



MAA Guide for the Aggregate Industry in Michigan: Fugitive Dust Control Plan

This document is to be used as a general guide and it is not intended as a sole source for information, nor is it intended to provide legal advice. Users are encouraged to seek technical advice from qualified professionals familiar with the site and fugitive dust management requirements. MAA is not responsible for any acts or omissions taken by any party using this document for reference.

Note that not all methods or techniques may be appropriate depending on the weather conditions. For example, the use of water when the temperature is near or below freezing may cause operational and safety concerns.

- Mine Property
 - Disturbed areas will be limited in such a way as to only expose areas that are being actively mined or are a part of ancillary activities servicing the mine. Other areas will be vegetated as feasible to avoid dust production.
 - Barriers including fencing, berms and vegetative buffers will be utilized when and where feasible to limit dust from traveling off site.

- Site Roadways / Plant Yard
 - The dust on the site roadways and the plant yard shall be controlled by applications of water, calcium chloride or other acceptable and approved fugitive dust control compounds. Applications of dust suppressants shall be completed as often as necessary to stay below applicable emission limits.
 - All paved roadways and plant yards shall be cleaned by vacuum sweeping or power brooming on an as-needed basis.
 - *“An as-needed basis” means the frequency or quantity of application necessary to minimize visible particulate matter emissions.*
 - Power brooming should be performed while wet from either rain or application of water.
 - For unpaved roads and parking lots they should be either:
 - Paved with asphalt or concrete
 - Treated with emulsified asphalt on an as-needed basis
 - Treated with water, calcium chloride or other acceptable dust suppressants on an as-needed basis
 - Double chip and seal and maintained on as as-needed basis
 - Any material spillage on roads shall be cleaned up immediately upon observation. Prior to closing the site at night, ensure that there is no spillage on the roads.
 - If feasible, sprayers should be utilized during operations which produce significant dust (i.e. blasting, crushing, etc.)
 - Other suggested BMPs that are commonly utilize at aggregate sites on a site specific and as needed basis include:
 - Wheel wash
 - Transfer point enclosures, chutes
 - Covering screens
 - Covering conveyors
 - Water spray at key locations on aggregate plant
 - Rumble strips on roadways



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- **Blasting**
 - Spray area with water prior to blasting to minimize airborne material.
- **Conveyance of Aggregates**
 - The drop distance at each transfer point shall be reduced to the minimum the equipment can achieve.
 - Apply water at the feed and intermediate points on an as-needed basis.
- **Transferring of Aggregates**
 - Minimize the vehicular distance between the transfer points.
 - Enclose the transfer points (when applicable).
 - Apply water on transfer points on an as-needed basis.
- **Storage Piles**
 - Stockpiling of all nonmetallic minerals shall be performed to minimize drop distance and control potential dust problems.
 - Stockpiles shall be watered on an as needed basis in order to meet the opacity limit of 5 percent. Equipment to apply water or dust suppressant shall be available at the site or on call for use at the site within a given operating day.
 - Maintain minimum size and number of stock piles of aggregate.
 - Treat around the stockpile area with water on an as-needed basis.
 - When practical, treat stockpiles with bonding agent (or polymer spray) to reduce the possibility from material to become airborne.
- **Truck Traffic**
 - On-site vehicles shall be loaded to prevent their contents from dropping, leaking, blowing or otherwise escaping. This shall be accomplished by loading so that no part of the load shall come in contact within 6 inches of the top of any side board, side panel or tailgate. Otherwise, the truck shall be tarped.
 - The drop distance during each transfer into a truck shall be reduced to the minimum the loading equipment can achieve.
 - Maintain vehicle bodies in a condition to prevent leakage.
 - Spray the aggregates with water.
 - Maintain a 15-mph speed limit in the yard.
- **Unloading of Material**
 - Reduce free fall distance to a minimum.
 - Reduce the rate of discharge of the aggregate.
 - Spray the aggregate with water on an as-needed basis.