STATE OF MINNESOTA	DISTRICT COURT
COUNTY OF OLMSTED	THIRD JUDICIAL DISTRICT Case Type: Civil Other/Misc.
All At 100 TH SIG (SI) THE SIG	Judge: Joseph F. Chase
Wilmar Investments, LLC,	Court File #55-CV-15-6531
Plaintiff,	
vs.	<u>DRAFT MEDIATED SETTLEMENT</u> <u>AGREEMENT</u>
Cascade Township,	
Defendant.	
**************************************	# # # # # # # # # # # # # # # # # # #

The undersigned have arrived at the following settlement agreement:

- 1. The parties to this agreement ("The Parties") are: Plaintiff Wilmar Investments, LLC ("Wilmar"); Cascade Township; Milestone Materials; Rochester Sand & Gravel; and Mathy Construction Company. Milestone Materials, Rochester Sand & Gravel, and Mathy Construction Company (collectively "Mathy") are not parties to the present lawsuit, but are interested in the proceeding, participated in the mediation and post-mediation negotiations, and agree to be bound by this agreement.
- 2. The Parties participated in mediation with mediator William Hull on January 31, 2017.
- 3. The Parties have arrived at a tentative settlement that has two contingencies: 1) this agreement is not binding until it has been approved by a majority of the full Cascade Township Board of Supervisors; 2) this agreement is not binding unless the Township grants a zoning change and the CUP with conditions referenced below. It is understood that the Township has made no formal commitment to grant the zoning change or issue a CUP with conditions, but the township representatives that attended the mediation and participated in post-mediation negotiations intend to recommend and support this agreement.
- 4. Wilmar and Mathy agree to forever waive and relinquish any claim that the properties that are referenced in the Complaint in this matter are entitled to any grandfather rights. Wilmar and Mathy forever relinquish any claims that they are entitled to conduct activities on the properties referenced in the Complaint because they owned or leased the properties prior to enactment of county and township zoning ordinances and land use controls. The waiver and relinquishment of rights referenced in this paragraph occur automatically when

- the Township grants the CUP referenced below. The waiver and relinquishment of rights does not occur unless the Township issues the CUP referenced below.
- 5. The Township will consider a change to the zoning classification of the section 11 properties referenced in the Complaint to Ag/Resource Commercial, excepting the parcel at the end of the cul-de-sac on Oak Meadow Lane, which shall retain its current zoning classification. The zoning change shall be applied for, processed, and considered in the usual fashion specified by township ordinances. When possible, and when not inconsistent with the terms of this agreement or the terms of the proposed CUP, the Township will encourage its planning officials to make use of materials already on file related to the prior zoning change request.
- 6. If the zoning change request is granted, the Township will then entertain an application for a CUP. The parties agree that the CUP to be considered will include the conditions stated in the attached Exhibit A, a list of CUP conditions.
- 7. It is anticipated that the completion of the zoning change and CUP process could take several months. Accordingly, the Parties agree to approach the court, advise that the matter has been tentatively settled, and request a cancellation or continuance of the trial date and all pending court appearances. In the event that the settlement is not finally consummated through issuance of a CUP with conditions, the Parties will jointly request that the court reset the matter for trial if it has been taken off the court calendar. In the event that the CUP is granted, the parties agree that this matter is dismissed with prejudice and without costs, disbursements, or attorney fees to any party.
- 8. All Parties acknowledge that the Township is not bound to either grant or deny any zoning change or CUP. The township representatives attending the mediation intend to support the zoning change request and the CUP's issuance with conditions, but neither they nor the Township are bound to do so.
- 9. As the compromise of disputed claims, this Agreement is not an admission against the interests of the parties or their officers, agents, employees, insurers, representatives, or affiliates.
- 10. In further consideration of the payments made pursuant to this Agreement, each of the Settling Parties agrees to release and discharge any claims it or they may have against any of the other Settling Parties for contribution or indemnity arising from or relating to the claims asserted in this litigation.
- 11. The Parties may execute this Agreement separately, and each separate signed document shall be deemed an original regardless of the date of its execution and delivery, and these counterparts together shall be one and the same Agreement.

# <u>Wilmar Investment, LLC v. Cascade Township, et al.</u> <u>Settlement Agreement</u>

# WILMAR INVESTMENTS, LLC

Dated:	By
	Its
	Plaintiff
	Dunlap & Seeger, P.A.
Dated:	By
	Robert G. Benner
	(#)
	206 Broadway South, Suite 505
	P.O. Box 549
	Rochester, MN 55903-0549
	507-288-9111
	Email:rgb@dunlaplaw.com
	Attorneus for Wilmar Investments LLC

### <u>Wilmar Investment, LLC v. Cascade Township, et al.</u> <u>Settlement Agreement</u>

# CASCADE TOWNSHIP Dated: By \_\_\_\_\_\_Its \_\_\_\_ Dated: Ву \_\_\_\_\_ Its Plaintiff Quinlivan & Hughes, P.A. Dated: Kenneth H. Bayliss #157569 Sixth Floor, Wells Fargo Center 400 South First Street P.O. Box 1008 St. Cloud, MN 56302 320-258-7840 Email: kbayliss@quinlivan.com Attorneys for Cascade Township

# <u>Wilmar Investment, LLC v. Cascade Township, et al.</u> <u>Settlement Agreement</u>

	MILESTONE MATERIALS
Dated:	By
	ROCHESTER SAND & GRAVEL
Dated:	By Its
	MATHY CONSTRUCTION COMPANY
Dated:	By
	Faegre, Baker, Daniels
Dated:	By
	Richard A. Duncan  (#)  2200 Wells Fargo Center  90 South Seventh Street  Minneapolis, MN 55402  612-766-7000  Email: Richard.duncan@faegrebd.com  Attorneys for Mathy Construction;  Milestone Materials; and Rochester  Sand & Gravel

#### PROPOSED CUP TERMS:

#### 1. Hours of Operation

All work on the section 11 properties will occur only during the following hours:

#### **Crushing Operations:**

October 1 – March 31: Monday through Friday only, 7 a.m. to 5 p.m. April 1—September 30: Monday through Friday only, 6:30 a.m. – 6:30 p.m.

#### **Hauling and Other Operations:**

October 1 – March 31: Monday through Friday only, 7 a.m. to 6 p.m. April 1—September 30: Monday through Saturday only; Monday through Friday, 6:00 a.m. – 8:00 p.m.; Saturday, 7:00 a.m. – 3:00 p.m.

Crushing Operations includes all blasting, excavating, removal of materials, processing of materials, and rock crushing. Blasting hours are also subject to the separate limitations provided below. Hauling and Other Operations includes all loading and hauling operations associated with sales from the property.

Employees and agents may be present on premises outside of operational hours for security and other non-production tasks. There may be emergency exceptions granted based on a joint agreement between Applicant and Cascade Township.

#### 2. Days of Operation

Monday through Friday, and Saturday as shown above. There shall be no operation on legal holidays, including New Years Day, Memorial Day (observed), Independence Day, Labor Day (observed), Thanksgiving Day, and Christmas Day.

# 3. Noise Limitations and Mitigation Measures

All activities will fully comply with all applicable state and federal regulations related to noise control.

In accordance with the Applicant's attached Noise Mitigation Plan, the operation will comply with MPCA regulations for Noise Pollution Control (Minnesota Rules 7030) and blasting activities will comply with NFPA 495 guidelines, Minnesota Statutes §§ 299F.72 – 299F.831, Minnesota Administrative Rules Ch. 7500 and common industry practices.

Berms will be constructed to minimize the effects of sound on surrounding properties. The location of these berms is shown on the attached Operations Plan. Hauling from the site shall be configured so as to minimize the backing of trucks and the attending noise due to backup alarms.

Loading vehicles and excavating equipment shall be equipped with back up alarms that use alternatives to the traditional high-frequency beeping that is most commonly used as a backup warning.

Equipment and trucks shall refrain from all jake braking.

Trucks and equipment shall have effective mufflers and related technology to lower noise emissions and mitigate noise.

For noise mitigation, the Applicant will build aggregate stockpiles and maintain natural screening to the extent possible through preservation of trees, scrub, other vegetation, and topography.

Applicant has provided the Township with a Noise Mitigation Plan, which contains the noise reduction provisions of this agreement and is designed to minimize noise and impacts on residents. Applicant must comply with the terms of the Noise Mitigation Plan. Applicant agrees to incorporate industry best management practices and incorporate technological improvements in their Noise Mitigation Plan. The Applicant's Noise Mitigation Plan has been reviewed by a qualified engineer agreed to by the parties and the Applicant has implemented and will continue to implement the reasonable recommendations from that engineer. The Township shall pay the cost of the engineer's services.

#### 4. Dust Control

For dust mitigation, the Applicant will introduce wind barriers, such as earth berm(s) or tree line(s). In addition, dust will be suppressed on site using equipment water suppression systems, water trucks, or other appropriate measures.

Dust abatement methods shall be required and enforced when: working and mining within the site, hauling from the site, on the access driveway and hauling material from the extraction site, to the nearest paved road. Mitigating measures, such as vegetated earth mounds, vehicle speed limits, and maintaining roads, windbreaks, dust suppression, and strategic placement of stockpiles, will be used to minimize fugitive dust emissions. Mining operations cannot create any undue smoke or odors. Best management practices for dust control shall be strictly observed.

Applicant has provided the Township with a Fugitive Dust Control Plan to minimize the effects of dust and airborne particulates on surrounding properties. (See attached Fugitive Dust Control Plan.) Applicant must comply with the terms of the Fugitive Dust Control Plan. Applicant agrees to incorporate industry best management practices and incorporate technological improvements in its Fugitive Dust Control Plan. The Applicant's Fugitive Dust Control Plan has been reviewed by a qualified engineer agreed to by the parties and the Applicant has implemented any reasonable recommendations from that engineer. The

Township shall pay the cost of the engineer's services. The Fugitive Dust Control Plan addresses the presence of particulate dust smaller than 10 microns at neighboring property lines.

#### 5. Berms and Visual Blocking

The Applicant must preserve the existing perimeter tree canopy (at highest point of elevation) and vegetation must remain to keep the visual appearance, aesthetics, and reduce the amount of dust and noise from leaving the mining area. Additionally, berms will be created and vegetated to assist with this effort. The locations of berms and preserved areas are shown on the Operations Plan.

The operation shall include the construction of berms to block views of the operations from the surrounding properties. The mining and processing facilities should be designed to be as inconspicuous to the immediate public as possible.

#### 6. Height of Storage Piles

The top of storage piles shall be no higher than 1,063 feet above sea level.

#### 7. Light Pollution

Lighting of the section 11 properties shall be minimized so as to avoid impacts on surrounding properties. Lighting for the operations must be directed away from neighboring properties. Any lighting for the operations used shall be shielded so as to minimize effects on surrounding properties.

#### 8. Blasting Limitations

Blasting shall be conducted in accordance with NFPA guidelines, Minnesota Statutes  $\S929F.72-299F.831$ , Minnesota Administrative Rules Ch. 7500, and industry practices to minimize adverse effects and ensure no damage to neighboring properties.

Blasting shall only occur Monday through Friday.

Any blasting shall take place between the hours of 10 a.m. and 4 p.m., unless a delay occurs due to weather conditions or equipment breakdown. 'Weather conditions' includes only unanticipated conditions that interfere with blasting on any given day, not, for instance, excessive rainfall that delays or interferes with construction projects that rely on the quarry for materials. The Township must be notified if a delay occurs that requires blasting outside of these hours, and the cause of the delay.

The quarry operator shall provide 48 hours advance notice of its intention to conduct blasting by way of a phone call, fax, email notification, or website posting, including the date and approximate hours during which blasting will

take place, to individuals residing within  $\frac{1}{2}$  mile of the Section 11 property that have requested that they be so notified.

#### 9. Groundwater Levels

All water use at the site will be managed in accordance with the requirements of the Water Appropriation Permit to be issued by the Minnesota Department of Natural Resources (MNDNR). Conditions of this permit will be solely governed and determined by the MNDNR and shall address (see attached Groundwater Monitoring Plan):

- Installation of monitoring wells
- Automated monitoring of water levels
- Reporting of the results of water levels monitoring to the MNDNR
- Reporting of water appropriation volumes to MNDNR
- Adherence to Water Use Conflict and Well Interference resolution processes

If the holder of the Water Appropriation Permit (the Applicant) is notified by the MNDNR that a water use conflict is suspected and probably due to the Applicant's water appropriation, based on confirmation of a formal well interference complaint or a preliminary hydrologic assessment, all appropriation authorized by the MNDNR permit must cease immediately until the interference is resolved. The Applicant may be required to obtain additional data to support the technical analysis, such as domestic well information within a radius of one and one-half miles of the production well. The Applicant and the impacted party may engage in a negotiated settlement process and there may be modifications made to the MNDNR permit in support of conflict resolution.

Without regard to whether a complainant makes a formal complaint through the MNDNR well complaint process or not, should the availability of water to existing domestic water well be interrupted or cease and it is believed to be a result of the Applicant's dewatering activities, the well owner may submit details of the problems to the Applicant. Within 12 hours of the receipt of the complaint, the Applicant must contact a licensed well contractor who has sufficient credentials (e.g. is familiar with local geology, local wells, well drilling, well repair, and located in the local proximity) to investigate the complaint. The well contractor shall advise the Applicant and the complainant of the timetable for the initial investigative visit. The initial investigative visit by the well contractor must be paid for by the Applicant. Should the initial investigative visit determine that the Applicant's dewatering activities have caused an interruption to the availability of water to the well, the Applicant shall incur the expenses required to remedy the situation. Costs include, but are not limited to, the well investigation by consultants, well repairs, and well construction. The Applicant shall provide a safe and adequate drinking water supply within 12 hours of notification and until either the water supply has been re-established to the homeowner, or the investigation has determined that the lack of water available to the well is not

associated with the Applicant's dewatering activities. Within 48 hours of receiving a well complaint, the Applicant shall notify the DNR Area Hydrologist that a complaint was received. If the complaint is unresolved, the complainant may choose to submit a formal well interference complaint to the DNR Area Hydrologist. The DNR will then conduct a technical review, determine the probable cause of the problem, and take appropriate action under the Water Appropriations Permit Program.

#### 10. <u>Location of Noisy Equipment (Rock Crushers)</u>

Rock crushing equipment shall be located so as to minimize impacts on surrounding properties.

#### 11. Location of Load Out Operations

Load out operations shall be located so as to minimize impacts on surrounding properties.

#### 12. Traffic Management Plan

The Applicant shall present a traffic management plan that defines routes of traffic coming to, operating on, and departing from the section 11 properties. All operations shall be in accordance with the traffic management plan. (See attached Haul Traffic Route display.)

The Applicant will maintain and repair any damage to Access Road to the east of the property access point to its intersection with East River Road to the Township engineer's reasonable satisfaction as long as the quarry is in operation. Once quarrying has ceased, this maintenance will be the responsibility of Cascade Township.

Any access shall be approved by the appropriate road authority. Ingress and egress points shall be clearly marked and only those signed access points shall be used.

"Trucks Hauling" signs with red flags are to be posted in locations to be determined by an engineer identified by the Township when hauling from the site and to be removed when hauling is not taking place.

# 13. <u>Limitations on Hauling to the Site from Off-site Locations</u>

The section 11 properties shall not be used as a stockpiling, storage, or processing site for materials that were not excavated from the section 11 properties. No crushing of recycled asphalt or concrete will be allowed on the section 11 properties. No off-site materials will be transported to the section 11 properties for crushing purposes.

# 14. <u>Use of Non-Standard Backup Alarms on Trucks and Loading Equipment</u>

Loading vehicles and excavating equipment shall be equipped with back up alarms that use alternatives to the traditional high-frequency beeping that is most commonly used as a back up warning.

#### 15. Reclamation and Restoration

Progressive reclamation will occur as extraction of aggregate resources is completed. (See attached Reclamation Plan(s)) Two conceptual Reclamation Plans have been provided. The first plan would create solely a recreational water body with safe slopes created on site. The second plan includes a generalized mixed use development of the property. Both of these plans have been provided due to two factors. First, the unknown community needs for the property many decades into the future. Second, the unknown community needs for aggregate in the future. The marketability of aggregates derived from the proposed quarrying will have a direct effect on the amount of earth material available for completion of reclamation at the site and the final topography of the site. The two plans provided are conceptual and are presented merely for consideration of possible future conditions. Ultimately, the final end use of the property will be determined by Wilmar Investments, LLC.

# 16. Bond or Security for Reclamation and Restoration

The Applicant shall post a reclamation guarantee for the area of disturbance giving financial assurance to Cascade Township and shall post a bond or security sufficient to assure reclamation and restoration in an amount to be agreed upon by the parties, or if the parties cannot agree, an amount determined by a third party agreed upon by the parties. The bond or security shall be for the purpose of assuring reclamation and restoration.

#### 17. Security of the Site

The site shall be secured with locking gates and fencing along the east property line near the trailer homes. "No Trespassing" signs will be located on the property so as to deter access to the section 11 properties by children or other unauthorized individuals. If fencing is not present along areas that abut public property, Applicant shall post signs warning of hazards to those that might enter the property from public land.

#### 18. Fuel Storage

No fuel shall be permanently stored on the section 11 properties.

#### 19. Wetland Impacts and Stormwater

All aggregate extraction and processing operations shall be conducted in a manner that minimizes impacts to wetlands. All aggregate extraction and processing operations shall be set back at least 200 feet from the north branch of the Zumbro River with the exception of the following:

- Stormwater structures and Best Management Practices
- Existing internal roadway
- Existing berm(s)
- Dewatering structures
- Maintenance activities of the aforementioned items

The Applicant will maintain a Stormwater Management Plan for the operation in order to be compliant with the Nonmetallic Mining Storm Water Permit with the Minnesota Pollution Control Agency. That plan will dictate the stormwater management at the site. (See attached Storm Water Pollution Prevention Plan)

For erosion control, the Applicant will employ the use of silt fencing, erosion control nets or mats, mulching, filter fabric barriers, and/or straw bale barriers where appropriate and as Minnesota Pollution Control Agency permits require.

#### 20. <u>Utility Impacts</u>

All operations shall be conducted in a manner that does not have adverse impacts on utilities, either existing or proposed.

# 21. Compliance with Laws and Regulations and Representations Made During Environmental Review (Gallons of Water to be Extracted; Material Not Excavated Below 900'; Etc.)

The Applicant shall comply with all rules, regulations, requirements, or standards of the Minnesota Pollution Control Agency, Minnesota Department of Natural Resources, Army Corps of Engineers and other applicable federal, state, or local agencies protecting the public's health, safety, and general welfare. Mining activities must always comply with the most recent Minnesota Department of Natural Resources standards including the Wetlands Conservation Act. These include but are not limited to air emission permitting and storm water permits. All MN DOT permits must be obtained and the Applicant must adhere to all MN DOT regulations.

All facilities and activities shall comply with all applicable land use, health, building, plumbing, mechanical, and electrical codes. All structures erected, built, or installed shall have a building permit. All fuel tanks and flammable materials shall be located above ground, in such locations, with containment, and under

such conditions as to conform to the requirements of the national fire codes (NFPA).

Applicant's operations will be consistent with the conditional use permit.

Unit of government	Type of Application
Minnesota Department of Natural Resources	Water Appropriation Permit
Minnesota Pollution Control Agency	General NPDES Storm Water Permit
Minnesota Pollution Control Agency	Air Emissions Permit
Cascade Township	Rezoning and Conditional Use Approval

#### 22. Odor Control

Odors at the site shall be controlled in a manner that minimizes impacts on adjoining properties.

#### 23. Vibration Control

Operations shall be conducted in such a manner as to minimize impacts on adjacent properties caused by vibration. Blasting vibration shall be allowed up to industry standards and regulations.

#### 24. Excavation Setbacks from Property Lines

Beyond any setbacks required by law, all activities related to the operations, including berms, shall be set back at least 100 feet from the property line.

# 25. <u>Complaint Process for Complaints Related to Operations</u>

Applicant shall have a written procedure for receiving and responding to community complaints related to its operations. Applicant shall identify a contact person who will receive complaints and shall promptly respond to complaints. Applicant shall promptly supply all complaint information to the Township.

#### 26. Spills on Roadways

Trucks used in hauling materials from the site shall be loaded in a manner to minimize spillage onto public roadways. The clean-up of aggregate as a result of spills or general transportation of aggregate from the Section 11 property to the Section 14 property for further processing, from the property access point on Access Road to the south access point of Rochester Sand & Gravel on East River Road, shall be the responsibility of the mine operator if the truck: (i) is owned and operated by the mine operator or a subsidiary or affiliated company; or (ii)

the mine operator has directly contracted with the truck for the purpose of transporting aggregate from the Section 11 property to the Section 14 property.

#### 27. Critical Habitats and Historical Features

No critical habitats or historical features will be affected by the mining activity on the property.

#### 28. Violations

Violation of the terms of the conditional use permit are subject to the provisions of the CUP and the Township CUP ordinances. Applicant shall have the rights and remedies provided in the CUP. Violations of the CUP may result in revocation of the conditional use permit and the Township shall have all remedies available to it pursuant to its ordinance or otherwise available to it in law or equity. Notwithstanding the foregoing, in the event that Applicant fails to perform any of the terms and conditions of the CUP, the Township shall provide Applicant, in writing, a notice of default and the parties shall hold an initial meeting within ten (10) days following notice of such default for purposes of attempting to resolve the default on an amicable basis unless the Township determines that threats to health, safety or property require a shorter notice period. If the parties cannot resolve the matter, the Township may issue a notice of violation to Applicant setting forth, in detail, the action(s) that must be taken to remedy the alleged default and a reasonable time period for curing the default.

#### 29. Other Conditions

The CUP shall be in the form of the Township's typical CUP and shall include terms as are typically included in the Township's CUPs.

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# Fugitive Dust Control Plan (January 22, 2018)

# FUGITIVE DUST CONTROL PLAN

for

MINING, ROCK CRUSHING and PROCESSING OPERATIONS

Crushing Operations and Permitted Aggregate Site in Section 11, Cascade Township, Minnesota

Milestone Materials 920 10th Avenue North Onalaska, WI 54650 Phone (608) 783-6411

Facility Contact Personnel Phone (608) 783-6411

Tim Jones - Vice President Tara Wetzel - Environmental Manager

# **Fugitive Emissions Control Plan**

Milestone Materials ("Company") recognizes the need for a comprehensive and consistent Company policy that outlines control measures, activities, and management options that contribute to a reduction in fugitive emissions from crushing, processing, and transporting of non-metallic mineral aggregates at aggregate mine locations. This plan specifies potential fugitive emissions sources, appropriate control options, operator responsibilities and responsible persons, and record keeping requirements for maintaining documentation of plan use.

# I. POTENTIAL FUGITIVE EMISSION SOURCES AND MANAGEMENT CONTROLS

- A. Transport of Shot Rock to Crusher
- B. Crushing Operations
- C. Screening Operations
- D. Conveying of Aggregate Products
- E. Stockpiling and Stockpile Maintenance
- F. Truck Transport of Final Product
- G. Total Facility

#### II. FUGITIVE EMISSIONS CONTROL OPTIONS

- A. Water Spray Application
- B. Shrouding
- C. Chemical Dust Suppressant Application
- D. Drop Height Management
- E. Site Traffic Speed Control
- F. Timing Management
- G. Climatic Influence
- H. Paving/Sweeping

#### III. RESPONSIBLE PERSON / RESPONSIBILITIES

- A. Maintain Control Equipment in Operable Condition
- B. Evaluate Fugitive Emissions and Need for Control Application
- C. Maintain Access to Water Sources as Needed
- D. Enforce Speed Limits on Process Vehicular Traffic
- E. Utilize Management Options
- F. Document Control Activities

#### IV. RECORDKEEPING / ACTIVITY DOCUMENTATION

- V. PM10 AT THE FENCE LINE
- VI. COMPANY CONTACTS FOR DUST COMPLAINTS

# I. Potential Fugitive Emission Sources and Management of the second state of the second secon

- **A. Transport of Shot Rock to Crusher** Loader traffic to and from the primary crusher from the shot rock or rubble pile may create excess fines in the tire lanes when surface moisture conditions are dry. Loader operators should scrape and replace traffic lane aggregates when necessary to reduce surface fines. Water may be added as necessary to maintain fugitive suppression.
- **B. Crushing Operations** Each reduction phase of the crushing process has the potential to generate fugitive emissions. Primary crushing typically exhibits the least fugitive generation, with each successive reduction having a greater potential for emissions. Each facility or crushing spread has spray equipment on site, including pumps, hose, spray nozzles, and spare parts. Spray nozzle location and water application rate is determined by the operator to provide maximum control under situational circumstances. The nozzle or nozzles may be located on one crusher or all crushers at the facility, depending on the needed control.
- C. Screening Operations Screening operations may generate fugitive emissions and are particularly susceptible to wind and low moisture conditions. The initial screen may have adequate material moisture for good emissions control in most circumstances, but as with the reduction phase, each successive screening operation has an increased potential for emissions, with decreased material moisture contents and finer fractions. Water addition during crushing typically exhibits the best control for screening operations. When water applications are ineffective, shrouding may be added to the screen units to minimize wind influence on the under-size fraction. Severe conditions may require that screen units be re-oriented to minimize wind influence on the screen face.
- **D. Conveying of Aggregate Products** Conveyance of rock products during the processing of aggregates exhibits the least potential for fugitive emissions of all the processes at a facility. The drop or transfer points between processes and conveyors provide the most opportunity for emissions, but are typically the easiest to control. Wind and/or low moisture conditions may be abated by water application, shrouding of the transfer point, enclosure hoods and boots, and minimizing the drop height between transfer points. For normal operations, application of a single management tool may be very effective in controlling emissions. Extreme conditions of wind and low aggregate moisture may necessitate the use of two or more of the available control options to provide adequate emissions reduction.
- E. Stockpiling and Stockpile Maintenance Stockpiling operations at crushing facilities consist of placing aggregates in storage piles with stackers or front-end loaders. Stackers are typically adjustable; so drop height to the pile can be controlled as with other conveyors. Loader transfer results in fewer emissions from dumping, but greater potential from the loader traffic and tire contact with generated fines. Travel roads may be sprayed with water or chemical dust suppressant for longer lasting control. Scraping and application of new aggregate can also be effective in controlling fugitive emissions from this operation. In quarries where travel distances are greater or material tendencies exhibit greater fugitive potential, traffic lanes may be paved and/or swept as more intensive management practices. Fugitive emissions from stockpiles are highly dependent on aggregate gradation, weather,



location, stockpile age, and amount of loading face activity. Aged stockpiles generally exhibit lower fugitive emissions than freshly crushed aggregate materials.

In order to minimize the potential for fugitive dust emissions, all raw material and finished product stockpiles (all materials other than topsoil and overburden which are shaped into berms and stabilized with vegetation) must be maintained on the floor of the quarry once a workable quarry footprint is established. Stockpile height is governed by the Conditional Use Permit issued by Cascade Township. In areas where emissions are above acceptable levels, water application to the stockpile exterior can provide adequate control. Intermittent applications may be necessary when emission conditions are persistent. Orienting the working face to avoid cross-winds can also be an effective management tool for lowering emissions.

- **F. Truck Transport of Final Product** Truck traffic in the area of crushing operations has the potential to generate excessive surface fines on haul roads. While climatic and situational circumstances can contribute to effective controls on a short-term basis, other more intensive and continuous practices are usually required to maintain control of fugitives from this source. Paving, sweeping, watering, chemical application and speed controls are the most effective options for controlling fugitive emissions from truck traffic. Any one or more of these management options may be incorporated into routine operations to provide continuous benefit.
- G. Total Facility Minimizing the emissions from fugitive sources at a crushing and processing facility requires a commitment of resources from top-level management, knowledge of potential contributing factors on the part of operations level personnel, and a common-sense application of available management options to provide significant control of fugitive emissions from crushing operations. The crushing operations foreman is trained to recognize state and federal opacity limits for various processes, continually evaluate operating conditions and resulting opacities, and apply appropriate controls to provide compliant operation. The foreman or other company responsible personnel document production, conditions, and controls to demonstrate compliance with permit conditions.

# **II. Fugitive Emissions Control Options**

- **A. Water Spray Application** Water may be added directly to aggregate product with spray nozzles at any phase of the production cycle. Each facility is equipped with adequate equipment to make multiple-point application of water if needed. The person responsible for plant operations decides where application affords the best control efficiency for current conditions. In addition to material control, the plant foreman is responsible for water application to site roads and stockpiles as necessary to maintain acceptable site opacity.
- **B. Shrouding** Shrouds may be constructed and maintained on any process equipment where it affords fugitive emissions control or may be used only on a site-specific or equipment-specific basis. Shrouds used for emissions control must meet MSHA safety standards.



- C. Chemical Dust Suppressant Application For climatic conditions where natural moisture is deficient and traffic volume is a contributing emissions source, the application of persistent controls such as calcium chloride or forest product resins may be necessary to provide longer lasting effective control. Applications may be supplemented with truck applied water as needed.
- **D. Drop Height Management** Facility foreman is responsible for minimizing drop height at all material transfer points, including stacker and loading operations.
- **E. Site Traffic Speed Control** Facility foreman or company responsible official enforces appropriate speed limit in the production area. Speed limit determination is influenced by site-specific conditions and may be lowered at the foreman's discretion, to provide greater control influence.
- **F. Timing Management** The supervisor of crushing operations may change scheduling of processing or blasting in a particular location or quarry to take advantage of climatic influence in providing additional emissions suppressive effect. While this option is variable, it can provide significant benefit in problematic geologic formations or urban locations.
- **G. Climatic Influence** Climate variations during the crushing season may have significant impact on emissions depending on precipitation frequency and duration. Midwestern locations provide opportunity for natural suppressive effects during the processing season, either by direct precipitation on process materials, or through retained moisture from those events. Seasonal variations in precipitation amounts, heat degree days, and wind determine the degree to which additional control activities are needed to meet permit terms and opacity limits.
- **H. Paving/Sweeping** Haul and access roads at some locations receive heavy traffic volume and may generate road surface fines in unmanageable quantity. For these extreme conditions, paving with hot-mix asphalt or recycled asphalt pavement and/or sweeping may be helpful in reducing emissions on an ongoing basis. The Company will pave the haul road from its southeast intersection with the access road, north to the end of the preserved woodland area shown on the attached Operations Plan, and will sweep this paved area as necessary to address fugitive dust. More intensive management practices such as these are normally supplemented with water spray or chemical suppressants to provide maximum emissions reduction.

# III. Responsible Person / Responsibilities

A. Maintain Control Equipment in Operable Condition - The facility foreman is responsible for managing emissions control and is required to maintain all suppressive equipment in operational condition according to the Malfunction Prevention and Abatement Plan. He must maintain adequate spare parts inventory to accommodate changing conditions and equipment replacement. All fugitive dust control equipment for



the crushing operations must be inspected daily. Daily inspection of fugitive dust control equipment is recorded on the daily tracking form.

- **B. Evaluate Fugitive Emissions and Need for Control Application** The facility foreman or other person designated as being responsible for operations management is required to evaluate conditions, process variables, and fugitive emissions on a continuous basis during crushing operations. From this evaluation, the responsible person determines whether opacity and emissions are within allowable levels, and if not, to apply available control options as needed to gain the required level of fugitive control.
- **C. Maintain Access to Water Sources as Needed** The foreman is responsible for locating and maintaining access to water resources to provide adequate fugitive emissions control. The water resource utilized may be truck delivered, well pumped, quarry or pit groundwater, or surface water available at the site.
- **D. Enforce Speed Limits on Process Vehicular Traffic -** The facility foreman/responsible person must determine if enforced speed limits are effective in controlling fugitive emissions from that source. He has authority to reduce vehicular speeds as appropriate to gain the needed control. Site speed limits affect all process vehicles, including loaders, trucks, and visitors. The Company will post a 20 mph speed limit on the haul road from the southeast access point to the quarry entrance; all other internal haul roads will have a posted speed limit of 15 mph both as shown on the Operations Plan; and all areas within the active quarry footprint will operate at a 10 mph speed limit.
- **E. Utilize Management Options** The facility foreman has authority to implement any available control option at his discretion. If conditions do not respond favorably to applied controls, the foreman may terminate production until additional resources are available or site conditions change. If available control options are ineffective in maintaining fugitive emissions at acceptable levels, the foreman is required to report that circumstance to company management for further action.
- **F. Document Control Activities -** The foreman or other person designated by the Company as responsible for facility compliance must maintain daily records of production throughput, fugitive emissions suppressive control activities, and relative weather conditions, to comply with permit terms while the site is active. Records for current year production are maintained at the facility and at the company headquarters for an additional 4 years.

# IV. Recordkeeping / Activity Documentation

The Company is committed to accurate and complete documentation of crushing process parameters that influence and indicate compliance with applicable state and federal regulations. The facility foreman / responsible party is required to record important process information daily while the site and crushing operations are active, and to deliver the records to the Company office for storage and reference for an additional four years.



# V. PM10 at the Fence Line

The state issued air quality permit for aggregate operations requires fugitive dust control measures to comply with ambient air quality standards, such as PM10, at the fence line as well as the source. Therefore, compliance with the state issued air quality permit ensures PM10 compliance at the fence line. Fugitive dust control measures described within this plan as well as Fugitive Dust Control plans for aggregate crushing operations are utilized to comply with both state and federal ambient air standards.

# VI. Company Contacts for Dust Complaints

The Milestone Materials contact for dust complaints is the Milestone Materials Area Manager at (507) 288-7447. If unable to reach the local area manager, contact the Milestone Materials Operations Manager at (608) 783-6411.





# Noise Mitigation Plan (January 22, 2018)

# **Noise Mitigation Plan**

for

MINING, ROCK CRUSHING and PROCESSING OPERATIONS

Crushing Operations and Permitted Aggregate Site in Section 11, Cascade Township, Minnesota

Milestone Materials 920 10th Avenue North Onalaska, WI 54650 Phone (608) 783-6411

> Facility Contact Personnel Phone (608) 783-6411

Tim Jones - Vice President Tara Wetzel - Environmental Manager

# Scope and Purpose

This noise mitigation plan describes the scope of noise reduction provisions that will be employed at the North Quarry to minimize noise and impacts to residents. The scope of the plan includes noise limitations and mitigation measures, including but not limited to, industry best management practices along with economically and technologically feasible equipment retrofits, site configurations, and engineering and administrative controls.

The purpose of the Noise Monitoring Plan is to comply with the Conditional Use Permit issued by Cascade Township. The Site will operate in full compliance with all applicable state and federal regulations related to noise control, including but not limited to the Minnesota Pollution Control Agency's (MPCA) regulations for Noise Pollution Control (Minnesota Rules 7030).

#### Noise Limitations

The Noise Standards are dependent on the noise area classification of the receiver. For residential housing, the allowable  $L_{10}$  daytime and nighttime noises are 65 dBA and 55 dBA, respectively, which can be exceeded ten percent of the time for an hour survey. Subsequently, the allowable  $L_{50}$  daytime and nighttime noises are 60 dBA and 50 dBA, respectively, which can be exceeded fifty percent of the time for an hour survey. Daytime is defined as 7:00 AM to 10:00 PM, and nighttime is defined as 10:00 PM to 7:00 AM. All measurements of sound are made at or within the point of human activity which is nearest the noise source. The standard described above will be applied, as appropriate, depending on the time of day when operations are occurring.

#### Mitigation Measures

Milestone Materials employs several noise reduction methods to control off-site noise exposures at the property boundaries. Typical noise reduction strategies include berm construction, natural vegetation, trees, natural topography, muffler utilization, power source location, noise deflection and absorption materials, and utilization of white noise back-up alarms. The methods of noise reduction utilized are site dependent and are adapted as needed to ensure noise exposure reductions of the employee and resulting property boundaries.

For the North Quarry site, the following noise reduction techniques will be applied at various locations throughout the property. as appropriate:

Earth berm construction per the Operations Plan, attached hereto. Company will
construct the berm between the access road and the mobile home park east of the quarry
within the first year of operations under the Conditional Use Permit following
consultation with the neighboring residents; other berms will be built as and when
affected areas are stripped of overburden and prepared for crushing. Should future
changes in quarry operations suggest that changes should be made to the currently
contemplated berms, Company will consult with Cascade Township and/or affected
residents at that time.
Preservation of natural vegetation indicated as "undisturbed" and "undisturbed trees": on
the attached Operations Plan,
Natural topography and screening,
Implementation of internal haul road traffic patterns to attenuate noise
from backup alarms, including the use of traffic patterns that minimize
backing up of haul trucks during loading operations, where possible,
operations, where possible,

Working mufflers on equipment,
Prohibition of Jake brake use, and
Utilization of white noise backup alarms on all non-road, company-owned loading and
excavating equipment.

Additional noise reduction strategies may be applied as necessary once the site is operational.

#### Noise Monitoring Parameters

Sound level measuring devices must meet Type O, I, II or S specifications under American National Standards Institute. Prior to noise readings, all sound level measuring devices must, at a minimum, be externally field calibrated before and after monitoring using a calibration device of known frequency and sound pressure level. Measurements must be made at least 3 feet off the ground using the A-weighting and fast response characteristics of the sound measuring device. If possible, all measurements should be at least 30 feet from noise reflecting structures, such as buildings. Measurements may not be made in sustained winds or in precipitation which results in a difference of less than ten decibels between the background noise level and noise source being measured. Additionally, the measurements must be made using a microphone which is protected from ambient conditions which would prevent an accurate measurement. Calibration of the sound level measuring device will be conducted annually by the manufacturer.

Background noise correction factors will be used as necessary to isolate the noise source being monitored from other surrounding noise sources.<sup>1</sup>

# **Blasting Noise**

Blasting will conform to NFPA 495 guidelines and common industry practice. These standards establish a maximum air overpressure of 133 dB(L). Seismographs will be used to monitor each blast. The seismograph records the maximum level of air overpressure at the location of each seismograph. Seismograph results will be made available to the Township for review upon request.

# Company Contacts for Noise Complaints

The Milestone Materials contact for noise complaints is the Milestone Materials Area Manager at (507) 288-7447. If unable to reach the local area manager, contact the Milestone Materials Operations Manager at (608) 783-6411. The Company will work with the complainant and local or state authorities, if necessary, to investigate and resolve all legitimate noise complaints.

<sup>&</sup>lt;sup>1</sup> Minnesota Pollution Control Agency, A Guide to Noise Control in Minnesota (November 2015), describes the process utilized for background noise correction

