize erosion due to rainfall and which will be in substantial conformity to the adjoining land area.
 - (2) Vegetation shall be restored by appropriate seeding of grasses or planting of shrubs or trees in all parts of such extraction area where such area is not to be submerged under water.
 - (3) The banks of all excavations not backfilled shall be sloped to the water line at a slope which shall not be less than three feet horizontal to one foot vertical and such bank shall be seeded.
 - (4) ~~In addition to the foregoing, the Board may impose such other conditions, requirements, or limitations concerning the nature, extent of the use, and operation of the extraction pit as the Board may deem necessary for the protection of adjacent properties and the public interest. The conditions shall be determined by the Board prior to issuance of the conditional use permit.~~

SILICA SAND MINING AND PROCESSING APPLICATION PACKET

6

PERFORMANCE STANDARDS AND RECLAMATION PLAN GUIDANCE

9.10 Extraction Pits/Land Alterations	PERFORMANCE STANDARDS
<p>The objective of this provision is to control alterations of land surfaces, minimize soil erosion and land scarring, to monitor the consumption of natural resources and minimize its impact on the adjacent lands and persons residing in the area.</p>	 <ul style="list-style-type: none"> ✓ Name & address of person requesting permit. ✓ Required maps. ✓ Soil erosion & sedimentation plan. ✓ Plan for dust & noise control. ✓ Location & species of vegetation to be replanted. ✓ Location & nature of structures to be erected in relation to end use plan.
<p>9.10.1 Administration</p> <ul style="list-style-type: none"> a. A Conditional Use Permit shall be required for all extraction pits and land alteration operations. The County Board may also require a performance bond of one hundred and ten (110) percent of estimated reclamation expenses from the land owner. b. The crushing, washing, refining or processing other than the initial removal of material shall be considered a conditional use. Quarries producing or manufacturing veneer stone, sills, lintels, cut flagstone, hearthstones, paving stone and similar architectural or structural stone and the storing or stockpiling of such products on the site shall be considered a conditional use. The manufacture of concrete building blocks or other similar blocks, the production or manufacturer of lime products, the production of ready-mixed concrete and any similar production or manufacturing processes which might be related to the mining operation shall be considered as a conditional use. Wells used in the process of mineral exploration that use five (5) million gallons or more a year are considered a conditional use. <p>9.10.2 Required Information</p> <p>The following information shall be provided by the person requesting the permit:</p> <ol style="list-style-type: none"> 1. Name and address of person requesting the mining permit. 2. The exact legal property description and acreage of area to be mined. 3. The following maps/documents of the entire site and to include all areas within five hundred (500) feet of the site. All maps shall be drawn at a scale of one (1) inch to one hundred (100) feet unless otherwise stated below. <ul style="list-style-type: none"> • Map/Document A - Existing conditions to include: <ol style="list-style-type: none"> i. Contour lines at five (5) foot intervals. ii. Existing vegetation. iii. Existing drainage & permanent water areas. iv. Existing structures. v. Existing wells. • Map/Document B - Proposed operations to include: <ol style="list-style-type: none"> i. Structures to be erected. ii. Location of sites to be excavated showing depth of proposed excavation. iii. Location of excavated deposits showing maximum height of deposits. 	

Figure 9.17 Required information for Extraction Pits/Land Alterations.

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- iv. Location of storage of excavated materials, showing the height of storage deposits.
- v. Location of vehicle parking.
- vi. Location of storage of explosives.
- vii. Erosion and sediment control structures.
- Map/Document C - Reclamation Plan to include:
 - i. Final grade of proposed site showing elevations and contour lines at five (5) foot intervals.
 - ii. Location and non invasive species of vegetation to be replanted.
 - iii. Location and nature of any structures to be erected in relation to the end use plan.
- 4. A soil erosion and sediment control plan.
- 5. A plan for dust and noise control.
- 6. A full and adequate description of all phases of the proposed operation to include an estimate of duration of the mining operation.
- 7. Any other information requested by the Planning Commission or governing body.

9.10.3 Performance Standards

1. **WATER RESOURCES:** The extraction pit or land alteration operation shall not be allowed to interfere with surface water drainage beyond the boundaries of the operation. The work done shall not adversely affect the quality of surface or subsurface water resources. Surface water originating outside and passing through the mining district shall, at its point of departure from the site, be of equal quality to the water at the point where it enters the site.
2. **SAFETY FENCING:** Any operation adjacent to a residential zone or within three hundred (300) feet of two (2) or more residential structures shall be bound by the following standards:
 - a. Where collections of water occur that are one and one-half (1½) feet or more in depth existing for any period of at least one (1) month, and occupy an area of seven hundred (700) square feet or more, all access to such collections of water shall be barred by a fence of at least four (4) feet in height.
 - b. In locations where slopes occur that are steeper than one (1) foot vertical to three (3) feet horizontal existing for a period of one (1) month or more, access to such slopes shall be barred by a fence or some similar effective barrier such as a snow fence at least four (4) feet in height. Earthen berms also may be constructed to prevent access to the steeper slopes.
3. **ACCESS ROADS:** The location of the intersection of access roads with any public roads shall be selected such that traffic on the access roads will have a sufficient distance or public road in view so that any turns onto the public road can be completed with a margin of safety.
4. **SETBACK:** Processing of minerals shall not be conducted closer than one hundred (100) feet to the property line nor closer than five hundred (500) feet to any residential or commercial structures

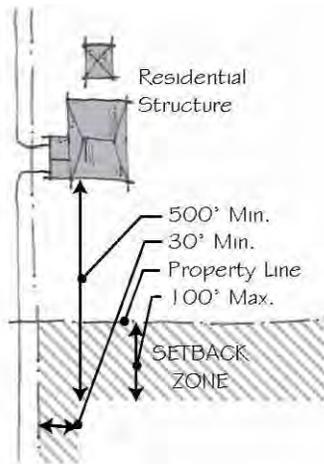


Figure 9.18 Setback for Extraction Pits/Land Alterations

- located prior to commencement of processing operations without the written consent of all owners and residents of said structures. Mining operations shall not be conducted closer than thirty (30) feet to the boundary of any zone where such operations are not permitted, nor shall such production or processing be conducted closer than thirty (30) feet to the boundary of an adjoining property line, unless the written consent of the owner of such adjoining property is first secured in writing. Mining operations shall not be conducted closer than thirty (30) feet to the right-of-way line of an existing or platted street, road or highway, except that excavating may be conducted within such limits in order to reduce the elevation thereof in conformity to the existing or platted street, road or highway.
5. APPEARANCE: All buildings, structures and plants used for the production of processing of sand and gravel shall be maintained in such a manner as is practical and according to acceptable industrial practice as to assure that such buildings, structures and plants will not become dangerously dilapidated.
 6. HOURS OF OPERATION: All operations shall be conducted between the hours of 6:00 AM and 10:00 PM CST. Permission may be granted for operations beyond these hours to respond to public or private emergencies or whenever any reasonable or necessary repairs to equipment are required to be made.
 7. TOPSOIL MANAGEMENT:
 - a. Removal: Removal of on-site topsoil and topsoil substitute material removal, when specified in the reclamation plan, shall be performed, prior to any mining activity associated with any specific phase of the mining operation.
 - b. Volume: The operator shall obtain the volume of soil required to perform final reclamation by removal of on-site topsoil or topsoil substitute material or by obtaining topsoil or substitute material as needed to make up the volume of topsoil as specified in the reclamation plan approved pursuant to this chapter.
 - c. Storage: Once removed, topsoil or topsoil substitute material shall, as required by the reclamation plan approved pursuant to this chapter, either be used in contemporaneous reclamation or stored in an environmentally acceptable manner. The location of stockpiled topsoil or topsoil substitute material shall be chosen to protect the material from erosion or further disturbance or contamination. Runoff water shall be diverted around all locations in which topsoil or topsoil substitute material is stockpiled.
 8. FINAL GRADING & SLOPES:
 - a. All areas affected by mining shall be addressed in the approved reclamation plan, pursuant to Chapter 9 to provide that a stable and safe condition consistent with the post-mining land use is achieved. The reclamation plan may designate high walls or other unmined and undisturbed natural solid bedrock as stable and safe and not in need of reclamation or designate other areas affected by mining including slopes comprised of unconsolidated

materials that exceed a 3:1 slope, whether or not graded, as stable and safe. For slopes designated as stable under this Subsection, the County may require that a site-specific engineering analysis be performed by a registered professional engineer to demonstrate that an acceptable slope stability factor is attainable at a steeper slope.

- b. Final reclaimed slopes covered by topsoil or topsoil substitute material may not be steeper than a 4:1 horizontal to vertical incline, unless demonstrated based on site-specific engineering analysis performed by a registered professional engineer. All areas in the extraction pit site where topsoil or topsoil substitute material is to be reapplied shall be graded or otherwise prepared prior to topsoil or topsoil substitute material redistribution to provide the optimum adherence between the topsoil or topsoil substitute material and the underlying material.
 - c. When the approved post-mining land use includes a body of water, the approved final grade at the edge of a body of water shall extend vertically six (6) feet below the lowest seasonal water level. A slope no steeper than 3:1 shall be created at a designated location or locations, depending on the size of the water body to allow for a safe exit.
9. DRIVEWAY/ACCESS FOR SITE:
- a. Driveway/access to the commercial/industrial site shall not be located within twenty-five (25) feet of adjacent property boundaries.
 - b. Driveway/access shall also receive applicable Township/Highway Department/State/Federal approval.

9.10.4 Reclamation

All sites shall be reclaimed immediately after operations cease. Reclamation shall be complete within one (1) calendar year after operation ceases. The following standards shall apply:

- 1. Within a period of three (3) months after the termination of a operation, or within three (3) months after abandonment of such operation for a period of six (6) months, or within three (3) months after expiration of a permit, all buildings, structures and plans incidental to such operation shall be dismantled and removed by, and at the expense of, the mining operator last operating such buildings, structures and plants.
- 2. Topsoil Redistribution for Reclamation: Topsoil or topsoil substitute material shall be redistributed in accordance with the reclamation plan approved pursuant to this chapter in a manner which minimizes compacting and prevents erosion. Topsoil or topsoil substitute material shall be uniformly redistributed except where uniform redistribution is undesirable or impractical. Topsoil or topsoil substitute material redistribution may not be performed during or immediately after a precipitation event until the soils have sufficiently dried.

3. Assessing Completion of Successful Reclamation:
 - a. The criteria for assessing when reclamation is complete shall be specified in the reclamation plan approved pursuant to this Chapter. Criteria to evaluate reclamation success shall be quantifiable.
 - b. Compliance with the re-vegetation success standards in the approved reclamation plan shall be determined by:
 - I. On-site inspections by Winona County or its agent;
 - II. Reports presenting results obtained during reclamation evaluations including summarized data on re-vegetation, photo documentation or other evidence that the criteria approved in the reclamation plan to ascertain success have been met; or
 - III. A combination of inspections and reports.
 - c. In those cases where the post mining land use specified in the reclamation plan requires a return of the mining site to a pre-mining condition, the operator shall obtain baseline data on the existing plant community for use in the evaluation of reclamation success pursuant to this section.
 - d. Re-vegetation success may be determined by:
 - I. Comparison to an appropriate reference area;
 - II. Comparison to baseline data acquired at the mining site prior to its being affected by mining; or
 - III. Comparison to an approved alternate technical standard.
 - e. Re-vegetation using a variety of plants indigenous to the area is encouraged.
4. Maintenance: During the period of the site reclamation the operator shall perform any maintenance necessary to prevent erosion, sedimentation or environmental pollution, comply with the standards of this Subchapter, or to meet the goals specified in the reclamation plan approved pursuant to this Chapter.

9.10.5 Non-Conforming Extraction Pits

Existing non-conforming pits shall be required to submit a reclamation plan following the standards in this Section.

9.11 Subsurface Mineral Exploration

Exploration of oil and natural resources can have a serious affect on land and the groundwater below. It is the intention of this Section of the Ordinance to monitor any exploratory activity, to insure such activity is in compliance with state law.

Remote sensing/exploration that does not disturb any soil do not require a Conditional Use Permit.