

PLANNING & ZONING COMMISSION AGENDA

Date: January 22, 2024

Time: Following the adjournment of the Nicollet County Board of Adjustments and Appeals Meeting (doors open at 6:45)

Location: Nicollet County Board Room, 501 S. Minnesota Avenue, St. Peter, MN

Copies of the meeting agenda and packet are available on the Nicollet County website: co.nicollet.mn.us/AgendaCenter

Questions or comments regarding the meeting can be directed to the Nicollet County Property Services Department by calling 507-934-7070, or by email to niccopermitapps@co.nicollet.mn.us.

1. Call to Order
2. Roll Call
3. Silence Your Cell Phone
4. Review of Cancellations and Additions
5. Approval of Minutes: *December 18, 2023*
6. Public Appearances
7. **PUBLIC HEARING: PLN23-02**
 - Applicant: Mark Butler – Minnesota Paving and Materials
 - Landowner: New Ulm Quartzite Quarries, Inc.
 - Request: 3-year Mineral Extraction Conditional Use Permit renewal
 - Location: Part of the Southeast ¼ of the Southeast ¼ of Section 34-110-30; Part of the Southern ½ of Section 35-110-30; and Part of the Northern ½ of Section 02-109-30, all located in Courtland Township
 - Parcel Number: 04.035.1705
8. Review Permits
9. Old Business
10. Other Business
11. Communications
12. Adjourn

Mission Statement

Providing efficient services with innovation and accountability.

Vision Statement

Setting the standard for providing superior and efficient county government services through leadership, accountability and innovation to a growing and diverse society.

Core Values

Leadership. Integrity.
Accountability.
Efficiency. Innovation.

PLANNING COMMISSION REGULAR MONTHLY MEETING MINUTES

DECEMBER 18, 2023	7:00 PM	NICOLLET COUNTY BOARD ROOM
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ROLL CALL	COMMISSIONERS PRESENT	COMMISSIONERS ABSENT EXCUSED	NICOLLET COUNTY STAFF PRESENT
	☒ Dave Ubel, <i>Chair</i> ☒ Jon Thoreson, <i>Vice Chair</i> ☒ Marie Dranttel, <i>Commissioner</i> ☒ Lloyd Hoffmann ☒ Justin Laven ☒ Randy Schwab	☐ Dave Ubel, <i>Chair</i> ☐ Jon Thoreson, <i>Vice Chair</i> ☐ Marie Dranttel, <i>Commissioner</i> ☐ Lloyd Hoffmann ☐ Justin Laven ☐ Randy Schwab	☒ Spencer Crawford, Zoning Specialist (ZS) ☒ John Zehnder, Zoning Specialist (ZS) ☒ Michelle Zehnder Fischer, County Attorney (CA) ☒ Crystal Madden, Recording Secretary ☒ Other Staff: Shana Jackson, County Assessor (CA) ☐ Other Staff:

REVIEW OF AGENDA	
AGENDA ADDITIONS / DELETIONS	None.

APPROVAL OF NOVEMBER 20, 2023 MINUTES	MOTION	2 ND
☒ APPROVE ☐ APPROVE WITH REVISIONS	☐ Dave Ubel, <i>Chair</i> ☐ Jon Thoreson, <i>Vice Chair</i> ☐ Marie Dranttel, <i>Commissioner</i> ☐ Lloyd Hoffmann ☐ Justin Laven ☒ Randy Schwab	☐ Dave Ubel, <i>Chair</i> ☐ Jon Thoreson, <i>Vice Chair</i> ☐ Marie Dranttel, <i>Commissioner</i> ☐ Lloyd Hoffmann ☒ Justin Laven ☐ Randy Schwab
VOTE TO APPROVE MINUTES	☒ PASS ☐ FAIL	VOTE: 6 - 0

PUBLIC APPEARANCES	
Mike Roen, 305 N. Van Buren Ave, Eveleth	Mr. Roen made a public appearance to request staff resources for a text amendment of the Nicollet County Zoning Ordinance to allow accessory dwelling units for elder care. There was discussion between Mr. Roen, Staff and the Commissioners. Commissioner Thoreson motioned staff research and report back to the Commission at the meeting next month. This motion was seconded by Commissioner Laven. The vote on the motion passed 6-0.

PUBLIC HEARINGS – CONDITIONAL USE	
PLN23-23	APPLICANT/LANDOWNER: Adam Hoffmann with M.R. Paving & Excavating Inc. / New Ulm Quartzite Quarries, Inc.
DESCRIPTION	Three (3) year review of their Mineral Extraction Permit for a hot mix plant in the Conservancy and Limited Industry Zoning Districts.
CONFLICT OF INTEREST	None.
SITE VISIT & PUBLIC CONTACT	Commissioners Dranttel, Hoffmann, Laven, Thoreson & Chair Ubel visited the site. Commissioner Laven and Chair Ubel heard from members of the public concerning the request.
STAFF REPORT PRESENTED BY	ZS Crawford
APPLICANT TESTIMONY	Present to represent the application was Adam Hoffmann, 21151 122 nd Street, Hanska with M.R. Paving & Excavating Inc.
PUBLIC TESTIMONY	A petition from members of the Shady Brook Acres subdivision was received by ZS Crawford, and was entered into the record stating they opposed the request. Gary Bruns at 57012 Hillcrest Lane, New Ulm was present to provide public testimony. Victor Redke at 54133 Edgewood Drive, New Ulm was present to provide public testimony. Mr. Redke submitted printed images into the record stating he would like control of the smoke and smell coming from the plant. Commissioner Laven discussed the location of the photographs, and Mr. Redke

	confirmed that the images are from the other hot mix plants on the site and not of this hot mix plant application currently up for renewal. Pat Nelson at 57063 Brookview Lane, New Ulm was present to provide public testimony. Mr. Nelson had questions concerning air quality testing. The Applicant and ZS Crawford provided answers.		
COMMISSIONER DISCUSSION	Further discussion between the Applicant, Commission, and Staff took place.		
COMMISSION ACTION - MOTION	MOTION	2ND	
RECOMMEND APPROVAL with staff recommended conditions #1-10.	☐ Dave Ubel, <i>Chair</i> ☐ Jon Thoreson, <i>Vice Chair</i> ☐ Marie Dranttel, <i>Commissioner</i> ☐ Lloyd Hoffmann ☐ Justin Laven ☒ Randy Schwab	☐ Dave Ubel, <i>Chair</i> ☒ Jon Thoreson, <i>Vice Chair</i> ☐ Marie Dranttel, <i>Commissioner</i> ☐ Lloyd Hoffmann ☐ Justin Laven ☐ Randy Schwab	
MOTION TO RECOMMEND APPROVAL WITH CONDITIONS AS RECOMMENDED BY STAFF		VOTE: 6 - 0	
COMMISSION ACTION – VOTE			
RECOMMEND APPROVAL with conditions, as recommended by Staff	☒ PASS	☐ FAIL	VOTE: 6 - 0
COMMISSION ACTION – ADOPT FINDINGS	MOTION	2ND	
ADOPT THE FINDINGS OF THE FACT AS STATED	☐ Dave Ubel, <i>Chair</i> ☐ Jon Thoreson, <i>Vice Chair</i> ☒ Marie Dranttel, <i>Commissioner</i> ☐ Lloyd Hoffmann ☐ Justin Laven ☐ Randy Schwab	☐ Dave Ubel, <i>Chair</i> ☒ Jon Thoreson, <i>Vice Chair</i> ☐ Marie Dranttel, <i>Commissioner</i> ☐ Lloyd Hoffmann ☐ Justin Laven ☐ Randy Schwab	
MOTION TO ADOPT THE FINDINGS OF FACT AS STATED	☒ PASS	☐ FAIL	VOTE: 6 - 0
PLN23-24	APPLICANT/LANDOWNER: Lee Alex with Trident Dairy / Dairy Wise Builders LLC.		
DESCRIPTION	Modification of an existing Feedlot Conditional Use Permit (CUP) for Granby Ranch to include cows as well as calves while maintaining 950.4 animal units (AUs).		
CONFLICT OF INTEREST	None.		
SITE VISIT & PUBLIC CONTACT	Commissioner Laven visited the site. Commissioners Thoreson and Chair Ubel stated they had visited the site in the past. There was no contact with Commissioners from members of the public.		
STAFF REPORT PRESENTED BY	ZS Zehnder. ZS Crawford stated for the record that there is a Minnesota Statute 15.99 Waiver on file for this request.		
APPLICANT TESTIMONY	Present to represent the application was Lee Alex, General Manager – Trident Dairy, located at 2228 Aspen Lane, North Mankato		
PUBLIC TESTIMONY	No one was present to provide public testimony.		
COMMISSIONER DISCUSSION	Further discussion between the Applicant, Commission, and Staff took place.		
COMMISSION ACTION - MOTION	MOTION	2ND	
RECOMMEND APPROVAL with conditions, as recommended by Staff	☐ Dave Ubel, <i>Chair</i> ☐ Jon Thoreson, <i>Vice Chair</i> ☐ Marie Dranttel, <i>Commissioner</i> ☐ Lloyd Hoffmann ☒ Justin Laven ☐ Randy Schwab	☐ Dave Ubel, <i>Chair</i> ☐ Jon Thoreson, <i>Vice Chair</i> ☐ Marie Dranttel, <i>Commissioner</i> ☐ Lloyd Hoffmann ☐ Justin Laven ☒ Randy Schwab	
MOTION TO RECOMMEND APPROVAL WITH CONDITIONS AS RECOMMENDED BY STAFF		VOTE: 6 - 0	
COMMISSION ACTION – VOTE			
RECOMMEND APPROVAL with conditions, as recommended by Staff	☒ PASS	☐ FAIL	VOTE: 6 - 0

COMMISSION ACTION – ADOPT FINDINGS	MOTION		2 ND
ADOPT THE FINDINGS OF THE FACT AS STATED	☐ Dave Ubel, <i>Chair</i> ☐ Jon Thoreson, <i>Vice Chair</i> ☐ Marie Dranttel, <i>Commissioner</i> ☒ Lloyd Hoffmann ☐ Justin Laven ☐ Randy Schwab		☐ Dave Ubel, <i>Chair</i> ☒ Jon Thoreson, <i>Vice Chair</i> ☐ Marie Dranttel, <i>Commissioner</i> ☐ Lloyd Hoffmann ☐ Justin Laven ☐ Randy Schwab
MOTION TO ADOPT THE FINDINGS OF FACT AS STATED	☒ PASS	☐ FAIL	VOTE: 6 - 0

MEETING RECESS

8:56 pm

Motion for a 10-minute recess was made by Commissioner Thoreson, and seconded by Commissioner Schwab. The vote on the motion passed 6-0. The meeting resumed at 9:05 pm.

PLN23-25		APPLICANT/LANDOWNER: Marty & Mary McCabe	
DESCRIPTION		To place fill dirt over fifty (50) cubic yards not associated with a permitted use on property within the Agricultural Preservation Zoning District.	
CONFLICT OF INTEREST		None.	
SITE VISIT & PUBLIC CONTACT		No Commissioner visited the site. There was no contact with Commissioners from members of the public.	
STAFF REPORT PRESENTED BY		DZA Crawford	
APPLICANT TESTIMONY		Present to represent the application were Mary & Marty McCabe, 36387 410 th Street, St. Peter.	
PUBLIC TESTIMONY		No one was present to provide public testimony. No other correspondence was received.	
COMMISSIONER DISCUSSION		Further discussion between the Applicant, Commission, and Staff took place.	
COMMISSION ACTION - MOTION		MOTION	2 ND
RECOMMEND APPROVAL with conditions, as recommended by Staff		☐ Dave Ubel, <i>Chair</i> ☐ Jon Thoreson, <i>Vice Chair</i> ☐ Marie Dranttel, <i>Commissioner</i> ☐ Lloyd Hoffmann ☐ Justin Laven ☒ Randy Schwab	☐ Dave Ubel, <i>Chair</i> ☒ Jon Thoreson, <i>Vice Chair</i> ☐ Marie Dranttel, <i>Commissioner</i> ☐ Lloyd Hoffmann ☐ Justin Laven ☐ Randy Schwab
VOTE TO RECOMMEND APPROVAL WITH CONDITIONS AS RECOMMENDED BY STAFF		VOTE: 6 - 0	
COMMISSION ACTION – VOTE			
RECOMMEND APPROVAL with conditions, as recommended by Staff	☒ PASS	☐ FAIL	VOTE: 6 - 0
COMMISSION ACTION – ADOPT FINDINGS		MOTION	2 ND
ADOPT THE FINDINGS OF THE FACT AS STATED	☐ Dave Ubel, <i>Chair</i> ☒ Jon Thoreson, <i>Vice Chair</i> ☐ Marie Dranttel, <i>Commissioner</i> ☐ Lloyd Hoffmann ☐ Justin Laven ☐ Randy Schwab	☐ Dave Ubel, <i>Chair</i> ☐ Jon Thoreson, <i>Vice Chair</i> ☐ Marie Dranttel, <i>Commissioner</i> ☒ Lloyd Hoffmann ☐ Justin Laven ☐ Randy Schwab	
MOTION TO ADOPT THE FINDINGS OF FACT AS STATED	☒ PASS	☐ FAIL	VOTE: 6 - 0

PLN23-26	APPLICANT/LANDOWNER: Holly Carlson		
DESCRIPTION	To establish and operate a dog boarding kennel within the applicant's residence on property located within the Agricultural Preservation Zoning District.		
CONFLICT OF INTEREST	None.		
SITE VISIT & PUBLIC CONTACT	Commissioners Laven & Chair Ubel visited the site. Contact was made with Commissioner Laven from a member of the public concerning barking, and in opposition of the request.		
STAFF REPORT PRESENTED BY	DZA Crawford		
APPLICANT TESTIMONY	Present to represent the application was Holly Carlson, 47530 478 th Street, Nicollet.		

PUBLIC TESTIMONY	No one was present to provide public testimony. Public comment was received by ZS Crawford on 12/18/2023. A neighbor commented in opposition of the request concerning noise nuisance from barking dogs. Particularly, during funerals at the neighboring cemetery. This comment was entered into the record.		
COMMISSIONER DISCUSSION	Further discussion between the Applicant, Commission, and Staff took place.		
COMMISSION ACTION - RECOMMENDATION	MOTION	2ND	
RECOMMEND APPROVAL with conditions, as amended to include a Noise Mitigation Plan per Nicollet County Zoning Ordinance 720.3(9)	☐ Dave Ubel, <i>Chair</i> ☒ Jon Thoreson, <i>Vice Chair</i> ☐ Marie Dranttel, <i>Commissioner</i> ☐ Lloyd Hoffmann ☐ Justin Laven ☐ Randy Schwab	☐ Dave Ubel, <i>Chair</i> ☐ Jon Thoreson, <i>Vice Chair</i> ☐ Marie Dranttel, <i>Commissioner</i> ☐ Lloyd Hoffmann ☒ Justin Laven ☐ Randy Schwab	
VOTE TO RECOMMEND APPROVAL WITH CONDITIONS AS AMENDED	☒ PASS	☐ FAIL	VOTE: 5 - 1
COMMISSION ACTION – FINDINGS OF FACT			
ADOPT THE FINDINGS OF FACT, as stated	☐ Dave Ubel, <i>Chair</i> ☐ Jon Thoreson, <i>Vice Chair</i> ☐ Marie Dranttel, <i>Commissioner</i> ☐ Lloyd Hoffmann ☐ Justin Laven ☒ Randy Schwab	☐ Dave Ubel, <i>Chair</i> ☐ Jon Thoreson, <i>Vice Chair</i> ☐ Marie Dranttel, <i>Commissioner</i> ☐ Lloyd Hoffmann ☒ Justin Laven ☐ Randy Schwab	
VOTE TO ADOPT THE FINDINGS OF FACT	☒ PASS	☐ FAIL	VOTE: 6 - 0

ADDITIONAL ITEMS

OLD BUSINESS	ZS Crawford presented MN State Statute 245A.11 Special Conditions for Residential Programs. Chair Ubel requested, and was provided, an update from ZS Crawford concerning the outcome of PLN23-17.		
OTHER BUSINESS	A motion was made by Commissioner Thoreson to approve 2024 Planning Commission Meeting Calendar, and was seconded by Commissioner Hoffmann. The vote on the motion passed 6-0. Chair Ubel requested ZS Crawford look into the chemical additive options hot mix plants propose to use to mitigate odor, including the associated health risks, to report to the Commission at the next meeting. CA Zehnder-Fisher recognized Nicollet County needs to look at elder care options in terms of rural development, but recommends that significant study, policy discussion, and research of ramifications be completed before significant revision of the Zoning Ordinance is made.		
COMMUNICATIONS	None.		
MOTION TO ADJOURN MEETING	MOTION	2ND	
10:10 PM	☐ Dave Ubel, <i>Chair</i> ☐ Jon Thoreson, <i>Vice Chair</i> ☒ Marie Dranttel, <i>Commissioner</i> ☐ Lloyd Hoffmann ☐ Justin Laven ☐ Randy Schwab	☐ Dave Ubel, <i>Chair</i> ☐ Jon Thoreson, <i>Vice Chair</i> ☐ Marie Dranttel, <i>Commissioner</i> ☐ Lloyd Hoffmann ☐ Justin Laven ☒ Randy Schwab	
VOTE TO ADJOURN MEETING	☒ CARRIED	☐ FAILED	VOTE: 6 - 0

CRYSTAL MADDEN, RECORDING SECRETARY		DATE	1/22/2024
CHAIR		DATE	1/22/2024



CONDITIONAL USE PERMIT

MINERAL EXTRACTION PERMIT RENEWAL

Minnesota Paving and Materials

PLN24-02

NICOLLET COUNTY PLANNING & ZONING ADVISORY COMMISSION

SUBJECT	Conditional Use Permit PLN24-02
APPLICANT	Mark Butler with Minnesota Paving and Materials
LANDOWNER	New Ulm Quartzite Quarries, Inc.
LOCATION	Part of the Southeast ¼ of the Southeast ¼ of Section 34-110-30; Part of the Southern ½ of Section 35-110-30; and Part of the Northern ½ of Section 02- 109-30
PARCEL NO	04.035.1705
EXISTING ZONING	Conservancy & Limited Industry Zoning Districts
HEARING DATE	01/22/2024
COUNTY BOARD DATE	02/13/2024
60 DAYS FROM REQUEST	03/03/2024

REQUEST

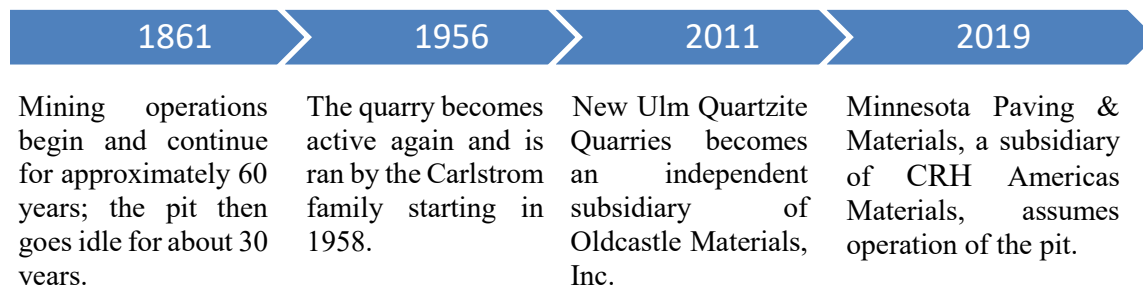
The Applicant is requesting a three-year review of their mineral extraction permit to mine, crush, process, and stockpile quartzite, along with operating multiple hot mix plants and a concrete batch plant.

ORDINANCE

Mineral extraction operations are required to renew their conditional use permit every three (3) years per Nicollet County Zoning Ordinance 724.2 (3). General standards for mineral extraction are found in Nicollet County Zoning Ordinance Section 724.

PROJECT DESCRIPTION

Timeline:



Operations:

The quartzite quarry consists of an open pit mine where rock is extracted using a conventional drill-blast-load/haul sequence. Mined material is processed through a crusher, washed, and then screened into piles via conveyor belts depending on size. The Applicant states they have removed 2,307,751 tons of materials over the past three years.

Equipment on site consists of front-end loaders, skid steers, fork lifts, crushers, screens, washers, conveyors, stackers, and various trucks. Electricity is produced by portable generator sets or comes from hard wire sources. Fuel is delivered by local distributors on an as needed basis, with fuel storage kept at a minimum. Mining operations are monitored by the Mine Safety and Health Administration and the Minnesota Pollution Control Agency. The facility has completed two Environmental Assessment Worksheets – the first in 1999 and the second in 2007.

The quarry contains a permanent hot mix plant operated by Valley Asphalt Products, which is permitted separately. There are also two spots for temporary hot mix plants; one is reserved for Minnesota Paving and Materials, while the other has recently been used by Central Specialties. The temporary plants are not currently at the quarry and the permanent facility is closed for the winter.

During the Valley Asphalt Products Conditional Use Permit renewal, residents of the neighboring Shady Brook Acres Subdivision expressed their concern about the smoke and smell coming from the quarry. In response to this, Minnesota Paving and Materials has proposed to obligate temporary third-party hot mix plants on the property to use an odor neutralizing agent and to obtain all required permits. Moreover, staff have reminded Minnesota Paving and Materials that failure to obtain a zoning permit for a temporary hot mix plant, including their own, is a Zoning Ordinance violation.

Geologic & Product Information:

The property lies on top of the Precambrian Sioux quartzite formation, which extends westward from New Ulm into the middle of South Dakota. The New Ulm location is the most northeasterly outlier of the Sioux quartzite outcrops. The quality of the quartzite rock mined at this location varies, with the lower grade material primarily being used for riprap and landscaping rock. Quartzite quality improves with depth and higher-grade rock is used for products such as seal-coat chips, concrete and bituminous additives, and poultry grit.

Access:

The site has direct access to 571st Lane via a path leading to the facility. The entrance is located about a half mile south of the 571st Lane & Highway 14 intersection.

Appearance:

The facility is screened from the Minnesota River and Highway 14 by a combination of trees, bluffs, and berms. Screening appears to meet the standards of Nicollet County Zoning Ordinance 424.5.

Bond Requirements:

Minnesota Paving and Materials has a continuous bond on file in the amount of \$225,000. The required amount is \$2,500 per acre due to the pit preexisting the 2014 Mineral Extraction Zoning Ordinance amendment. The bond will need to be increased to \$257,500 to cover the 103 acres being used but not yet reclaimed on the site.

Hours of Operation:

In 2008, the Board granted permission for the Applicant to undertake processing activities at any time provided that noise levels remain in compliance with Minnesota Rules Chapter 7030. In 2014, the Board also granted extended operating hours from 6 a.m. and 7 p.m.

Stormwater:

Water from the quarry area is pumped to a sedimentation pond, which is the original quarrying area located in the center of the property. Dewatering of the mining area is often required due to the low elevation of the pit. Wash water goes into a pond that filters sedimentation before reuse. Water from the site is sometimes deposited into the Minnesota River, although this is rare.

Dust, Noise, & Odor Control:

- Water, zinc chloride, and soybean oil are used to control dust on the haul road as needed.
- Dust is controlled during processing by mister bars on the conveyors and spraying the stockpiles with a water cannon.
- Noise is controlled by fabricated shielding installed on the equipment, and also berming.
- A cherry scented additive is used in the temporary hot mix plant owned by Minnesota Paving and Materials.
- The permanent hot mix plant and any third-party plant operate their own dust, noise, and odor control measures.

Reclamation Plan:

The Applicant has an end use plan on file showing a low-density subdivision with the old quarrying areas as lakes. Reclamation will likely take place beyond 2075, as there are plenty of useable deposits left on the property.

SURROUNDING LAND USE

The surrounding land use is varied, with a subdivision to the north; the Minnesota River to the south and west; and other gravel pits to the east. The City of New Ulm is located a little under a mile to the west.

NEIGHBOR NOTIFICATION

Property owners were notified of the request per the standards of Section 505.3 of the Zoning Ordinance and Minnesota State Statute 394.26.

CRITERIA FOR GRANTING A CONDITIONAL USE PERMIT

1. Given the nature of the land, the requested use is compatible with the public health, safety, and general welfare.

- Mineral extraction, which includes hot mix plants, is a conditionally permitted use in the Conservancy and Limited Industry Zoning Districts.
- The quarry must follow all local, state, and federal standards, including those from the Minnesota Pollution Control Agency.
- The quarry generally meets the Zoning Ordinance standards outlined in Sections 505, 603, 608, and 724.

2. The requested use will not create an unreasonably excessive burden on the existing roads or utilities.

- The quarry has access to Highway 14, which can accommodate larger trucks and typical traffic generated from this location.
- The utility usage for this location does not appear to be unreasonable.

3. The requested use is compatible with the surrounding area and will not significantly depreciate nearby properties.

- The quarry is generally screened from the surrounding uses.
- The quarry must follow all federal, state, and local standards, including from the Minnesota Pollution Control Agency.
- The Applicant has a procedure in place to handle and resolve complaints.
- An end use plan is on file, and the Applicant will be required to restore the property when extraction operations cease.

4. The structure and the use shall have an appearance that will not have an unreasonably adverse effect on nearby properties.

- The quarry is generally screened from the surrounding uses.
- The use adheres to the applicable standards of Sections 724.5(3) and 724.5(16) of the Zoning Ordinance for the appearance and screening of mineral extraction facilities.

5. The requested use is consistent with the Nicollet County Land Use Ordinances.

- The request meets the applicable standards and requirements found in Sections 505, 603, 608, and generally 724 of the Zoning Ordinance for mineral extraction conditional use permits.

6. The requested use is not in conflict with the Nicollet County Comprehensive Plan.

- The Comprehensive Plan states that the aggregate industry provides vital jobs for residents and revenue for local businesses.
- The Comprehensive Plan states that Nicollet County will continue to work with aggregate businesses, such as this one, to ensure that these operations can continue in a sustainable and environmentally friendly manner.

7. The requested use will not create an unreasonably adverse effect because of noise, odor, glare, or general unsightliness, for nearby property owners.

- The quarry must follow all federal, state, and local standards, including from the Minnesota Pollution Control Agency.
- The use appears to comply with the standards of Sections 724.5(7), 724.5(9), and 724.5(13-14) of the Zoning Ordinance for dust control and air quality; hours of operation; noise and vibrations; and road dust and debris.

8. The requested use is reasonably related to the existing land use and environment.

- The request is a renewal and does not change the existing land use.
- Mineral extraction is a conditionally permitted use in the Conservancy and Limited Industry Zoning Districts.

9. There are no apparent unreasonable health risks posed to neighbors or the public in general.

- The quarry and any associated hot mix plants must continually comply with all federal, state, and local standards, including from the Minnesota Pollution Control Agency.

10. The requested use will/will not have an adverse effect upon public health, safety, and welfare due to the following other factors:

- The request is proposed to meet county standards, with no apparent adverse effects to the public health, safety, and welfare.

STAFF RECOMMENDATIONS

1. The Applicant undertakes the project according to the plans and specifications submitted to the County with the application.
2. The permit will be periodically reviewed by the County to ensure compliance with the permit and permit conditions.
3. The County may enter onto the premises at reasonable times and in a reasonable manner to ensure the permit holder is in compliance with the conditions and all other applicable statutes, rules, and ordinances.
4. The conditional use permit to mine, crush, wash, process, and stockpile quartzite rock must be reviewed on a three (3) year basis (renewal required in January 2027).
5. The Applicant shall conduct mining operations between 6 a.m. and 8 p.m., Monday through Saturday, except in the event of an emergency.
6. The Applicant may conduct processing operations, 24 hours a day, Monday through Saturday, provided noise levels remain in compliance with Minnesota Rules Chapter 7030 "Noise Pollution Control".
7. Any increase in the amount of acres actively being mined or not yet reclaimed requires an additional/amended bond covering the additional acreage, and be submitted to Nicollet County Property Services.
8. The Applicant shall use dust reducing techniques along 571st Lane during times of heavy traffic and dry conditions. This may include the watering or some other method that will minimize the dust generated from the increased truck traffic.
9. The Applicant shall maintain a National Pollutants Discharge Elimination System (NPDES) Permit and Industrial Storm Water permit (or a combined permit) with the Minnesota Pollution Control Agency that will cover the entire project area.
10. All temporary hot mix plants located on the property must obtain a zoning permit from Nicollet County Property Services, and follow all applicable local, state, and federal regulations.

Applicant: Minnesota Paving and Materials
Landowner: New Ulm Quartzite Quarries

PLN24-02

ATTACHMENT A	Application
ATTACHMENT B	Submitted by Applicant
B.1	NPDES MNG Permit, Water Appropriation\
	Permits, Air Quality Permit & Tests
B.2	Storm Water Pollution Prevention Plan
B.3	Spill, Prevention, Control & Countermeasure
	Plan
ATTACHMENT C	Location Map
ATTACHMENT D	Aerial Map
ATTACHMENT E	Site Photographs
ATTACHMENT F	Neighbor Notification List
ATTACHMENT G	Criteria for Conditional Use Permit



PROPERTY SERVICES DIVISION
501 S MINNESOTA AVENUE, SAINT PETER, MN 56082
507-934-7070

PLANNING & ZONING ADVISORY COMMISSION APPLICATION

TOTAL FEES: \$496.00

Parcel#: 04.035.1705

Permit#: PLN24-2

Date: 1/3/2024

Applicant: Mark Butler- Minnesota Paving and Materials

Telephone: 651 353 9958

Owner: New Ulm Quartzite Quarries

Property Address: 56073 Highway 14, New Ulm, MN 56073

Abbreviated Legal Description: Sec 35-110-30

Township: Courtland Township

Zoning District(s): CONSERVANCY

LIMITED INDUSTRY

Record Type: Conditional Use Permit

Subtype: Renewal

Category: Other

Description: Mineral Extraction 3 year renewal

G.C. Licence#: N/A

Job Cost: N/A

Hearing Date: 01/22/24

ATTACHMENT A
Application

PERMIT EXPIRATION DATE:

N/A

Mark Butler

Mark Butler (Jan 3, 2024 12:41 CST)

APPLICANT SIGNATURE

Jan 3, 2024

DATE

James Gaudier

PROPERTY SERVICES

01/03/24

DATE

PLN24-02 App

Final Audit Report

2024-01-03

Created:	2024-01-03
By:	Spencer Crawford (Spencer.Crawford@co.nicollet.mn.us)
Status:	Signed
Transaction ID:	CBJCHBCAABAANycP-xVTWokjKQr1qlcFBg0-Vzf4LYCc

"PLN24-02 App" History

 Document created by Spencer Crawford (Spencer.Crawford@co.nicollet.mn.us)
2024-01-03 - 6:17:51 PM GMT

 Document emailed to mark.butler@minnmpm.com for signature
2024-01-03 - 6:18:27 PM GMT

 Email viewed by mark.butler@minnmpm.com
2024-01-03 - 6:40:36 PM GMT

 Signer mark.butler@minnmpm.com entered name at signing as Mark Butler
2024-01-03 - 6:41:30 PM GMT

 Document e-signed by Mark Butler (mark.butler@minnmpm.com)
Signature Date: 2024-01-03 - 6:41:32 PM GMT - Time Source: server

 Agreement completed.
2024-01-03 - 6:41:32 PM GMT



Adobe Acrobat Sign



Minnesota Paving and Materials
1905 3rd Avenue
Mankato, MN 56001

O 507 625 4848
F 507 625 4907

www.minnmpm.com

December 14, 2023

Nicollet County Property Services
501 South Minnesota Avenue
St. Peter, MN 56082

Via email to: spencer.crawford@co.nicollet.mn.us

RE: New Ulm Quartzite Quarries Conditional Use Permit Renewal

Dear Planning Commission,

Minnesota Paving and Materials (New Ulm Quartzite Quarries) request approval for renewal of a Conditional Use Permit for mineral extraction, processing and stockpiling, including asphalt hot mix and concrete batch plants. The following is a list of additional information as required.

1. A description of vehicles, machinery and materials used on site, including hot mix plants.

1 portable hot mix asphalt plant, 3 front end loaders, 2 skid steers, 1 water truck, 1 maintenance truck, 2 personnel pick-ups, 1 man lift, 1 fork lift, 1 primary jaw crusher, 1 primary cone crusher, 1 secondary cone crusher, 1 tertiary crusher, 1 triple deck screen (horizontal), 1 triple deck screen (inclined), 1 single deck screen, 1 fine washer, 18 plant conveyors, 12 portable stackers

2. Estimated number of trips to the facility per day.

An estimated 30k-40k trips are made annually to the facility for MPM Aggregate and HMA operations.

3. Dust, noise and odor control measures.

Dust on haul roads is controlled by water trucks, calcium chloride and soybean oil. Stockpiles are controlled by water cannons. Conveyors, crushers and bins are controlled by spray bars. The berm and trees along the perimeter help to contain dust and noise, which will improve as the quarry is mined deeper. We employ white noise back-up alarms in our equipment, along with required guarding and other fabricated shielding to dampen the noise. MPM utilizes a cherry scented additive while producing hot mix asphalt to control the odor. The mine site is also regulated by MSHA and MPCA standards and requirements.

4. A copy of all state and federal permits, including the NPDES permit.

ATTACHED

5. A copy of the Storm Water Pollution Prevention Plan (SWPPP).

ATTACHED

ATTACHMENT B
Submitted by Applicant

6. The reclamation plan on file with the county remains unchanged.

On file with Nicollet County

7. List of hazardous materials stored or used on site.

Refer to the SPCC plan.

8. An explanation of how waste and hazardous materials are disposed of.

Solid waste is contained within dumpsters and garbage cans. This is picked up as needed and taken to a waste facility as necessary. Non-hazardous liquid waste from chemical toilets is collected weekly when we are operating. Hazardous materials are picked up by either OSI or Safety Kleen. Vehicle and equipment maintenance fluids are contained in appropriate containers within the shop.

9. Dates and hours of operation.

ACTIVITIES	DESCRIPTION	HOURS OF OPERATION
Drilling and Blasting, Quarry Mining and Primary (Plant 1) Processing	Extraction of raw material from the earth and initial crushing of material.	Monday-Saturday 6:00am – 8:00pm 5:30am – 6:00am warm up period 8:00pm – 8:30pm shut down period
Secondary (Plant 2) and Tertiary (Plant 3) Processing	Additional processing stages to further crush and screen the material to size.	Monday – Saturday 24 Hours a day
Scale Retail Operational Hours	Loading out of material to end users	Monday – Friday 6:30am – 6:30pm Saturday 6:30am – 1:00pm
Asphalt Plants Operations	Asphalt production at plants operated by MPM	Monday – Friday 6:00am – 8:00pm 5:30am – 6:00am warm up period 8:00pm – 8:30pm shut down period

*Deviation is requested for emergencies. Project specific deviation is also requested upon approval.

10. Complaint management procedures, including the primary contact.

The primary contact for complaints shall be:

Mark Butler
mark.butler@minnmpm.com
507-351-3213

As complaints are received MPM will work together with Nicollet County and other required to parties to resolve the matter in a timely fashion.

Along with the mitigation measures in place for dust, noise and odor; MPM maintains two seismographs located along the north side of Hwy 14 in Fleck's subdivision and MN Valley Lutheran High School.



MINERAL EXTRACTION CHECKLIST

The following information is required to be provided for a conditional use permit application. Additional information may be required, as determined necessary by the Zoning Administrator and per Section 724 of the Zoning Ordinance.

NUMBER OF ACRES AS FOLLOWS:

103 Acres being mined or used for mining purposes (stockpiles, equipment storage, haul roads, etc).
97 Acres permitted and remaining to be mined in future phases.
N/A Acres where land reclamation has occurred.
20 Acres not permitted to be mined (non-mining related acres).
380 Total acreage of property.

TONNAGE OF MATERIAL REMOVED:

2,307,751 Tons of material removed from site over the past three (3) years, or since last permit renewal date.

Include a copy of the renewed **BOND** or **LETTER OF CREDIT** for the site. Continuation letters must to be sent to the Property Services Office on years when the permit is not scheduled for renewal.

PLEASE PRINT:

Property Owner: **Minnesota Paving and Materials (NUQQ)**

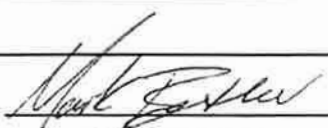
Owner's Address: **45755 571st Lane, New Ulm, MN 56073**

Contractor working the site: **same**

Contractor's address: **same**

Contractor's phone number: **651-353-9958**

Date: **12-14-2023**

Applicant (Landowner or Contractor) Signature: 

Parcel No. **040351705**

Map No. **1035400029**

Revised 11-29-18 JH

Mission Statement
Providing efficient services
with innovation and accountability.

Leadership. Efficiency.
Accountability. Innovation.
Integrity.

Vision Statement
Setting the standard for providing superior and
efficient county government services through
leadership, accountability and innovation to a
growing and diverse society.



National Pollutant Discharge Elimination System/State Disposal System

MNG490131

Permittee: OMG Midwest
Facility name: Minnesota Paving and Materials - Mankato
City or Township: Mankato, **County:** Blue Earth
Issuance date: September 20, 2023
Expiration date: May 31, 2027

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

The goal of this permit is to reduce pollutant levels in point source discharges and protect water quality in accordance with the U.S. Clean Water Act, Minnesota statutes and rules, and federal laws and regulations.

This permit is effective on the issuance date identified above. This permit expires at midnight on the expiration date identified above.

Signature: *Elise M. Doucette*

This document has been electronically signed.

Elise M. Doucette
Supervisor
Industrial Division

for the Minnesota Pollution Control Agency

Submit eDMRs

Submit via the MPCA e-Services at

https://rsp.pca.state.mn.us/TEMPO_RSP/Orchestrate.do?initiate=true

Submit WQ reports to:

Electronically: wq.submittals.mPCA@state.mn.us

Include *Water quality submittals form*:

<https://www.pca.state.mn.us/sites/default/files/wq-wwprm7-71.docx>

Questions on this permit?

- For eDMR and other permit reporting issues, use the directory listed at the bottom of the DMR page:
<https://www.pca.state.mn.us/business-with-us/discharge-monitoring-reports>
- For specific permit requirements, contact your compliance staff: <https://www.pca.state.mn.us/business-with-us/wastewater-compliance-and-enforcement-staff>
- Wastewater Permit Program general questions, contact: MPCA, 651-282-6143 or 800-657-3938

Table of Contents

	Page
1. Summary of stations and station locations	3
2. Permit requirements	5
3. Submittal action summary.....	36
4. Limits and monitoring.....	38

1. Summary of stations and station locations

Station	Type of station	Local name	PLS location
LA 001	MNG49 Wastewater	Sioux Rock Quarry (J1-1442)	T107N, R35W, S08, SE Quarter
LA 002	MNG49 Wastewater	Paulson Pit (J1 1442)	T108N, R27W, S29
LA 003	MNG49 Wastewater	Davis Pit (J1-1442)	T110N, R26W, S28, SE Quarter
LA 004	MNG49 Wastewater	Dundas Wash Plant (J1 1442)	T111N, R20W, S32, NW Quarter
LA 008	MNG49 Wastewater	Evans Jones Pit (J1-1442)	T109N, R29W, S21, NW Quarter
LA 009	MNG49 Wastewater	Lundin-Hansen (J1-1442)	T110N, R26W, S33, NE Quarter
LA 010	MNG49 Wastewater	Annandale Pit (D1-2951)	T121N, R28W, S14, SE Quarter
LA 012	MNG49 Wastewater	Boutwell Pit (J1-1442)	T109N, R26W, S08, NE Quarter
LA 013	MNG49 Wastewater	Hinkemeyer Pit (J1-1442)	T36N, R29W, S33, NW Quarter
LA 014	MNG49 Wastewater	St. Cloud Pit (St Cloud Maintenance Shop) (J1-1442)	T124N, R28W, S36, NE Quarter
LA 015	MNG49 Wastewater	Stay Pit (J1-1442)	T36N, R28W, S11, SE Quarter
LA 016	MNG49 Stormwater, Non-discharging	Swenson-Gilbertson (J1-1442)	T110N, R26W, S33, SW Quarter
LA 017	MNG49 Wastewater	Undersander Pit (J1-1442)	T124N, R29W, S23, SE Quarter
LA 018	MNG49 Wastewater	Vivant Pit (J1-1442)	T41N, R27W, S12
LA 019	MNG49 Wastewater	04603 Becker Asphalt Plant (D1-2951)	T33N, R28W, S18, NE Quarter
LA 020	MNG49 Wastewater	04602 Lakeland Asphalt Plant (D1-2951)	T29N, R20W, S33, SE Quarter
LA 021	MNG49 Wastewater	04605 Umore Asphalt Plant (D1-2951)	T115N, R19W, S34, SW Quarter
LA 022	MNG49 Wastewater	04604 Waite Park Plant (D1-2951)	T124N, R28W, S18, SW Quarter
LA 023	MNG49 Wastewater	04701 Kasota Asphalt Plant (D1-2951)	T109N, R26W, S04, NW Quarter
LA 025	MNG49 Wastewater	Spear Pit (J1-1442)	T109N, R29W, S21, SE Quarter
LA 026	MNG49 Wastewater	Erickson Pit (J1-1442)	T107N, R27W, S14, SE Quarter
LA 027	MNG49 Wastewater	Owatonna Quarry (J2-1422)	T108N, R20W, S33, SE Quarter
LA 030	MNG49 Wastewater	NUQQ West Outfall (J2-1429)	T110N, R30W, S34, SW Quarter
LA 031	MNG49 Wastewater	NUQQ East Outfall (J2-1429)	T109N, R30W, S02, SW Quarter
LA 033	MNG49 Wastewater	Mankato Maintenance Shop (J1-1442)	T108N, R26W, S06, SE Quarter
LA 035	MNG49 Wastewater	Cedar Grove Pit (J1-1442)	T108N, R27W, S33, NE Quarter
SD 022	Stormwater, Non-specific Runoff	Kasota Quarry (J1 1442)	T109N, R26W, S19

SD 031	MNG49 Dewatering	Sioux Rock Quarry (J1-1442)	T107N, R35W, S08, SE Quarter
SD 052	MNG49 Dewatering	Dundas Wash Plant (J1-1442)	T111N, R20W, S32, SW Quarter
SD 071	MNG49 Dewatering	Owatonna Quarry (J2-1422)	T108N, R20W, S33, SE Quarter
SD 073	MNG49 Dewatering	Sioux Rock Asphalt, Cottonwood (D1 2951)	T107N, R35W, S08, SE Quarter
SD 081	MNG49 Dewatering	NUQQ West Outfall (J2-1429)	T110N, R30W, S35
SD 082	MNG49 Dewatering	NUQQ East Outfall (J2-1429)	T110N, R30W, S35
SD 083	Stormwater, Non-specific Runoff	Rogers Yard (J1-1442)	T120N, R23W, S11, SE Quarter

2. Permit requirements

SD 022	Stormwater, Non-specific Runoff	
		Surface Discharge: MNG49 Subsectors D1, J1, J2
	2.1.1	The Permittee shall submit an annual DMR: Due by 21 days after the end of each calendar year following permit issuance. [Minn. R. 7001.0150, Subp. 2(B)]
SD 031	MNG49 Dewatering	
		Surface Discharge: MNG49 Dewatering from Construction Sand and Gravel (1442)
	2.2.1	The Permittee shall submit a quarterly DMR: Due by 21 days after the end of each calendar quarter following permit issuance. [Minn. R. 7001.0150, Subp. 2(B)]
	2.2.2	The Permittee shall submit an annual DMR: Due by 21 days after the end of each calendar year following permit issuance. [Minn. R. 7001.0150, Subp. 2(B)]
SD 052	MNG49 Dewatering	
		Surface Discharge: MNG49 Dewatering from Construction Sand and Gravel (1442)
	2.3.1	The Permittee shall submit a quarterly DMR: Due by 21 days after the end of each calendar quarter following permit issuance. [Minn. R. 7001.0150, Subp. 2(B)]
	2.3.2	The Permittee shall submit an annual DMR: Due by 21 days after the end of each calendar year following permit issuance. [Minn. R. 7001.0150, Subp. 2(B)]
SD 071	MNG49 Dewatering	
		Surface Discharge: MNG49 Dewatering from Subsector J2 (1411, 1422, 1423, 1429)
	2.4.1	The Permittee shall submit a quarterly DMR: Due by 21 days after the end of each calendar quarter following permit issuance. [Minn. R. 7001.0150, Subp. 2(B)]
	2.4.2	The Permittee shall submit an annual DMR: Due by 21 days after the end of each calendar year following permit issuance. [Minn. R. 7001.0150, Subp. 2(B)]
SD 073	MNG49 Dewatering	
		Surface Discharge: MNG49 Dewatering from Construction Sand and Gravel (1442)
	2.5.1	The Permittee shall submit a quarterly DMR: Due by 21 days after the end of each calendar quarter following permit issuance. [Minn. R. 7001.0150, Subp. 2(B)]
	2.5.2	The Permittee shall submit an annual DMR: Due by 21 days after the end of each calendar year following permit issuance. [Minn. R. 7001.0150, Subp. 2(B)]
SD 081	MNG49 Dewatering	
		Surface Discharge: MNG49 Dewatering from Subsector J2 (1411, 1422, 1423, 1429)
	2.6.1	The Permittee shall submit a quarterly DMR: Due by 21 days after the end of each calendar quarter following permit issuance. [Minn. R. 7001.0150, Subp. 2(B)]
	2.6.2	The Permittee shall submit an annual DMR: Due by 21 days after the end of each calendar year following permit issuance. [Minn. R. 7001.0150, Subp. 2(B)]
SD 082	MNG49 Dewatering	
		Surface Discharge: MNG49 Dewatering from Subsector J2 (1411, 1422, 1423, 1429)

	2.7.1	The Permittee shall submit a quarterly DMR: Due by 21 days after the end of each calendar quarter following permit issuance. [Minn. R. 7001.0150, Subp. 2(B)]
	2.7.2	The Permittee shall submit an annual DMR: Due by 21 days after the end of each calendar year following permit issuance. [Minn. R. 7001.0150, Subp. 2(B)]
SD 083	Stormwater, Non-specific Runoff	
		Surface Discharge: MNG49 Subsectors D1, J1, J2
	2.8.1	The Permittee shall submit an annual DMR: Due by 21 days after the end of each calendar year following permit issuance. [Minn. R. 7001.0150, Subp. 2(B)]
MNG490131	OMG Midwest Inc dba Minnesota Paving and Materials	
		Non-Metallic Mining and Associated Activities General Permit Requirements
	2.9.1	Applicability. [Minn. R. 7001]
	2.9.2	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. Asphalt production areas, also known as asphalt paving mixtures and blocks (SIC Code 2951), including portable 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. Recycling and storage of 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. F. Activities associated with the above facilities noted, including maintenance activities and facilities, unless otherwise prohibited in this permit. This Permit authorizes 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. The Permittee shall comply with the "Stormwater Discharge Design Requirements" chapter and the "Construction Activity Requirements" chapter of the MPCA Construction Stormwater (CSW) NPDES general permit (https://www.pca.state.mn.us/sites/default/files/wq-strm2-68a.pdf) when conducting construction activity and small construction activity. Earth disturbing activities conducted as a normal part of post-construction use of the permitted facility do not trigger the need for CSW permit coverage. The earth disturbing activity has to be part of a project to build, demolish, or replace a structure (e.g., building, road, pad, pipeline, transmission line) to trigger the need to comply with the CSW permit. Earth disturbance that is a normal part of the long-term use or maintenance of the property is not "active construction" and does not trigger the need for CSW permit coverage. [Minn. R. 7001]
	2.9.3	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. "Mine Pit Dewatering" means any water that is impounded or that collects in the mine and is pumped from the mine through the efforts of the mine operator. Uncontaminated groundwater and stormwater collecting in a low area in which

		there is a stormwater outlet for stormwater/seepage/drainage by gravity overflow shall not be considered mine pit dewatering. 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 and is not authorized under this permit. [Minn. R. 7001]
	2.9.4	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 managed compliant with this Permit. To be authorized under this permit, the following discharges must be collected, contained or infiltrate into the ground and Best Management Practices must be implemented to prevent contamination of groundwater: A. Aggregate 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 asphalt production areas, including portable 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 sawing stone or dust control on crushers, conveyors, associated equipment, stockpiles, and site roadways. I. Boiler blowdown and reverse osmosis reject. J. Low or high pressure steam curing. K. Noncontact cooling water used for dryer, pump, and air compressor cooling. For wastewater discharges listed above, see the Technology Based Effluent Limits - Non-Stormwater Discharges section of this permit for Wastewater Basin Design and Construction Requirements for newly constructed basins as of the issuance date of this permit. [Minn. R. 7001]
	2.9.5	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: A. Emergency fire-fighting activities. B. Fire hydrant and fire suppression system flushing. C. Potable water line flushing. D. Uncontaminated condensate from air conditioners, coolers, and other compressors and from the outside storage of refrigerated gases or liquids. E. Landscape watering provided all pesticides, herbicides and fertilizers have been applied in accordance with manufacturer's instructions. F. 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. G. Routine external building wash down that does not use detergents, solvents, or degreasers. H. Uncontaminated groundwater or spring water. I. Foundation or footing drains where flows are not contaminated. J. 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). [Minn. R. 7001]

2.9.6	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. [Minn. R. 7001]
2.9.7	Activities Not Covered/Limitations on Coverage. [Minn. R. 7001]
2.9.8	This permit does not authorize the discharge from the following activities except as authorized in the Applicability Section of this permit: A. Dewatering of mine or quarry areas other than those under Subsector J1 and J2. B. 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. C. Contaminated groundwater discharges. D. Petroleum refinement. E. Manufacturing of asphalt or asphalt emulsions. F. Industrial sand mines (SIC 1446) that utilize HF flotation. G. Dredging or filling of wetlands or other surface waters of the state. H. Discharges of hazardous substances, lubricants, fuel leaks, or fuel spills. I. 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. [Minn. R. 7001]
2.9.9	This permit does not authorize new or expanded discharges that the MPCA determines are or may be discharged at a level which will cause, have the reasonable potential to cause, or contribute to a violation of water quality standards consistent with the requirements of 40 CFR 122.4(i) and 122.44(d)(1)(i). This includes the discharge to groundwater where pollutants in the discharge reach surface waters and have reasonable potential to exceed applicable surface water quality standards. [40 CFR pt. 122, 4(i)]
2.9.10	This permit does not authorize existing discharges that the MPCA determines are or may be discharged at a level which will cause, have the reasonable potential to cause, or contribute to a violation of water quality standards consistent with the requirements of 40 CFR 122.44. This includes the discharge to groundwater where pollutants in the discharge reach surface waters and have reasonable potential to exceed applicable surface water quality standards. [40 CFR pt. 122, 44]
2.9.11	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. [Minn. R. 7001]
2.9.12	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. [Minn. R. 7001]
2.9.13	Facilities located within the exterior boundaries of an Indian reservation must apply to the U.S. EPA for coverage under the multi-sector general permit or for an individual permit. Note: "Indian country is defined under 18 USC Â§1151 and includes all lands within the exterior boundaries of federally recognized Indian reservations and on lands held in federal trust status. Facilities that currently do not have storm water discharge permit coverage and

		are located within Indian Country shall contact the United States Environmental Protection Agency (EPA) to apply for permit coverage. For existing discharges covered under a NPDES permit from EPA, discharges will continue to be covered by a NPDES permit. Dischargers that previously held permit coverage under previous versions of this permit after September 30, 2001, are no longer eligible for coverage under this permit and must contact EPA to apply for permit coverage." [Minn. R. 7001]
	2.9.14	This permit does not authorize discharges to calcareous fens listed in Minn. R. 7050.0335. [Minn. R. 7007.0335]
	2.9.15	Mine site dewatering discharges from Subsectors J1 and J2 that discharge directly to the following receiving waters are not authorized by this permit: A. Outstanding Resource Value Waters (ORVWs) as defined by Minnesota Rules 7050.0335 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. 2 and 4); and C. DNR-posted fish-spawning areas. [Minn. R. 6264.0125]
	2.9.16	Authorization. [Minn. R. 7001]
	2.9.17	Permit Application. Owners and operators of a site or sites with covered facility activities identified in this permit, and who provide a complete and approvable application for a permit, are eligible for coverage under this permit for those activities. [Minn. R. 7001]
	2.9.18	Notice of Coverage. [Minn. R. 7001]
	2.9.19	Permittees requesting initial coverage are covered under this permit when the MPCA notifies them in writing of this coverage. [Minn. R. 7001]
	2.9.20	Additional sites may be covered under this permit provided that the new site(s) meet all applicability criteria 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. [Minn. R. 7001]
	2.9.21	Requiring an Individual Permit. [Minn. R. 7001]
	2.9.22	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. Any interested person may petition the MPCA commissioner to take action under 40 CFR Â§ 122.28(b)(3)(i) to require a facility covered by the general permit to apply for and obtain an individual permit. [Minn. R. 7001.0210, subp. 6]
	2.9.23	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. [Minn. R. 7001]
	2.9.24	This general permit does not cover industrial sand mining activities (SIC Code 1446) that: A. Meet or exceed the thresholds for mandatory environmental review and the MPCA determines the operations, emissions, activities, discharges, or facilities of the permit applicant or permittee have characteristics creating the potential for significant environmental effects; or B. The MPCA determines the need for site-specific permit requirements including, but not limited to, groundwater monitoring, additional surface discharge monitoring, hydrogeological study, etc. which are beyond those contained in this permit in order to protect waters of the state. If the MPCA determines that A or B apply, a permit applicant or Permittee shall obtain coverage under an individual permit for the facility site. Sites that are required to obtain

		individual permit coverage, at the Permittee's request, may be reviewed for general permit eligibility following the first full term of individual permit coverage. [Minn. R. 7001]
	2.9.25	Notice of Temporarily Inactive Site(s). [Minn. R. 7001]
	2.9.26	The Permittee(s) must ensure that permanent stormwater Best Management Practices (BMPs) are in place if the site is temporarily inactive. [Minn. R. 7001]
	2.9.27	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 the Monitoring Requirements section of the permit for the calendar year the site becomes active. [Minn. R. 7001]
	2.9.28	Notice of Inactive Site(s). [Minn. R. 7001]
	2.9.29	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. [Minn. R. 7001]
	2.9.30	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. BMPs designed to decompose on site (such as some compost logs) may be left in place. 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 sufficiently 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. [Minn. R. 7001]
	2.9.31	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 final stabilization requirements; or B. There is no longer a discharge of pollutants to waters of the state, including groundwater, from activities covered by this permit; or C. The Permittee supplies the name and contact information for the owner or operator that is responsible for the site. [Minn. R. 7001]
	2.9.32	Water Quality Based Effluent Limits. [Minn. R. 7001]
	2.9.33	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. [40 CFR pt. 122, 44]
	2.9.34	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. [Minn. R. 7050, Minn. R. 7060]
	2.9.35	The Permittee shall limit and control the use of materials at the facility that may cause exceedances of surface water and groundwater standards specified in Minnesota Rules, chs. 7050 and 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. [Minn. R. 7050, Minn. R. 7060]
	2.9.36	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. [Minn. R. 7001]
	2.9.37	Floating solids or visible foam shall not be discharged in other than trace amounts.

		[Minn. R. 7001]
	2.9.38	Oil or other substances shall not be discharged in amounts that create a visible color film. [Minn. R. 7001]
	2.9.39	Any outlet pipe, culvert or hose outlets for the discharge shall be located at ground level. 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. [Minn. R. 7001]
	2.9.40	All water from dewatering or basin draining activities must be discharged in a manner that does not cause nuisance conditions, flooding on nearby properties, erosion in receiving channels or on downslope properties, or inundation in a wetland causing adverse impact to the wetland. [Minn. R. 7001]
	2.9.41	Special Requirements. [Minn. R. 7001]
	2.9.42	For stormwater discharges with a discharge location that flows to and is within one mile of Outstanding Resource Value Waters (ORVWs) as defined in Minn. R. 7050.0335, subp. 1, 2, 3, and 4 (not including calcareous fens listed in Minn. R. 7050.0335 & Minn. R. 7050.0470) and trout waters as listed in Minn. R. 6264.0050, subp. 2 and 4: A. The Permittee shall develop and implement stormwater control measures, including BMPs that restrict the facility industrial stormwater discharges to the extent necessary to preserve the existing high quality, or to preserve the wilderness, scientific, recreational, or other special characteristics that make the water an Outstanding Resource Value Water. In addition, a stormwater intervention limit value of 65 mg/L for Solids, Total Suspended (TSS) applies to the discharge at a stormwater monitoring location, instead of 100 mg/L as specified in the 'Stormwater Limits and Monitoring Intervention Limits' section of this Permit. If the Permittee has a waiver from the requirements to conduct benchmark monitoring in accordance with the Technology Based Effluent Limits - Stormwater Discharges section of this permit, the benchmark value does not apply. B. If the discharge is to a trout stream, BMPs shall also be designed and implemented to protect the water quality from excess temperature increases. C. If the discharge is to a trout lake, BMPs shall also be designed and implemented to protect the water quality from excess phosphorus increases. D. If the discharge is to a wetland, the Permittee shall also comply with the requirements of Minn. R. 7050.0186 WETLAND STANDARDS AND MITIGATION. [Minn. R. 7050]
	2.9.43	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 prior to the impacts to the wetland. [Minn. R. 7001]
	2.9.44	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 MPCA that address the site impacts, whereas a non-jurisdictional determination does not address site impacts. [Minn. R. 7001]
	2.9.45	If there are impacts from the site that are not addressed in one of the permits addressed in the Special Requirements section of this permit 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: A. Avoid all significant adverse impacts to wetlands from site discharges. B. Minimize any unavoidable impacts to wetlands from site discharges. C. 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. [Minn. R. 7001]
	2.9.46	If a site discharges to a water of the state that appears on the current U.S. Environmental Protection MPCA (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 a 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. [Minn. R. 7001]
	2.9.47	Technology Based Effluent Limits - Stormwater Discharges. [Minn. R. 7001]
	2.9.48	Stormwater Management Devices. [Minn. R. 7001]
	2.9.49	The Permittee is authorized to use industrial stormwater ponds, sedimentation basins, and/or infiltration devices for stormwater management. [Minn. R. 7001]
	2.9.50	Industrial stormwater ponds, sedimentation basins, and/or infiltration devices shall not be located in areas that receive direct discharges from permanent or stationary vehicle fueling tanks (aboveground or underground storage tanks) and maintenance activity areas (shops), except where adequate secondary containment is provided as required under the SPCC Rule, and/or the basin is designed specifically to satisfy the federal SPCC Rule. Spill prevention and response BMPs shall be implemented in areas where mobile refuelers transfer product. [Minn. R. 7001]
	2.9.51	When wastewater from authorized activities is co-mingled with stormwater, it is considered wastewater, and a surface water discharge is not authorized under this permit. This does not include stormwater co-mingling with mine dewatering from Subsector J1 and J2 facilities, which is approved for a surface water discharge under this permit. [Minn. R. 7001]
	2.9.52	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 (based on National Oceanic and Atmospheric Administration Atlas 14, Volume 8 (NOAA Atlas 14, Volume 8)), 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 unauthorized non-stormwater discharges to surface waters. This waiver is for monitoring only; effluent limits still apply to the discharge and Permittees must maintain compliance with the limits. This waiver is only effective for the term of the permit. Permittees must reapply for the waiver every permit term. [Minn. R. 7001]
	2.9.53	Erosion and Sediment Control Practices. [Minn. R. 7001]
	2.9.54	Sediment control practices must be established on all down-gradient perimeters and be located up-gradient of any buffer zones. The perimeter sediment control practice must be in place 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). These practices shall remain in place until the site has been stabilized. [Minn. R. 7001]
	2.9.55	The Permittee shall re-install all sediment control practices that have been adjusted or removed to accommodate short-term activities such as clearing or grubbing, or passage of vehicles, immediately after the short-term activity has been completed. Short-term activities shall be completed as quickly as possible. Re-installation of sediment control practices shall be completed no later than before the next precipitation event, even if the short-term activity is not complete. [Minn. R. 7001]
	2.9.56	The Permittee(s) shall plan for and implement appropriate BMPs such as 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 project site before work begins. [Minn. R. 7001]

2.9.57	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 any natural buffers, surface water, or stormwater conveyances such as curb and gutter systems, or conduits and ditches. [Minn. R. 7001]
2.9.58	Vehicle Tracking. 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 within 24 hours of discovery. The MPCA Vehicle Tracking factsheet may be used as guidance in BMP development: http://www.pca.state.mn.us/index.php/view-document.html?gid=7419 . [Minn. R. 7001]
2.9.59	Good Housekeeping. 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. [Minn. R. 7001]
2.9.60	BMP Maintenance. [Minn. R. 7001]
2.9.61	The Permittee shall maintain all BMPs identified in the Pollution Prevention Plan (Plan) and implemented at the facility, to ensure BMP effectiveness. [Minn. R. 7001]
2.9.62	The Permittee shall develop a schedule for preventive maintenance of all BMPs. The schedule shall be stored with the Plan. [Minn. R. 7001]
2.9.63	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 the 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 maintain it with the Plan. [Minn. R. 7001]
2.9.64	The Permittee shall record dates of all maintenance and repairs. The Permittee shall maintain these records with the Plan. [Minn. R. 7001]
2.9.65	All silt fences must be repaired, replaced, or supplemented when they become nonfunctional or the sediment reaches 1/2 of the height of the device. These repairs must be made within 24 hours of discovery, or as soon as field conditions allow access. [Minn. R. 7001]
2.9.66	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). For sediment releases to surface waters, the release must be reported to the MPCA/DNR. The sediment shall be removed from the surface water if approved by the DNR. [Minn. R. 7001]
2.9.67	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. [Minn. R. 7001]
2.9.68	Spills and Leaks. [Minn. R. 7001]
2.9.69	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 Prevention Plan (Plan). 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 800-422-0798 (toll free) or 651-649-5451 (metro area) per Minn. Stat. Section 115.061. [Minn. Stat. ch. 115]
	2.9.70	Subsector D1 - Asphalt Production - Additional Spills and Leaks Requirements. [Minn. R. 7001]
	2.9.71	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. [Minn. R. 7001]
	2.9.72	Subsector E2 - Ready-Mix and Other Concrete Operations - Additional Spills and Leaks Requirements. [Minn. R. 7001]
	2.9.73	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. [Minn. R. 7001]
	2.9.74	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. [Minn. R. 7001]
	2.9.75	The Permittee shall also prevent the exposure of fine granular solids (cement, fly ash, kiln dust, etc.) to stormwater, where practicable, by storing these materials in enclosed silos, hoppers, buildings, and under other coverings. [Minn. R. 7001]
	2.9.76	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. [Minn. R. 7001]
	2.9.77	Technology Based Effluent Limits - Non-Stormwater Discharges. [Minn. R. 7001]
	2.9.78	Wastewater Basin Design and Construction Requirements. [Minn. R. 7001]
	2.9.79	When constructing new (as of the issuance date of this permit) containment basins to infiltrate authorized non-stormwater discharges, not including uncontaminated scale deck wash water that does not use detergents, solvents, or degreasers, wash water associated with cleaning of mobile equipment that does not use detergents, solvents, or degreasers and/or waters used for sawing stone or dust control on crushers, conveyors, associated equipment, stockpiles, and site roadways, of this permit from Subsector J1 and J2 activities, it shall: A. Have at least sufficient capacity to contain all wastewater discharges so as to prevent overflow. B. Be constructed to contain the bounce from precipitation and stormwater runoff resulting from a 10-year, 24-hour storm event. Any overflow of the basin shall not discharge to surface water or any storm sewer system. C. Not be constructed in areas that receive direct discharges from permanent or stationary vehicle fueling tanks (underground or aboveground storage tanks) and maintenance activity areas (shops). Spill prevention and response BMPs shall be implemented in areas where mobile refuelers transfer product. [Minn. R. 7001]
	2.9.80	When constructing new (as of the issuance date of this permit) containment basins to infiltrate authorized non-stormwater discharges from Subsector E2 activities, it shall: A. Be designed consistent with accepted engineering practices. Designs shall be approved by a professional engineer or other licensed professional. B. Be constructed and maintained to allow for infiltration of wastewater. Long term soil infiltration rates for new infiltration devices shall not be greater than 1.63 inches per hour unless pretreatment practices are implemented prior to infiltration. C. Be constructed to allow for maximum separation distance from groundwater with a minimum of 3 feet between the bottom of the impoundment and the seasonal high water table. D. Have at least sufficient capacity to contain all wastewater discharges so as to prevent

		overflow. E. Be constructed to contain the bounce from precipitation and stormwater runoff resulting from a 10-year, 24-hour storm event. Any overflow of the basin shall not discharge to surface water or any storm sewer system. F. Not be constructed in areas with standing water or areas that receive direct discharges from permanent or stationary vehicle fueling tanks (underground or aboveground storage tanks) and maintenance activity areas (shops). Spill prevention and response BMPs shall be implemented in areas where mobile refuelers transfer product. The Permittee shall maintain design documentation to demonstrate containment basins meet the requirements of (A) through (F). [Minn. R. 7001]
	2.9.81	If a Permittee has indicated all stormwater and/or process wastewater is contained and/or infiltrates on site, the site is prohibited from discharging to surface waters and will not be required to submit Discharge Monitoring Reports (DMRs). The site will be assigned a Land Application (LA) designation in lieu of a Surface Discharge (SD) designation. [Minn. R. 7001]
	2.9.82	Karst Topography. [Minn. R. 7001]
	2.9.83	New Basins. New infiltration devices for authorized non-stormwater discharges are prohibited within 1000 feet up-gradient or 100 feet downgradient of active karst features. [Minn. R. 7001]
	2.9.84	Existing Basins. The design and construction of containment basins shall include additional or different measures as necessary (e.g. impervious liner in pond bottom) to assure compliance with surface and groundwater standards in Minn. R. chs. 7050 and 7060 and to ensure protection of drinking water supply management areas (see Minn. R. 4720.5100, subp. 13). These measures shall be identified in the Pollution Prevention Plan. [Minn. R. 7001]
	2.9.85	Subsector J1 and J2 - Mine Pit Dewatering to Surface Waters. [Minn. R. 7001]
	2.9.86	Permittees are authorized to discharge mine site dewatering flow to surface waters if the following conditions are met: A. Discharges only from Subsector J1 and J2 facilities. B. Discharges meet the effluent limits applied in this permit. C. The dewatering discharges do not co-mingle with other process wastewater. D. The dewatering discharges are not to ORVWs, DNR-designated trout waters, and/or DNR-posted fish-spawning areas. E. The Permittee has documented in their Pollution Prevention Plan location and initial flow estimates for surface discharge stations. [Minn. R. 7001]
	2.9.87	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. [Minn. R. 7001]
	2.9.88	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. [Minn. R. 7001]
	2.9.89	The Permittee(s) must ensure that discharge points are adequately protected from erosion and scour. The discharge must be dispersed over natural riprap, sand bags, plastic sheeting, or other accepted energy dissipation measures. Adequate sedimentation control measures are required for discharge water that contains suspended solids. [Minn. R. 7001]
	2.9.90	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. [Minn. R. 7001]
	2.9.91	Subsector D1 - Asphalt - BMPs for Wet Scrubber Wastewater. [Minn. R. 7001]
	2.9.92	This permit authorizes stormwater discharges from asphalt production areas (SIC Code 2951) and/or stormwater discharges from the installation, construction, and/or operation of wet scrubbers at asphalt production plants. This permit does not authorize the discharge of asphalt production wet scrubber wastewater to surface waters or to groundwater. Any discharge to surface water will require an individual NPDES permit. [Minn. R. 7001]

2.9.93	Wastewater from asphalt production wet scrubbers shall be held within pipes, aboveground tanks or lined impoundments. 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. [Minn. R. 7001]
2.9.94	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. [Minn. R. 7001]
2.9.95	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 seasonal 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. [Minn. R. 7001]
2.9.96	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. [Minn. R. 7001]
2.9.97	PVC and HDPE liner systems shall be designed and installed in general accordance with the most recent version of MPCA guidance documents High Density Polyethylene Liner Guidance (June 2011) or Polyvinyl Chloride Liner Guidelines (May 2011). [Minn. R. 7001]
2.9.98	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. [Minn. R. 7001]
2.9.99	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. [Minn. R. 7001]
2.9.100	PVC and HDPE liner panels shall be laid out to minimize seams, with an overlap of four to size 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. [Minn. R. 7001]
2.9.101	The design of a reinforced Portland cement concrete liner shall be in accordance with the American Concrete Institute (ACI) Manual of Concrete Practice. [Minn. R. 7001]
2.9.102	The Permittee shall inspect each impoundment for cracks or other failures, at least once each operating year. This inspection shall be conducted after the spring thaw and before the start of the asphalt plant operating season. In addition: A. PVC and HDPE lined impoundments shall complete a water balance test annually after the spring thaw and before the start of the asphalt plant operating season. The water balance test shall be completed in accordance with the MPCA "Prefill and Water Balance Criteria" (December 2010). B. Concrete lined impoundments shall complete water tightness testing at least once per 5 years (once per permit cycle). Water tightness testing for concrete impoundments shall be completed in accordance with the most recent version of ACI 350.1 "Specification for Tightness Testing of Environmental Engineering Concrete Containment Structures."

		Impoundments that do not pass the water balance or tightness testing may not be placed into service until a passing result is achieved; this may require identifying and repairing problem areas of the impoundment and repeating the testing. 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. [Minn. R. 7001]
	2.9.103	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. [Minn. R. 7001]
	2.9.104	The Permittee shall divert surface water runoff around impoundments, prevent erosion, and protect the structural integrity of exterior embankments from failure. [Minn. R. 7001]
	2.9.105	The Permittee shall maintain impoundments during the winter so that ice layers and frost action do not damage the liner effectiveness and integrity. [Minn. R. 7001]
	2.9.106	Sediments that accumulate in 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 asphalt mixture. The Permittee may use one of the following options for sediment disposal if the MPCA authorizes this specific in writing: A. Leave in-place; B. Use as clean fill; or C. Land spread. 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. [Minn. R. 7001]
	2.9.107	The Permittee may dispose of 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. [Minn. R. 7001]
	2.9.108	Asphalt Ingredients, Burner Fuels and Chemical Additives. If the Permittee proposes to use asphalt ingredients, burner fuels and/or chemical additives other than those designated below, at an 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 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. Freemont 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 asphalt plant scrubber operations. P. Fines from asphalt fabric filter operations. Q. Silicone. [Minn. R. 7001]
	2.9.109	Subsector E2 - Ready-Mix and Other Concrete Operations Discharges to Groundwater. [Minn. R. 7001]
	2.9.110	This permit section is intended to cover process wastewater discharges from concrete product operations. Authorized discharges to groundwater specified in the Applicability Section of this permit 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). [Minn. R. 7001]
	2.9.111	Containment basins shall be constructed in compliance with this permit. [Minn. R. 7001]
	2.9.112	Authorized E2 activity discharge to new containment basins (as of the issuance date of this permit) must meet the following conditions: A. be constructed to allow for maximum separation distance from groundwater with a minimum of 3 feet between the bottom of the impoundment and the seasonal high water table. B. If the wastewater pH of authorized discharges from E2 activities is outside the range of 6.0-9.0 Standard Units (SU), the wastewater must also be passed through an extra soil zone, mixed with other authorized process waters or rinse waters, or held in a lined or sealed basin to prevent infiltration in order to bring the pH within the range of 6.0-9.0 SU before the wastewater mixes with groundwater. [Minn. R. 7001]
	2.9.113	Authorized E2 activity discharge to existing containment basins must meet the following conditions: A. If the wastewater pH of authorized discharges from E2 activities is outside the range of 6.0-9.0 Standard Units (SU), the wastewater must also be passed through a soil zone, mixed with other authorized process waters or rinse waters, or held in a lined or sealed basin to prevent infiltration in order to bring the pH within the range of 6.0-9.0 SU before the wastewater mixes with groundwater. [Minn. R. 7001]
	2.9.114	Pollution Prevention Plan (Plan). [Minn. R. 7001]
	2.9.115	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. Minnesota Guide to Pollution Prevention Planning: https://www.pca.state.mn.us/quick-links/minnesota-guide-pollution-prevention-planning. [Minn. R. 7001]
	2.9.116	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. [Minn. R. 7001]
	2.9.117	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. [Minn. R. 7001]

2.9.118	A Plan shall be used by the Permittee to document all BMPs used to comply with all control measures required in the Technology Based Effluent Limits sections 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 a list of all structural and non-structural BMPs designed and implementation at the site. [Minn. R. 7001]
2.9.119	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 materials and 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. J. Chemical additives/dust suppressant use. [Minn. R. 7001]
2.9.120	The Plan for each site shall include an inventory of all chemical additives currently used to treat wastewater and/or stormwater including chemical dust suppressants. This inventory shall include: A. The name of the additive. B. The process for which the additive will be used. C. The proposed method of application, application frequency, and daily average and maximum rates of use. D. The date of MPCA approval. MPCA approval is required for any additives that are new, increasing in usage, or not previously approved. See the Total Facilities Requirements section of this permit and go to the chemical additive webpage at http://www.pca.state.mn.us/index.php/water/water-types-and-programs/wastewater/wastewater-technical-assistance/chemical-additive-approvals.html to find the documents necessary to complete the approval process. [Minn. R. 7001]
2.9.121	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, which 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, designated trout waters, and wetlands within one mile of the site (Minn. R. 7050.0335, 6264.0050, and 7050.0420). D. Directions of stormwater flow indicated by arrows (including stormwater that is contained/infiltrated on site). E. Location of all discharge points. F. Location of all overflow points from control devices. G. Topography of the area. H. Location of all activities and materials. I. Location of all structural BMPs. J. Location and description of any non-stormwater discharges. K. Dewatering points. L. Water supply wells.

		M. Surface water supply intakes.
		Portable sites can meet the requirements of (G) through (M) above by developing general plant configuration maps. [Minn. R. 7001]
	2.9.122	The Permittee shall review the Plan at least annually and modify the Plan, if: A. 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. B. The Permittee has identified a monitoring location from which the discharge flows to, and is within one mile of, an impaired water. C. A routine inspection, compliance evaluation, or visual inspection identified deficiencies in the Plan and/or BMP. D. Additional stormwater and/or wastewater control measures and BMPs are necessary to meet applicable water quality standards or to address exceedances of intervention limits. E. 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 the Total Facilities Requirements section of this permit. [Minn. R. 7001]
	2.9.123	The Plan must be kept at the site when the site is active. If there is no office located on-site, electronic access of the Plan is acceptable. The Plan must be available to the MPCA within 72 hours of a request for review. [Minn. R. 7001]
	2.9.124	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. [Minn. R. 7001]
	2.9.125	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. [Minn. R. 7001]
	2.9.126	Records of all inspections conducted in accordance with permit requirements shall be maintained within the Plan. [Minn. R. 7001]
	2.9.127	Subsector D1 - Asphalt - Additional Plan Requirements. [Minn. R. 7001]
	2.9.128	Asphalt facilities (Subsector D1) must also identify: A. Petroleum storage. B. Fuel Storage. C. Recycled Asphalt Pavement Storage. D. Aggregate Storage. E. Recycled concrete, concrete block and brick crushing and storage. F. Cold Patch Storage. G. Release agent storage and application. [Minn. R. 7001]
	2.9.129	Subsector E2 - Ready-Mix Operations - Additional Plan Requirements. [Minn. R. 7001]
	2.9.130	Ready-Mix Operations (Subsector E2) must also identify: A. Bag house or other dust control device. B. Recycle/sediment pond, clarifier, or other device used for the treatment of process wastewater. C. The areas that drain to the treatment device. D. Description of multiple locations of ready-mix and other concrete operations, if applicable. [Minn. R. 7001]
	2.9.131	Inspection Reports. [Minn. R. 7001]
	2.9.132	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. [Minn. R. 7001]

2.9.133	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. [Minn. R. 7001]
2.9.134	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 the Pollution Prevention Plan. 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. Findings of inspections, including recommendations for corrective actions. G. Corrective actions taken (including dates, times, and party completing maintenance activities). [Minn. R. 7001]
2.9.135	In addition to the inspection requirements of this Section, separately from the required annual runoff event inspection, 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. [Minn. R. 7001]
2.9.136	Subsector D1 - Asphalt - Additional Inspection Reports Requirements. [Minn. R. 7001]
2.9.137	The operator of an Asphalt Facility shall also 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. [Minn. R. 7001]
2.9.138	Subsector E2 - Ready-Mix and Other Concrete Operations - Additional Inspection Reports Requirements. [Minn. R. 7001]
2.9.139	Dust collection and containment systems shall be included in the site inspections. [Minn. R. 7001]
2.9.140	Monitoring Requirements. [Minn. R. 7001]
2.9.141	Stormwater Monitoring. [Minn. R. 7001]
2.9.142	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 MPCA. The information must be recorded in the specified areas on the form and in the unit specified. [Minn. R. 7001]
2.9.143	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). [Minn. R. 7001]
2.9.144	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 MPCA. [Minn. R. 7001]
	2.9.145	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. [Minn. R. 7001]
	2.9.146	The intervention limit monitoring location(s) selected by the Permittee shall be in a location that: A. 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. B. Minimizes or eliminates sampling of stormwater from off-site sources (run-on). C. 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. [Minn. R. 7001]
	2.9.147	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. [Minn. R. 7001]
	2.9.148	An exceedance of an applicable annual average 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 as described below. Failure to respond to an intervention limit exceedance is a violation of the permit. If an exceedance of an intervention limit occurs, modify the Plan and document all corrective actions, including improvements to BMPs, necessary to meet the applicable intervention limits. Modifications and upgrades of the Plan and BMPs shall be initiated immediately, but no later than 14 days beyond discovery of an intervention limit exceedance. The Permittee must install a new or modified control and make it operational as soon as possible. If it is infeasible to complete the installation of a new or modified BMP within 14 calendar days, the Permittee must document why it is infeasible to complete the installation or repair within the 14-day timeframe. The Permittee must also outline a schedule for completing the work, and documentation must be completed as soon as practicable after the 14-day timeframe but no longer than 45 days after discovery. If 45 days is infeasible, the Permittee must complete the installation or repair as soon as practicable and document the reason for delay. All documentation shall be contained within or as an attachment to the Plan. [Minn. R. 7001]
	2.9.149	If the site is Temporarily Inactive during a monitoring period, intervention limit monitoring is not required, but the Permittee shall indicate on their DMR 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. [Minn. R. 7001]
	2.9.150	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. [Minn. R. 7001]
	2.9.151	If the Permittee submits documentation in compliance with 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. [Minn. R. 7001]

2.9.152	Stormwater Limits and Monitoring Intervention Limits A. Subsectors J1, J2, D1, and E2: Total Suspended Solids, 100 mg/L. B. Subsector E2: Iron, 1.0 mg/L. [Minn. R. 7001]
2.9.153	Mine Dewatering to Surface Waters - Effluent Limit Monitoring. [Minn. R. 7001]
2.9.154	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. [Minn. R. 7001]
2.9.155	If the Permittee submits documentation in compliance with 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. [Minn. R. 7001]
2.9.156	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. [Minn. R. 7001]
2.9.157	For active mine dewatering, samples shall be representative of the discharge and collected during any measurable event at an outfall. Flow monitoring shall be monitored using a continuous flow monitor or pump-run times. [Minn. R. 7001]
2.9.158	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. [Minn. R. 7001]
2.9.159	Mine Dewatering to Surface Waters - Monitoring for Permit Reissuance. 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 the Total Facilities Requirements section of this permit: A. Total Dissolved Solids. B. Hardness. C. Oil & Grease and surfactants. D. Antimony, arsenic, beryllium, cadmium, chromium, copper, lead, nickel, selenium, silver, thallium, and zinc. E. Aluminum, barium, boron, cobalt, iron, magnesium, manganese, molybdenum, total tin, and total aluminum. [Minn. R. 7001]
2.9.160	Total Facilities Requirements. [Minn. R. 7001]
2.9.161	Definitions. Refer to the 'Permit Users Manual' found on the MPCA website (www.pca.state.mn.us) for standard definitions. [Minn. R. 7001]
2.9.162	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, 7050, 7052, 7053, 7060, and 7080; and Minn. Stat. ch. 115 and 116. [Minn. R. 7001]
2.9.163	Permittee Responsibility. The Permittee shall perform the actions or conduct the activity authorized by this permit in compliance with the conditions of the permit and, if required, in accordance with the plans and specifications approved by the MPCA. [Minn. R. 7001.0150, subp. 3(E)]
2.9.164	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 40 CFR pts. 400 to 460 and Minn. R. chs. 7050, 7052, 7053 and any other applicable MPCA rules. [Minn. R. 7001.1090, subp. 1(A)]
2.9.165	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, excessive suspended solids, material discoloration, obnoxious odors, gas ebullition, deleterious sludge

		deposits, undesirable slimes or fungus growths, aquatic habitat degradation, excessive growths of aquatic plants, acutely toxic conditions to aquatic life, or other adverse impact on the receiving water. [Minn. R. 7050.0210, Subpt. 2]
	2.9.166	Property Rights. This permit does not convey a property right or an exclusive privilege. [Minn. R. 7001.0150, subp. 3(C)]
	2.9.167	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. [Minn. R. 7001.0150, subp. 3(O)]
	2.9.168	The MPCA's issuance of this permit does not obligate the MPCA to enforce local laws, rules, or plans beyond what Minnesota statutes authorize. [Minn. R. 7001.0150, subp. 3(D)]
	2.9.169	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. [Minn. R. 7001.0150, subp. 3(A)]
	2.9.170	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. [Minn. R. 7001.0150, subp. 3(B)]
	2.9.171	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. [Minn. R. 7001]
	2.9.172	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. [Minn. R. 7001]
	2.9.173	Inspection and Entry. When authorized by Minn. Stat. ch. 115.04, 115B.17, subd. 4, and 116.091, and upon presentation of proper credentials, the Permittee shall allow the MPCA, or an authorized employee or agent of the MPCA, 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. [Minn. R. 7001.0150, subp. 3(I)]
	2.9.174	Control Users. The Permittee shall regulate the users of its facility 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. [Minn. R. 7001.0150, subp. 3(F)]
	2.9.175	Sampling. [Minn. R. 7001]
	2.9.176	Representative Sampling. The Permittee shall conduct samples and measurements required by this permit as specified in this permit and shall be representative of the discharge or monitored activity. [Minn. R. 7001.0150, subp. 2(B)]
	2.9.177	Additional Sampling. If the Permittee monitors more frequently than required, they shall report the results and the frequency of monitoring on their eDMR for that reporting period. [Minn. R. 7001.1090, subp. 1(E)]
	2.9.178	Certified/Accredited Laboratory. A laboratory accredited by the Minnesota Department of Health [Minn. R. 4740.2010 through Minn. R. 4740.2120] and/or certified by the MPCA [Minn. R. 7001.4310 through Minn. R. 7001.4390] shall conduct analyses required by this permit, unless approved in writing by the MPCA. A certified/accredited laboratory does not need to complete analyses of dissolved oxygen, pH, temperature, specific conductance, and total residual oxidants (chlorine, bromine). Those analyses shall comply with 40 CFR pt. 136.

		Dissolved oxygen, pH, and total residual oxidants must be performed on-site. Follow the manufacturer's specifications for equipment maintenance and use. [Minn. R. 4740.2010-4740.2120, Minn. R. 7001.4310-7001.4390]
	2.9.179	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. [Minn. R. 7001.0150, subp. 2(B), Minn. R. 7041.3200]
	2.9.180	Equipment Calibration. The Permittee shall check and/or calibrate flow meters, pumps, flumes, lift stations, or other flow monitoring equipment used for purposes of determining compliance (within plus or minus ten percent of the true flow values) with permit requirements at least twice annually. [Minn. R. 7001.0150, subp. 2(B & C)]
	2.9.181	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: 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; D. The analytical techniques, procedures, and methods used; and E. The results of the analysis. [Minn. R. 7001.0150, subp. 2(C)]
	2.9.182	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 Permittee shall record the information in the specified areas on those forms and in the units specified. Required forms may include a Sample Values Form. If required, the Permittee shall record individual values for each sample and measurement on the Sample Values Form provided by the MPCA. The Permittee shall submit Sample Values Form with the appropriate eDMRs. The Permittee may design and use their own Sample Values Form; however, the Permittee shall not use their form until the MPCA reviews and approves the form. Note: The Permittee shall also record required summary information on their eDMR. Permittee submitted summary information contained only on the Sample Values Form does not comply with reporting requirements. [Minn. R. 7001.0150, subp. 2(B), Minn. R. 7001.1090, subp. 1(D)]
	2.9.183	Submitting Reports. The Permittee shall submit eDMRs, Sample Values Forms, and other supplemental attachment forms via MPCA e-Services after the MPCA approves their authorization request. The Permittee shall electronically submit eDMRs, Sample Values Forms, and other supplemental attachment forms by the 21st day of the month following the sampling period or otherwise as specified in this permit. The Permittee shall complete eDMR submittal on or before 11:59 p.m. of the 21st day of the month following the sampling period or as otherwise specified in this permit. The Permittee shall submit an eDMR for each required station even if no discharge occurred during the reporting period. The Permittee shall submit other reports required by this permit electronically or by mail. The Permittee shall submit reports by the date specified in this permit. For electronic submittals, the Permittee shall submit on or before 11:59 p.m. on the date specified in this permit. For mailed submittals, the Permittee shall ensure that submittals via U.S. Postal Service or other hand delivery method contain postmarks by the date specified in this permit.

		Electronically: wq.submittals.mPCA@state.mn.us Include Water quality submittals form: www.pca.state.mn.us/sites/default/files/wq-wwprm7-71.docx Or by mail: Attention: WQ Submittals Center Minnesota Pollution Control Agency 520 Lafayette Road North St. Paul, MN 55155-4191. [Minn. R. 7001.0150, subp. 2(B), Minn. R. 7001.0150, subp. 3(H)]
	2.9.184	Incomplete or Incorrect Reports. The Permittee shall immediately submit an electronically amended report or eDMR to the MPCA upon discovery by the Permittee or notification by the MPCA that it has submitted an incomplete or incorrect report or eDMR. The amended report or eDMR shall contain the missing or corrected data along with a comment on the eDMR explaining the circumstances of the incomplete or incorrect report. If it is impossible to amend the report or eDMR electronically, the Permittee shall immediately notify the MPCA and the MPCA will provide direction for the amendment submittals. [Minn. R. 7001.0150, subp. 3(G)]
	2.9.185	Required Signatures. The Permittee or the duly authorized representative of the Permittee shall sign all eDMRs, forms, reports, and other documents submitted to the MPCA per Minn. R. 7001.0150, subp. 2(D). The person or persons who sign the eDMRs, forms, reports, or other documents shall certify that he or she understands and complies with the certification requirements of Minn. R. chs. 7001.0070 and 7001.0540, including the penalties for submitting false information. A registered professional engineer shall certify technical documents, such as design drawings and specifications, and engineering studies submitted as part of a permit application or by permit conditions. [Minn. R. 7001.0540]
	2.9.186	Reporting Limit (RL). The Permittee shall report monitoring results below the 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 Permittee shall report the concentration as "< 0.1 mg/L." The Permittee shall not use "non-detected," "undetected," "below detection limit," or "zero" when reporting results. The MPCA considers these terms as permit reporting violations. Where sample values are less than the RL and the permit requires reporting of an average, the Permittee shall calculate the average as follows: A. If some values are less than (<) the RL, substitute zero for all non-detectable values to use in the average calculation; B. If all values are less than (<) the RL, calculate the average and report as < the RL average concentration; and C. To calculate a mass loading with a less than (<) the RL concentration, use the RL value in the calculation and then add the "<" to the product of the concentration and the volume. [Minn. R. 7001.0150, subp. 2(B)]
	2.9.187	Records. The Permittee shall, when requested by the MPCA, 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. [Minn. R. 7001.0150, subp. 3(H)]
	2.9.188	Confidential Information. Except for data determined to be confidential according to Minn. Stat. ch. 116.075, subd. 2, all reports required by this permit are available for public inspection. The MPCA does not consider effluent data confidential. To request the MPCA maintain data as confidential, the Permittee shall follow Minn. R. 7000.1300. [Minn. R. 7000.1300]
	2.9.189	Noncompliance and Enforcement. [Minn. R. 7001]
	2.9.190	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. ch. 115.071 and 116.072, including monetary penalties, imprisonment, or both. [Minn. R. 7001.1090, subp. 1(B)]
	2.9.191	Criminal Activity. The Permittee shall not knowingly make a false statement, representation, or certification in a record or other document submitted to the MPCA. A person who falsifies a report or document submitted to the MPCA, or tampers with, or knowingly renders inaccurate a monitoring device or method that requires maintenance under this permit is subject to criminal and civil penalties provided by federal and state law. [Minn. R. 7001.0150, subp. 3(G), Minn. R. 7001.1090, subp. 1(G & H), Minn. Stat. ch. 609.671, subd. 1]
	2.9.192	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. [40 CFR 122.41(c)]
	2.9.193	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. If the Permittee discovers that noncompliance with a condition of the permit occurred and that the noncompliance could endanger human health, public drinking water supplies, or the environment, the Permittee shall within 24 hours of the discovery of the noncompliance orally notify the Commissioner and submit a written description of the noncompliance within five days of the discovery. If the Permittee discovers other noncompliance that does not explicitly endanger human health, public drinking water supplies, or the environment, the Permittee shall report the description of noncompliance within 30 days of the discovery. If no eDMR is required within 30 days, the Permittee shall submit a written report including the description of noncompliance within 30 days of the discovery of the noncompliance. This description shall include the following information: A. A description of the event including volume, duration, monitoring results, and receiving waters; B. The cause of the event; C. The steps taken to reduce, eliminate, and prevent reoccurrence of the event; D. The exact dates and times of the event; and E. Steps taken to reduce any adverse impact resulting from the event. [Minn. R. 7001.0150, subp. 3(K)]
	2.9.194	Upset Defense. In the event of temporary noncompliance with applicable effluent limitation(s) 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 MPCA 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(I); and F. That the Permittee implemented the remedial measures required by Minn. R. 7001.0150, subp. 3(J). [Minn. R. 7001.1090]
	2.9.195	Release. [Minn. R. 7001]

2.9.196	Unauthorized Releases of Wastewater Prohibited. This permit prohibits overflows, discharges, spills, or other releases of wastewater or materials to the environment, whether intentional or not, except for discharges from outfalls specifically authorized by this permit. 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. [40 CFR 122.41, Minn. Stat. ch. 115.061]
2.9.197	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 800-422-0798 or 651-649-5451 (metro area) immediately upon discovery of the release. The Permittee may contact the MPCA during business hours at 800-657-3864 or 651-296-6300 (metro area); and 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 Permittee cannot immediately or completely recover the released materials or substances, 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. [Minn. R. 7001.1090]
2.9.198	Sampling of a Release. Upon discovery of a release, the Permittee shall: A. Collect representative samples of the release. The Permittee shall sample the release for permitted effluent parameters and other 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, the Permittee shall collect fecal coliform bacteria samples where the Permittee determines that the release contains or may contain sewage. If the Permittee cannot immediately stop the release, the Permittee shall consult with the MPCA regarding additional sampling requirements. The Permittee shall collect samples at least, but not limited to, two times per week for as long as the release continues; and B. Submit the sampling results on the Release Report located on the MPCA's website at https://www.pca.state.mn.us/water/discharge-monitoring-reports . The Permittee shall submit the Release Report to the MPCA with the next eDMR or within 30 days, whichever is sooner. [Minn. R. 7001.1090]
2.9.199	Bypass. [Minn. R. 7001]
2.9.200	Anticipated Bypass. The Permittee may allow any bypass to occur that does not cause effluent limitation exceedances, but only if the bypass is for essential maintenance to assure efficient operation of the facility. The Permittee shall submit prior notice to the MPCA at least ten days before the date of the bypass, if possible. The notice of the need for an anticipated bypass shall include the following information: A. The proposed date and estimated duration of the bypass; B. The alternatives to bypassing; and C. A proposal for effluent sampling during the bypass. Any bypass wastewater shall enter waters of the state from outfalls specifically authorized by this permit. Therefore, the Permittee shall collect samples at the frequency and location identified in this permit or two times per week for as long as the bypass continues, whichever is more frequent. [40 CFR 122.41(m)(2 & 3), Minn. R. 7001.1090, subp. 1(J)]
2.9.201	This permit prohibits all other bypasses. The MPCA may take enforcement action against the Permittee for a bypass, unless the specific conditions described in Minn. R. 7001.1090 subp. 1(K) and 40 CFR 122.41(m)(4)(i) are met. In the event of an unanticipated bypass, the Permittee shall: A. Take all reasonable steps to immediately end the bypass; B. Notify the Minnesota Department of Public Safety Duty Officer at 800-422-0798 or

		651-649-5451 (metro area) immediately upon commencement of the bypass. The Permittee may contact the MPCA during business hours at 800-657-3864 or 651-296-6300 (metro area); C. Immediately take 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 directed by the MPCA, the Permittee shall consult with other local, state, or federal agencies for implementation of abatement, clean up, or remediation activities; and D. Only allow bypass wastewater as specified in this section to enter waters of the state from outfalls specifically authorized by this permit. The Permittee shall collect samples at the frequency and location identified in this permit or two times per week for as long as the bypass continues, whichever is more frequent. The Permittee shall also follow the reporting requirements for effluent violations as specified in this permit. [40 CFR 122.41(m)(4)i, Minn. R. 7001.1090, subp. 1(K), Minn. Stat. ch. 115.061]
	2.9.202	Operation and Maintenance. [Minn. R. 7001]
	2.9.203	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(F)]
	2.9.204	In the event of a reduction or loss of effective treatment of wastewater at the facility, the Permittee shall control production or curtail 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 they restore facility treatment processes or until the Permittee provides an alternative method of treatment. [Minn. R. 7001.1090, subp. 1(C)]
	2.9.205	Solids Management. The Permittee shall properly store, transport, and manage biosolids, septage, sediments, residual solids, filter backwash, screenings, oil, grease, and other substances so that pollutants do not enter surface waters or groundwaters of the state. The Permittee shall manage solids in accordance with local, state, and federal requirements. [40 CFR 503, Minn. R. 7041]
	2.9.206	Scheduled Maintenance. The Permittee shall schedule maintenance of the treatment works during non-critical water quality periods to prevent water quality degradation, except where the facility requires emergency maintenance to prevent a condition that would be detrimental to water quality or human health. [Minn. R. 7001.0150, subp. 2(B), Minn. R. 7001.0150, subp. 3(F)]
	2.9.207	Control Tests. The Permittee shall conduct in-plant control tests at a frequency adequate to ensure compliance with the conditions of this permit. [Minn. R. 7001.0150, subp. 2(B), Minn. R. 7001.0150, subp. 3(F)]
	2.9.208	Changes to the Facility or Permit. [Minn. R. 7001]
	2.9.209	Permit Modifications. Except as provided under Minn. Stat. ch. 115.07, subd. 1 and 3, no person required by statute or rule to obtain a permit may construct, install, modify, or 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 MPCA issues a written permit for the facility or activity. Permittees that propose to make changes to the facility or discharge that requires permit modification shall follow Minn. R. 7001.0190. If the Permittee cannot determine whether the proposed changes require a permit modification, the Permittee shall contact the MPCA prior to any action. The MPCA recommends that Permittees submit the application for permit modification to the MPCA at least 180 days prior to the planned change. [Minn. R. 7001.0300]
	2.9.210	This permit does not require plans, specifications, and MPCA approval when maintenance dictates the need for installation of new equipment, provided the equipment is the same

		design size and has the same design intent. For instance, Permittees can replace a broken pipe, lift station pump, aerator, or blower with the same design-sized equipment without MPCA approval. If this permit does not expressly authorize the Permittee proposed construction, the MPCA may require a permit modification. If the proposed construction project requires an Environmental Assessment Worksheet under Minn. R. 4410, no construction shall begin until the MPCA issues a negative declaration and the Permittee receives or implements all approvals. [Minn. R. 7001.0030]
	2.9.211	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. If a permittee who indicated on their application that their site does not have stormwater discharge but that changes, the Permittee is required to submit an application for permit modification to indicate the change in status and meet the monitoring and reporting requirements of the permit. [Minn. R. 7001.0150, subp. 3(M)]
	2.9.212	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 increase or new use of a chemical additive at least 60 days, or as soon as possible, before the proposed increase or new use. The Permittee shall include at least the following information for the proposed additive as instructed in the chemical additive approvals section on the MPCA website at https://www.pca.state.mn.us/water/wastewater-additional-guidance-and-information: A. The process for which the additive will be used; B. Safety Data Sheet (SDS) 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 SDS 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. 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. [Minn. R. 7001.0170]
	2.9.213	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 of this permit pursuant to Minn. R. 7001.0180. [Minn. R. 7001.0170, Minn. R. 7001.0180]

2.9.214	Total Maximum Daily Load (TMDL) Impacts. The MPCA may require facilities that discharge to an impaired surface water, watershed, or drainage basin to comply with additional permits or permit requirements. These requirements can include additional restriction or relaxation of limits and monitoring as authorized by the CWA 303(d)(4)(A) and 40 CFR ch. 122.44(l)(2)(i), necessary to ensure consistency with the assumptions and requirements of any applicable EPA approved wasteload allocations resulting from TMDL studies. [40 CFR 122.44(l)(2)(i)]
2.9.215	Permit Transfer. This permit is not transferable to any person without the express written approval of the MPCA after compliance with the requirements of Minn. R. 7001.0190. A person who receives permit transference shall comply with the conditions of this permit. [Minn. R. 7001.0150, subp. 3(N)]
2.9.216	Facility Closure. The Permittee is responsible for closure and post-closure 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 a Facility Closure Plan to the MPCA for approval. The MPCA may require a permit modification or reissuance for facility closure that could result in a potential long-term water quality concern, such as the ongoing discharge of wastewater to surface or groundwater. The MPCA may require the Permittee to establish and maintain financial assurance to ensure performance of certain obligations under this permit, including closure, post-closure care, and remedial action at the facility. If the MPCA requires financial assurance, the MPCA shall approve the amount and type of financial assurance, and proposed modifications to previously MPCA-approved financial assurance. [Minn. Stat. ch. 116.07, subd. 4]
2.9.217	Permit Reissuance. If the Permittee desires to continue permit coverage beyond the date of permit expiration, the Permittee shall submit an application for permit reissuance: Due by 180 days prior to permit expiration. [Minn. R. 7001.0040]
2.9.218	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: 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; or 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. [Minn. R. 7001.0040, Minn. R. 7001.0160]
2.9.219	Termination of General Permit Coverage. Upon reclamation and stabilization of all permitted sites, the covered applicant shall submit a request for termination of general permit coverage using the Notification of Permit Termination e-services. Guidance is available on the MPCA website at: https://www.pca.state.mn.us/sites/default/files/p-gen1-18.pdf . [Minn. Stat. ch. 116.07]
2.9.220	All discharges shall cease before a termination request form is submitted to the MPCA. Any discharge of pollutants to surface or groundwaters or land on or after the date of submittal shall be considered a violation of the Clean Water Act unless authorized by another NPDES permit. All land disturbances or alterations that are a result of the activities covered under this permit must be stabilized prior to submittal for closure, or the closure of those areas must have coverage under another NPDES permit. [Minn. Stat. ch. 116.07]

2.9.221	The terms and conditions of the General Permit remain in full force and effect including the payment of the annual fee, until General Permit coverage has been formally terminated by the MPCA. [Minn. R. 7002]
2.9.222	Permit Specific Definitions. [Minn. R. 7001]
2.9.223	"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). [40 CFR 440.132(a), State Definitions]
2.9.224	"Asphalt cement" means fluxed or unfluxed asphalt specially prepared for direct use in the manufacture of asphalt pavements. [State Definitions]
2.9.225	"Asphalt Emulsion" means a mixture of asphalt cement, chemical, and water solution. Asphalt emulsions are produced by adding an emulsifying agent to asphalt and water. [State Definitions]
2.9.226	"Asphalt pavement" means a mixture of asphalt cement (asphalt binder), aggregate, and other additives; may also be referred to as asphalt concrete (AC), bituminous mix (BM), and sometimes asphaltic concrete (HMAC). [State Definitions]
2.9.227	"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. [State Definitions]
2.9.228	"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. [State Definitions]
2.9.229	"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. [40 CFR pt. 122, 26(b)(14), State Definitions]
2.9.230	"Impaired Water" means waters identified as impaired by the MPCA, and approved by the USEPA, pursuant to section 303(d) of the Clean Water Act (33 U.S.C. Section 303(d)). [CWA Sect. 303.d, State Definitions]
2.9.231	"Impoundments" mean topographic depressions designed to hold liquid. [State Definitions]
2.9.232	"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 is not an Active Facility. The Permittee does not anticipate mining and/or associated activities to occur in the foreseeable future and has requested the permit coverage at this inactive portion be terminated, and the inactive portion is no longer covered by an active mining permit. [State Definitions]
2.9.233	"Infeasible" means not technologically possible or not economically practicable and achievable in light of the best industry practices. [State Definitions]
2.9.234	"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. [State Definitions]
	2.9.235	"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. [State Definitions]
	2.9.236	"Mine Pit Dewatering" means any water that is impounded or that collects in the mine and is pumped from the mine through the efforts of the mine operator. Uncontaminated groundwater and stormwater collecting in a low area in which there is a stormwater outlet for stormwater/seepage/drainage by gravity overflow shall not be considered mine pit dewatering. 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 and is not authorized under this permit. [State Definitions]
	2.9.237	"Non-Stormwater Discharge" means any discharge not comprised entirely of stormwater. [State Definitions]
	2.9.238	"Operator" is the person responsible for the overall operation of an industrial facility under Minn. R. pt. 7090.3000. [Minn. R. 7090.3000, State Definitions]
	2.9.239	"Owner" is the person who owns an industrial facility or part of an industrial facility under Minn. R. pt. 7090.3000. [Minn. R. 7090.3000, State Definitions]
	2.9.240	"Person" means any human being, any municipality or other governmental or political subdivision or public MPCA, 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. [State Definitions]
	2.9.241	"Pipes" mean hollow cylinders or tubes constructed of non-earthen materials. [State Definitions]
	2.9.242	"Pollution Prevention Plan" (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. [State Definitions]
	2.9.243	"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. [State Definitions]
	2.9.244	"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. [State Definitions]
	2.9.245	"Seasonal High Water Table" means the highest level the water table reaches during a given year. Methods of determining the seasonal high water table are given in part 7041.3400, subpart 3. [Minn. R. 7041.0100, Subp. 48]
	2.9.246	"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. [Minn. R. 7041.0100, Subpt. 48, Minn. R. 7041.3400, Subp. 3, State Definitions]
	2.9.247	"Significant Materials" includes, but is not limited to: raw materials; fuels; materials such as solvents, detergents, and plastic pellets; finished materials such as metallic products; raw materials used in food processing or production; hazardous substances designated under Section 101(14) of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA); any chemical the facility is required to report pursuant to Section 313 of the Emergency Planning and Community Right-to-Know Act (EPCRA); fertilizers; pesticides; and waste products such as ashes, slag, and sludge that have the potential to be released with stormwater discharges. When determining whether a material is significant, the physical and chemical characteristics of the material should be considered (e.g. the material's solubility, transportability, and toxicity characteristics) to determine the material's pollution potential. [40 CFR pt. 122, 26(b)(12)]
	2.9.248	"Small Construction Activity" means small construction activity as defined in 40 CFR 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. [State Definitions]
	2.9.249	"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. [State Definitions]
	2.9.250	"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. [State Definitions]
	2.9.251	"Tanks" means a container, vessel, or enclosure designed to contain substances and is constructed of materials such as concrete, steel, plastic, or fiberglass reinforced plastic, and provides structural support. [State Definitions]
	2.9.252	"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. [State Definitions]
	2.9.253	"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. ch. 115.01, Subpt. 21, State Definitions]
	2.9.254	"Water Quality Standards" means those provisions contained in Minn. R Chapters 7050 and 7052. [Minn. R. 7050, Minn. R. 7052, State Definitions]
	2.9.255	"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, Subpt. 1(a)B, State Definitions]

3. Submittal action summary

SD 022	Stormwater, Non-specific Runoff	
		Surface Discharge: MNG49 Subsectors D1, J1, J2
	3.1.1	The Permittee shall submit an annual DMR: Due by 21 days after the end of each calendar year following permit issuance. [Minn. R. 7001.0150, Subp. 2(B)]
SD 031	MNG49 Dewatering	
		Surface Discharge: MNG49 Dewatering from Construction Sand and Gravel (1442)
	3.2.1	The Permittee shall submit a quarterly DMR: Due by 21 days after the end of each calendar quarter following permit issuance. [Minn. R. 7001.0150, Subp. 2(B)]
	3.2.2	The Permittee shall submit an annual DMR: Due by 21 days after the end of each calendar year following permit issuance. [Minn. R. 7001.0150, Subp. 2(B)]
SD 052	MNG49 Dewatering	
		Surface Discharge: MNG49 Dewatering from Construction Sand and Gravel (1442)
	3.3.1	The Permittee shall submit a quarterly DMR: Due by 21 days after the end of each calendar quarter following permit issuance. [Minn. R. 7001.0150, Subp. 2(B)]
	3.3.2	The Permittee shall submit an annual DMR: Due by 21 days after the end of each calendar year following permit issuance. [Minn. R. 7001.0150, Subp. 2(B)]
SD 071	MNG49 Dewatering	
		Surface Discharge: MNG49 Dewatering from Subsector J2 (1411, 1422, 1423, 1429)
	3.4.1	The Permittee shall submit a quarterly DMR: Due by 21 days after the end of each calendar quarter following permit issuance. [Minn. R. 7001.0150, Subp. 2(B)]
	3.4.2	The Permittee shall submit an annual DMR: Due by 21 days after the end of each calendar year following permit issuance. [Minn. R. 7001.0150, Subp. 2(B)]
SD 073	MNG49 Dewatering	
		Surface Discharge: MNG49 Dewatering from Construction Sand and Gravel (1442)
	3.5.1	The Permittee shall submit a quarterly DMR: Due by 21 days after the end of each calendar quarter following permit issuance. [Minn. R. 7001.0150, Subp. 2(B)]
	3.5.2	The Permittee shall submit an annual DMR: Due by 21 days after the end of each calendar year following permit issuance. [Minn. R. 7001.0150, Subp. 2(B)]
SD 081	MNG49 Dewatering	
		Surface Discharge: MNG49 Dewatering from Subsector J2 (1411, 1422, 1423, 1429)
	3.6.1	The Permittee shall submit a quarterly DMR: Due by 21 days after the end of each calendar quarter following permit issuance. [Minn. R. 7001.0150, Subp. 2(B)]
	3.6.2	The Permittee shall submit an annual DMR: Due by 21 days after the end of each calendar year following permit issuance. [Minn. R. 7001.0150, Subp. 2(B)]
SD 082	MNG49 Dewatering	
		Surface Discharge: MNG49 Dewatering from Subsector J2 (1411, 1422, 1423, 1429)
	3.7.1	The Permittee shall submit a quarterly DMR: Due by 21 days after the end of each calendar quarter following permit issuance. [Minn. R. 7001.0150, Subp. 2(B)]
	3.7.2	The Permittee shall submit an annual DMR: Due by 21 days after the end of each calendar year following permit issuance. [Minn. R. 7001.0150, Subp. 2(B)]
SD 083	Stormwater, Non-specific Runoff	
		Surface Discharge: MNG49 Subsectors D1, J1, J2

	3.8.1	The Permittee shall submit an annual DMR: Due by 21 days after the end of each calendar year following permit issuance. [Minn. R. 7001.0150, Subp. 2(B)]
MNG490131	OMG Midwest Inc dba Minnesota Paving and Materials	
		Non-Metallic Mining and Associated Activities General Permit Requirements
	3.9.1	Permit Reissuance. If the Permittee desires to continue permit coverage beyond the date of permit expiration, the Permittee shall submit an application for permit reissuance: Due by 180 days prior to permit expiration. [Minn. R. 7001.0040]

4. Limits and monitoring

Subject item	Parameter	Discharge limitations				Monitoring requirements						
		Quantity /Loading avg.	Quantity /Loading max.	Quantity /Loading units	Quality /Conc. min.	Quality /Conc. avg.	Quality /Conc. max.	Quality/ Conc. units	Frequency	Sample type	Effective period	Notes
SD 022 Kasota Quarry (J1-1442)	Solids, Total Suspended (TSS)					Monitor only. calendar year average intervention		milligrams per liter	twice per year	Grab	Jan-Dec	Any reported value >100 mg/L exceeds the intervention limit. If the discharge is within 1 mile of an ORVW, trout stream, or trout lake, the intervention limit is 65 mg/L.
SD 031 Sioux Rock Quarry (J1-1442)	Flow		Monitor only. calendar quarter total	million gallons		Monitor only. calendar quarter average		million gallons per day	once per quarter	Measurement, Continuous	Jan-Dec	
SD 031 Sioux Rock Quarry (J1-1442)	Nitrite Plus Nitrate, Total (as N)					Monitor only. calendar year average		milligrams per liter	once per year	Grab	Jan-Dec	
SD 031 Sioux Rock Quarry (J1-1442)	Nitrogen, Kjeldahl, Total					Monitor only. calendar year average		milligrams per liter	once per year	Grab	Jan-Dec	
SD 031 Sioux Rock Quarry (J1-1442)	pH				6.5 calendar quarter minimum		8.5 calendar quarter maximum	standard units	once per quarter	Grab	Jan-Dec	
SD 031 Sioux Rock Quarry (J1-1442)	Phosphorus, Total (as P)					Monitor only. calendar quarter average		milligrams per liter	once per quarter	Grab	Jan-Dec	
SD 031 Sioux Rock Quarry (J1-1442)	Solids, Total Suspended (TSS)						30 daily maximum	milligrams per liter	once per quarter	Grab	Jan-Dec	

SD 052 Dundas Wash Plant (J1- 1442)	Flow	Monitor only. calendar quarter total	million gallons	Monitor only. calendar quarter average	8.5 calendar quarter maximum	million gallons per day	once per quarter	Measurement, Continuous	Jan-Dec
SD 052 Dundas Wash Plant (J1- 1442)	Nitrite Plus Nitrate, Total (as N)			Monitor only. calendar year average		milligrams per liter	once per year	Grab	Jan-Dec
SD 052 Dundas Wash Plant (J1- 1442)	Nitrogen, Kjeldahl, Total			Monitor only. calendar year average		milligrams per liter	once per year	Grab	Jan-Dec
SD 052 Dundas Wash Plant (J1- 1442)	pH		6.5 calendar quarter minimum			standard units	once per quarter	Grab	Jan-Dec
SD 052 Dundas Wash Plant (J1- 1442)	Phosphorus, Total (as P)			Monitor only. calendar quarter average		milligrams per liter	once per quarter	Grab	Jan-Dec
SD 052 Dundas Wash Plant (J1- 1442)	Solids, Total Suspended (TSS)				30 daily maximum	milligrams per liter	once per quarter	Grab	Jan-Dec
SD 071 Owatonna Quarry (J2- 1422)	Flow	Monitor only. calendar quarter total	million gallons	Monitor only. calendar quarter average		million gallons per day	once per quarter	Measurement, Continuous	Jan-Dec
SD 071 Owatonna Quarry (J2- 1422)	Nitrite Plus Nitrate, Total (as N)			Monitor only. calendar year average		milligrams per liter	once per year	Grab	Jan-Dec
SD 071 Owatonna Quarry (J2- 1422)	Nitrogen, Kjeldahl, Total			Monitor only. calendar year average		milligrams per liter	once per year	Grab	Jan-Dec

SD 071 Owatonna Quarry (J2-1422)	pH				6.5 calendar quarter minimum		8.5 calendar quarter maximum	standard units	once per quarter	Grab	Jan-Dec
SD 071 Owatonna Quarry (J2-1422)	Phosphorus, Total (as P)					Monitor only. calendar quarter average		milligrams per liter	once per quarter	Grab	Jan-Dec
SD 071 Owatonna Quarry (J2-1422)	Solids, Total Suspended (TSS)						30 daily maximum	milligrams per liter	once per quarter	Grab	Jan-Dec
SD 073 Sioux Rock Asphalt, Cottonwood (D1 2951)	Flow	Monitor only. calendar quarter total				Monitor only. calendar quarter average		million gallons per day	once per quarter	Measurement, Continuous	Jan-Dec
SD 073 Sioux Rock Asphalt, Cottonwood (D1 2951)	Nitrite Plus Nitrate, Total (as N)					Monitor only. calendar year average		milligrams per liter	once per year	Grab	Jan-Dec
SD 073 Sioux Rock Asphalt, Cottonwood (D1 2951)	Nitrogen, Kjeldahl, Total					Monitor only. calendar year average		milligrams per liter	once per year	Grab	Jan-Dec
SD 073 Sioux Rock Asphalt, Cottonwood (D1 2951)	pH				6.5 calendar quarter minimum		8.5 calendar quarter maximum	standard units	once per quarter	Grab	Jan-Dec
SD 073 Sioux Rock Asphalt, Cottonwood (D1 2951)	Phosphorus, Total (as P)					Monitor only. calendar quarter average		milligrams per liter	once per quarter	Grab	Jan-Dec
SD 073 Sioux Rock Asphalt, Cottonwood (D1 2951)	Solids, Total Suspended (TSS)						30 daily maximum	milligrams per liter	once per quarter	Grab	Jan-Dec

SD 081 NUQQ West Outfall (J2-1429)	Flow	Monitor only. calendar quarter total	million gallons		Monitor only. calendar quarter average	8.5 calendar quarter maximum	million gallons per day	once per quarter	Measurement, Continuous	Jan-Dec
SD 081 NUQQ West Outfall (J2-1429)	Nitrite Plus Nitrate, Total (as N)				Monitor only. calendar year average		milligrams per liter	once per year	Grab	Jan-Dec
SD 081 NUQQ West Outfall (J2-1429)	Nitrogen, Kjeldahl, Total				Monitor only. calendar year average		milligrams per liter	once per year	Grab	Jan-Dec
SD 081 NUQQ West Outfall (J2-1429)	pH		6.5 calendar quarter minimum				standard units	once per quarter	Grab	Jan-Dec
SD 081 NUQQ West Outfall (J2-1429)	Phosphorus, Total (as P)				Monitor only. calendar quarter average		milligrams per liter	once per quarter	Grab	Jan-Dec
SD 081 NUQQ West Outfall (J2-1429)	Solids, Total Suspended (TSS)					30 daily maximum	milligrams per liter	once per quarter	Grab	Jan-Dec
SD 082 NUQQ East Outfall (J2-1429)	Flow	Monitor only. calendar quarter total	million gallons		Monitor only. calendar quarter average		million gallons per day	once per quarter	Measurement, Continuous	Jan-Dec
SD 082 NUQQ East Outfall (J2-1429)	Nitrite Plus Nitrate, Total (as N)				Monitor only. calendar year average		milligrams per liter	once per year	Grab	Jan-Dec
SD 082 NUQQ East Outfall (J2-1429)	Nitrogen, Kjeldahl, Total				Monitor only. calendar year average		milligrams per liter	once per year	Grab	Jan-Dec
SD 082 NUQQ East Outfall (J2-1429)	pH		6.5 calendar quarter minimum			8.5 calendar quarter maximum	standard units	once per quarter	Grab	Jan-Dec

SD 082 NUQQ East Outfall (J2-1429)	Phosphorus, Total (as P)						Monitor only. calendar quarter average		milligrams per liter	once per quarter	Grab	Jan-Dec	
SD 082 NUQQ East Outfall (J2-1429)	Solids, Total Suspended (TSS)							30 daily maximum	milligrams per liter	once per quarter	Grab	Jan-Dec	
SD 083 Rogers Yard (J1-1442)	Solids, Total Suspended (TSS)						Monitor only. calendar year average intervention		milligrams per liter	twice per year	Grab	Jan-Dec	Any reported value >100 mg/L exceeds the intervention limit. If the discharge is within 1 mile of an ORVW, trout stream, or trout lake, the intervention limit is 65 mg/L.



STATE OF
MINNESOTA
DEPARTMENT OF NATURAL RESOURCES

PHONE NO.

P.O. BOX 756, NEW ULM, MN 56073
(507) 359-6050

March 8, 1993

Jeff Carlstrom
New Ulm Quartzite Quarries
Route 5, Box 21
New Ulm MN 56073-9102

Dear Mr. Carlstrom:

AMENDED PERMIT 56-0141, MINNESOTA RIVER, NICOLLET COUNTY

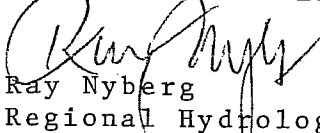
Enclosed is Amended Permit 56-0141, authorizing appropriation of water for mine processing located in Section 34, T110, R30W.

Please read all permit conditions and limitations. As a condition of this permit you are required to install a flow meter to record the monthly and total volumes of water appropriated annually. A water use report will be sent to you each January for reporting the amounts for the previous year. The report must be submitted with a processing fee by February 15 each year. Enclosed is a rate schedule that can be used to determine annual report of water use processing fees. The report and fee must be submitted as long as the permit is active even if no water is used. Failure to submit the water use report and fee can result in the termination of your permit. Please do not send the report and fee until notified.

If you have any questions, please contact Assistant Area Hydrologist, Larry Kramka at (507) 389-6713.

Sincerely,

DIVISION OF WATERS


Ray Nyberg
Regional Hydrologist

c: Region 4 Administrator
Region 4 Hydrologist
Area Hydrologist - Leo Getsfried
Area Fisheries Supervisor - Hugh Valiant
Area Wildlife Manager - Dennis Simon
Conservation Officer - Dave Mador
Enforcement Supervisor - Roger Tietz
Nicollet County SWCD
Nicollet County Zoning Administrator
Permits Unit
Data Systems
Regional Enforcement Supervisor - Randy Evans

MA-02628-02

**WATER APPROPRIATION PERMIT**

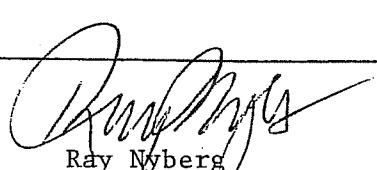
500 Lafayette Road
St. Paul, MN 55155-4032

AMENDED

PERMIT
56-0141
COUNTY
NICOLLET (52)

THIS AMENDED PERMIT SUPERSEDES ALL PREVIOUS VERSIONS OF PERMIT #56-0141

IN THE MATTER OF THE APPLICATION FOR APPROPRIATION OF WATERS OF THE STATE, PERMISSION IS HEREBY GRANTED TO:

PERMITTEE NEW ULM QUARTZITE QUARRIES	Authorized Agent JEFF CARLSTROM, Executive Manager	
Address Route 5, Box 21, New Ulm, MN 56073-9102 PHONE: (507) 354-2925		
To Appropriate From: Minnesota River, 1200 gpm, stationary pump Point of Taking: SE, SE, SE of Section 34, T110N, R30W		
Purpose: Mine process water used in crushing and washing of aggregates.		
Property Described as: Government Lot 2, Section 34, T110N, R30W Portions of Section 35, T110N, R30W		
Authorized Signature  Ray Nyberg	Title Regional Hydrologist	Date March 8, 1993

This permit is granted subject to the following **CONDITIONS:**

1. QUANTITY:

The permittee is authorized to appropriate water at a rate not to exceed 1200 gallons per minute. The total amount of water appropriated shall not exceed XXXX acre feet or 81.0 million gallons per year.

2. LIMITATIONS:

(a.) Any violation of the terms and provisions of this permit and any appropriation of the waters of the state in excess of that authorized hereon shall constitute a violation of Minnesota Statutes, Chapter 105.

(b.) This permit shall not be construed as establishing any priority of appropriation of waters of the state.

(c.) This permit is permissive only. No liability shall be imposed upon or incurred by the State of Minnesota or any of its employees, on account of the granting hereof or on account of any damage to any person or property resulting from any act or omission of the permittee relating to any matter hereunder. This permit shall not be construed as estopping or limiting any legal claims or right of action of any person other than the state against the permittee, for any damage or injury resulting from any such act or omission, or as stopping or limiting any legal claim or right of action of the state against the permittee, for violation of or failure to comply with the provisions of the permit or applicable provisions of law.

(d.) In all cases where the doing by the permittee of anything authorized by this permit shall involve the taking, using, or damaging of any property rights or interests of any other person or persons, or of any publicly owned lands or improvements thereon or interests therein, the permittee, before proceeding therewith, shall obtain the written consent of all persons, agencies, or authorities concerned, and shall acquire all property, rights and interests necessary therefore.

(e.) This permit shall not release the permittee from any other permit requirements or liability or obligation imposed by Minnesota Statutes, Federal Law or local ordinances relating thereto and shall remain in force subject to all conditions and limitations now or hereafter imposed by law.

(f.) Unless explicitly specified, this permit does not authorize any alterations of the beds or banks of any public (protected) waters or wetlands. A separate permit must be obtained from the Department of Natural Resources prior to any such alteration.

3. PERMITTEE'S RESPONSIBILITIES:

(a.) MONITORING.

The permittee shall equip each installation for appropriating or using water with a device or employ a method to measure the quantity of water appropriated to within ten (10) percent of actual amount withdrawn unless otherwise specified by special provision.

(b.) REPORTS.

Monthly records of the amount of water appropriated or used shall be recorded for each installation. Such readings and the total amount of water appropriated or used shall be reported annually to the Director of the Division of Waters, on or before February 15 of the following year, upon forms supplied by the Division. Any processing fee required by law or rule shall be submitted with the records whether or not any water was appropriated during the year. Failure to report shall be sufficient cause for terminating the permit 30 days following written notice.

(c.) TRANSFER OR ASSIGNMENT.

Any transfer or assignment of rights, or sale of property involved hereunder shall be reported within 90 days thereafter to the Director of the Division of Waters. Such notice shall be made by the transferee (i.e. new owner) and shall state the intention to continue the appropriation as stated in the permit. This permit shall not be transferred or assigned except with the written consent of the Commissioner.

(d.) MODIFICATION.

The permittee must notify the Commissioner in writing of any proposed changes to the existing permit. This permit shall not be modified without first obtaining the written permission from the Commissioner.

4. COMMISSIONER'S AUTHORITY:

(a.) The Commissioner may inspect any installation utilized for the appropriation or use of water. The permittee shall grant access to the site at all reasonable times and shall supply such information concerning such installation as the Commissioner may require.

(b.) The Commissioner may, as he deems necessary, require the permittee to install gages and/or observation wells to monitor the impact of the permittee's appropriation on the water resource and require the permittee to pay necessary costs of installation and maintenance.

(c.) The Commissioner may restrict, suspend, amend, or cancel this permit in accordance with applicable laws and rules for any cause for the protection of public interests, or for violation of the provisions of this permit.

5. PUBLIC RECORD:

All data, facts, plans, maps, applications, annual water use reports, and any additional information submitted as part of this permit, and this permit itself are part of the public record and are available for public inspection at the offices of the Division of Waters. The information contained therein may be used by the Division as it deems necessary. The submission of false data, statements, reports, or any such additional information, at any time shall be deemed as just grounds for revocation of this permit.

SPECIAL CONDITIONS

1. The permittee shall implement adequate soil and water conservation measures in order to protect water quality and prevent erosion and sedimentation.
2. All pump intakes must be screened to prevent fish from being drawn into the system.
3. This permit is valid only in conjunction with all required discharge authorizations. The permittee must submit copies of discharge authorizations and agreements and report the termination of same to the Division of Waters.
4. The Division of Waters reserves the right to review this permit as additional hydrologic data become available and to issue any further order as may become necessary to protect public interest.
5. Minnesota Statutes require all installations for appropriating water to be equipped with flow meters, unless another method of measurement is approved by the DNR-Division of Waters.
6. The permittee shall, whenever practical and feasible, employ water conservation techniques and practices such as reuse and recycling for onsite gravel washing or other quarry water supply needs.
7. The Division of Waters may require the suspension of appropriation during periods of low water in order to maintain a minimum flow in the watershed.

c: Region 4 Administrator
Region 4 Hydrologist
Area Hydrologist - Leo Getsfried
Area Fisheries Supervisor - Hugh Valiant
Area Wildlife Manager - Dennis Simon
Conservation Officer - Dave Mador
Enforcement Supervisor - Roger Tietz
Regional Enforcement Supervisor - Randy Evans
Nicollet County SWCD
Nicollet County Zoning Administrator
Permits Unit
Data Systems

N.U.Q.Q.
NEW ULM QUARTZITE QUARRIES

CRUSHED AGGREGATES
CHERRYSTONE POULTRY GRIT



Thursday, January 17, 2002

MN DNR - Waters
500 Lafayette Drive, Box 48
St. Paul, MN 55155-4048

RE: APPROPRIATION PERMITS 97-4200 AND 560141, NICOLLET COUNTY, MN

To Whom it May Concern:

Currently we have two metered installations, and consequently two permits, for which we track water use at our operation in New Ulm.

Permit 97-4200 tallies water from our quarry which is primarily ground water. This installation was set up in the year 2000 - to coincide with the issuance of Permit 97-4200 - and uses a Krohne mag meter to totalize water appropriated. The mag meter has required a substantial re-engineering of the piping configuration surrounding the meter; we have been working with the Krohne engineers to create a pipe design that will enable the meter to accurately reflect the water actually pumped from the quarry. Initially we discovered the mag meter was indicating erroneous readings based on a partial pipe flow. Mag meters work accurately when the pipe, (in our case an 18" round pipe metal pipe), is full. This has been a "patience trying" exercise in trial and error, never-the-less we believe we have the problem solved and will take meter readings beginning next season. This past year we have made monthly estimates based on the elapsed time our pump has run and by using the pump manufacturer's engineering information.

Permit 560141 tallies water pumped from the Minnesota River. We use this pump upon occasion and recently had a new mechanical meter installed to track water appropriated from the river. The meter was installed mid season and we have not yet developed the administrative rules for reading the meter at regular intervals. Our attached report is derived from estimates the our plant operators have put together based on their use of the river pump to furnish process water to our crushing plants. Next season we should have rules in place for recording these meter readings on a monthly basis.

If you have question, please feel free to phone me at your convenience.

Best regards,

NEW ULM QUARTZITE QUARRIES, INC.

Jeffrey G. Carlstrom
General Manager

Route 5, Box 21
New Ulm, Minnesota 56073
(507) 354-2925, Fax (507) 359-7870
www.nuqq.com



Minnesota Department of Natural Resources

500 Lafayette Road
St. Paul, Minnesota 55155-40__



October 11, 1999

Jeffrey G. Carlstrom
New Ulm Quartzite Quarries
RR 5 Box 21
New Ulm MN 56073

Dear Mr. Carlstrom:

APPROPRIATION PERMIT 97-4200, QUARRY DEWATERING, NICOLLET COUNTY

Enclosed is Appropriation Permit 97-4200, authorizing the appropriation of 1,516 million gallons of water per year to accomplish dewatering of your mining operation. The permit authorizes one stationary pump to appropriate at a rate not to exceed 3900 gallons per minute.

Please read all permit conditions and limitations, especially conditions 8, 9, and 12. In accordance with the Environmental Assessment discussions, both the gathering of well information within a one and one half mile radius and installation of observation wells are required. Well information may be available through the Brown/Nicollet Environmental Health Department. Please contact Bonnie Holz, Environmental Health Director at 507-934-4140 for what information may be available.

As a condition of this permit you are also required to install a flow meter to record the monthly and total volumes of water appropriated annually. A water use report will be sent to you each January for reporting the amounts for the previous year. The report must be submitted with a processing fee by February 15 each year. Please refer to the enclosed rate schedule to determine your annual water use fee. The report and fee must be submitted as long as the permit is active, even if no water is used. Failure to submit the water use report and fee can result in the termination of your permit. Please do not send the report and fee until notified.

If you have any questions regarding your permit, please contact Area Hydrologist Robert Collett at 320-234-2560.

Sincerely,
DNR WATERS

John Linc Stine, Administrator
Permits and Land Use Section

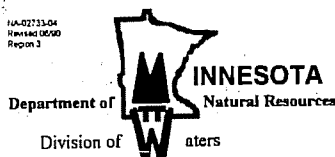
Enclosure

c: Dave Leuthe, Regional Hydrologist
Nicollet County SWCD
Nicollet County ZA
Hugh Valiant, Fisheries
Victoria Poage, Ecological Services

Robb Collett, Area Hydrologist
Conservation Officer, Greg Abraham
Data Systems/St. Paul
Dennis Simon, AWM
Obwell Program Manager

DNR Information: 612-296-6157, 1-800-766-6000 • TTY: 612-296-5484, 1-800-657-3929





WATER APPROPRIATION PERMIT

500 Lafayette Road
St. Paul, MN 55155-4032

PERMIT
97-4200

COUNTY
NICOLLET (52)

IN THE MATTER OF THE APPLICATION FOR APPROPRIATION OF WATERS OF THE STATE, PERMISSION IS HEREBY GRANTED TO:

PERMITTEE NEW ULM QUARTZITE QUARRIES INC		Authorized Agent
Address Route 5 Box 21, New Ulm, MN 56073; Phone (507) 354-2925		
To appropriate from: Quarry by means of one stationary pump at 3900 gpm Point of Taking: SW¼, Section 35, T110N, R30W. Point of Discharge: SE¼ SE¼, Section 34, T110N, R30W.		
Purpose: Quarry dewatering on a seasonal basis from March 1 to December 1 each year. Eventual discharge to the Minnesota River via a settling basin via an 18 inch, 1800 foot pipe as authorized by NPDES/SDS Permit No. MN 0061638. Use Code (263)		
Property described as: Portions of Section 2, T109N, R30W, and Section 34 and 35, T110N, R30W. Minnesota River (Mankato) Watershed (28)		
Authorized Signature John Linc Stine <i>John Linc Stine</i>	Title Administrator Permits and Land Use Section	Date 10-11-99

This permit is granted subject to the following **CONDITIONS:**

1. QUANTITY:

The Permittee is authorized to appropriate water at a rate not to exceed 3900 gallons per minute. The total amount of water appropriated shall not exceed 4654 acre feet or 1516 million gallons per year.

2. LIMITATIONS:

(a) Any violation of the terms and provisions of this permit and any appropriation of the waters of the state in excess of that authorized hereon shall constitute a violation of Minnesota Statutes, Chapter 103.

(b) This permit shall not be construed as establishing any priority of appropriation of waters of the state.

(c) This permit is permissive only. No liability shall be imposed upon or incurred by the State of Minnesota or any of its employees, on account of the granting hereof or on account of any damage to any person or property resulting from any act or omission of the Permittee relating to any matter hereunder. This permit shall not be construed as estopping or limiting any legal claims or right of action of any person other than the state against the Permittee, for any damage or injury resulting from any such act or omission, or as estopping or limiting any legal claim or right of action of the state against the Permittee, for violation of or failure to comply with the provisions of the permit or applicable provisions of law.

(d) In all cases where the doing by the Permittee of anything authorized by this permit shall involve the taking, using, or damaging of any property, rights or interests of any other person or persons, or of any publicly owned lands or improvements thereon or interests therein, the Permittee, before proceeding therewith, shall obtain the written consent of all persons, agencies, or authorities concerned, and shall acquire all property, rights, and interests necessary therefore.

(e) This permit shall not release the Permittee from any other permit requirements or liability or obligation imposed by Minnesota Statutes, Federal Law, or local ordinances relating thereto and shall remain in force subject to all conditions and limitations now or hereafter imposed by law.

(f) Unless explicitly specified, this permit does not authorize any alterations of the beds or banks of any public (protected) waters or wetlands. A separate permit must be obtained from the Department of Natural Resources prior to any such alteration.

(over, please)

3. PERMITTEE'S RESPONSIBILITIES:

(a) FLOW METER.

The Permittee shall equip each installation for appropriating or using water with a flow meter, unless another method of measuring the quantity of water appropriated to within ten (10) percent of actual amount withdrawn is approved by the Division of Waters.

(b) REPORTS.

Monthly records of the amount of water appropriated or used shall be recorded for each installation. Such readings and the total amount of water appropriated or used shall be reported annually to the Director of the Division of Waters, on or before February 15 of the following year, upon forms supplied by the Division. Any processing fee required by law or rule shall be submitted with the records whether or not any water was appropriated during the year. Failure to report shall be sufficient cause for terminating the permit 30 days following written notice.

(c) TRANSFER OR ASSIGNMENT.

Any transfer or assignment of rights, or sale of property involved hereunder shall be reported within 90 days thereafter to the Director of the Division of Waters. Such notice shall be made by the transferee (i.e., new owner) and shall state the intention to continue the appropriation as stated in the permit. This permit shall not be transferred or assigned except with the written consent of the Commissioner.

(d) MODIFICATION.

The Permittee must notify the Commissioner in writing of any proposed changes to the existing permit. This permit shall not be modified without first obtaining the written permission from the Commissioner.

4. COMMISSIONER'S AUTHORITY:

(a) The Commissioner may inspect any installation utilized for the appropriation or use of water. The Permittee shall grant access to the site at all reasonable times and shall supply such information concerning such installation as the Commissioner may require.

(b) The Commissioner may, as he/she deems necessary, require the Permittee to install gages and/or observation wells to monitor the impact of the Permittee's appropriation on the water resource and require the Permittee to pay necessary costs of installation and maintenance.

(c) The Commissioner may restrict, suspend, amend, or cancel this permit in accordance with applicable laws and rules for any cause for the protection of public interests, or for violation of the provisions of this permit.

5. PUBLIC RECORD:

All data, facts, plans, maps, applications, annual water use reports, and any additional information submitted as part of this permit, and this permit itself are part of the public record and are available for public inspection at the offices of the Division of Waters. The information contained therein may be used by the Division as it deems necessary. The submission of false data, statements, reports, or any such additional information, at any time shall be deemed as just grounds for revocation of this permit.

6. WETLAND CONSERVATION ACT:

Where the work authorized by this permit involves the draining or filling of wetlands not subject to DNR jurisdiction, the permittee shall not initiate any appropriation under this permit until the permittee has obtained official approval from the responsible governmental unit as required by the Minnesota Wetland Conservation Act.

7. WELL ABANDONMENT:

The permittee shall notify the Minnesota Department of Health prior to abandoning, removing, covering, plugging or filling the well(s) from which the authorized appropriation was made. The well(s) must be abandoned by a licensed well driller and in accordance with the procedures required under the Minnesota Department of Health Water Well Code (4725.2500 - 4725.2900).

8. DOMESTIC WELL INFORMATION AND INTERFERENCE:

The permit is not valid until the permittee submits well information for all domestic wells within a radius of one and one half miles of the quarry. Domestic well information must include the following: well owner, well location, age of well, depth, diameter, static water level. The permittee shall submit domestic well information to the Area Hydrologist, DNR Waters, 20596 Highway 7, Hutchinson, MN 55350. If notified by the Department that well interference is suspected and probable from your appropriation, based on confirmation of a formal well interference complaint, all appropriation authorized by this permit must cease immediately until the interference is resolved.

9. WATER QUALITY SAMPLING:

In accordance with the Record of Decision dated September 1, 1999, the permittee shall submit copies of the domestic well information including sampling results for coliform bacteria and nitrates to the Minnesota Department of Health, Environmental Health Division, Policy Analysis Unit Supervisor, 220 Metro Square Building, 121 East 7th Place, St. Paul, MN 55101.

10. DISCHARGE AUTHORIZATION:

This permit is valid only in conjunction with all required discharge authorizations.

11. SUSPENSION:

DNR Waters may require the suspension of appropriations during periods of high water in order to limit flows in the watercourse/watershed.

12. OBSERVATION WELLS:

This permit is not valid until the permittee installs observation wells as specified in the Record of Decision dated September 1, 1999. To document the effect of dewatering the west quarry as mining to lower levels continues, the permittee shall install two observation wells; one along the northerly boundary of the property and one along the westerly property boundary. The north observation well will be installed at the property line immediately south of unique well no. 402900. The well on the west property line shall be installed between the west quarry and the Guldano well. An observation well shall be installed outside the zone of influence within one mile of the quarry to measure weather-related effects on ground water levels. The control well shall be installed immediately to establish the range of current ground water elevations. Water levels in the observation wells and the control well shall be measured on a monthly basis, the same day each month. If the water levels in the observation wells near the quarry show that drawdown levels are ten feet greater than the range of current elevations plus the regional fluctuation indicated by the control well, a program of testing water levels in existing wells within the five-foot drawdown contour will be instituted. Water levels are to be recorded and submitted to the Observation Well Program Manager, DNR Waters, 500 Lafayette Road Box 32, St. Paul, MN 55155-4032, by October 31st each year for the period ending September 30th or upon request. Copies of water well records for all wells must be submitted to the DNR Obwell Program Manager.

13. CONSERVATION:

All practical and feasible water conservation methods and practices must be employed to promote sound water management and minimize dewatering water volumes.

c: Dave Leuthe, Regional Hydrologist
Robb Collett, Area Hydrologist
Nicollet County SWCD
DNR Fisheries, Hugh Valiant

DNR Enforcement-Greg Abraham, CO
Ecological Services, Victoria Poage
Nicollet County Zoning Administrator
DNR Wildlife, Dennis Simon

Obwell Program Manager
Data Systems



520 Lafayette Road North | St. Paul, Minnesota 55155-4194 | 651-296-6300

800-657-3864 | Use your preferred relay service | info.pca@state.mn.us | Equal Opportunity Employer

April 24, 2019

Michael Callahan
Environmental Specialist
OMG Midwest Inc dba Minnesota Paving and Materials
1905 3rd Ave
Mankato, MN 56001-2802

RE: Air Emission General Permit No. 10300033-101

Dear Michael Callahan:

Enclosed is the signed cover page for State Non-Metallic Mineral General Permit No. 10300033-101 for the facility located at 45755 571st Ave, New Ulm, Brown County, Minnesota. The Minnesota Pollution Control Agency (MPCA) received Form GP-01 on 04/15/2019, which notified the MPCA that the owner name changed from OldCastle Materials Group to OMG Midwest Inc dba Minnesota Paving & Materials. This permit supersedes Air Emission Permit No. 10300033-004.

The signed cover page indicates that the permit was issued to your facility and authorizes the operation of your non-metallic mineral processing facility. Keep this for your records. You are responsible for identifying and complying with all parts of the permit that apply to your facility.

The permit is effective from the date the permit is issued to you. Please read through the permit and review its conditions and requirements. Distribute the permit to staff members responsible for ensuring compliance with the conditions and limitations in the permit. If appropriate, post the permit at the facility.

Thank you for your cooperation during the permit process. If you have questions about any portion of the permit, I may be reached at 651-757-2123 or by email at beckie.olson@state.mn.us.

Sincerely,

Toni Volkmeier

This document has been electronically signed.

Toni Volkmeier, P.E.
Supervisor, Air Quality Permits Unit 3
Air Quality Permits Section
Industrial Division

TV/BAO:lao

Enclosure

AIR EMISSION GENERAL PERMIT NO. 10300033-101

IS ISSUED TO

OMG Midwest Inc dba Minnesota Paving and Materials
45755 571st Ave
New Ulm, MN 56073-5508

The emission units, control equipment and emission stacks at the stationary source authorized in this general permit are as described in the Permit Applications Table.

This general permit supersedes Air Emission General Permit No. 10300033- 004 and authorizes the Permittee to construct, modify, and operate nonmetallic mineral processing stationary sources at multiple locations in Minnesota under the conditions set forth herein as long as all conditions of this general permit are always met at each stationary source covered by the Permittee's general permit. (Portable crushing spreads or aggregate processing plants in some situations may be stationary sources themselves, or in other situations parts of another stationary source). If the construction, modification, or operation of a nonmetallic mineral processing stationary source by the Permittee would not comply with all conditions of this general permit, the Permittee must apply for and obtain an individual Part 70, state, or registration permit before beginning actual construction of the modification or change. Terms used in this general permit are as defined in the state air quality rules unless the term is explicitly defined in this general permit.

Unless otherwise indicated, all the Minnesota rules cited as the origin of the permit terms are incorporated into the State Implementation Plan under 40 CFR § 52.1220 and as such are enforceable by the U.S. Environmental Protection Agency (EPA) Administrator or citizens under the Clean Air Act.

Permit Type: State General, Limits to Avoid Pt 70/Limits to Avoid NSR

Issue Date: April 24, 2019

Expiration: Nonexpiring
Title I Conditions do not expire

Signature: *Toni Volkmeier*

This document has been electronically signed.

for the Minnesota Pollution Control Agency

for Don Smith, P.E., Manager
Air Quality Permits Section
Industrial Division

Permit Applications Table

Permit Type	Application Date(s)	Permit Action
Nonmetallic Mineral General Permit Administrative	4/15/2019	10300033-101

TABLE OF CONTENTS

Notice to the Permittee

Permit Shield

Table A: Limits and Other Requirements

Table B: Submittals

Appendix I: Source-Specific Requirements

Attached Forms: These forms are available on the MPCA Website at <http://www.pca.state.mn.us/air/permits/forms.html>

Form Name: NM-CR, MN General Permit Annual Compliance Certification

Form Name: NM-EQ, Equipment Description and Notification Form

Form Name: GP-01, Air Emission General Permit Administrative Changes

Form Name: NM-DRF, Deviations Report

Form Name: NM-RE, Location Notification

NOTICE TO THE PERMITTEE:

Your stationary source may be subject to the requirements of the Minnesota Pollution Control Agency's (MPCA) solid waste, hazardous waste, and water quality programs. If you wish to obtain information on these programs, including information on obtaining any required permits, please contact the MPCA general information number at:

Metro Area	651-296-6300
Outside Metro Area	1-800-657-3864
TTY	651-282-5332

The rules governing these programs are contained in Minn. R. chs. 7000-7105. Written questions may be sent to: Minnesota Pollution Control Agency, 520 Lafayette Road North, St. Paul, Minnesota 55155-4194.

Questions about this air emission permit or about air quality requirements can also be directed to the telephone numbers and address listed above.

PERMIT SHIELD:

Subject to the limitations in Minn. R. 7007.1800, compliance with the conditions of this permit shall be deemed compliance with the specific provision of the applicable requirement identified in the permit as the basis of each condition.

Subject to the limitations of Minn. R. 7007.1800 and 7017.0100, subp. 2, notwithstanding the conditions of this permit specifying compliance practices for applicable requirements, any person (including the Permittee) may also use other credible evidence to establish compliance or noncompliance with applicable requirements.

TABLE A: LIMITS AND OTHER REQUIREMENTS

Table A contains the limits and other requirements with which your nonmetallic mineral processing stationary source(s) must comply. These limits are located in the first column of the table (What to do). The limits can be emission limits or operational limits. This column also contains the actions that you must take and the records you must keep to show that you are complying with the limits. The second column of Table A (Why to do it) lists the regulatory basis for these limits. An appendix is included in your general permit. Unless specifically indicated otherwise, requirements contained in the various parts of the appendix are enforceable conditions of this general permit. The limits and other requirements contained in Table A apply to each nonmetallic mineral processing stationary source constructed, modified, or operated by the Permittee which is covered by this general permit.

Stationary Source: "Stationary source" has the meaning given in Minn. R. 7005.0100, subp. 42c. For there to be a nonmetallic mineral processing stationary source, one or more pieces of processing equipment (such as those listed in Table A.1, namely crushers, screens, transfer operations, etc.) must be present and operational (storage of equipment in an inoperative state does not constitute a stationary source). Stationary sources may contain portable, mobile, and stationary equipment.

Multiple-Party Site: A multiple-party site is a stationary source location where two or more equipment owners or operators operate nonmetallic mineral processing equipment on the same site and there exists a contractual or other similar relationship between them regarding processing of nonmetallic minerals or their nonmetallic mineral processing operations support each other at the site.

At a multiple-party site, the governing permit is the permit held by the nonmetallic mineral processing company that establishes the stationary source and hires others to perform part of the nonmetallic mineral processing there. This company, which is the holder of the governing permit, is the Permittee responsible for the multiple-party site. If you are the Permittee of a stationary source location which is a multiple-party site, you shall require all parties to comply with the provisions of your permit.

Table A.1: Eligibility Requirements

What to do	Why to do it
Emission Units Allowed: Each nonmetallic mineral processing stationary source constructed, modified and operated under this general permit shall consist only of: Crushers (subject to the fines crushing production limitation described, below, under "Materials Allowed") Screens Wet screening operations and associated transfer operations downstream of the wet screening operation in the production line process up to, but not including, the next crusher in the production line of a nonmetallic mineral processing stationary source. A wet screening operation means a screening facility designed and operated to remove unwanted material from the product by a washing process whereby the product is completely saturated with water in a slurry Transfer operations (including belt conveyors, enclosed truck/railcar loading stations, bucket elevators, storage bins, stackers, ladders, chutes, classification screws, feeders, pneumatic systems, and bagging operations) Internal combustion engines Sand heaters Air separators (closed system) Storage piles Paved and unpaved roads and parking lots Bulldozers, loaders, and other related vehicles Insignificant activities as defined in Minn. R. 7007.1300, subp. 2 and 3 Conditionally insignificant activities listed in Minn. R. 7008.	Minn. Stat. § 116.07, subd. 4a; Minn. R. 7007.0800, subp. 2, and Minn. R. 7007.1100
Emission Units Not Allowed: Although only the emission units listed in "Emission Units Allowed" are allowed under this general permit, the following emission units that are sometimes part of a nonmetallic mineral processing stationary source are specifically not allowed under this general permit: grinding mills, air conveying systems, air classifiers, calciners, and aggregate heaters/dryers.	Minn. Stat. § 116.07, subd. 4a, Minn. R. 7007.0800, subp. 2, and Minn. R. 7007.1100
New Source Performance Standards: If applicable, the owner or operator shall comply with NSPS standards for nonmetallic mineral processing, volatile organic liquid storage vessels (storage tanks), compression ignition internal combustion engines and spark ignition internal combustion engines.	40 CFR pt. 60, subps. OOO, Kb, III and JJJ; Minn. Stat. § 116.07, subd. 4a, Minn. R. 7007.0800, subp. 2, and Minn. R. 7007.1100

Table A.1. (Continued)

National Emission Standards for Hazardous Air Pollutions: If applicable, the owner or operator shall comply with the NESHAP standards for reciprocating internal combustion engines.

40 CFR pt. 63, subp. ZZZZ;
Minn. R. 7007.0800, subp. 2

Revised New Source Performance Standards for Nonmetallic Mineral Processing: If 40 CFR 60, subp. OOO is revised after October 28, 2008, those changes shall be automatically applicable under this permit. The Permittee shall comply with any changes according to the schedule provided in Subpart OOO as allowed by US. EPA.	40 CFR pt. 60, subp. OOO; Minn. R. 7007.0800, subp. 2
Materials Allowed: Except as specifically provided below, a nonmetallic mineral processing stationary source constructed, modified, and operated under this general permit may produce or process only: - Crushed and broken limestone - Crushed and broken granite - Crushed and broken stone - Construction sand and gravel - Recycled concrete - Recycled asphalt pavement - The initial steps in producing manufactured sand Exceptions: Other - De Minimis Quantities: A de minimis quantity is a quantity of materials, other than those listed above, that may be produced or processed such that the total amount of actual emissions from producing or processing of all de minimis quantities in any calendar year at any stationary source location is less than one ton (i.e., 1 ton/year per site) of Particulate Matter (PM). No pollutants other than PM, Particulate Matter less than 10 microns (PM₁₀) or Particulate Matter less than 2.5 (PM_{2.5}) may be emitted as a result of producing or processing the other material, except those emitted from the operation of associated internal combustion engines. Whenever the Permittee produces or processes de minimis quantities of other materials, calculations of the projected and actual PM, PM₁₀ and PM_{2.5} emissions from producing or processing de minimis quantities must be kept by the Permittee along with records of the dates, site, tons of material produced or processed and a description of the material. Fines Crushing: Crushing material to a maximum size of 3/16 inch or smaller in any calendar year at any stationary source location covered by this general permit is limited to less than 50,000 tons (i.e., 50,000 tons/year per site). Whenever the Permittee performs fines crushing, records must be kept by the Permittee indicating the dates, site, and tons of material produced or processed as well as a description of the material. Crushing material to a maximum size of 3/16 inch is referred to in this general permit as "fines crushing." Fines crushing involve the production of manufactured sand and products of a similar size.	Minn. Stat. § 116.07, subd. 4a, Minn. R. 7007.0800, subp. 2, and Minn. R. 7007.1100

Table A.1. (Continued)

Control Equipment Allowed: A nonmetallic mineral processing stationary source constructed, modified, and operated under this general permit may contain add-on air pollution control equipment to capture and remove air pollutants from process air streams or have equipment located indoors provided that compliance with all emission limits in this general permit is maintained without considering the effect of such controls. Because no prescribed operation and maintenance and recordkeeping are required, reduced emissions due to such add-on control equipment will not be considered when calculating emissions for the annual emissions inventory.	Minn. Stat. § 116.07, subd. 4a, Minn. R. 7007.0800, subp. 2, and Minn. R. 7007.1100
Geographic Areas of Operation Allowed: Under this general permit, provided all conditions are met at all stationary sources, the Permittee is authorized to construct, modify and operate multiple stationary sources simultaneously anywhere in Minnesota except any area designated as maintenance area for PM ₁₀ . If the Permittee wishes to operate at a location in an area that is or becomes reclassified nonattainment for PM ₁₀ after issuance of this general permit, the Permittee must submit an application for an individual part 70, state, or registration permit to cover that location before commencing operation or beginning actual construction or modification of a nonmetallic mineral processing stationary source.	Minn. Stat. § 116.07, subd. 4a, Minn. R. 7007.0800, subp. 2, Minn. R. 7007.0800, subp. 12, and Minn. R. 7007.1100

Table A.2: Total Facility Requirements

What to do	Why to do it
Circumvention: Do not install or use a device or means that conceals or dilutes emissions, which would otherwise violate a federal or state air pollution control rule, without reducing the total amount of pollutant emitted.	Minn. R. 7011.0020
Fugitive Emissions: The owner or operator shall not cause or permit the handling, use, transporting, or storage of any material in a manner which may allow avoidable amounts of particulate matter to become airborne. Comply with all other requirements listed in Minn. R. 7011.0150.	Minn. R. 7011.0150
Noise: The Permittee shall comply with the noise standards set forth in Minn. R. 7030.0010 to 7030.0080 at all times during the operation of any emission units. This is a state only requirement and is not enforceable by the EPA Administrator or citizens under the Clean Air Act.	Minn. R. 7030.0010 - 7030.0080
Inspections: The owner or operator shall comply with the inspection procedures and requirements as found in Minn. R. 7007.0800, subp. 9(A).	Minn. R. 7007.0800, subp. 9(A)
General Conditions: The Permittee shall comply with the General Conditions listed in Minn. R. 7007.0800, subp. 16	Minn. R. 7007.0800, subp. 16
Performance Testing: Conduct all performance testing in accordance with Minn. R. ch. 7017 unless otherwise noted. The Commissioner may request additional performance testing under Minn. R. 7017.2020, subp. 1.	Minn. R. 7017.2001-7017.2060
Performance Test Notifications and Submittals: Performance Tests Notification (written): due 30 days before each Performance Test Performance Test Plan: due 30 days before each Performance Test. To be submitted on <i>form NM-TP</i> Performance Test Pretest Meeting: due 7 days before each Performance Test Performance Test Report: due 45 days after each Performance Test Performance Test Microfiche/CD Copy: due 105 days after each Performance Test The Notification, Test Plan, and Test Report may be submitted in alternative format as allowed by Minn. R. 7017.2018.	Minn. R. 7017.2018; Minn. R. 7017.2030, subps. 1-4; and Minn. R. 7017.2035, subp. 1-2
Recordkeeping: Retain all records required by this general permit at each stationary source or at the Permittee's option, the Permittee's central office for a period of five years from the date of monitoring, emission calculations, sampling, measurement, or report. Records which must be retained include all calibration and maintenance records, all original chart recordings for continuous monitoring instrumentation, and copies of all reports and records required by this general permit. Records must conform to the requirements listed in Minn. R. 7007.0800, subp. 5(A).	Minn. R. 7007.0800, subp. 5(A) and 5(C)
Submittals: All submittals required by this general permit must be certified by a responsible official, defined in Minn. R. 7007.0100, subp. 21. Submittals which must be provided on forms approved by the Commissioner are noted in Tables A and B. All submittals must be postmarked or received by the date specified in the tables.	Minn. R. 7007.0800, subp. 6

Table A.2 (Continued)

Notification of Deviations Endangering Human Health or the Environment: As soon as possible after discovery, notify the Commissioner or the state duty officer, either orally or by facsimile, of any deviation from permit conditions which could endanger human health or the environment.	Minn. R. 7019.1000, subp. 1
Notification of Deviations Endangering Human Health or the Environment Report: Within 2 working days of discovery, notify the Commissioner in writing of any deviation from permit conditions which could endanger human health or the environment. Include the following information in this written description: 1. the cause of the deviation; 2. the exact dates of the period of the deviation, if the deviation has been corrected; 3. whether or not the deviation has been corrected; 4. the anticipated time by which the deviation is expected to be corrected, if not yet corrected; and 5. steps taken or planned to reduce, eliminate, and prevent reoccurrence of the deviation.	Minn. R. 7019.1000, subp. 1
Operation Changes: In any shutdown, breakdown, or deviation the Permittee shall immediately take all practical steps to modify operations to reduce the emission of any regulated air pollutant. The Commissioner may require feasible and practical modifications in the operation to reduce emissions of air pollutants. No emissions units that have an unreasonable shutdown or breakdown frequency of process or control equipment shall be permitted to operate.	Minn. R. 7019.1000, subp. 4
Shutdown Notifications: Notify the Commissioner at least 24 hours in advance of a planned shutdown of any control equipment or process equipment if the shutdown would cause any increase in the emissions of any regulated air pollutant. If the owner or operator does not have advance knowledge of the shutdown, notification shall be made to the Commissioner as soon as possible after the shutdown. However, notification is not required in the circumstances outlined in Items A, B and C of Minn. R. 7019.1000, subp. 3. At the time of notification, the owner or operator shall inform the Commissioner of the cause of the shutdown and the estimated duration. The owner or operator shall notify the Commissioner when the shutdown is over.	Minn. R. 7019.1000, subp. 3
Breakdown Notifications: Notify the Commissioner within 24 hours of a breakdown of more than one hour duration of any control equipment or process equipment if the breakdown causes any increase in the emissions of any regulated air pollutant. The 24-hour time period starts when the breakdown was discovered or reasonably should have been discovered by the owner or operator. However, notification is not required in the circumstances outlined in Items A, B and C of Minn. R. 7019.1000, subp. 2. At the time of notification or as soon as possible thereafter, the owner or operator shall inform the Commissioner of the cause of the breakdown and the estimated duration. The owner or operator shall notify the Commissioner when the breakdown is over.	Minn. R. 7019.1000, subp. 2

Table A.2 (Continued)

Semiannual Deviations Report: Due 30 days after the end of each calendar half-year. The first semi-annual report submitted by the Permittee shall cover the calendar half-year in which the permit was issued. The first report of each calendar year covers January 1 – June 30 due by July 30. The second report of each calendar year covers July 1 – December 31 due by January 30. If no deviations have occurred, the Permittee shall submit the report stating no deviations. <i>To be submitted on a form NM-DRF.</i>	Minn. R. 7007.0800, subp. 6(A)(2)
Annual Compliance Certification: Due 31 days after the end of each calendar year (<i>January 31</i>) following general permit issuance (for the previous calendar year). The report covers all deviations experienced during the calendar year. <i>To be submitted on a form NM-CR.</i>	Minn. R. 7007.0800, subp. 6(C)
Emissions Inventory Report: Due on or before April 1 of each calendar year following permit issuance. To be submitted on a form approved by the Commissioner.	Minn. R. 7019.3000-7019.3010
Emission Fees: Due 60 days after receipt of an MPCA invoice.	Minn. R. 7002.0005-7002.0095
Name Change of Ownership or Control of Stationary Source: The owner or operator shall submit to the MPCA the Air Emission General Permit <i>Administrative Changes Form (GP-01)</i> within 7 days of the name change in ownership or control of the stationary source. If the Commissioner determines that the new owner or operator meets the eligibility requirements of the general permit for general permit issuance, then the Commissioner shall issue the general permit to the new owner or operator. Issuance of a general permit to the new owner or operator of an eligible stationary source voids and supersedes the general permit of the previous owner or operator. If the Commissioner determines the new owner or operator does not meet the eligibility requirements, the new owner or operator shall submit a permit application for a registration, state, or part 70 permit within 120 days of the Commissioner's written request for the application.	Minn. R. 7007.1100, subp. 8; Minn. R. 7007.0800, subp. 2

Table A.3: Requirements and Limits that Apply to the Entire Stationary Source

What to do	Why to do it
Material Moisture Content: At each stationary source, the feed material moisture content shall be greater than or equal to 1.5 percent. This shall be demonstrated at each stationary source by either 1 or 2 below: 1. Test moisture content of each different feed material source (sampled at an area representative of the feed source and physically capable of being sampled), as follows: a. Use American Society for Testing and Materials (ASTM) method numbers D 2216-92 or D 4643-93 (or equivalent). b. Keep records of each moisture content test summarizing the method used, results, date, time, and initials of person performing test. c. Test weekly, when operating, unless three consecutive tests at the stationary source location show moisture contents of greater than or equal to 1.5 percent after which testing is no longer required until the source of the feed material changes. d. When testing indicates that feed material moisture content is less than 1.5 percent, or in situations where it is infeasible to sample and test, or where the Permittee elects not to sample and test, the Permittee must operate a moisture addition device at or immediately prior to the initial crusher(s) or initial screen(s) where unprocessed feed material is being fed to achieve a moisture content greater than or equal to 1.5 percent. Moisture addition during operation shall continue until subsequent moisture content testing demonstrates that feed material moisture content is greater than or equal to 1.5 percent. Daily, when operating, either: (i) keep records of the date, water flow rate, material throughput rate, and initials of the person making the record and the time the record was made; or (ii) conduct moisture content testing daily on the feed material after water application following a. and b. above, and if results show moisture content is less than 1.5 percent, increase water addition to insure moisture is 1.5 percent or greater and re-test to verify.	Title I Condition: To qualify for this general permit under Minn. R. 7007.1100; Limit to avoid classification as major source and modification under 40 CFR § 52.21 and Minn. R. 7007.3000; Limit to avoid major source classification under 40 CFR § 70.2 and Minn. R. 7007.0200; Minn. Stat. § 116.07, subd. 4a, Minn. R. 7007.0800, subp. 2, and Minn. R. 7007.1100

Table A.3 (Continued)

<u>OR</u> 2. Keep records indicating that feed material is being removed from below the water table - or from below the surface of a waterway (e.g., creek, river, lake) - or that the feed material is recycled asphalt pavement. Records shall include a description of the source (if recycled asphalt pavement, so indicate), the corresponding dates, and the initials of the person making the record.	
Stationary Source Designation and Capacity Limits: Only one option (Small, Medium, or Large) at a time shall apply at each stationary source covered by this general permit. The option that shall apply to a particular stationary source is selected by the Permittee from the Stationary Source Designation Matrix in Appendix I, either Table 1 or Table 2. The option, along with the limit on annual production (throughput), and the limit on the amount of equipment shall be indicated in a Location Notification submitted by the Permittee as required by this general permit on a form approved by the Commissioner. (Wet screening operations and associated transfer operations downstream of the wet screening operation in the production line process up to, but not including, the next crusher in the production line of a nonmetallic mineral processing stationary source shall not be counted towards the number of units or capacity levels indicated under the three site designation options. A wet screening operation means a screening facility designed and operated to remove unwanted material from the product by a washing process whereby the product is completely saturated with water in slurry.) To demonstrate compliance with the annual production limit at each stationary source location, the Permittee shall maintain daily record of the production, in tons. The Permittee shall also maintain record of the monthly calculation and the 12-month rolling sum (i.e., the current month plus the eleven preceding months). If a stationary source has less than 12 months of operational data, the Permittee shall determine compliance during the first 12 months under this general permit using the following formula: $N = 0.95 \times (\text{Annual Production Limit}) + 0.0045 \times (\text{Annual Production Limit}) \times (n-1)$ Where "n" is the number of months in operation, and "N" is the rolling sum limit for the current month. At its option, the Permittee may calculate and record individual monthly sums, in lieu of 12-month rolling sums, for a stationary source location such that the annual production limit divided by 12 is not exceeded. These calculations and records must be made by the 15th day of the following month. (At a multiple-party site, the number of pieces of equipment (Table 1) or the capacity of equipment (Table 2) of all parties operating at the site at the same time shall be added together by the Permittee to determine the stationary source designation and the appropriate non-process dust control option for that site. Likewise, the production of all parties shall be added together by the Permittee to determine compliance with the annual production limit from the Stationary Source Designation Matrix, in Appendix I.)	Title I Condition. To qualify for this general permit under Minn. R. 7007.1100; Limit to avoid classification as major source and modification under 40 CFR § 52.21 and Minn. R. 7007.3000; Limit to avoid major source classification under 40 CFR § 70.2 and Minn. R. 7007.0200; Minn. Stat. § 116.07, subd. 4a, Minn. R. 7007.0800, subp. 2, Minn. R. 7007.1100, and Minn. R. 7011.0150

Table A.3 (Continued)

Non-Process Dust Control Options: The option (Small, Medium, or Large), and the associated non-process dust control requirements, that shall apply to each stationary source covered by this general permit is selected by the Permittee from the Stationary Source Designation Matrix as described above. <u>Small Stationary Source Non-Process Dust Control:</u> The Permittee shall comply with the requirements of Minn. R. 7011.0150. This means that all reasonable measures shall be taken to prevent avoidable amounts of particulate matter from becoming airborne. In a practical manner this refers to preventing avoidable visible dust emissions beyond the lot line surrounding the stationary source. Control of non-process dust emissions can be achieved through such measures as applying water or commercially available dust suppressant to stock piles, unpaved roads and handling areas. <u>Medium Stationary Source Non-Process Dust Control:</u> In addition to the requirements described in the "Small" option, the following requirements apply to the Permittee: 1. Record date and time of action and initials of person making the record. 2. Record amount of water or dust suppressant applied. 3. If a commercially available dust suppressant is used, it shall be applied in accordance with the manufacturer's guidelines. A copy of these manufacturer's guidelines must be kept by the Permittee. <u>Large Stationary Source Non-Process Dust Control:</u> In addition to the requirements described in the "Small" option, the following requirements apply to the Permittee: 1. Record date and time of action and initials of person making the record; 2. Record amount of water or dust suppressant applied; 3. If a commercially available dust suppressant is used, it shall be applied in accordance with the manufacturer's guidelines. A copy of these manufacturer's guidelines must be kept by the Permittee; 4. Record the location (e.g., on a site sketch) of water or dust suppressant application; 5. Install a rain gauge at the site and record the precipitation in the previous 24 hours for each day of operation at the site; 6. Make and record basic weather observations according to the Weather Summary Criteria listed in Appendix I that best characterize each operating day; 7. Unpaved roads at the site shall be posted with speed limit signs indicating a maximum speed of 10 miles per hour; and 8. Equipment to apply water or dust suppressant shall always be available at the site or on call for use at the site within a given operating day.	Title I Condition: Limit to avoid classification as major source and modification under 40 CFR § 52.21 and Minn. R. 7007.3000; Limit to avoid major source classification under 40 CFR § 70.2 and Minn. R. 7007.0200; Minn. Stat. § 116.07, subd. 4a, Minn. R. 7007.0800, subp. 2, Minn. R. 7007.1100, and Minn. R. 7011.0150
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Table A.3 (Continued)

Equipment Inventory List: The Permittee shall maintain a written list of each piece of equipment on site, if applicable. The list shall include the type of equipment, serial number, dates of installation, modification and reconstruction, all applicable Standards of Performance for New Stationary Sources, subparts OOO, IIII and JJJJ records, and for the National Emission Standards for Hazardous Air Pollutants, subpart ZZZZ, if applicable. The list shall be updated to include any new, modified or changed equipment just before making a change. When the list is updated, the Permittee shall maintain copies of all previous equipment lists on site or the central office for a period of 5 years. Notation of the evaluation shall be done before making every modification or change. In the notation, the Permittee shall re-evaluate whether if the facility still qualifies for this general permit. If the answer is no, the Permittee must apply for a Part 70 permit that would authorize the modification or change that would allow to operate the facility before making the modification or change. <i>The Permittee may use Form NM-EQ as an equivalent for the equipment inventory list but must include the additional requirements listed above.</i>	To qualify for this general permit under Minn. R. 7007.1100 and Minn. R. 7007.0800, subp. 2
Labeling Requirements: The Permittee shall permanently affix the manufacturer's serial number (or otherwise unique identifying number) to each piece of crushing, screening, transfer operation, heaters, air separators, and stationary internal combustion engine equipment for tracking purposes within 60 days of permit issuance, if applicable. The number shall be permanently affixed and maintained so that it is readable and visible at all times from a safe distance at each stationary source. This number shall correspond to the number contained in records regarding the piece of equipment.	Minn. Stat. § 116.07, subd. 4a, Minn. R. 7007.0800, subp. 2, and Minn. R. 7007.1100
Location Notification: Submit a Location Notification at least 48 hours prior to each change in location of a stationary source, establishment of a new stationary source location, or change in a capacity/dust control option at an individual stationary source. <i>To be submitted on a form NM-RE.</i>	Minn. Stat. § 116.07, subd. 4a, Minn. R. 7007.0800, subp. 2, Minn. R. 7007.0800, subp. 12, and Minn. R. 7007.1100
Source Specific Requirements: Comply with the source-specific requirements in Appendix I of this permit	To qualify for this general permit under Minn. R. 7007.1100. See Appendix I

Table A.4: Limits that Apply to NSPS Crushers

(Those subject to 40 CFR pt. 60, subp. 000.)

What to do	Why to do it
Opacity: less than 15 percent opacity.	40 CFR § 60.672(c) and Minn. R. 7011.3350

Table A.5: Limits that Apply to other Equipment Subject to NSPS

(Those subject to 40 CFR pt. 60, subp. 000. Included here are, screens, belt conveyors, bucket elevators, bagging operations, storage bins, and enclosed truck or railcar loading stations.)

What to do	Why to do it
Opacity: less than 10 percent opacity.	40 CFR § 60.672(b) and Minn. R. 7011.3350

Table A.6: Limits that Apply to Equipment not Subject to NSPS

What to do	Why to do it
Opacity: For equipment put in operation on or after 7/9/69: less than 20 percent opacity.	Minn. R. 7011.0715, subp. 1(B)
Opacity: For equipment put in operation before 7/9/69: less than 20 percent opacity except that a maximum of 60 percent opacity shall be permissible for four minutes in any 60-minute period and 40 percent opacity shall be permissible for four additional minutes in any 60-minute period.	Minn. R. 7011.0710, subp. 1(B)

Table A.7: NSPS Notification and Testing Requirements for Equipment Newly Subject to NSPS (Subpart OOO) and Submittal Requirements for Replacements

(If you are the Permittee responsible for a stationary source location which is a multiple-party site covered by your general permit you shall take all reasonable measures to insure that all equipment being operated at the stationary source has met these requirements in Table A.7. You are not required to repeat the notices and tests if they have already been done; however, you must be able to indicate where the documentation of the notices and tests can be found (e.g., the Air Quality file associated with a company you have hired).)

What to do	Why to do it
CONSTRUCTION OR RECONSTRUCTION: Notification of construction or reconstruction postmarked no later than 30 days after the start of construction as defined in 40 CFR§ 60.2 except for mass-produced (prefabricated) affected facilities.	40 CFR § 60.7(a)(1) and Minn. R. 7019.0100, subp. 1
ACTUAL INITIAL STARTUP: Notification of actual initial startup date postmarked within 15 days after such date.	40 CFR § 60.7(a)(3) and Minn. R. 7019.0100, subp. 1
INITIAL PERFORMANCE TESTING: Shall be completed within 60 days of achieving maximum production rate but no later than 180 days after initial startup date.	40 CFR § 60.8(a), 60.675, 60.676, Minn. R. 7017.2015, and Minn. R. 7011.3350
PERFORMANCE TEST NOTIFICATION: Performance test notification postmarked at least 30 days prior to conducting a performance test.	40 CFR § 60.8(d), and Minn. R. 7017.2015, subp. 2(A)
REPLACEMENT: Notification postmarked within 60 days after making the replacement.	40 CFR § 60.670(d), 60.676, and Minn. R. 7011.3350
NOTIFICATION OF ANY PHYSICAL CHANGE OR OPERATIONAL CHANGE: Notification postmarked 60 days or as soon as practicable before the change is commenced.	40 CFR § 60.7(a)(4); 40 CFR § 60.670 and Minn. R. 7019.0100, subp. 1

Table A.8: Requirements and Limits that Apply to Stationary Internal Combustion Engines at Each Stationary Source

(This includes generators as well as other stationary internal combustion engines (e.g., those which directly drive crushers or screens), but does not include mobile sources, such as loaders, haul trucks and other vehicles.)

What to do	Why to do it
Allowed Fuels: Diesel fuel, natural gas, liquefied petroleum gas (LPG)/propane, biodiesel and gasoline, subject to the limitation described below. No other fuels shall be used. For each stationary source location covered by this general permit, the Permittee shall monthly record the amount of each fuel used during the previous month and do the calculation on the Stationary Internal Combustion Engines Fuel Use <i>form (NM-EN)</i> in Appendix I by the 15th of the following month, if more than one fuel was used. The Permittee may elect to make and record this calculation in a different format, but it must include the same information. (At a multiple-party site, the fuel used by all parties operating at the site at the same time shall be added together by the Permittee to determine compliance for that site.)	Title I Condition. Limit to avoid classification as major source and modification under 40 CFR § 52.21 and Minn. R. 7007.3000; limit to avoid major source classification under 40 CFR § 70.2 and Minn. R. 7007.0200; Minn. R. 7011.2300, subp. 2; Minn. Stat. § 116.07, subd. 4a, Minn. R. 7007.0800, subp. 2, and Minn. R. 7007.1100
SO₂: less than or equal to 0.5 lbs/mmBtu heat input using a 3-hour rolling average	Minn. R. 7011.2300, subp. 2
Opacity: less than or equal to 20 percent opacity once operating temperatures have been obtained.	Minn. R. 7011.2300, subp. 1
Sitting Conditions: The Permittee shall maintain the sitting conditions for generators as listed in Appendix I.	Minn. R. 7007.1100; Minn. R. 7007.0800, subp. 2
Fuel Supplier Certification: The Permittee shall obtain and maintain a fuel supplier certification for each shipment of diesel fuel, certifying that the sulfur content does not exceed 0.50% by weight.	Minn. R. 7007.0800, subps. 4 & 5

Table A.9: Requirements and Limits that Apply to Stationary Emergency Internal Combustion Engines at Each Stationary Source

What to do	Why to do it
SO₂: less than or equal to 0.5 lbs/mmBtu heat input using a 3-hour rolling average	Minn. R. 7011.2300, subp. 2
Opacity: less than or equal to 20 percent opacity once operating temperatures have been obtained.	Minn. R. 7011.2300, subp. 1
Fuel type: Natural gas/propane/diesel/biodiesel only by design.	Minn. R. 7005.0100, subp. 35a
Hours of Operation: The Permittee shall maintain documentation on site that the unit is an emergency generator by design that qualifies under the U.S. EPA memorandum entitled "Calculating Potential to Emit (PTE) for Emergency Generators" dated September 6, 1995, limiting operation to 500 hours per year.	Minn. R. 7007.0800, subps. 4 & 5
Fuel Supplier Certification: The Permittee shall obtain and maintain a fuel supplier certification for each shipment of diesel fuel, certifying that the sulfur content does not exceed 0.50% by weight.	Minn. R. 7007.0800, subps. 4 & 5

Table A.10: Limits and Requirements that Apply to Volatile Organic Liquid Storage Tanks (Must be Insignificant Activities) Which are Subject to 40 CFR pt. 60, subp. Kb

Tanks *subject* to 40 CFR pt. 60, subp. Kb includes those meeting both of the following requirements:

- storage capacity is greater than or equal to 40 m³ (10,568 gallons); *and*
- tank construction, reconstruction, or modification commenced after July 23, 1984.

(If you are the Permittee responsible for a stationary source location which is a multiple-party site covered by your general permit, you shall take all reasonable measures to insure that all subject tanks meet these requirements in Table A.10. You are not required to repeat the recordkeeping requirement if it has already been met.)

What to do	Why to do it
Tank size: Any volatile organic liquid storage tank constructed, reconstructed, or modified after July 23, 1984, must have a design capacity less than 75 m ³ (19,815 gallons)	Minn. Stat. § 116.07, subd. 4a, Minn. R. 7007.0800, subp. 2, and Minn. R. 7007.1100
Records: For each tank, keep records showing the dimension of the storage vessel and an analysis showing the capacity of the storage vessel. Retain records for the life of the tank.	40 CFR § 60.116b(b) and 60.116b(a), and Minn. R. 7011.1520(C)

Table A.11: Limits and Requirements that Apply to New and Existing Sand Heaters

What to do	Why to do it
PM: less than or equal to 0.30 grains per dry standard cubic foot unless required to reduce emissions to less than or equal to either the amount allowed by Minn. R. 7011.0700 to 7011.0735	Minn. R. 7011.0610, subp. 1(A)(1)
Opacity: less than or equal to 20% opacity except for one-six minute period per hour of not more than 60 % percent opacity.	Minn. R. 7011.0610, subp. 1(A)(2)
SO₂: less than or equal to 2.0 lbs/mmBtu using a 3-hour rolling average	Minn. R. 7011.0610, subp. 2 (A)
Maximum Capacity of Total Heaters: less than or equal to 10.0 mmBtu/hr	Minn. Stat. § 116.07, subd. 4a, Minn. R. 7007.0800, subp. 2, and Minn. R. 7007.1100
Fuel Type: Natural Gas and Propane only	Minn. Stat. § 116.07, subd. 4a, Minn. R. 7007.0800, subp. 2, and Minn. R. 7007.1100

Table A.12: The following Standards of Performance for Stationary Compression Ignition Internal Combustion Engines (40 CFR pt. 60, subp. IIII) for Engines with less than 30 liters per cylinder that were constructed, modified, or reconstructed after July 11, 2005.

The date that construction commences is the date the engine is ordered by the owner or operator. Applies to owners and operators that commence construction after July 11, 2005, of the following engines:

- 1) *engines manufactured after April 1, 2006, and are not fire pump engines*
- 2) *engines manufactured as a certified National Fire Protection Association (NFPA) fire pump engine after July 1, 2006.*

Engines modified or reconstructed after July 11, 2005, must meet the emission standards for the model year in which the engine was originally new, not the year that the engine was modified or reconstructed.

Emergency Stationary Internal Combustion Engine (ICE) is defined as an engine whose operation is limited to emergency situations and required testing and maintenance. Examples include stationary ICE used to produce power for critical networks or equipment (including power supplied to portions of a facility) when electric power from the local utility (or the normal power source, if the facility runs on its own power production) is interrupted, or stationary ICE used to pump water in the case of fire or flood, etc. Stationary CI ICE used to supply power to an electric grid or that supply power as part of a financial arrangement with another entity are not considered to be emergency engines.

HP- Horsepower

g/HP-hr- grams per horsepower-hour

Owners and Operators of Non-Emergency Engines (Pre-2007) and < 10 liters/cylinder

What to do	Why to do it
A. EMISSION STANDARDS	hdr
MAXIMUM ENGINE POWER LESS THAN 11 HP	hdr
NMHC + NO_x : less than 7.8 g/HP-hr	40 CFR § 60.4204 (a); Minn. R. 7011.3520
CO : less than 6.0 g/HP-hr	40 CFR § 60.4204 (a); Minn. R. 7011.3520
PM : less than 0.75 g/HP-hr	40 CFR § 60.4204 (a); Minn. R. 7011.3520
MAXIMUM ENGINE POWER GREATER THAN OR EQUAL TO 11 HP BUT LESS THAN 25HP	hdr
NMHC + NO_x : less than 7.1 g/HP-hr	40 CFR § 60.4204 (a); Minn. R. 7011.3520
CO : less than 4.9 g/HP-hr	40 CFR § 60.4204 (a); Minn. R. 7011.3520
PM : less than 0.60 g/HP-hr	40 CFR § 60.4204 (a); Minn. R. 7011.3520
MAXIMUM ENGINE POWER GREATER THAN OR EQUAL TO 25 HP BUT LESS than 50 HP	hdr
NMHC + NO_x : less than 7.1 g/HP-hr	40 CFR § 60.4204 (a); Minn. R. 7011.3520
CO : less than 4.1 g/HP-hr	40 CFR § 60.4204 (a); Minn. R. 7011.3520
PM : less than 0.60 g/HP-hr	40 CFR § 60.4204 (a); Minn. R. 7011.3520

MAXIMUM ENGINE POWER GREATER THAN OR EQUAL TO 50 HP BUT LESS than 175 HP	hdr
NOx : less than 6.9 g/HP-hr for engine power greater	40 CFR § 60.4204 (a); Minn. R. 7011.3520
MAXIMUM ENGINE POWER GREATER THAN OR EQUAL TO 175 HP BUT GREATER THAN 750 HP	hdr
HC : less than 1.0 g/HP-hr	40 CFR § 60.4204 (a); Minn. R. 7011.3520
NOx : less than 6.9 g/HP-hr	40 CFR § 60.4204 (a); Minn. R. 7011.3520
CO : less than 8.5 g/HP-hr	40 CFR § 60.4204 (a); Minn. R. 7011.3520
PM : less than 0.40 g/HP-hr	40 CFR § 60.4204 (a); Minn. R. 7011.3520

Owners and Operators of Non-Emergency Engines (Pre-2007) and ≥ 10 liters/cylinder and < 30 liters/cylinder

What to do	Why to do it
A. EMISSION STANDARDS	hdr
NOx : less than 12.7 g/HP-hr (17.0 g/KW-hr) when maximum test speed is less than 130 revolutions per minute (rpm)	40 CFR § 60.4204; 40 CFR § 94.8(a)(1); Minn. R. 7011.3520
NOx : less than 33.6 g/HP-hr ($45.0 \times N^{-0.20}$) when maximum test speed is at least 130 rpm but less than 2000 rpm, where N is the maximum test speed of the engine in rpm	40 CFR § 60.4204; 40 CFR § 94.8(a)(1); Minn. R. 7011.3520
NOx : less than 7.3 g/HP-hr (9.8 g/kW-hr) when maximum test speed is 2000 rpm or more.	40 CFR § 60.4204; 40 CFR § 94.8(a)(1); Minn. R. 7011.3520

Owners and Operators of Non-Emergency Engines (2007 and later) and < 30 liters/cylinder

What to do	Why to do it
A. EMISSION STANDARDS	hdr
NO_x : less than 12.7 g/HP-hr (17.0 g/KW-hr) when maximum test speed is less than 130 revolutions per minute (rpm)	40 CFR § 60.4204; 40 CFR § 94.8(a)(1); Minn. R. 7011.3520
NO_x : less than 33.6 g/HP-hr ($45.0 \times N^{-0.20}$) when maximum test speed is at least 130 rpm but less than 2000 rpm, where N is the maximum test speed of the engine in rpm	40 CFR § 60.4204; 40 CFR § 94.8(a)(1); Minn. R. 7011.3520
NO_x : less than 7.3 g/HP-hr (9.8 g/kW-hr) when maximum test speed is 2000 rpm or more.	40 CFR § 60.4204; 40 CFR § 94.8(a)(1); Minn. R. 7011.3520

B. FUEL REQUIREMENTS FOR OWNERS AND OPERATORS OF NON-EMERGENCY ENGINES	hdr
Fuel Restriction: On October 1, 2007, the owners and operators that use diesel fuel must use diesel fuel that meets the requirements of 40 CFR§ 80.510(a)	40 CFR § 60.4207; 40 CFR § 80.510(a); Minn. R. 7011.3520
Fuel Restriction: On October 1, 2010, the owners and operators of stationary CI internal combustion engines with a displacement of less than 30 liters per cylinder that use diesel fuel must use the requirements of 40 CFR§ 80.510(b) for nonroad diesel fuel	40 CFR § 60.4207; 40 CFR § 80.510(b); Minn. R. 7011.3520
Fuel Used Up: Owners and operators of pre-2011 model year stationary CI internal combustion engines may petition the EPA Administrator for approval to use remaining non-compliant fuel that does not meet the fuel requirements of 40 CFR§ 60.4207 (a) and (b) beyond the dates required for purpose of using up existing fuel inventories. If approved, the petition will be valid for a period of up to 6 months. If additional time is needed, the owner or operator is required to submit a new petition to the EPA Administrator.	40 CFR § 60.4207; Minn. R. 7011.3520

C. COMPLIANCE REQUIREMENTS FOR OWNERS AND OPERATORS OF NON-EMERGENCY ENGINES	hdr
The owner or operator must comply with the emission standards specified in 40 CFR§ 60.4204, and must operate and maintain the stationary CI internal combustion engine and control device according to the manufacturer's written instructions or procedures developed by the owner or operator that are approved by the engine manufacturer. In addition, owners and operators may only change those settings that are permitted by the manufacturer. The owner and operator must also meet the requirements of 40 CFR pts. 89, 94 and/or 1068, as they apply to you.	40 CFR § 60.4211; Minn. R. 7011.3520
For pre-2007 model year engines with a displacement < 30 liters per cylinder that are not fire pump engines, you must demonstrate compliance according to <u>one</u> of the methods specified below: (1) Purchasing an engine certified according to 40 CFR pt. 89 or 40 CFR pt. 94, as applicable, for the same model year and maximum engine power. The engine must be installed and configured according to the manufacturer's specifications; (2) Keeping records of performance test results for each pollutant for a test conducted on a similar engine. The test must have been conducted using the same methods specified in this subpart and these methods must have been followed correctly; (3) Keeping records of engine manufacturer data indicating compliance with the standards; (4) Keeping records of control device vendor data indicating compliance with the standards; or (5) Conducting an initial performance test to demonstrate compliance with the emission standards according to the requirements specified in 40 CFR§ 60.4212, as applicable.	40 CFR § 60.4211(b)(1) through (5); Minn. R. 7011.3520
The owner or operator of a 2007 model year and later with a displacement < 30 liters per cylinder stationary CI internal combustion engine and must comply with the emission standards specified in 40 CFR§ 60.4204(b) or 40 CFR§ 60.4205(b). The engine must be installed and configured according to the manufacturer's specifications.	40 CFR § 60.4211(c) Minn. R. 7011.3520
D. MONITORING FOR OWNERS AND OPERATORS FOR NON-EMERGENCY ENGINES	hdr
The owner or operator of a stationary CI internal combustion engine equipped with a diesel particulate filter to comply with the emission standards in 40 CFR § 60.4204, the diesel particulate filter must be installed with a backpressure monitor that notifies the owner or operator when the high backpressure limit of the engine is approached.	40 CFR § 60.4209(b); Minn. R. 7011.3520

E. NOTIFICATIONS AND REPORTING FOR OWNERS AND OPERATORS FOR NON-EMERGENCY ENGINES	hdr
Owners and operators of non-emergency stationary CI ICE that are greater than 2,237 KW (3,000 HP), or have a displacement of greater than or equal to 10 liters per cylinder, or are pre-2007 model year engines that are greater than 130 KW (175 HP) and not certified, must meet the following requirements: Submit an initial notification as required in 40 CFR § 60.7(a)(1). The notification must include the following information : 1) Name and address of the owner or operator; 2) The address of the affected source; 3) Engine information including make, model, engine family, serial number, model year, maximum engine power, and engine displacement; 4) Emission control equipment; and 5) Fuel used.	40 CFR § 60.4214(a)(1); Minn. R. 7011.3520
F. RECORDKEEPING FOR OWNERS AND OPERATORS FOR NON-EMERGENCY ENGINES	hdr
Owners and operators of non-emergency stationary CI ICE that are greater than 2,237 KW (3,000 HP), or have a displacement of greater than or equal to 10 liters per cylinder, or are pre-2007 model year engines that are greater than 130 KW (175 HP) and not certified, must meet the following requirements: Keep records of the following information: 1) All notifications submitted and all documentation supporting any notification; 2) Maintenance conducted on the engine; 3) If the stationary CI internal combustion is a certified engine, documentation from the manufacturer that the engine is certified to meet the emission standards; and 4) If the stationary CI internal combustion is not a certified engine, documentation that the engine meets the emission standards.	40 CFR § 60.4214(a)(2); Minn. R. 7011.3520
<i>Records of Any Corrective Actions:</i> If the stationary CI internal combustion engine is equipped with a diesel particulate filter, the owner or operator must keep records of any corrective action taken after the backpressure monitor has notified the owner or operator that the high backpressure limit of the engine is approached.	40 CFR § 60.4214(c); Minn. R. 7011.3520

Owners and Operators of Emergency Engines Except Fire Pump Engines (Pre-2007) and < 10 liters/cylinder

What to do	Why to do it
A. EMISSION STANDARDS	hdr
MAXIMUM ENGINE POWER LESS THAN 11 HP	hdr
<i>NMHC + NOx</i> : less than 7.8 g/HP-hr	40 CFR § 60.4205 (a); Minn. R. 7011.3520
<i>CO</i> : less than 6.0 g/HP-hr	40 CFR § 60.4205 (a); Minn. R. 7011.3520
<i>PM</i> : less than 0.75 g/HP-hr	40 CFR § 60.4205 (a); Minn. R. 7011.3520
MAXIMUM ENGINE POWER GREATER THAN OR EQUAL TO 11 HP BUT LESS THAN 25HP	hdr
<i>NMHC + NOx</i> : less than 7.1 g/HP-hr	40 CFR § 60.4205 (a); Minn. R. 7011.3520
<i>CO</i> : less than 4.9 g/HP-hr	40 CFR § 60.4205 (a); Minn. R. 7011.3520
<i>PM</i> : less than 0.60 g/HP-hr	40 CFR § 60.4205 (a); Minn. R. 7011.3520
MAXIMUM ENGINE POWER GREATER THAN OR EQUAL TO 25 HP BUT LESS than 50 HP	hdr
<i>NMHC + NOx</i> : less than 7.1 g/HP-hr	40 CFR § 60.4205 (a); Minn. R. 7011.3520
<i>CO</i> : less than 4.1 g/HP-hr	40 CFR § 60.4205 (a); Minn. R. 7011.3520
<i>PM</i> : less than 0.60 g/HP-hr	40 CFR § 60.4205 (a); Minn. R. 7011.3520
MAXIMUM ENGINE POWER GREATER THAN OR EQUAL TO 50 HP BUT LESS than 175 HP	hdr
<i>NOx</i> : less than 6.9 g/HP-hr for engine power greater	40 CFR § 60.4205 (a); Minn. R. 7011.3520
MAXIMUM ENGINE POWER GREATER THAN OR EQUAL TO 175 HP BUT GREATER THAN 750 HP	hdr
<i>HC</i> : less than 1.0 g/HP-hr	40 CFR § 60.4205 (a); Minn. R. 7011.3520
<i>NOx</i> : less than 6.9 g/HP-hr	40 CFR § 60.4205 (a); Minn. R. 7011.3520
<i>CO</i> : less than 8.5 g/HP-hr	40 CFR § 60.4205 (a); Minn. R. 7011.3520
<i>PM</i> : less than 0.40 g/HP-hr	40 CFR § 60.4205 (a); Minn. R. 7011.3520

Owners and Operators of Emergency Engines Except Fire Pump Engines (Pre-2007) and ≥ 10 liters/cylinder and < 30 liters/cylinder

What to do	Why to do it
<i>NOx</i> : less than 12.7 g/HP-hr (17.0 g/KW-hr) when maximum test speed is less than 130 revolutions per minute (rpm)	40 CFR § 60.4205(a); 40 CFR § 94.8(a)(1); Minn. R. 7011.3520
<i>NOx</i> : less than 33.6 g/HP-hr ($45.0 \times N^{-0.20}$) when maximum test speed is at least 130 rpm but less than 2000 rpm, where N is the maximum test speed of the engine in rpm	40 CFR § 60.4205(a); 40 CFR § 94.8(a)(1); Minn. R. 7011.3520
<i>NOx</i> : less than 7.3 g/HP-hr (9.8 g/kW-hr) when maximum test speed is 2000 rpm or more.	40 CFR § 60.4205(a); 40 CFR § 94.8(a)(1); Minn. R. 7011.3520

Owners and Operators of Emergency Engines Except Fire Pump (2007 and later) and < 30 liters/cylinder

What to do	Why to do it
A. EMISSION STANDARDS	hdr
MAXIMUM ENGINE POWER LESS THAN 50 HP (Model Year 2007). Shall comply with the certification emission standards for new nonroad CI engines.	hdr
<i>NMHC+NOx</i> : less than 3.5 g/HP-hr (4.7 g/kW-hr)	40 CFR § 60.4205(b); 40 CFR § 60.4202; 40 CFR § 89.112; Minn. R. 7011.3520
<i>CO</i> : less than 3.7 g/HP-hr (5.0 g/kW-hr)	40 CFR § 60.4205(b); 40 CFR § 60.4202; 40 CFR § 89.112; Minn. R. 7011.3520
<i>PM</i> : less than 0.30 g/HP-hr (0.40 g/kW-hr)	40 CFR § 60.4205(b); 40 CFR § 60.4202; 40 CFR § 89.112; Minn. R. 7011.3520
Opacity: shall not exceed the following: (1) 20 percent during the acceleration mode; (2) 15 percent during the lugging mode; and (3) 50 percent during the peaks in either the acceleration or lugging modes.	40 CFR § 60.4205(b); 40 CFR § 60.4202; 40 CFR § 89.113; Minn. R. 7011.3520
MAXIMUM ENGINE POWER LESS THAN 11 HP (Model Year 2008+)	hdr
<i>NMHC + NOx</i> : less than 5.6 g/HP-hr	40 CFR § 60.4205 (b); 40 CFR § 1039.104, 105, 107, 115 and 40 CFR § 60.4202, Table 2 ; Minn. R. 7011.3520
<i>CO</i> : less than 6.0 g/HP-hr	40 CFR § 60.4205 (b); 40 CFR § 1039.104, 105, 107, 115 and 40 CFR § 60.4202, Table 2; Minn. R. 7011.3520
<i>PM</i> : less than 0.30 g/HP-hr	40 CFR § 60.4205 (b); 40 CFR § 1039.104, 105, 107, 115 and 40 CFR § 60.4202, Table 2; Minn. R. 7011.3520
MAXIMUM ENGINE POWER GREATER THAN OR EQUAL TO 11 HP BUT LESS THAN 25 HP (Model Year 2008+)	hdr
<i>NMHC + NOx</i> : less than 5.6 g/HP-hr	40 CFR § 60.4205 (b); 40 CFR § 1039.104, 105, 107, 115 and 40 CFR § 60.4202, Table 2; Minn. R. 7011.3520
<i>CO</i> : less than 4.9 g/HP-hr	40 CFR § 60.4205 (b); 40 CFR § 1039.104, 105, 107, 115 and 40 CFR § 60.4202, Table 2; Minn. R. 7011.3520

<i>PM</i> : less than 0.30 g/HP-hr	40 CFR § 60.4205 (b); 40 CFR § 1039.104, 105, 107, 115 and 40 CFR § 60.4202, Table 2; Minn. R. 7011.3520
MAXIMUM ENGINE POWER GREATER THAN OR EQUAL TO 25 HP BUT LESS THAN 50 HP (Model Year 2008+)	hdr
<i>NMHC</i> + <i>NOx</i> : less than 5.6 g/HP-hr	40 CFR § 60.4205 (b); 40 CFR § 1039.104, 105, 107, 115 and 40 CFR § 60.4202, Table 2; Minn. R. 7011.3520
<i>CO</i> : less than 4.1 g/HP-hr	40 CFR § 60.4205 (b); 40 CFR § 1039.104, 105, 107, 115 and 40 CFR § 60.4202, Table 2; Minn. R. 7011.3520
<i>PM</i> : less than 0.22 g/HP-hr	40 CFR § 60.4205 (b); 40 CFR § 1039.104, 105, 107, 115 and 40 CFR § 60.4202, Table 2; Minn. R. 7011.3520
MAXIMUM ENGINE POWER GREATER THAN OR EQUAL 50 HP (Model Year 2007). Shall comply with the certification emission standards for new nonroad CI engines for the same model year and maximum engine power in 40 CFR§ 89.112 and 40 CFR§ 89.113 for all pollutants beginning in model year 2007	hdr

Owners and Operators of Fire Pump Engines (All years 2007 and after) and < 30 liters/cylinder

What to do	Why to do it
A. EMISSION STANDARDS	hdr
MAXIMUM ENGINE POWER LESS THAN 11 HP (Model Year 2010 and earlier)	hdr
NMHC + NOx: less than 7.8 g/HP-hr	40 CFR § 60.4205 (c); Minn. R. 7011.3520
CO: less than 6.0 g/HP-hr	40 CFR § 60.4205 (c); Minn. R. 7011.3520
PM: less than 0.75 g/HP-hr	40 CFR § 60.4205 (c); Minn. R. 7011.3520
MAXIMUM ENGINE POWER LESS THAN 11 HP (Model Year 2011+)	hdr
NMHC + NOx: less than 5.6 g/HP-hr	40 CFR § 60.4205 (c); Minn. R. 7011.3520
PM: less than 0.30 g/HP-hr	40 CFR § 60.4205 (c); Minn. R. 7011.3520
MAXIMUM ENGINE POWER GREATER THAN OR EQUAL TO 11 HP BUT LESS THAN 25HP (Model Year 2010 and earlier)	hdr
NMHC + NOx: less than 7.1 g/HP-hr	40 CFR § 60.4205 (c); Minn. R. 7011.3520
CO: less than 4.9 g/HP-hr	40 CFR § 60.4205 (c); Minn. R. 7011.3520
PM: less than 0.60 g/HP-hr	40 CFR § 60.4205 (c); Minn. R. 7011.3520
MAXIMUM ENGINE POWER GREATER THAN OR EQUAL TO 11 HP BUT LESS THAN 25HP (Model Year 2011+)	hdr
NMHC + NOx: less than 5.6 g/HP-hr	40 CFR § 60.4205 (c); Minn. R. 7011.3520
PM: less than 0.30 g/HP-hr	40 CFR § 60.4205 (c); Minn. R. 7011.3520
MAXIMUM ENGINE POWER GREATER THAN OR EQUAL TO 25 HP BUT LESS than 50 HP (Model Year 2010 and earlier)	hdr
NMHC + NOx: less than 7.1 g/HP-hr	40 CFR § 60.4205 (c); Minn. R. 7011.3520
CO: less than 4.1 g/HP-hr	40 CFR § 60.4205 (c); Minn. R. 7011.3520
PM: less than 0.60 g/HP-hr	40 CFR § 60.4205 (c); Minn. R. 7011.3520
MAXIMUM ENGINE POWER GREATER THAN OR EQUAL TO 25 HP BUT LESS than 50 HP (Model Year 2011+)	hdr
NMHC + NOx: less than 5.6 g/HP-hr	40 CFR § 60.4205 (c)
PM: less than 0.22 g/HP-hr	40 CFR § 60.4205 (c)
MAXIMUM ENGINE POWER GREATER THAN OR EQUAL TO 50 HP BUT LESS than 75 HP (Model Year 2010 and earlier)	hdr
NMHC + NOx: less than 7.8 g/HP-hr	40 CFR § 60.4205 (c); Minn. R. 7011.3520

<i>CO</i> : less than 3.7 g/HP-hr	40 CFR§ 60.4205 (c); Minn. R. 7011.3520
<i>PM</i> : less than 0.60 g/HP-hr	40 CFR§ 60.4205 (c); Minn. R. 7011.3520
MAXIMUM ENGINE POWER GREATER THAN OR EQUAL TO 50 HP BUT LESS than 75 HP (Model Year 2011+) ¹	hdr
<i>NMHC + NOx</i> : less than 3.5g/HP-hr	40 CFR§ 60.4205 (c); Minn. R. 7011.3520
<i>PM</i> : less than 0.30 g/HP-hr	40 CFR§ 60.4205 (c); Minn. R. 7011.3520
MAXIMUM ENGINE POWER GREATER THAN OR EQUAL TO 75 HP BUT LESS than 100 HP (Model Year 2010 and earlier)	hdr
<i>NMHC + NOx</i> : less than 7.8 g/HP-hr	40 CFR§ 60.4205 (c); Minn. R. 7011.3520
<i>CO</i> : less than 3.7 g/HP-hr	40 CFR§ 60.4205 (c); Minn. R. 7011.3520
<i>PM</i> : less than 0.60 g/HP-hr	40 CFR§ 60.4205 (c); Minn. R. 7011.3520
MAXIMUM ENGINE POWER GREATER THAN OR EQUAL TO 75 HP BUT LESS than 100 HP (Model Year 2011+) ¹	hdr
<i>NMHC + NOx</i> : less than 3.5 g/HP-hr	40 CFR§ 60.4205 (c); Minn. R. 7011.3520
<i>PM</i> : less than 0.30 g/HP-hr	40 CFR§ 60.4205 (c); Minn. R. 7011.3520
MAXIMUM ENGINE POWER GREATER THAN OR EQUAL TO 100 HP BUT LESS than 175 HP (Model Year 2009 and earlier)	hdr
<i>NMHC + NOx</i> : less than 7.8 g/HP-hr	40 CFR§ 60.4205 (c); Minn. R. 7011.3520
<i>CO</i> : less than 3.7 g/HP-hr	40 CFR§ 60.4205 (c); Minn. R. 7011.3520
<i>PM</i> : less than 0.60 g/HP-hr	40 CFR§ 60.4205 (c); Minn. R. 7011.3520
MAXIMUM ENGINE POWER GREATER THAN OR EQUAL TO 100 HP BUT LESS than 175 HP (Model Year 2010+) ²	hdr
<i>NMHC + NOx</i> : less than 3.0 g/HP-hr	40 CFR§ 60.4205 (c); Minn. R. 7011.3520
<i>PM</i> : less than 0.22 g/HP-hr	40 CFR§ 60.4205 (c); Minn. R. 7011.3520
MAXIMUM ENGINE POWER GREATER THAN OR EQUAL TO 175 HP BUT LESS than 300 HP (Model Year 2008 and earlier)	hdr
<i>NMHC + NOx</i> : less than 7.8 g/HP-hr	40 CFR§ 60.4205 (c); Minn. R. 7011.3520
<i>CO</i> : less than 2.6 g/HP-hr	40 CFR§ 60.4205 (c); Minn. R. 7011.3520
<i>PM</i> : less than 0.40 g/HP-hr	40 CFR§ 60.4205 (c); Minn. R. 7011.3520
MAXIMUM ENGINE POWER GREATER THAN OR EQUAL TO 175 HP BUT LESS than 300 HP (Model Year 2009+)	hdr
<i>NMHC + NOx</i> : less than 3.0 g/HP-hr	40 CFR§ 60.4205 (c); Minn. R. 7011.3520
<i>PM</i> : less than 0.15 g/HP-hr	40 CFR§ 60.4205 (c); Minn. R. 7011.3520

MAXIMUM ENGINE POWER GREATER THAN OR EQUAL TO 300 HP BUT LESS than 600 HP (Model Year 2008 and earlier)	hdr
<i>NMHC + NOx</i> : less than 7.8 g/HP-hr	40 CFR§ 60.4205 (c); Minn. R. 7011.3520
<i>CO</i> : less than 2.6 g/HP-hr	40 CFR§ 60.4205 (c); Minn. R. 7011.3520
<i>PM</i> : less than 0.40 g/HP-hr	40 CFR§ 60.4205 (c); Minn. R. 7011.3520
MAXIMUM ENGINE POWER GREATER THAN OR EQUAL TO 300 HP BUT LESS than 600 HP (Model Year 2009+)	hdr
<i>NMHC + NOx</i> : less than 3.0 g/HP-hr	40 CFR§ 60.4205 (c); Minn. R. 7011.3520
<i>PM</i> : less than 0.15 g/HP-hr	40 CFR§ 60.4205 (c); Minn. R. 7011.3520
MAXIMUM ENGINE POWER GREATER THAN OR EQUAL TO 600 HP BUT LESS OR EQUAL TO 750 HP (Model Year 2008 and earlier)	hdr
<i>NMHC + NOx</i> : less than 7.8 g/HP-hr	40 CFR§ 60.4205 (c); Minn. R. 7011.3520
<i>CO</i> : less than 2.6 g/HP-hr	40 CFR§ 60.4205 (c); Minn. R. 7011.3520
<i>PM</i> : less than 0.40 g/HP-hr	40 CFR§ 60.4205 (c); Minn. R. 7011.3520
MAXIMUM ENGINE POWER GREATER THAN OR EQUAL TO 600 HP BUT LESS OR EQUAL TO 750 HP (Model Year 2009+)	hdr
<i>NMHC + NOx</i> : less than 3.0 g/HP-hr	40 CFR§ 60.4205 (c); Minn. R. 7011.3520
<i>PM</i> : less than 0.15 g/HP-hr	40 CFR§ 60.4205 (c); Minn. R. 7011.3520
MAXIMUM ENGINE POWER GREATER THAN 750 HP (Model Year 2007 and earlier)	hdr
<i>NMHC + NOx</i> : less than 7.8 g/HP-hr	40 CFR§ 60.4205 (c); Minn. R. 7011.3520
<i>CO</i> : less than 2.6 g/HP-hr	40 CFR§ 60.4205 (c); Minn. R. 7011.3520
<i>PM</i> : less than 0.40 g/HP-hr	40 CFR§ 60.4205 (c); Minn. R. 7011.3520
MAXIMUM ENGINE POWER GREATER THAN 750 HP (Model Year 2008+)	hdr
<i>NMHC + NOx</i> : less than 4.8 g/HP-hr	40 CFR§ 60.4205 (c); Minn. R. 7011.3520
<i>PM</i> : less than 0.15 g/HP-hr	40 CFR§ 60.4205 (c); Minn. R. 7011.3520

¹ For model years 2011-2013, owners and operators of fire pump stationary CI ICE in this engine power category with a rated speed of greater than 2,560 revolutions per minute (rpm) may comply with the emission limitations for 2010 model year engines

² For model years 2010-2012, owners and operators of fire pump stationary CI ICE in this engine power category with a rated speed of greater than 2,560 rpm may comply with the emission limitations for 2009 model year engines

B. MONITORING, REPORTING AND RECORDKEEPING FOR OWNERS AND OPERATORS OF EMERGENCY ENGINES	hdr
The owner or operator is not required to submit an initial notification. Starting with the model year 2013 for engine power less than 75 HP; model year 2012 for engine power less than 175 HP; and model year 2011 for engine power greater than and equal to 175 HP. If the emergency engine does not meet the standards applicable to non-emergency engines in the applicable model year, the owner or operator must keep records of the operation of the engine in emergency and non-emergency service that are recorded through the non-resettable hour meter. The owner must record the time of operation of the engine and the reason the engine was in operation during that time.	40 CFR§ 60.4214 (b); Minn. R. 7011.3520
Starting with the model year 2013 for engine power less than 75 HP; model year 2012 for engine power less than 175 HP; and model year 2011 for engine power greater than and equal to 175 HP, stationary CI internal combustion engine manufacturers must add a permanent label stating that the engine is for stationary emergency use only to each new emergency stationary CI internal combustion engine greater than or equal to 19 KW (25 HP) that meets all the emission standards for emergency engines in 40 CFR§ 60.4202 but does not meet all the emission standards for non-emergency engines in 40 CFR§ 60.4201. The label must be added according to the labeling requirements specified in 40 CFR§ 1039.135(b). Engine manufacturers must specify in the owner's manual that operation of emergency engines is limited to emergency operations and required maintenance and testing.	40 CFR§ 60.4210 (f); Minn. R. 7011.3520

Table A.12: The following Standards of Performance for Stationary Spark Ignition Internal Combustion Engines (40 CFR pt. 60, subp. JJJJ) for Engines with less than or equal to 500 brake horsepower. These engines can use gasoline fuel only.

The engines that are constructed, modified or reconstructed after June 12, 2006, are subject to these rules. The date that construction commences is the date the engine is ordered by the owner or operator.

1. Non-emergency engines with a maximum engine power less than 500 HP, manufactured on or after July 1, 2008;
2. Emergency engines with a maximum engine power greater than 25HP, manufactured on or after January 1, 2009;
3. Engines that are acting as temporary replacement units and that are located at a stationary source for less than 1 year and that have been properly certified as meeting the standards that would be applicable to such engine under the appropriate nonroad engine provisions, are not required to meet any other requirements.

Owners and Operators of Non-Emergency Engines (Manufactured after July 1, 2008)

What to do	Why to do it
Owners and operators use gasoline must use gasoline that meets the per gallon sulfur limit in 40 CFR § 80.195.	40 CFR§ 60.4235
After July 1, 2010, owners and operators may not install stationary SI ICE with a maximum engine power of less than 500 HP that do not meet the applicable requirements in 40 CFR § 60.4233.	40 CFR§ 60.4236(c)
The owner or operator must operate and maintain the certified stationary SI internal combustion engine and control device according to the manufacturer's emission-related written instructions, and must keep records of conducted maintenance to demonstrate compliance, but no performance testing is required.	40 CFR§ 60.4243(a)
Owners and operators of all stationary SI ICE must keep records of the information in (1) through (4). (1) All notifications and all documentation supporting any notification as described in 40 CFR §§ 60.7 and 60.19. (2) Maintenance conducted on the engine. (3) If the stationary SI internal combustion engine is a certified engine, documentation from the manufacturer that the engine is certified to meet the emission standards and information as required in 40 CFR parts 90 and 1048. (4) If the stationary SI internal combustion engine is not a certified engine or is a certified engine operating in a non-certified manner and subject to 40 CFR§ 60.4243(a)(2), documentation that the engine meets the emission standards.	40 CFR§ 60.4245 (a); 40 CFR§ 60.7 and 60.19.
For all stationary SI emergency ICE greater than or equal to 130 HP and less than 500 HP manufactured on or after July 1, 2011 that do not meet the standards applicable to non-emergency engines, the owner or operator of must keep records of the hours of operation of the engine that is recorded through the non-resettable hour meter.	40 CFR§ 60.4243(d)

Owners and Operators of Emergency Engines (Manufactured after July 1, 2008)

What to do	Why to do it
The owner or operator of an emergency stationary SI internal combustion engine that is less than 130 HP, was built on or after July 1, 2008, and does not meet the standards applicable to non-emergency engines, you must install a non-resettable hour meter upon startup of your emergency engine.	40 CFR§ 60.4237
Emergency stationary ICE may be operated for the purpose of maintenance checks and readiness testing, provided that the tests are recommended by Federal, State or local government, the manufacturer, the vendor, or the insurance company associated with the engine. Maintenance checks and readiness testing of such units is limited to 100 hours per year. There is no time limit on the use of emergency stationary ICE in emergency situations. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that Federal, State, or local standards require maintenance and testing of emergency ICE beyond 100 hours per year. Emergency stationary ICE may operate up to 50 hours per year in non-emergency situations, but those 50 hours are counted towards the 100 hours per year provided for maintenance and testing. The 50 hours per year for non-emergency situations cannot be used for peak shaving or to generate income for a facility to supply power to an electric grid or otherwise supply power as part of a financial arrangement with another entity. For owners and operators of emergency engines, any operation other than emergency operation, maintenance and testing, and operation in non-emergency situations for 50 hours per year, as permitted in this section, is prohibited.	40 CFR§ 60.4243(d)
Emergency stationary SI ICE with a maximum engine power of greater than 19 KW (25 HP), owners and operators may not install engines that do not meet the applicable requirements in <i>40 CFR§ 60.4233 after January 1, 2011</i>.	40 CFR§ 60.4236(a)
For all stationary SI emergency ICE greater than 25 HP and less than 130 HP manufactured on or after July 1, 2008, that do not meet the standards applicable to non-emergency engines, the owner or operator of must keep records of the hours of operation of the engine that is recorded through the non-resettable hour meter. The owner or operator must document how many hours are spent for emergency operation; including what classified the operation as emergency and how many hours are spent for non-emergency operation.	40 CFR§ 60.4245(b)

Table A.14: The following are the requirements of the National Emission Standards for Hazardous Air Pollutants for Reciprocating Internal Combustion Engines (40 CFR pt. 63, subp. ZZZZ)

Owners and operators of new and reconstructed stationary engines located at area sources of HAP emissions must meet the requirements of 40 CFR pt. 60, subps. IIII or JJJJ, as appropriate. If the owners and operators are in compliance with either 40 CFR pt. 60, subps. IIII or JJJJ, as appropriate, they would be in compliance with 40 CFR pt. 63, subp. ZZZZ, for new and reconstructed engines.

Existing Source: Constructed or reconstructed before June 12, 2006

New Source: Constructed or reconstructed on or after June 12, 2006

Reconstructed must meet the definition of reconstruction in 40 CFR§ 63.2 and reconstruction is commenced on or before June 12, 2006.

TABLE B: SUBMITTALS

Table B lists the submittals you must send to the Commissioner. Table B is divided into two sections, for source-specific submittal requirements and for submittals required of all Permittees. Source-specific submittals are further organized as either one-time only or recurrent requirements.

Return complete permit application to:

Minnesota Pollution Control Agency
Air Quality Permit Coordinator
520 Lafayette Road North,
St. Paul, Minnesota 55155-4194

Send all other submittals to:

Minnesota Pollution Control Agency,
Air Quality Compliance Tracking Coordinator
520 Lafayette Road North,
St. Paul, Minnesota 55155-4194.

New Source and Equipment One-Time Submittals			
What to Send	When to Send	What is affected	Citation
Location Notification on a form approved by the Commissioner	At least 48 hours prior to each change in location of a stationary source, establishment of a new stationary source location, or a change in capacity/dust control option at an individual stationary source	Each stationary source (plant location) to be covered by your general permit	Minn. R. 7007.0800, subp. 12
NSPS Equipment Description and Notification of commencement of construction (defined in 40 CFR§ 60.2) on a form approved by the Commissioner Notifying	No later than 30 days after start of construction	Equipment newly subject to NSPS except for mass-produced (i.e., prefabricated) facilities	40 CFR §. 60.7(a)(1); Minn. R. 7019.0100
NSPS Equipment Description and Notification of initial startup date on a form approved by the Commissioner	Within 15 days after initial startup	Equipment newly subject to NSPS	40 CFR §. 60.7(a)(3); Minn. R. 7019.0100
NSPS Equipment Description and Notification of equipment replacement on a form approved by the Commissioner (With information required in 40 CFR§ 60.676)	Within 60 days after making the replacement	An existing facility (piece of equipment not subject to NSPS) being replaced by a piece of equipment of equal or smaller size or capacity)	40 CFR § 60.676(a) and 60.670(d); Minn. R. 7011.3350

Routine Submittals

What to Send	When to Send	What is affected	Citation
Semiannual Deviations Reporting on a form approved by the Commissioner with a summary of <i>all</i> instances of deviations from permit conditions (or indicating none occurred). Submit the report for the second half-year report with your annual Compliance Certification. Use Form NM-DRF	Semiannually: due July 30, covering January 1 through June 30, and due January 31, covering July 1 through December 31	All stationary sources (plant locations) covered by your general permit (A single form may be submitted supplying necessary information for all stationary sources covered by this general permit during the reporting period)	Minn. R. 7007.0800, subp. 6(A)(2)
Annual Compliance Certification on a form approved by the Commissioner. Submit with the second half-year semiannual deviations report. Use Form NM-CR	Annually, by January 31 for the previous calendar year		Minn. R. 7007.0800 subp. 6(C)
Emissions inventory report A form will be sent for you to complete and return	Annually, by April 1 for the previous calendar year		Minn. R. 7019.3000-7019.3100
Emission fees	Annually, within 60 days of receipt of an MPCA invoice		Minn. R. 7002.0005-7002.0085
Periodic Submittals (required as necessary)			
Oral notification of deviation endangering human health or the environment	Immediately after discovery	Stationary source (plant location) covered by your general permit (A single notification and/or submittal may be submitted supplying necessary information for all stationary sources covered by this general permit if events coincide. Otherwise, each requirement applies separately to each stationary source for each individual event.)	Minn. R. 7019.1000, subp. 1
Written description of deviation endangering human health or the environment	Within 2 days of discovery		Minn. R. 7019.1000, subp. 1
Shutdown notification	At least 24 hours before a planned shutdown of process or control equipment if it would cause an increase in the emission of air pollutants and again when the shutdown is over		Minn. R. 7019.1000, subp. 3
Breakdown notification	Immediately for a breakdown of more than one hour duration of any process or control equipment if the breakdown causes an increase in the emission of air pollutants and again when the breakdown is over		Minn. R. 7019.1000, subp. 2

Notification and Test Plan on a form approved by the Commissioner	At least 30 days before performance test date	Affected facility (piece of equipment) as defined in 40 CFR § 60.676 and any other equipment required to be tested	Minn. R. 7017.2030
Pre-test meeting	At least 7 days prior to performance test date		Minn. R. 7017.2030, subp. 4
Test report	Within 45 days after performance test date	Affected facility (piece of equipment) as defined in 40 CFR § 60.676 and any other equipment tested	Minn. R. 7017.2035, subp. 2
Microfiche or CD copy of test report	Within 105 days after performance test date		Minn. R. 7017.2035, subp. 2

APPENDIX I: SOURCE-SPECIFIC REQUIREMENTS

Stationary Source Designation Matrix

Stationary Internal Combustion Engines Fuel Use

Weather Summary Criteria

Generator Sitting Conditions

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NONMETALLIC MINERAL PROCESSING GENERAL PERMIT, STATIONARY SOURCE DESIGNATION MATRIX

TABLE 1 - Annual Production versus Numbers of Units

Table 1. Stationary Source Category Annual Production (tons) - Up to:														
Category	Number of Units				Stationary Source Annual Production (tons)									
	Crushers	Screens	Transfer Operations	500,000	1,000,000	1,250,000	1,500,000	1,750,000	2,000,000	2,250,000	2,500,000	2,750,000	3,000,000	
A	1	1	10	small	small	small	small	small	medium	medium	medium	medium	large	3,000,000
B	2	2	20	small	small	small	small	small	medium	medium	medium	large	large	large
C	3	3	30	small	small	small	medium	medium	medium	large	large	large	not allowed	not allowed
D	4	4	40	small	small	small	medium	medium	large	large	large	not allowed	not allowed	not allowed
E	5	5	50	small	small	medium	medium	large	large	not allowed	not allowed	not allowed	not allowed	not allowed
F	6	6	60	small	small	medium	medium	large	not allowed	not allowed	not allowed	not allowed	not allowed	not allowed
G	7	7	70	small	small	medium	large	not allowed	not allowed	not allowed	not allowed	not allowed	not allowed	not allowed
H	8	8	80	medium	medium	medium	large	not allowed	not allowed	not allowed	not allowed	not allowed	not allowed	not allowed

TABLE 2 - Annual Production versus In-Place Capacity

Table 2. Stationary Source Category Annual Production (tons) Versus In-Place Capacity														
Category	Cumulative In-Place Capacity (tph)			Stationary Source Annual Production (tons) Up to:										
	Crushers	Screens	Transfer Operations	500,000	1,000,000	1,250,000	1,500,000	1,750,000	2,000,000	2,250,000	2,500,000	2,750,000	3,000,000	
I	750	750	7500	small	small	small	medium	medium	medium	large	large	large	not allowed	
II	1250	1250	12500	medium	medium	medium	medium	medium	large	large	not allowed	not allowed	not allowed	
III	2500	2500	25000	large	large	large	large	large	large	not allowed	not allowed	not allowed	not allowed	

Stationary sources, using Table 2, with cumulative capacities above 2,500 tons per hour (tph) for crushers or for screens or above 25,000 tph for transfer operations are not allowed under this general permit.

If Table 2 is used for determining the stationary source designation, in order to demonstrate compliance with the cumulative capacity limitation, the Permittee must keep an up-to-date record (e.g., a site plan or process flow diagram) showing the cumulative in-place capacity of each equipment type at the stationary source. This record does not need to identify specific unique identifying numbers for pieces of equipment. It may be generic in nature, but must be sufficiently detailed to determine the cumulative capacity of all equipment types at the stationary source. Wet screening operations are excluded from counting toward the number of units in the matrix above.



**Minnesota Pollution
Control Agency**

520 Lafayette Road North
St. Paul, MN 55155-4194

NM-EN

STATIONARY INTERNAL COMBUSTION ENGINES FUEL USE

Air Quality Permit Program - General Permit Nonmetallic Mineral
Processing

- 1) AQD File No.: _____
- 2) AQD Permit No.: _____
- 3) Company Name: _____
- 4) Stationary Source Name/Location: _____
- 5) Dates of period covered by calculation: _____
- 6) Printed name of person recording calculation: _____
- 7) Date (must be done by 15th of following month): _____

Fuel Type	Amount Burned in Previous 12-Month Period at Stationary Source Location *	Units	Multiplying Factor	Subtotal
Diesel Fuel		Gallons	$\times 3.09 \div 10,000$	
Diesel Fuel with up to 20% Biodiesel		Gallons	$\times 2.83 \div 10,000$	
Natural Gas		Cubic Feet	$\times 1.70 \div 1,000,000$	
Liquefied Petroleum Gas (LPG) / Propane		Gallons	$\times 6.95 \div 100,000$	
Gasoline		Gallons	$\times 4.24 \div 1,000$	
Calculation Total	(Sum subtotals)		Must be less than 90 *	

* If a stationary source has less than 12 months of operational data, the Permittee shall determine compliance during the first 12 months under this general permit using the following formula:

$$N = 0.95 \times (\text{Annual Limit}) \\ + 0.0045 \times (\text{Annual Limit}) \times (n-1)$$

Where "n" is the number of months in operation, and "N" is the rolling sum limit for the current month.

At its option, the Permittee may calculate and record individual monthly sums, in lieu of 12-month rolling sums, for a stationary source location such that the annual production limit divided by 12 is not exceeded. Also at its option, if only one fuel is used, the Permittee may record and sum the quantity of fuel used directly, in which case the annual limits are as follows: 291,545 gallons for diesel fuel, 317,851 gallons for diesel fuel with up to 20% biodiesel, 53 million cubic feet for natural gas, 1.3 million gallons for propane, and 21,221 gallons for gasoline.

TDD (for hearing and speech impaired only): (651) 282-5332

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**WEATHER SUMMARY CRITERIA
FOR
LARGE STATIONARY SOURCE NON-PROCESS DUST CONTROL OPTION
NONMETALLIC MINERAL PROCESSING GENERAL PERMIT**

Sky Conditions

CLR	<1/10 cloud coverage
SCT (Ptly Cldy)	1/10-5/10 cloud coverage (opaque)
BKN (Mstly Cldy)	6/10-9/10 cloud coverage (opaque)
OVC (Cloudy)	10/10 cloud coverage (opaque)
THN OVC	Sky is completely covered with high thin clouds and <5/10 cloud coverage is opaque

Note: The cloud coverage is a cumulative total of all cloud layers.

Weather Conditions

Fog	May also be associated with drizzle and may obstruct sky
Drizzle	Small particles of rain many times associated with fog
Lt Rain	Continuous falling at a light rate (good horizontal visibility)
Mod Rain	Continuous falling at a mod. rate (horiz. visibility decreased)
Hvy. Rain	Continuous falling at heavy rate; in sheets (horizontal visibility low)
T-Stm	Thunderstorm -- thunder, lightning, and usually mod. to hvy. rain
Hail	Associated with thunderstorms
Frz Rain	Rain that freezes on contact of cold objects; glazing
Sleet	Mixture of rain and ice pellets
Ice Pellets	Clear/mostly translucent pellets of ice -- not easily broken/crushed
Snw Grns/Snw Pellets	Hard/crunchy opaque (white) pellets of snow -- easily crushed
Lt Snow	Falling at a light rate; flurries (good horizontal visibility)
Mod Snow	Falling at a moderate rate (horizontal visibility decreased)
Hvy Snow	Falling at a heavy rate (poor horizontal visibility)

Wind Scale

0-10 MPH	Light Breeze	Leaves rustle
10-20 MPH	Light Wind	Small tree branches move; wind extends light flag
20-30 MPH	Mod. Wind	Large branches in motion; umbrella used with difficulty
30-40 MPH	Mod. Gale	Whole trees in motion; difficulty walking against wind
40-50 MPH	Strong Gale	Twigs break off of trees

Temperature

Approximate using a range of 5 degrees Fahrenheit if the actual temperature is not known.

GENERATOR/ENGINE SITTING CONDITIONS

Capacity Allowed to Operate Simultaneously horsepower	Minimum Stack Height Feet (meters)	Minimum Distance Between Engines and Property Boundaries Feet (meters)
500	14(4.27)	60 (18.30)
750	14(4.27)	135(41.15)
1000	14(4.27)	210(64.0)
1500	14(4.27)	330(100.0)



AIR EMISSION PERMIT NO. 99000320 - 001

'OPTION D' REGISTRATION PERMIT

FOR A

HOT MIX ASPHALT FACILITY

According to Minnesota Statutes Chapter 115 and 116, Minnesota Rules Chapters 7001 and 7007, and 40 CFR part 52, subp. Y:

Hardrives Inc
14475 Quiram Dr
Rogers, MN 55374 USA

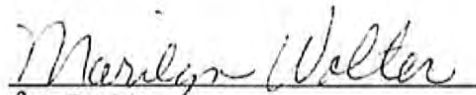
(hereinafter Permittee) is issued an Air Emission Registration Permit by the Minnesota Pollution Control Agency for its Hardrives Inc - Plant 601 facility located at various locations throughout the state of Minnesota.

The permit authorizes modification, construction, reconstruction, and operation of the stationary source under the conditions set forth below.

Issue Date: 10-20-2009

Expiration: Pursuant to Minn. Rules pt. 7007.1050, subp. 3a, the permit shall be considered not to expire until a new permit is issued.

Compliance Requirements: The Permittee shall comply with Minn. Rules pts. 7007.1110 (Registration Permit General Requirements) and 7007.1130 (Option D Requirements) and all applicable requirements.

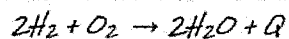

for Paul Eger

Commissioner

Minnesota Pollution Control Agency



ELEMENTAL AIR



Innovative Technology for Air Quality Management

**Results of the
TSP Compliance**

Test Location:
Hardrives Portable Plant 601
305th Street
Frontenac, MN 55026

Prepared for:
Mr. Kevin Gannon
14475 Quiram Ave.
Rogers, Minnesota 55374
Phone: (763) 428-8886
Fax: (763) 428-8868
kgannon@hardriveinc.com

Report # E16055
September 19, 2016

Approved By:

Brian Durkop

Brian Durkop, QSTI
President

830 TOWER DRIVE • SUITE 100 • MEDINA • MINNESOTA • 55340
PHONE: 763.477.4462 • FAX: 763.477.5991
WWW.E2AIR.COM



**Minnesota Pollution
Control Agency**

520 Lafayette Road
St. Paul, MN 55155-4194

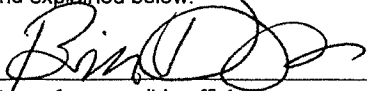
Air Performance Test Form

Certifications Required for Performance Test Reports

NOTE: All performance test reports must contain a certification by the responsible parties that the test results have been reported accurately, that the field data is a true representation of the sampling procedures, and that the process data is a true indicator of the operating parameters of the emissions unit at the time of the performance test. (Ref. Minn. R. 7017.2040). Performance test results will not be accepted without certification of the report. Please note that original signatures are required.

1. Certification of sampling procedures by the team leader of the personnel conducting the sampling procedures:

"I certify under penalty of law that the sampling procedures were performed in accordance with the approved test plan and that the data presented in this test report are, to the best of my knowledge and belief, true, accurate, and complete. All exceptions are listed and explained below."



Signature of responsible official

Brian Durkay

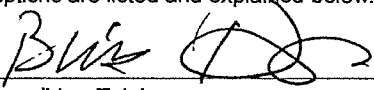
Printed name of person signing

Title President

Date 9/29/16

2. Certification of analytical procedures by the person responsible for the laboratory analysis of field samples:

"I certify under penalty of law that the analytical procedures were performed in accordance with the requirements of the test methods and that the data presented for use in the test report were, to the best of my knowledge and belief, true, accurate, and complete. All exceptions are listed and explained below."



Signature of responsible official

Brian Durkay

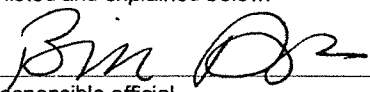
Printed name of person signing

Title President

Date 9/29/16

3. Certification of test report by the senior staff person at the testing company who is responsible for compiling and checking the test report:

"I certify under penalty of law that this test report and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the test information submitted. Based on my inquiry of the person or persons who performed sampling and analysis relating to the performance test, the information submitted in this test report is, to the best of my knowledge and belief, true, accurate, and complete. All exceptions are listed and explained below."



Signature of responsible official

Brian Durkay

Printed name of person signing

Title President

Date 9/29/16

4. Certification of test report by owner or operator of the emission facility:

"I certify under penalty of law that the information submitted in this test report accurately reflects the operating conditions at the emission facility during this performance test and describes the date and nature of all operational and maintenance activities that were performed on process and control equipment during the month prior to the performance test. Based on my inquiry of the person or persons who performed the operational and maintenance activities, the information submitted in this test report is, to the best of my knowledge and belief, true, accurate, and complete. All exceptions are listed and explained below."

Signature of responsible official

Printed name of person signing

Title

Date

Note: This form is to be submitted as part of the performance test report and must have original signatures.

TABLE OF CONTENTS

SECTION 1.0	EXECUTIVE SUMMARY	
1.1	Summary of Test Methods.....	4
1.2	Summary of Test Results.....	4
1.3	Summary of Production	5
1.4	Summary of Errors and Omissions.....	5
1.5	Summary of Report Organization	5
SECTION 2.0	TEST RESULTS	
2.1	Particulate Results	6
2.1	Opacity Results.....	8
SECTION 3.0	TEST PROCEDURES	
3.1	Determination of Sample Point Locations.....	9
3.2	Determination of Velocity and Volumetric Flow	9
3.3	Determination of Molecular Weight and Moisture Content.....	11
3.4	Determination of Particulate Matter.....	13
3.5	Determination of Opacity	14
Appendix A	Field Data Sheets	
Appendix B	Calculated Field Data Results	
Appendix C	Process Operations Data	
Appendix D	Laboratory Results	
Appendix E	Equipment Calibrations	
Appendix F	Test Protocol	

SECTION 1.0

EXECUTIVE SUMMARY

This report presents the results of a source test performed by Elemental Air (www.e2air.com) at the Hardrives, Inc. Portable Plant 601 located in Frontenac, Minnesota. The test was performed on September 19, 2016 to quantify particulate matter emissions and visible emissions from the hot mix plant. The purpose of the tests was to meet the requirements set forth in the Hardrives, Inc. Permit to Operate and to establish compliance after modifications to the hot mix plant. Mr. Bill Scrimgeour, Mr. Mark Carlson and Mr. Nathan Fitterer performed the testing. The process operating conditions and the aggregate analyses were performed and recorded by Hardrives plant personnel. There were no MPCA observers present for the testing program.

1.1 Summary of Test Methods

Table 1.1
Hardrives Inc.
Portable Plant 601

METHOD	PURPOSE	RUN TIME	# OF RUNS
EPA 1	Determination of Traverse Points	NA	1
EPA 2	Determination of Velocity and Volumetric Flow	60 minutes	3
EPA 3	Determination of Molecular Weight	60 minutes	3
EPA 4	Determination of Moisture	60 minutes	3
EPA 5	Determination of Particulate Matter	60 minutes	3

1.2 Summary of Test Results

Table 1.2
Hardrives Inc.
Portable Plant 601
September 19, 2016

PARAMETER	UNITS	TEST 1	TEST 2	TEST 3	AVERAGE	EMISSION LIMIT	APPLICABLE RULE
Particulate	(gr/dscf)	0.010	0.005	0.010	0.008	0.040	40CFR 60.92 (a)(1) and Minn. R. 7011.0909
Particulate	(mg/dscm)	34.28	20.22	44.94	33.15	90	40CFR 60.92 (a)(1) and Minn. R. 7011.0909
Opacity	(%)	7.3	-	-	7.3	20	40CFR 60.92 (a)(1) and Minn. R. 7011.0909

1.3 Summary of Production

The asphalt plant is a counter flow drum with a manufactures rated capacity of 300-400 tons/hour of hot mix. The unit is capable of firing propane. The emissions are controlled by an Air Pulse Fabric Filter capable of 80,000 cubic feet per minute.

Table 1.3
Hardrives Inc.
Portable Plant 601
September 19, 2016

PARAMETER	TEST 1	TEST 2	TEST 3	AVERAGE
Production (tons/hr)	309.8	319.8	320.2	316.6

1.4 Summary of Errors and Omissions

Errors and omissions that occurred during this project and in this report are outlined in this subsection to correct mistakes, clarify data, and to discuss field changes to the proposed test protocol.

Except as noted above testing was conducted according to the approved test plan and the procedures utilized to complete the project were conducted according to the plan with no deviations.

1.5 Summary of Report Organization

This report is organized in the following manner. Section 2.0 provides detailed test results for the individual test run. Section 3.0 provides a summary of the testing procedures. Copies of the field data sheets, calculated field data results, process operation data, equipment calibrations, and the test plan are located in appendices A through F respectively.

SECTION 2.0

TEST RESULTS

The testing was conducted in conformance to applicable US EPA and MPCA methodologies and rules. The testing project was conducted according to the approved test plan submitted to the MPCA. A copy of the test plan is located in Appendix F.

2.1 Particulates

The results of the three tests performed for the determination of particulate matter are reported in Table 2.1.

Table 2.1
Hardrives Inc.
Portable Plant 601
Particulate Test Results

Client: <i>Hardrives Inc</i>			Plant: <i>Plant 601</i>
Date(s): <i>September 19, 2016</i>			EPA Method(s): <i>1-5</i>
Run #:.....	Run 1	Run 2	Run 3
Date:	9/19/2016	9/19/2016	9/19/2016
Time:	10:25-11:28	12:20-14:01	14:30-15:40
			Average
Process Conditions			
Total Feed (tph)	309.8	319.8	320.2
Asphalt Cement (tph).....	13.6	13.8	14.0
Recycled Asphalt (tph)	45.0	47.0	47.4
Virgin Asphalt (tph).....	290.0	295.0	295.0
Mix Temp (°F).....	296.4	295.0	298.4
Drum Exit (°F).....	309.2	310.3	317.0
Aggregate Moisture (%)	7.1	7.1	7.1
Propane (GPH)	450.0	455	455
			453.3
Control Equipment (Baghouse)			
FF Delta P (inH2O)	2.6	3.5	3.7
			3.3
Stack Conditions			
Doc. Version.....	AB M5 Ver 1.10		
Nozzle (inches).....	0.249	0.255	0.255
Delta P (inH2O).....	0.58	0.83	0.87
Delta H (inH2O)	1.09	1.55	1.74
Stack Temp (°F)	273	276	291
Oxygen (%).....	11.6	13.3	13.8
Carbon Dioxide (%)	8.2	6.7	6.3
Moisture (%)	33.42	29.39	27.59
Mol Weight, Dry	29.8	29.6	29.6
Mol Weight, Wet	25.8	26.2	26.4
			26.1

Stack Press (inH2O)	-0.35	-0.34	-0.34	-0.34
Stack Area (ft2)	17.12	17.12	17.12	17.12
Stack Vel (ft/sec)	53.82	64.24	66.38	61.48
Stack Flow (wacfm)	55,288	65,987	68,183	63,153
Stack Flow (wscfm)	38,720	46,008	46,624	43,784
Stack Flow (dscfm)	25,779	32,488	33,761	30,676

Test Results - Total Particulate Matter

Sample Gas Vol (dscf)	32.331	39.076	41.271	37.559
Isokinetics (%)	105.8	96.7	98.3	100.3

Filter (mg).....	1.1	3.7	2.5	2.4
Probe Rinse (mg).....	19.9	8.5	24.4	17.6
Total (mg).....	21.0	12.2	26.9	20.0

Filterable (lbs/hr)	2.215	1.342	2.910	2.155
Filterable (gr/dscf)	0.0100	0.0048	0.0101	0.0083
Filterable (mg/dscm).....	34.2838	20.2187	44.9360	33.1462

2.2 Opacity

The results of the test performed for the determination of visible emissions are reported in Table 2.2.

**Table 2.2
Hardrives Inc.
Portable Plant 601
Visible Emissions Test Results**

Client: *Hardrives Inc*

Date(s): *September 19, 2016*

Plant: *Plant 601*

EPA Method(s): *9*

Run #:..... Run 1

Date: 9/19/2016

Time: 10:25-11:25

Process Conditions

Total Feed (tph) 309.8

Asphalt Cement (tph)..... 13.6

Recycled Asphalt (tph) 45.0

Virgin Asphalt (tph)..... 290.0

Mix Temp (°F)..... 296.4

Drum Exit (°F)..... 309.2

Aggregate Moisture (%) 7.1

Propane (GPH) 450.0

Control Equipment (Baghouse)

FF Delta P (inH2O) 2.6

Test Results - Opacity

Max 6-min Avg (%)..... 7.29

Avg. Opacity (%)..... 3.44

Max. Reading (%) 25.00

Min. Reading (%)..... 0.00

of Reading > 20% 2

of Readings 240

SECTION 3.0

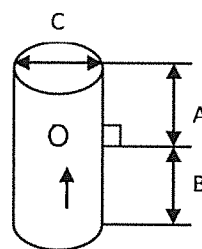
TEST PROCEDURES

3.1 Determination of Sample Point Locations

REF: Code of Federal Regulations, Title 40, Part 60, Appendix B, PS 2

Stack Dimensions

Stack Length:	43.25 inches
Stack Width:	57.0 inches
Stack Effective Diameter (C):	49.18 inches
Upstream from Flow Disturbance (A):	216.0 inches
Downstream from Flow Disturbance (B):	144.0 inches
Area:	17.12 square feet
Port Depth:	1.625 inches
Number of Ports:	5



Point Dimensions (w/ port length)

Point 1	5.95	inches
Point 2	14.60	inches
Point 3	23.25	inches
Point 4	31.90	inches
Point 5	40.55	inches

3.2 Determination of Velocity and Volumetric Flow

REF: Code of Federal Regulations, Title 40, Part 60, Appendix A, Method 2

Measurement System

A combination Stausscheibe (Type S) pitot tube and type K thermocouple were used to measure duct velocity head and temperature. The pitot tube was connected via flexible tubing to a manometer. The thermocouple was connected to a digital potentiometer.

Measurement Procedure

Prior to sampling, traverse points were selected utilizing Method 1 requirements. The locations of the traverse points are presented in Section 3.1 and the reduced field data sheets. A traverse of the stack was performed to determine stack velocity head, temperature distributions, cyclonic flow, and stack static pressure.

Calculations

$$v_s = K_p C_p (\sqrt{\Delta P})_{avg} \sqrt{\frac{T_{s(avg)}}{P_s M_s}}$$

- v_s = Stack velocity, ft/sec
 ΔP = Average velocity head, in H₂O
 C_p = Pitot tube coefficient, dimensionless
 T_s = Stack absolute temperature, °R
 P_s = Stack absolute pressure, inHg
 M_s = Molecular weight of stack gas, wet basis, lb/lb-mole
 K_p = Pitot tube constant, 85.49

$$Q = v_s * A_s * 60$$

- Q = Wet stack gas flow rate at actual conditions, WACFM
 v_s = Stack velocity, ft/sec
 A_s = Stack area, ft²

$$Q_{ws} = Q * \frac{T_{std}}{T_s} * \frac{P_s}{P_{std}}$$

- Q_{ws} = Wet stack gas flow rate at standard conditions, WSCFM
 T_{std} = Standard absolute temperature, 528 °R
 T_s = Stack absolute temperature, °R
 P_s = Stack absolute pressure, inHg
 P_{std} = Standard absolute pressure, 29.92 inHg

$$Q_{sd} = Q * (1 - B_{ws}) * \frac{T_{std}}{T_s} * \frac{P_s}{P_{std}}$$

- Q_{sd} = Dry stack gas flow rate at standard conditions, DSCFM
 Q = Wet stack gas flow rate at actual conditions, WACFM
 B_{ws} = Flue gas moisture content, proportion by volume, dimensionless
 T_{std} = Standard absolute temperature, 528 °R
 T_s = Stack absolute temperature, °R
 P_s = Stack absolute pressure, inHg
 P_{std} = Standard absolute pressure, 29.92 inHg

3.3 Determination of Molecular Weight and Moisture Content

REF: Code of Federal Regulations, Title 40, Part 60, Appendix A, Methods 3 and 4

Sampling System

A sample probe integral to the particulate train was connected to the impinger train which consisted of a set of pre-weighed impingers connected in series and immersed in an ice bath. The impinger train was followed in series by a carbon vane pump, a dry test meter, and a calibrated orifice connected to an inclined manometer.

At the combustion sources, Boilers No. 1, flue gas molecular weight was determined by concurrent Method 3 sampling to a Tedlar Bag. A sample was continuously extracted from the gas stream and passed through a conditioner to dry the gas. The Tedlar bag was injected directly to a series of calibrated analyzers for oxygen and carbon dioxide concentration determination. The sample collection was run concurrently with the EPA Method 5 sampling. The average concentration over the test period was used to determine gas molecular weight using the equations included in this section.

Measurement Procedure

Prior to sampling, a leak check was performed and the leak rate, time, and vacuum were recorded on the stack test data sheet. Following the leak check, the sample probe was inserted into the stack and the pump turned on. The sample time was calculated based on a minimum sample volume of 21 cubic feet and a sample rate of 0.75 cubic feet per minute. At the conclusion of sampling, a final leak check was performed and recorded on the data sheet.

Calculations

$$P_s = P_{Barometric} + \left(\frac{P_{sg}}{13.6} \right)$$

P_s = Stack absolute pressure, inHg

P_{bar} = Barometric pressure, inHg

P_{sg} = Stack static pressure, IWG

$$M_d = (.44 \%CO_2 + .32 \%O_2 + .28 (\%N_2 + \%CO))$$

M_d = Molecular weight of flue gas (dry), lb/lb-mole

$$M_w = (.44 \%CO_2 + .32 \%O_2 + .28 (\%N_2 + \%CO)) \left(1 - \frac{\%H_2O}{100} \right) + .18 \%H_2O$$

M_w = Molecular weight of flue gas (wet), lb/lb-mole

$$M_w = M_d (1 - B_{ws}) + 18.0 B_{ws}$$

M_w = Molecular weight of flue gas (wet), lb/lb-mole
 M_d = Molecular weight of flue gas (dry), lb/lb-mole
 B_{ws} = Flue gas moisture content, proportion by volume, dimensionless

$$B_{ws} = \frac{V_{wc (std)}}{(V_{m (std)} + V_{wc (std)})}$$

B_{ws} = Flue gas moisture content, proportion by volume, dimensionless
 $V_{wc (std)}$ = Volume of water vapor at standard conditions, SCF
 $V_{m (std)}$ = Dry meter volume at standard conditions, DSCF

$$V_{wc (std)} = 0.04715 V_{lc}$$

$V_{wc (std)}$ = Volume of water vapor at standard conditions, SCF
 V_{lc} = Volume of liquid collected in the impingers, mL

$$V_{m (std)} = 17.64 V_m Y \left(\frac{P_{barometric} + \frac{\Delta H}{13.6}}{T_m} \right)$$

$V_{m (std)}$ = Dry meter volume at standard conditions, DSCF
 V_m = Dry meter volume uncorrected, DCF
 Y = Meter calibration coefficient
 P_{bar} = Barometric pressure, inHg
 ΔH = Orifice pressure differential, IWG
 T_m = Meter temperature, °R
 17.64 = °R/inHg

3.4 Determination of Particulate Matter

REF: Code of Federal Regulations, Title 40, Part 60, Appendix A, Methods 1-5

Sampling System

A curved sample nozzle was connected via a "Swage-Lok" fitting to a heated probe liner. The probe liner was attached to a heated glass filter holder containing a glass fiber filter. The exit to the filter holder was connected to the impinger train which consisted of a set of pre-weighed impingers connected in series and immersed in an ice bath. The impinger train was followed in series by a carbon vane pump, a dry test meter, and a calibrated orifice connected to an inclined manometer. A Tedlar bag was used to collect an integrated Method 3 sample. Type K thermocouples were used to measure the following temperatures: probe heater, filter heater, impinger outlet, and dry test meter inlet and outlet.

A combination Stausscheibe (Type S) pitot tube and type K thermocouple were used to measure duct velocity head and temperature. The pitot tube was connected via flexible tubing to an inclined manometer. The thermocouple was connected to a digital potentiometer.

Sampling Procedure

Prior to sampling, traverse points were selected based on Method 1 requirements. The locations of the traverse points are presented in the reduced field data sheets. A preliminary traverse of the stack was performed to determine stack velocity head, temperature distributions, cyclonic flow, and stack static pressure. If necessary, preliminary runs by Methods 3 and 4 were performed to determine duct moisture and fixed gas content. Based on this information, a sample nozzle of appropriate inside diameter was selected, and the impinger train charged. Sample time per traverse point was estimated in order that a minimum of 30 dscf of sample would be collected.

The apparatus was assembled as completely as possible in the staging area and transported to the sample site. Potential contamination of the sample train was prevented by sealing all openings with aluminum foil. Once in the sampling area, the probe and filter heaters were brought to temperatures of $248 \pm 25^\circ\text{F}$, and the apparatus was leak checked. Upon successful completion of the leak check, the initial dry test meter reading was recorded, and the probe inserted at the first traverse point.

The stack temperature, dry test meter temperature, and the velocity head across the pitot was measured and recorded on the data sheet. The isokinetic sampling rate in terms of pressure drop across the calibrated orifice was calculated and recorded on the data sheet. The pump and timer were turned on, and the sample rate adjusted to correspond to the calculated isokinetic rate. Once the sample rate was set, the following data was recorded:

- Dry Gas Meter Volume
- Dry test meter outlet temperature
- Sample vacuum
- Probe heater temperature
- Filter heater temperature
- Impinger outlet temperature

At the end of the sample time for the first point, the probe was moved to the next point, and the measurements, calculations and recording of data was repeated. Upon completion of sampling from a port, the pump was turned off and the dry test meter reading recorded. The probe was removed from the stack, and placed in the next sample port. The previously described procedure was repeated for each sample port.

When the sample run was completed, the final dry test meter reading was recorded and the probe removed from the port. A post-test leak check was performed at a vacuum higher than the highest sample vacuum measured during the sample run. The final leak rate was recorded on the data sheet. The sample train was sealed from contamination and transported to the staging area for recovery.

Sample Recovery

Sample was recovered in two fractions: front half and back half. The front half fraction consisted of the filter itself, as well as, acetone rinses and brushings of: the nozzle, the probe liner; and the front half of the filter holder. The filter was recovered to a labeled petri dish made of glass or plastic. Acetone rinses were recovered to a labeled, clean polyethylene bottle. The liquid level in the polyethylene bottle was marked upon completion of recovery.

At the conclusion of each day of sampling, reagent and recovery solvent blanks were collected into the same types of containers as were used for sample recovery. The blank containers were clearly labeled, and the liquid levels marked.

Analytical Procedure

The Method 3 sample was analyzed in the field with a fyrite analyzer. The results of this analysis are presented both in the calculated field data and on the field data sheets.

Prior to analysis, the samples were checked for liquid loss, and the liquid volume of each sample bottle determined. The liquid samples from each run and blanks were transferred to individual tarred beakers, and the liquid allowed to evaporate at ambient temperature and pressure. The front half fraction and solvent blanks were analyzed gravimetrically until two consecutive weighs agreed to within 0.5 mg.

3.5 Determination of Opacity

REF: Code of Federal Regulations, Title 40, Part 60, Appendix A, Method 9

Positioning of the observer

The opacity of the plume as viewed by the observer can be influenced due to several variables with respect the position of the observer. The position of the observer with respect to the sun. Position of the observer with respect to the observation point. Attached or detached steam plumes. Position of the observer with respect to a rectangular stack with high length to width ratios.

The acceptable criteria for the position the observer is outlined in Method 9 as follows:

- 1) The observer must maintain a position with the sun located at a 140° arc to the observers back.
- 2) The observer must maintain an angle of >18° with respect to the observation point.
- 3) The observer must read the opacity where a steam plume does not interfere. Between the stack and the steam plume if the steam plume is detached from the stack. After the steam plume if the steam plume is attached from the stack.
- 4) The observer must read a rectangular stack at a point where the stack has the shortest cross sectional diameter.

Visible Emission Readings

A test for visible emission requires 240 consecutive reading. Each reading is recorded in 15-second intervals for 60-minutes. The percent opacity is recorded in 5 percent increments for 0 to 100. The observer must record the

results on a data sheet as outlined in Method 9. (ie. position of the observer, date, time, process information, location of the stack, and the 15-second opacity readings). The determination of opacity is calculated using a 6-minute rolling average.

Appendix A
Field Data Sheets



ELEMENTAL AIR

2H₂ + O₂ → 2H₂O + H

Innovative Technology for Air Quality Management

ST319-03

AUTOMATED BOX STACK TEST DATA SHEET

Client	Hardrives, Inc.	Test Date	9/19/16
Facility	Frontenac (601)	Start/Stop Time	1025 - 1128
Unit	EP01	Test Method	EPA 5
Location	Outlet	Run Number	1
Project #	E16055	Description	TSP
Operator	MC-BC	Carbon Trap ID	

RUN DATA

Tamb		°F	# Ports	5	Meter Box #	AB 5	ID#
Pbar	29.11	In Hg	# Points	25	Nozzle Dia. (in)	0.249	ID#
Filter #	TSP 42	Holder ID	Time/Pt	2.4	Probe ID #		Pitot ID #
MF #	1.35		Port Order	ABCDE	del H @	1.841	HBox ID #
Pstack	-0.34	In H ₂ O	Pitot Coef	0.84	Meter Factor	1.020	
Sample Time	60	min	Test #		Data File Name		

Leak Chk	CFM	Vac	Init	Time	Pitot Leak Check	Run	1	2	3	Average
Pre	0	18	MC	921	Pre	O2	11.6			
Post	0	10	MC	1133	Post	CO2	8.2			

≤ 0.02 cfm or 4 % of Sample Rate Stable @ ≥ 3" 15 sec

DATA CORRECTIONS / RECORD

End Vol	Start Vol	Diff	Omit	Description	Impinger	End	Start	Diff	50ml Rinse	Y N
					#1	933.5	699.9			261096
					#2	781.8	689.5			261108
					#3	610.5	604.3			261009
					#4	939.4	927.3			261043
					#5					
					#6					
					#7					
					#8					
					Total					

Post Field Meter Calibration Set Vacuum = 17" Collect 5 cf per run

Delta H	Vm I	Vm F	Tm I	Tm F	ID	Amb	Vacuum	Time

TC Field Calibration

Ref °F	

≤ 1.5 % (Absolute Temp)

Comments 03 CA3

12.0	7.88
11.9	8.0
11.9	8.0
11.5	8.3
11.5	8.2
11.2	8.5
11.2	8.6

E16055

17 of 54


ELEMENTAL AIR
20% O₂ - 80% N₂ - 0.1% CO₂

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AUTOMATED BOX STACK TEST DATA SHEET

Client	Hardrives, Inc.	Test Date	9/19/16
Facility	Frontenac (601)	Start/Stop Time	1220 - 1401
Unit	EP01	Test Method	EPA 5
Location	Outlet	Run Number	2
Project #	E16055	Description	TSP
Operator		Carbon Trap ID	

RUN DATA

Tamb	°F	# Ports	5	Meter Box #	AB 5	ID#
Pbar	29.12	In Hg	# Points	25	Nozzle Dia. (in)	0.255
Filter #	TSP 43	Holder ID	Time/Pt	2.4	Probe ID #	Pitot ID #
MF #	135	Port Order	ABCDE	del H @	1.841	HBox ID
Pstack	-0.34	In H ₂ O	Pitot Coef	0.84	Meter Factor	1.020
Sample Time	60	min	Test #		Data File Name	

Leak Chk	CFM	Vac	Init	Time	Pitot Leak Check	Run	1	2	3	Average
Pre	0	10	MC	147	Pre	O2	13.3			
Post	0	10	ML	145	Post	CO2	6.7			

≤ 0.02 cfm or 4 % of Sample Rate Stable @ ≥ 3" 15 sec

DATA CORRECTIONS / RECORD

End Vol	Start Vol	Diff	Omit	Description	Impinger	End	Start	Diff	ID #
					#1	718.6	678.4		261107
					#2	767.0	681.4		261115
					#3	1019.2	613.6		261064
					#4	952.1	938.0		261095
					#5				
					#6				
					#7				
					#8				
					Total				

Post Field Meter Calibration Set Vacuum = 17" Collect 5 cf per run

Delta H	Vm I	Vm F	Tm I	Tm F	ID	Amb	Vacuum	Time

TC Field Calibration

Ref °F

≤ 1.5 % (Absolute Temp)

Comments

O ₂	CO ₂	
12.2	7.7	Rain Delay 1222 - 1300
13.6	6.4	
13.6	6.5	
13.6	6.5	
13.6	6.5	



ELEMENTAL AIR

20% O₂ → 20.0% O₂

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AUTOMATED BOX STACK TEST DATA SHEET

Client	Hardrives, Inc.	Test Date	9/19/16
Facility	Frontenac (601)	Start/Stop Time	1430-1540
Unit	EP01	Test Method	EPA 5
Location	Outlet	Run Number	3
Project #	E16055	Description	TSP
Operator		Carbon Trap ID	

RUN DATA

Tamb	°F	# Ports	5	Meter Box #	AB 5	ID#
Pbar	29.13	In Hg	# Points	25	Nozzle Dia. (in)	0.255 ID# 224889
Filter #	TSP44	Holder ID	Time/Pt	2.4	Probe ID #	Pitot ID #
MF #	135	Port Order	ABCDE	del H @	1.841	HBox ID
Pstack	-0.34	In H ₂ O	Pitot Coef	0.84	Meter Factor	1.020
Sample Time	60	min	Test #	1	Data File Name	

Leak Chk	CFM	Vac	Init	Time	Pitot Leak Check	Run	1	2	3	Average
Pre	0	10	ML	1419	Pre	O2	13.8			
Post	0	13	ML	1544	Post	CO2	6.3			
≤ 0.02 cfm or 4 % of Sample Rate					Stable @ ≥ 3" 15 sec					

DATA CORRECTIONS / RECORD

End Vol	Start Vol	Diff	Omit	Description	Impinger	MATERIAL WEIGHT (g)	50ml Rinse	Y N	
						End	Start	Diff	ID #
					#1	937.6	700.0		261053
					#2	752.5	679.1		261012
					#3	616.9	609.9		261023
					#4	938.9	923.4		261001
					#5				
					#6				
					#7				
					#8				
					Total				

Post Field Meter Calibration Set Vacuum = 17" Collect 5 cf per run

Delta H	Vm I	Vm F	Tm I	Tm F	ID	Amb	Vacuum	Time

TC Field Calibration

Ref °F

≤ 1.5 % (Absolute Temp)

Comments

O ₂ CO ₂
14.0 6.0
13.7 6.4
13.8 6.2
13.8 6.3
13.6 6.4

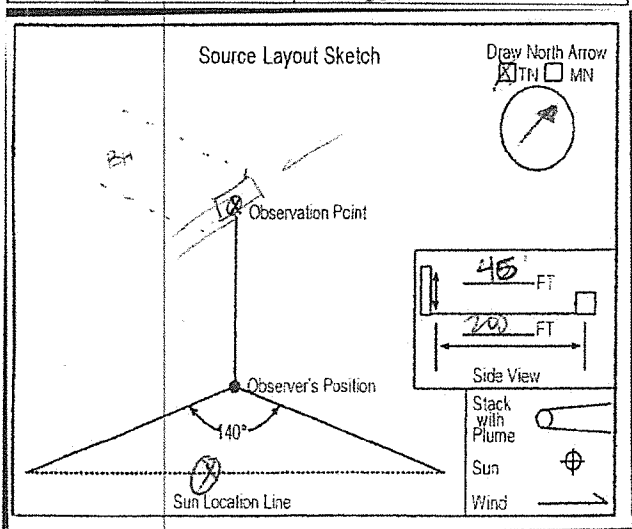
E16055

19 of 54

**EPA METHOD 9 (40 CFR 60 - Appendix A)
VISIBLE EMISSION OBSERVATION FORM**

Form #: 1

COMPANY NAME Hardrives Inc	
Facility Name	
Street Address 306th St	
CITY Lake City	STATE MN ZIP 55041
PROCESS EQUIPMENT Portable Asphalt Plant	OPERATING MODE Full
CONTROL EQUIPMENT Bayhouse	OPERATING MODE Full
DESCRIBE EMISSION POINT Single stack @ end of bayhouse emissions trailer	
HEIGHT OF EMISSION POINT 45 ft	HEIGHT OF EMISSION POINT RELATIVE TO OBSERVER START 25' END 25'
DISTANCE TO EMISSION POINT START 200 ft END	DIRECTION TO EMISSION PT. (DEGREES 0-360) START 110° END 110°
VERTICAL ANGLE TO OBSERVATION POINT START 4° END 4°	DIRECTION TO OBSERVATION POINT (DEGREES 0-360) START 110° END 110°
DISTANCE & DIRECTION TO OBSERVATION POINT FROM EMISSION POINT START SE of EP END SE of EP	
DESCRIBE EMISSIONS	
START Plume	END Plume
EMISSION COLOR	WATER DROPLET PLUME
START White END	ATTACHED ☐ DETACHED ☐ NONE ☒
DESCRIBE PLUME BACKGROUND	
START Grey	END Grey
BACKGROUND COLOR	SKY CONDITIONS
START Grey END	START Overcast END Overcast
WIND SPEED	WIND DIRECTION
START 4.4 m/s END 1 m/s	START NW END NW
AMBIENT TEMP START 73° END 75°	WET BULB TEMP 60.7 RH percent



ADDITIONAL INFORMATION

OBSERVATION DATE 9/19/2016	START TIME 10:25	END TIME 10:55
--------------------------------------	----------------------------	--------------------------

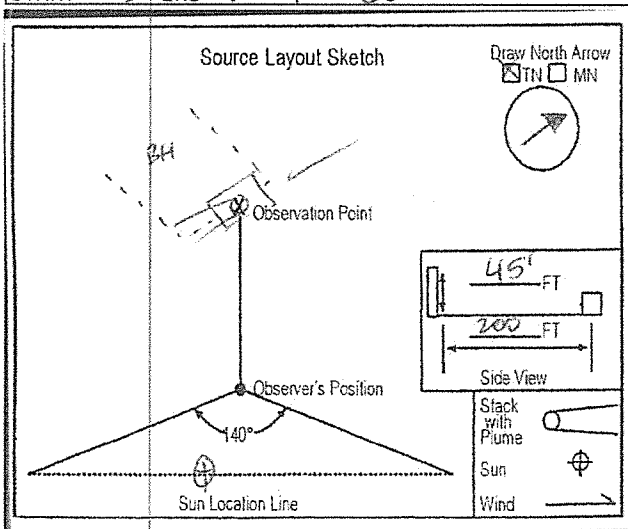
MIN	SEC				COMMENTS
	0	15	30	45	
1	5	5	5	0	
2	0	0	0	5	
3	10	10	10	5	
4	10	10	10	5	
5	15	5	5	5	
6	10	15	10	10	
7	15	10	20	15	
8	5	5	5	5	
9	0	5	5	0	
10	0	0	0	0	
11	0	5	0	0	
12	5	5	0	5	
13	0	5	10	25	
14	10	25	15	15	
15	5	0	0	5	
16	0	15	5	5	
17	0	0	10	5	
18	5	5	5	5	
19	5	5	5	5	
20	5	5	5	5	
21	0	0	0	0	
22	0	5	0	0	
23	5	5	0	5	
24	0	0	0	0	
25	0	0	0	5	
26	5	5	10	5	
27	5	0	5	0	
28	0	0	0	0	
29	0	0	0	0	
30	5	5	5	5	

OBSERVER'S NAME (PRINT) Nathan Fitterer	
OBSERVER'S SIGNATURE [Signature]	DATE 9/19/2016
ORGANIZATION Elemental Air	
CERTIFIED BY Eastern Technical Associates	DATE

**EPA METHOD 9 (40 CFR 60 - Appendix A)
VISIBLE EMISSION OBSERVATION FORM**

Form #: 2

COMPANY NAME <i>Hardrive Inc.</i>		
Facility Name		
Street Address <i>306th St</i>		
CITY <i>Lake City</i>	STATE <i>MN</i>	ZIP <i>55041</i>
PROCESS EQUIPMENT <i>Portable Asphalt Plant</i>		OPERATING MODE <i>Full</i>
CONTROL EQUIPMENT <i>Baghouse</i>		OPERATING MODE <i>Full</i>
DESCRIBE EMISSION POINT <i>Single Stack @ end of baghouse emissions trailer</i>		
HEIGHT OF EMISSION POINT <i>45'</i>		HEIGHT OF EMISSION POINT RELATIVE TO OBSERVER START <i>25'</i> END <i>25'</i>
DISTANCE TO EMISSION POINT START END <i>200 ft</i>		DIRECTION TO EMISSION PT. (DEGREES 0-360)) START END <i>110°</i>
VERTICAL ANGLE TO OBSERVATION POINT START END <i>4°</i>		DIRECTION TO OBSERVATION POINT (DEGREES 0-360)) START END <i>110°</i>
DISTANCE & DIRECTION TO OBSERVATION POINT FROM EMISSION POINT START END <i>SE of EP</i>		
DESCRIBE EMISSIONS START <i>Plume</i> END <i>Plume</i>		
EMISSION COLOR START <i>White</i> END <i>White</i>		WATER DROPLET PLUME ATTACHED ☐ DETACHED ☐ NONE ☒
DESCRIBE PLUME BACKGROUND START <i>Gray</i> END <i>Gray</i>		
BACKGROUND COLOR START <i>Dark</i> END <i>Dark</i>		SKY CONDITIONS START <i>Overcast</i> END <i>Gray</i>
WIND SPEED START <i>14</i> END <i>14</i>		WIND DIRECTION START <i>NW</i> END <i>WNW</i>
AMBIENT TEMP START <i>75</i> END <i>75</i>		WET BULB TEMP RH percent <i>60.4</i>



OBSERVATION DATE		START TIME		END TIME	
9/19/2016		10:55		11:25	

MIN	SEC	0	15	30	45	COMMENTS
1	5	10	5	5		
2	5	5	5	10		
3	5	5	10	5		
4	5	5	0	0		
5	5	5	5	5		
6	0	5	5	5		
7	5	5	0	5		
8	0	0	5	5		
9	10	5	0	5		
10	5	0	0	0		
11	0	0	0	0		
12	0	0	0	0		
13	0	0	0	0		
14	0	0	0	0		
15	0	0	0	0		
16	0	0	0	0		
17	0	0	0	0		
18	0	0	0	0		
19	0	0	0	0		
20	0	0	0	0		
21	0	0	0	0		
22	0	0	0	0		
23	0	0	0	0		
24	0	0	0	0		
25	0	0	5	0		
26	5	5	0	5		
27	5	5	0	5		
28	5	5	5	0		
29	5	5	5	5		
30	5	5	5	5		

OBSERVER'S NAME (PRINT) <i>Nathan Fitterer</i>	
OBSERVER'S SIGNATURE <i>Nathan Fitterer</i>	DATE <i>9/19/2016</i>
ORGANIZATION <i>Elemental Air</i>	
CERTIFIED BY <i>Eastern Technical Associates</i>	DATE

Appendix B

Calculated Field Data Results



ELEMENTAL AIR

282 • C₁ • 2810 • 12

Innovative Technology for Air Quality Management

AUTOMATED BOX STACK TEST DATA SHEET

Client	Hardrives, Inc.	Test Date	9/19/2016
Facility	Frontenac, MN	Start/Stop Time	10:25-11:28
Unit	EP01	Test Method	EPA 5
Location	Stack	Run Number	1
Project #	E16055	Description	TSP
Operator	MC-BS-NF	Carbon Trap ID	

RUN DATA

Tamb		°F	# Ports	5	Meter Box #	AB 5	ID#	
Pbar	29.11	In Hg	# Points	25	Nozzle Dia. (in)	0.249	ID#	224110
Filter #	TSP42		Time/Pt	2.4	Probe ID #		Pitot ID #	
MF #	1.35		Port Order	ABCDE	del H @	1.841		
Pstack	-0.35	In H ₂ O	Pitot Coef	0.84	Meter Factor	1.020		
Sample Time	60	min	Test #	1	Data File Name			

Leak Chk	CFM	Vac	Init	Time	Pitot Leak Check	Run	1	2	3	Average
Pre	0	18	MC	9:21	Pre	O2	11.60	11.60	11.60	11.60
Post	0	10	MC	11:33	Post	CO2	8.20	8.20	8.20	8.20

≤ 0.02 cfm or 4 % of Sample Rate Stable @ ≥ 3" 15 sec

DATA CORRECTIONS / RECORD

End Vol	Start Vol	Diff	Omit	Description	Impinger	MATERIAL WEIGHT (g)	50ml Rinse	Y N	
						End	Start	Diff	ID #
					#1	933.5	699.9		
					#2	781.8	689.5		
					#3	610.5	604.3		
					#4	939.4	927.3		
					#5				
					#6				
					#7				
					#8				
					Total	3265.2	2921.0	344.2	

Post Field Meter Calibration		Set Vacuum = 17"		Collect 5 cf per run				
Delta H	Vm I	Vm F	Tm I	Tm F	ID	Amb	Vacuum	Time
Enter on Run 3 Sheet								

TC Field Calibration	
Ref °F	Probe TC °F

≤ 1.5 % (Absolute Temp)

Comments

Date	Time	Port	Point	Time	Delta P	Delta H	Meter Vol	Vac	Stack	Probe	Filter	Dryer	Meter In	Meter Out	ISO	Static	DH Avg	SQRT
Average				60	0.58	1.09	33.975	5.6	272.9	248.3	251.2	63.9	98.4	85.9	99.1	-0.34	1.04	
9/19/2016	10:26:02 AM	1	1	1	0.777	1.43	0.67	6.1	257.3	252.5	251.9	71.3	81	78.8	99.4	-0.34		
9/19/2016	10:27:00 AM	1	1	2	0.776	1.45	1.307	6.6	260.5	256.6	251.6	67.3	82.9	78.2	99.1	-0.34		
9/19/2016	10:28:01 AM	1	2	3	0.774	1.46	1.966	6.7	263.3	254.6	251.4	66.6	84.3	78.2	100.2	-0.34		
9/19/2016	10:29:01 AM	1	2	4	0.576	1.11	2.54	5.5	265.9	249.5	249.1	66.2	85.3	78.4	100.4	-0.34		
9/19/2016	10:30:01 AM	1	2	5	0.56	1.01	3.086	5.1	267.9	244.5	251.8	66.2	86.3	78.6	100.1	-0.34		
9/19/2016	10:31:02 AM	1	3	6	0.559	1.02	3.637	5.1	269.8	243.3	248.6	66.3	87.3	78.8	100	-0.34		
9/19/2016	10:32:02 AM	1	3	7	0.566	1.05	4.197	5.2	271.7	244.4	252.8	66.2	88.3	79	100	-0.34		
9/19/2016	10:33:01 AM	1	3	8	0.503	0.95	4.708	4.9	272.6	247	249.1	66	89.4	79.3	100	-0.34		
9/19/2016	10:34:01 AM	1	4	9	0.449	0.82	5.192	4.4	273.4	250	252.1	66	90	79.5	99.8	-0.34		
9/19/2016	10:35:01 AM	1	4	10	0.467	0.84	5.691	4.5	273.4	252.3	251.1	66.1	90.8	79.8	99.4	-0.34		
9/19/2016	10:36:02 AM	1	4	11	0.467	0.83	6.186	4.5	273.8	250.8	250.9	66.4	91.7	80	99.2	-0.34		
9/19/2016	10:37:02 AM	1	5	12	0.478	0.86	6.694	4.6	274.8	246.8	255	66.7	92.4	80.2	99	-0.34		
9/19/2016	10:38:00 AM	1	5	13	0.618	1.04	7.23	5.2	274.9	245.3	247	67.2	93.1	80.5	98.7	-0.34		
9/19/2016	10:39:01 AM	1	5	14	0.628	1.12	7.807	5.5	275.5	246.3	252.2	67.9	94.1	80.8	98.6	-0.34		
9/19/2016	10:40:01 AM	1	6	15	0.617	1.12	8.383	5.5	276	248.4	256.2	68.3	94.9	81.2	98.4	-0.34		
9/19/2016	10:43:24 AM	2	3	17	0.778	1.35	9.659	6.2	279.9	253.7	251.1	70.2	94	82	98.4	-0.34		
9/19/2016	10:44:25 AM	2	3	18	0.493	1.14	10.237	5.7	280	252.4	247.9	65.7	96.7	82.3	99	-0.34		
9/19/2016	10:45:23 AM	2	3	19	0.495	0.96	10.753	4.9	280.1	246.4	252.6	63.8	97.1	82.6	99.1	-0.34		
9/19/2016	10:46:23 AM	2	4	20	0.439	0.84	11.252	4.5	279.4	242.6	253.7	62.6	97.5	83	99.2	-0.34		
9/19/2016	10:47:24 AM	2	4	21	0.463	0.83	11.749	4.5	278.6	241.9	249.4	62.3	97.7	83.3	99.1	-0.34		
9/19/2016	10:48:24 AM	2	5	22	0.534	0.95	12.28	4.9	278.2	243.3	252	61.8	98.1	83.6	99	-0.34		
9/19/2016	10:49:25 AM	2	5	23	0.628	1.08	12.847	5.4	276.8	245.7	249.2	61.9	98.7	83.9	98.7	-0.34		
9/19/2016	10:50:23 AM	3	1	24	0.645	1.18	13.423	5.8	276.3	248.9	248.3	61.3	99.4	84.2	98.7	-0.34		
9/19/2016	10:52:12 AM	3	1	25	0.858	1.56	14.111	6.7	278.4	249.6	250.5	63.4	97.9	84.8	98.7	-0.34		
9/19/2016	10:53:12 AM	3	1	26	0.848	1.52	14.787	7.1	278.3	247.8	251.8	61.7	100.2	85	98.7	-0.34		
9/19/2016	10:54:12 AM	3	2	27	0.782	1.57	15.474	7.3	278	246.4	248.9	61.7	101	85.3	98.8	-0.34		
9/19/2016	10:55:13 AM	3	2	28	0.749	1.48	16.144	7.1	277.7	247	253.6	61.5	101.7	85.6	99	-0.34		
9/19/2016	10:56:11 AM	3	3	29	0.764	1.46	16.784	7	277.7	249	246.6	61.5	102.2	86.1	99	-0.34		
9/19/2016	10:57:11 AM	3	3	30	0.75	1.41	17.436	6.8	277.1	251.4	253.1	61.7	102.5	86.4	99	-0.34		
9/19/2016	10:58:12 AM	3	3	31	0.707	1.32	18.065	6.4	277.3	251	255.5	61.7	102.8	86.7	99	-0.34		
9/19/2016	10:59:12 AM	3	4	32	0.722	1.31	18.696	6.4	276.8	247.1	247	61.8	103	87	99	-0.34		
9/19/2016	11:00:13 AM	3	4	33	0.727	1.34	19.331	6.5	276.8	244.7	252.6	61.8	103.1	87.3	99	-0.34		
9/19/2016	11:01:13 AM	3	5	34	0.726	1.35	19.97	6.6	276.1	245.1	250.7	61.9	103.1	87.6	99	-0.34		
9/19/2016	11:02:11 AM	3	5	35	0.734	1.35	20.588	6.6	274.8	247.3	251.6	61.9	103.2	87.9	98.9	-0.34		
9/19/2016	11:03:12 AM	4	1	36	0.74	1.35	21.219	6.7	274.9	250	249.8	62.6	103.1	88.1	98.9	-0.34		
9/19/2016	11:05:04 AM	4	1	37	0.594	1.3	21.842	6.1	274.4	248.2	256.6	64.9	100.9	88.8	99	-0.34		
9/19/2016	11:06:05 AM	4	1	38	0.602	1.08	22.412	5.7	274.3	248.5	248.5	63.2	102.2	88.9	99	-0.34		
9/19/2016	11:07:03 AM	4	2	39	0.559	1.1	22.967	5.7	274	250.4	251.4	63.1	102.5	89.1	99	-0.34		
9/19/2016	11:08:03 AM	4	2	40	0.517	0.98	23.509	5.3	273.9	250.1	253.9	62.9	102.7	89.3	99	-0.34		
9/19/2016	11:09:04 AM	4	3	41	0.485	0.89	24.025	5	273.6	246.8	250.4	62.7	102.7	89.4	99	-0.34		
9/19/2016	11:10:04 AM	4	3	42	0.404	0.82	24.52	4.7	273.4	246.2	252.6	62.5	102.7	89.6	99.1	-0.34		
9/19/2016	11:11:05 AM	4	3	43	0.421	0.81	25.015	4.7	272.9	248.4	248.6	62.5	102.7	89.8	99.1	-0.34		
9/19/2016	11:12:03 AM	4	4	44	0.431	0.81	25.493	4.7	272	251.5	254.5	62.6	102.8	90	99	-0.34		
9/19/2016	11:13:03 AM	4	4	45	0.449	0.82	25.989	4.7	271.6	252.6	249.7	62.7	102.8	90.1	99	-0.34		
9/19/2016	11:14:04 AM	4	5	46	0.487	0.89	26.505	4.9	270.9	250	249.5	63	102.9	90.3	98.9	-0.34		
9/19/2016	11:15:04 AM	4	5	47	0.533	1	27.057	5.4	270.3	246.3	253	63.3	103.1	90.4	99	-0.34		
9/19/2016	11:16:04 AM	5	1	48	0.509	1	27.597	5.4	270.5	244.3	250.2	63.2	103.2	90.6	99	-0.34		
9/19/2016	11:17:59 AM	5	1	49	0.474	1	28.152	5.2	267.9	244.5	251.2	65.2	101.2	91.1	99.1	-0.34		
9/19/2016	11:19:00 AM	5	1	50	0.461	0.88	28.667	5	268	248.3	249	63.1	102.4	91	99.1	-0.34		
9/19/2016	11:20:00 AM	5	2	51	0.458	0.87	29.178	5	268.7	251.7	253.5	62.6	102.7	91.2	99.1	-0.34		
9/19/2016	11:20:58 AM	5	2	52	0.455	0.87	29.672	5	269.1	251.9	249.5	62.3	102.9	91.2	99.1	-0.34		
9/19/2016	11:21:59 AM	5	3	53	0.452	0.87	30.185	5	268.5	248.6	252	62.3	103.1	91.4	99.1	-0.34		
9/19/2016	11:22:59 AM	5	3	54	0.418	0.82	30.684	4.8	268.3	245.9	249.2	62.4	103.2	91.5	99.1	-0.34		
9/19/2016	11:23:59 AM	5	3	55	0.437	0.81	31.178	4.8	267.9	245.6	254.5	62.7	103.3	91.6	99.1	-0.34		
9/19/2016	11:25:00 AM	5	4	56	0.493	0.89	31.699	5	268.1	247.4	248.7	62.8	103.4	91.7	99	-0.34		
9/19/2016	11:25:58 AM	5	4	57	0.549	0.97	32.225	5.3	268.6	250.5	253.2	62.9	103.5	91.8	99	-0.34		
9/19/2016	11:26:58 AM	5	5	58	0.566	1.07	32.796	5.6	269.3	252.6	248.9	62.8	103.8	91.9	99	-0.34		
9/19/2016	11:27:59 AM	5	5	59	0.618	1.16	33.393	6	269.5	250.7	254.8	62.6	104.1	92.1	99	-0.34		
9/19/2016	11:28:59 AM	5	5	60	0.612	1.16	33.975	6	269.9	246.4	250.5	62.4	104.3	92.2	99	-0.34		

Client	Hardrives, Inc.	Date	9/19/2016
Facility	Frontenac, MN	Job Number	E16055
Unit	EP01	Description	TSP
Location	Stack	Run No.	1
Pbar (inHg)	29.11	Ref Temp°F	68
Ref Pres (in.Hg)	29.92	H2O Cond. (mL)	344.2
Meter Factor (Y)	1.020	Delta H@	1.841
Pitot Coeff. (Cp)	0.84	Stack Area (ft2)	17.12
Dry MW	29.8	Wet MW	25.8
Nozzle Diameter (in)	0.249	Press Stack (Ps)	-0.35
Avg O2 (%)	11.60	Avg CO2 (%)	8.20

Sample Gas Volume	32.33 l dscf
Water Vapor	16.229 scf
Moisure Content	33.42 %
Avg. Stack Velocity	53.82 ft/sec
	3229.48 ft/min
Stack Flow	55288 wacfm
	38720 wscfm
	25779 dscfm
% Isokinetic	105.8 %

E16055
25 of 54



Client	Harddrives, Inc.	Test Date	9/19/2016
Facility	Frontenac, MN	Start/Stop Time	12:20-14:01
Unit	EP01	Test Method	EPA 5
Location	Stack	Run Number	2
Project #	E16055	Description	TSP
Operator	MC-BS-NF	Carbon Trap ID	

Tamb	°F	# Ports	5	Meter Box #	AB 5	ID#	
Pbar	29.12	In Hg	# Points	25	Nozzle Dia. (in)	0.255	ID# 224089
Filter #	TSP43		Time/Pt	2.4	Probe ID #	Pitot ID #	
MF #	1.35		Port Order	ABCDE	del H @	1.841	
Pstack	-0.34	In H2O	Pitot Coef	0.84	Meter Factor	1.020	
Sample Time	60	min	Test #	1	Data File Name		

Stable @ $\geq 3''$ 15 sec

1	2	3	Average
13.32	13.32	13.32	13.32
6.72	6.72	6.72	6.72

End Vol	Start Vol	Diff	Omit	Description	Impinger	End	Start	Diff	ID #
					#1	918.0	678.4		
					#2	767.0	681.4		
					#3	619.2	613.6		
					#4	952.1	938.0		
					#5				
					#6				
					#7				
					#8				
					Total	3256.3	2911.4	344.9	

[illegible]

Ref °F	Probe TC °F

Comments

[illegible]

Date	Time	Port	Point	Time	Delta P	Delta H	Meter Vol	Vac	Stack	Probe	Filter	Dryer	Meter In	Meter Out	ISO	Static	DH Avg	SQRT
Average				60	0.83	1.55	41.167	6.9	276.4	248.5	251.3	62.5	99.5	89.3	103.0	-0.34	1.24	
9/19/2016	12:21:00 PM	1	1	1	0.787	1.44	0.669	6.1	261.3	249.6	252.3	65.2	89.1	88.8	101.5	-0.34		
9/19/2016	12:21:41 PM	1	1	2	0.76	1.42	1.111	6.4	262.2	255.1	251.9	61.7	89.1	87.7	102.6	-0.34		
9/19/2016	1:01:23 PM	1	2	3	0.946	1.76	2.113	6.5	253.5	248.8	254.4	64.9	85.6	84.8	104.3	-0.34		
9/19/2016	1:02:22 PM	1	2	4	0.577	1.61	2.798	7	247.3	248	249	61.3	85.7	84	108.2	-0.34		
9/19/2016	1:03:24 PM	1	3	5	0.56	1.31	3.454	6	245.4	248.9	253.1	60.8	86.1	83.9	109.8	-0.34		
9/19/2016	1:04:23 PM	1	3	6	0.456	1	3.99	5	246.2	250.9	250	61.2	86.6	83.9	109.6	-0.34		
9/19/2016	1:05:23 PM	1	3	7	0.445	0.89	4.514	4.6	248.9	251.8	252.5	61.5	87.1	84	109.1	-0.34		
9/19/2016	1:06:23 PM	1	4	8	0.489	0.89	5.037	4.6	251.3	248.8	249.9	61.8	87.7	83.9	107.8	-0.34		
9/19/2016	1:07:24 PM	1	4	9	0.498	0.9	5.564	4.6	254	245.3	250.4	62.7	88.5	84	107	-0.34		
9/19/2016	1:08:24 PM	1	5	10	0.557	0.92	6.097	4.7	255.6	244.6	249.1	63.3	89.2	84	105.7	-0.34		
9/19/2016	1:09:22 PM	1	5	11	0.633	1.08	6.656	5.4	256.5	246.1	252.9	63.4	90	84.1	105	-0.34		
9/19/2016	1:10:23 PM	2	1	12	0.588	1.07	7.226	5.4	257.2	248.8	248.5	64.2	90.7	84.1	104.6	-0.34		
9/19/2016	1:12:13 PM	2	1	13	1.036	1.74	7.97	7	262	249	248.4	65.9	90.5	84.4	103.8	-0.34		
9/19/2016	1:13:14 PM	2	1	14	1.031	1.84	8.729	8	265.4	250.1	253	64.8	92.2	84.3	103.4	-0.34		
9/19/2016	1:14:14 PM	2	2	15	0.868	1.77	9.468	7.8	267.5	251.6	248.9	64.8	93	84.4	103.9	-0.34		
9/19/2016	1:15:13 PM	2	2	16	0.702	1.33	10.087	6.2	268.4	249.8	253.1	64.9	93.5	84.6	103.8	-0.34		
9/19/2016	1:16:13 PM	2	3	17	0.541	1.02	10.646	5.3	267.1	246.1	249.2	63.6	93.9	84.8	103.8	-0.34		
9/19/2016	1:17:13 PM	2	3	18	0.638	1.12	11.237	5.4	268.4	244.5	252.5	62.1	94.4	85	103.4	-0.34		
9/19/2016	1:18:14 PM	2	3	19	0.707	1.28	11.873	5.9	270.8	245.4	248.5	60.7	95.2	85.2	103.3	-0.34		
9/19/2016	1:19:14 PM	2	4	20	0.811	1.44	12.536	6.3	273.7	247.7	253.5	59.8	95.9	85.4	103	-0.34		
9/19/2016	1:20:12 PM	2	4	21	0.845	1.49	13.195	6.6	275.9	250.7	248.8	59.4	96.8	85.6	102.9	-0.34		
9/19/2016	1:21:13 PM	2	5	22	0.86	1.53	13.884	6.7	276.1	251.3	253.8	59	97.4	85.9	102.7	-0.34		
9/19/2016	1:22:13 PM	2	5	23	0.925	1.67	14.603	7.2	276.2	248.5	248.4	59.5	98	86.1	102.6	-0.34		
9/19/2016	1:23:14 PM	3	1	24	0.92	1.66	15.308	7.3	278	244.8	252.6	59.1	98.5	86.4	102.6	-0.34		
9/19/2016	1:25:04 PM	3	1	25	1.165	1.97	16.101	7.9	279	244.2	251.2	60.5	97.1	86.9	102.3	-0.34		
9/19/2016	1:26:05 PM	3	1	26	1.237	2.12	16.916	9	279.9	247.9	251.3	58.9	98.5	87	102	-0.34		
9/19/2016	1:27:05 PM	3	2	27	1.189	2.22	17.753	9.5	280.3	251.6	249.3	58.6	99.1	87.3	102.1	-0.34		
9/19/2016	1:28:03 PM	3	2	28	1.171	2.12	18.54	9.1	280.9	252.1	251.6	58.9	99.5	87.5	102.1	-0.34		
9/19/2016	1:29:04 PM	3	3	29	1.194	2.11	19.357	9	281.6	248.6	248.8	59	99.8	87.8	101.9	-0.34		
9/19/2016	1:30:04 PM	3	3	30	1.182	2.11	20.172	9	282	245	254	59.2	100.2	88.1	102	-0.34		
9/19/2016	1:31:04 PM	3	3	31	1.274	2.23	21.012	9.4	283.1	245	248.7	59.3	100.7	88.4	101.8	-0.34		
9/19/2016	1:32:05 PM	3	4	32	1.193	2.15	21.835	9.1	283.8	247	253.5	59.3	101.3	88.8	101.8	-0.34		
9/19/2016	1:33:03 PM	3	4	33	1.21	2.17	22.633	9.2	286	250.4	250.9	59.4	101.8	89.1	101.8	-0.34		
9/19/2016	1:34:04 PM	3	5	34	1.182	2.13	23.454	9.1	286.8	251.8	251	59.7	102.4	89.4	101.8	-0.34		
9/19/2016	1:35:04 PM	3	5	35	1.199	2.14	24.276	9.1	286.4	249	249.3	60	102.9	89.8	101.7	-0.34		
9/19/2016	1:36:04 PM	4	1	36	1.192	2.14	25.078	9.1	286.9	245.7	251.9	60.2	103.3	90.1	101.8	-0.34		
9/19/2016	1:37:55 PM	4	1	37	0.925	1.84	25.847	7.5	285	245.1	248.8	62.7	102	90.7	101.8	-0.34		
9/19/2016	1:38:53 PM	4	1	38	0.925	1.68	26.551	7.4	287.2	248.8	253.4	61.8	103.4	90.9	101.8	-0.34		
9/19/2016	1:39:54 PM	4	2	39	0.802	1.5	27.24	6.9	288.8	252.2	249.6	62.4	104	91.2	101.9	-0.34		
9/19/2016	1:40:54 PM	4	2	40	0.779	1.37	27.897	6.4	289.4	252.3	252	63.1	104.3	91.5	101.8	-0.34		
9/19/2016	1:41:54 PM	4	3	41	0.76	1.39	28.558	6.4	289.3	248.9	253.7	63.5	104.7	91.9	101.8	-0.34		
9/19/2016	1:42:55 PM	4	3	42	0.637	1.1	29.147	5.5	289.4	245.6	248.8	64.1	105	92.2	101.8	-0.34		
9/19/2016	1:43:53 PM	4	3	43	0.642	1.1	29.716	5.4	289.9	245	253.7	63.5	105.3	92.4	101.7	-0.34		
9/19/2016	1:44:54 PM	4	4	44	0.675	1.16	30.328	5.7	289.8	247	249.9	63.5	105.7	92.7	101.6	-0.34		
9/19/2016	1:45:54 PM	4	4	45	0.67	1.21	30.945	5.9	290.4	249.7	250.6	64.1	106.1	93	101.6	-0.34		
9/19/2016	1:46:54 PM	4	5	46	0.754	1.31	31.587	6.2	289.3	251.1	248.8	63.8	106.6	93.3	101.5	-0.34		
9/19/2016	1:47:55 PM	4	5	47	0.928	1.64	32.308	7.4	288.4	248.5	255.6	63.6	107.2	93.7	101.5	-0.34		
9/19/2016	1:48:55 PM	5	1	48	0.905	1.65	33.012	7.4	288.2	245.8	253.5	63.7	107.6	94	101.5	-0.34		
9/19/2016	1:49:41 PM	5	1	49	0.72	2.33	33.126	6.5	282.8	244.9	249	67.4	105.5	94.6	101.6	-0.34		
9/19/2016	1:51:36 PM	5	1	50	0.732	1.44	34.387	6.6	283.4	248.3	252.8	64.8	107.3	94.7	101.7	-0.34		
9/19/2016	1:52:36 PM	5	2	51	0.728	1.34	35.036	6.4	283.1	252.4	248.3	64.6	108.2	95	101.7	-0.34		
9/19/2016	1:53:37 PM	5	2	52	0.705	1.29	35.675	6.2	284.4	251.1	256.6	64.6	108.4	95.3	101.7	-0.34		
9/19/2016	1:54:35 PM	5	3	53	0.701	1.26	36.287	6.1	284.7	247.1	254	64.8	108.5	95.5	101.6	-0.34		
9/19/2016	1:55:35 PM	5	3	54	0.729	1.29	36.928	6.1	285.7	245	249	65	108.6	95.8	101.6	-0.34		
9/19/2016	1:56:36 PM	5	3	55	0.737	1.34	37.579	6.3	287.2	245.7	254.1	65.2	108.9	96	101.6	-0.34		
9/19/2016	1:57:36 PM	5	4	56	0.85	1.51	38.269	6.8	287.9	248.5	250.2	65.3	109.1	96.3	101.6	-0.34		
9/19/2016	1:58:37 PM	5	4	57	0.882	1.62	38.986	7.3	288.1	252.2	251	65.3	109.5	96.5	101.6	-0.34		
9/19/2016	1:59:35 PM	5	5	58	0.896	1.59	39.672	7.2	288.4	252.9	256	65.3	109.8	96.8	101.5	-0.34		
9/19/2016	2:00:35 PM	5	5	59	0.96	1.72	40.413	7.6	288.6	249.8	248.7	65.6	110.1	97.1	101.5	-0.34		
9/19/2016	2:01:36 PM	5	5	60	0.988	1.78	41.167	7.9	288.8	245.6	254.2	65.9	110.5	97.3	101.5	-0.34		

Determination of Particulate Emissions From Stationary Sources

Client	Hardrives, Inc.	Date	9/19/2016
Facility	Frontenac, MN	Job Number	E16055
Unit	EP01	Description	TSP
Location	Stack	Run No.	2
Pbar (inHg)	29.12	Ref Temp°F	68
Ref Pres (in.Hg)	29.92	H2O Cond. (mL)	344.9
Meter Factor (Y)	1.020	Delta H@	1.841
Pitot Coeff. (Cp)	0.84	Stack Area (ft2)	17.12
Dry MW	29.6	Wet MW	26.2
Nozzle Diameter (in)	0.255	Press Stack (Ps)	-0.34
Avg O2 (%)	13.32	Avg CO2 (%)	6.72

[illegible]

Sample Gas Volume	39.076 dscf
Water Vapor	16.262 scf
Moisure Content	29.39 %
Avg. Stack Velocity	64.24 ft/sec
	3854.40 ft/min
Stack Flow	65987 wacfm
	46008 wscfm
	32488 dscfm
% Isokinetic	96.7 %

Elemental Air



ELEMENTAL AIR

24x7x24 - 24x7x24

Innovative Technology for Air Quality Management

AUTOMATED BOX STACK TEST DATA SHEET

Client	Hardrives, Inc.	Test Date	9/19/2016
Facility	Frontenac, MN	Start/Stop Time	14:30-15:40
Unit	EP01	Test Method	EPA 5
Location	Stack	Run Number	3
Project #	E16055	Description	TSP
Operator	MC-BS-NF	Carbon Trap ID	

RUN DATA

Tamb		°F	# Ports	5	Meter Box #	AB 5	ID#
Pbar	29.13	In Hg	# Points	25	Nozzle Dia. (in)	0.255	ID#
Filter #	TSP44		Time/Pt	2.4	Probe ID #		Pitot ID #
MF #	1.35		Port Order		del H @	1.841	
Pstack	-0.34	In H2O	Pitot Coef	0.84	Meter Factor	1.020	
Sample Time	60	min	Test #	1	Data File Name		

Leak Chk	CFM	Vac	Init	Time	Pitot Leak Check	Run	1	2	3	Average
Pre	0	10	MC	14:19	Pre	O2	13.78	13.78	13.78	13.78
Post	0	13	MC	15:44	Post	CO2	6.26	6.26	6.26	6.26

≤ 0.02 cfm or 4 % of Sample Rate Stable @ ≥ 3" 15 sec

DATA CORRECTIONS/RECORD

End Vol	Start Vol	Diff	Omit	Description	Impinger	End	Start	Diff	50ml Rinse	Y	N
					#1	937.6	700.0				
					#2	752.5	679.1				
					#3	616.9	609.9				
					#4	938.9	923.4				
					#5						
					#6						
					#7						
					#8						
					Total	3245.9	2912.4	333.5			

Post Field Meter Calibration Set Vacuum = 17" Collect 5 cf per run

Delta H	Vm I	Vm F	Tm I	Tm F	ID	Amb	Vacuum	Time

TC Field Calibration

Ref °F	Probe TC °F

≤ 1.5 % (Absolute Temp)

Comments

E16055

29 of 54

Date	Time	Port	Point	Time	Delta P	Delta H	Meter Vol	Vac	Stack	Probe	Filter	Dryer	Meter In	Meter Out	ISO	Static	DH Avg SQRT
Average				60	0.87	1.74	44.772	7.5	291.1	249.1	250.9	66.8	115.9	106.7	101.2	-0.34	1.31
9/19/2016	2:32:03 PM	1	1	2	1.028	1.94	1.596	7.6	299.6	253.1	249.4	69	106.5	100.9	101.7	-0.34	
9/19/2016	2:33:03 PM	1	2	3	0.906	1.85	2.365	7.6	301.2	258.8	252.6	67.8	107.9	100.7	102.3	-0.34	
9/19/2016	2:34:02 PM	1	2	4	0.816	1.53	3.042	6.5	301.7	256.3	251.7	67.8	108.6	100.9	101.6	-0.34	
9/19/2016	2:35:02 PM	1	3	5	0.802	1.52	3.738	6.4	300.2	251.2	250.4	67.3	109.3	101.1	101.5	-0.34	
9/19/2016	2:36:02 PM	1	3	6	0.642	1.26	4.373	5.6	298.9	245.5	249.4	68.2	109.8	101.3	101.6	-0.34	
9/19/2016	2:37:03 PM	1	3	7	0.639	1.25	5.006	5.5	298.4	243.4	251.4	68.6	110.4	101.6	101.6	-0.34	
9/19/2016	2:38:03 PM	1	4	8	0.721	1.38	5.668	5.9	298.8	244.5	248.9	69.1	111.1	101.8	101.1	-0.34	
9/19/2016	2:39:04 PM	1	4	9	0.734	1.4	6.337	6	300.2	247.2	251	68.9	112	102	101.1	-0.34	
9/19/2016	2:40:02 PM	1	5	10	0.807	1.49	7.008	6.3	300.3	250.8	250.1	69.7	112.7	102.2	100.7	-0.34	
9/19/2016	2:41:02 PM	1	5	11	0.951	1.8	7.769	7.3	299.6	253.1	253.3	68.7	113.4	102.4	100.6	-0.34	
9/19/2016	2:42:03 PM	2	1	12	0.94	1.87	8.543	7.7	299.6	250.9	248.5	69	114.1	102.7	100.7	-0.34	
9/19/2016	2:43:49 PM	2	1	13	1.191	2.22	9.385	8.4	298.7	245.4	249.2	70.7	113.2	103.2	100.7	-0.34	
9/19/2016	2:44:50 PM	2	1	14	1.206	2.31	10.249	9.4	299	248.2	252	67.7	114.8	103.4	100.7	-0.34	
9/19/2016	2:45:50 PM	2	2	15	1.041	2.16	11.084	9.1	298.6	251.4	251.2	66.6	115.4	103.7	100.9	-0.34	
9/19/2016	2:46:50 PM	2	2	16	0.887	1.75	11.836	7.5	297.4	252.8	249.6	66.3	115.7	104	101	-0.34	
9/19/2016	2:47:51 PM	2	3	17	0.882	1.74	12.585	7.5	296.3	249.5	250.5	66.6	115.9	104.3	101.1	-0.34	
9/19/2016	2:48:51 PM	2	3	18	0.696	1.39	13.259	6.4	295.4	246.8	252.7	66.4	116	104.5	101.2	-0.34	
9/19/2016	2:49:50 PM	2	3	19	0.723	1.38	13.908	6.3	293.9	247.2	248.1	66.6	116.2	104.8	101.1	-0.34	
9/19/2016	2:50:50 PM	2	4	20	0.774	1.48	14.601	6.6	292.3	249.6	254.3	66.9	116.4	105	100.9	-0.34	
9/19/2016	2:51:50 PM	2	4	21	0.831	1.65	15.333	7.2	292	252.7	250.5	67.1	116.7	105.2	101	-0.34	
9/19/2016	2:52:49 PM	2	5	22	0.806	1.66	16.04	7.2	292.9	252.8	251.3	67.2	117	105.5	101	-0.34	
9/19/2016	2:53:51 PM	2	5	23	0.918	1.73	16.813	7.4	292.7	249.8	253.1	67.3	117.2	105.7	101	-0.34	
9/19/2016	2:54:49 PM	3	1	24	0.933	1.79	17.551	7.6	292.8	245.5	248.6	67.4	117.4	105.9	100.9	-0.34	
9/19/2016	2:56:32 PM	3	1	25	1.221	2.21	18.414	8.6	290.3	244.1	249.5	68.3	116.3	106.5	100.7	-0.34	
9/19/2016	2:57:30 PM	3	1	26	1.247	2.46	19.281	10.2	292.4	247.8	251.2	66.4	117.1	106.5	100.7	-0.34	
9/19/2016	2:58:31 PM	3	2	27	1.152	2.32	20.155	9.8	292.9	251.9	252.6	66.5	117.3	106.7	100.8	-0.34	
9/19/2016	2:59:31 PM	3	2	28	1.108	2.23	21.007	9.3	293.4	253.4	250	66.7	117.4	107	100.8	-0.34	
9/19/2016	3:00:32 PM	3	3	29	1.107	2.2	21.856	9.1	294	250.6	254.4	66.2	117.4	107.1	100.9	-0.34	
9/19/2016	3:01:32 PM	3	3	30	1.142	2.24	22.708	9.2	295	246.1	248.8	66.8	117.5	107.4	100.9	-0.34	
9/19/2016	3:02:32 PM	3	3	31	1.048	2.11	23.534	8.8	295.4	244.2	252.2	67	117.7	107.6	101	-0.34	
9/19/2016	3:03:31 PM	3	4	32	1.091	2.14	24.341	8.9	295.5	245.2	249.5	67.4	117.9	107.7	101	-0.34	
9/19/2016	3:04:31 PM	3	4	33	1.156	2.24	25.197	9.4	295.8	248	252.2	67.6	118.2	107.9	100.9	-0.34	
9/19/2016	3:05:31 PM	3	5	34	1.172	2.35	26.075	9.8	296.4	252.1	249.7	68	118.5	108.1	101	-0.34	
9/19/2016	3:06:30 PM	3	5	35	1.12	2.22	26.899	9.4	295.9	254.3	250.9	68.3	118.9	108.4	101	-0.34	
9/19/2016	3:07:32 PM	4	1	36	1.152	2.28	27.77	9.4	295.6	252	250	68.5	119.2	108.6	101.1	-0.34	
9/19/2016	3:09:37 PM	4	1	37	0.912	1.99	28.593	8.1	290.3	243.3	251.1	69.8	117.5	109.1	101.2	-0.34	
9/19/2016	3:19:25 PM	4	2	39	0.883	1.81	30.138	7.6	274	247.5	250.2	68	115.4	109.8	101.4	-0.34	
9/19/2016	3:20:25 PM	4	2	40	0.967	1.92	30.929	8.2	275.5	252	253.2	64.9	116.8	109.3	101.4	-0.34	
9/19/2016	3:21:25 PM	4	3	41	0.758	1.62	31.661	7.2	277	251.9	249.6	64.3	117	109.4	101.4	-0.34	
9/19/2016	3:22:26 PM	4	3	42	0.656	1.36	32.329	6.3	279.9	248.8	251.2	64.9	117.2	109.5	101.5	-0.34	
9/19/2016	3:23:24 PM	4	3	43	0.624	1.27	32.955	6	281.5	245.9	250.2	65.1	117.3	109.6	101.5	-0.34	
9/19/2016	3:24:24 PM	4	4	44	0.644	1.26	33.598	5.9	283.2	245.7	251.5	64.5	117.4	109.7	101.4	-0.34	
9/19/2016	3:25:25 PM	4	4	45	0.706	1.38	34.271	6.4	283.6	246.5	250.6	64.7	117.5	109.7	101.4	-0.34	
9/19/2016	3:26:25 PM	4	5	46	0.76	1.46	34.964	6.6	285	249.5	253.5	64.5	117.7	109.8	101.4	-0.34	
9/19/2016	3:27:26 PM	4	5	47	0.881	1.7	35.708	7.4	284.9	250.6	248.9	63.5	117.8	109.9	101.3	-0.34	
9/19/2016	3:28:26 PM	5	1	48	0.887	1.73	36.44	7.5	285.9	249.1	250.5	63.8	117.8	109.9	101.3	-0.34	
9/19/2016	3:29:56 PM	5	1	49	0.688	1.62	37.178	6.9	280	246.1	251.3	65.4	117	110.1	101.4	-0.34	
9/19/2016	3:30:55 PM	5	1	50	0.698	1.43	37.838	6.6	282.9	247.7	251.1	64.7	117.4	110	101.4	-0.34	
9/19/2016	3:31:57 PM	5	2	51	0.703	1.36	38.53	6.4	283.9	250.7	248.4	64.9	117.5	110.1	101.4	-0.34	
9/19/2016	3:32:56 PM	5	2	52	0.675	1.36	39.176	6.4	284.1	252	254.5	65	117.6	110.1	101.4	-0.34	
9/19/2016	3:33:56 PM	5	3	53	0.678	1.36	39.847	6.4	284.3	249.6	249.5	65.3	117.6	110.2	101.4	-0.34	
9/19/2016	3:34:56 PM	5	3	54	0.669	1.37	40.517	6.4	284.8	245.8	250.7	65.5	117.6	110.2	101.4	-0.34	
9/19/2016	3:35:57 PM	5	3	55	0.678	1.36	41.186	6.4	284.7	245	251.9	66	117.6	110.3	101.4	-0.34	
9/19/2016	3:36:55 PM	5	4	56	0.732	1.43	41.849	6.6	285.5	247.1	248.3	66.3	117.7	110.3	101.4	-0.34	
9/19/2016	3:37:55 PM	5	4	57	0.77	1.54	42.561	7	285.4	249.9	253.8	66.5	117.8	110.3	101.4	-0.34	
9/19/2016	3:38:56 PM	5	5	58	0.792	1.51	43.269	7	285.3	251.4	249.9	66.5	117.8	110.3	101.3	-0.34	
9/19/2016	3:39:56 PM	5	5	59	0.923	1.73	44.024	7.6	285	249	253.1	66.7	117.8	110.4	101.3	-0.34	
9/19/2016	3:40:57 PM	5	5	60	0.89	1.77	44.772	7.8	284.9	244.3	249.3	66.7	117.8	110.3	101.3	-0.34	

Determination of Particulate Emissions From Stationary Sources

Client	Hardrives, Inc.	Date	9/19/2016
Facility	Frontenac, MN	Job Number	E16055
Unit	EP01	Description	TSP
Location	Stack	Run No.	3
Pbar (inHg)	29.13	Ref Temp°F	68
Ref Pres (in.Hg)	29.92	H2O Cond. (mL)	333.5
Meter Factor (Y)	1.020	Delta H@	1.841
Pitot Coeff. (Cp)	0.84	Stack Area (ft2)	17.12
Dry MW	29.6	Wet MW	26.4
Nozzle Diameter (in)	0.255	Press Stack (Ps)	-0.34
Avg O2 (%)	13.78	Avg CO2 (%)	6.26

[illegible]

Sample Gas Volume	41.271 dscf
Water Vapor	15.725 scf
Moisure Content	27.59 %
Avg. Stack Velocity	66.38 ft/sec
	3982.72 ft/min
Stack Flow	68183 wacfm
	46624 wscfm
	33761 dscfm

% Isokinetic	98.3 %
--------------	--------

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METHOD 9 REDUCED FIELD DATA

Client: Hardrives, Inc.
 Facility: 601 Plant
 Unit: EP01
 Location: Stack

Date: #####
 Time: 10:25-11:25
 Project #: E16055
 Comments: _____

Test Results:

Maximum 6 Minute Average: 7.3 %
 Average Opacity: 3.4 %
 Maximum Opacity: 25.0 %
 Minimum Opacity: 0.0 %
 # of Readings >20%: 2
 Number of Readings: 240

Interval	0	15	30	45
1	5	5	5	0
2	0	0	0	5
3	10	10	10	5
4	10	10	10	5
5	15	5	5	5
6	10	15	10	10
7	15	10	20	15
8	5	5	5	5
9	0	5	5	0
10	0	0	0	0
11	0	5	0	0
12	5	5	0	5
13	0	5	10	25
14	10	25	15	15
15	5	0	0	5
16	0	15	5	5
17	0	0	10	5
18	5	5	5	5
19	5	5	5	5
20	5	5	5	5
21	0	0	0	0
22	0	5	0	0
23	5	5	0	5
24	0	0	0	0
25	0	0	0	5
26	5	5	10	5
27	5	0	5	0
28	0	0	0	0
29	0	0	0	0
30	5	5	5	5

Interval	0	15	30	45
31	5	10	5	5
32	5	5	5	10
33	5	5	10	5
34	5	5	0	0
35	5	5	5	5
36	0	5	5	5
37	5	5	0	5
38	0	0	5	5
39	10	5	0	5
40	5	0	0	0
41	0	0	0	0
42	0	0	0	0
43	0	0	0	0
44	0	0	0	0
45	0	0	0	0
46	0	0	0	0
47	0	0	0	0
48	0	0	0	0
49	0	0	0	0
50	0	0	0	0
51	0	0	0	0
52	0	0	0	0
53	0	0	0	0
54	0	0	0	0
55	0	0	5	0
56	5	5	0	5
57	5	5	0	5
58	5	5	5	0
59	5	5	5	5
60	5	5	5	5

Appendix C

Process Operation Data



Minnesota Pollution
Control Agency

520 Lafayette Road
St. Paul, MN 55155-4194

Air Performance Test Form

Operating Data Summary for Asphalt Sources

General Information (all blanks must be filled in, use N/A where appropriate, check all that apply)

Test date(s): 9/19/16

This plant is: ☒ Portable (moved around for majority of year) ☐ Stationary (in one place for a majority of year)

Plant type: ☐ Batch mix ☒ Parallel flow drum ☐ Counterflow drum ☐ Continuous mix

Other: _____

Pollution Control Equipment: ☒ Fabric filter ☐ Multiclone ☐ Cyclone ☐ Venturi Scrubber

☐ If Wet Scrubber: _____ % scrubber water recycled

Fuel, Material Processed, and Control Equipment Information

Itemize all fuels and materials added to the combustion process during the test period. List fuel type used during testing

If oil, specify type: Waste Oil If other units of measure are used, specify and calculate appropriate heat input.

What other types of fuel can be burned? Natural Gas

Test No.	Fuel input (gal/hr)	Heat content (Btu/gal-as received)	Heat input (Btu/hr)	% - 200 fines	% Moisture of virgin aggregate material
Run 1	450	125000	56250000	Not Available	7.1
Run 2	455	125000	56875000	Not Available	7.1
Run 3	455	125000	56875000	Not Available	7.1
Average	453	125000	56666666		7.1

Other control equipment parameters	Design	During testing
Cleaning cycles (fabric filter)	Continuous	Continuous
Air to cloth ratios (fabric filter)	NA	NA
No. of spray bars and psi (scrubber)		
No. of nozzles per spray bar (scrubber)		
Water flow rate in gpm (scrubber)		

Describe the location of the thermocouples reading exiting dryer and mix temperature: Drum Exit

gal/hr = gallons per hour

Btu/gal = British thermal unit per gallon

Btu/hr = British thermal unit per hour

psi = pressure per square

gpm = gallons per minute

	Time in 15 minute intervals	Virgin (V) Material tph	Asphalt (A) Material tph	Total Throughput (V+A) tph	Temp. of Gases Exiting Dryer °F	Hot Mix Temp. °F	Dust Collector ΔP inches w. c.	Water Flow Rate gpm	Water Supply Pressure psig
	1025	290	13.5	304	314	300	2.6	NA	NA
	1040	290	13.7	304	310	299	2.5	NA	NA
	1055	290	13.3	303	309	298	2.5	NA	NA
	1110	290	13.6	304	306	290	2.6	NA	NA
	1125	290	13.7	304	307	295	2.8	NA	NA
	1315	295	13.9	309	300	291	3.2	NA	NA
	1330	295	13.7	309	310	295	3.7	NA	NA
	1345	295	13.8	309	315	298	3.5	NA	NA
	1400	295	13.9	309	316	296	3.7	NA	NA
	1430	295	13.9	309	320	301	3.7	NA	NA
	1445	295	14.0	309	319	294	3.8	NA	NA
	1500	295	13.9	309	319	302	3.8	NA	NA
	1515	295	14.1	309	315	300	3.7	NA	NA
	1530	295	14.0	309	312	295	3.7	NA	NA
Average		293	13.8	307	312	304	3.3		

tph = tons per hour

°F = degrees Fahrenheit

ΔP = pressure drop

Temp. = Temperature

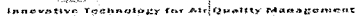
gpm = gallons per minute

inches w. c. = inches of water column

psig = pressure per square inch gauge

Note:

- All information required must be completed and submitted as part of the performance test report. Failure to submit the required information will result in an incomplete performance test report.
- This form provides only a summary of the operating conditions during the performance test. Additional and more detailed records are required to meet the requirements of Minn. R. 7017.2035. This form is to be submitted as part of the performance test report.



Client: Hardens Inc. Test #: _____ Page 1 of 1
Date: 9-19-16 Project #: 666119 Unit: 601 Fuel: Waste Operator: Jim W.
Location: Frontier, Mo

"I certify that this information provided above, to the best of my knowledge and belief, is true and accurate, and reflects the operating conditions at the emission facility during this performance test. All exceptions are listed and explained in the included attachment."

Date:

36 of 54

Appendix D

Laboratory Results

EPA REFERENCE METHOD 5
Determination of Particulate Emissions From Stationary Sources
Filterable Emissions

Client	Hardrives, Inc.	Analyst	EF
Facility	Frontenac, MN	Job Number	E16055
Unit	EP01	Description	TSP
Location	Stack	Version	AB M5 Ver 1.10

TEST 1	Time	10:25-11:28	Date	9/19/2016
Filter Net Gain		1.1 mg	11.60	% Oxygen
Probe Rinse Net Gain		19.9 mg	NA	F-factor
Sample Gas Volume		32.331 dscf	1.49	O2 Factor
Stack Volumetric Flow		25779 dscfm		
Particulate Concentration			NA	lbs/mmBtu
Particulate Concentration			0.650	mg/dscf
Particulate Emission Rate			2.215	lbs/hr
Particulate Concentration			0.010	gr/dscf
Particulate Concentration			0.015	gr/dscf @7% Oxygen

TEST 2	Time	12:20-14:01	Date	9/19/2016
Filter Net Gain		3.7 mg	13.32	% Oxygen
Probe Rinse Net Gain		8.5 mg	NA	F-factor
Sample Gas Volume		39.076 dscf	1.83	O2 Factor
Stack Volumetric Flow		32488 dscfm		
Particulate Concentration			NA	lbs/mmBtu
Particulate Concentration			0.312	mg/dscf
Particulate Emission Rate			1.342	lbs/hr
Particulate Concentration			0.005	gr/dscf
Particulate Concentration			0.009	gr/dscf @7% Oxygen

TEST 3	Time	14:30-15:40	Date	9/19/2016
Filter Net Gain		2.5 mg	13.78	% Oxygen
Probe Rinse Net Gain		24.4 mg	NA	F-factor
Sample Gas Volume		41.271 dscf	1.95	O2 Factor
Stack Volumetric Flow		33761 dscfm		
Particulate Concentration			NA	lbs/mmBtu
Particulate Concentration			0.652	mg/dscf
Particulate Emission Rate			2.910	lbs/hr
Particulate Concentration			0.010	gr/dscf
Particulate Concentration			0.020	gr/dscf @7% Oxygen

RESULT AVERAGE TEST 1-3

Particulate Concentration	NA	lbs/mmBtu
Particulate Concentration	0.538	mg/dscf
Particulate Emission Rate	2.155	lbs/hr
Particulate Concentration	0.008	gr/dscf
Particulate Concentration	0.014	gr/dscf @7% Oxygen



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✓	Notes	ID #	Net Gain (mg)	PreWeight 1 (g)	PreWeight 2 (g)	PostWeight 1 (g)	PostWeight 2 (g)	Fraction	Project ▾	Unit	Test	Run	Status
	G110mm	... TSP 42	1.1	0.6351	0.6356	0.6367	0.6362	Filter	E16055	EP01	TSP	1	Completed
	G110mm	... TSP 43	3.7	0.6328	0.6332	0.6367	0.6367	Filter	E16055	EP01	TSP	2	Completed
	G110mm	... TSP 44	2.5	0.6338	0.6336	0.6364	0.6360	Filter	E16055	EP01	TSP	3	Completed
	50mL	... 15	19.9	29.1524	29.1519	29.1719	29.1721	Acetone Rinse FH	E16055	EP01	TSP	1	Completed
	50mL	... 16	8.5	29.1274	29.1273	29.1359	29.1358	Acetone Rinse FH	E16055	EP01	TSP	2	Completed
	50mL	... 17	24.4	29.6212	29.6214	29.6457	29.6456	Acetone Rinse FH	E16055	EP01	TSP	3	Completed

Appendix E

Equipment Calibrations

Date	09/19/2016
Project	E16055
AutoBox	AB-5
Pass/Fail	Pass
Deviation	1.3 %
Yqa Check	1.007
Pre-Cal Yd	1.020
Delta H@	1.841
Avg Delta H (inH2O)	1.74
Delta H Avg SQRT	1.31
Run Time (Min)	60
Volume (dcf)	44.772
Abs Meter Temp (°R)	566.7
Pbar (inHg)	29.13
Mol Weight Dry	29.60

Project:Test Description PM and Opacity

Created at 9/20/2016 15:05 by  Mark Carlson

Last modified at 9/20/2016 15:05 by  Mark Carlson

Close

Meter Box ID	AB-5
Current	Yes
Cal Date	3/19/2016
Expiration Date	9/18/2016
5-Point Yd	1.020
H@	1.841
Max Yd Variation	0.005
Pass/Fail	Pass
M5/30B	M5
Master Factor	1.35
Cal Tech Last	Frayseth
NIST Master	MN M5 Orifice Set
Cal ID	AB5031916
Cal PDF	
Cal Tech First	Eric

Created at 4/30/2016 16:40 by  Eric Frayseth
 Last modified at 4/30/2016 16:40 by  Eric Frayseth

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✓	Nozzle ID	AVERAGE	Nozzle Type	Service Mode	Dim A	Dim B	Dim C	Maximum	Minimum	Difference	Pass/Fail	Location	
	224089	...	0.255	Pyrex Glass	In Service	0.255	0.256	0.255	0.256	0.255	0.001	Pass	Nozzle A
	224110	...	0.249	Pyrex Glass	In Service	0.250	0.250	0.248	0.250	0.248	0.002	Pass	Nozzle D

Appendix F

Test Plan

Test Plan Approval - Harddrives

Severin, Marc (MPCA) [marc.severin@state.mn.us]

Sent: 8/30/2016 1:40 PM

To: kgannon@harddrivesinc.com, bdurkop@e2air.com

Cc: "Severin, Marc (MPCA)" <marc.severin@state.mn.us>

Test Plan Approval Letter

Facility: Harddrives, Inc.

Address: 305th Street Parcel ID # 32-145-0310, Frontenac, MN55026

Contact Person/Phone: Kevin Gannon

Test Date: September 9, 2016

Test Plan Submittal Date: August 1, 2016

Pretest Meeting Date: Pre-test meeting waived

Units to be Tested: Gencor Baghouse (EP01)

Agency Interest ID: 150142

Your test plan has been approved by the Minnesota Pollution Control Agency (MPCA) as follows:

Test plan approved with the following provisions:

1. Include in the final test report all process and pollution control equipment operating data collected at 15 minute intervals (minimum) and averaged for each test run and test. This information must be clear easily understood by individuals not familiar with the process. All information needed to show process operating rate and pollution control equipment compliant operation must be included. A link to reporting forms can be found below.
2. An acceptable report must comply with Minn. Rule 7017.2035 PERFORMANCE TEST REPORTING REQUIREMENTS. Use of the PTRCC form will help assure that a complete test report is submitted to the MPCA.
3. Testing will be conducted to determine Front-half Particulate Matter emissions and Opacity.

Marc Severin

Pollution Control Specialist 3

Minnesota Pollution Control Agency

520 Lafayette Road No.

St. Paul, Minnesota 55155-4194

651-757-2716

marc.severin@state.mn.us

The following forms are available at <http://www.pca.state.mn.us/jsrid16>

Operating Data Summary – Asphalt Plants

Report Certifications Form

Performance Test Report Completeness Criteria (PTRCC)

All periods of noncompliance with emission limits must be reported to the MPCA, this includes any periods of engineering tests. The requirements outlined under the Notification of Deviations Endangering Human Health or the Environment, Minn. R. 7019.1000, subp. 1., shall be followed. This information should also be clearly stated and readily available in the executive summary of the test report.

Please be aware that enforcement action will be taken for performance test failures indicating emissions above applicable limits (excess actual emissions to the environment). Failures commonly result in assessment of a monetary penalty. Upon the first test failure, the Company should take immediate measures to minimize emissions. The measures taken should be documented, as they will become part of the record of corrective actions.

E16055

45 of 54

(Preferred) Electronic copies of the test report submitted to SubmitStackTest.PCA@state.mn.us
If an electronic copy of the complete test report is submitted the paper and CD copies are not required. Please follow requirements outlined in Method 1 of the document found at this link:
<https://www.pca.state.mn.us/sites/default/files/aq1-39.pdf>

Hard Copy Performance Test Reports and Microfiche or CD Copy submittals will be addressed to:
Air Quality Compliance Tracking Coordinator
Industrial Division
Minnesota Pollution Control Agency
520 Lafayette Road North
St. Paul, Minnesota 55155-4194

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ELEMENTAL AIR



Innovative Technology for Air Quality Management

**Air Emission Performance Test Plan
Hardrives, Inc.
Portable Plant #601**

Date test plan written or revised: July 15, 2016
Revision: 1.0
Scheduled test date(s): August 17, 2016

PART I. GENERAL INFORMATION

1. Name and address of emission facility:

Hardrives, Inc.
Portable Plant #601
305th Street
Parcel ID # 32-145-0310, Goodhue County
Frontenac, MN 55026

2. Name, Telephone and Facsimile number of contact person at emission facility:

Mr. Kevin Gannon
Phone: (763) 428-8886
Cell: (612) 802-1920
kgannon@hardrivesinc.com

3. MPCA Permit File Number: 99000320-001

4. Physical description and location of emission unit to be tested:

The unit is being tested due to the installation of new equipment at the portable plant.
The new equipment is as follows:

Gencor Baghouse 80,000 CFN (Serial #:BH 138-48223-96-3A)

The hot mix plant is located in Frontenac, MN in Goodhue County Parcel ID 32-145-0310.

5. Name of Independent Testing Company, contact person, telephone and facsimile number:

Brian Durkop, QSTI
Elemental Air
(763) 477-4462 Ext 151
(763) 477-5991 Fax
bdurkop@e2air.com

PART II. TESTING REQUIREMENTS

1. Testing Description

Three test runs will be conducted for the determination of total particulate matter. One run for visible emissions will be conducted by an EPA Method 9 certified observer concurrently with one of the total particulate matter results.

Elemental Air will utilize a fully calibrated digital sampling console to conduct the sampling.

2. The following table is a description of the Pollutants to be tested, the applicable emission limits, and the applicable regulations for each pollutant:

Test Location	Number of Runs and Duration	Pollutant Tested/ Specific Method	Applicable Emission Limit	Applicable Rule, Regulation, or Citation
EP01	3 runs 60-minutes	Particulate Matter mg/dscm, gr/dscf EPA Method 5	90 mg/dscm and 0.040 gr/dscf	40 CFR 60.92(a)(1) Minn. R. 7011.0909
EP01	1 run 60-minutes	Visible Emissions % EPA Method 9	20 %	40 CFR 60.92(a)(2) Minn. R. 7011.0909

3. The following is a detailed description of the procedure for fuel sampling and analysis to be followed for the applicable emission unit:

A single composite waste oil sample will be taken for analysis of heating value and sulfur content.

PART III. OPERATING CONDITIONS

1. The following table contains a description of the emission unit(s) to be tested: Detailed descriptions of operating parameters listed that will determine production, operating capacity, and/or operating conditions during testing are also included:

Process Equipment Description	Process Rates/Operating Conditions During Test	Control Equipment Description	Control Equipment Operating Parameter During Test
Cedar Rapids Dryer (Model 132)	Virgin Material 300-400 tons per hour	FF Baghouse	80,000 acfm
Cedar Rapids Burner	Heat Input 175 mmBtu	Manufacturer: Gencor	2-6 inH ₂ O ΔP
	Firing 100% Waste Oil		

2. The following operation data will be collected during each test run

Asphalt Cement (tph wet)
Recycled Asphalt (tph wet)
Virgin Asphalt (tph wet)
Total Feed (tph wet)
Baghouse Exit Temperature (°F)
Drum Exit Temperature (°F)
-200 Fines (%)
Aggregate Moisture (%)
Waste Oil (gpm)
Baghouse DP (in. H₂O)

PART IV. TEST METHODS

The following is a description of the methods, number of test runs, length of test runs, and sampling volume of each pollutant:

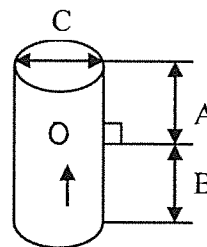
1: Determination of Sample Points

Code of Federal Regulations, Title 40, Part 60, Appendix A, Method 1

Stack Sampling Location (EP01)

A = 216 inches
B = 144 inches
C = 43X57 inches (Square)
Port Depth = 3 inches
Number of Ports = 5

TSP Sample Points (including port depth)
Calculated on Site



2: Determination of Molecular Weight and Moisture Content

Code of Federal Regulations, Title 40, Part 60, Appendix A, 3 and 4

Sampling System

A probe is connected to the impinger train, which consisted of a set of pre-weighed impingers connected in series and immersed in an ice bath. The impinger train is followed in series by a carbon vane pump, a dry test meter, and a calibrated orifice connected to an inclined manometer.

Measurement Procedure

Prior to sampling, a leak check is performed and the leak rate, time, and vacuum is recorded on the stack test data sheet. Following the leak check, the sample probe is inserted into the stack and the pump turned on. The sample time is calculated based on a minimum sample volume of 21 cubic feet and a sample rate of approximately 0.75 cubic feet per minute. At the conclusion of sampling, a final leak check is performed and recorded on the data sheet.

Flue gas molecular weight will be determined by collecting an integrated Tedlar bag and analyzing the contents by instrumentation.

Calculations

Method 3 - Flue Gas Molecular Weight (dry)

$$M_d = (.44 \% CO_2 + .32 \% O_2 + .28 (\% N_2 + \% CO))$$

M_d = Molecular weight of flue gas (dry), lb/lb-mole

Method 3 - Flue Gas Molecular Weight (wet)

$$M_w = (.44 \% CO_2 + .32 \% O_2 + .28 (\% N_2 + \% CO)) \left(1 - \frac{\% H_2O}{100} \right) + .18 \% H_2O$$

M_w = Molecular weight of flue gas (wet), lb/lb-mole

Method 3 - Flue Gas Molecular Weight (wet)

$$M_w = M_d (1 - B_{ws}) + 18.0 B_{ws}$$

M_w = Molecular weight of flue gas (wet), lb/lb-mole

M_d = Molecular weight of flue gas (dry), lb/lb-mole

B_{ws} = Flue gas moisture content, proportion by volume, dimensionless

Method 4 - Flue Gas Moisture Content

$$B_{ws} = \frac{V_{wc (std)}}{(V_{m (std)} + V_{wc (std)})}$$

B_{ws} = Flue gas moisture content, proportion by volume, dimensionless

$V_{wc (std)}$ = Volume of water vapor at standard conditions, SCF

$V_{m (std)}$ = Dry meter volume at standard conditions, DSCF

$$V_{wc (std)} = 0.04715 V_{lc}$$

Method 4 - Volume of Water Vapor (Std)

$V_{wc (std)}$ = Volume of water vapor at standard conditions, SCF

V_{lc} = Volume of liquid collected in the impingers, mL

3: Determination of Total Particulate Emissions

REF: Code of Federal Regulations, Title 40, Part 60, Appendix A, Method 5

Sampling System

A curved glass sample nozzle will be connected via a Teflon "Swage-Lok" fitting to a heated flexible Teflon probe liner with a rigid probe sheath. The probe liner will be attached to an external heated glass filter holder containing a glass fiber filter. The exit to the filter holder will be connected to the impinger train, which consists of a set of pre-weighed impingers connected in series and immersed in an ice bath. The impinger train will be followed in series by a vacuum pump, a dry test meter, and a calibrated orifice connected to a digital pressure gauge. Type K thermocouples will be used to measure the following temperatures: probe, filter, impinger outlet, and dry test meter inlet and outlet.

A combination Stausscheibe (Type S) pitot tube and type K thermocouple will be used to measure duct velocity head and temperature. The pitot tube will be connected via flexible Teflon tubing to a digital pressure gauge. The stack thermocouple will be connected to a digital potentiometer.

Sampling Procedure

Prior to sampling, traverse points will be selected based on Method 1 requirements. The locations of the traverse points are presented in Part VI of this protocol. A preliminary traverse of the stack will be performed to determine stack velocity head, temperature distributions, cyclonic flow, and stack static pressure. Based on this information, a sample nozzle diameter will be selected within the physical limits of the sampling system. The sample train will be assembled as completely as possible in the staging area and transported to the sample location. By sealing all openings with aluminum foil, potential contamination of the sample train will be prevented. Once in the sampling area, the probe and filter heaters will be brought to the proper temperature and the apparatus will be leak checked. Upon successful completion of the leak check, the initial dry test meter reading shall be recorded, and the probe inserted at the first traverse point.

The stack temperature, dry test meter temperature, and the velocity head across the pitot shall be measured and recorded on the data sheet. The isokinetic sampling rate set point in terms of pressure drop across the calibrated orifice will be calculated and recorded on the data sheet. The pump and timer are then turned on, and the sample rate adjusted to correspond to the calculated isokinetic rate. Once the sample rate is set, the following data will be recorded:

- Dry Gas Meter Volume
- Dry test meter outlet temperature
- Sample vacuum
- Probe temperature
- Filter temperature
- Impinger outlet temperature

At the end of the sample time for the first point, the probe will be moved to the next point, and the measurements, calculations and recording of data will be repeated. Upon completion of sampling from a port, the pump will be turned off and the dry test meter reading recorded. The probe will then be removed from the stack, and placed in the next sample port.

When the sample run is completed, the final dry test meter reading will be recorded and the probe will be removed from the port. A post-test leak check will be performed at a vacuum higher than the highest sample vacuum measured during the sample run. The final leak rate will be recorded on the data sheet. The sample train will be sealed from contamination and transported to the staging area for recovery.

Sample Recovery

The front half fraction consists of the filter itself, as well as, acetone rinses and brushings of the nozzle, the probe liner, and the front half of the filter holder. The filter will be recovered utilizing forceps and placed into a labeled Petri dish made of glass or plastic. Acetone rinses will be recovered to a labeled, clean polyethylene bottle. The liquid level in the polyethylene bottle will be marked upon completion of recovery.

The exterior of each impinger will be cleaned and dried, and the net weight gain of each will be determined to the nearest 0.1 gram.

Calculations

Method 5 - Area Nozzle

$$A_n = \pi r^2$$

A_n = Area of the sample nozzle, ft²

r = Radius of the nozzle, ft

V_{lc} = Volume of liquid collected in the impingers, mL

Method 5 - Volume of Sample Collected (Std)

$$V_{m(std)} = 17.64 V_m Y \left(\frac{P_{barometric} + \frac{\Delta H}{13.6}}{T_m} \right)$$

$V_{m(std)}$ = Dry meter volume at standard conditions, DSCF

V_m = Dry meter volume uncorrected, DCF

Y = Meter calibration coefficient

P_{bar} = Barometric pressure, inHg

ΔH = Orifice pressure differential, IWG

T_m = Meter temperature, °R

17.64 = °R/inHg

Method 5 - Percent of Isokinetic Sampling

$$I = \frac{100 T_s [K_3 V_{lc} + (V_m Y / T_m)(P_{barometric} + \Delta H / 13.6)]}{60 \theta v_s P_s A_n}$$

- I* = % Isokinetics
T_s = Absolute average stack gas temperature, °R
K₃ = 0.002669 inHg-ft³/mL-°R
V_m = Volume of gas sample as measured by the dry gas meter, DCF
Y = Dry gas meter calibration factor
V_{lc} = Volume of liquid collected in the impingers, mL
 θ = Sample time, minutes
P_{bar} = Barometric pressure at the sampling site, inHg
 ΔH = Average pressure differential across the orifice meter, in H₂O
v_s = Stack velocity, ft/sec
P_s = Stack absolute pressure, inHg
A_n = Cross sectional area of nozzle, ft²
T_m = Absolute average dry gas meter temperature, °R

Method 5 - Particulate Emission Rate (grains)

$$C_s = 0.01543 \left(\frac{M_n}{V_{m(std)}} \right)$$

- C_s* = Grains per dry standard cubic foot
M_n = Mass of collected particulate, mg
V_{m(std)} = Dry meter volume at standard conditions, DSCF

Method 5 - Particulate Emission Rate (lbs)

$$E = C_s * Q_{sd} * \frac{60 \text{ min/hr}}{7000 \text{ gr/lb}}$$

- E* = Pounds per hour, particulates
C_s = Particulate grain loading, gr/DSCF
Q_{sd} = Dry stack gas flow rate at standard conditions, DSCFM

4: Determination of Visible Emissions

REF: Code of Federal Regulations, Title 40, Part 60, Appendix A, Method 9

Positioning of the observer

The opacity of the plume as viewed by the observer can be influenced due to several variables with respect to the position of the observer. The position of the observer with respect to the sun. Position of the observer with respect to the observation point. Attached or detached steam plumes. Position of the observer with respect to a rectangular stack with high length to width ratios.

The acceptable criteria for the position the observer is outlined in Method 9 as follows:

- 1) The observer must maintain a position with the sun located at a 140° arc to the observers back.
- 2) The observer must maintain an angle of <18° with respect to the observation point.
- 3) The observer must read the opacity where a steam plume does not interfere. Between the stack and the steam plume if the steam plume is detached from the stack. After the steam plume if the steam plume is attached from the stack.
- 4) The observer must read a rectangular stack at a point where the stack has the shortest cross sectional diameter.

Visible Emission Readings

A test for visible emission requires 480 consecutive readings. Each reading is recorded in 15-second intervals for 60 minutes. The percent opacity is recorded in 5 percent increments for 0 to 100. The observer must record the results on a data sheet as outlined in Method 9. (ie. position of the observer, date, time, process information, location of the stack, and the 15-second opacity readings). The determination of opacity is calculated using a 6-minute rolling average.

PART V. TEST SCHEDULE

The testing will take place on the following dates:

Setup	August 16, 2016
Test	August 17, 2016

PART VI. REPORT SUBMITTAL

Electronic copies of the results will be submitted within 45 days of testing completion.

Stormwater Pollution Prevention Plan for:

Small/Mobile Asphalt Plant
Portable

SWPPP Contact:

Andrew Wojtowicz
Minnesota Paving & Materials
14475 Quiram Dr.
Rogers, Minnesota 55374

SWPPP Preparation Date:

July 2021

SWPPP Updated Date:

November 2023

Contents

Table of Contents

SWPPP CERTIFICATION.....	v
SWPPP Updates	vi
SECTION 1: FACILITY DESCRIPTION AND CONTACT INFORMATION.....	1
1.1 Facility Information.....	1
1.2 Contact Information/Responsible Parties	2
1.3 Stormwater Pollution Prevention Team.....	3
1.4 Site Description.....	4
1.5 General Location Map	4
1.6 Site Map.....	4
1.7 Impaired Waters.....	5
SECTION 2: POTENTIAL POLLUTANT SOURCES.....	5
2.1 Potential Pollutants Associated with Industrial Activity.....	5
2.2 Spills and Leaks	6
2.2.1 Potential Spills and Leaks	6
2.2.2 Past Spills and Leaks.....	6
2.3 Non-Stormwater Discharges.....	7
2.3.1 Authorized Non-Stormwater Discharges	7
2.3.2 Unauthorized Non-Stormwater Discharges.....	8
2.4 Salt Storage.....	8
2.5 Sampling Data Summary.....	8
SECTION 3: STORMWATER CONTROL MEASURES	8
3.1 Non-Numeric Technology-Based Effluent Limits (BPT/BAT/BCT)	8
3.1.1 Minimize Exposure.....	9
3.1.2 Good Housekeeping.....	9
3.1.3 Maintenance	10
3.1.4 Spill Prevention and Response.....	10
3.1.5 Erosion and Sediment Controls.....	11
3.1.6 Management of Runoff.....	12
3.1.7 Dust Generation and Vehicle Tracking of Industrial Materials	12
3.1.8 Mercury Minimization Plan.....	12
3.2 Sector-Specific Non-Numeric Effluent Limits	13
3.2.1 Erosion and Sediment Controls.....	13
3.2.2 Vehicle Tracking	13
3.3 Numeric Effluent Limitations Based on Effluent Limitations Guidelines.....	13
3.4 Water Quality-Based Effluent Limitations and Water Quality Standards	13
SECTION 4: SCHEDULES AND PROCEDURES	14
4.1 Good Housekeeping	14
4.2 Maintenance.....	14
4.3 Spill Prevention and Response Procedures	14
4.4 Erosion and Sediment Control.....	14
4.5 Employee Training	14
4.6 Inspections and Assessments	15
4.6.1 Routine Facility Inspections	15

4.6.2	Exception to Routine Facility Inspections for Inactive and Unstaffed Sites.....	15
4.7	Monitoring	16
SECTION 5: DOCUMENTATION TO SUPPORT ELIGIBILITY CONSIDERATIONS UNDER OTHER FEDERAL LAWS		17
5.1	Documentation Regarding Endangered Species	17
5.2	Documentation Regarding Historic Properties.....	17
SECTION 6: CORRECTIVE ACTIONS		17
SECTION 7: SWPPP MODIFICATIONS		17

Appendix A: General Location Maps

Appendix B: Site Map

Appendix C: Unauthorized Non-Stormwater Discharge Evaluation

Appendix D: Sector D Fact Sheet

Appendix E: Corrective Actions Form

Contact Information		
Environmental Specialist	Andrew Wojtowicz	Office: (763) 400-2083
		Cell (Main) : (507) 594-8374
Plant Operator	Dale Haren	(651) 783-2727
	National Response Center	(800) 424-8802
	U.S. EPA Region V	(312) 353-2000
		(800) 621-8431
	Minnesota Duty Officer	(651) 649-5451
		(800) 422-0798
Spill Clean-Up Agencies		

SWPPP CERTIFICATION

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Name: _____ Title: _____

Signature: _____ Date: _____

The Plan must be reviewed at least once per year to confirm all information contain within is current and accurate. Changes shall be made as necessary. Record the date the Plan was reviewed, the reviewer's name, and a summary of any changes made to the Plan.

vi | Page

SECTION 1: FACILITY DESCRIPTION AND CONTACT INFORMATION

1.1 Facility Information

Name of Facility: 04606 Small/Mobile Asphalt

Street: 45755 571st Ave

City: New Ulm State: MN ZIP Code: 56073

County or Similar Subdivision: Nicollet

NPDES ID (i.e., permit tracking number): MNG 490131 (if covered under a previous permit)

Primary Industrial Activity SIC code, and Sector and Subsector (MSGP, Appendix D and Part 8): 2951

Co-located Industrial Activity(s) SIC code(s), Sector(s) and Subsector(s) (MSGP, Appendix D): Sector D

Latitude/Longitude

Latitude: 44.2893012

Longitude: -94.4074299

Method for determining latitude/longitude (check one):

☐ USGS topographic map (specify scale: _____)

☐ GPS

☒ Other (please specify):

Google Earth

Horizontal Reference Datum (check one):

☐ NAD 27 ☒ NAD 83 ☐ WGS 84

Is the facility located in Indian country? ☐ Yes ☒ No

If yes, name of Reservation, or if not part of a Reservation, indicate "not applicable." NA

Are you considered a "federal operator" of the facility?

Federal Operator – an entity that meets the definition of "operator" in this permit and is either any department, agency or instrumentality of the executive, legislative and judicial branches of the Federal government of the United States, or another entity, such as a private contractor, operating for any such department, agency, or instrumentality.

☐ Yes

☒ No

Discharge Information

Does this facility discharge stormwater into a municipal separate storm sewer system (MS4)?

☐ Yes ☒ No

If yes, name of MS4 operator: _____

Name(s) of surface water(s) that receive stormwater from your facility:

Not applicable, stormwater is contained on-site.

Does this facility discharge industrial stormwater directly into any segment of an "impaired water" (see definition in MSGP, Appendix A)? ☐ Yes ☒ No

If Yes, identify name of the impaired water(s) (and segment(s), if applicable): N/A

Identify the pollutant(s) causing the impairment(s):

Which of the identified pollutants may be present in industrial stormwater discharges from this facility?

Has a Total Maximum Daily Load (TMDL) been completed for any of the identified pollutants? If yes, please list the TMDL pollutants:

Does this facility discharge industrial stormwater into a receiving water designated as a Tier 2, Tier 2.5 or Tier 3 water (see definitions in MSGP, Appendix A)? ☐ Yes ☒ No

Are any of your stormwater discharges subject to effluent limitation guidelines (ELGs) (MSGP Table 1-1)? ☐ Yes ☒ No

If Yes, which guidelines apply?

1.2 Contact Information/Responsible Parties

Facility Operator: Minnesota Paving & Materials

1905 3rd Avenue

Mankato, Minnesota 56001

Telephone Number: 507-625-4848

Fax number: 507-625-4907

Facility Owner: CRH

2401 SE Tones Drive

Ankeny, Iowa 50021

Telephone Number: 515-266-9928

Fax number: 515-263-3878

1.3 Stormwater Pollution Prevention Team

The stormwater pollution prevention team is responsible for developing, implementing, maintaining, and revising the SWPPP. The members of the team are familiar with the management and operation of the Small/Mobile Asphalt Plant. Each member has specific responsibilities to guarantee the facility's compliance with stormwater regulations. The team is composed of the SWPPP coordinator, SWPPP on-site team members, and SWPPP team members.

The SWPPP coordinator is responsible for composing and implementing the Plan. The SWPPP coordinator designates all SWPPP team members. Maintenance practices identified as Best Management Practices (BMPs) will be overseen by the SWPPP coordinator. Annual employee training will be conducted and/or overseen by the SWPPP coordinator or his/her designee. Additional duties will include identifying potential pollutant sources, identifying deficiencies in the SWPPP, and updating the SWPPP as necessary. The SWPPP coordinator or his/her designee must review the SWPPP annually. Annual fees will be submitted by the SWPPP coordinator or his/her designee. The SWPPP coordinator or his/her designee will review all chemical analysis and complete the associated reports, including the Annual Report due March 31st each year.

The SWPPP on-site team members will be responsible for SWPPP related activities which must be performed at the facility. SWPPP on-site team members will conduct and record monthly site inspections as required by the MSGP. At least one inspection must be conducted during a rain event. SWPPP on-site team members will install and maintain the BMPs outline in Section 3 of this Plan. Additionally, staff will ensure all housekeeping and monitoring procedures are implemented. The required stormwater samples will be collected by a SWPPP on-site team member or his/her designee.

SWPPP team members will provide additional assistance to both the SWPPP coordinator and the SWPPP on-site team members as required.

Table 1: Stormwater Pollution Prevention Team

Staff Name	Individual Responsibilities
<i>Environmental Manager</i>	SWPPP Coordinator
<i>Plant Operator</i>	SWPPP On-Site Team Member
Additional Staff as Necessary	SWPPP Team Member

1.4 Site Description

The Small/Mobile Asphalt Plant is a mobile plant that will be move around to different sites. It will have a similar set up at each site it is located at. Based on site activities, the Small/Mobile Asphalt Plant falls under the standard industrial classification code 2951. The Small/Mobile Asphalt Plant is currently set up at the New Ulm Quartzite Quarry, located in Nicollet County southwest of Highway 14. A more detailed description of the industrial activities at the New Ulm Quartzite Quarry can be found in it's SWPPP. Activities associated with this facility include haul and access roads, and raw material storage. All activities are performed outdoors; there are no enclosed processes at the facility. Below is a list of activities which may be performed at the facility along with corresponding equipment. There are settling ponds on site to diminish suspended solids.

Above and Below Ground Tanks:

Equipment Involved: Tanks, Fueling Trucks

Activity: Refueling the tanks, as well as refueling trucks and other tanks.

Screening:

Equipment Involved: excavators, loaders, haul trucks

Activity: Handling material from a stock pile into a screen; loading screen material; developing a stock pile of screened material; handling and hauling waste materials from the site

Maintenance and Fueling:

Equipment Involved: excavators, loaders, haul trucks, screens, fuel trucks

Activity: Minor maintenance, lubrication, and fueling. Spill kits are used for spill prevention during each fueling or maintenance activity

Drainage Maintenance:

Equipment Involved: excavators, loaders, haul trucks, grader

Activity: Digging ditches; cleaning settling pond; grading and contouring the site with a loader; hauling waste material from the site; and cleaning and repairing erosion controls

Restoration and Contour Grading:

Equipment Involved: excavators, loaders, dozer, haul trucks, grader

Activity: Shaping the site for final restoration; vegetating, adding topsoil

1.5 General Location Map

The general location map for this facility can be found in Appendix A. The general location map identifies the property boundary and receiving waters for stormwater discharge if applicable.

1.6 Site Map

The site map for this facility can be found in Appendix B.

1.7 Impaired Waters

The Minnesota River, Heymans Creek, and Cottonwood River are within one mile of the site and are considered “impaired waters” due to unacceptable standards aquatic life and aquatic consumption deemed by the MPCA. These are outlined on the General Location Map. Stormwater runoff from this site is not directly discharged into these bodies of water.

SECTION 2: POTENTIAL POLLUTANT SOURCES

Pollutants exposed to stormwater discharge from active mineral mining and processing facilities will vary depending on activities and pollutant sources. Multiple factors may affect water quality.

- Geographic location
- Hydrogeology
- Topography
- Mineralogy of the extracted resource and the surrounding rock
- Mineral extraction method
- Ground cover
- Outdoor activities
- Size of operation
- Type, duration, and intensity of precipitation events

2.1 Potential Pollutants Associated with Industrial Activity

Common mineral mining and processing facility activities, pollutant sources, and pollutants are listed below in Table 2: Potential Pollutants. All activities listed below may not be performed at the facility. Notation of a pollutant does not require the facility to test for that specific pollutant. The facility will perform testing based on the effluent limitations noted in the MPCA permit.

Table 2: Possible Pollutant Sources

Activity	Pollutant Source	Pollutant
Outdoor stockpiling of materials	Exposure of aggregate (sand, stone, limestone, gravel, etc.) to precipitation	Total Suspended Solids (TSS), Total Dissolved Solids (TDS), Biochemical Oxygen Demons (BOD5), Chemical Oxygen Demand (COD), Oil & Grease (O&G), Benzene, Methylene Blue Active Substances (MBAS), metals, pH
Storage of materials in aboveground tanks, totes, drums, and other containers	Leakage from tanks, totes, drums, and other containers	TSS, TDS, BOD5, COD, O&G, Benzene, MBAS, metals, pH

Activity	Pollutant Source	Pollutant
Transport of materials by a conveyor or front-end loader	Exposed materials and potential spills	TSS, TDS, BOD5, COD, O&G, Benzene, MBAS, metals, pH
Storage of raw materials	Spills and leaks of materials from tank farms or 55-gallon drums	Petroleum or synthetic-based stocks and various additives, O&G, pH
Vehicle and equipment maintenance	Parts cleaning, waste disposal of rags, oil filters, air filters, batteries, hydraulic fluids, transmission fluids, brake fluids, coolants, lubricants, degreasers, spent solvents	Gas/diesel fuel, fuel additives, oil/lubricants, heavy metals, brake fluids, transmission fluids, chlorinated solvents, arsenic
Vehicle and equipment fueling	Spills and leaks during fuel transfer, spills due to “topping off” tanks, runoff from fueling areas, wash down of fueling areas, leaking storage tanks, spills of oils, brake fluids, transmission fluids	Gas/diesel fuel, fuel additives, oil, lubricants, heavy metals

2.2 Spills and Leaks

2.2.1 Potential Spills and Leaks

Potential spills and leaks from the facility would be associated with fuel tanks present at the facility and other oil-containing equipment. Equipment will be located throughout the facility dependent on daily activities. Fuel tanks will be located in a location away from heaving traffic, but easily accessible. Due to the facility’s layout, any spills or leaks will be contained on-site. Appropriate spill containment equipment will be located on-site to prevent access to navigable waters. Any spills or leaks will be cleaned appropriately according to section 3.1.4

2.2.2 Past Spills and Leaks

The facility has not experienced any significant spills or leaks in the past three years. Significant spills and leaks include but are not limited to releases of oil or hazardous substances in excess of quantities

that are reportable under Clean Water Act (CWA) Section 311 or Section 102 of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA).

2.3 Non-Stormwater Discharges

2.3.1 Authorized Non-Stormwater Discharges

The National Pollutant Elimination System (NPDES) / State Disposal System (SDS) General Permit MNG490000 for Nonmetallic Mining and Associated Activities authorizes non-stormwater discharges that do not discharge to a surface water of the state as long as these discharges are not already authorized in a separate NPDES/SDS permit. The facility does not have a separate NPDES/SDS permit. Non-stormwater that co-mingles with stormwater is considered a non-stormwater discharge (wastewater) and must be disposed of properly. To be authorized under General Permit MNG490000, the discharges listed below must be collected, contained, or infiltrated to the ground and Best Management Practices must be implemented to prevent contamination of groundwater.

- a) Aggregate 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 sawing stone or dust control on crushers, conveyors, associated equipment, stock piles, and site roadways.
- i) Boiler blowdown and reverse osmosis reject
- j) Low or high pressure steam curing
- k) Noncontact cooling water used for dry, pump and air compressor cooling.

Additionally, the following non-stormwater discharges are authorized provided that appropriate Best Management Practices are followed to minimize erosion and the discharge of sediment when necessary:

- a) Emergency fire-fighting activities.
- b) Fire hydrant and fire suppression system flushing.
- c) Potable water line flushing.
- d) Uncontaminated condensate from air conditioners, coolers, and other compressors and from the outside storage of refrigerated gases or liquids.
- e) Landscape watering provided all pesticides, herbicides, and fertilizers have been applied in accordance with manufacturer's instructions.
- f) 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.
- g) Routine external building wash down that does not use detergents, solvents, or degreasers.
- h) Uncontaminated groundwater or spring water.
- i) Foundation or footing drains where flows are not contaminated.

- j) Incident windblown mist from cooling towers that collects on rooftops or adjacent portions of the facility, but not intentional discharges from the cooling tower.

2.3.2 Unauthorized Non-Stormwater Discharges

General Permit MNG490000 does not authorize the following discharges:

- a) Dewatering of mine or quarry areas other than those under Subsector J1 and J2
- b) Surface water discharge 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.
- c) Contaminated groundwater discharges.
- d) Petroleum refineries.
- e) Facilities that manufacture asphalt or asphalt emulsions.
- f) Industrial sand mines (SIC 1446) that utilize HF flotation.
- g) Dredging or filling of wetlands or other surface waters of the state.
- h) Discharges of hazardous substances, lubricants, fuel leaks, or fuel spills.
- i) Sites from 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.

An evaluation of the facility's unauthorized non-stormwater discharges can be found in Appendix C.

2.4 Salt Storage

No salt storage piles are located at the facility.

2.5 Sampling Data Summary

There is no sampling data for this site.

SECTION 3: STORMWATER CONTROL MEASURES

3.1 Non-Numeric Technology-Based Effluent Limits (BPT/BAT/BCT)

Best practicable technology (BPT), best available technology (BAT) and best conventional technology (BCT) are examples of non-numeric technology based effluent limits. BPTs are based on the average of the best existing technology. BCTs are designed to control the discharge of conventional pollutants: BOD, TSS, pH, and oil & grease. BATs are designed to control the discharge of toxic and non-conventional pollutants. BPTs/BATs/BCTs are obtained through BMPs designed to minimize exposure of stormwater to potential pollutants. BMPs will be reassessed during the Plan's annual review to determine if any changes need to be made for continued compliance.

3.1.1 Minimize Exposure

Minimizing exposure of potential pollutant sources to precipitation is an important control option. Minimizing exposure prevents pollutants from contact with precipitation and can reduce the need for BMPs to treat contaminated stormwater runoff. It can also prevent debris from being picked up by stormwater and carried into drains and surface waters.

The following BMPs may be implemented to minimize exposure. All BMPs listed below may not be utilized.

- Install berms along the uphill perimeter of the site to divert stormwater around facility activities
- Grade slope perimeter haul roads towards the site to prevent stormwater from leaving the site
- Hydroseed exposed soil slopes as possible
- Grade the site to ditches or other hydraulic means to ensure runoff passes through settling pond
- Construct ditch at the base of mined slopes to prevent stormwater on the slopes from traveling over extraction and haul areas
- Use covered chutes or booms when loading and unloading materials
- Install vegetative areas downstream of stock piles to infiltrate stormwater before it contacts any materials
- Install vegetative areas downstream of stock piles to slow down stormwater discharges after it contacts any materials
- Manage operations to avoid buildup of dust or other deposits on exhaust vents and roof stacks
- Close dumpster lids when not in use

3.1.2 Good Housekeeping

Good housekeeping is a practical, cost-effective way to maintain a clean and orderly facility to prevent potential pollution sources from coming into contact with stormwater. It includes establishing protocols to reduce the possibility of mishandling materials or equipment and training employees in good housekeeping techniques. Common areas where good housekeeping practices should be followed include trash containers and adjacent areas, material storage areas, vehicle and equipment maintenance areas, and loading docks.

Potential good housekeeping BMPs are as follows for the site. All activities listed below may not be performed at the site.

- Vehicle servicing and fueling will use portable spill containment and absorbent pads. All pads will be disposed of at an appropriate location
- Spill clean-up products are readily available on-site
- All used servicing containers or products will be disposed of at an appropriate location
- Fuel fill hoses will have spill and overflow protection features
- Topping off of fuel tanks will be discouraged
- Areas of the pit that begin pumping subsurface moisture will be closed to mining operations until the area drains and stabilizes
- The facility gate will be closed and locked at the end of each day to prevent unauthorized use

3.1.3 Maintenance

Regular inspections, testing, and preventative maintenance of industrial equipment should be performed at the facility. The maintenance program is intended to ensure the structural control measures and industrial equipment are in good operating condition to prevent or minimize leaks and other releases of pollutants.

The following practices should be followed as part of the maintenance program:

- Outdoor tanks, transfer equipment, and the surrounding area will be monitored for leaks. These visual inspections will not be documented. Any deterioration of the equipment will be repaired in a timely manner.
- Secondary containment will be provided as necessary.
- Proper filling and material transfer procedures will be followed to minimize spills.

3.1.4 Spill Prevention and Response

A spill prevention and response procedure will enable the facility to respond quickly and appropriately to any spills including those from potential pollutant sources identified in section 2.1 that may occur. A proper response can also prevent a spill from becoming a release. To develop an effective procedure, past spill occurrences, potential spill locations, and likely drainage points for potential spill areas have been reviewed.

Spill prevention and response procedures are as follows:

- Identify potential discharge locations
- Identify monitoring locations or surface waters that may be impacted
- Label containers
- Use secondary containment and/or barriers as necessary
- Train employees in proper prevention and response techniques
- Maintain spill equipment on-site
- Maintain proper material handling, storage, and clean-up procedures
- Maintain contact information for individuals who need to be notified in the event of a spill
- Promptly report and document any spills or leaks to appropriate individuals

In the event of a spill or leak, the following procedures will be followed:

- Secure the site
- Stop the spill, if possible
- Contact the fire department or other emergency response personnel, if necessary
- Control and contain the spill using on-site spill equipment that may include absorbent, booms, socks, soil, etc.
- Notify the site manager and SWPPP coordinator
- Clean up the spill appropriately
- Complete any necessary forms and reports

A leak, spill, or other release containing a hazardous substance or oil in an amount equal to or in excess of a reportable quantity as established under 40 CFR Part 110, 40 CFR Part 117, or 40 CFR Part 302 must be reported. The National Response Center must be contacted if any of the quantities listed in the above regulations are exceeded.

National Response Center
(800) 424-8802

The State of Minnesota requires that petroleum spills of an amount greater than five (5) gallons be reported. Reportable spills should be directed to:

Minnesota Duty Officer
(651) 649-5451
(800) 422-0798

The caller will need to have the following information about the incident:

- Name, organization, and telephone number
- Name and address of the party responsible for the incident
- Date and time of the incident
- Location of the incident
- Source and cause of the discharge
- Types of material(s) discharged
- Quantity of materials discharge
- Danger or threat posed by the discharge
- Number and types of injuries, if any
- Weather conditions at the incident location
- Other information to help emergency personnel respond to the incident

3.1.5 Erosion and Sediment Controls

BMPs have been selected and implemented to limit erosion on areas of the site that, due to topography, activities, soils, cover, materials, or other factors are likely to experience erosion.

Erosion control BMPs installed to prevent soil from becoming dislodged may include:

- Seeding,
- Mulching, and
- Sodding.

Sediment control BMPs utilized at the facility may include:

- Vegetative buffer strips,
- Silt fences,
- Straw bale barriers,
- Horizontal slope grading,
- Sediment basins,
- Berming,
- Riprap outlet protection, and
- Construction entrance/exits

All BMPs listed above may not be utilized.

3.1.6 Management of Runoff

Erosion can occur when soils are exposed to water, wind, or ice. Erosion occurs when the exposed soils loosen, become suspended in water or air, and are transported to another location.

Some of the following BMPs may be implemented to limit erosion and control sediment:

- Leave as much vegetation onsite as possible
- Minimize the length of time bare soil is exposed
- Divert or prevent runoff from flowing over exposed areas where possible
- Stabilize disturbed soils as soon as possible
- Slow runoff flowing over the site

3.1.7 Dust Generation and Vehicle Tracking of Industrial Materials

Dust is generated from stacks, stock piles, cleared ground, gravel roads, and open areas.

Dust control BMPs may include:

- Routine cleaning of stacks and filters
- Spraying controlled amounts of water on haul roads to dampen dust-generating areas
- Material tracked off site will be swept up within 24 hours

3.1.8 Mercury Minimization Plan

No mercury-containing devices present at the facility are exposed to stormwater. Mercury-containing devices include:

- Fluorescent bulbs
- Mercury lamps
- Mercury switches
- Mercury thermometers, gauges, and other medical or scientific equipment
- Certain batteries

3.2 Sector-Specific Non-Numeric Effluent Limits

Additional sector-specific non-numeric effluent limits are discussed below.

3.2.1 Erosion and Sediment Controls

Sediment controls will be implemented as necessary on down-gradient perimeters before up-gradient land disturbing activities begin. Flow diversion (ex. swales and berms) and/or structural controls (ex. sediment traps, dikes, silt fences) may be used for erosion control. Temporary stock piles or stripping/overburden stored outside the pit will have sediment control mechanisms in place until the material is completely removed. Material will not be placed in surface water or stormwater channels. The installation of sediment control practices may be adjusted to accommodate short-term activities.

3.2.2 Vehicle Tracking

Vehicle tracking of sediment onto paved surfaces from the site may be minimized through stone pads, concrete or steel wash racks, or gravel entrances/exits.

3.3 Numeric Effluent Limitations Based on Effluent Limitations Guidelines

The facility is subject to Sector D, Subsector D1: Asphalt Paving and Roofing Materials. The table below identifies the sector-specific benchmark monitoring and effluent limitations.

Table 3: Sector-Specific Benchmark Monitoring and Effluent Limitations

Subsector	Parameter	Benchmark Value	Effluent Limits
D1 Asphalt Paving and Roofing Materials	Solids, Total Suspended (TSS)	100 mg/L	Effluent monitoring not required

The BMPs identified in Section 3.1 and 3.2 will be implemented to remain under the benchmark value set by the MSGP.

3.4 Water Quality-Based Effluent Limitations and Water Quality Standards

No effluent limits are applicable to this facility.

SECTION 4: SCHEDULES AND PROCEDURES

4.1 Good Housekeeping

Pickup and disposal of waste materials is conducted when the dumpsters are full. Used oil and spent solvent is disposed of on an as needed basis through an approved disposal company.

4.2 Maintenance

Regular inspections of industrial equipment are conducted to prevent leaks and spills. Periodic inspections of berms and the general facility are conducted to ensure stormwater does not leave the site. These inspections are not recorded.

4.3 Spill Prevention and Response Procedures

Annual employee training for stormwater will include information pertaining to spill prevention and response procedures. Appropriate spill response materials will be located throughout the facility. Employees will be trained in the proper handling of materials which have the potential to contaminate stormwater.

4.4 Erosion and Sediment Control

Polymers and other chemical treatments are not used for erosion and sediment control.

4.5 Employee Training

To assist employees in becoming more aware of facility stormwater procedures, an annual training event will occur. In addition, new employees will be trained on the facility's stormwater procedures. At a minimum, the training program will review the components and goals of the SWPPP.

The following individuals are required to attend the training:

- Employees developing the SWPPP
- Employees implementing the SWPPP
- Employees working in areas of industrial activity
- Employees conducting benchmark and/or effluent monitoring

A copy of the latest training documents can be obtained from the Environmental Department.

4.6 Inspections and Assessments

4.6.1 Routine Facility Inspections

A minimum of one site inspection per calendar month that the site is an active site and staffed is required. A minimum of one inspection per calendar year must be conducted during a runoff event. One inspection must also be conducted during a snowmelt event. Completed monthly monitoring reports will be maintained on-site.

Position responsible for inspections: Site Manager or his/her designee

Schedule for conducting inspections: Monthly

Exposed material and activity areas: The asphalt plant and storage piles are exposed to stormwater

Potential pollutant sources:

- Total Suspended Solids (TSS)

Spill and/or leak locations in the past three (3) years:

- None

Discharge point location(s): There is no sample location, as all stormwater stays on site

Effluent limit control measures:

- Minimize exposures
- Good housekeeping
- Maintenance
- Spill prevention and response
- Erosion and sediment control
- Runoff management
- Dust generation and vehicle tracking management

4.6.2 Exception to Routine Facility Inspections for Inactive and Unstaffed Sites

This facility is inactive. No routine facility inspections are currently being conducted.

4.7 Monitoring

The permit for the facility requires two grab sample be obtained each year. The samples should be collected during a runoff event, one occurring in the spring and one in the fall. The annual concentration is the average of the two grab samples. Currently all stormwater is designed to stay on site, so no sampling is required.

Sample Location: There is no sample location, as all stormwater stays on site

Pollutants to be sampled:

- Total Suspended Solids (TSS)

Monitoring Schedule: Twice per year. Not required unless a discharge event occurs.

Numeric Limitations:

- Total Suspended Solids (TSS): 100 mg/L

Procedures:

1. Prepare for grab sample
 - a. Collect sample within 30 minutes of start of runoff event when water is flowing
2. Assemble necessary equipment
 - a. New one-gallon re-sealable plastic bag
 - b. Clean bottle for collecting sample with the name of the person collecting the sample, the date, and the location of sample on it
 - c. Container of preservative
 - d. Cooler and ice for shipping sample
3. Select the best sampling location
4. Collecting the sample
 - a. Do not walk or stand upstream of the sample location
 - b. Place bottle caps on an uncontaminated surface when removed
 - c. Hold the bottle facing upstream when collecting sample
 - d. Place bottle in middle of stormwater flow
 - e. Once sample is collected add the preservative provided
 - f. Note the time of the sample on the sample bottle
 - g. Cap the bottle and place in one-gallon re-sealable plastic bag
 - h. Place bottle and bag in cooler, ensure bottle uniformly covered by ice

SECTION 5: DOCUMENTATION TO SUPPORT ELIGIBILITY CONSIDERATIONS UNDER OTHER FEDERAL LAWS

5.1 Documentation Regarding Endangered Species

The Minnesota DNR's Natural Areas Inventory was used to determine which threatened and endangered species are present in the county the site is located in. Those identified species were then cross referenced against the IUCN Red List. There was one species which appeared on both lists which was the northern myotis.

The northern myotis prefers forests and caves. The site is in a relatively forested area. If any trees are cleared it will be done between November 1st and March 31st.

5.2 Documentation Regarding Historic Properties

No Historic Properties are located in/near the site.

SECTION 6: CORRECTIVE ACTIONS

The Plan will be reviewed annually. Modification will be made to the Plan if:

- There is construction or a change in design, operation, or maintenance at the facility that affects stormwater management or compliance.
- The Permittee has identified a monitoring location to which the discharge flows that is within one mile of an impaired water, including newly listed impaired water.
- A routine inspection, compliance evaluation, or visual inspection identifies deficiencies in the SWPPP and/or BMPs.
- Additional stormwater control measures and BMPs are necessary to meet applicable water quality standards or to address exceedances of benchmark values.
- There is an unauthorized discharge from the facility. If the SWPPP modification is based on a release or unauthorized discharge, 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 must be included.

SECTION 7: SWPPP MODIFICATIONS

Modifications and updates to this Plan must be noted in the SWPPP update section at the beginning of the document. The certification statement is not required to be resigned after minor modifications.

Appendix A

General Location Maps



Appendix B

Site Map





Appendix C

Unauthorized Non-Stormwater Discharge Evaluation

Appendix D

Sector D Fact Sheet

Appendix E – Corrective Action Form

Site Name: _____

If any of the following conditions occur, review and revise the selection, design and implementation of control measures to ensure permit limits are met, pollutant discharges are minimized and the condition and its reoccurrence is eliminated:

- An unauthorized release or discharge (e.g., spill, leak, or discharge not authorized by this or another NPDES permit) occurs at your facility;
- An inspection or evaluation of your facility by a NDEE official, EPA official, or local entity determines that modifications to the control measures are necessary;
- You find in your routine facility inspection, quarterly visual assessment, or comprehensive site inspection that your control measures are not being properly operated and maintained; or
- You become aware, or NDEE determines, that your control measures are not stringent enough for the discharge to meet applicable water quality standards or the non-numeric effluent limits in this permit;
- Whenever a visual assessment shows evidence of storm water pollution (e.g., color, odor, floating solids, settled solids, suspended solids, foam).

Provide a description of the event that requires corrective action

Date:

--

Provide a description of the corrective actions taken

Date:

--

Completed By: _____

**Stormwater Pollution Prevention Plan
for:**

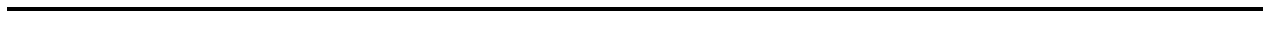
New Ulm Quartzite Quarry
45755 571st Lane
New Ulm, Minnesota 56073

SWPPP Contact:

Andrew Wojtowicz
Minnesota Paving & Materials
14475 Quiram Dr.
Rogers, Minnesota 55374

**SWPPP Preparation Date:
August 2018**

**SWPPP Updated Date:
November 2022**



Contents

Table of Contents

SWPPP CERTIFICATION	v
SWPPP Updates.....	vi
SECTION 1: FACILITY DESCRIPTION AND CONTACT INFORMATION	1
1.1 Facility Information	1
1.2 Contact Information/Responsible Parties	2
1.3 Stormwater Pollution Prevention Team	3
1.4 Site Description	4
1.5 General Location Map.....	4
1.6 Site Map	4
1.7 Impaired Waters	5
SECTION 2: POTENTIAL POLLUTANT SOURCES	5
2.1 Potential Pollutants Associated with Industrial Activity.....	5
2.2 Spills and Leaks	6
2.2.1 Potential Spills and Leaks.....	6
2.2.2 Past Spills and Leaks.....	6
2.3 Non-Stormwater Discharges.....	7
2.3.1 Authorized Non-Stormwater Discharges.....	7
2.3.2 Unauthorized Non-Stormwater Discharges.....	8
2.4 Salt Storage	8
2.5 Sampling Data Summary.....	8
SECTION 3: STORMWATER CONTROL MEASURES	11
3.1 Non-Numeric Technology-Based Effluent Limits (BPT/BAT/BCT).....	11
3.1.1 Minimize Exposure.....	11
3.1.2 Good Housekeeping.....	12
3.1.3 Maintenance	12
3.1.4 Spill Prevention and Response.....	12
3.1.5 Erosion and Sediment Controls	14
3.1.6 Management of Runoff.....	14
3.1.7 Dust Generation and Vehicle Tracking of Industrial Materials.....	15
3.1.8 Mercury Minimization Plan	15
3.2 Sector-Specific Non-Numeric Effluent Limits	15
3.2.1 Erosion and Sediment Controls	15
3.2.2 Vehicle Tracking	15
3.3 Numeric Effluent Limitations Based on Effluent Limitations Guidelines.....	16
3.4 Water Quality-Based Effluent Limitations and Water Quality Standards	16
SECTION 4: SCHEDULES AND PROCEDURES	17
4.1 Good Housekeeping.....	17
4.2 Maintenance	17
4.3 Spill Prevention and Response Procedures	17
4.4 Erosion and Sediment Control	17

4.5 Employee Training 17

4.6 Inspections and Assessments 18

 4.6.1 Routine Facility Inspections 18

 4.6.2 Exception to Routine Facility Inspections for Inactive and Unstaffed Sites 18

4.7 Monitoring 19

 4.7.1 Annual Testing 19

 4.7.2 Quarterly Testing 20

**SECTION 5: DOCUMENTATION TO SUPPORT ELIGIBILITY CONSIDERATIONS UNDER OTHER
FEDERAL LAWS 21**

5.1 Documentation Regarding Endangered Species 21

5.2 Documentation Regarding Historic Properties..... 21

SECTION 6: CORRECTIVE ACTIONS..... 21

SECTION 7: SWPPP MODIFICATIONS 21

- Appendix A: General Location Maps
- Appendix B: Site Map
- Appendix C: Unauthorized Non-Stormwater Discharge Evaluation
- Appendix D: Sector J Fact Sheet
- Appendix E: Corrective Actions Form

Contact Information		
Environmental Specialist	Andrew Wojtowicz	Office: (763) 400-2083
		Cell (Main) : (507) 594-8374
Aggregate Operations Manager	Mike Lang	Office:
		Cell: (712)-267-6349
	National Response Center	(800) 424-8802
	U.S. EPA Region V	(312) 353-2000
		(800) 621-8431
	Minnesota Duty Officer	(651) 649-5451
		(800) 422-0798
Spill Clean-Up Agencies		

SWPPP CERTIFICATION

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Name: _____ Title: _____

Signature: _____ Date: _____

The Plan must be reviewed at least once per year to confirm all information contain within is current and accurate. Changes shall be made as necessary. Record the date the Plan was reviewed, the reviewer's name, and a summary of any changes made to the Plan.

[illegible]

SECTION 1: FACILITY DESCRIPTION AND CONTACT INFORMATION

1.1 Facility Information

Name of Facility: 00801 New Ulm Quartzite Quarry

Street: 45755 571st Lane

City: New Ulm State: MN ZIP Code: 56073

County or Similar Subdivision: Nicollet

NPDES ID (i.e., permit tracking number): MNG 490131 (if covered under a previous permit)

Primary Industrial Activity SIC code, and Sector and Subsector (2017 MSGP, Appendix D and Part 8):
1429

Co-located Industrial Activity(s) SIC code(s), Sector(s) and Subsector(s) (2017 MSGP, Appendix D):
Sector J

Latitude/Longitude

Latitude:	Longitude:
44.284° N	94.408° W

Method for determining latitude/longitude (check one):

- ☐ USGS topographic map (specify scale: _____)
- ☐ GPS
- ☒ Other (please specify): Google Earth

Horizontal Reference Datum (check one):

☐ NAD 27 ☒ NAD 83 ☐ WGS 84

Is the facility located in Indian country? ☐ Yes ☒ No

If yes, name of Reservation, or if not part of a Reservation, indicate "not applicable." NA

Are you considered a "federal operator" of the facility?

Federal Operator – an entity that meets the definition of "operator" in this permit and is either any department, agency or instrumentality of the executive, legislative and judicial branches of the Federal government of the United States, or another entity, such as a private contractor, operating for any such department, agency, or instrumentality.

☐ Yes ☒ No

Discharge Information

Does this facility discharge stormwater into a municipal separate storm sewer system (MS4)?

☐ Yes ☒ No

If yes, name of MS4 operator: _____

Name(s) of surface water(s) that receive stormwater from your facility:

Does this facility discharge industrial stormwater directly into any segment of an “impaired water” (see definition in 2017 MSGP, Appendix A)? ☐ Yes ☒ No

If Yes, identify name of the impaired water(s) (and segment(s), if applicable): N/A

Identify the pollutant(s) causing the impairment(s):

Which of the identified pollutants may be present in industrial stormwater discharges from this facility?

Has a Total Maximum Daily Load (TMDL) been completed for any of the identified pollutants? If yes, please list the TMDL pollutants:

Does this facility discharge industrial stormwater into a receiving water designated as a Tier 2, Tier 2.5 or Tier 3 water (see definitions in 2017 MSGP, Appendix A)? ☐ Yes ☒ No

Are any of your stormwater discharges subject to effluent limitation guidelines (ELGs) (2017 MSGP Table 1-1)? ☐ Yes ☒ No

If Yes, which guidelines apply?

1.2 Contact Information/Responsible Parties

Facility Operator: Minnesota Paving & Materials

1905 3rd Avenue

Mankato, Minnesota 56001

Telephone Number: 507-625-4848

Fax number: 507-625-4907

Facility Owner: CRH

2401 SE Tones Drive

Ankeny, Iowa 50021

Telephone Number: 515-266-9928

Fax number: 515-263-3878

1.3 Stormwater Pollution Prevention Team

The stormwater pollution prevention team is responsible for developing, implementing, maintaining, and revising the SWPPP. The members of the team are familiar with the management and operation of New Ulm Quartzite Quarry. Each member has specific responsibilities to guarantee the facility's compliance with stormwater regulations. The team is composed of the SWPPP coordinator, SWPPP on-site team members, and SWPPP team members.

The SWPPP coordinator is responsible for composing and implementing the Plan. The SWPPP coordinator designates all SWPPP team members. Maintenance practices identified as Best Management Practices (BMPs) will be overseen by the SWPPP coordinator. Annual employee training will be conducted and/or overseen by the SWPPP coordinator or his/her designee. Additional duties will include identifying potential pollutant sources, identifying deficiencies in the SWPPP, and updating the SWPPP as necessary. The SWPPP coordinator or his/her designee must review the SWPPP annually. Annual fees will be submitted by the SWPPP coordinator or his/her designee. The SWPPP coordinator or his/her designee will review all chemical analysis and complete the associated reports, including the Annual Report due March 31st each year.

The SWPPP on-site team members will be responsible for SWPPP related activities which must be performed at the facility. SWPPP on-site team members will conduct and record monthly site inspections as required by the MSGP. At least one inspection must be conducted during a rain event. SWPPP on-site team members will install and maintain the BMPs outline in Section 3 of this Plan. Additionally, staff will ensure all housekeeping and monitoring procedures are implemented. The required stormwater samples will be collected by a SWPPP on-site team member or his/her designee.

SWPPP team members will provide additional assistance to both the SWPPP coordinator and the SWPPP on-site team members as required.

Table 1: Stormwater Pollution Prevention Team

Staff Name	Individual Responsibilities
<i>Environmental Manager</i>	SWPPP Coordinator
<i>Aggregate Operations Manager</i>	SWPPP On-Site Team Member
Additional Staff as Necessary	SWPPP Team Member

1.4 Site Description

New Ulm Quartzite Quarry is located in Nicollet County southwest of Highway 14. The industrial activities performed at this facility are consistent with SIC code 1429; Crushed and Broken Stone, Not Elsewhere Classified. Activities associated with this facility include haul and access roads, mineral extraction and processing, reclamation, equipment and vehicle maintenance, and fueling. Raw material is stored in stock piled located at the facility. All activities are performed outdoors; there are no enclosed processes at the facility. Below is a list of activities which may be performed at the facility along with the corresponding equipment. There are settling ponds on site to diminish suspended solids.

General Mining:

Equipment Involved: excavators, loaders, haul trucks, blasting

Activity: Excavating material with a loader and/or excavator, creating stock piles of various road construction materials including recycled asphalt, and loading haul trucks

Screening:

Equipment Involved: excavators, loaders, haul trucks

Activity: Handling material from a stock pile into a screen; loading screen material; developing a stock pile of screened material; handling and hauling waste materials from the site

Maintenance and Fueling:

Equipment Involved: excavators, loaders, haul trucks, screens, fuel trucks

Activity: Minor maintenance, lubrication, and fueling. Spill kits are used for spill prevention during each fueling or maintenance activity

Drainage Maintenance:

Equipment Involved: excavators, loaders, haul trucks, grader

Activity: Digging ditches; cleaning settling pond; grading and contouring the site with a loader; hauling waste material from the site; and cleaning and repairing erosion controls

Restoration and Contour Grading:

Equipment Involved: excavators, loaders, dozer, haul trucks, grader

Activity: Shaping the site for final restoration; vegetating, adding topsoil

1.5 General Location Map

The general location map for this facility can be found in Appendix A. The general location map identifies the property boundary and receiving waters for stormwater discharge if applicable.

1.6 Site Map

The site map for this facility can be found in Appendix B.

1.7 Impaired Waters

The Minnesota River, Heymans Creek, and the Cottonwood River are within one mile of the site and are considered “impaired waters” due to unacceptable standards aquatic life and aquatic consumption deemed by the MPCA. These are outlined on the General Location Map. There is no stormwater runoff from this site so no stormwater is discharged into this body of water.

SECTION 2: POTENTIAL POLLUTANT SOURCES

Pollutants exposed to stormwater discharge from active mineral mining and processing facilities will vary depending on activities and pollutant sources. Multiple factors may affect water quality.

- Geographic location
- Hydrogeology
- Topography
- Mineralogy of the extracted resource and the surrounding rock
- Mineral extraction method
- Ground cover
- Outdoor activities
- Size of operation
- Type, duration, and intensity of precipitation events

2.1 Potential Pollutants Associated with Industrial Activity

Common mineral mining and processing facility activities, pollutant sources, and pollutants are listed below in Table 2: Potential Pollutants. All activities listed below may not be performed at the facility. Notation of a pollutant does not require the facility to test for that specific pollutant. The facility will perform testing based on the effluent limitations noted in the MPCA permit.

Table 2: Potential Pollutants

Activity	Pollutant Source	Pollutant
Site Preparation	Road Construction	Dust, total suspended solids (TSS), total dissolved solids (TDS), turbidity
	Removal of overburden	
	Removal of waste rock to expose the mineral body	
Mineral Extraction	Blasting activities	Dust, TSS
Mineral Processing Activities	Rock Sorting	Dust, TSS, turbidity, fines
	Rock crushing	Dust, TSS, TDS, turbidity, fines
	Rock washing	TSS, TDS, turbidity, pH
Mineral Processing Activities	Raw material storage	Dust, TSS, TDS, turbidity
	Waste rock storage	Dust, TSS, TDS, turbidity, pH
	Raw material loading	Dust, TSS, TDS, turbidity
	Processing materials unloading	Fuel, oil, lime
	Raw or waste material transportation	Dust, TSS, TDS, turbidity
Other Activities	Sedimentation pond upsets	TSS, TDS, turbidity, pH

Activity	Pollutant Source	Pollutant
Other Activities	Sedimentation pond sludge removal and disposal	Dust, TSS, TDS, turbidity, pH
	Air emission control cleaning	Dust, TSS, TDS, turbidity
Storage of materials in aboveground tanks, totes, drums, and other containers	Leakage from tanks, totes, drums, and other containers	TSS, TDS, BOD5, COD, O&G, Benzene, MBAS, metals, pH
Equipment/Vehicle Maintenance	Fueling activities	Fuel, oil
	Parts cleaning	Solvents, oil, heavy metals, acid/alkaline wastes
	Waste disposal of oily rags, oil and gas filters, batteries, coolants, degreasers	Oil, heavy metals, solvents, acids
	Fluid replacement including hydraulic fluid, oil, transmission fluid, radiator fluids, and grease	Oil, arsenic, lead, cadmium, chromium, benzene, TCA, TCE, PAHs, solvents
Reclamation Activities	Site preparation for stabilization	Dust, TSS, TDS, turbidity
	Fertilizers	Nitrogen, phosphorus

2.2 Spills and Leaks

2.2.1 Potential Spills and Leaks

Potential spills and leaks from the facility would be associated with fuel tanks present at the facility and other oil-containing equipment. Equipment will be located throughout the facility dependent on daily activities. Fuel tanks will be in a location away from heaving traffic, but easily accessible. Due to the facility's layout, any spills or leaks will be contained on-site. Appropriate spill containment equipment will be located on-site to prevent access to navigable waters. Any spills or leaks will be cleaned appropriately according to section 3.1.4

2.2.2 Past Spills and Leaks

The facility has not experienced any significant spills or leaks in the past three years. Significant spills and leaks include but are not limited to releases of oil or hazardous substances in excess of quantities that are reportable under Clean Water Act (CWA) Section 311 or Section 102 of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA).

2.3 Non-Stormwater Discharges

2.3.1 Authorized Non-Stormwater Discharges

The National Pollutant Elimination System (NPDES) / State Disposal System (SDS) General Permit MNG490000 for Nonmetallic Mining and Associated Activities authorizes non-stormwater discharges that do not discharge to a surface water of the state as long as these discharges are not already authorized in a separate NPDES/SDS permit. The facility does not have a separate NPDES/SDS permit. Non-stormwater that co-mingles with stormwater is considered a non-stormwater discharge (wastewater) and must be disposed of properly. To be authorized under General Permit MNG490000, the discharges listed below must be collected, contained, or infiltrated to the ground and Best Management Practices must be implemented to prevent contamination of groundwater.

- a) Aggregate 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 sawing stone or dust control on crushers, conveyors, associated equipment, stock piles, and site roadways.
- i) Boiler blowdown and reverse osmosis reject
- j) Low or high pressure steam curing
- k) Noncontact cooling water used for dry, pump and air compressor cooling.

Additionally, the following non-stormwater discharges are authorized provided that appropriate Best Management Practices are followed to minimize erosion and the discharge of sediment when necessary:

- a) Emergency fire-fighting activities.
- b) Fire hydrant and fire suppression system flushing.
- c) Potable water line flushing.
- d) Uncontaminated condensate from air conditioners, coolers, and other compressors and from the outside storage of refrigerated gases or liquids.
- e) Landscape watering provided all pesticides, herbicides, and fertilizers have been applied in accordance with manufacturer's instructions.
- f) 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.
- g) Routine external building wash down that does not use detergents, solvents, or degreasers.
- h) Uncontaminated groundwater or spring water.
- i) Foundation or footing drains where flows are not contaminated.
- j) Incident windblown mist from cooling towers that collects on rooftops or adjacent portions of the facility, but not intentional discharges from the cooling tower.

2.3.2 Unauthorized Non-Stormwater Discharges

General Permit MNG490000 does not authorize the following discharges:

- Dewatering of mine or quarry areas other than those under Subsector J1 and J2
- Surface water discharge 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 groundwater 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 from 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.

An evaluation of the facility's unauthorized non-stormwater discharges can be found in Appendix C.

2.4 Salt Storage

No salt storage piles are located at the facility.

2.5 Sampling Data Summary

Annual Testing	Discharge Point	Parameter	
Year		Nitrite Plus Nitrate, Total (as N)	Nitrogen, Kjeldahl, Total
2022		SD 001	0.12 mgN/L

Quarterly Testing						
Year	Quarter	Discharge Point	No Discharge	Parameter	Quantity	Concentration
2022	01/01 – 03/31	SD 001	X	Flow	N/A	N/A
				pH		N/A
				Phosphorus, Total (as P)		N/A
				Solids, Total Suspended (TSS)		N/A
	04/01 - 06/30	SD 001	X	Flow	N/A	N/A
				pH		N/A
				Phosphorus, Total (as P)		N/A
				Solids, Total Suspended (TSS)		N/A

	Quarter	Discharge Point	No Discharge	Parameter	Quantity	Concentration
2022	07/01 – 09/30	SD 001	X	Flow	N/A	N/A
				pH		N/A
				Phosphorus, Total (as P)		N/A
				Solids, Total Suspended (TSS)		N/A
	10/01 – 12/31	SD 001		Flow	N/A	N/A
				pH		6.67 SU
				Phosphorus, Total (as P)		0.06 mgP/L
				Solids, Total Suspended (TSS)		47 mg/L

Annual Testing	Discharge Point	Parameter	
Year		Nitrite Plus Nitrate, Total (as N)	Nitrogen, Kjeldahl, Total
2021	SD 001	N/A	N/A

Quarterly Testing						
Year	Quarter	Discharge Point	No Discharge	Parameter	Quantity	Concentration
2021	01/01 – 03/31	SD 001	X	Flow	N/A	N/A
				pH		N/A
				Phosphorus, Total (as P)		N/A
				Solids, Total Suspended (TSS)		N/A
	04/01 - 06/30	SD 001	X	Flow	N/A	N/A
				pH		N/A
				Phosphorus, Total (as P)		N/A
				Solids, Total Suspended (TSS)		N/A
	07/01 – 09/30	SD 001	X	Flow	N/A	N/A
				pH		N/A
				Phosphorus, Total (as P)		N/A
				Solids, Total Suspended (TSS)		N/A
	10/01 – 12/31	SD 001	X	Flow	N/A	N/A
				pH		N/A
				Phosphorus, Total (as P)		N/A
				Solids, Total Suspended (TSS)		N/A

Annual Testing	Discharge Point	Parameter	
Year		Nitrite Plus Nitrate, Total (as N)	Nitrogen, Kjeldahl, Total
2020	SD 001	0.06	0

Quarterly Testing						
Year	Quarter	Discharge Point	No Discharge	Parameter	Quantity	Concentration
2020	01/01 – 03/31	SD 001		Flow	19.66 Mgal	0.21 mgd
				pH		7.62 SU
				Phosphorus, Total (as P)		0.09 mg/L
				Solids, Total Suspended (TSS)		19 mg/L
	04/01 - 06/30	SD 001	X	Flow	N/A	N/A
				pH		N/A
				Phosphorus, Total (as P)		N/A
				Solids, Total Suspended (TSS)		N/A
	07/01 – 09/30	SD 001	X	Flow	N/A	N/A
				pH		N/A
				Phosphorus, Total (as P)		N/A
				Solids, Total Suspended (TSS)		N/A
	10/01 – 12/31	SD 001	X	Flow	N/A	N/A
				pH		N/A
				Phosphorus, Total (as P)		N/A
				Solids, Total Suspended (TSS)		N/A

* No quantity for pH, Total Phosphorus, or TSS

Quarterly Testing					
Year	Quarter	Discharge Point	No Discharge	Parameter	Concentration
2016	07/01 – 09/30	SD 001		Nitrite Plus Nitrate, Total (as N)	0.98
				Nitrogen, Kjeldahl, Total	0.7
				Nitrogen, Total (as N)	1.7
				pH	8
				Phosphorus, Total (as P)	<0.1
				Solids, Total Suspended (TSS)	40
	10/01 – 12/31	SD 001		Nitrite Plus Nitrate, Total (as N)	0.98
				Nitrogen, Kjeldahl, Total	0.7
				Nitrogen, Total (as N)	1.7
				pH	7.4
				Phosphorus, Total (as P)	<0.1
				Solids, Total Suspended (TSS)	22

* No quantity for pH, Total Phosphorus, or TSS

** No testing report for Quarter 1 or 2

Monthly Testing							
Year	Month	Discharge Point	No Discharge	Parameter	Quantity (Mgal)	Concentration	
						Month Average	Month maximum
2016	May	SD 001		Flow	0.389	0.0125	0.035
	June	SD 001		Flow	0.786	0.0262	0.1123
	July	SD 001	X	Flow	N/A	N/A	N/A
	September	SD 001		Flow	3053000	101800	233100
	October	SD 001		Flow	11.277	0.3638	0.7443
	November	SD 001		Flow	15.826	0.5275	0.7536
	December	SD 001		Flow	3.92	0.1265	0.454

SECTION 3: STORMWATER CONTROL MEASURES

3.1 Non-Numeric Technology-Based Effluent Limits (BPT/BAT/BCT)

Best practicable technology (BPT), best available technology (BAT) and best conventional technology (BCT) are examples of non-numeric technology based effluent limits. BPTs are based on the average of the best existing technology. BCTs are designed to control the discharge of conventional pollutants: BOD, TSS, pH, and oil & grease. BATs are designed to control the discharge of toxic and non-conventional pollutants. BPTs/BATs/BCTs are obtained through BMPs designed to minimize exposure of stormwater to potential pollutants. BMPs will be reassessed during the Plan's annual review to determine if any changes need to be made for continued compliance.

3.1.1 Minimize Exposure

Minimizing exposure of potential pollutant sources to precipitation is an important control option. Minimizing exposure prevents pollutants from contact with precipitation and can reduce the need for BMPs to treat contaminated stormwater runoff. It can also prevent debris from being picked up by stormwater and carried into drains and surface waters.

The following BMPs may be implemented to minimize exposure. All BMPs listed below may not be utilized.

- Install berms along the uphill perimeter of the site to divert stormwater around facility activities
- Grade slope perimeter haul roads towards the site to prevent stormwater from leaving the site
- Hydroseed exposed soil slopes as possible
- Grade the site to ditches or other hydraulic means to ensure runoff passes through settling pond
- Construct ditch at the base of mined slopes to prevent stormwater on the slopes from traveling over extraction and haul areas
- Use covered chutes or booms when loading and unloading materials
- Install vegetative areas downstream of stock piles to infiltrate stormwater before it contacts any materials
- Install vegetative areas downstream of stock piles to slow down stormwater discharges after it contacts any materials
- Manage operations to avoid buildup of dust or other deposits on exhaust vents and roof stacks
- Close dumpster lids when not in use

3.1.2 Good Housekeeping

Good housekeeping is a practical, cost-effective way to maintain a clean and orderly facility to prevent potential pollution sources from coming into contact with stormwater. It includes establishing protocols to reduce the possibility of mishandling materials or equipment and training employees in good housekeeping techniques. Common areas where good housekeeping practices should be followed include trash containers and adjacent areas, material storage areas, vehicle and equipment maintenance areas, and loading docks.

Potential good housekeeping BMPs are as follows for the site. All activities listed below may not be performed at the site.

- Vehicle servicing and fueling will use portable spill containment and absorbent pads. All pads will be disposed of at an appropriate location
- Spill clean-up products are readily available on-site
- All used servicing containers or products will be disposed of at an appropriate location
- Fuel fill hoses will have spill and overflow protection features
- Topping off of fuel tanks will be discouraged
- Areas of the pit that begin pumping subsurface moisture will be closed to mining operations until the area drains and stabilizes
- The facility gate will be closed and locked at the end of each day to prevent unauthorized use

3.1.3 Maintenance

Regular inspections, testing, and preventative maintenance of industrial equipment should be performed at the facility. The maintenance program is intended to ensure the structural control measures and industrial equipment are in good operating condition to prevent or minimize leaks and other releases of pollutants.

The following practices should be followed as part of the maintenance program:

- Outdoor tanks, transfer equipment, and the surrounding area will be monitored for leaks. These visual inspections will not be documented. Any deterioration of the equipment will be repaired in a timely manner.
- Secondary containment will be provided as necessary.
- Proper filling and material transfer procedures will be followed to minimize spills.

3.1.4 Spill Prevention and Response

A spill prevention and response procedure will enable the facility to respond quickly and appropriately to any spills including those from potential pollutant sources identified in section 2.1 that may occur. A proper response can also prevent a spill from becoming a release. To develop an effective procedure, past spill occurrences, potential spill locations, and likely drainage points for potential spill areas have been reviewed.

Spill prevention and response procedures are as follows:

- Identify potential discharge locations

- Identify monitoring locations or surface waters that may be impacted
- Label containers
- Use secondary containment and/or barriers as necessary
- Train employees in proper prevention and response techniques
- Maintain spill equipment on-site
- Maintain proper material handling, storage, and clean-up procedures
- Maintain contact information for individuals who need to be notified in the event of a spill
- Promptly report and document any spills or leaks to appropriate individuals

In the event of a spill or leak, the following procedures will be followed:

- Secure the site
- Stop the spill, if possible
- Contact the fire department or other emergency response personnel, if necessary
- Control and contain the spill using on-site spill equipment that may include absorbent, booms, socks, soil, etc.
- Notify the site manager and SWPPP coordinator
- Clean up the spill appropriately
- Complete any necessary forms and reports

A leak, spill, or other release containing a hazardous substance or oil in an amount equal to or in excess of a reportable quantity as established under 40 CFR Part 110, 40 CFR Part 117, or 40 CFR Part 302 must be reported. The National Response Center must be contacted if any of the quantities listed in the above regulations are exceeded.

National Response Center
(800) 424-8802

The State of Minnesota requires that petroleum spills of an amount greater than five (5) gallons be reported. Reportable spills should be directed to:

Minnesota Duty Officer
(651) 649-5451
(800) 422-0798

The caller will need to have the following information about the incident:

- Name, organization, and telephone number
- Name and address of the party responsible for the incident
- Date and time of the incident
- Location of the incident
- Source and cause of the discharge
- Types of material(s) discharged
- Quantity of materials discharge
- Danger or threat posed by the discharge
- Number and types of injuries, if any

- Weather conditions at the incident location
- Other information to help emergency personnel respond to the incident

3.1.5 Erosion and Sediment Controls

BMPs have been selected and implemented to limit erosion on areas of the site that, due to topography, activities, soils, cover, materials, or other factors are likely to experience erosion.

Erosion control BMPs installed to prevent soil from becoming dislodged may include:

- Seeding,
- Mulching, and
- Sodding.

Sediment control BMPs utilized at the facility may include:

- Vegetative buffer strips,
- Silt fences,
- Straw bale barriers,
- Horizontal slope grading,
- Sediment basins,
- Berming,
- Riprap outlet protection, and
- Construction entrance/exits

All BMPs listed above may not be utilized.

3.1.6 Management of Runoff

Erosion can occur when soils are exposed to water, wind, or ice. Erosion occurs when the exposed soils loosen, become suspended in water or air, and are transported to another location.

Some of the following BMPs may be implemented to limit erosion and control sediment:

- Leave as much vegetation onsite as possible
- Minimize the length of time bare soil is exposed
- Divert or prevent runoff from flowing over exposed areas where possible
- Stabilize disturbed soils as soon as possible
- Slow runoff flowing over the site

Stormwater drains to the quarry floor. There are three settling ponds on the quarry floor any stormwater is pumped into. Stormwater and quarry dewatering are pumped from the final settling pond up the quarry wall and off site. A floating silt fence may be used in the settling ponds if necessary.

3.1.7 Dust Generation and Vehicle Tracking of Industrial Materials

Dust is generated from stacks, stock piles, cleared ground, gravel roads, and open areas.

Dust control BMPs may include:

- Routine cleaning of stacks and filters
- Spraying controlled amounts of water on haul roads to dampen dust-generating areas
- Material tracked off site will be swept up within 24 hours

3.1.8 Mercury Minimization Plan

No mercury-containing devices present at the facility are exposed to stormwater. Mercury-containing devices include:

- Fluorescent bulbs
- Mercury lamps
- Mercury switches
- Mercury thermometers, gauges, and other medical or scientific equipment
- Certain batteries

3.2 Sector-Specific Non-Numeric Effluent Limits

Additional sector-specific non-numeric effluent limits are discussed below.

3.2.1 Erosion and Sediment Controls

Sediment controls will be implemented as necessary on down-gradient perimeters before up-gradient land disturbing activities begin. Flow diversion (ex. swales and berms) and/or structural controls (ex. sediment traps, dikes, silt fences) may be used for erosion control. Temporary stock piles or stripping/overburden stored outside the pit will have sediment control mechanisms in place until the material is completely removed. Material will not be placed in surface water or stormwater channels. The installation of sediment control practices may be adjusted to accommodate short-term activities.

Berms have been placed on the eastern edge of the property to help keep erosion rates low and to keep sediment on site. Three settling ponds have also been placed on-site down gradient of active mining so stormwater runoff collects in these ponds which allows sediment to settle into the ponds and remain on-site.

3.2.2 Vehicle Tracking

Vehicle tracking of sediment onto paved surfaces from the site may be minimized through stone pads, concrete or steel wash racks, or gravel entrances/exits.

3.3 Numeric Effluent Limitations Based on Effluent Limitations Guidelines

The facility is subject to Sector J, Subsector J2: Dimension, Crushed Stone, Nonmetallic Minerals. The table below identifies the sector-specific benchmark monitoring and effluent limitations outlined in the 2017 MSGP.

Table 3: Sector-Specific Benchmark Monitoring and Effluent Limitations

Subsector	Parameter	Benchmark Value	Effluent Limits
J1 Sand and Gravel Mining	Solids, Total Suspended (TSS)	100 mg/L	Effluent monitoring not required
J2 Dimension, Crushed Stone, Nonmetallic Minerals	Solids, Total Suspended (TSS)	100 mg/L	Effluent monitoring not required
	Flow	Monitor Only, Mgal	Effluent monitoring not required
	Nitrite Plus Nitrate, Total (as N)	Monitor Only, mg/L	Effluent monitoring not required
	Nitrogen, Kjeldahl, Total (mg/L)	Monitor Only	Effluent monitoring not required
Subsector	Parameter	Benchmark Value	Effluent Limits
J2 Dimension, Crushed Stone, Nonmetallic Minerals	pH	6.5 – 8.5, SU	Effluent monitoring not required
	Phosphorus, Total (as P)	Monitor Only, mg/L	Effluent monitoring not required
J3 Clay, Ceramic, Refractory Materials, Chemical and Fertilizer Mineral Mining	Solids, Total Suspended (TSS)	100 mg/L	Effluent monitoring not required

The BMPs identified in Section 3.1 and 3.2 will be implemented to remain under the benchmark value set by the 2017 MSGP.

3.4 Water Quality-Based Effluent Limitations and Water Quality Standards

No effluent limits are applicable to this facility.

SECTION 4: SCHEDULES AND PROCEDURES

4.1 Good Housekeeping

Pickup and disposal of waste materials is conducted when the dumpsters are full. Used oil and spent solvent is disposed of on an as needed basis through an approved disposal company.

4.2 Maintenance

Regular inspections of industrial equipment are conducted to prevent leaks and spills. Periodic inspections of berms and the general facility are conducted to ensure stormwater does not leave the site. These inspections are not recorded.

4.3 Spill Prevention and Response Procedures

Annual employee training for stormwater will include information pertaining to spill prevention and response procedures. Appropriate spill response materials will be located throughout the facility. Employees will be trained in the proper handling of materials which have the potential to contaminate stormwater.

4.4 Erosion and Sediment Control

Polymers and other chemical treatments are not used for erosion and sediment control.

4.5 Employee Training

To assist employees in becoming more aware of facility stormwater procedures, an annual training event will occur. In addition, new employees will be trained on the facility's stormwater procedures. At a minimum, the training program will review the components and goals of the SWPPP.

The following individuals are required to attend the training:

- Employees developing the SWPPP
- Employees implementing the SWPPP
- Employees working in areas of industrial activity
- Employees conducting benchmark and/or effluent monitoring

A copy of the latest training documents can be obtained from the Environmental Department.

4.6 Inspections and Assessments

4.6.1 Routine Facility Inspections

A minimum of one site inspection per calendar month that the site is an active site and staffed is required. A minimum of one inspection per calendar year must be conducted during a runoff event. One inspection must also be conducted during a snowmelt event. Completed monthly monitoring reports will be maintained on-site.

Position responsible for inspections: Site Manager or his/her designee

Schedule for conducting inspections: Monthly

Exposed material and activity areas: The entire facility is exposed to stormwater. No materials or equipment are stored indoors.

Potential pollutant sources:

- Site preparation
- Mineral extraction
- Mineral processing
- Equipment/vehicle maintenance
- Reclamation activities

Spill and/or leak locations in the past three (3) years:

- None

Discharge point location(s): There are two discharge locations for this site. SD 001 is the west outfall, located on the north west side of the property. SD 004 is the east outfall located in the south area of the site.

Effluent limit control measures:

- Minimize exposures
- Good housekeeping
- Maintenance
- Spill prevention and response
- Erosion and sediment control
- Runoff management
- Dust generation and vehicle tracking management

4.6.2 Exception to Routine Facility Inspections for Inactive and Unstaffed Sites

No exceptions to routine facility inspections are currently being invoked.

4.7 Monitoring

4.7.1 Annual Testing

The permit for the facility requires a grab sample be obtained each year for Nitrite Plus Nitrate, Total (as N) and Nitrogen, Kjeldahl.

Sample Location: See Appendix B: Site Map for the discharge location.

Pollutants to be sampled:

- Nitrite plus Nitrate, Total (as N)
- Nitrogen, Kjeldahl, Total (mg/L)

Monitoring Schedule: Annually

Procedures:

1. Prepare for grab sample
 - a. Collect sample within 30 minutes of start of runoff event when water is flowing
2. Assemble necessary equipment
 - a. New one-gallon re-sealable plastic bag
 - b. Clean bottle for collecting sample with the name of the person collecting the sample, the date, and the location of sample on it
 - c. Container of preservative
 - d. Cooler and ice for shipping sample
3. Select the best sampling location
4. Collecting the sample
 - a. Do not walk or stand upstream of the sample location
 - b. Place bottle caps on an uncontaminated surface when removed
 - c. Hold the bottle facing upstream when collecting sample
 - d. Place bottle in middle of stormwater flow
 - e. Once sample is collected add the preservative provided
 - f. Note the time of the sample on the sample bottle
 - g. Cap the bottle and place in one-gallon re-sealable plastic bag
 - h. Place bottle and bag in cooler, ensure bottle uniformly covered by ice

4.7.2 Quarterly Testing

The permit for the facility requires four grab samples be obtained each year.

Sample Location: See Appendix B: Site Map for the discharge location.

Pollutants to be sampled:

- Flow
- pH
- Total Suspended Solids (TSS)
- Total Phosphorus

Monitoring Schedule: Quarterly

Numeric Limitations:

- pH: 6.5 – 8.5
- Total Suspended Solids (TSS): 100 mg/L

Procedures:

1. Prepare for grab sample
 - a. Collect sample within 30 minutes of start of runoff event when water is flowing
2. Assemble necessary equipment
 - a. New one-gallon re-sealable plastic bag
 - b. Clean bottle for collecting sample with the name of the person collecting the sample, the date, and the location of sample on it
 - c. Container of preservative
 - d. Cooler and ice for shipping sample
3. Select the best sampling location
4. Collecting the sample
 - a. Do not walk or stand upstream of the sample location
 - b. Place bottle caps on an uncontaminated surface when removed
 - c. Hold the bottle facing upstream when collecting sample
 - d. Place bottle in middle of stormwater flow
 - e. Once sample is collected add the preservative provided
 - f. Note the time of the sample on the sample bottle
 - g. Cap the bottle and place in one-gallon re-sealable plastic bag
 - h. Place bottle and bag in cooler, ensure bottle uniformly covered by ice

SECTION 5: DOCUMENTATION TO SUPPORT ELIGIBILITY CONSIDERATIONS UNDER OTHER FEDERAL LAWS

5.1 Documentation Regarding Endangered Species

The Minnesota DNR's Natural Areas Inventory was used to determine which threatened and endangered species are present in the county the site is located in. Those identified species were then cross referenced against the IUCN Red List. There was one species which appeared on both lists which was the northern myotis.

The northern myotis prefers forests and caves. The site is in a relatively forested area. If any trees are cleared it will be done between November 1st and March 31st.

5.2 Documentation Regarding Historic Properties

No Historic Properties are located in/near the site.

SECTION 6: CORRECTIVE ACTIONS

The Plan will be reviewed annually. Modification will be made to the Plan if:

- There is construction or a change in design, operation, or maintenance at the facility that affects stormwater management of compliance.
- The Permittee has identified a monitoring location to which the discharge flows that is within one mile of an impaired water, including newly listed impaired water.
- A routine inspection, compliance evaluation, or visual inspection identifies deficiencies in the SWPPP and/or BMPs.
- Additional stormwater control measures and BMPs are necessary to meet applicable water quality standards or to address exceedances of benchmark values.
- There is an unauthorized discharge from the facility. If the SWPPP modification is based on a release or unauthorized discharge, 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 must be included.

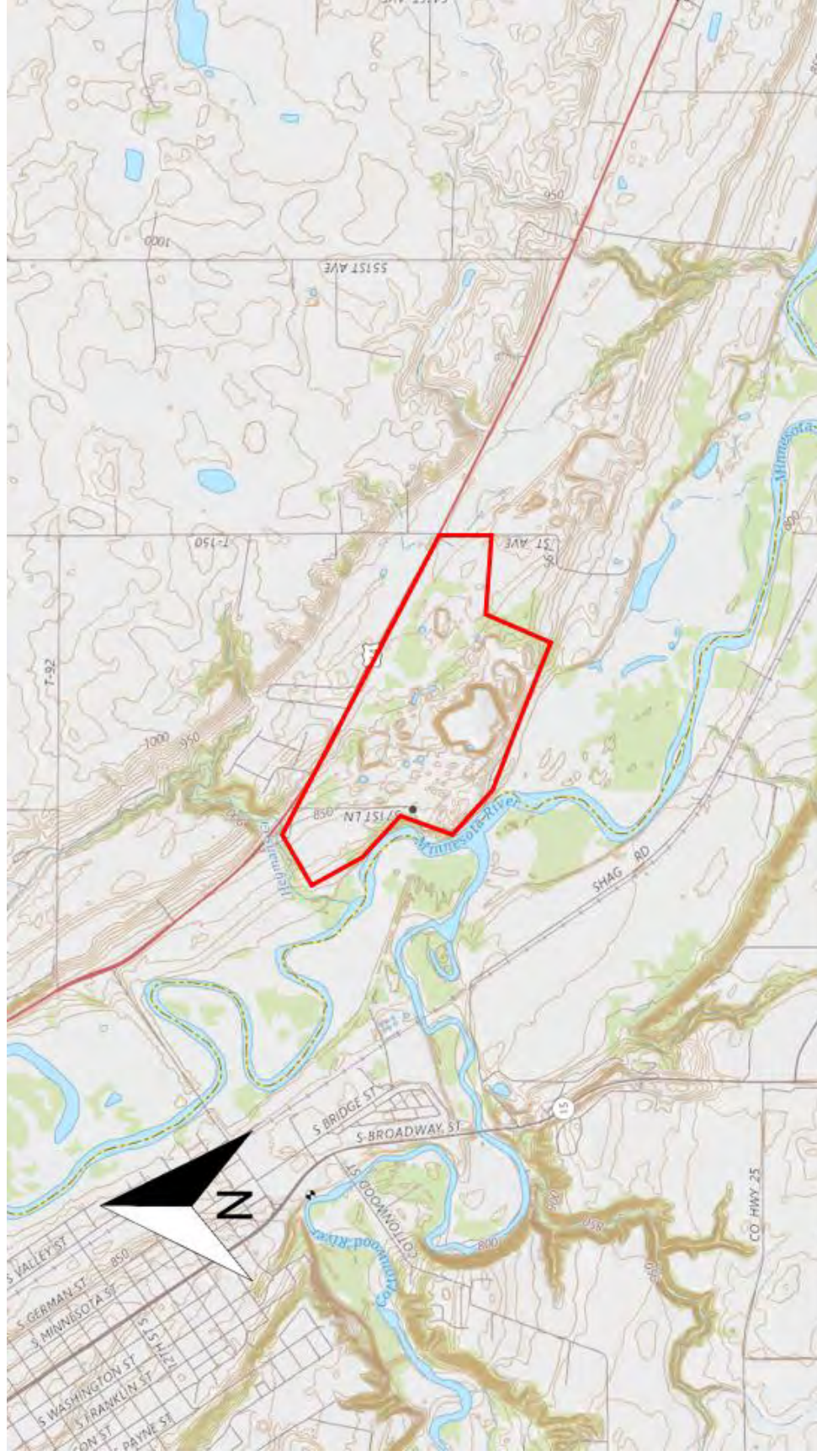
SECTION 7: SWPPP MODIFICATIONS

Modifications and updates to this Plan must be noted in the SWPPP update section at the beginning of the document. The certification statement is not required to be resigned after minor modifications.

Appendix A

General Location Maps





Appendix B

Site Map



Appendix C

Unauthorized Non-Stormwater Discharge Evaluation

Appendix D

Sector J Fact Sheet

Appendix E – Corrective Action Form

Site Name: _____

If any of the following conditions occur, review and revise the selection, design and implementation of control measures to ensure permit limits are met, pollutant discharges are minimized and the condition and its reoccurrence is eliminated:

- An unauthorized release or discharge (e.g., spill, leak, or discharge not authorized by this or another NPDES permit) occurs at your facility;
- An inspection or evaluation of your facility by a NDEE official, EPA official, or local entity determines that modifications to the control measures are necessary;
- You find in your routine facility inspection, quarterly visual assessment, or comprehensive site inspection that your control measures are not being properly operated and maintained; or
- You become aware, or NDEE determines, that your control measures are not stringent enough for the discharge to meet applicable water quality standards or the non-numeric effluent limits in this permit;
- Whenever a visual assessment shows evidence of storm water pollution (e.g., color, odor, floating solids, settled solids, suspended solids, foam).

Provide a description of the event that requires corrective action

Date:

--

Provide a description of the corrective actions taken

Date:

--

Completed By: _____



**Spill Prevention, Control, and
Countermeasure Plan**

**Minnesota Paving and Materials
Plant 601 – Small Portable Asphalt Plant**

File No. 227703284

May 2022

Prepared for:



Minnesota Paving and Materials
14475 Quiram Drive
Rogers, MN 55374

Prepared by:

Stantec Consulting Services Inc.
2080 Wooddale Drive
Suite 100
Woodbury, MN 55125



**SPILL PREVENTION, CONTROL, AND COUNTERMEASURE PLAN
MINNESOTA PAVING & MATERIALS - PLANT 601 - SMALL PORTABLE ASPHALT PLANT**

Table of Contents

May 2022

Table of Contents

CROSS REFERENCE INDEX	III
1.0 CERTIFICATION.....	1.1
1.1 PROFESSIONAL ENGINEER'S CERTIFICATION	1.1
1.2 SPCC MANAGEMENT APPROVAL	1.1
1.3 CERTIFICATION OF SUBSTANTIAL HARM.....	1.2
1.4 SPCC PLAN REVIEW AND RECERTIFICATION.....	1.3
2.0 INTRODUCTION.....	2.1
2.1 DETERMINATION OF PRACTICABILITY AND ENVIRONMENTAL EQUIVALENCE.....	2.1
2.2 SPCC PLAN AVAILABILITY	2.2
2.3 SPCC PLAN SUBMITTAL AND SPILL REPORTING	2.2
2.4 STATE REGULATION REGARDING SPILL PREVENTION & CONTAINMENT.....	2.3
3.0 FACILITY INFORMATION	3.1
3.1 FACILITY NAME	3.1
3.2 MAILING ADDRESS/LOCATION:	3.1
3.3 OWNER NAME, ADDRESS	3.1
3.4 CONTACT PERSON	3.1
3.5 KEY PERSONNEL	3.1
3.6 FACILITY DESCRIPTION	3.2
3.7 TOTAL OIL STORAGE.....	3.2
4.0 OIL STORAGE AND CONTAINMENT	4.1
4.1 BULK STORAGE CONTAINERS/SECONDARY CONTAINMENT	4.1
4.2 OIL FILLED OPERATIONAL EQUIPMENT	4.2
4.3 PORTABLE STORAGE.....	4.3
4.4 SPILL POTENTIAL.....	4.3
4.5 CONTAINMENT AND DIVERSIONARY STRUCTURES.....	4.4
4.6 FACILITY DRAINAGE	4.5
4.6.1 General Drainage and Site Stormwater Structures.....	4.5
4.6.2 Stormwater Inspection and Disposal.....	4.5
5.0 OPERATIONS AND PROCEDURES	5.1
5.1 TRANSFER OPERATIONS, PUMPING, AND IN-PLANT PROCESSES.....	5.1
5.2 TANK TRUCK LOADING/UNLOADING.....	5.2
5.3 INSPECTIONS AND INTEGRITY TESTING.....	5.3
5.4 SECURITY	5.5
5.5 TRAINING PROCEDURE.....	5.5
6.0 SPILL RESPONSE PLAN.....	6.1
6.1 OIL SPILL CONTROL PLAN	6.1



SPILL PREVENTION, CONTROL, AND COUNTERMEASURE PLAN
MINNESOTA PAVING & MATERIALS - PLANT 601 - SMALL PORTABLE ASPHALT PLANT

Table of Contents

May 2022

6.1.1	Introduction	6.1
6.1.2	Oil Spill Plan.....	6.1
6.2	EMERGENCY CONTACT LIST.....	6.3
6.3	SPILL CONTAINMENT EQUIPMENT LOCATIONS	6.3
6.4	SPILL CLEANUP AND DISPOSAL.....	6.3
6.5	SPILL REPORTING AND NOTIFICATION	6.3

LIST OF TABLES

Table 1.1	SPCC Plan Review and Amendments.....	1.3
Table 4.1	Potential Spill	4.3
Table 5.1	Reasonably Expected Discharge Scenario.....	5.3
Table 5.2	Tank Integrity Testing Schedule	5.4

FIGURES

Figure 1	Site Location Map (to be updated for each site)
Figure 2	Site Plan

APPENDICES

Appendix A	Truck Loading and Unloading Procedure
Appendix B	SPCC Inspection Logs
Appendix C	Record of Spill Prevention Training
Appendix D	Spill Report Form



Cross Reference Index

USEPA SPCC REQUIREMENTS

Section in 40 CFR 112	USEPA SPCC Requirements	Section / Page in this SPCC
Requirement to prepare and implement a Spill Prevention, Control, and Countermeasure Plan		
3(d)	Professional Engineering review and certification	Section 1/Page 1.1
3(e)	Distribution of Plan and availability	Section 2/Page 2.2
Amendment of Spill Prevention, Control, and Countermeasure Plan by Regional Administrator		
4(a)	Facility discharges submit information to the Regional Administrator	Section 2/Page 2.2
Amendment of Spill Prevention, Control, and Countermeasure Plan by owners or operators		
5(a)	Amending the SPCC Plan	Section 1/Page 1.3
5(b)	Review and evaluation of the SPCC	Section 1/Page 1.3
5(c)	Professional Engineer certification of technical amendment	Section 1/Page 1.3
General requirements for Spill Prevention, Control, and Countermeasure Plans		
7(a)	Management commitment	Section 1/Page 1.1
7 (a)(2)	Environmental Equivalence	Section 2 / Page 2.1
7(a)(3)	The physical layout of the facility • Diagrams • Countermeasures for discharge discovery and response • Methods for disposal of recovered materials • Contact list and phone numbers	Section 3/Page 3.1 Section 6/Page 6.1 Figure 2
7(b)	Plan a prediction of the direction, rate of flow, and total quantity of oil which could be discharged from the facility as a result of major equipment failure	Section 4/Page 4.3
7(c)	Provide appropriate containment and/or diversionary structures or equipment to prevent a discharge	Section 4/Page 4.4
7(d)	Impracticability Determination	Section 2/Page 2.1
7(e)	Inspections, tests, and records	Section 5/Page 5.3
7(f)	Personnel, training, and discharge prevention procedures	Section 5/Page 5.5
7(g)	Security (excluding oil production facilities)	Section 5/Page 5.5
7(h)	Tank truck loading / unloading	Section 5/Page 5.2
7(j)	State Regulations	Section 2/Page 2.3
Requirements for onshore facilities (petroleum oils)		
8(b)	Facility drainage	Section 4/Page 4.5
8(c)	Bulk storage containers	Section 4/Page 4.1
8(d)	Facility transfer operations, pumping, and facility process	Section 5/Page 5.1



1.0 Certification

1.1 Professional Engineer's Certification

40 CFR 112.3(d)

I attest that I am familiar with the requirements of the SPCC Rule; I or my designated agent have visited and examined the facility; the Plan has been prepared in accordance with good engineering practices, including consideration of applicable industry standards and with the requirements of the SPCC Rule; procedures for required inspections and testing have been established and the Plan is adequate for the facility.

Signature/Date:	<u><i>Denise Kazmierczak</i></u>	<u><i>5/22/2022</i></u>
Name:	Denise Kazmierczak, Professional Engineer	Date
Registration:	Minnesota Professional Engineer Registration 26594	

1.2 SPCC Management Approval

40 CFR 112.7(a)

This SPCC Plan is fully approved by the management of Minnesota Paving and Materials (MPM), and the necessary resources have been committed to implement the Plan as described.

<u><i>Chad Phillips</i></u>	<u>6-11-22</u>
Chad Phillips	Date
Asphalt Plants Manager	



**SPILL PREVENTION, CONTROL, AND COUNTERMEASURE PLAN
MINNESOTA PAVING & MATERIALS - PLANT 601 - SMALL PORTABLE ASPHALT PLANT**

Certification

May 2022

1.3 Certification of Substantial Harm

40 CFR 112.20(e)

The Oil Pollution Act of 1990 requires additional information and submission of the SPCC Plan to the USEPA Region 5 Regional Administrator if the facility could reasonably be expected to cause "substantial harm" to the environment by discharging oil into navigable water. Minnesota Paving and Materials does not pose "substantial harm" and therefore is not subject to this part of the Rule.

Facility Name: Minnesota Paving and Materials – Plant 601 – Small Portable Asphalt Plant

1. Does the facility transfer oil over water to or from vessels and does the facility have a total oil storage capacity greater than or equal to 42,000 gallons?

Yes _____ No X

2. Does the facility have a total oil storage capacity greater than or equal to 1 million gallons and does the facility lack secondary containment that is sufficiently large to contain the capacity of the largest aboveground oil storage tank plus sufficient freeboard to allow for precipitation within any aboveground storage tank area?

Yes _____ No X

3. Does the facility have a total oil storage capacity greater than or equal to 1 million gallons and is the facility located at a distance (as calculated using the appropriate formula in Attachment C-III to this appendix or a comparable formula¹) such that a discharge from the facility could cause injury to fish and wildlife and sensitive environments? For further description of fish and wildlife and sensitive environments, see Appendices I, II, and III to DOC/NOAA's "Guidance for Facility and Vessel Response Plans: Fish and Wildlife and Sensitive Environments" (see Appendix E to this part, Section 10, for availability) and the applicable Area Contingency Plan.

Yes _____ No X

4. Does the facility have a total oil storage capacity greater than or equal to 1 million gallons and is the facility located at a distance (as calculated using the appropriate formula in Attachment C-III to this appendix or a comparable formula¹) such that a discharge from the facility would shut down a public drinking water intake²?

Yes _____ No X

5. Does the facility have a total oil storage capacity greater than or equal to 1 million gallons and has the facility experienced a reportable oil spill in an amount greater than or equal to 10,000 gallons within the last 5 years?

Yes _____ No X

CERTIFICATION

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document, and that based on my inquiry of those individuals responsible for obtaining this information, I believe that the submitted information is true, accurate, and complete.

Chad Phillips
Signature

Chad Phillips
Name (please type or print)

Asphalt Plants Manager
Title

6-11-22
Date

¹If a comparable formula is used, documentation of the reliability and analytical soundness of the comparable formula must be attached to this form.

²For the purposes of 40 CFR part 112, public drinking water intakes are analogous to public water systems as described at 40 CFR 143.2(c).



1.4 SPCC Plan Review and Recertification

40 CFR 112.5

The SPCC Plan shall be amended, within six months, whenever there is a change in the facility's design, construction, operation, or maintenance which materially affects the facility's spill potential for the discharge of oil into or upon the navigable waters of the United States or adjoining shorelines. The Plan must be reviewed at least once every five years, and amended to include more effective prevention and control technology, if: (1) such technology will significantly reduce the likelihood of a spill, and (2) if such technology has been proven in the field. Changes to the Plan must be re-certified by a registered Professional Engineer (P.E.).

Examples of changes that may require amendment of the Plan and certification include but are not limited to:

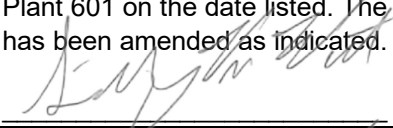
- commissioning or decommissioning bulk storage containers;
- replacement, reconstruction or movement of bulk storage containers;
- replacement or installation of piping systems;
- altering secondary containment structures, or
- modification of tank inspection guidelines.

Non-technical changes not requiring the exercise of good engineering practice do not require P.E. certification. Such non-technical changes include but are not limited to:

- changes to the contact list,
- modifications to transfer procedures,
- requirements for stormwater discharges, or
- changes associated with location and handling of 55-gallon drums.

The table provided below is to be completed following each evaluation, and/or amendment.

Table 1.1 SPCC Plan Review and Amendments

Review Date	Review Comments / Amendments	Reviewer Signature	Reviewer (print name)	PE certification required
December 2015	Original plan		Brian Knutson	Y / N
April 2022	5-year Review Updates made to reflect site changes	I have Completed review and evaluation of the SPCC Plan for MPM Plant 601 on the date listed. The Plan has been amended as indicated. 	Mike... Gallahan-- Lindsay Van Woert	Y N
6/27/2022	Contact changes		Lindsay Van Woert	N



SPILL PREVENTION, CONTROL, AND COUNTERMEASURE PLAN
MINNESOTA PAVING & MATERIALS - PLANT 601 - SMALL PORTABLE ASPHALT PLANT

Introduction

May 2022

2.0 Introduction

The United States Environmental Protection Agency (USEPA) requires owners of non-transportation-related oil and petroleum products facilities to develop and implement a Spill Prevention, Control and Countermeasure (SPCC) Plan. SPCC Plans must be prepared and implemented if: the capacity of any aboveground storage tank (AST) or the total aboveground aggregate storage capacity is 1,320 gallons or more; and, due to its location, the facility could potentially allow discharge of oil into or upon the navigable waters of the United States.

This SPCC Plan is required of the Minnesota Paving and Materials (MPM) – Plant 601 Small Portable Asphalt Plant because oil products stored at the facility exceed the above referenced threshold; and, due to its location, the facility could potentially allow discharge of oil into or upon the navigable waters of the United States. The purpose of the SPCC Plan is to prevent the occurrence of oil spills by the use of sound engineering and management controls and to prevent discharge of oil into or upon navigable waters of the United States or adjoining shorelines (including discharge of oil via groundwater). In the event a discharge occurs, the plan identifies control and countermeasures. This SPCC plan has been prepared in general accordance with Title 40, Code of Federal Regulations (CFR), Part 112.

In addition to fulfilling the requirements of 40 CFR 112, this SPCC Plan is used as a reference for oil storage information and testing records, as a tool to communicate practices on preventing and responding to discharges with employees, as a guide to facility inspections, and as a resource during emergency response.

As stated, the federal SPCC Rule requires facilities to prepare a plan to cover oil-containing tanks and equipment only.

2.1 Determination of Practicability and Environmental Equivalence

40 CFR 112.7(d)

There is no determination of impracticability. Facility management has determined, in accordance with 40 CFR 112.7(d), that use of the containment and diversionary structures or readily available equipment to prevent discharged oil from reaching navigable waters is practical and effective at this plant.

40 CFR 112.7(a)(2)

The facility uses Equivalent Environmental Protection to satisfy Bulk Storage Container inspection requirements (112.8(c)(6)). Environmental equivalence program details are provided in Section 4.1 and Section 5.3.



SPILL PREVENTION, CONTROL, AND COUNTERMEASURE PLAN
MINNESOTA PAVING & MATERIALS - PLANT 601 - SMALL PORTABLE ASPHALT PLANT

Introduction

May 2022

2.2 SPCC Plan Availability

40 CFR 112.3(e)

A complete copy of this SPCC Plan will be kept on-site and made available for on-site review by the USEPA or Minnesota Pollution Control Agency (MPCA) representatives during normal working hours. Copies of the SPCC Plan do not need to be sent to the USEPA or MPCA.

2.3 SPCC Plan Submittal and Spill Reporting

40 CFR 112.4

This SPCC Plan must be submitted to the USEPA Region 5 Regional Administrator and the MPCA within 60 days, along with the other information specified in §112.4 and a written report containing the items shown below, **if** either of the following occurs:

- The facility discharges more than 1,000 gallons of oil in a single discharge into or upon the navigable waters of the United States or adjoining shorelines in a single event; and/or
- The facility discharges more than 42 gallons (one barrel) of oil in each of two discharges into or upon the navigable waters of the United States or adjoining shorelines within any 12-month period.

The written report is to contain the following information:

- Name of the facility;
- Name(s) of the owner or operator of the facility;
- Location of the facility;
- Date and year of initial facility operation;
- Maximum storage or handling capacity of the facility and normal daily throughput;
- Description of the facility, including maps, flow diagrams, topographical maps, and other maps;
- A complete copy of the SPCC Plan with any amendments;
- The cause(s) of spill(s), including a failure analysis of the system or subsystem in which the failure occurred;
- The corrective actions and/or countermeasures taken, including an adequate description of equipment repairs and/or replacements;
- Additional preventive measures taken or contemplated to minimize the possibility of recurrence; and
- Such other information as the Regional Administrator may reasonably require pertinent to the plan or spill event.



2.4 State Regulation Regarding Spill Prevention & Containment

40 CFR 112.7(j)

Minnesota Statute 115.061 states it is the duty of every person to notify the MPCA immediately of the discharge, accidental or otherwise, of any substance or material under its control which, if not recovered, may cause pollution of waters of the state, and the responsible person shall recover as rapidly and as thoroughly as possible such substance or material and take immediately such other action as may be reasonably possible to minimize or abate pollution of waters of the state caused thereby. Notification shall be made to the Minnesota Duty Officer. Notification is not required for a discharge of five gallons or less of petroleum. Refer to Section 6.2 for Emergency Contact names and phone numbers.

The State of Minnesota (Minnesota Statute 115E) requires persons who own or operate a facility that stores more than 10,000 gallons of oil or hazardous substances in aboveground tanks to prepare a prevention and response plan. This SPCC Plan satisfies the Minnesota requirements for spill planning for oil stored in aboveground storage tanks. There are no hazardous substances stored in aboveground storage tanks in quantities more than 10,000 gallons. There are no SPCC Plan submittals or reporting requirements to the MPCA.

Minnesota Statute 116.48 requires that aboveground storage tanks greater than or equal to 500 gallons in size be registered with the MPCA. Tank notification to the MPCA must be made within 30 days of installation or change in tank status. Tanks not required to be registered (exempt) include: tanks containing gases, totes, temporary tanks, and equipment.



3.0 Facility Information

40 CFR 112.7(a)(3)

3.1 Facility Name

Minnesota Paving and Materials
Plant 601 – Small Portable Asphalt Plant

3.2 Mailing Address/Location:

Portable Asphalt Plant
(multiple locations seasonally)
(See attached Figure 1 for current location)

3.3 Owner Name, Address

Minnesota Paving and Materials
14475 Quiram Drive
Rogers, MN 55374

3.4 Contact Person

~~Jim Wollack~~ – Plant Operator Zack Waktins
Primary Spill Coordinator 651-783-2727
~~Cell (651)-783-2727~~

3.5 Key Personnel

Jack Fraune
Superintendent
612-759-6768

Chad Phillips
Operations Manager
507-380-7875

Lindsay Van Woert
Environmental Manager
515-339-5485

~~Chris Miller~~ – Materials Manager
Alternate Spill Coordinator
~~Cell (320)-260-6777-----~~

~~Greg Tishbirek~~ – Plant Superintendent
Alternate Spill Coordinator
~~Cell (612)-490-7243~~

~~Mike Callahan~~ – Environmental Manager
Alternate Spill Coordinator
~~Office (507)-625-4848-~~
~~Cell (507)-597-8374-~~

Brian Knutson – Safety Director
Alternate Spill Coordinator
Office (763) 400-2010
Cell (612) 490-4097

Contact updates 2022/06/27 by LVW



3.6 Facility Description

MPM operates a portable asphalt plant in Minnesota. This is a mobile plant that frequently relocates to different sites throughout the year. The locations of the sites vary. Site specific location maps will be incorporated into the plan for each location the plant operates (see Figure 1).

The way the plant is set up at each location is typically very similar. A Site Plan is provided as Figure 2. The plant is typically located within a gravel pit (aggregate source area) which provides facility containment and prevents off site discharges.

3.7 Total Oil Storage

The total oil storage available for this plant is approximately 74,500-gallons. A breakdown of the oil type of product storage is shown in the table below and on the facility Site Plan in Figure 2.

Material	Tank# (Figure 2)	Tank Capacity (gallons)	Location	Secondary Containment
Oil Containing Equipment				
Heat Transfer Oil	A	250	System staged next to 30,000-gallon AC Tank	Spill Response Equipment and Facility Containment – Gravel Pit
Bulk Oil Storage Containers				
Diesel Fuel	A	400	Fuel for heat transfer pump attached to 30,000-gallon AC Tank	Facility Containment – Gravel Pit, Spill Equipment, & Active Response (Upgrade Spill Containment per Section 4.1 and 4.5)
Diesel Fuel	A	250	Fuel for heat transfer pump attached to 22,000-gallon AC Tank	Facility Containment – Gravel Pit, Spill Equipment, & Active Response (Upgrade Spill Containment per Section 4.1 and 4.5)
Asphalt Cement	B	30,000	Next to the hot mix drum	Facility Containment – Gravel Pit (Thermoplastic Material)
Asphalt Cement	C	22,000	Next to the hot mix drum	Double Wall Tank
Burner Fuel Oil	D	20,000	Next to the 30,000-gallon AC Tank	Synthetic Liner and Berm (native material) Installed Capacity ≥24,000-gallons
Diesel Fuel	E	1,000	Generator Unit	Double Wall Tank – Genset Unit
Portable Oil Storage				
Drag Slat Cleaner (Meyer DSC-HT Oil-Based)	F	300-gal Tote	Hot-Mix Plant Underneath Dragline	Facility Containment - Gravel Pit, Spill Equip., & Active Response (Upgrade to Spill Pallet)
Non-SPCC Regulated				
Truck Release Agent (Non-Oil Meyer Ultra Slider)	--	300-gal Tote	Truck Loadout Area	Facility Containment - Gravel Pit, Spill Equipment, & Active Response



4.0 Oil Storage and Containment

4.1 Bulk Storage Containers/Secondary Containment

40 CFR 112.8(c)

General tank information is summarized below. **Detailed tank and product information as well as location of the tanks and oil containing equipment is included in Section 3.7.**

112.8(c)(1) – The plant only uses containers of material and construction that are compatible with the materials stored and the conditions of storage (temperature and pressure).

112.8(c)(2) – Adequate secondary containment is provided for each bulk storage tank. Specific secondary containment information is provided in Section 4.5. **Secondary containment for totes/drums of Drag Slat Cleaner will be upgraded to spill pallets, and additional containment will be provided for the single wall heating oil diesel fuel tanks.**

112.8(c)(3) – The 20,000-gallon Burner Fuel Tank has a secondary containment structure, which consists of an aggregate base and synthetic liner that could accumulate stormwater. In the event stormwater does accumulate and requires drainage, it is inspected for sheen or any other signs of petroleum. If the inspection does not identify any impacts the stormwater will be pumped to the ground surface. If the inspection shows the presence of oil, the authorized individual shall implement proper handling.

There are no other outdoor secondary containment structures that accumulate stormwater and require discharge. Site drainage information is provided in Section 4.6 below.

112.8(c)(4)&(5) – There are no completely buried or partially buried metallic tanks currently used for oil storage on-site.

112.8(c)(6) – Each tank is inspected monthly by trained facility personnel. The inspections consist of a visual check for any evidence of leaks, distortion, corrosion, or settlement. The inspections cover the entire circumference of the tank or length of an aboveground line segment from a distance close enough to see whether or not product has seeped or flowed from the tank, including a check of all telltale pipes or similar leak detection systems.

The facility has developed a hybrid visual inspection program that is used in combination with integrity testing based on the requirements of Steel Tank Institute Standard SP001. Monthly visual inspections are completed during the facility's operating season (approximately March through October). During the winter months (November through February), the facility removes all liquid oil products from the tanks and reservoirs and allows remaining asphalt cement to cool and harden in its respective tanks. Given these conditions, monthly visual inspections are not completed during winter months. This site-specific inspection program provides environmental equivalence to the industry standard because it removes the potential for leaks and spills during the time when inspections are not performed. In some cases, the facility may elect to continue storing oil throughout the winter, in which case monthly inspections would continue, as prescribed by the industry standard. Additional detail is provided in Section 5.3.



SPILL PREVENTION, CONTROL, AND COUNTERMEASURE PLAN
MINNESOTA PAVING & MATERIALS - PLANT 601 - SMALL PORTABLE ASPHALT PLANT
Oil Storage and Containment
May 2022

Bulk storage containers (ASTs) will also be tested for integrity periodically according to industry standards (e.g., Steel Tank Institute). All testing will be completed by certified inspectors in accordance with applicable standards. Internal and external inspections of field erected aboveground storage tanks are conducted according to information in Section 5.3 below.

112.8(c)(7) – One closed-loop heating oil system is in use at the facility. The heating system is used to keep asphalt cement fluid. The system is filled with thermal oil and consists of a heater, two pumps, and piping network. The oil is heated and circulated through the piping which runs inside the two asphalt cement tanks to keep the product fluid. If the heating oil piping failed, asphalt cement could enter the heating system, but it is a closed loop and does not discharge.

112.8(c)(8) – Overfill prevention for the tanks at the plant is identified below.

- 30,000-gallon Asphalt Cement Tank: Manual check through top of tank
- 22,000-gallon Asphalt Cement Tank: Manual check through top of tank
- 20,000-gallon Burner Fuel Tank: Manual check through top of tank
- 1,000-gallon Diesel Fuel Tank: Visual level gauge
- 400-gallon Diesel Fuel Tank (Heat Transfer System Pump): Manual check via top of tank
- 250-gallon Diesel Fuel Tank (Heat Transfer System Pump): Manual check via top of tank

If overfilling occurs at any of these tanks, material would spill onto the ground within the aggregate pit. If material reaches the ground, it would be contained within the aggregate pit until cleanup could occur.

112.8(c)(9) – There are no wastewater treatment facilities associated with this plant.

112.8(c)(10) – Oil leaks which result in a loss of oil from tank seams, gaskets, rivets, and bolts are promptly corrected.

112.8(c)(11) – Portable oil storage at this facility includes one tote of drag slat cleaner. Facility drainage, active measures, and spill response equipment are currently used to provide containment and prevent a discharge. During storage, totes are labeled and properly sealed. The containers are inspected monthly to verify proper storage conditions. Other portable and mobile oil storage containers are typically less than 55 gallons.

4.2 Oil Filled Operational Equipment

A heat transfer system is used in conjunction with the asphalt plant's tanks. The system is used to help heat the tanks and piping, so the asphalt product stays fluid and movable. The heat transfer system consists of a 250-gallon heating tank/reservoir of thermal oil. The system is a closed loop system with heating coils that provide heat to the two asphalt cement tanks.

The heat transfer system uses a diesel pump for each AC tank. The pump for the 30,000-gallon AC tank has a 400-gallon diesel fuel reservoir. The pump for the 22,000-gallon AC tank has a 250-gallon diesel fuel reservoir.



SPILL PREVENTION, CONTROL, AND COUNTERMEASURE PLAN
MINNESOTA PAVING & MATERIALS - PLANT 601 - SMALL PORTABLE ASPHALT PLANT
Oil Storage and Containment
May 2022

Any potential leakage caused by the reservoirs or heating coils would be contained within the site's gravel pit. MPM personnel would use on-site spill response materials as needed to prevent a release to waters of the State.

There is no other regulated oil filled operational equipment on-site (containing oil ≥ 55 gallons).

4.3 Portable storage

Portable oil storage at this facility includes one tote of drag slat cleaner. The containers are DOT approved and are located at the facility as shown on Figure 2. Portable oil storage containers are located to prevent a discharge. There is no other portable oil storage in quantities equal to or greater than 55 gallons on-site.

4.4 Spill Potential

40 CFR 112.7(b)

MPM provides secondary containment and containment/diversionary structures for the bulk storage containers used for oil storage. The plant will typically be located within an aggregate pit, which is graded in such a way to prevent any runoff or discharges from leaving the vicinity of the plant. Therefore, tank failures would not be expected to reach navigable waterways.

The most reasonable potential for a spill event occurrence would be due to operational or equipment failure during oil product transfers such as tank overflow, hose rupture or pump leakage. If a spill were to occur during transfer, the spill event would most likely be small and could be contained within close proximity of the spill. It is unlikely that a spill could migrate off-site. Plant personnel are present during the oil transfer process and have immediate access to equipment shut off devices to stop oil transfer. Potential spill scenarios are described in Table 4.1.

Table 4.1 Potential Spill

Potential Event	Spill Description/Direction	Volume Released	Spill Rate
30,000-Gallon Asphalt Cement Tank			
Tank failure, tank truck leak, hose leak, pump failure	Asphalt Cement will collect in a small area around the plant and be contained within the gravel pit. Asphalt cement eventually solidifies at ambient temperatures. Heavy equipment will be used to create earthen berms and collect any spilled material, which will be used as feedstock for the plant.	1-30,000 gallons	Gradual to instantaneous



SPILL PREVENTION, CONTROL, AND COUNTERMEASURE PLAN
MINNESOTA PAVING & MATERIALS - PLANT 601 - SMALL PORTABLE ASPHALT PLANT
Oil Storage and Containment
May 2022

Potential Event	Spill Description/Direction	Volume Released	Spill Rate
22,000-Gallon Asphalt Cement Tank			
Tank failure, tank truck leak, hose leak, pump failure	Asphalt Cement will be contained within the double wall tank. If secondary containment fails, material will collect in a small area around the plant and be contained within the gravel pit. Asphalt cement eventually solidifies at ambient temperatures. Heavy equipment will be used to create earthen berms and collect any spilled material, which will be used as feedstock for the plant.	1-22,000 gallons	Gradual to instantaneous
20,000-Gallon Burner Fuel Tank			
Tank failure	Material will pool in the lined secondary containment berm. If containment fails, material will impact aggregate material but remain within the gravel pit until clean up can occur.	1-20,000 gallons	Gradual to instantaneous
Generator Diesel Fuel Tank			
Tank failure	A double wall tank provides secondary containment. If secondary containment fails, material will pool within the aggregate pit and be cleaned up using spill response equipment.	1-1,000 gallons	Gradual to instantaneous
Heating Oil System and Heating Oil Diesel Pumps			
Tank failure	Material will pool on-site within the aggregate pit and be cleaned up using spill response equipment.	1-400 gallons	Gradual to instantaneous

4.5 Containment and Diversionary Structures

40 CFR 112.7(c) and 112.8(c)(2)

MPM provides secondary containment for all of the bulk storage tanks located onsite. This is a mobile plant that frequently relocates to several different sites throughout the year. The typical duration of plant operations at any given location is approximately 30 days. Given the type of plant and operations, site conditions may vary from location to location. Therefore, a variety of secondary containment measures will be evaluated and implemented to satisfy containment requirements at individual sites. Considerations include:

- **Reasonable Expectations of Discharge and Plant Containment**

The SPCC rule applies to facilities that, due to their location, can reasonably be expected to discharge oil. This determination is based on the geographical and locational aspects of the plant.



The portable asphalt plant is typically located within an aggregate pit that will prevent a discharge/runoff of oil to surface waters. Facilities do not contain conduits such as sewer lines, catch basins, ditches or buried utilities that could facilitate transport off-site.

- **Earthen Berms**

Earthen materials will be used to construct containment berms to provide secondary containment for ASTs. The site's earthen containment systems will be designed to contain oil until cleanup occurs (sufficiently impervious). The suitability of earthen material for secondary containment will depend on the properties of the native materials available and the product stored. Compacted soils should be suitable to contain released product for cleanup prior to impacts to navigable waters. Asphalt cement is a thermoplastic material and must be heated to maintain its liquid form. It solidifies rapidly upon release to the environment. Compacted native materials will be suitable to contain this product.

- **Synthetic Liner Systems**

In situations where native soils may not be appropriate to contain refined oil products until cleanup occurs and there is reasonable expectation that released product could discharge from the site, the plant will use synthetic liner systems to provide secondary containment (e.g., burner fuel bulk storage tank). Earthen berms will be constructed, and the liner set within the structure. Additional earthen materials will be used to cover the liner and prevent liner damage.

- **Double Wall Tanks**

Double walled tanks satisfy secondary containment requirements for bulk storage of oil/fuel products. MPM will continue to evaluate tank upgrades/replacement to double walled systems where practical to provide secondary containment for portable asphalt plant bulk storage tanks. Currently the generator diesel fuel tank and 22,000-gallon asphalt cement tank are double wall system.

Tote and drum containment is provided by a combination of facility drainage features, spill equipment (sorbents, booms, floor dry, shovels, etc.) and active response. CRH plans to improve secondary containment for heating oil diesel tanks and totes to include spill pallets or other containment feature.

4.6 Facility Drainage

40 CFR 112.8(b)

4.6.1 General Drainage and Site Stormwater Structures

The area where the plant is located is generally graded to ensure that any stormwater that falls within the site will be contained and infiltrate into the ground. There are generally no discharges to navigable waters from asphalt plant operational areas.

4.6.2 Stormwater Inspection and Disposal

Stormwater accumulated in secondary containment structures will be inspected for the presence of oil products prior to discharge. Visibly clean water is discharged to the ground surface and facility drainage



SPILL PREVENTION, CONTROL, AND COUNTERMEASURE PLAN
MINNESOTA PAVING & MATERIALS - PLANT 601 - SMALL PORTABLE ASPHALT PLANT
Oil Storage and Containment
May 2022

system. All stormwater-related discharges from the containment areas will follow guidelines listed in the SWPPP which is maintained in the Office. The authorized individual will be trained in how to dispose of storm water and actions to be taken in case of overflow, rupture or leaking.

112.8(b)(2) – Secondary containment dikes are not equipped with manually controlled valves for draining accumulated stormwater.



5.0 Operations and Procedures

5.1 Transfer Operations, Pumping, and In-Plant Processes

40 CFR 112.8(d)

Oil products arrive at and leave the facility by truck transport. The asphalt cement tanks, burner fuel tank and the diesel fuel tank are filled by tanker truck. All other oil products are delivered in portable containers. These products are transferred into operating equipment manually, as needed. Tank filling and oil product transfers are continuously monitored to reduce the potential for overfill or other leakage. Following each transfer operation all pumps are turned off and equipment secured. All oil product transfer is performed in accordance with the provisions of this SPCC Plan. Specific transfer procedures are identified Appendix A.

Asphalt Cement – Asphalt cement is transferred from the tanks to the hot mix drum via 4" flexible hose. The hose is reinforced with a wire mesh.

Burner Fuel – Fuel is transferred from the bulk storage tank to the burner via a 4" flexible hose. The hose is reinforced with a wire mesh.

Generator Diesel Fuel – Fuel is transferred from the bulk storage tank to the generator via a short run of steel piping.

Heat Transfer Oil – Oil is contained within a closed loop system. Oil is heated and then pumped through 1 ½" steel coils that circulate around the Asphalt cement tanks. Transfers typically do not occur into or out of the system during plant operations.

40 CFR 112.8(d)(1)

The plant does not use completely buried piping for any of the SPCC-subject containers or equipment. Therefore, there is no buried piping that requires protective wrapping / coating or cathodic protection (required if installed after August 2002).

Also, there are no transfers to/from an exempt UST across a loading/unloading rack or other aboveground transfer equipment. Therefore, there are no UST transfer area containment requirements.

40 CFR 112.8(d)(2)

All terminal connections for piping at transfer points are currently in use. If in the future piping is placed out of service, the terminal connections will be capped or blank-flanged as required.

40 CFR 112.8(d)(3)

Supports for aboveground piping are properly designed to minimize abrasion and corrosion and allow for expansion and contraction.



40 CFR 112.8(d)(4)

The plant will incorporate visual inspection of the valves, piping and appurtenances into the visual inspection requirements for the plant. These inspections will be completed on a monthly basis (seasonally, according to the hybrid inspection program) to detect any possible leaks or potential problems. **The inspection logs are maintained on-site. An example is included in Appendix B.**

40 CFR 112.8(d)(5)

Aboveground piping and oil transfer operations at this plant do not occur in areas where transfer activities will be interrupted or crossed by vehicle traffic. The aboveground piping at the plant is protected from the flow of traffic.

5.2 Tank Truck Loading/Unloading

40 CFR 112.7(h)

Operators of asphalt cement/fuel trucks must be licensed in accordance with state and federal regulations and be properly trained by the distributor in the use of the equipment. Specific information on the quantity of oil to be transferred will be provided to the truck operator by plant personnel. A plant representative and/or the tanker truck operator are required to stay with the truck during unloading.

Loading / unloading rack means a fixed structure (such as a platform or gangway) necessary for loading or unloading a tank truck or rail car and includes a loading or unloading arm. A loading / unloading arm is typically a movable piping assembly that includes fixed piping or a combination of fixed and flexible piping typically with at least one swivel joint that allows movement of the piping to transfer product to/from a tank truck or rail car. A transfer rack may include any combination of piping assemblages, valves, pumps, shut off devices, overfill sensors, or personnel safety devices.

Based upon information from the USEPA's guidance, **the plant does not operate any transfer racks.** Loading/unloading areas using a single hose and connection or include moving portable containers are not considered "racks". Areas where oil is transferred but no loading or unloading rack is present are subject to general secondary containment requirements in 40 CFR 112.7(c). Secondary containment size should be based on the magnitude of a most likely discharge, taking into consideration the specific features of the plant and operation. Active secondary containment (manual response) can help satisfy this requirement. USEPA recommends that a determination of adequate secondary containment consider:

- The reasonably expected sources and causes of a discharge;
- The reasonably expected maximum rate of discharge;
- The ability to detect and react to the discharge; and/or
- The reasonably expected duration of the discharge.



Table 5.1 Reasonably Expected Discharge Scenario

Scenario:
A tanker truck is transferring product into the Burner Fuel Tank with an attendant present throughout the operation.
Details:
The truck is pumping at a rate of 100 gallons per minute.
The reasonably expected source and cause of a discharge is a ruptured flexible transfer hose.
A pump shutoff switch and valve are present and accessible to the attendant.
An evaluation determines that the discharge will not impede the attendant's access to the shutoff valve and that he can safely shut down transfer operations within 30 seconds of the hose rupture.
Calculations:
The maximum reasonably expected discharge is calculated to be: 50 gallons
Conclusion:
Secondary containment volume for a most likely discharge event should be at least 50 gallons. This is satisfied by a combination of impermeable surfaces, spill response equipment (absorbent booms/pads) and an immediate active/manual response.

- Product is transferred into tanks from a bulk tanker truck using flexible hose and manually controlled nozzle. **Transfer procedures are identified in Appendix A.** Following each transfer, all pumps are turned off and equipment secured.
- Prior to departure of any tank truck, all outlets of such vehicles will be closely examined for leakage, and if necessary, tightened, adjusted, or replaced by the transporter to prevent liquid leakage while in transit.
- Warning signs and wheel chocks will be used to prevent premature vehicle departure.
- Nighttime oil transfers and transfer during precipitation events will be avoided, if possible. However, adequate facility lighting is provided in the event of a nighttime transfer.
- Spill response materials are available to contain a spill in tank transfer areas and prevent spills from leaving the site. In addition, a quick response and control of a spill shall be implemented.

5.3 Inspections and Integrity Testing

40 CFR 112.7(e)

Hybrid Inspection Program

In accordance with EPA SPCC Bulk Storage Containers Inspection Guidance, this facility has established a hybrid inspection program. The hybrid inspection program has been determined to be environmentally equivalent by the certifying PE.

Visual tank inspections are completed on a monthly basis. This facility deviates from industry standard by temporarily stopping monthly visual tank inspections during the winter months (November through February). The reason for the deviation from the industry standard is based on the seasonal nature of



SPILL PREVENTION, CONTROL, AND COUNTERMEASURE PLAN
MINNESOTA PAVING & MATERIALS - PLANT 601 - SMALL PORTABLE ASPHALT PLANT
Operations and Procedures
May 2022

asphalt production. This facility ceases operations during the winter months because cold temperatures influence the physical properties of the asphalt product. Most staff are laid off during the winter closure. Therefore, the plant is not consistently staffed during the winter. The facility has determined that the best operational option is to seasonally remove oil storage from the site and establish this hybrid inspection program.

This hybrid program effectively minimizes the risk of spills and leaks seasonally by requiring the following:

- All liquid oil products are removed from the facility during non-operational winter months.
- Remaining AC present in tanks is not heated (solid at ambient temperatures).
- Operational controls, heating systems, valves, and associated equipment are locked out.

If, for any reason, the facility is unable to remove the oil storage and cool the asphalt cement during the winter months, the hybrid program will not apply, and the facility will conduct monthly inspections as they would during the remainder of the year.

When monthly inspections are conducted, they are executed by trained facility personnel. Each tank and segment of aboveground piping is inspected. Records of the inspections are kept onsite. An example Inspection Form is included in Appendix B.

40 CFR 112.8(c)(6)

This section of the SPCC Rule requires that each aboveground container be tested for integrity on a regular schedule including visual inspection with another testing technique. Testing techniques may include hydrostatic testing, ultrasonic testing, or another system of non-destructive shell testing. MPM has determined, in accordance with industry standards the appropriate frequency and type of inspection and testing, which take into account container size, configuration, design, and previous inspection history.

The facility will perform integrity testing on **Shop Fabricated** bulk storage tanks based on the requirements of Steel Tank Institute Standard SP001. Requirements are summarized in Table 5-2

Table 5.2 Tank Integrity Testing Schedule

Steel Tank Institute Standard for Inspection of AST's			
<u>Shop fabricated:</u> Asphalt Cement Tanks (22,000 and 30,000-gallons)	Category 1A Tanks (5,000 to 30,000 ASTs) AST with Continuous Release Detection Method and Secondary Containment System; contains a thermoplastic that is solid at ambient temperatures.	Formal External Inspection Not required by the STI Standard for this category of tank and material (Thermoplastic Material)	Formal Internal Inspections Not required by the STI Standard for this Category of tank.



Steel Tank Institute Standard for Inspection of AST's			
<u>Shop fabricated:</u> Burner Fuel Tank (20,000-gallons)	Category 1 Tanks (5,000 to 30,000 ASTs)	Formal External Inspection Every 20 years	Formal Internal Inspections
	AST with Continuous Release Detection Method and Secondary Containment System	Tank Age/Last Inspection: Unknown Next Inspection Date: 2022 (unless tank data is located)	Not required by the STI Standard for this Category of tank.
<u>Shop fabricated:</u> Generator Diesel Fuel Tank (1,000-gallons) <u>Heating Oil Diesel Fuel Tanks</u> (400 & 250-gallons)	Category 1 Tanks (<5,000-gallons in size) AST with Continuous Release Detection Method and Secondary Containment System	Formal External Inspection Not required by the STI Standard for this Category of tank	Formal Internal Inspections Not required by the STI Standard for this Category of tank

Formal integrity tests will be performed by an inspector with the following qualifications:

- STI Certified SP001 Tank System Inspector

Following inspection by a certified tank inspection contractor, if the inspector recommends an alternate schedule based on the results, this schedule will be modified and the SPCC Plan updated as appropriate.

5.4 Security

40 CFR 112.7 (g)

All master flow and drain valves, and any other valves permitting direct outward flow of a container's contents to the surface, are secured in the closed position when in non-operating or standby status. All starter controls on oil pumps, where applicable, are locked in the "off" position and located in an area accessible only to authorized personnel. Loading/unloading connections of oil piping is secured by capping or other acceptable means when not in service. Adequate lighting is provided at the facility to assist in the discovery of discharges and prevent discharges occurring through acts of vandalism.

5.5 Training Procedure

40 CFR 112.7 (f)

Since an SPCC Plan depends on its implementation, MPM will provide baseline and annual refresher training to its personnel who are involved in the handling, storage, or use of oil products. SPCC training may be completed in conjunction with other training programs such as emergency response training and/or HAZWOPER training. Records of these briefings and spill prevention training will be documented



SPILL PREVENTION, CONTROL, AND COUNTERMEASURE PLAN
MINNESOTA PAVING & MATERIALS - PLANT 601 - SMALL PORTABLE ASPHALT PLANT
Operations and Procedures
May 2022

and retained by human resources or the environmental department. An example form to record these briefings and trainings is included in **Appendix C**.

40 CFR 112.7(f)(1)

All personnel with oil handling responsibilities will be provided training in the following areas:

- Operation and maintenance of equipment to prevent discharges;
- Discharge procedure protocols;
- Applicable pollution control laws, rules, and regulations;
- General plant operations, and
- The contents of this SPCC Plan.

40 CFR 112.7(f)(2)

In accordance with 40 CFR 112.7(f)(2), the following person is accountable for spill prevention training: Environmental
Name: -Mike Callahan- Title: Environmental Manager department - LVW
2022/06/27

40 CFR 112.7(f)(3)

Yearly spill prevention briefings will be provided by management for operations personnel to ensure adequate understanding of the Spill Prevention Control and Countermeasure Plan. These briefings will highlight any past spill events or failures and recently developed precautionary measures. Training will be held on oil spill prevention, containment, and retrieval methods. Records of these briefings and spill prevention training will be kept on file. Instructions and phone numbers regarding the reporting of a spill to the National Response Center and the state Duty Officer are listed in Section 6 of this Plan.



6.0 Spill Response Plan

40 CFR 112.7(a)

6.1 Oil Spill Control Plan

6.1.1 Introduction

Prompt response to a spill is the best means of minimizing any impact to the environment, preventing a discharge from reaching waters of the United States.

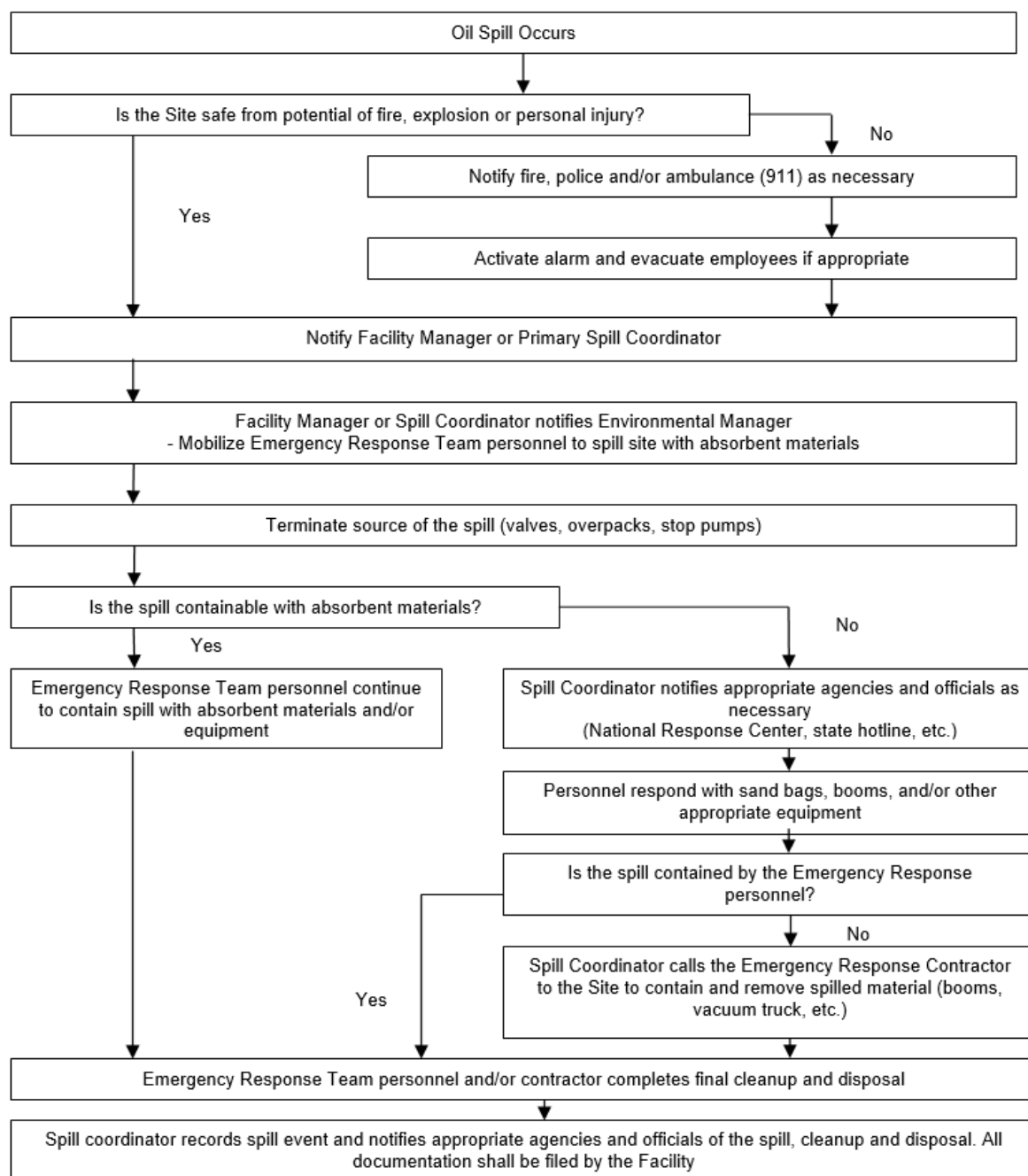
In the case of a petroleum product spill, appropriate and timely measures will be taken to prevent the migration of spilled oil products and protect the health and safety of the public. The key steps of the spill control plan are presented in Section 6.1.2. The plan identifies who contains the spill and when outside sources (such as police, fire, or emergency response personnel) are needed to control and clean up the petroleum product spill. In the event of a spill or release, incident information and response actions will be recorded in accordance with MPM requirements. In the event of a spill or release, incident information and response actions will be recorded on the Spill Report Form (**Appendix D**).

6.1.2 Oil Spill Plan

Once a petroleum product spill is detected at the plant, the detector will quickly assess the immediate area with regard to its safety and if there is a potential for fire, explosion, or personal injury. In the event there is a fire, explosion, or personal injury, notify the Environmental Manager and inform them of the exact nature of the problem. They will notify local emergency units and take appropriate action as required. The detector will also notify their immediate supervisor. Maintenance forces will be mobilized with spill containment equipment. The spill area will be isolated, and evacuation initiated as needed by the Environmental Manager. Specific steps are identified in the flow chart below.



SPILL PREVENTION, CONTROL, AND COUNTERMEASURE PLAN
MINNESOTA PAVING & MATERIALS - PLANT 601 - SMALL PORTABLE ASPHALT PLANT
 Spill Response Plan
 May 2022



6.2 Emergency Contact List

Contacts updated 2022/06/27 by LVW

Company Contacts		Primary Number
1. Jim Wollack – Plant Operator – Primary Spill Coordinator	Cell (651) 783-2727	651-783-2727
2. Chris Miller – Materials Manager – Alternate Spill Coordinator	Cell (320) 260-6777	612-759-6768
3. Greg Tishbirek – Plant Superintendent – Alternate Spill Coordinator	Cell (763) 400-2041	507-380-7875
4. Brian Knutson – Safety Director – Alternate Spill Coordinator	Cell (507) 597-8374	515-339-5485
5. Mike Callahan – Environmental Manager – Alternate Spill Coordinator	Cell (612) 490-4097	
Cleanup Contractors		
1. West Central Environmental	(888) 923-2778	
Federal, State, and Local Agencies		
1. National Response Center	(800)-422-0798	
2. Minnesota Duty Officer – 24 hr. Spill Hotline	(800) 424-8802	
3. MN Pollution Control Agency	800-657-3864	
4. Local Emergency Planning Committee	911	
5. Fire Department	911	
6. Police Department	911	

Zack Watkins
 Jack Fraune
 Chad Phillips

Lindsay Van Woert

6.3 Spill Containment Equipment Locations

Spill containment equipment is located in the maintenance trailer near the asphalt plant. Spill equipment includes oil absorbent socks and pads within a 30-gallon container. Loaders on-site can be used to construct a temporary dike if a spill occurs and ditches can be blocked in the event of a spill or release.

A Spill Equipment inventory is completed periodically during monthly site/tank inspections. Materials will be replaced as needed to maintain an adequate supply of absorbents and related spill equipment supplies. Following a larger spill, spill control equipment will be ordered and restocked as part of the cleanup and disposal process.

6.4 Spill Cleanup and Disposal

The Environmental Manager will define the actual cleanup responsibilities once the spill is contained and its magnitude determined. Once a spill is contained, equipment will be used to recover the pooled product. Used absorbents will be containerized and disposed of properly. Contaminated soils/debris will be managed in a manner that complies with EPA and State of Minnesota requirements for disposal of soils from petroleum spills. A spill report form is located in **Appendix D**.

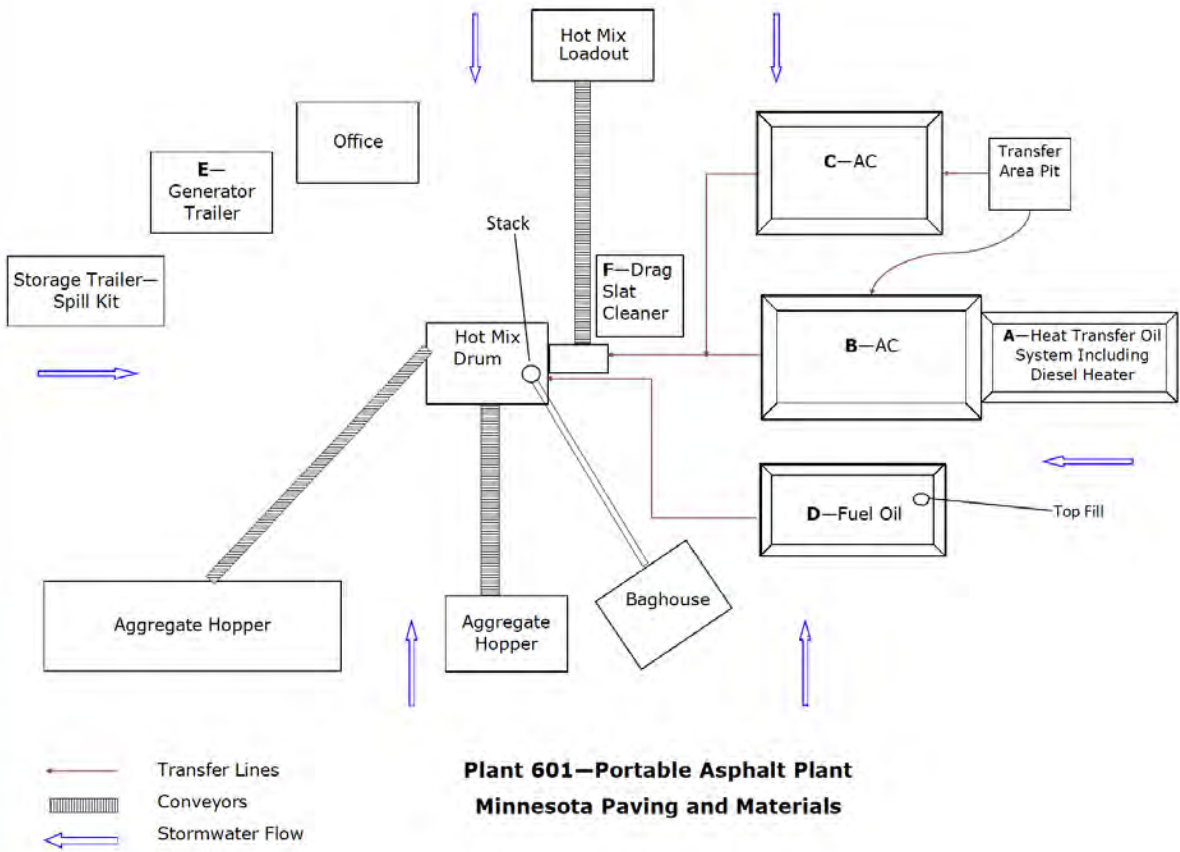
6.5 Spill Reporting and Notification

See Sections 2.2 and 2.3 for USEPA and the State of Minnesota reporting and notification requirements.



FIGURES

- 1. Site Location Map (to be updated for each site)**
- 2. Site Plan**





22,000-gallon
asphalt cement
250-gallon
diesel fuel

30,000-gallon
asphalt cement
250-gallon
diesel fuel/heat
transfer oil

300-gallon tote or 2
55-gallon drums of
Drag Slat Cleaner

1,000-gallon diesel tank

20,000-gallon burner fuel Oil
and synthetic liner/berm
containment
400-gallon diesel fuel

APPENDIX A

Truck Loading and Unloading Procedure

TRUCK LOADING AND UNLOADING PROCEDURE

MPM – 601 Portable Asphalt Plant SPCC Plan

LOADING AND UNLOADING

The following procedures have been developed and will be followed in order to reduce the potential for hazards during truck loading/unloading operations:

- MPM will contact the vendors and order product.
- The Vendor shall arrive at the site during working hours and check in with MPM to gain access to the tanks.
- A MPM and/or Vendor representative will be present during the entire loading and unloading operation.
- Secure the truck for loading/unloading in a location that has easy access to hose connections. Set brakes.
- Measure the volume of product in the tank to ensure there is adequate capacity to receive the transfer.
- Make hose connections between storage tank fill line and tanker truck in proper sequence. Double check to ensure all connections are tight.
- Engage pump and move liquid from tanker truck. Check for leaks along hose, piping and at connections. If a leak is noted, stop the operation immediately and make repairs or arrange for repairs.
- Close valves to prevent spillage when disconnecting. Make sure all transfer lines are disconnected before departing.
- Cap the pipe and relock.
- Prior to departure of the tanker, the lowermost drain and all outlets of the tank are inspected for leakage and, if necessary, tightened, adjusted, or replaced to prevent liquid leakage in transit.
- Spill response materials are available to contain a spill in tank transfer areas. In addition, a quick response and control of a spill shall be implemented.

APPENDIX B

SPCC Inspection Logs

Stormwater and SPCC Monthly Inspection Form

Name of Plant or Pit:

Rain Event ☐ Yes ☐ No
(One per year)

Snow Melt ☐ Yes ☐ No
(One per year)

DIRECTIONS: Operator must inspect each item on the list and **if defective** put a ✓ mark in space by item.
If defective, explain in space provided below.

Shift	ITEM	Shift	ITEM
	Aboveground Storage Tanks, Plastic Totes, Drums		Site/Housekeeping
	Container labeled properly		Fence/gate intact
	Container surface free from any signs of leakage		Gates locked when not in attendance
	Container free from damage, shell distortions, or deterioration		Lights working properly
	Bolts, rivets, or seams free from damage or leaking		“Out of Service” tanks disconnected and marked
	Container paint in good condition		“Used Oil” not “Waste Oil”
	Container supports in good condition		SPCC on-site (1,320 gallons of capacity or more)
	Container foundation free from erosion or settling		Spill kit on-site and stocked
	If equipped, level gauges and overfill alarms in good working order		
	Container vents not obstructed		Stormwater
	If equipped with overfill test button, activate to confirm operational		Stormwater contained on-site or discharge within permit limits
	Check interstitial space on double walled tanks		No spills or leaks in parking or plant areas
			Plant equipment not leaking or damaged
	Secondary Containment (if not double walled)		No track-out from property onto access road
	Containment walls are intact		Ditches/gutters clean of bottles, trash, litter, & sediment
	No standing water in containment area		Sediment ponds are functional
	No visible oil sheen after rain event		All chemical or petroleum containers are properly marked and undamaged
	Valves in closed position, locked		Stormwater Pollution Prevention Plan (SWPPP) on-site, signed, and accurate
	Drainage log completed		BMPs operating properly
***Notify an Environmental Manager if tanks/drums are removed or added to the site.			

☐ **No Defects Found**

Notes: _____

ATTN: Failure to notes deficiencies or falsified information on this report is grounds for disciplinary action.

Operator Signature: _____

Date: _____

This Record Shall Be Kept for a Period of Five Years and be Provided to an Inspector Upon Request.

Secondary Containment Drainage Log (If there was no drainage performed please note)

[illegible]

Spill Prevention Control and Countermeasure Annual Inspection Form

This inspection form must be completed each year. For items marked “N”, repair or adjustment may be needed. Complete a column for each container listed in the site’s SPCC Plan. Add additional pages as needed.

Y – Yes
NA – Not Applicable
N – No (*Repair or adjustment may be required*)
C – See ‘Comment Section’ below

Petroleum Containers (55 gal or larger)	Container	Container	Container	Container	Container
Container ID (<i>or location</i>)					
Container Type (<i>D = drum, T = tote, or A = aboveground tank</i>)					
Container capacity (<i>gallons</i>)					
Container properly labeled for contents					
Safety Labels (<i>No Smoking, Hot, Flammable, etc</i>)					
Container is free from damage, corrosion, or leaks					
Container coating (paint) in good condition (if applicable)					
Container supports in good condition					
All sides of container are visible for inspection					
Container foundation free from erosion or settling					
Liquid level gauges and overfill alarms in working order					
Emergency shut-off switch (ASTs) available and functional					
Container vents are unobstructed					
Container lid(s), bung(s), or valves(s) closed when not in use					
Container protected from traffic (<i>posts, barrier blocks, etc</i>)					
Container can be secured from tampering when not in use					
Piping is free from damage, corrosion, or leaks					
Container and piping area free from signs of leaks or spills					
Container is double walled					
Secondary Containment (<i>if applicable</i>)					
Containment type (<i>R = concrete, M = metal, O = other</i>)					
Containment walls are intact (<i>leak free</i>)					
Standing water in containment area (<i>inches – enter zero if empty</i>)					
No visible oil sheen or stain in containment					
No visible oil sheen or stain outside containment					
Containment drain valve(s) in closed position and locked					
Containment drainage log completed					
Site/Housekeeping					
Fence/gate intact					
Gates locked when not in attendance					
Security lights working properly					
“Out of Service” containers disconnected and marked					
Spill kit on-site and stocked					

Comments:

Inspector: _____

Site: _____

Signature: _____

Date: _____

APPENDIX C

Record of Spill Prevention Training

(Example Form – Completed Copies Maintained by Human Resources and Environmental Department)

RECORD OF SPILL PREVENTION TRAINING
MPM – 601 Portable Asphalt Plant
SPCC Plan

Instructions: To ensure adequate understanding of the SPCC plan for this plant, training will be scheduled and conducted by the owner or operators for oil handling personnel on an annual basis. At a minimum, training will cover operation and maintenance of equipment to prevent discharges, discharge procedure protocols, applicable pollution control laws, rules and regulations, general facility operations and the contents of the SPCC Plan. During this training there will be an opportunity for facility operators and other personnel to share recommendations concerning health, safety, and environmental issues encountered during operation of the facility.

Date: _____

Attendees:	TITLE	SIGNATURE	PRINT NAME
	_____	_____	_____
	_____	_____	_____
	_____	_____	_____
	_____	_____	_____
	_____	_____	_____
	_____	_____	_____
	_____	_____	_____
	_____	_____	_____
	_____	_____	_____

AGENDA TOPICS:

Subjects and Issues: _____

Recommendations
and Suggestions: _____

APPENDIX D

Spill Report Form

INCIDENT REPORT

MPM – 601 Portable Asphalt Plant

Instructions: Fill in blanks. This form is to be filled out and distributed as soon as practical after an oil release is discovered and initial response to the release has been initiated.

Exact facility address will vary due to varied relocation of asphalt plant. For this reason, Main Office is given as a contact.

Minnesota Paving and Materials
1905 3rd Avenue
Mankato, MN 55100
(763) 428-8886

Date of Release:	Time of Release:
Type of Material Spilled:	Quantity Spilled:
Exact Location of Spill:	
Waterway Potentially Impacted:	
Estimated Quantity to Waterway:	
Source and Cause of Release:	
Extent of Actual and Potential Water Pollution:	
Damages or Injuries Caused by Spill:	
Affected Medium: ☐ Air ☐ Water ☐ Soil	
Steps Being Taken To Contain/Cleanup Spill:	
Steps Being Taken to Minimize Impacts:	
Evacuation Was/Is Necessary: ☐ No ☐ Yes Number Impacted:	
Regulatory Agencies / Other Entities Contacted:	





**Spill Prevention, Control, and
Countermeasure Plan**

Minnesota Paving & Materials

**New Ulm Quartzite Quarry (NUQQ)
45755 571st Lane
New Ulm, Minnesota**

File No. 227703795

February 2023

Prepared for:



Minnesota Paving and Materials

**14475 Quiram Drive
Rogers, Minnesota 55374**

Prepared by:

Stantec Consulting Services Inc.

**2080 Wooddale Drive
Suite 100
Woodbury, MN 55125**





SPCC Plan Fact Sheet New Ulm Quartzite Quarry

Applicability:

The United States Environmental Protection Agency (USEPA) requires owners of facilities to develop and implement a Spill Prevention, Control and Countermeasure (SPCC) Plan if the capacity of any aboveground storage tank (AST) or the total aboveground aggregate storage capacity is 1,320 gallons.

This SPCC Plan is required because the facility stores oil products (petroleum, vegetable and/or animal fat) in quantities greater than 1,320 gallons.

Table FS-1: Planning Level Eligibility Determination

<u>Tier I Criteria</u>	
Qualify for SPCC Template (Appendix G of SPCC Rule) and self-certification if facility can answer no to all questions below:	
• Is there >10,000 gallons in aggregate aboveground oil storage capacity	Yes
• Is the maximum individual aboveground oil storage container >5,000 gallons	Yes
• Determine secondary containment to be impracticable	No
• Use environmentally equivalent measures	No
• There have been discharges to navigable waters in the past 3 years (single discharge >1,000 gal. or two discharges >42 gal. in same year)	No
MPM New Ulm Quartzite Quarry does not qualify as a Tier I facility	
MPM New Ulm Quartzite Quarry is required to prepare a PE-certified Plan in accordance with all applicable requirements of 112.7 and consistent with the CRH facility SPCC Plan format.	

Total Facility Oil Storage: Approximately 14,870 gallons. Storage locations are shown on Figure 2.

Table FS-2: Oil Related Materials (Regulated Under SPCC Rule)

<u>Material</u>	<u>Tank Capacity (gallons)</u>	<u>Location</u>	<u>Secondary Containment</u>
Bulk Oil Storage Containers			
Diesel AST	9,000	Northeast of Shop	Double Walled
Diesel AST	525	Northeast of Shop	Double Walled



SPILL PREVENTION, CONTROL, AND COUNTERMEASURE PLAN
MINNESOTA PAVING & MATERIALS – NEW ULM QUARTZITE QUARRY
 SPCC Plan Fact Sheet
 February 2023



SPCC Plan Fact Sheet
New Ulm Quartzite Quarry

<u>Material</u>	<u>Tank Capacity (gallons)</u>	<u>Location</u>	<u>Secondary Containment</u>
Gasoline AST	525	Northeast of Shop	Double Walled
Used Oil AST	525	Outside south wall of Shop	Double Walled
Transmission Fluid ASTs	2 Tanks @ 200 gal. each	Shop	Shop Holding Tank
Hydraulic Fluid AST	200	Shop	Shop Holding Tank
Motor Oil AST	200	Shop	Shop Holding Tank
Diesel AST (Mobile)	525	Winter: Northeast of Shop Summer: Quarry	Double Walled
Portable Oil Storage			
Bearing Grease Drums	2 Drums @ 55 gal. each	Shop	Shop Holding Tank
Transmission Fluid Drum	55	Warehouse	Spill Pallet
Bearing Grease Drum	55	Warehouse	Spill Pallet
Gear Oil Drums	10 Drums @ 55 gal. each	Warehouse	Spill Pallets
Engine Oil Drums	10 Drums @ 55 gal. each	Warehouse	Spill Pallets
Hydraulic Fluid Drums	30 Drums @ 55 gal. each	Warehouse	Spill Pallets
Non-SPCC Regulated			
Mineral Oil Transformers (Utility Owned)	5 @ > 55 gal. each (Utility Owned)	Throughout Property	Facility Containment (Quarry, Spill Kit, Active Response)





SPCC Plan Fact Sheet New Ulm Quartzite Quarry

Table FS-3 SPCC Plan Inspection, Procedure, and Response Information		
Plan Location:	On-Site Office	
SPCC Plan Review:	Every 5 years full plan review (Professional Engineer re-certification as necessary).	
	Within 6 months of major facility changes (changes affecting potential for oil spill/release at facility).	
Inspections:	Monthly/Annual: Per SPCC Rule, complete monthly inspections of all oil containing tanks, oil containing equipment and associated containment and transfer areas. Additionally, annual inspections are conducted to further minimize the chance of spill/leaks. See Appendix A for inspection form examples.	
	Tank Integrity Testing: Shop Fabricated ASTs >5,000 gal. (See Section 5.3 for additional information).	
Training:	Annually for every individual that handles oil products. See Section 5.5 for additional information. Training documentation is maintained by the corporate Human Resources department.	
Transfer Operations:	A company representative and/or tank truck operator must be present during all loading and unloading operations.	
	Prior to transfer	1. Visually check all hoses for leaks and wet spots. 2. Verify that sufficient volume is available in the receiving tank. 3. Secure the tanker vehicle with wheel chocks and interlocks. 4. Ensure the vehicle's parking brakes are set. 5. Verify proper alignment of the valves and proper functioning of the pumping system. 6. Inspect the lower most drain and all outlets.
	During transfer	7. Attach hoses and operate pumps and valves. 8. Driver must stay with the vehicle at all times during loading. 9. Periodically inspect all systems, hoses, and connections. 10. When loading, keep internal and external valves on the receiving tank open along with pressure relief valves. 11. Monitor the liquid level in the receiving tank to prevent overflow. 12. Monitor flow meters to determine rate of flow. 13. When topping off the tank, reduce flow to prevent overflow.





SPCC Plan Fact Sheet New Ulm Quartzite Quarry

Table FS-3 SPCC Plan Inspection, Procedure, and Response Information		
	After transfer	14. Make sure transfer operation is completed. 15. Close all tank and loading valves before disconnecting. 16. Securely close all vehicle internal, external, and dome cover valves before disconnecting. 17. Secure all hatches 18. Make sure the hoses are drained to remove the remaining oil before moving them away from the connection. Use a drip pan. 19. Cap the end of the hose and other connecting devices before moving them to prevent uncontrolled leakage. 20. Remove wheel chocks and interlocks. 21. Inspect the lowermost drain and all outlets on the tank truck prior to departure. In necessary, tighten, adjust, or replace caps, valves, or other equipment to prevent oil leaking while in transit.
Security:	- All oil storage and handling equipment currently in use at the site is located inside an area secured by fencing or other perimeter control (geography of quarry) restricting public access. - Buildings are locked to prevent unauthorized access when the facility is not operating. Breakers are shut off after-hours so that pumps at outdoor ASTs cannot operate. - All master flow valves, and any other valves permitting direct outward flow of a container's contents to the surface, are maintained in the closed position when in non-operating or non-standby status. - Loading/unloading connections of oil piping is secured by capping or other acceptable means when not in service. - Adequate lighting is provided at the facility to assist in the discovery of discharges and prevent discharges occurring through acts of vandalism.	
<u>Emergency Contact List:</u>	Andrew Wojtowicz – Environmental Specialist Primary Spill Coordinator	763-400-2083 (w) 507-594-8374 (c)
	Randy Mathiowetz – Manager Alternate Spill Coordinator	507-317-3584 (c)
	Mike Lang – Production Manager Alternate Spill Coordinator	712-267-6349 (c)
	New Ulm Police/Fire	911
	Minnesota Duty Officer	651-649-5451 / 800-422-0798
	National Response Center	800-424-8802
	U.S. Environmental Protection Agency – Region 5	312-353-2318





SPCC Plan Fact Sheet New Ulm Quartzite Quarry

Table FS-3 SPCC Plan Inspection, Procedure, and Response Information		
	Contractors: Bay West Inc. Rock Leaf Water Environmental	1-800-279-0456 833-762-5532
Location of Spill Materials (subject to change):	• Shop • Warehouse • Aggregate materials staged around property along with front-end loader available to build berms and diversion structures (native materials for spill response)	
Clean-up and Disposal:	Separate and stage any contaminated materials (sorbents, soils, etc.). Containerize if possible and arrange for proper disposal.	
Spill Report Form:	Document the spill/release and response activities on the Discharge / Spill Report Form (Appendix B).	
Reportable Quantities	<u>Oil</u> (Petroleum and Fuel)	<u>State of Minnesota:</u> Report spills/releases of any quantity that reaches, or has the potential to reach, any natural surface water or the environment (air, soil, storm drain). This includes any spill of five gallons or more of oil. Immediately notify the State Duty Officer. Minnesota Duty Officer 24-Hour Spill Notification Hotline 651-649-5451 or 800-422-0798.
		<u>Federal:</u> EPA has determined that discharges of oil in quantities that may be harmful to public health or the environment need to be reported to the National Response Center. This includes spills/releases/discharges that: • Violate applicable water quality standards; • Cause a film or "sheen" upon, or discoloration of the surface of the water or adjoining shorelines; or • Cause a sludge or emulsion to be deposited beneath the surface of the water or upon adjoining shorelines. National Response Center: 800-424-8802





SPCC Plan Fact Sheet New Ulm Quartzite Quarry

Spill Response Flow Chart

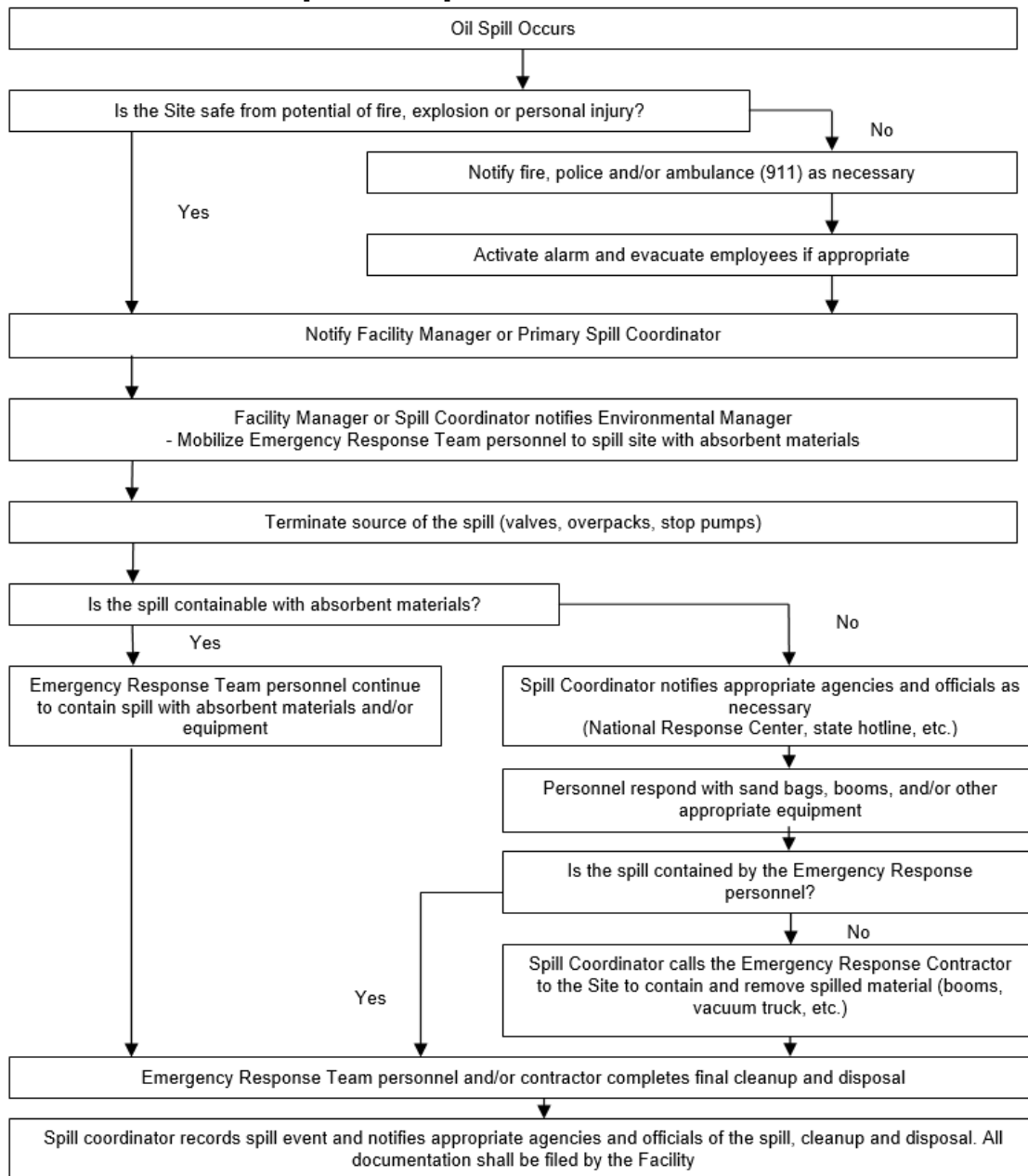


Table of Contents

CROSS REFERENCE INDEX	III
1.0 CERTIFICATION.....	1.1
1.1 PROFESSIONAL ENGINEER'S CERTIFICATION	1.1
1.2 SPCC MANAGEMENT APPROVAL	1.1
1.3 CERTIFICATION OF SUBSTANTIAL HARM.....	1.2
1.4 SPCC PLAN REVIEW AND RECERTIFICATION.....	1.3
2.0 INTRODUCTION.....	2.1
2.1 IMPRACTICABILITY DETERMINATION	2.1
2.2 SPCC PLAN AVAILABILITY	2.1
2.3 SPCC PLAN SUBMITTAL AND SPILL REPORTING	2.2
2.4 STATE REGULATION REGARDING SPILL PREVENTION & CONTAINMENT.....	2.2
3.0 FACILITY INFORMATION	3.1
3.1 FACILITY NAME	3.1
3.2 LOCATION.....	3.1
3.3 OWNER NAME, ADDRESS	3.1
3.4 CONTACT PERSON	3.1
3.5 KEY PERSONNEL	3.1
3.6 FACILITY DESCRIPTION	3.2
3.7 FIXED STORAGE	3.2
3.8 PORTABLE STORAGE.....	3.2
3.9 OIL-FILLED EQUIPMENT	3.2
3.10 TOTAL OIL STORAGE.....	3.3
4.0 OIL STORAGE AND CONTAINMENT	4.1
4.1 BULK STORAGE CONTAINERS	4.1
4.2 OIL FILLED EQUIPMENT	4.2
4.3 PORTABLE STORAGE.....	4.2
4.4 SPILL POTENTIAL.....	4.2
4.5 CONTAINMENT AND DIVERSIONARY STRUCTURES	4.4
4.6 FACILITY DRAINAGE	4.4
4.6.1 General Drainage and Site Stormwater Structures.....	4.4
4.6.2 Stormwater Inspection and Disposal	4.5
5.0 OPERATIONS AND PROCEDURES	5.1
5.1 TRANSFER OPERATIONS, PUMPING, AND IN-PLANT PROCESSES	5.1
5.2 TANK TRUCK LOADING/UNLOADING.....	5.2
5.3 INSPECTIONS AND RECORDS	5.4
5.4 SECURITY	5.6
5.5 TRAINING PROCEDURE.....	5.6
6.0 SPILL RESPONSE PLAN.....	6.1

6.1	OIL SPILL CONTROL PLAN	6.1
6.1.1	Introduction	6.1
6.1.2	Oil Spill Plan.....	6.1
6.2	EMERGENCY CONTACT LIST.....	6.1
6.3	SPILL CONTAINMENT EQUIPMENT LOCATIONS	6.2
6.4	SPILL CLEANUP AND DISPOSAL.....	6.2
6.5	SPILL REPORTING AND NOTIFICATION	6.2

LIST OF TABLES

Table 1.1	SPCC Plan Review and Amendments.....	1.3
Table 4.1	Potential Spill	4.3
Table 5.1	Reasonably Expected Discharge Scenario.....	5.3

FIGURES

Figure 1	Site Location Map
Figure 2	Site Detail Map

APPENDICES

Appendix A	SPCC Inspection Forms
Appendix B	Spill Report Form

CROSS REFERENCE INDEX

USEPA SPCC REQUIREMENTS

Section in 40 CFR 112	USEPA SPCC Requirements	Section / Page in this SPCC
Requirement to prepare and implement a Spill Prevention, Control, and Countermeasure Plan		
3(d)	Professional Engineering review and certification	Section 1/Page 1.1
3(e)	Distribution of Plan and availability	Section 2/Page 2.1
Amendment of Spill Prevention, Control, and Countermeasure Plan by Regional Administrator		
4(a)	Facility discharges submit information to the Regional Administrator	Section 2/Page 2.2
Amendment of Spill Prevention, Control, and Countermeasure Plan by owners or operators		
5(a)	Amending the SPCC Plan	Section 1/Page 1.3
5(b)	Review and evaluation of the SPCC	Section 1/Page 1.3
5(c)	Professional Engineer certification of technical amendment	Section 1/Page 1.3
General requirements for Spill Prevention, Control, and Countermeasure Plans		
7(a)	Management commitment	Section 1/Page 1.1
7 (a)(2)	Environmental equivalence	Not Applicable
7(a)(3)	The physical layout of the facility • Diagrams • Countermeasures for discharge discovery and response • Methods for disposal of recovered materials • Contact list and phone numbers	Section 3/Page 3.1 Section 6/Page 6.1 Figure 2
7(b)	Plan a prediction of the direction, rate of flow, and total quantity of oil which could be discharged from the facility as a result of major equipment failure	Section 4/Page 4.2
7(c)	Provide appropriate containment and/or diversionary structures or equipment to prevent a discharge	Section 4/Page 4.4
7(d)	Determination of Practicability	Section 2/Page 2.1
7(e)	Inspections, tests, and records	Section 5/Page 5.4
7(f)	Personnel, training, and discharge prevention procedures	Section 5/Page 5.6
7(g)	Security (excluding oil production facilities)	Section 5/Page 5.6
7(h)	Tank truck loading / unloading	Section 5/Page 5.2
7(i)	Brittle Fracture Evaluation	Not Applicable
7(j)	State Regulations	Section 2/Page 2.2
Requirements for onshore facilities (petroleum oils)		
8(b)	Facility drainage	Section 4/Page 4.4
8(c)	Bulk storage containers	Section 4/Page 4.1
8(d)	Facility transfer operations, pumping, and facility process	Section 5/Page 5.1

1.0 CERTIFICATION

1.1 PROFESSIONAL ENGINEER'S CERTIFICATION

40 CFR 112.3(d)

I attest that I am familiar with the requirements of the SPCC Rule; I or my designated agent have visited and examined the facility; the Plan has been prepared in accordance with good engineering practices, including consideration of applicable industry standards and with the requirements of the SPCC Rule; procedures for required inspections and testing have been established and the Plan is adequate for the facility.

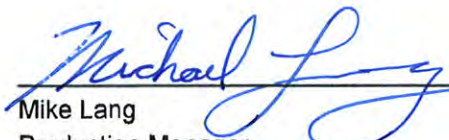
I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly Licensed Professional Engineer under the laws of the state of Minnesota.

Signature/Date:  2/7/2023
Name: Denise Kazmierczak, Professional Engineer Date
Registration: Minnesota Professional Engineer Registration 26594

1.2 SPCC MANAGEMENT APPROVAL

40 CFR 112.7(a)

This SPCC Plan is fully approved by the management of Minnesota Paving and Materials (MPM) and the necessary resources have been committed to implement the Plan as described.

 8 Feb 23
Mike Lang Date
Production Manager



**SPILL PREVENTION, CONTROL, AND COUNTERMEASURE PLAN
MINNESOTA PAVING & MATERIALS – NEW ULM QUARTZITE QUARRY**

Certification
February 2023

1.3 CERTIFICATION OF SUBSTANTIAL HARM

40 CFR 112.20(e)

The Oil Pollution Act of 1990 requires additional information and submission of the SPCC Plan to the USEPA Region 5 Regional Administrator if the facility could reasonably be expected to cause "substantial harm" to the environment by discharging oil into navigable water. Minnesota Paving and Materials does not pose "substantial harm" and therefore is not subject to this part of the Rule.

Facility Name: Minnesota Paving and Materials, New Ulm Quartzite Quarry

1. Does the facility transfer oil over water to or from vessels and does the facility have a total oil storage capacity greater than or equal to 42,000 gallons?
Yes _____ No X
2. Does the facility have a total oil storage capacity greater than or equal to 1 million gallons and does the facility lack secondary containment that is sufficiently large to contain the capacity of the largest aboveground oil storage tank plus sufficient freeboard to allow for precipitation within any aboveground storage tank area?
Yes _____ No X
3. Does the facility have a total oil storage capacity greater than or equal to 1 million gallons and is the facility located at a distance (as calculated using the appropriate formula in Attachment C-III to this appendix or a comparable formula¹) such that a discharge from the facility could cause injury to fish and wildlife and sensitive environments? For further description of fish and wildlife and sensitive environments, see Appendices I, II, and III to DOC/NOAA's "Guidance for Facility and Vessel Response Plans: Fish and Wildlife and Sensitive Environments" (see Appendix E to this part, Section 10, for availability) and the applicable Area Contingency Plan.
Yes _____ No X
4. Does the facility have a total oil storage capacity greater than or equal to 1 million gallons and is the facility located at a distance (as calculated using the appropriate formula in Attachment C-III to this appendix or a comparable formula¹) such that a discharge from the facility would shut down a public drinking water intake²?
Yes _____ No X
5. Does the facility have a total oil storage capacity greater than or equal to 1 million gallons and has the facility experienced a reportable oil spill in an amount greater than or equal to 10,000 gallons within the last 5 years?
Yes _____ No X

CERTIFICATION

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document, and that based on my inquiry of those individuals responsible for obtaining this information, I believe that the submitted information is true, accurate, and complete.

Michael Lang
Signature

Mike Lang
Name (please type or print)

Production Manager
Title

8 Feb 23
Date

¹If a comparable formula is used, documentation of the reliability and analytical soundness of the comparable formula must be attached to this form.

²For the purposes of 40 CFR part 112, public drinking water intakes are analogous to public water systems as described at 40 CFR 143.2(c).



1.4 SPCC PLAN REVIEW AND RECERTIFICATION

40 CFR 112.5

The SPCC Plan shall be amended, within six months, whenever there is a change in the facility's design, construction, operation, or maintenance which materially affects the facility's spill potential for the discharge of oil into or upon the navigable waters of the United States or adjoining shorelines. The Plan must be reviewed at least once every five years and amended to include more effective prevention and control technology, if: (1) such technology will significantly reduce the likelihood of a spill, and (2) if such technology has been proven in the field. Changes to the plan must be re-certified by a registered professional engineer (P.E.). Examples of changes that may require amendment of the Plan and certification include but are not limited to:

- commissioning bulk storage containers;
- replacement, reconstruction or movement of bulk storage containers;
- replacement or installation of piping systems;
- altering secondary containment structures, or
- modification of tank inspection guidelines.

Non-technical changes not requiring the exercise of good engineering practice do not require P.E. certification. Such non-technical changes include but are not limited to:

- changes to the contact list,
- modifications to transfer procedures,
- requirements for storm water discharges, or
- changes associated with location and handling of 55-gallon drums.

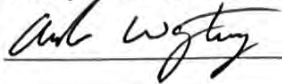
The table provided below is to be completed following each evaluation, and/or amendment.

Table 1.1 SPCC Plan Review and Amendments

Review Date	Review Comments / Amendments	Reviewer Signature	Reviewer (print name)	PE certification required
1-31-12	Plan by ISG		Chris Larson, ISG	Y / N
1-3-14	Updated Plan by ISG		Matthew Brand ISG	Y / N
8-20-15	Updated Plan by ISG		Chuck Brandel ISG	Y / N
8-16-17	Updated Plan by ISG		Chuck Brandel ISG	Y / N



SPILL PREVENTION, CONTROL, AND COUNTERMEASURE PLAN
MINNESOTA PAVING & MATERIALS – NEW ULM QUARTZITE QUARRY
 Certification
 February 2023

Review Date	Review Comments / Amendments	Reviewer Signature	Reviewer (print name)	PE certification required
February 2023	5-Year Review Plan Update by Stantec	I have completed review and evaluation of the SPCC Plan for MPM New Ulm Quartzite Quarry on the date listed. 	Andrew Wojtowicz	(Y) / N



SPILL PREVENTION, CONTROL, AND COUNTERMEASURE PLAN MINNESOTA PAVING & MATERIALS – NEW ULM QUARTZITE QUARRY

Introduction
February 2023

2.0 INTRODUCTION

The United States Environmental Protection Agency (USEPA) requires owners of non-transportation-related oil and petroleum products facilities to develop and implement a Spill Prevention, Control and Countermeasure (SPCC) Plan. SPCC Plans must be prepared and implemented if: the capacity of any aboveground storage tank (AST) or the total aboveground aggregate storage capacity is 1,320 gallons or more; and, due to its location, the facility could potentially allow discharge of oil into or upon the navigable waters of the United States. Only containers with a capacity of 55 gallons or greater are counted in calculation of aboveground storage capacity. The capacities of permanently closed containers do not count towards the threshold numbers.

This SPCC Plan is required of MPM – New Ulm Quartzite Quarry (NUQQ) because petroleum products stored at the facility exceed the above referenced threshold; and, due to its location, the facility could potentially allow discharge of oil into or upon the navigable waters of the United States. The purpose of the SPCC Plan is to prevent the occurrence of oil spills by the use of sound engineering and management controls; and prevent discharge of oil into or upon navigable waters of the United States or adjoining shorelines (including discharge of oil via groundwater). In the event a discharge occurs, the Plan identifies control and countermeasures. This SPCC Plan has been prepared in general accordance with Title 40, Code of Federal Regulations (CFR), Part 112.

In addition to fulfilling the requirements of 40 CFR 112, this SPCC Plan is used as a reference for oil storage information and testing records, as a tool to communicate practices on preventing and responding to discharges with employees, as a guide to facility inspections, and as a resource during emergency response.

As stated, the federal SPCC Rule requires facilities to prepare a plan to cover oil containing tanks and equipment only.

2.1 IMPRACTICABILITY DETERMINATION

40 CFR 112.7(d)

There is no determination of impracticability. Facility management has determined, in accordance with 40 CFR 112.7(d), that use of the containment and diversionary structures or readily available equipment to prevent discharged oil from reaching navigable waters is practical and effective at this facility.

2.2 SPCC PLAN AVAILABILITY

40 CFR 112.3(e)

A complete copy of this SPCC Plan will be kept on-site and made available for on-site review by the USEPA or Minnesota Pollution Control Agency (MPCA) representatives during normal working hours.



SPILL PREVENTION, CONTROL, AND COUNTERMEASURE PLAN MINNESOTA PAVING & MATERIALS – NEW ULM QUARTZITE QUARRY

Introduction
February 2023

Copies of the SPCC Plan do not need to be sent to the USEPA or MPCA, other than as specified in Sections 2.3 and 2.4.

2.3 SPCC PLAN SUBMITTAL AND SPILL REPORTING

40 CFR 112.4

This SPCC Plan must be submitted to the USEPA Region 5 Regional Administrator and the MPCA within 60 days, along with the other information specified in §112.4 and a written report containing the items shown below, **if** either of the following occurs:

- The facility discharges more than 1,000 gallons of oil in a single discharge into or upon the navigable waters of the United States or adjoining shorelines in a single event; and/or
- The facility discharges more than 42 gallons (one barrel) of oil in each of two discharges into or upon the navigable waters of the United States or adjoining shorelines within any 12-month period.

The written report is to contain the following information:

- Name of the facility;
- Name(s) of the owner or operator of the facility;
- Location of the facility;
- Date and year of initial facility operation;
- Maximum storage or handling capacity of the facility and normal daily throughput;
- Description of the facility, including maps, flow diagrams, topographical maps, and other maps;
- A complete copy of the SPCC Plan with any amendments;
- The cause(s) of spill(s), including a failure analysis of the system or subsystem in which the failure occurred;
- The corrective actions and/or countermeasures taken, including an adequate description of equipment repairs and/or replacements;
- Additional preventive measures taken or contemplated to minimize the possibility of recurrence; and
- Such other information as the Regional Administrator may reasonably require pertinent to the plan or spill event.

2.4 STATE REGULATION REGARDING SPILL PREVENTION & CONTAINMENT

40 CFR 112.7(j)

Spill Planning:

Minnesota Statute 115.061 states it is the duty of every person to notify the MPCA immediately of the discharge, accidental or otherwise, of any substance or material under its control which, if not recovered,



SPILL PREVENTION, CONTROL, AND COUNTERMEASURE PLAN MINNESOTA PAVING & MATERIALS – NEW ULM QUARTZITE QUARRY

Introduction

February 2023

may cause pollution of waters of the state, and the responsible person shall recover as rapidly and as thoroughly as possible such substance or material and take immediately such other action as may be reasonably possible to minimize or abate pollution of waters of the state caused thereby. Notification shall be made to the Minnesota Duty Officer at 1-800-422-0798. Notification is not required for a discharge of five gallons or less of petroleum. Depending on the severity of the spill or accidental discharge, the department may require the owner or operator to:

- Take immediate remedial measures;
- Determine the extent of pollution to waters of the state;
- Provide alternate water sources to water users impacted by the spill or accidental discharge; or
- Any other actions necessary to protect human health and the environment.

The State of Minnesota (Minnesota Statute 115E) requires persons who own or operate a facility that stores more than 10,000 gallons of oil or hazardous substances in aboveground tanks to prepare a prevention and response plan. This SPCC Plan satisfies the Minnesota requirements for spill planning for oil stored in aboveground storage tanks. Note, there are no hazardous substances stored in aboveground storage tanks in quantities more than 10,000 gallons at this facility. There are no SPCC Plan submittals or reporting requirements to the MPCA.

Minnesota Statute 116.48 requires that aboveground storage tanks greater than or equal to 500 gallons in size and contain petroleum or hazardous substances used commercially, must notify the MPCA of the existence of these tanks. Tank notification to the MPCA must be made within 30 days of installation or change in tank status. Tanks not required to be registered (exempt) include: tanks containing gasses, flow-thru process tanks, totes, temporary tanks, and equipment.



3.0 FACILITY INFORMATION

40 CFR 112.7(a)(3)

3.1 FACILITY NAME

Minnesota Paving and Materials
New Ulm Quartzite Quarry (NUQQ)

3.2 LOCATION

45755 571st Lane
New Ulm, Minnesota 56073
(507) 317-3584

Latitude 44° 17' 32" N
Longitude 94° 24' 43" W

3.3 OWNER NAME, ADDRESS

Minnesota Paving and Materials
14475 Quiram Drive
Rogers, Minnesota 55374

3.4 CONTACT PERSON

Andrew Wojtowicz
Environmental Specialist
Office (763) 400-2083
Cell (507) 594-8374

3.5 KEY PERSONNEL

Randy Mathiowetz
Manager
Cell (507) 317-3584

Mike Lang
Production Manager
Cell (712) 267-6349



3.6 FACILITY DESCRIPTION

The New Ulm Quartzite Quarry is owned by Minnesota Paving and Materials and is located at 45755 571st Lane in New Ulm, Minnesota. The site is comprised of approximately 370 acres and is bordered to the north by State Highway 14, to the east and west by agricultural land, and to the south by the Minnesota River. Access to the facility is off 571st Lane which runs through the property. There are two main buildings on site: the Shop and the Warehouse.

The facility handles, stores, and uses petroleum products for maintenance and fueling. The site receives products via tanker truck and drum delivery. The products are stored in aboveground storage tanks (ASTs) in portable containers.

A site location and site detail map are provided as Figures 1 and 2.

The facility typically operates 13 hours per day, five to six days per week. Approximately 10 employees work at the facility.

3.7 FIXED STORAGE

Nine (9) storage tanks consisting of:

- One (1), 9,000-gallon aboveground diesel tank.
- One (1), 525-gallon aboveground diesel tank.
- One (1), 525-gallon aboveground gasoline tank.
- One (1), 525-gallon aboveground used oil tank.
- Two (2), 200-gallon aboveground transmission fluid tanks.
- One (1), 200-gallon aboveground hydraulic fluid tank.
- One (1), 200-gallon aboveground motor oil tank.
- One (1), 525-gallon aboveground mobile diesel tank.

3.8 PORTABLE STORAGE

Up to 54 portable oil storage containers consisting of:

- Three (3), 55-gallon drums bearing grease.
- One (1), 55-gallon drum transmission fluid.
- Ten (10), 55-gallon drums gear oil.
- Ten (10), 55-gallon drums engine oil.
- Thirty (30), 55-gallon drums hydraulic fluid.

3.9 OIL-FILLED EQUIPMENT

At NUQQ, there are five utility-owned, oil-containing transformers with capacities over 55-gallons. There are no other pieces of oil-filled equipment with capacities over 55 gallons.



3.10 TOTAL OIL STORAGE

The total oil storage available at this site is approximately 14,870 gallons. A complete aboveground storage tank inventory list is included in the Fact Sheet at the beginning of this Plan. Tank locations are shown on Figure 2.



4.0 OIL STORAGE AND CONTAINMENT

4.1 BULK STORAGE CONTAINERS

40 CFR 112.8(c)

General tank information is summarized below. Detailed tank and product information for the tanks and oil containing equipment is included in the Fact Sheet in the front of this Plan. The location of these items is shown on Figure 2.

112.8(c)(1) – All oil tanks used at this facility are constructed in accordance with industry specifications. The facility only uses containers of material and construction that are compatible with the materials stored and the conditions of storage (temperature and pressure).

112.8(c)(2) – Adequate secondary containment is provided for bulk storage tanks as noted in Section 4.5 of this Plan.

112.8(c)(3) – There are no diked areas exposed to precipitation onsite.

112.8(c)(4)&(5) – There are no completely buried or partially buried oil tanks at the facility.

112.8(c)(6) – Each tank is inspected monthly by trained facility personnel. The inspections consist of a visual check for any evidence of leaks, distortion, corrosion, or settlement. The inspections cover the entire circumference of the tank or length of an aboveground line segment from a distance close enough to see whether or not product has seeped or flowed from the tank, including a check of all telltale pipes or similar leak detection systems.

Bulk storage containers (ASTs) will also be tested for integrity according to industry standards (e.g., Steel Tank Institute). All testing will be completed by certified inspectors in accordance with applicable standards. Internal and external inspections of field erected aboveground storage tanks are conducted according to information in Section 5.3 below.

112.8(c)(7) – There are no heating coils or oil heating systems at the facility.

112.8(c)(8) – Overfill prevention is provided for bulk storage tanks and includes:

- Diesel, Gasoline, and Used Oil Tanks – Visual level gauges.
- Hydraulic Fluid, Transmission Fluid, and Motor Oil Tanks (in Shop) – Mechanical level gauges.

Overfill prevention for portable tanks is provided using liquid level visual verification options including: manual checks and mechanical gauges. If overfilling occurs at any of these tanks, material would spill onto the floor. If material reaches the floor, it would be contained using spill equipment until cleanup could occur.



SPILL PREVENTION, CONTROL, AND COUNTERMEASURE PLAN
MINNESOTA PAVING & MATERIALS – NEW ULM QUARTZITE QUARRY
Oil Storage and Containment
February 2023

Tanks are loaded in accordance with the loading and unloading procedure. Drivers and a facility representative are present during all oil transfers. If a spill does occur, the operator/observer will follow immediate action procedures described in Section 6 and in the Fact Sheet in the front of this Plan.

112.8(c)(9) – There are no wastewater pretreatment facilities associated with this facility.

112.8(c)(10) – Oil leaks which result in a loss of oil from tank seams, gaskets, rivets, and bolts are promptly corrected.

112.8(c)(11) – Portable oil storage at this facility includes up to 54 drums of various oil products. Containment for drums in the Shop is provided by the 1,000-gallon holding tank which receives flow from the floor drains. Containment for drums in the Warehouse is provided by spill pallets. Active measures using spill containment equipment are also used to prevent a discharge. During storage, drums are labeled and properly sealed. The containers are inspected monthly to verify proper storage conditions. Facility containment is described in Section 4.5.

4.2 OIL FILLED EQUIPMENT

The on-site transformers are constructed of heavy corrosion-resistant steel and built to resist pressure differentials including full vacuum. The local utility owns and maintains this equipment and it is not the responsibility of MPM. However, if spills or leaks are discovered from the transformers, procedures in this Plan will be followed to minimize risk to the environment. The electrical utility company will be contacted immediately to take control of cleanup associated with the release of product from their equipment, and associated transformer repair.

4.3 PORTABLE STORAGE

Portable oil storage at this facility includes up to three drums of bearing grease, one drum of transmission fluid, 10 drums of gear oil, 10 drums of engine oil, and 30 drums of hydraulic fluid. The containers are DOT approved and are located at the facility as shown on Figure 2. Mobile or portable oil storage containers are located to prevent a discharge.

4.4 SPILL POTENTIAL

40 CFR 112.7(b)

The facility provides secondary containment and containment/diversionary structures for the bulk storage containers used for oil storage. The most reasonable potential for a spill event occurrence is due to operational or equipment failure during oil product transfers such as tank overflow, hose rupture, or pump leakage. If a spill were to occur during transfer operations, the spill event would most likely be small and could be contained on-site. It is unlikely that a spill could migrate off-site. Facility personnel are present during the oil transfer process and have immediate access to equipment shut off devices to stop oil transfer. In addition, spill containment equipment is located in the Shop and the Warehouse. Native materials and the geography of the quarry pit could also be used to contain a spill. The following table



SPILL PREVENTION, CONTROL, AND COUNTERMEASURE PLAN
MINNESOTA PAVING & MATERIALS – NEW ULM QUARTZITE QUARRY
Oil Storage and Containment
February 2023

(Table 4.1) includes the main types of equipment failures that could possibly occur at the facility. The details for spill direction, volume and rates are based on worst case scenarios.

Table 4.1 Potential Spill

Potential Spill Event	Spill Direction	Volume Released	Spill Rate
Stationary Diesel Tanks (9,000 and 525 Gallons) and Gasoline Tank (525 Gallons)			
Tank Failure, Tanker Leak, Piping Failure, Hose or Pump Failure During Transfer	The double walled tanks provide secondary containment. If secondary containment failed, material would release to the ground surface, flow southwest, and pool in the Shop area. A large release may flow out of the Shop area and southeast to the quarry pit.	1-9,000 gallons	Gradual to instantaneous
Used Oil Tank (525 Gallons)			
Tank Failure, Tanker Leak, Hose or Pump Failure During Transfer	The double walled tank provides secondary containment. If secondary containment failed, material would release to the ground surface, flow southeast, and pool in the Shop area. A large release may flow out of the Shop area and southeast to the quarry pit.	1-525 gallons	Gradual to instantaneous
Mobile Diesel Tank (525 Gallons)			
Tank Failure, Tanker Leak, Hose or Pump Failure During Transfer	The double walled tank provides secondary containment. If secondary containment failed, material would flow southeast and pool in the Shop area (winter), or flow into the quarry pit (summer).	1-525 gallons	Gradual to instantaneous
Shop ASTs (200-Gal Each: Hydraulic Fluid, Motor Oil, 2x Transmission Fluid)			
Tank Failure, Hose or Pump Failure During Transfer	The Shop underground holding tank provides secondary containment. A release would flow into a Shop floor drain, which leads to a 1,000-gallon underground holding tank. If a spill occurs, the holding tank will be pumped out as soon as possible and contents will be disposed of appropriately.	1-200 gallons	Gradual to instantaneous
Shop Drums (Bearing Grease)			
Tank Failure, Hose or Pump Failure During Transfer	The Shop underground holding tank provides secondary containment. A release would flow into a Shop floor drain, which leads to a 1,000-gallon underground holding tank. If a spill occurs, the holding tank will be pumped out as soon as possible and contents will be disposed of appropriately.	1-55 gallons	Gradual to instantaneous



Potential Spill Event	Spill Direction	Volume Released	Spill Rate
Warehouse Drums (Bearing Grease, Transmission Fluid, Gear Oil, Engine Oil, Hydraulic Fluid)			
Tank Failure, Hose or Pump Failure During Transfer	Spill pallets provide secondary containment. If secondary containment fails, material will be contained using active response and spill equipment. The spill could flow out of a Warehouse door and southeast to the quarry pit.	1-55 gallons	Gradual to instantaneous

4.5 CONTAINMENT AND DIVERSIONARY STRUCTURES

40 CFR 112.7(c), 112.8(c)(2)

Methods of secondary containment at this facility include a combination of structures and land-based spill response (e.g., sorbents) to prevent oil from reaching navigable waters. Specific secondary containment information includes the following:

- **Diesel ASTs, Used Oil AST, and Gasoline AST:** Secondary containment is provided by double-walled steel tanks. The interstitial space between the primary and secondary containers is equipped with a visual gauge to detect leaks and is inspected on a monthly basis.
- **Shop Oil ASTs and Drums:** Secondary containment is provided by the 1,000-gallon underground holding tank connected to Shop floor drains. The holding tank is separate from the sanitary tank. The holding tank is serviced approximately once per year, as needed based on liquid level.
- **Warehouse Drums:** Secondary containment is provided by spill pallets.
- The indoor transfer areas at the Facility utilize the Shop holding tank as containment, in addition to active response and spill equipment. Outdoor transfer areas (located at each outdoor AST) utilize active response, spill equipment, and the quarry pit as containment.

The spill equipment located on-site includes but is not limited to absorbent pads and booms. The spill equipment is located in the Shop and the Warehouse. Additionally, the facility grading is designed to direct all material flows towards the quarry pit, which serves as containment.

4.6 FACILITY DRAINAGE

40 CFR 112.8(b), 112.8(c)(3)

4.6.1 General Drainage and Site Stormwater Structures

The site is sloped southeast to the quarry pit (see Figure 2). There is one stormwater pipe that directs water from the Warehouse area into the quarry. Everything drains internal to the site. Water accumulated



SPILL PREVENTION, CONTROL, AND COUNTERMEASURE PLAN
MINNESOTA PAVING & MATERIALS – NEW ULM QUARTZITE QUARRY
Oil Storage and Containment
February 2023

in the quarry can be manually pumped to an infiltration basin west of the quarry pit if necessary to manage water levels in the quarry pit. Additional areas surrounding the quarry will follow natural topography and drain to the Minnesota River.

4.6.2 Stormwater Inspection and Disposal

There are no secondary containment structures that contain oil tanks which accumulate precipitation.



5.0 OPERATIONS AND PROCEDURES

5.1 TRANSFER OPERATIONS, PUMPING, AND IN-PLANT PROCESSES

40 CFR 112.8(d)

Oil products arrive at the facility by truck transport. Tank filling and oil product transfers are continuously monitored to reduce the potential for overfill or other leakage. Following each transfer operation all pumps are turned off and equipment secured. All oil product transfer is performed in accordance with the provisions of this SPCC Plan. Specific transfer procedures are identified in the Fact Sheet located in the front of this plan.

Transfer operations at the facility include the following:

- 9,000-Gal Diesel Tank – Diesel is transferred to the bulk storage tank via a short run of top-mounted steel aboveground piping. The piping connects to a spill box where the tanker truck hose can be connected. An electric pump pumps diesel to a flexible hose and manual nozzle, which is used to fuel mobile equipment/vehicles. The tank has an emergency shutoff button to stop pumping if needed.
- 525-Gal Diesel (stationary) and Gasoline Tanks – Material is transferred to the bulk storage tanks via a top-mounted tanker truck connection. Electric pumps pump the material to a flexible hose and manual nozzle on each tank, which are used to fuel mobile equipment/vehicles. The tanks have an emergency shutoff button to stop pumping if needed.
- 525-Gal Diesel (mobile) – Material is transferred to the tank via tanker truck or from the 9,000-gallon diesel tank. An electric pump pumps the material to a flexible hose and manual nozzle on the tank, which is used to fuel mobile equipment/vehicles.
- Used Oil – Used oil is manually transferred from small portable containers into the covered fill port on the top of the tank. Oil is pumped out of the tank by a tanker truck.
- Shop ASTs – Oil products are manually transferred into the ASTs from drums. Each AST has an air diaphragm pump, flexible hose reel, and manual nozzle, which are used to fill smaller containers and mobile equipment.

The facility has small transfer areas at each bulk storage tank.

40 CFR 112.8(d)(1)

There is no buried oil piping at NUQQ.

40 CFR 112.8(d)(2)

Pipelines no longer in use or in standby service for an extended period of time will be capped or blank-flanged as required.



40 CFR 112.8(d)(3)

The only aboveground oil piping at NUQQ is the piping directly attached to the 9,000-gallon diesel tank (from top of tank to spill box). Supports for this piping are designed to minimize abrasion and corrosion and to allow for expansion and contraction. Pipe supports are visually inspected during the monthly inspection of the facility.

40 CFR 112.8(d)(4)

The facility will incorporate visual pipeline inspections (including valves, flanges, etc.) into the visual inspection requirements for the facility. These inspections will be completed on a monthly basis to detect any possible leaks or potential problems. Inspection Forms are located in Appendix A. Completed copies are maintained onsite.

40 CFR 112.8(d)(5)

Transfer operations at this facility do not occur in areas where transfer activities will be interrupted or crossed by vehicle traffic or are at an elevation designed to avoid contact with traffic. The aboveground piping at the 9,000-gallon diesel tank is protected from the flow of traffic. There are vehicle bollards in place at the used oil tank and stationary diesel and gasoline tanks.

5.2 TANK TRUCK LOADING/UNLOADING

40 CFR 112.7(h)

Operators of oil trucks must be licensed in accordance with state and federal regulations and be properly trained by the distributor in the use of the equipment. Specific information on the quantity of oil to be transferred will be provided to the truck operator by facility personnel. A facility representative and/or the tanker truck operator are required to stay with the truck during unloading. Transfer procedures are included in the Fact Sheet in the front of this plan and below in Table 5.2.

Loading / unloading rack means a fixed structure (such as a platform or gangway) necessary for loading or unloading a tank truck or rail car and includes a loading or unloading arm. A loading / unloading arm is typically a movable piping assembly that includes fixed piping or a combination of fixed and flexible piping typically with at least one swivel joint that allows movement of the piping to transfer product to/from a tank truck or rail car. A transfer rack may include any combination of piping assemblages, valves, pumps, shut off devices, overfill sensors, or personnel safety devices.

Based upon information from the USEPA's guidance, **this facility does not operate any transfer racks.** Loading/unloading areas using a single flexible hose and connection or include moving portable containers are not considered "racks".

Areas where oil is transferred but no loading or unloading rack is present are subject to general secondary containment requirements in 40 CFR 112.7(c). Secondary containment size should be based on the magnitude of a most likely discharge, taking into consideration the specific features of the facility



and operation. Active secondary (manual response) can help satisfy this requirement. USEPA recommends that a determination of adequate secondary containment consider:

- The reasonably expected sources and causes of a discharge;
- The reasonably expected maximum rate of discharge;
- The ability to detect and react to the discharge; and/or
- The reasonably expected duration of the discharge.

Table 5.1 Reasonably Expected Discharge Scenario

Scenario:
A tanker truck is transferring product into a diesel tank with an attendant present throughout the operation.
Details:
The truck is pumping at a rate of 50 gallons per minute.
The reasonably expected source and cause of a discharge is a ruptured flexible hose connection.
A shutoff switch and valve are present on the transfer truck and are accessible to the attendant.
An evaluation determines that the discharge will not impede the attendant's access to the shutoff valve and that he can safely shut down transfer operations within 30 seconds.
Calculations:
The maximum reasonably expected discharge is calculated to be: 25 gallons
Conclusion:
Secondary containment volume for a most likely discharge event should be at least 25 gallons. This is satisfied by a combination of facility features, spill response equipment (absorbent booms/pads) and an immediate active/manual response.

The table below delineates the oil transfer procedures to be followed by the facility and contracted transport.

Table 5.2 Fuel Transfer Procedures

Stage	Tasks
Prior to loading/unloading	1. Visually check all hoses for leaks and wet spots. 2. Verify that sufficient volume (ullage) is available in the storage tank or truck. 3. Lock in the closed position all drainage valves of the secondary containment structure. 4. Secure the tank vehicle with wheel chocks and interlocks. 5. Ensure that the vehicle's parking brakes are set. 6. Verify proper alignment of valves and proper functioning of the pumping system 7. If filling a tank truck, inspect the lowermost drain and all outlets. 8. Establish adequate bonding/grounding prior to connecting to the fuel transfer point



SPILL PREVENTION, CONTROL, AND COUNTERMEASURE PLAN
MINNESOTA PAVING & MATERIALS – NEW ULM QUARTZITE QUARRY
 Operations and Procedures
 February 2023

Stage	Tasks
During unloading / loading	9. Driver must stay with the vehicle at all times during loading/unloading activities. 10. Periodically inspect all systems, hoses and connections. 11. When loading, keep internal and external valves on the receiving tank open along with the pressure relief valves. 12. When making a connection, shut off the vehicle engine. When transferring Class materials, shut off the vehicle engine unless it is used to operate a pump. 13. Maintain communication with the pumping and receiving stations. 14. Monitor the liquid level in the receiving tank to prevent overflow. 15. Monitor flow meters to determine rate of flow 16. When topping off the tank, reduce flow rate to prevent overflow
After loading/ unloading	17. Make sure the transfer operation is completed. 18. Close all tank and loading valves before disconnecting. 19. Securely close all vehicle internal, external, and dome cover valves before disconnecting. 20. Secure all hatches 21. Disconnect grounding/bonding wires. 22. Make sure the hoses are drained to remove the remaining oil before moving them away from the connection. Use a drip pan 23. Cap the end of the hose and other connecting devices before moving them to prevent uncontrolled leakage. 24. Remove wheel chocks and interlocks. 25. Inspect the lowermost drain and all outlets on tank truck prior to departure. If necessary, tighten, adjust, or replace caps, valves, or other equipment to prevent oil leaking while in transit

Additional information regarding transfer processes:

- Facility operators and the truck operator will remain with the vehicle at all times while product is being transferred.
- Nighttime oil transfers and transfer during precipitation events will be avoided, when possible.
- Spill equipment materials are available to contain a spill during transfer. In addition, a quick response and control of a spill shall be implemented.

5.3 INSPECTIONS AND RECORDS

40 CFR 112.7(e)

A monthly visual inspection of all oil tanks, oil containing equipment, containment structures, piping, etc. will be completed and documented. This is a formal inspection required for all oil containers inventoried in this SPCC Plan. Inspections will be completed by trained personnel and logged accordingly. The inspection log will be maintained for 3 years. An example Inspection Form is included in Appendix A.

Additional inspections are conducted to further minimize the chance of spill/leaks. These include the following:



SPILL PREVENTION, CONTROL, AND COUNTERMEASURE PLAN
MINNESOTA PAVING & MATERIALS – NEW ULM QUARTZITE QUARRY
Operations and Procedures
February 2023

- Annual Facility Inspection – Example Inspection Form is included in Appendix A.

40 CFR 112.8(c)(6)

This section of the SPCC Rule requires that each aboveground container be tested for integrity on a regular schedule including visual inspection with another testing technique. Testing techniques may include hydrostatic testing, ultrasonic testing, or another system of non-destructive shell testing. The facility has determined, in accordance with industry standards the appropriate frequency and type of inspection and testing, which take into account container size, configuration, design, and previous inspection history.

The facility will perform integrity testing on Shop Fabricated bulk storage tanks based on the requirements of Steel Tank Institute Standard SP001. Requirements are summarized in Table 5.3.

Table 5.3 Integrity Testing Schedule

Steel Tank Institute Standard for Inspection of Shop Fabricated ASTs			
<u>Shop Fabricated</u> Diesel Tank (9,000 gallons)	Category 1 Tank (5,001 – 30,000 gallons) AST with Continuous Release Detection and Secondary Containment	Formal External Inspection: Every 20 years Age/Installed: Unknown Next Inspection: 2023	Formal Internal Inspection: Not required by the STI Standard for this Category of tank.
<u>Shop Fabricated</u> Mobile and Stationary Diesel Tanks (525 gallons each) Gasoline Tank (525 gallons) Used Oil Tank (525 gallons) Shop ASTs (200 gallons each)	Category 1 Tanks <5,000 gallons in size AST with Continuous Release Detection Method and Secondary Containment System.	Formal External Inspection Not required by the STI Standard for this category of tank.	Formal Internal Inspection Not required by the STI Standard for this category of tank.

If signs of leakage or deterioration are observed during visual inspection, integrity testing may be considered to evaluate integrity. Formal integrity tests will be performed by an inspector with the following qualifications:

- STI Certified SP001 Tank System Inspector.

Following inspection by a certified tank inspection contractor, if the inspector recommends an alternate schedule based on the results, this schedule will be modified and the SPCC Plan updated as appropriate.



5.4 SECURITY

40 CFR 112.7(g)

This Facility is a quartzite quarry with maintenance capabilities for vehicles and equipment. Products are brought in and shipped out via transport truck. The Facility is operational and staffed 5-6 days a week, 13 hours per day. It has the ability to be operational 24 hours per day, as needed.

- The Facility perimeter is controlled by a combination of fencing, gates, and natural barriers from the geography of the quarry.
- All master flow valves, and any other valves permitting direct outward flow of a container's contents to the surface, are maintained in the closed position when in non-operating or non-standby status.
- Buildings are locked to prevent unauthorized access when the facility is not operating. Breakers are shut off after-hours so that pumps at outdoor ASTs cannot operate.
- Loading/unloading connections of oil piping is secured by capping or other acceptable means when not in service.
- The facility is well lit which helps prevent accidental spills/releases and vandalism.

5.5 TRAINING PROCEDURE

40 CFR 112.7(f)

Since an SPCC Plan depends on its implementation, the facility will provide baseline and annual refresher training to its personnel who are involved in the handling, storage, or use of oil products. SPCC training may be completed in conjunction with other facility training programs such as emergency response training and/or HAZWOPER training. Training documentation is maintained by the corporate Human Resources department.

40 CFR 112.7(f)(1)

All personnel with oil handling responsibilities will be provided training in the following areas:

- Operation and maintenance of equipment to prevent discharges;
- Discharge procedure protocols;
- Applicable pollution control laws, rules, and regulations;
- General facility operations, and
- The contents of this SPCC Plan.

40 CFR 112.7(f)(2)

The Environmental Specialist has primary responsibility for preparing, implementing, and maintaining an effective spill prevention program at this facility.



SPILL PREVENTION, CONTROL, AND COUNTERMEASURE PLAN
MINNESOTA PAVING & MATERIALS – NEW ULM QUARTZITE QUARRY
Operations and Procedures
February 2023

40 CFR 112.7(f)(3)

Annual discharge prevention training is conducted by the Environmental Specialist or designee for all facility personnel involved in oil operations. Any new facility personnel with oil-handling responsibilities are provided with training prior to being involved in the oil-handling operation. Training will be held on oil spill prevention, containment, and retrieval methods. The training is aimed at ensuring continued understanding and adherence to the discharge prevention procedures presented in this SPCC Plan. Facility personnel are provided the opportunity and encouraged, both during the training and at any other time as appropriate, to share recommendations concerning health, safety, and environmental issues encountered during facility operations. Records of these briefings and spill prevention training will be kept on file.



6.0 SPILL RESPONSE PLAN

40 CFR 112.7(a)

6.1 OIL SPILL CONTROL PLAN

6.1.1 Introduction

Prompt response to a spill is the best means of minimizing any impact to the environment, preventing a discharge from reaching waters of the United States.

In the case of a petroleum product spill, appropriate and timely measures will be taken to prevent the migration of spilled oil products and protect the health and safety of the public. The key steps of the spill control plan are presented in Section 6.1.2 and in the response flow chart in front of this plan (Fact Sheet Section). The Plan identifies who contains the spill and when outside sources (such as police, fire, or emergency response personnel) are needed to control and clean up the petroleum product spill. In the event of a spill or release, incident information and response actions will be recorded in accordance with MPM requirements. In the event of a spill or release, incident information and response actions will be recorded on the Spill Report Form (Appendix B).

6.1.2 Oil Spill Plan

Once a petroleum product spill is detected at the facility, the detector will quickly assess the immediate area with regard to its safety and if there is a potential for fire, explosion, or personal injury. In the event there is a fire, explosion, or personal injury, notify the Manager and inform them of the exact nature of the problem. They will notify local emergency units and take appropriate action as required. The detector will also notify their immediate supervisor. Maintenance forces will be mobilized with spill containment equipment. The spill area will be isolated, and evacuation initiated as needed by the Manager.

6.2 EMERGENCY CONTACT LIST

Facility/Company Contacts	Primary Number	Secondary Number
1. Andrew Wojtowicz – Environmental Specialist	(763) 400-2083	(507) 594-8374
2. Randy Mathiowetz – Manager	(507) 317-3584	
3. Mike Lang – Plant Manager	(712) 267-6349	
Regional EPA Office (Region 5)	(800) 621-8431	
MPCA Spill Hotline 24 hr. (Duty Officer)	(800)-422-0798	
National Response Center	(800) 424-8802	
New Ulm Fire and Police	911	



Cleanup Contractors		
1. Bay West Inc.	(800) 279-0456	--
2. Rock Leaf Water Environmental	(833) 762-5532	--

6.3 SPILL CONTAINMENT EQUIPMENT LOCATIONS

Spill containment equipment is located in the Shop and the Warehouse. Spill equipment includes absorbent materials and tools (e.g., shovels).

Spill equipment is checked periodically during monthly site/tank inspections. Materials will be replaced as needed to maintain an adequate supply of absorbents and related spill equipment supplies. Following a larger spill, spill control equipment will be ordered and restocked as part of the cleanup and disposal process.

6.4 SPILL CLEANUP AND DISPOSAL

The Environmental Specialist will define the actual cleanup responsibilities once the spill is contained and its magnitude determined. Once a spill is contained, equipment will be used to recover the pooled product. Used absorbents will be containerized and disposed of properly. Contaminated soils/debris will be managed in a manner that complies with EPA and State of Minnesota requirements for disposal of soils from petroleum spills. A spill report form is located in Appendix B.

6.5 SPILL REPORTING AND NOTIFICATION

See Sections 2.3 and 2.4 for USEPA and the State of Minnesota reporting and notification requirements.

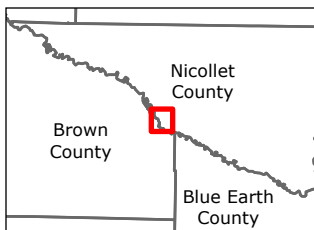
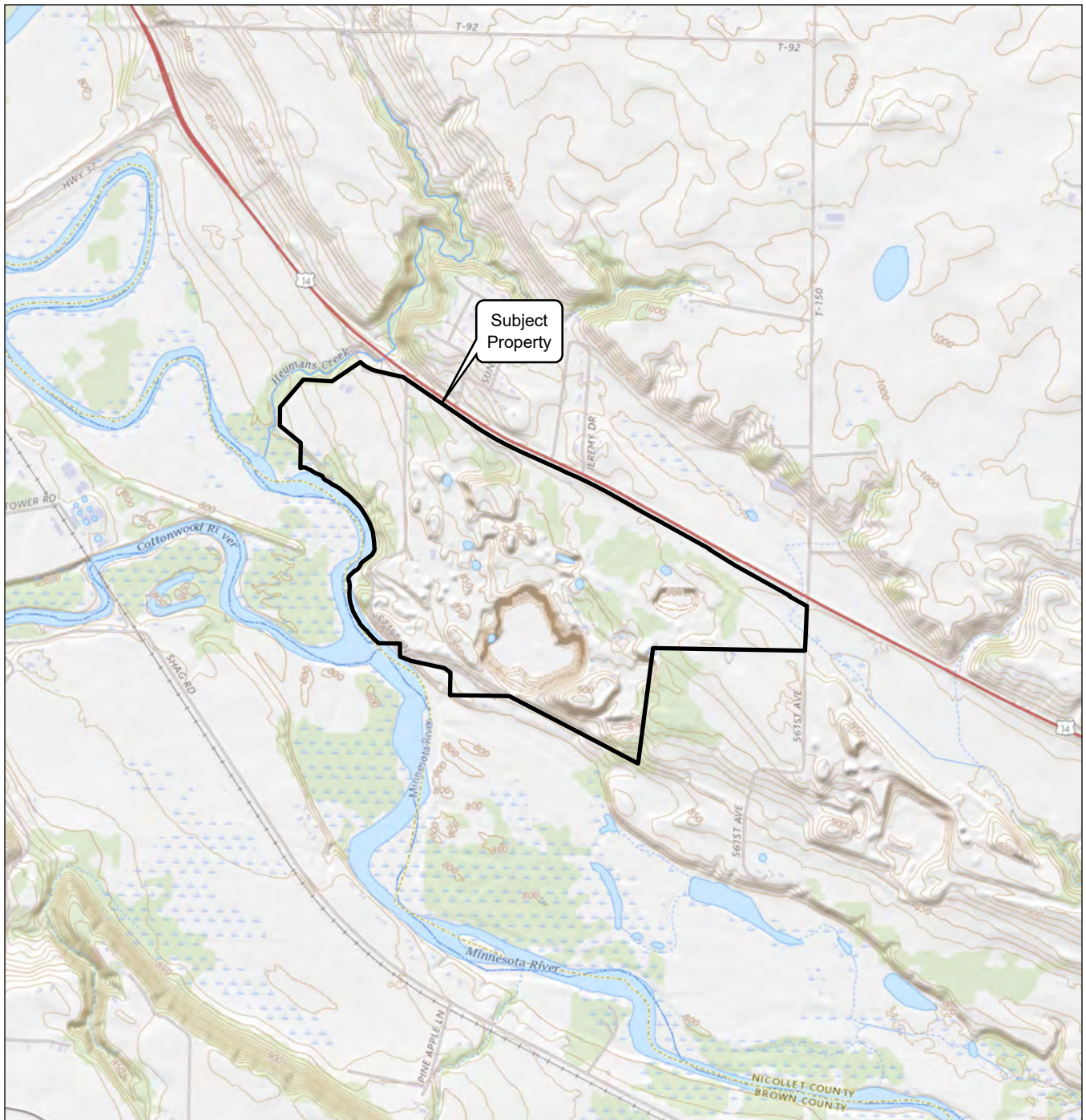


FIGURES

1. Site Location Map

2. Site Detail Map

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- Notes**
1. Coordinate System: NAD 1983 UTM Zone 15N
 2. Data Sources: USGS
 3. Background: USGS 7.5 Minute Quadrangle

Legend
[Black Outline] Site Boundary

0 1,000 2,000 Feet
(At original document size of 8.5x11)
1:24,000



Project Location
T110N, R30W, S35
New Ulm, Nicollet Co., MN

Prepared by BS on 2022-12-05

Client/Project
Minnesota Paving & Materials
New Ulm Quartzite Quarry
SPCC

227703795

Figure No.

1

Title
Site Location Map

Figure No.

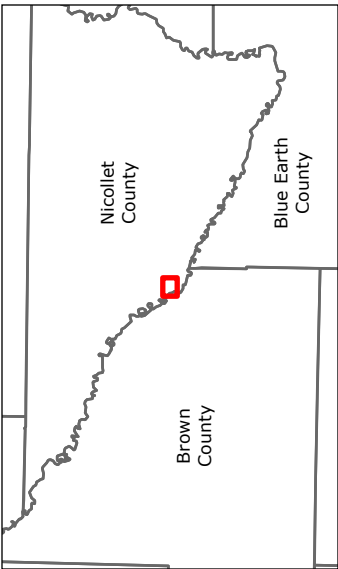
2

Site Detail Map

Client/Project	Minnesota Paving & Materials New Ulm Quartzite Quarry SPCC	227703795
Project Location	T110N, R30W, S35 New Ulm, Nicollet Co., MN	Prepared by BS on 2022-12-07



- Legend
- Site Boundary
 - Subsurface Stormwater Flow
 - Surface Flow Direction
 - Catch Basin
 - Spill Kit
 - Transformer



- Notes
- Coordinate System: NAD 1983 UTM Zone 15N
 - Data Sources: Esri
 - Background: Esri World Imagery



APPENDIX A

SPCC Inspection Forms

Stormwater and SPCC Monthly Inspection Form

Name of Plant or Pit:

Rain Event ☐ Yes ☐ No
(One per year)

Snow Melt ☐ Yes ☐ No
(One per year)

DIRECTIONS: Operator must inspect each item on the list and if defective put a ✓ mark in space by item.
If defective, explain in space provided below.

Shift	ITEM	Shift	ITEM
	Aboveground Storage Tanks, Plastic Totes, Drums		Site/Housekeeping
	Container labeled properly		Fence/gate intact
	Container surface free from any signs of leakage		Gates locked when not in attendance
	Container free from damage, shell distortions, or deterioration		Lights working properly
	Bolts, rivets, or seams free from damage or leaking		“Out of Service” tanks disconnected and marked
	Container paint in good condition		“Used Oil” not “Waste Oil”
	Container supports in good condition		SPCC on-site (1,320 gallons of capacity or more)
	Container foundation free from erosion or settling		Spill kit on-site and stocked
	If equipped, level gauges and overfill alarms in good working order		
	Container vents not obstructed		Stormwater
	If equipped with overfill test button, activate to confirm operational		Stormwater contained on-site or discharge within permit limits
	Check interstitial space on double walled tanks		No spills or leaks in parking or plant areas
			Plant equipment not leaking or damaged
	Secondary Containment (if not double walled)		No track-out from property onto access road
	Containment walls are intact		Ditches/gutters clean of bottles, trash, litter, & sediment
	No standing water in containment area		Sediment ponds are functional
	No visible oil sheen after rain event		All chemical or petroleum containers are properly marked and undamaged
	Valves in closed position, locked		Stormwater Pollution Prevention Plan (SWPPP) on-site, signed, and accurate
	Drainage log completed		BMPs operating properly
***Notify an Environmental Manager if tanks/drums are removed or added to the site.			

☐ **No Defects Found**

Notes: _____

ATTN: Failure to notes deficiencies or falsified information on this report is grounds for disciplinary action.

Operator Signature: _____

Date: _____

This Record Shall Be Kept for a Period of Five Years and be Provided to an Inspector Upon Request.

Spill Prevention Control and Countermeasure Annual Inspection Form

This inspection form must be completed each year. For items marked “N”, repair or adjustment may be needed. Complete a column for each container listed in the site’s SPCC Plan. Add additional pages as needed.

Y – Yes
NA – Not Applicable
N – No *(Repair or adjustment may be required)*
C – See ‘Comment Section’ below

Petroleum Containers (55 gal or larger)	Container	Container	Container	Container	Container
Container ID <i>(or location)</i>					
Container Type <i>(D = drum, T = tote, or A = aboveground tank)</i>					
Container capacity <i>(gallons)</i>					
Container properly labeled for contents					
Safety Labels <i>(No Smoking, Hot, Flammable, etc)</i>					
Container is free from damage, corrosion, or leaks					
Container coating (paint) in good condition (if applicable)					
Container supports in good condition					
All sides of container are visible for inspection					
Container foundation free from erosion or settling					
Liquid level gauges and overfill alarms in working order					
Emergency shut-off switch (ASTs) available and functional					
Container vents are unobstructed					
Container lid(s), bung(s), or valves(s) closed when not in use					
Container protected from traffic <i>(posts, barrier blocks, etc)</i>					
Container can be secured from tampering when not in use					
Piping is free from damage, corrosion, or leaks					
Container and piping area free from signs of leaks or spills					
Container is double walled					
Secondary Containment <i>(if applicable)</i>					
Containment type <i>(R = concrete, M = metal, O = other)</i>					
Containment walls are intact <i>(leak free)</i>					
Standing water in containment area <i>(inches – enter zero if empty)</i>					
No visible oil sheen or stain in containment					
No visible oil sheen or stain outside containment					
Containment drain valve(s) in closed position and locked					
Containment drainage log completed					
Site/Housekeeping					
Fence/gate intact					
Gates locked when not in attendance					
Security lights working properly					
“Out of Service” containers disconnected and marked					
Spill kit on-site and stocked					

Comments:

Inspector: _____

Site: _____

Signature: _____

Date: _____

APPENDIX B

Spill Report Form

APPENDIX B
DISCHARGE NOTIFICATION FORM

Instructions: Fill in blanks. This form is to be filled out and distributed as soon as practical after an oil release is discovered and initial response to the release has been initiated.

Facility Name: Minnesota Paving & Materials – New Ulm Quartzite Quarry

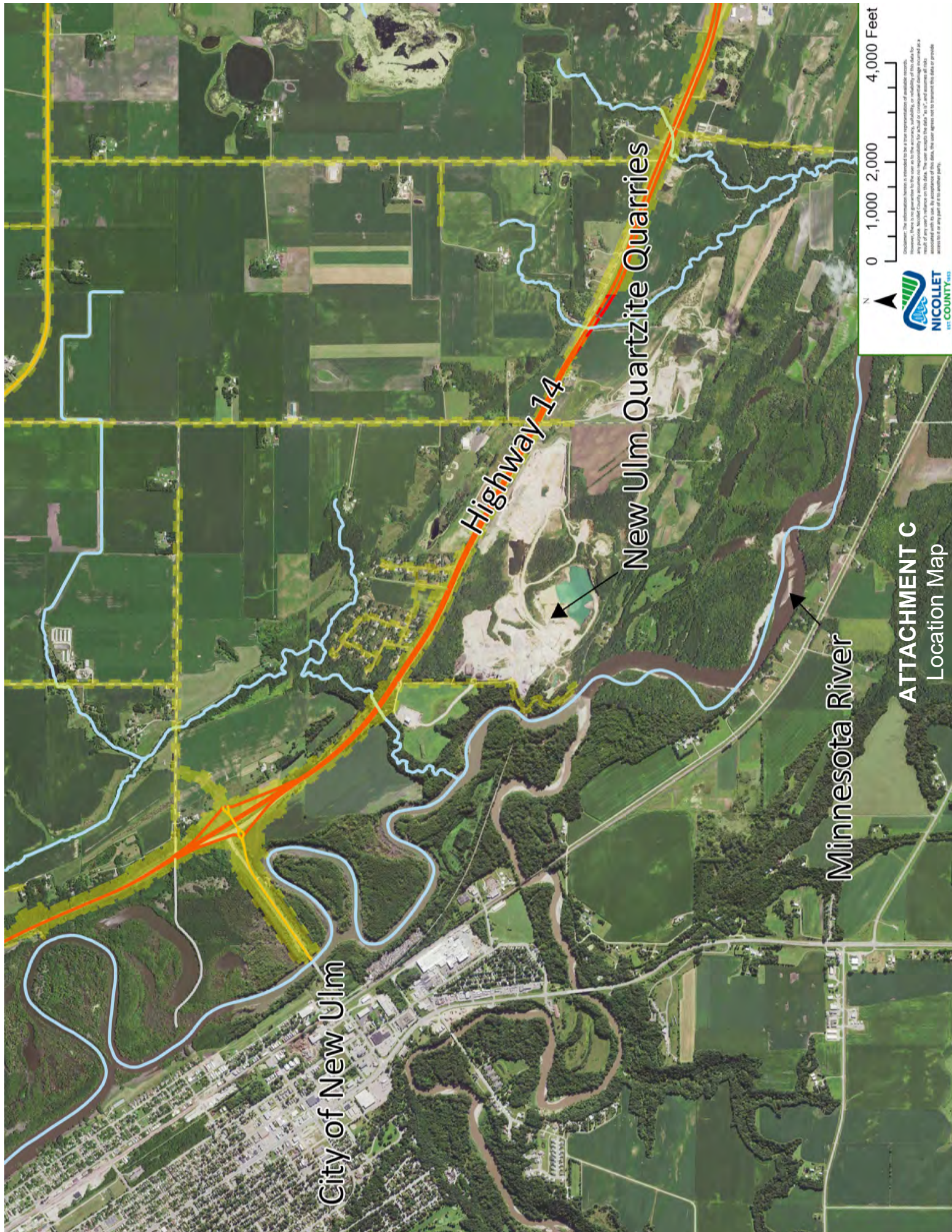
Facility Address: 45755 571st Lane

New Ulm, MN 56073

Facility Phone Number: 507-317-3584

Date of Release:	Time of Release:
Type of Material Spilled:	Quantity Spilled:
Exact Location of Spill:	
Waterway Potentially Impacted:	
Estimated Quantity to Waterway:	
Source and Cause of Release:	
Extent of Actual and Potential Water Pollution:	
Damages or Injuries Caused by Spill:	
Affected Medium: ☐ Air ☐ Water ☐ Soil	
Steps Being Taken To Contain/Cleanup Spill:	
Steps Being Taken to Minimize Impacts:	
Evacuation Was/Is Necessary: ☐ No ☐ Yes	
Regulatory Agencies / Other Entities Contacted:	





City of New Ulm

Highway 14

New Ulm Quartzite Quarries

Minnesota River

ATTACHMENT C
Location Map

0 1,000 2,000 4,000 Feet

N

 NICOLLET
COUNTY

This map is provided for informational purposes only. It is not intended to be a representation of the actual location of any property. Nicollet County assumes no responsibility for actual or consequential damage caused by any use of this map. The user assumes all risk for any use of this map. This map is not to be used for any purpose other than as a general reference.

Highway 14

New Ulm Quartzite Quarries

Minnesota River

ATTACHMENT D
Aerial Map

0 250 500 1,000 Feet

N



NICOLLET
COUNTY

Disclaimer: The information herein is intended to be a true representation of available records. However, there is no guarantee to the user as to the accuracy, reliability, or validity of this data for any purpose. The user assumes all liability for any use of this data. The user agrees to hold Nicollet County harmless for any use of this data. The user agrees to hold Nicollet County harmless for any use of this data. The user agrees to hold Nicollet County harmless for any use of this data.

Aggregate Storage



Mining Area



Mining Area



Aggregate Processing



Settling Pond



Sedimentation Pond



DISPLAYNAME	MAILINGADDR	MAILINGCITYSTATEZIP
ALBRECHT GLEN R & LAUREN G ALBRECHT	56929 HILLCREST LN	NEW ULM MN 56073
AREVALO JOSE G	45323 KOHN DR	NEW ULM MN 56073
AREVALO JUAN P & SAN JUANA AREVALO	56963 HILLCREST LN	NEW ULM MN 56073
BERG JAMIE & GINA M BERG	45304 KOHN DR	NEW ULM MN 56073
BERTRANG JEFFREY ERNEST & WENDY JANE BERTRANG	45493 JEREMY DR	NEW ULM MN 56073
BLUME HOWARD	305 W RIDGE RD	COURTLAND MN 56021
BODE MARCELLA J	45479 561ST AVE	NEW ULM MN 56073
BORTH RONALD J & SANDRA M BORTH	45184 EDGEWOOD DR	NEW ULM MN 56073
BRADLEY SHANE M & KERI R BRADLEY	45233 SUNRISE DR	NEW ULM MN 56073
BRUNS GARY J SHIRLEY A BRUNS	57012 HILLCREST LN	NEW ULM MN 56073
CITY OF NEW ULM	100 BROADWAY ST	NEW ULM, MN 56073
CORDES WADE & VELEDA CORDES	56936 BROOKVIEW LN	NEW ULM MN 56073
DITTRICH DAVID A & PATRICE A DITTRICH	45508 JEREMY DR	NEW ULM MN 56073
ENTER JASON P & JODY M ENTER	57108 422ND ST	NEW ULM MN 56073-4321
ESSER DANIEL & SHEILA ESSER	56932 HILLCREST LN	NEW ULM MN 56073
ESSER DANIEL M & SHEILA ESSER	56932 HILLCREST LN	NEW ULM MN 56073
FORBROOK CURTIS L & KRISTIN R FORBROOK	45261 JEREMY DR	NEW ULM MN 56073
GRATHWOHL NORMAN & LISA GRATHWOHL	56998 HILLCREST LN	NEW ULM MN 56073
GREJTAK JOHN F & DIANE K GREJTAK	56923 HILLCREST LN	NEW ULM MN 56073
GULDAN TIMOTHY J & BROOKE M GULDAN	46198 561ST AVE	NEW ULM MN 56073
HEYMANN JOHN H	106 MONUMENT STREET	NEW ULM MN 56073
HIPSTER LLC	1220 SOUTH VALLEY ST	NEW ULM MN 56073
HOFMANN MICHELLE R & MARCEL U HOFMANN	45228 SUNRISE DR	NEW ULM MN 56073
HULKE SCOTT R & KATHY J HULKE	45274 SUNRISE DR	NEW ULM MN 56073
KALK JOSHUA B	45205 JEREMY DR	NEW ULM MN 56073
KLOECKL BRYCE A & TAYLOR C KLOECKL	45318 JEREMY DR	NEW ULM MN 56073
LADE MARY D	56933 BROOKVIEW LN	NEW ULM MN 56073
LEGARE DENNIS	46126 571ST LN	NEW ULM MN 56073
LESKEY DELORES B	45165 EDGEWOOD DR	NEW ULM MN 56073
LUDEWIG LEON M & MARY A LUDEWIG	45196 SUNRISE DR	NEW ULM MN 56073
LUND DOUGLAS R & KATHLEEN K LUND	45541 JEREMY DR	NEW ULM MN 56073
MEHLHOP PATRICK	45272 JEREMY DR	NEW ULM MN 56073
MN DNR & REAL ESTATE MANAGEMENT	500 LAFAYETTE RD	SAINT PAUL MN 55155-4030
MN VALLEY LUTH HIGH SCHOOL & ASSN	45638 561ST AVE	NEW ULM MN 56073
NELSON STEVEN A & BETH J NELSON	45210 JEREMY DR	NEW ULM MN 56073
NORDBY DENNIS & SHARON NORDBY	45201 SUNRISE DR	NEW ULM MN 56073
OHM RONALD C OHM & CARLOTTA L OHM	56947 HILLCREST LN	NEW ULM MN 56073
RAHE BRIAN D & JUDY M RAHE	45691 561ST AVE	NEW ULM MN 56073-9132
RAYMOND KUEHN	12142 SHAG RD	NEW ULM, MN 56073
REWITZER RUTH ANN	55921 US HIGHWAY 14	NEW ULM MN 56073
ROLLOFF DAVID & CHRISTENE ROLLOFF	45452 JEREMY DR	NEW ULM MN 56073
STEVENSEN NICHOLAS J & CHELSEY N BODE	45402 JEREMY DR	NEW ULM MN 56073
THOMAS & NANCY HAALA	722 GARDEN ST	NEW ULM, 56073
Tim Harmening- Courtland Township	43370 541st Ave	Courtland, MN 56021
WAIBEL MARY J	45438 541ST ST	COURTLAND MN 56021
WATSON GARY C & LINDA C WATSON	56944 HILLCREST LN	NEW ULM MN 56073
WIDMARK AARON R & LEAH C	45309 JEREMY DR	NEW ULM MN 56073



PLANNING COMMISSION

CRITERIA FOR GRANTING A CONDITIONAL USE PERMIT

Name of Applicant Mark Bulter, MN Paving & Materials **Hearing** January 22, 2024
Property Owner New Ulm Quartzite Quarries, Inc. **Continuation** N/A
File PLN24-02 **Commission Member** Choose an item.
Use Request 3-year Mineral Extraction Conditional Use Permit renewal

FINDINGS OF FACT

Authority for issuance of conditional use permits is derived from Minnesota State Statute §394.301 and Nicollet County Zoning Ordinance, Section 505. The conditional use must maintain the health, safety, morals, and general welfare of the community.

1. Given the nature of the land, the requested use is compatible with public health, safety, and general welfare.

YES ☐ NO ☐ REASON: _____

2. The requested use will not create an unreasonably excessive burden on the existing roads or other utilities.

YES ☐ NO ☐ REASON: _____

3. The requested use is compatible with the surrounding area and will not significantly depreciate nearby properties.

YES ☐ NO ☐ REASON: _____

4. The structure and the use shall have an appearance that will not have an unreasonably adverse effect on nearby properties.

YES ☐ NO ☐ REASON: _____

ATTACHMENT G
Criteria for Conditional Use Permit

5. The requested use is consistent with the County Zoning Ordinance.

YES ☐ NO ☐ REASON: _____

6. The requested use is not in conflict with the County Comprehensive Plan.

YES ☐ NO ☐ REASON: _____

7. The requested use will not create an unreasonably adverse effect because of noise, odor, glare, or general unsightliness, for nearby property owners.

YES ☐ NO ☐ REASON: _____

8. The requested use is reasonably related to the existing land use and environment.

YES ☐ NO ☐ REASON: _____

9. There are no apparent unreasonable health risks posed to neighbors or the public in general.

YES ☐ NO ☐ REASON: _____

10. The requested use ____ have adverse effect upon public health, safety and welfare due to the following other factors.

WILL ☐ WILL NOT ☐ REASON: _____

THE NICOLLET COUNTY PLANNING COMMISSION

☐ RECOMMENDS APPROVAL OF THE REQUESTED USE

☐ RECOMMENDS DENIAL OF THE REQUESTED USE

THIS DECISION WAS BASED UPON

☐ Application

☐ Site visit

☐ Information received at public hearing

☐ Staff Report

☐ Pictures

SPECIAL CONDITIONS ARE LISTED ON THE RECORDED CONDITIONAL USE AND IN THE RECORD.

FACTS SUPPORTING THE ANSWER TO EACH QUESTION ABOVE ARE HEREBY CERTIFIED AS THE FINDINGS OF THE NICOLLET COUNTY PLANNING COMMISSION.

Date: _____ Commission Member: _____



12/01/2023 - 12/31/2023 Permit Form

RECORD ID	RECORD TYPE	DESCRIPTION	ADDRESS	OWNER NAME
BLD22-078	SSTS PERMIT	NEW SEPTIC FOR 4 BEDROOM DWELLING	50059 461ST AVENICOLLET, MN 56074	MARY BETH SOOST
BLD23-183	STRUCTURE PERMIT	NEW SHED DECEMBER 2023	59570 350TH ST, LAFAYETTE, MN 56054	MICHAEL J HOFFMANN
BLD23-184	SSTS PERMIT	NEW TANK FOR NEW HOUSE USING EXISTING TANK	36387 410TH ST, SAINT PETER, MN 56082	MARTY & MARY MCCABE
BLD23-185	STRUCTURE PERMIT	REBUILD PARLOR AND MILKING BUILDING	38171 403RD AVE, SAINT PETER MN 56082	ANNEXSTAD FAIRY FARMS INC
BLD23-186	STRUCTURE PERMIT	GARAGE ADDITION	40105 615TH AVE, NEW ULM, MN 56073	RANDALL J NETZKE
PLN24-001	VARIANCE	PARSONAGE EXPANSION	3777 STATE HIGHWAY 22, SAINT PETER MN 56082	JOHN MERSETH, JR