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# **City of Detroit** CITY COUNCIL

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TO:	The Honorable Detroit City Council
FROM:	David Whitaker, Director A Legislative Policy Division
DATE:	July 11, 2024

#### **RE:** ORDINANCE TO REGULATE FUGITIVE DUST EMISSIONS IN DETROIT

Council Member Coleman A. Young, II that the Legislative Policy Division (LPD) provide a report that analyzes and examines aspects of the Fugitive Dust Emissions Ordinance in Detroit, passed at the Formal Session of Tuesday, May 21, 2024, (Item 20.1). This report addresses several questions posed by Council Member Young II concerning the definitions, enforcement, and implications of the ordinance.

#### **Definition of "Human-Made Activity"**

Council Member Young II has inquired about the definition of "human-made activity" within the context of the Fugitive Dust Ordinance. "Human-made activity" is an undefined term, but it appears in the definition of "Fugitive Dust" which "means any solid particulate matter that becomes airborne or otherwise moves beyond the premises or, if being transported by a vehicle, moves beyond the confines of the vehicle, by natural or *human-made activities*, excluding engine combustion exhaust and particulate matter emitted from a properly permitted exhaust stack."<sup>1</sup>

LPD has reached out to the Building, Safety, Engineering, and Environmental Department (BSEED) and the Law Department to appropriately define the term. BSEED has not responded to LPD's questions as of the date of this report.<sup>2</sup> Because "human-made activity" is undefined, it must be interpreted within the broader context of the ordinance. As explained below, the ordinance is intended to regulate "community

<sup>&</sup>lt;sup>1</sup> 2019 Detroit City Code, Sec. 8-15-5

<sup>&</sup>lt;sup>2</sup> According to the Law Department, "Human made activity in this context means activity by a person or an instrument of a person (including machinery)."

establishments" and not individual residents. Therefore, while the ordinance applies to human activities as opposed to naturally occurring dust, it does not apply to every human activity by each individual.

#### **Impact on Residents: Routine Maintenance Activities**

There is some concern that the fugitive dust ordinance could be enforced against individual residents for everyday activities like cutting grass or sweeping sidewalks if they create dust with an opacity greater than 0<sup>%</sup>.<sup>3</sup> The opacity limits under the ordinance only apply to "community establishments" which "means all businesses, non-profit organizations, churches, governmental agencies, and other such institutions, and residential structures containing five or household units.<sup>4</sup> The ordinance technically allows for the ticketing of an individual if the individual is a "community establishment designee" or an owner of the property where the community establishment is located.<sup>5</sup> However, individual homeowners and residents are not "community establishments" that are subject to the ordinance. Practical enforcement would likely account for the minor nature of these activities compared to larger, more impactful industrial processes.

The ordinance is not intended to prevent individuals from maintaining their lawns. However, the ordinance does apply to operations that create fugitive dust at community establishments including "weed abatement" and "landscaping."<sup>6</sup> If the activity in question takes place at a multifamily unit or apartment with 5 or more units. The individuals who would be responsible or who would be issued a ticket would be:

- The Property Owner
- The community establishment designee, which could be a manager, operator, or agent of the fined establishment

In cases where the owner or the community establishment designee lives in the apartment or multifamily dwelling with 5 or more units, a "resident" could technically be fined. However, this would not mean that the renter would be directly responsible for the ticket with the city. Instead, the responsibility would fall on the owner or designee. This distinction is important to ensure that residents are not unduly penalized for routine maintenance activities and that enforcement is focused on larger and more impactful sources of dust emissions.

## Impact on Commercial/Industrial Community Establishments

The ordinance specifies that community establishments can be ticketed for creating dust with an opacity greater than 0% beyond its property boundaries. Community establishments that generate greater than 0-5% opacity per the ordinance are required to have a fugitive dust plan submitted to BSEED to meet compliance standards. To the extent that landscaping activities by a community establishment causes fugitive dust, the community establishment must create and adhere to a fugitive dust plan. Typically, activities such as lawn mowing and generating grass clippings are not the type of activities that will generate fugitive dust and are not the intended target of the ordinance.

## Fines and Ticket Costs on Community Establishments

Under the definition of "community establishment" and "community establishment designee," there is concern whether residents could be ticketed if they create dust with an opacity greater than 5% on the

<sup>&</sup>lt;sup>3</sup> *Id.*, Sec. 8-15-582 (a).

<sup>&</sup>lt;sup>4</sup> *Id.*, Sec. 8-15-4

<sup>&</sup>lt;sup>5</sup> Id.

<sup>&</sup>lt;sup>6</sup> *Id.* Sec. 8-15-581(b).

property or greater than 0% beyond the property line. The ordinance does technically allow for ticketing in these instances if the dust exceeds 0% opacity beyond the property line. If a community establishment or its designated representative is fined for violating the ordinance, the entity or designee will be issued a blight violation and be required to pay the fine to the City as set forth in the ordinance.<sup>7</sup> The landlord, owner, or designee has the option to pass this cost onto the tenants or renters of the property or units as there are no provisions against this. The City is not involved with the source of the funds, provided the fine is paid by the designated party.

## **BSEEDs Role and Monitoring Techniques**

Technology is not necessarily required for opacity measurement. Due to the nature of fugitive dust located here in Detroit, EPA Method 9 or 22 would suffice in terms of screening and monitoring. Method 9<sup>8</sup> requires proper certification whereas Method 22<sup>9</sup> does not require a certification. Method 9 also is commonly used for stationary sources v Method 22 which is used to make sure the process and any emission control equipment are operating properly and are not generating excess emissions. Both Method 9 and 22 utilize visual cues to monitor and measure opacity. A key element to consider between 9 and 22 would be 9 measures opacity while 22 measures frequency.

According to the Fugitive Dust Ordinance, it is mandatory for a community establishment's fugitive dust plan to include an individual certified in EPA Method 9.<sup>10</sup> BSEED and relevant representatives within the department are certified in EPA Method 9, ensuring compliance and proper enforcement of the ordinance. EPA Method 9 involves the visual determination of the opacity of emissions from stationary sources. To follow EPA Method 9, an individual must complete a training program where they learn to evaluate the opacity of emissions by comparing them to a series of standard images. This method requires periodic field certification to ensure the accuracy of the observer's visual assessments. Certified individuals must demonstrate their ability to consistently and accurately assess opacity by participating in these field tests and maintaining their certification through regular re-evaluation.

## **Technology Associated with Opacity Monitoring**

Technology is available for commercial/ industrial uses to monitor opacity on a continuous basis. Continuous opacity monitors (COMs) are readily available for purchase are available to track opacity measurements on stacks. COMs are widely used but are prone to drift offsets and downtime. Their reliability results in many facilities owning a backup COM to cover mechanical failures. COMs can be more accurate, but a visible emissions reader is considered more reliable. COMs operate on stacks only, therefore operations such as storage piles of material, handling areas, and transfer points require manual methods such as EPA Method 9.

## Conclusion

The Fugitive Dust Emissions Ordinance aims to mitigate the impact of dust emissions on public health and the environment, ensuring a cleaner and healthier community. For effective implementation, it is crucial that BSEED is equipped with the necessary staff and materials needed to measure low levels of opacity, and that enforcement practices are applied thoughtfully, especially concerning minor residential activities.

 $<sup>^{7}</sup>$  Id., Sec. 8-15-11 (a)

<sup>&</sup>lt;sup>8</sup> EPA. Method 9 8/3/2017 1, August 3, 2017. <u>https://www.epa.gov/sites/default/files/2017-08/documents/method\_9.pdf</u>.

<sup>&</sup>lt;sup>9</sup> EPA. Method 22 1/14/2019, January 14, 2019. <u>https://www.epa.gov/sites/default/files/201908/documents/method\_22\_0.pdf</u>. <sup>10</sup> 2019 Detroit City Code, Sec. 8-15-582 (9) (a)

Please contact our office if you need any further assistance.