

Carmeuse Americas—DRUMMOND ISLAND OPERATION

23311 East Haul Road • Drummond Island, MI 49726 Phone: 906.493.5211 info@carmeuse.com

July 7th, 2021

Michael Conklin

Environmental Engineer

Air Quality Division Michigan Department of Environmental Quality 1504 West Washington Street, Marquette, Michigan 49855

Subject: Fugitive Air Emissions

Dear Mr. Conklin:

Carmeuse Americas Drummond Island operations located at 23311 East Haul Road, Drummond Island, Michigan received a complaint from a resident located on the south east side of the island approximately 1.5 miles from our Carmeuse Americas Drummond Island production plant. The dust complaint received by Michael Conklin EGLE Compliance officer on June 4th was sent on to Carmeuse personnel. Michael Conklin notified Christopher Martin who then arrange for an onsite meeting with plant personnel for June 8th to investigate the complaint.

During the meeting, Roger Nash Site Operations Manager toured the complainant's home and Carmeuse's facility with Michael Conklin. It was noted, through photos and written notes of limestone dust on a barbecue cover and the house itself. Initially, it was thought the dust came from a storage pile of limestone fines but after further investigation by John Abbitt and Roger Nash it was determined the fugitive dust that affected the residents, came from our dry settling ponds. It has been a very dry winter without much snow cover or precipitation and the settling pond had the top layer of fine material become dry and loose. This top layer most likely became airbourne due to high winds.

In speaking with Roger Nash and John Abbitt, we have determined the settling ponds were the cause of the fugitive dust that affected Mr. Coppings property during the times he had complained. We first thought it was the stockpile but after visually seeing the material being transport by the wind from the settling pond, we changed our focus to the ponds in addition to the stockpile of tailings. The facility made some repairs to the embankments to direct and hold water for much longer period of time in pond 1 and 2. This will keep them flooded and eliminate the potential of dust coming from the pond area. See photo 1 an 2.



Photo #1



Photo # 2



Additional, we have knocked down the original limestone fines pile that was originally thought to be contributing to the fugitive dust. Please see Photo #3

Photo #3



The other location for fugitive dust was our internal roadway from the production office to the quarry face, which is approximately 8 miles. It was noted through Michael Conklin that the opacity reach 40 percent on an instantaneous reading. The 6-minute average was approximated at 6.5 Percent. We noted from Michael's photo that the opacity was 5% John or Roger did not observe any dust coming off the truck at 40%. Carmeuse has always committed to reduce fugitive dust from our roadways. We continue to use and spray the roads with water. In addition to water, we have finally received confirmation a contractor will travel to the island to apply brine to our road and continually keep the roads with dust suppression. The brine is scheduled for July 7-12. Carmeuse Drummond island facility has updated its fugitive dust plan to include brine for the roads and to ensure that we minimize the impact of the settling ponds.

Carmeuse Lime Drummond operation strives to comply with all legislation by conducting visible emission observations. If emissions are noted, Carmeuse will take necessary action to rectify any problems immediately. We have been in contact with the resident and we noted that he reported incidents on April 6 and May 21 of this year. We did note that there was heavy winds on those days. Roger Nash and Christopher Martin have mentioned to EGLE and the residents that we would prefer that we be contacted immediately so that we can react or understand if we have a problem area that is affecting our



neighbours. We have been in contact with the affected parties and will provide any additional help needed to clean up any dust that has influenced their homes. Our facility management will be reviewing our inspection frequencies of the pond and stockpile areas. They will work with the environmental manager to identify additional dust suppressions options.

We invite to you visit our facility so we can demonstrate the philosophical approach we take in dealing with environmental issues. If you have any additional questions, or would like to discuss this matter further, please call Christopher Martin at 519 535 0530 or Roger Nash at 989 351 9628.

Sincerely,

Christopher Martin

Christopher Martin

Carmeuse Americas

Senior Environmental Manager

Great Lakes

Cc. John Abbitt

Cc. Roger Nash



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Exhibit A

Fugitive Dust Control Plan

Carmeuse Americas – Drummond Island

1. Summary of Source Descriptions and Control Measures:

a. Loading or Unloading of Open Storage Piles

Limestone is crushed, sized, stockpiled, and washed prior to shipment to customers. Consequently, the amount of material less than 100 mesh is less than 1%. This factor in addition to the fact that the material is wet when it goes through the process greatly reduces the potential for fugitive dust emissions. The limestone is blasted and is moved to the primary crusher through a series of haul trucks. The truck dump the stone into the primary crusher. The stone is damp to wet and then is crushed and fed through a series of secondary crushers, screen, and are conveyed onto storage pile around the shipping dock. The stone is wet throughout the process due to a series of water sprays. Normal pile weathering further reduces the potential for fugitive emissions. Moisture causes aggregation of larger particles. Any significant rainfall soaks the interior of the stockpile, and the drying process is very slow. The material is moved by front-end loaders to a smaller pile, which has underground feeders as described in outdoor conveying. During movement by the front-end loaders, the material is wet. The limestone pile is inactive for only a small percentage of the time. The stone depending on the customer is loaded onto boats through a belt system.

(Note: Water will be applied to storage pile as needed.)

b. Transporting of Bulk Materials:

Each shift operator is responsible for the housekeeping and maintenance of the load out area. Spillage that occurs during load out will be cleaned as soon as possible. Water truck is permanently located at the plant, and it is available for watering plant roadways. The supervisors of each department will ensure the housekeeping procedures are followed. The plant maintains a safe speed limit throughout the plant.

c. Outdoor Conveying – Enclosures:

<u>Limestone</u> – This material originates from a conveyor with feeders located underneath the storage pile. The material has a high moisture content during conveying from the storage pile to the plant area to the loading onto a ship. The conveyor is underground and completely enclosed from the storage pile to a





transfer point also located underground. From this transfer point to the plant storage piles, the conveyor is covered with a 210-degree enclosure.

- d. Roads and Lots:
- 1) <u>Paved areas</u> The plant roadway loop that is used by all vehicles coming into the property is completely paved. A water truck is located at the plant and is used as needed to clean and or wet the roadway, as weather permits.
- 2) <u>Unpaved Roadways</u> The front-end loader and rock truck is generally the only vehicle using the unpaved roadways in the stockpile area. Unpaved will be treated with a dust suppressant as needed. The facility has determine brine will be the best type of dust suppressant for the unpaved roads. Other faculties with similar roads have provided great feedback for using this product. Ground condition, such as rain or snow/ice may create conditions where the dust suppressant will not be necessary. A log sheet will be kept that will record the wetting schedule, approximately volumes, and precipitation amounts as needed.
- e. Housekeeping Procedures:
- 1) <u>High pressure water clean-up</u> A clean-up program will be instituted where water is used to clean accumulated dust from buildings and other appropriate areas, as necessary.
- 2) <u>Product conveyors, transfer points, etc.</u> A daily inspection will be performed. Points of accumulation of dust will be cleaned as needed.
- 3) <u>Screening and storage area</u> The screening and storage area will be inspected regularly. Points of accumulation of dust will be cleaned as needed.
- 4) <u>Plant Grounds</u>- The roadways and general grounds will be inspected regularly. Points of accumulation of dust will be cleaned as needed. The facility management will check the settling ponds regularly to ensure water in pond during production times.