Rock Crushing Rules Public Comments Received 1.17.2023 – 1.20.2023

Date Comment Received	Comment	PDF /Attachment
1/17/2023 01:02 PM	Please see Ozinga's comments to the Proposed Rules for Reprocessable Construction/Demolition Material Facilities. Contact me if you have any questions.	Appendix A
1/20/2023 09:56 AM	Please be advised that I represent the Chicago Environmental Justice Network. Please accept this message and the attachments as CEJN's comments on the Proposed Rules for Reprocessable Construction/Demolition Material Facilities. Because this portal only accepts a single file, extensive supporting material for these comments and for the record is being submitted separately to Jennifer Hesse and Gabriela Wagener-Sobrero.	Appendix B
1/20/2023 02:13 PM	See comments on Nov 2022 new proposed rules for reprocessable construction/demolition materials on behalf of NRDC, submitted in the included pdf file (also emailed to CDPH staff).	Appendix C
1/20/2023 03:27 PM	Thank you for the opportunity to provide comments concerning the Proposed Rules for Reprocessable Construction/Demolition Material Facilities; Revised November 21, 2022 ("Revised Proposed Rules"). The proposed rules are inconsistent with the City's recycling objectives, waste reduction strategies, and climate action plans. Most of the RCDM facilities within the City limits serve as recycling centers for public works projects conducted by the City Departments of Transportation and Water Management. If the Revised Proposed Rules drive RCDM facilities out of the city limits, the City will increase its carbon footprint by hauling waste to be processed beyond the municipal boundaries. The City would be simply shifting any perceived burden to other communities in the immediate area and increasing the miles driven to service projects that will inevitably need to be completed by City forces. Increased transportation costs will result in taxpayers being forced to pay higher rates for waste hauling, processing, and disposal. The Revised Proposed Rules are unnecessary and burdensome and, if adopted, the regulations will increase taxpayer costs, eliminate local jobs, and stymie recycling. We respectfully request consideration of the attached additional comments. COMMENTS: 1. The Department need not regulate "Incidental Debris" as newly defined in the Proposed Revised Rules. The materials listed as "uncontaminated debris" do not compromise the air quality in Chicago. Material storage and handling are sufficiently regulated by the limits on pile height and existing stormwater management regulations. 2. Sections 3.8.6 and 4.8.2 should be more specific. The standard of whether "internal roads and parking areas are maintained to meet the paving objectives of these rules" is too subjective. Moreover, these sections should not eliminate the opportunity for facility operators to use recycled asphalt pavement for aggregate surfaces. Finally, the Department should clarify why it references the Washington State Department of Transportation Pavement Surface Condition Rating Manual rather than regulations published by the Illinois Department of Transportation or the Guide for the Design of Pavement Structures, published by the American Association of State Highway and Transportation Officials (AASHTO). 3. Sections 3.10.20 and 4.8.11. Additional Requirements should be amended to limit the Commissioners' authority to seek "additional information." The Commissioner's authority should be limited to additional information about the design or proposed operation plans of a facility. 4. Section 4.1. Professional Engineer should be eliminated. Operators of existing facilities should be allowed, if possible, to prepare applications, including the required information, without the seal of a Professional Engineer ("PE"). 5. The requirement for continuous Dust Monitoring, Air Monitoring, and related plans should be eliminated. Areas experiencing non-attainment of PM-2.5 and PM-10 are unrelated to the operations of recycling facilities,	None

	which is not a major source of the pollutants the City desires to monitor or control (link to EPA report on Chicago Air Quality). Facilities outside a reasonable setback (we offer 1,000 lineal feet) from sensitive districts (i.e. residential, parks, etc) should be exempt from this requirement. In the alternative, Section 5.5 (a)(ii) should be revised to eliminate modeling "performed by others," as such an allowance may subject applicants to standards set by parties whose work may not conform to general standards of professionalism. Suggested substitute language follows: At each location of the Facility found in an air quality impact assessment created by a professional engineer or the Air Quality Impact Assessment (AQIS) or other equivalent air impact analysis performed by CDPH, and found to be potentially more likely than not to exceed EPA's 24-hour standard for PM10 more than one time per 30-day period. For PM10, a potential exceedance shall mean the highest 24-hour annual concentration modeled latest Ambient Air Background Concentrations table posted in the City's Air Quality Ordinance, Resources for Applicants web page (https://www.chicago.gov/city/en/sites/air-qualityzoning/home/resources-for-applicants.html). The applicant may propose an alternate monitor-siting approach or may request a waiver from this requirement for the Commissioner's review and approval, which shall not be unreasonably denied. Proposals for alternate approaches or waivers shall be supported by sound science and statistics that consider meteorological conditions, pollutant sources and concentrations, and topography. 6. If the Department insists on adopting the Revised Proposed Rules, existing facilities should be granted an exemption on the limits to throughput for tons/cubic yards generated by the City of Chicago and other publicly funded construction projects. Without a volume exemption, most existing RCDM operators will not be able to provide the City with the benefits of recycling and reusing material generated from within the City.	
1/20/2023 03:45 PM	See attached	Appendix D
1/20/2023 04:55 PM	Comments attached	Appendix E
1/20/2023 07:16 PM	Please see attachment below:	Appendix F

APPENDIX A

19001 Old LaGrange Road, Mokena, IL 60448
708.326.4200

January 17, 2023

Chicago Department of Public Health
333 South State Street #200
Chicago, IL 60604
Submitted via email: envcomments@cityofchicago.org and CDPH Website

Re: Proposed Rules for Reprocessable Construction/Demolition Material Facilities
Comments to Proposed Rules

Ozinga appreciates the opportunity to provide additional comments on the Proposed Rules for Reprocessable Construction/Demolition Material Facilities. Ozinga supports the City of Chicago's goals for achieving cleaner air for all neighborhoods. In fact, our transition from diesel to natural gas fuel for our fleet continues to reduce truck emissions each year. We are pleased to share our investment in this sustainable fuel source with municipal and private fleets as well.

While we agree with the ultimate goal, Ozinga respectfully disagrees with the rigorous requirements for Reprocessable Construction/Demolition Material Facilities

Before addressing the proposed regulations, Ozinga wishes to comment on statements from the City of Chicago in the Official Response to Public Comments on Proposed Rules for Reprocessable Construction/Demolition Material Facilities (https://www.chicago.gov/content/dam/city/depts/cdph/InspectionsandPermitting/environmental-rules-regs/Reprocessing-Rules-Responsiveness-Document_Final.pdf):

Page 3: CDPH states the High Potential for Dust for Crushing Facilities.

Ozinga disagrees with the belief that the crushing processes necessarily cause a high potential for dust. Ozinga crushing operations, for example, provide a significant amount of dust control measures such as water spraying at the crushing point. In addition, the concrete used for crushing has an average moisture content which exceeds 10% by weight.

To better understand the CDPH analysis and conclusion, it would be helpful to understand the specifics of the modeling analysis used. Specifically,

- What was the processing rate on the equipment for the model?
- Were control devices considered as part of the modeling analysis?
- Was a high moisture content of the concrete considered?

In fact, in 2022, Ozinga emitted 0.28 tons of total particulate matter, 0.10 tons of PM-10, and 28 pounds of PM-2.5 based on 140,805 tons of crushing unused clean concrete, and AP-42 emission calculations from Section 11.19-2. These calculations prove that the crushing operations at the Ozinga site do not cause a high potential for creating dust.

Page 4: During this discussion, CDPH discusses the Ozone Non-Attainment status for Chicago IL/IN/WI area. CDPH states the following:

"Ozone is not directly emitted but forms from a complex photochemical reaction process involving nitrogen dioxide (NO2) and volatile organic compounds (VOCs) in the air. A major source of NO2 is diesel engine emissions from on-road and non- road sources such as trucks, material-handling equipment, and generators, like those operated at rock-crushing facilities in large numbers. Given the Chicagoland's worsening non-attainment status for ozone, it is more critical that we reduce emissions that contribute to the formation of ozone."

First, it should be noted that there are no diesel-powered generators or material-handling equipment at the Ozinga site. While there are nitrogen dioxide and volatile organic compound (VOC) emissions from diesel-powered non-road equipment at the Ozinga site, these emissions are a small fraction compared to the large amount of VOC and Nitrogen Oxides (NOx) emissions from other sources such as on-road automobiles and trucks, and major stationary sources of VOC and NOx. As shown in Page 7 of the City of Chicago Air Quality and Health Report (https://www.chicago.gov/content/dam/city/depts/cdph/statistics_and_reports/Air_Quality_Health_doc_FINALv4.pdf), the lower decile areas for air quality are located adjacent to the Kennedy Expressway, the Eisenhower Expressway, the Stevenson Expressway, and the Dan Ryan Expressway.

Considering the NAAQS Ozone Non-Attainment Status for Ozinga's Chicago Region and the lack of fuel-combustion operations at this facility, it seems the greater threat to air quality for the area is not from crushing operations but from on-road diesel powered trucks and automobiles. It should be noted that Ozinga has 180 vehicles in its fleet which are compressed natural gas fueled. In addition, Ozinga has a natural gas fueling station at the Chinatown location. Therefore, Ozinga continues to perform efforts which minimize VOC and NOx emissions throughout the Chicago region.

While the Chicago Region continues to achieve attainment status for PM-10 and PM-2.5, Ozinga agrees efforts must be made to minimize particulate matter. However, excessive air monitoring for sites which produce little to no emissions will serve no benefit to surrounding communities. The additional monitoring will not decrease emissions as our sites and other related sites already perform emission control operations. The related expenses will simply discourage proper recycling industrial operations in the City of Chicago in the future. The lack of these industrial operations will create a higher dependence of crushed material from areas outside Chicago and will create more emissions from the trucks and rail cars which transport these recycled materials into the city.

Finally, the increased transportation costs to receive recycled material will directly increase construction costs. Most importantly, this will discourage further economic and job development within the City of Chicago.

Page 4: Lead and Asbestos Discussion

CDPH states the following on Page 4:

"Lead and asbestos contamination may be introduced through concrete debris or other feedstock processed at the rock-crushing facility. Primary sources of lead at rock-crushing facilities come from materials coated with lead-based paint ("LBP"). Meanwhile, asbestos was historically added to concrete to reduce cracking, increase durability, and improve fire resistance. Asbestos was also used in other building products that may find their way into the rock crushing facility feedstock, such as mastic, tiles, and mortar."

Despite LBP usage in the US generally ending around 1978 and asbestos use around 1989, and the fact that local, state, and federal laws require the demolition of most old structures to be surveyed and abated for these materials, due to their ubiquitous use and high prevalence, lead and asbestos remain a concern, and should be continuously screened for and monitored at rock-crushing facilities and operations.

CDPH also states the following on Page 37:

As previously discussed, the reprocessable construction/demolition material feedstock may contain lead and asbestos. The sampling frequency of once every two months is based on the maximum that may be required per 11-4-1980 of the MCC. This frequency appears to be half what IDOT requires to reuse construction and demolition debris. For instance, under its 8-08.2 Policy Memorandum for Construction and Demolition Debris Sand as a Fine Aggregate for Trench Backfill 23, IDOT requires suppliers to run a detection program for lead and asbestos, with a sampling and testing frequency of one sample per calendar month, unless changed by IDOT based on historical testing.

Ozinga understands the concern of potential contaminants in any material used for recycling purposes. Lead and asbestos were contaminants found in materials that were used in many industries, not just the construction industry. However, Ozinga only crushes Ozinga-produced leftover concrete from current jobs. Since no lead or asbestos is in the cement, stone, sand, admixtures, or water from when the concrete is mixed, there will be no lead or asbestos when the concrete is poured. Therefore, asbestos and lead testing on concrete will serve no added benefit. In a comparable way, lead used to be present in gasoline. It would be the equivalent of incorporating lead testing in automobile tailpipe emissions screening even though gasoline has been completely lead-free since 1986. The tailpipe testing for lead would serve no purpose.

While CDPH cites the testing requirements from IDOT for clean construction and demolition debris, it should be noted that IDOT does not require testing for Ozinga's crushed concrete for recycling in ready-mix concrete IDOT jobs. This is due to Ozinga only using leftover Ozinga concrete from current jobs. Therefore, SDS sheets showing no contaminants provide more than adequate proof that the crushed concrete contains no lead or asbestos.

In response to specific proposed regulations:

4.8.10: Fugitive Dust BMP Evaluation

The Design Report shall include a comprehensive evaluation, by a qualified independent third party of the best management practices (BMPs) needed to effectively address fugitive particulate concerns at the Facility. Such evaluation shall, at a minimum, include the following:

a. Certifications, resumes, and other proofs that the independent third party is qualified to conduct the evaluation. For the purpose of this paragraph, a professional engineer (P.E.) or a certified industrial hygienist (CIH) with relevant experience are deemed qualified;

b. A description of the qualified independent third party's relationship to the Owner or Operator;

c. An analysis of the effectiveness of the Facility's Dust Control Plan, as well as the Operator's implementation of said plan, in complying with the visible dust and opacity limit requirements under Section 7.6.2 of these rules, and other industry, local, state, and federal fugitive dust standards; and

d. A root cause analysis and recommended corrective action for each noted deficiency in (c) above;

Response: The use of a Best Management Plan is an excessive practice which does not ensure compliance. The use of a Facility Dust Control Plan, which is already required and reviewed by Illinois EPA, provides proper guidance to mitigate dust at a crushing facility. The requirements listed in Section 5.4 of these regulations allow for proper dust control measures. This section should be stricken from the proposed rules.

Sections 5.5 and 7.3: PM-10 Monitor Requirements

Response: The installation of PM-10 monitors is excessive for crushing operations. The majority of crushing operations possess Lifetime or ROSS permits with Illinois EPA. The state agencies under the authority of USEPA Region V, including Illinois EPA, rarely mandate continuous particulate matter monitors for Title V Permitted sites. In addition, Illinois EPA does not require PM-10 monitors for ROSS or Lifetime Operating Permit sites.

Furthermore, PM-10 monitors do not account for the source of dust. Particulate matter detected by a monitor can either be from the permitted site, a neighboring site, a roadway, or even an open field. PM-10 monitors can trigger a number of false positives when detecting dust from a permitted site. According to these regulations, a facility is considered in violation of a regulation even if the dust came from an outside source.

The use of Reportable Action Levels (RAL) is not necessary for facilities which emit little to no emissions. The requirement of facilities reporting to the city within 15 minutes of an exceedance is not feasible especially since workers at the site are not operating electronic devices during their day-to-day operations.

Finally, the requirement of recording around 7,000 15-minute intervals per quarter is excessive for low-emitting facilities. As stated earlier in the letter, the poor air quality in the City of Chicago is not caused by pollutants which originate from crushing operations. Due to their excessive nature and potential inaccuracies, PM-10 monitors should not be required for crushing operations. The fugitive dust measures listed in Section 7.6.2 provide more than adequate assurance for compliance of emission requirements. Specifically, the measures listed in Section 7.6.2 are usually implemented by government agencies for

facilities which emit higher levels of pollutants than crushing facilities. Therefore, the measures listed in 7.6.2 should provide for more than adequate dust monitoring; and makes the use of PM-10 monitors unnecessary.

Section 5.5 (g): Dust Monitoring Plan and Sampling Plan

The dust monitoring plan must also include a sampling plan to determine the concentration of particulates and the fraction of harmful contaminants that may be in them. Specifically, air samples shall be collected at all monitored locations triennially for analysis of the following pollutants:

i. Lead using NIOSH Method 7300, 7302, or 7303;
ii. Asbestos fibers using NIOSH Method(s) 7400 and/or 7402;
iii. Silica using NIOSH Method 7500 or 7602;
iv. Respirable particulates using NIOSH Method 0600; and
v. Total dust using NIOSH Method 0500.

The Commissioner may approve alternate test methods or require the use of EPA methods, depending on site-specific factors. The Commissioner may also require the air monitoring or sampling of other contaminants that may reasonably be emitted from the Facility at harmful levels.

Response: Ozinga employees are not required to wear respirators while operating crushing equipment. This is due to the low risk of exposure to silica, respirable particles, and total dust, it would be unnecessary to measure these particles on a continuous basis.

As stated earlier in this letter, the Ozinga Lumber Street site only crushes leftover Ozinga-produced concrete product. Asbestos and lead would not be found in the crushed concrete since there was no asbestos-containing material in the original production of the concrete. Therefore, Ozinga proposes the exclusion of certain testing requirements if documented proof is given that a component is not present in the product.

Section 7.4.6: Testing Materials

The Owner and/or Operator shall test Reprocessed materials generated at the Facility. A composite sample of each aggregate product shall be collected and tested for extractable lead using SW846 Test Method 1311-Toxicity Characteristic Leaching Procedure (TCLP) and EPA Method 6010, 6020, or 7000. The frequency of the testing shall be every two (2) months or as specified in the permit and shall not exceed six (6) times per calendar year unless the Commissioner expresses sufficient cause in written form to the Owner and/or Operator, pursuant to Section 11-4-1980 of the Code.

The sample results shall be submitted to CDPH within ten (10) days from the Operator's receipt of the laboratory results. In the event a sample exceeds EPA's hazardous waste criteria, the submittal shall include a narrative explaining the circumstances of the

exceedance, the amount of product impacted, the actions the Permittee has undertaken or will take to properly handle, store, and dispose of the impacted material, and protocols that will be adopted to ensure such exceedances do not occur in the future.

Response: As stated earlier in this letter, the Ozinga Lumber Street site only crushes leftover Ozinga-produced concrete product. The tests required in this subpart are unnecessary since crushed stone and concrete do not have lead. Ozinga proposes an alternative means of compliance for this requirement. If a company submits a Safety Data Sheet for a finished product which shows no lead of lead compounds, the facility shall be exempt from this requirement.

Lastly, a General Comment on the Proposed Regulations. On Slide 10 of CDPH's Rock Crusher Rules Stakeholder Briefings Presentation (https://www.chicago.gov/content/dam/city/depts/cdph/InspectionsandPermitting/Rock%20Crusher%20Rules%20Stakeholder%20Briefings%20Presentation.pdf), the location of the crushing facilities is placed on the Air Quality and Health Index Map of 2020. While CDPH focuses on crushing facilities, the majority of the emissions in these high decile areas will remain even once these regulations are in place. The emissions from crushing facilities are miniscule compared to other surrounding industries. There are other facilities with higher emissions and more stringent air permits which will not be subject to the excessive standards listed in these regulations. Second, the emissions created in these high decile areas are from other sources, including highway traffic. This is one of the findings listed in the 2020 City of Chicago Air Quality and Health Report:

"We visualized the pollution burden and population characteristics indicators in a map, with red representing the highest (worse) and green the lowest (better) Air Quality and Health Index scores. The resulting map shows that the areas of greatest concern are primarily located on the South and West Sides of the city. In particular, parts of the city bisected by major highways with high concentrations of industry are over-burdened, experiencing high levels of both pollution and vulnerability."

This is further proven by the Chicago Region Ozone NAAQS Non-Attainment Status and USEPA Region V's Ambient Air Quality Analysis for the Southeast Side (https://www.epa.gov/system/files/documents/2021-10/southeast-chicago-air-quality-report-202110-26p.pdf). Crushing facilities are not significant sources of NOx and VOC. Highway traffic continues to be a main reason for poor air quality in the City of Chicago. Excessive regulations for crushing facilities, especially for ROSS-level facilities such as Ozinga, do not address the air quality issues in the City of Chicago.

If you have any questions concerning my comments, please contact me at 708-326-4591.

Sincerely,

Michael Saldarelli
Director of Environmental Compliance

APPENDIX B

Greater Chicago Legal Clinic

Keith Harley, Attorney at Law
17 N. State St., Suite 1710
Chicago, IL 60602
(312) 726-2938
kharley@kentlaw.iit.edu

January 20, 2023

City of Chicago, Public Comment
Attn: Rulemaking – Rock Crushing

Submitted Via email to: Chicago.gov/envcommunityinfo
EnvComments@cityofchicago.org

Re: Proposed Rules for Reprocessable Construction/Demolition Material Facilities

To Whom It May Concern:

Please be advised that I represent the Chicago Environmental Justice Network (CEJN). CEJN is a coalition of several Chicago-based environmental justice organizations, including the Little Village Environmental Justice Organization, Neighbors for Environmental Justice, Blacks in Green, Southeast Environmental Task Force and People for Community Recovery. CEJN advocates to eliminate adverse and disproportionate risks in environmental justice communities, to ensure opportunities for these communities to participate at every level of decision-making, and to equitably allocate the benefits of public health, economic, environmental and energy programs and resources.

For purposes of these comments, two CEJN organizations are particularly important. Because of the aggregation of reprocessing facilities on the southwest side, the individual members of Neighbors for Environmental Justice (McKinley Park) and the Little Village Environmental Justice Organization are especially affected by this category of facilities. For this reason, individual members of these organizations may be submitting comments arising from their own experiences. Moreover, other CEJN organizations may be submitting comments addressing their community-based perspectives on the proposed regulations.

CEJN fully endorses the comments submitted by the Natural Resources Defense Council and the Northwestern Law School Environmental Law Clinic on behalf of Southeast Environmental Task Force. Further, CEJN incorporates by reference the comments it, NRDC and Northwestern submitted during the initial public comment period on these proposed regulations.

CEJN Comment One: CEJN requests increased transparency and additional public participation opportunities regarding fugitive dust control be written into the rules. Specifically, CEJN requests that CDPH require facilities to disclose the locations of all air monitoring and weather monitoring equipment relative to the reprocessing

device as well as any other sources of fugitive dust or emissions. Additionally, CEJN requests that facilities be mandated to record and accept community complaints from individuals who witness or observe fugitive dust crossing facility boundaries. Finally, CEJN implores CDPH to enact more stringent opacity limits.

Rock crushing dust is known to contain and carry numerous hazardous materials including silica, lead, and particulate matter (PM). Silica dust (crystalline silica), a known human carcinogen, originates during construction on materials such as stone, rock, brick, tile, concrete, and quartz, many of which will be crushed at rock crushing facilities.[1] Silica dust is 100 times smaller than a grain of sand so it often remains unobserved but can be incredibly harmful to human health when inhaled.[2] Exposure to silica dust can lead to lung cancer, silicosis (irreversible scarring and stiffening of the lungs), kidney disease, heart failure, and chronic obstructive pulmonary disease ("COPD").[3] PM exposure has been linked to premature death, heart attack, irregular heartbeat, aggravated asthma, decreased lung function, and increased respiratory symptoms like coughing or difficulty breathing.[4] If small enough, particles may be embedded in lungs or enter the bloodstream and cause irreversible damage.[5] Children, the elderly, and persons with preexisting heart or lung disease are most susceptible to PM exposure, but symptoms can occur in anyone. PM exposure produces health impacts even at very low concentrations; there is no identified threshold of PM below which no damage to health is observed. As such, the pollution control methods should be aimed at the lowest concentrations of PM possible.[6] Beyond health impacts, PM can detrimentally affect the environment by causing haze, making water systems acidic, depleting nutrients in soil, damaging forests and crops, changing the diversity of ecosystems, and contributing to acid rain.[7]

Monitoring Equipment Location

CEJN firmly believes that the best way to address the severe risks associated with rock crushing dust is to require air monitoring data to be made publicly accessible on at least a daily basis.[8] At the least, CEJN urges CDPH to require facilities to disclose the locations of all air and weather monitoring equipment and the relative location to sources of fugitive dust emissions. PM10 can stay in the air for minutes or hours and can travel up to 30 miles.[9] These pollutants may not remain in the air for extended periods of time, but existing research identifies increasing health impacts associated with hourly increases in PM.[10]

As mentioned in prior industry comments, PM monitors may detect fugitive dust from other sources depending on their location.[11] CDPH has acknowledged that even facilities that do not meet the state or federal major source

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[1] *ToxFAQs for Silica,* Agency for Toxic Substances and Disease Registry (Jan. 2020), available at Silica | ToxFAQs™ | ATSDR (cdc.gov); *see also Silica…It's Not Just Dust: Silica Dust Causes Silicosis*, Nat'l Inst. for Occupational Safety & Health, https://www.cdc.gov/niosh/docs/97-112/ (last updated June 2014).

[2] *Silica, Crystalline*, U.S. Dep't of Labor, Occupational Safety & Health Admin., https://www.osha.gov/silica-crystalline.

[3] *Id.*

[4] *Health and Environmental Effects of Particulate Matter (PM),* U.S. Envt'l Protection Agency (last updated Aug. 30, 2022), https://www.epa.gov/pm-pollution/health-and-environmental-effects-particulate-matter-pm.

[5] *Id.*

[6] *Ambient (Outdoor) Air Pollution,* World Health Organization (Dec. 19, 2022), https://www.who.int/news-room/fact-sheets/detail/ambient-(outdoor)-air-quality-and-health .

[7] *Health and Environmental Effects of Particulate Matter (PM),* U.S. Envt'l Protection Agency (last updated Aug. 30, 2022), https://www.epa.gov/pm-pollution/health-and-environmental-effects-particulate-matter-pm.

[8] CEJN Reprocessable Construction/Demolition Material Facilities Rules Public Comment at 5-6 (November 2021) https://www.chicago.gov/content/dam/city/depts/cdph/InspectionsandPermitting/Comment-ChicagoEnvironmentalJusticeNetwork_Oct3121.pdf.

[9] *Particulate Matter Information,* Pima County Arizona, (2021), available at https://webcms.pima.gov/cms/one.aspx?portalId=169&pageId=167257.

[10] *The Relationships Between Short-Term Exposure to Particulate Matter and Mortality in Korea: Impact of Particulate Matter Exposure Metrics for Sub-Daily Exposures,* Son, J., Bell, M., Environ Res. Lett (March 2013) available at https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4288032/.

[11] Ozinga Reprocessable Construction/Demolition Material Facilities Rules Public Comment at 6 (October 2021) https://www.chicago.gov/content/dam/city/depts/cdph/InspectionsandPermitting/Comment-Ozinga_Oct272021.pdf.

requirements may create localized hotspots "that exceed NAAQS and may have consequential health and quality-of-life impacts on adjacent populations."[12]

> "For example, air dispersion modeling conducted by a rock-crushing facility in Chicago reported peak hourly and daily total suspended particulates ("TSP") levels of 983.2 ug/m3 and 579.9 ug/m3, respectively. Assuming 44% of the TSP was PM10, the PM10 fraction would be about 255 ug/m3 or roughly 170% of the NAAQS standard. Likewise, assuming 49% of the PM10 above was PM2.5, the peak emission would have contained over 250% of the NAAQS PM2.5 24-hour standard of 35ug/m3."[13]

Requiring facilities to disclose the location of air monitors will aid in analyzing the data and source of fugitive dust, even if that source is beyond facility boundaries. To more fully understand the data reported by air and weather monitoring equipment at a given facility, and the possible related health impacts, CEJN proposes the following changes to *3.10.5 and 4.8.1 General Layout of the Facility*:

3.10.5 n. The location of all air monitoring equipment and at what height the air monitor is mounted and a representation of the area that the air monitor is sampling.

4.8.1 m. The location of all air monitoring equipment and at what height the air monitor is mounted and a representation of the area that the air monitor is sampling.

Public Complaint Process

Given the severity of the risks associated with rock crushing dust and the proximity of these facilities to overburdened residential areas, CEJN again requests that increased transparency and public participation regarding air monitoring must be written into the rules.[14] As currently written, the proposed rules do not include required procedure for facilities to accept complaints from community members who witness or observe fugitive dust crossing the boundary of the facility, and nuisance complaints need only be reported to CDPH quarterly.

As CDPH mentioned in the September 2021 public meeting, all existing rock crushing facilities are located within overburdened environmental justice neighborhoods in Chicago's industrial corridors. The two pending facilities are proposed to be built and operated in overburdened communities. Rock crushers are only allowed in certain zones[15] within the city, all of which are located within environmental justice neighborhoods.[16] The air quality throughout Chicago does not leave an extensive margin of error for rock crushing companies, especially in the industrial corridors.[17] Many of the communities within or near the industrial corridors are already at a risk for chronic respiratory illnesses like asthma and COPD.[18]

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[12] CDPH Responsiveness Document at 3.

[13] *Id.*

[14] CEJN Reprocessable Construction/Demolition Material Facilities Rules Public Comment at 5-6 (November 2021) https://www.chicago.gov/content/dam/city/depts/cdph/InspectionsandPermitting/Comment-ChicagoEnvironmentalJusticeNetwork_Oct3121.pdf

[15] M3, PMD 6, 8a, 9, 11a, 12, 13, and 14.

[16] *City of Chicago Zoning and Land Use Map,* City of Chicago Department of Planning and Development, last visited 2022 at https://gisapps.chicago.gov/ZoningMapWeb/?liab=1&config=zoning

[17] "[T]he areas of greatest concern are primarily located on the South and West Sides of the city. In particular, parts of the city bisected by major highways with high concentrations of industry are over-burdened, experiencing high levels of both pollution and vulnerability." *Air Quality and Health Report,* City of Chicago, (2020) available at https://www.chicago.gov/content/dam/city/depts/cdph/statistics_and_reports/Air_Quality_Health_doc_FINALv4.pdf

[18] i.e., Chicago has an asthma rate of 9.5% while West Garfield Park has a rate of 20.2% and South Deering has a rate of 15.6%. https://www.chicagohealthatlas.org/indicators/asthma. In 2017, the highest rates of childhood asthma were found to be in West and East Garfield Park (47.0 per 10,000) and West Englewood (46.4 per 10,000). Further, the highest rates of childhood asthma emergency department visits were in Austin (323 per 10,000) and West Englewood (302 per 10,000). All these community areas are of high concentrated disadvantaged and overburdened residents. https://www.dph.illinois.gov/sites/default/files/publications/publicationsowh2016-il-childhood-asthma-surveillance-report_0.pdf

In keeping with CDPH's commitment to environmental justice, CEJN requests that the following language be added to *5.5 Dust Monitoring Plan* and 7.6.2 *Fugitive Dust*:

5.5. h. Public Complaint Process. The monitoring plan must also outline the Facility's process for receiving and recording public complaints. This process will be made available to the public along with the Facility's permit application.

7.6.2 f. Public Complaint Reporting. The Owner or Operator shall maintain a record of all received complaints to be submitted to the Commissioner along with the quarterly report outlined in section 7.19. The Commissioner may request more frequent public complaint reporting based on a Facility's history of compliance with all rules and regulations.

Opacity Limits

USEPA expressed their support for CDPH's proposed rules regarding reprocessable construction/demolition material facilities as every one of Chicago's rock crushers is located in a neighborhood whose residents experience disproportionate health disparities and environmental burdens as the result of heavy industry.[19] The letter goes on to explain that PM exposure from rock crushing has been linked to aggravated asthma, decreased lung function, and even heart attack or premature death.[20] USEPA supports fenceline monitoring and sampling to minimize potential community exposure.[21] With the risk to fenceline communities being high, all precautions should be taken to ensure risks are minimized as much as possible.

Michigan Department of Environment, Great Lakes, and Energy (EGLE) also appreciates the risk that nonmetallic mineral crushing facilities. In their compliance guide they state that:

> "Research has shown that inhaling too much dust lowers the body's natural defenses because dust builds up in our respiratory system and irritates the sensitive tissues in our lungs. Therefore, breathing a lot of dust over a long period of time can cause chronic breathing and lung problems. Another consequence of dust generation is reduced visibility (also known as haze).; Haze can contribute to excessive soiling, discoloration, and damage to personal property. Fine particles can remain suspended in the air and travel long distances. For example, emissions from a factory in Gary, Indiana, can end up in Grand Rapids, Michigan."[22]

As proposed the Owner or Operator shall not cause or allow the emission of fugitive dust from any storage pile, transfer point, roadway, or parking area that, for a period or periods aggregating more than three (3) minutes in any one hour, exceeds an opacity of 10% based on a visual reading in accordance with the Method 9, 40 CFR part 60. EGLE also requires facilities to monitor equipment opacity limits during operation in accordance with Method 9 but have the same or lower opacity limits for almost all operations. With an exception for the one higher opacity limit, all crushers, CDPH should follow EGLE and lower the opacity limits that are currently proposed. As USEPA recognizes, all of Chicago's rock crushing facilities are in communities that already experience disproportionate health disparities and environmental burdens due to the heavy industry nearby. CEJN proposes the following language be added to *7.6.2 Fugitive Dust*:

7.6.2 c. Opacity Limit. The owner or Operator shall not cause or allow the emission of any Fugitive Dust within the Facility at any storage pile, transfer point, roadway, or parking

[19] Letter from Kathryn Siegel, Manager, Air Toxics and Assessment Branch, U.S. Envt'l Protection Agency, to Megan Cunningham, Managing Deputy Commissioner, Chicago Dep't of Public Health (Nov. 16, 2022), https://www.chicago.gov/content/dam/city/depts/cdph/InspectionsandPermitting/environmental-rules-regs/CDPH-Support-Letter-for_Rock-Crushing-Proposed-rules.pdf.

[20] *Id.*

[21] *Id.*

[22] https://www.michigan.gov/egle/-/media/Project/Websites/egle/Documents/Regulatory-Assistance/Guidebooks/Mineral-Crusher-Guidebook.pdf at 1-2

area that, for a period or periods aggregating more than (3) three minutes in any one hour, exceeds ~~an~~ opacity limits ~~of 10%~~ set forth in Table 2 based on a visual reading in accordance with the Method 9, 40 CFR part 60, Appendix A. To demonstrate compliance with the limits set out in Table 2, a Facility shall establish monitoring protocols for each specific equipment listed, which should include, but not limited to, specific monitoring equipment designated to monitor the different opacity limits at each type of equipment.

Table 2

Equipment	Opacity Limit (%)
Any equipment enclosed within a building	No visible emissions
All Crushers	10
Screens	10
Rock Drills	5
Conveyors/Transfer Points	10
Wash Screens and all subsequent equipment downstream up to the next crushers or storage bin	No visible emissions
All equipment controlled by a baghouse dust collector	7
Wheel loaders and truck traffic	5
Material storage piles	5
Any other process equipment which is part of the nonmetallic mineral crushing facility or related processes	10

CEJN Comment Two: As highlighted by CDPH's response to initial public comments, additional regulatory requirements are necessary to address Chicago's non-attainment status in ozone. While ozone is not a substance that is directly emitted, it forms, in part, due to diesel engine emissions:

> "Ozone is not directly emitted but forms from a complex photochemical reaction process involving nitrogen dioxide (NO2) and volatile organic compounds (VOCs) in the air. A major source of NO2 is diesel engine emissions from on-road and nonroad sources such as trucks, material-handling equipment, and generators, like those operated at rock-crushing facilities in large numbers. Given the Chicagoland's worsening non-attainment status for ozone, it is more critical that we reduce emissions that contribute to the formation of ozone."[23]

Due to the impact these diesel emissions have on the city's air quality, and the lack of diesel emission modeling required in the emissions and air dispersion modeling quality, it is imperative that CDPH add the following proposed language to the proposed rules.

Idle Plans

As mentioned at length in the previous comments, Chicago is non-attainment with ozone and diesel emissions are a contributing cause to that non-attainment.[24] In an effort to curtail those emissions, CEJN is requesting that stronger requirements for anti-idling on permitted facility property be implemented. Currently Section 3.10.13 and 4.8.6 require an idle reduction plan that demonstrates compliance with Section 9-80-095 of the Municipal Code of Chicago ("MCC"). The pertinent section reads as follows: "(a) It shall be unlawful for any person who

[23] CDPH Responsiveness Document at 4.

[24] CEJN Reprocessable Construction/Demolition Material Facilities Rules Public Comment at 17 (November 2021), https://www.chicago.gov/content/dam/city/depts/cdph/InspectionsandPermitting/Comment-ChicagoEnvironmentalJusticeNetwork_Oct3121.pdf; *see also,* NRDC Rsprocessable Construction/Demolition Material Facilities Rules Public Comment at 7-8 (November 2021), https://www.chicago.gov/content/dam/city/depts/cdph/InspectionsandPermitting/Comment-NRDC_Nov12021.pdf.

owns or operates any motor vehicle which is powered by diesel fuel to stand such vehicle with the engine running for more than a total of three minutes within any sixty-minute period."[25] In addition to this, CDPH in their response to first round of comments, stated they would incorporate the Facility's anti-idling plan and require the posting of signage at the Facility into the permit conditions.[26]
While CEJN appreciates the additional language to include signage, CEJN believes that a sign can be easily ignored or simply not seen. CEJN further believes that requirements under 9-80-095 can also easily be forgotten about or simply not followed. Further, as 9-80-095 is written, it is unclear if the Facility will be liable for violation of the MCC by third party vehicle owners who are present on the Facility's property. As the Facility does not own or operate all of the vehicles dropping off material for processing, it is unclear if the Facility is required to monitor the third-party vehicles present on their property on a daily basis.

This becomes more unclear by 9-80-095(c) stating, "The operator or the registered owner of record of any vehicle standing in violation of this section shall be fined as set forth in Section 9-100-020 of this Code."[27] This language seems to suggest that even if the Facility is liable for the third party vehicle owners, the Facility would not be fined for the violation because under the MCC the operator or registered owner of the vehicle in violation shall be fined. With Chicago being in non-attainment for ozone and the known contributing effect diesel emissions have, CEJN believes that clearer, stronger, language is needed to ensure Facilities appreciate the harmful effects idling vehicles pose. CEJN proposes the following changes to *Sections 3.10.13 and 4.8.6*:

3.10.13 c. An idling reduction plan that Demonstrates compliance with Section 9-80-095 of the Code ~~and that~~ which minimizes unnecessary idling of vehicles and equipment in order to avoid contributions to poor air quality and noise. An idle reduction plan shall pertain to all vehicles located on and waiting to come on a Facility's property, regardless of ownership, and must contain explicit procedure on how the Facility intends to track idle times for all said vehicles for the sixty-minute period, as required under Section 9-80-095. A Facility is subject to any and all fines and violations under Section 9-80-095 for which any and all vehicles on their property are subject to; and

4.8.6 c. An idling reduction plan that Demonstrates compliance with Section 9-80-095 of the Code ~~and that~~ which minimizes unnecessary idling of vehicles and equipment in order to avoid contributions to poor air quality and noise. An idle reduction plan shall pertain to all vehicles located on and waiting to come on a Facility's property, regardless of ownership, and must contain explicit procedure on how the Facility intends to track idle times for all said vehicles for the sixty-minute period, as required under Section 9-80-095. A Facility is subject to any and all fines and violations under Section 9-80-095 for which any and all vehicles on their property are subject to; and

Traffic Counts
As proposed, Section 3.10.13(f) requires Facilities to take traffic counts in hourly intervals at all ingress/egress points to identify the peak hours of traffic. However, there is no requirement for this information to be posted for public access. There are no recording or publishing requirements in these sections and to maintain transparency it is important to know how much additional traffic the facility is subjecting the community to, especially with Chicago being in nonattainment for ozone.

Further, posting the traffic count will ensure that the Facility is completing the requirement and will provide valuable insight on the impact the Facility has on existing traffic flows. This will also allow community members to avoid the area and roads around the Facility when the peak traffic is occurring. As Facilities are required to

[25] Municipal Code of Chicago 9-80-095
[26] CDPH Responsiveness Document at 19.
[27] Municipal Code of Chicago 9-80-095

maintain this data already, the burden of publishing their results is low. A simple log broken down in hourly intervals can be easily posted to a Facility website or elsewhere for viewing by community members.

CEJN proposes the following changes to *3.10.13 Traffic*:

3.10.13 f. Traffic counts taken in hourly intervals at all ingress/egress points to identify the peak hours of traffic occurring in the morning and afternoon. The traffic counts shall include a classification of vehicles. The Facility shall make the traffic counts available to the public by posting all logged data for each month within ten (10) days from the last day of that month.

CEJN Comment Three: CEJN requests that CDPH add "Consequential Facility" to the definition list in the proposed Rules for Reprocessable Construction/Demolition Material Facilities Operated Within the City of Chicago. "Consequential Facility" appears as a definition in the Rules for Large Recycling Facilities ("LRF") and is not currently included in the proposed rules. This addition will allow for more transparency and communities will be able to hold facilities that pose a greater threat to a higher standard. Keeping the community's safety and well-being as the main objective in this rule proposal, adding this definition will allow more safeguards to be implemented. Consequential Facility would include any facilities that (a) are located within 660 ft of a sensitive area; (b) have been found in violation of any federal, state, or local air quality law or regulation within the last three years; or (c) any Facility that the Department concludes is causing a nuisance, or has a pattern of operation that has the potential to cause a nuisance, based on their review of inspection reports, monitoring records, and complaints filed against the Facility. The same protection given to communities by the LRF should be present in the proposed rules as well.

As proposed, the rules allow the Commissioner to impose more stringent standards on facilities that have recurring violations and verified complaints. (in 5.4 Dust Control plan, 5.5(g) and Section 8) The Commissioner also has the authority to deny a new permit or renewal based on an evaluation of the facilities compliance history. However, unlike in LRF there is no separate classification and automatically triggered requirements for facilities that meet the definition of a consequential facility. It is imperative that facilities' compliance history is considered when permits are issued or renewed. These facilities pose a higher risk to the communities and that additional risk should be counteracted by holding those facilities to a higher standard. Instead of leaving it to the Commissioner's discretion on what compliance history is considered, the applying facility must include their compliance history in their application and what sensitive areas are nearby.

There is no guarantee that a facility which poses a higher threat to the community, due to its location or history of non-compliance, is held to a higher standard. It is imperative that communities are protected from these facilities, and by classifying facilities as consequential, it would allow higher standards to be imposed by rule, and not at the Commissioner's discretion only.

In July 2022, CDPH issued Guidelines Regarding Permitting Process for Consequential Large Recycling Facilities, Reprocessable Construction/Demolition Material Facilities, and Waste Handling Facilities[28] which applies to facilities that require a permit under Section 11-4-1930 of the Municipal Code of Chicago. If CDPH is implementing a permitting process for consequential reprocessable construction/demolition material facilities, CDPH must define what facilities classify as consequential.

CEJN proposes the following additions to the definition list and to *8.1 Compliance History, Suspension, Revocation, and Appeals*:

2. Definitions

[28] https://www.chicago.gov/content/dam/city/sites/rgm-expansion/documents/CDPH-Guidelines-Regarding-Permitting-Process.pdf

"Consequential Facility" means a Reprocessable Construction/Demolition Material Facility that meets at least one of the following criteria:

a. Is located within 660 feet of a Sensitive Area;
b. Has been found in violation of any federal, state, or local air quality law or regulation within the last three years; or
c. Any Facility that the Department concludes is causing a nuisance, or has a pattern of operation that has the potential to cause a nuisance, based on their review of inspection reports, monitoring records, and complaints filed against the Facility.

8.1 Compliance History, Suspension, Revocation, and Appeals

8.1.1 Additional RALs. The Department may set forth different or additional RALs in a Consequential Facility's permit for wind speeds, PM2.5, VOCs, and other pollutants based on the information contained in the application, the Facility's compliance history, the occurrence of dust nuisance and health complaints and/or other factors.

8.1.2 Additional Requirements. The Department may subject Consequential Facilities to additional requirements based on past compliance including but not limited to; enclosure of processing equipment and/or stockpiles, air monitoring, additional barriers, limits to stockpile height, limit throughput of materials, and any other requirements that would ensure the safety and well-being of the surrounding communities and environment.

CEJN Comment Four: "Nuisance" language was included in the introduction to the rules and the responsiveness document and is supported by introductory language to the revised rules: "Whereas, these facilities can be significant sources of dust and contaminated storm and process water discharges with the potential to harm human health and the environment, and cause a public nuisance." Additionally, the location of facilities in exclusively EJ communities supports inclusion of strong protective language, as well as amount of industry push back to the scope of the rules and CDPH's power to implement them. Because of the potential significant, adverse, and disproportionate risks to environmental justice communities arising from the operations of this category of facilities in Chicago, CEJN reasserts the following provision should be added to the regulations:

CDPH shall mandate any additional measures that are necessary to protect public health, safety, and welfare and to prevent nuisance conditions. If a facility, alone or in combination with other [polluting] sources, cannot operate in a manner that protects public health, safety, and welfare and that avoids creating nuisance conditions, CDPH shall deny the permit application. In making determinations under this provision, CDPH shall consider the operating history and compliance history of the permit applicant including the record of public complaints.

CEJN Comment Five: As mentioned above and raised by USEPA, all the Chicago rock crushers are in neighborhoods whose residents experience disproportionate health disparities and environmental burdens as the result of heavy industry. With that in mind, CDPH must take every step to ensure that the communities are not unnecessarily burdened with additional emissions from the heavy industrial area. CEJN thus requests that the following restrictions on operations during high wind events, storage pile boundary setbacks, and reporting time requirement limitations be added to the proposed rules.

High Wind Events

The highest risk and potential for fugitive dust to be emitted from a Facility's operation is during high wind events. With the proximity of fenceline communities to Facility's operations, dust does not have to be blown very far from the Facility's boundary before it has the potential to cause an adverse impact. Due to the nature and course of the work that takes place at rock crushing Facilities, CEJN request that CDPH enact a prohibition on operations at Facilities during a high wind event. All crushing, stockpiling, transporting, and other operations

that kick up dust must be prohibited during a high wind event. This prohibition will ensure the safety, health, and well-being of the nearby communities and environment.

Storage Pile Boundary Setbacks

With rock crushing facilities being in areas with neighborhoods located all around, CDPH must attempt to mitigate fugitive dust emissions anywhere possible. As proposed, in Section 3.10.17 and 4.8.7 Perimeter Barrier, Facilities are required to have at least an eight (8) foot barrier around the facility, with some exceptions. In Section 7.4.1 Raw, Processed, and Finished Product Stockpiles, Facilities are permitted to have stockpiles up to thirty (30) feet high, with no limitations on where those stockpiles are located on the Facility's property. As proposed, it seems that a Facility could have a thirty (30) foot stockpile directly next to an eight (8) foot perimeter barrier. It is not hard to imagine that fugitive dust from a thirty (30) foot high stockpile could easily blow over and across an eight (8) foot perimeter barrier.

This is unacceptable and has the potential to cause unnecessary emissions of fugitive dust, which could be easily remedied by enclosure of the stockpile, locating the stockpile further from the perimeter, a higher barrier, dust mitigation techniques, or covering of the stockpile. CEJN proposes the following changes to *7.4.1 Raw, Processed, and Finished Product Stockpiles*:

7.4.1 The height of any outdoor storage stockpile within the Facility shall not exceed 30 feet. The Facility shall maintain height markers up to 30 feet, with gradations marked at one-foot intervals, at all outdoor stockpile locations to indicate the current height of material stockpiles. The Facility shall Demonstrate that all stockpiles are located at a far enough distance from the Facility's perimeter barrier to ensure that no fugitive dust is blown from the stockpiles across the Facility's perimeter barrier. Full enclosure of stockpiles or other fugitive dust mitigation techniques may be utilized if a stockpile cannot be physically located far enough from the Facility's perimeter barrier due to Facility lay out or space availability.

Time Limitations on Reporting Requirement

As proposed Section 7.3 Material Volume and Weight Limitations, does not impose a time limitation on when the Operator shall notify the Department. Nor does Section 7.3 require a Facility to come back into compliance with their material volume and weight limitations after responding to an emergency. CEJN does not want an emergency to be a reason for a Facility to remain out of compliance with their permit for an extended period of time and request that time limitations be placed on noncompliance. CEJN proposes the following language change to *7.3 Material Volume and Weight Limitations*:

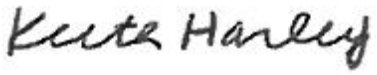
7.3 Material Volume and Weight Limitations

7.3 The Facility may not exceed the volume or weight limits specified in the permit. If in response to an emergency, the Facility is required to receive a volume or weight that exceeds the permitted limit, a written record of the date, time, additional volume or weight, and reason shall be made part of the Facility's Operating Record, and the Operator shall notify the Department in accordance with the permit and no later than seven (7) days following the exceedance.

7.3.1 Remaining Out of Compliance. A Facility shall return to their volume or weight limits specified in the permit as soon as feasible and not to exceed one (1) month out of compliance. If a Facility exceeds their permit requirements for longer than a month, the Operator shall notify the Department of the continual exceedance and provide a good faith reason as to why the Facility has not been able to come back into compliance following the emergency.

Thank you for your consideration of these comments.

Sincerely,



Keith Harley
Jason Clark
Chloe Bell
Attorneys for the Chicago Environmental Justice Network
Greater Chicago Legal Clinic, Inc.
17 N. State St., Suite 1710
Chicago, IL 60602
(312) 726-2938

ATTACHMENT

EJ in Air Permitting
Principles for Addressing Environmental Justice Concerns in Air Permitting
December 2022

Securing environmental justice and equity for all environmentally overburdened communities is a high priority for EPA. Executive Orders 14008, 12898, and 13985 direct agencies to make achieving environmental justice and equity a part of their mission. To advance environmental justice and equity through permitting actions under the Clean Air Act (CAA), the Office of Air and Radiation (OAR) is providing resources and recommendations to the EPA regions regarding approaches for addressing environmental justice and advancing environmental equity.

Additionally, Title VI of the Civil Rights Act of 1964 and other federal civil rights laws ensure that recipients of EPA financial assistance ("EPA recipients"), including state and local permitting programs, do not discriminate – either intentionally or in effect – against persons on the basis of race, color, national origin (including limited English proficiency or "LEP"), disability, sex, and age. Compliance with the federal civil rights laws by EPA recipients is mandatory and represents an important enforcement tool for achieving environmental justice. The *Interim Environmental Justice and Civil Rights in Permitting Frequently Asked Questions ("FAQ")* provide valuable information about how civil rights issues may arise in the context of permitting and suggested methods of analysis that may be appropriate in those situations. While not reproducing the level of detail in the FAQs in this document, links to specific, relevant FAQs are integrated throughout where appropriate.

The goal of this document is to provide a framework of principles and practices to assist each EPA region to promote environmental justice and equity through air permitting programs using existing CAA authorities and discretion, federal civil rights laws, as well as other federal and state laws that may help to mitigate potential adverse and disproportionate effects of a permitting action. This document will be updated as needed to incorporate the experience and insight gained through the use of these principles and practices, the FAQs, and any future relevant EPA guidance. The document does not prescribe a single specific approach or methodology for addressing environmental justice and equity in air permitting. Rather, what is appropriate in each situation should be considered on a case-by-case basis.

EPA regional air permitting staff are encouraged to immediately apply these eight principles and associated practices in issuing federal CAA permit decisions. Regions are equally encouraged to work collaboratively and proactively with state, tribal, and local partners to facilitate their consideration and application of these same principles in their air permitting actions where appropriate to protect human health and the environment for all affected individuals, including those who live in communities with environmental justice and equity concerns.

This document does not change or substitute for any requirement under the CAA or its implementing regulations, any EPA-approved CAA permitting program, or Title VI of the Civil Rights Act, nor are they a regulation themselves. Nothing in this document is intended to impose or establish legally binding requirements and no part of this document has legally binding effect

or represents the consummation of agency decision making. To the extent there is any inconsistency between this document and any statute, regulation, or guidance, the latter takes precedence. EPA retains discretion to use or deviate from this document as appropriate. It is, therefore, not a final agency action and is not judicially reviewable.

1.) **Identify communities with potential environmental justice concerns:** EPA regions and permitting authorities can use EJScreen or other suitable geographic information system and mapping tools and data to identify communities with potential environmental justice concerns to encourage proactive community engagement and promote the fair treatment and meaningful involvement of the affected community in air permitting actions. EJScreen and similar tools allow users to couple demographic indicators (*e.g.,* low-income communities, communities of color, and tribal/indigenous communities) with environmental indicators in order to conduct a screening of a community potentially disproportionately and adversely affected by environmental and human health harms or risks. There are additional environmental indicators in EJScreen that allow users to screen for whether communities affected by an air permitting action are already affected by other pollution sources and may be vulnerable based on age, unemployment, or linguistic isolation, among other non-pollution stressors. Finally, the use of screening tools may also inform permitting authorities of whether a permitting decision may raise possible issues of civil rights compliance, i.e., may have an adverse and disparate effect on the basis of race, color, or national origin (including LEP) See *FAQ #8*.

2.) **Engage early in the permitting process to promote meaningful participation and fair treatment:** OAR encourages permitting authorities to identify those permitting actions that may have a disproportionately high and adverse effect on communities, including those with environmental justice concerns, preferably before the permit application is submitted. OAR also recommends that air permit applicants work with the permitting authority and affected community to provide opportunities for meaningful participation and fair treatment throughout the air permitting process. This practice creates the opportunity for the permitting authority, either independently or working with the permit applicant, to identify resources or any additional information that would facilitate understanding of the potential effects of a permitting action on the community and promote fair treatment and meaningful participation throughout the permitting process. Early engagement may also facilitate the early identification of siting alternatives, if appropriate, or mitigation measures that the applicant can take to address potential adverse and disproportionate effects of the permitting action. It is important for EPA and permitting authorities to communicate throughout the permitting process and to recognize and address concerns affecting the community. Similarly, it is important for the applicant and the permitting authority to meaningfully engage with the community in order to discuss and consider potential approaches to addressing concerns before, during, and after the air permitting process.

3.) **Enhance public involvement throughout the permitting process:** When a permitting action may result in disproportionately high and adverse human health or environmental effects on a community, including one with environmental justice concerns, it is important that the permitting authority and permit applicant provide the affected community with meaningful opportunities to provide input into the decisions that will impact residents' lives.

This could include, for example, training on how to make effective comments on permits; making the permit application, administrative record, and data easily and publicly available; notifying the public of the action through multiple communication methods (e.g., mail, online, social media, door-to-door, etc.); providing multiple methods for public comment (e.g. mail, online, voicemail); holding formal public hearings and informal public meetings in or near the community; providing translation and interpretive services where appropriate; providing more easily understandable support documents to supplement a statement of basis or other permit decision support documents; and other actions that may address barriers to meaningful participation and further encourage public engagement during the permitting process. For more information, see *Environmental Justice in the Permitting Process (2000)*, *Enhancing Environmental Justice in EPA Permitting Programs (2011)*, and *EPA Activities To Promote Environmental Justice in the Permit Application Process (May 9, 2013)*.

Effective public participation is also a component of any analysis to determine whether recipients' programs and activities, including permitting activities, comply with EPA's non-discrimination regulations. See 40 CFR Parts 5 and 7. For more information, see the Title VI Public Involvement Guidance for EPA Assistance Recipients Administering Environmental Permitting Programs (Recipient Guidance), 54 Fed. Reg. 14207 (Mar. 21, 2006) and Guidance to Environmental Protection Agency Financial Assistance Recipients Regarding Title VI Prohibition Against National Origin Discrimination Affecting Limited English Proficient Persons, 69 Fed. Reg. 35602 (June 25, 2004).

4.) **Conduct a "fit for purpose" environmental justice analysis:** When a permitting action may result in disproportionately high and adverse human health or environmental effects on a community, including one with environmental justice concerns, permitting authorities are encouraged to conduct an environmental justice analysis of appropriate scope to inform the permitting decision.

An environmental justice analysis accomplishes two important policy objectives: (1) it addresses the principle of fair treatment by further evaluating adverse and disproportionate impacts and identifying ways to prevent or mitigate such impacts; and (2) it addresses the principle of meaningful involvement by fostering enhanced community engagement in the permitting decision. EPA recommends including the results of any analysis in the administrative record for the permit to transparently show whether and how the permit may adversely and disproportionately affect a community. Environmental justice analyses will vary according to the specific circumstances of any permit decision, but may include:

- Further evaluation of demographic data indicating vulnerabilities in the affected population;
- Further input from stakeholders, including the affected community;
- An evaluation of existing environmental data, including air monitoring, air modeling, or, as appropriate, data from other media;
- An evaluation of the facility's compliance record;
- An evaluation of existing public health data about the affected community;
- An evaluation of the permitting action's potential health and non-health adverse effects (e.g., noise, odor, and traffic);

- An evaluation of the cumulative impact of the permitting action under consideration together with impacts from other regulated and non-regulated sources of pollution in the community;
- An evaluation of the potential effects of the permitting action under consideration on the health of a population and the distribution of those effects within the population; and
- An evaluation of potential methods for minimizing or mitigating adverse effects on the community.

See *FAQ #8*. If the screening analysis indicates that the permitting action will have a disproportionate effect on the basis of race, color, or national origin (including LEP status), then it may be necessary to conduct an analysis of disparate impacts under federal non-discrimination laws, including Title VI. See *FAQ #9*, 11-13. The components of an environmental justice analysis described above can also be relevant to the consideration of civil rights compliance. See *FAQ #4*.

5.) **Minimize and mitigate disproportionately high and adverse effects associated with the permit action to promote fair treatment:** When a permitting action may result in disproportionately high and adverse human health or environmental effects on a community, including one with environmental justice concerns, permitting authorities can promote fair treatment by fully examining all relevant statutory and regulatory authorities, including discretionary authorities, to develop permit terms and conditions to address or mitigate identified air quality impacts to the extent feasible. Examples of potential legal discretion under existing authorities may be found in *EPA Legal Tools to Advance Environmental Justice*. EPA and other air permitting authorities may also consider whether other federal, state, tribal or local entities have authority that may be used to address or mitigate effects and engage with those entities, where feasible, to implement solutions.

In addition to considering whether an air permit meets all applicable federal air permitting requirements, EPA may, when appropriate and conditions warrant, submit formal comments to identify available discretion under federal, state, or local authorities that may be applied to mitigate or otherwise address the air permitting action's effects on the community. In addition, EPA may submit formal comments when a permitting action raises an EPA recipient's independent obligation to comply with federal non-discrimination laws, including Title VI. See *FAQ #5*.

EPA recipients have an independent obligation under federal civil rights laws with respect to all of their programs and activities, including environmental permitting programs. If a permitting program is an EPA recipient and its decision is likely to have an adverse and disparate effect on the basis of race, color, national origin (including LEP), disability, sex, or age, then the program should consider broadly the availability of less discriminatory alternatives. For more information, see *FAQ #14*.

6.) **Provide federal support throughout the air permitting process:** When a permitting action by an EPA recipient may result in disproportionately high and adverse human health or environmental effects on a community, including one with environmental justice concerns, EPA will be available to collaborate with the permitting authority to provide technical support, guidance, and recommendations to address these effects on the community, including cumulative effects.

7.) **Enhance transparency throughout the air permitting process:** It is important that permitting authorities provide transparency in decision making throughout the air permitting process with consideration of the specific needs of the community. The administrative record for the permitting action should be readily available in a format and location that is easily accessible to the affected community. We recommend clearly documenting the affected community's concerns and addressing those concerns to the extent possible. The permitting authority and applicant can consider ways to make compliance monitoring, test results, records, and reports required by the permit publicly available in a meaningful way that is understandable and readily accessible by the community. For more information and available resources, see *FAQ #15*.

8.) **Build capacity to enhance the consideration of environmental justice in the air permitting process:** EPA's capacity to confront environmental justice challenges will depend on a coordinated, long-term effort with our regulatory partners, stakeholders, and affected communities nationwide. EPA recognizes the importance of building the collective capacity of EPA, state, tribal, and local co-regulators to promote the fair treatment and meaningful involvement of communities with environmental justice concerns in the air permitting process. OAR supports the development of EPA, state, local and tribal capacity to identify and address these concerns through training, technical assistance, and outreach activities. Many permitting authorities have already developed effective tools to advance environmental justice. EPA supports peer-to-peer learning between our regulatory partners, stakeholders, and affected communities to identify best practices on how to address environmental justice concerns and collectively expand our positive impact in environmentally overburdened communities.

DEPARTMENT OF PUBLIC HEALTH
CITY OF CHICAGO

CDPH Guidelines Regarding Permitting Process For Consequential Large Recycling Facilities, Reprocessable Construction/Demolition Material Facilities, and Waste Handling Facilities

July 2022 Update

(1) Introduction

On November 30, 2020, the Chicago Department of Public Health ("CDPH") issued guidelines for public engagement during the permitting process for "Consequential" large recycling facilities, as defined in CDPH's Rules for Large Recyclers.[1] The guidelines reflect CDPH's commitment to transparency and consideration of community concerns in the permitting process by establishing timelines for sharing permit applications, receiving public comments, and reviewing applicant submittals. In furtherance of these purposes, and in the interest of consistency, CDPH hereby expands the guidelines to cover certain waste and material handling facilities,[2] subject to the timelines and public hearing requirements set forth in Sections 11-4-1520(G), 11-4-1660, and 11-4-1930 of the Municipal Code of Chicago ("Code").

(2) Permit Application Receipt, Posting, Public Comment, and Community Meeting.

(a) Within **ten (10) business days** from receipt of a full application, CDPH will post the application (minus any Confidential Business Information ("CBI"), which is designated as such through CDPH's CBI process) on the City's website. CDPH will accept written comments on the permit application for at least **thirty (30) days** from the date that CDPH posts the permit application. Interested members of the public may submit comments to CDPH through envcomments@cityofchicago.org, a dedicated email address. All written comments will be posted on the City's website.

(b) For facilities subject to the public hearing requirements set forth in Section 11-4-1660, and for all other facilities where there is a significant degree of public

[1] The Rules for Large Recycling Facilities and other CDPH Rules may be viewed at www.cityofchicago.org/environmentalrules and https://www.chicago.gov/city/en/depts/dol/rules-and-regulations-portal.html.

[2] "Waste handling facilities" are facilities that require a permit under Section 11-4-250 of the Code. Reprocessable construction/demolition material facilities are facilities that require a permit under Section 11-4-1930 of the Code.

interest in the application, CDPH will schedule a community meeting within the **thirty (30) day** comment period referenced above to explain the permitting process, allow the applicant to present the proposed facility and operations, and hear any local feedback or concerns. CDPH will provide at least **ten (10) business days**' notice of the community meeting. Notices for waste handling and reprocessable construction/demolition material ("C/D material") facilities will be posted in accordance with the Rules of Procedure for Notice of Hearings.

(c) To help ensure a meaningful sharing of information, CDPH requests that public comments on the application address whether or not the application meets all applicable requirements in the Code and relevant underlying rules ("Rules"), and that they be as concrete and specific as possible.

(3) Permit Application Review, Review of Public Comments on Application, Completeness Determination.

No sooner than five (5) days and no later than thirty (30) days from the end of the public comment period on the application, CDPH will review the public comments and complete a review of the application per the standards set forth in the Code and Rules. Within this same time period, CDPH will make a determination regarding whether the application is complete and meets all requirements of the Code and Rules.

(4) Deficient Application.

(a) If, within **sixty (60) days** of posting of the application or any supplemental application[3], CDPH finds any deficiency in the application, CDPH may either deny the permit or request more information, depending on the extent of the deficiencies. If CDPH has questions during its review of the application, CDPH may notify the applicant and request a written response, supplementary information, or both, as deficiencies are identified. CDPH will post each such notification on the City's website. Within **ten (10) business days** from receipt of the applicant's response, CDPH will post the response (minus any designated CBI) on the City's website. Each posting of a supplemental application will trigger a new thirty (30) day written comment period.

(b) If, after reviewing all of the applicant's responses, CDPH finds that the application is still incomplete or does not meet all requirements, CDPH will either notify the applicant of the remaining deficiencies and provide a final opportunity to remedy them, or will issue a permit denial letter, depending on the nature and extent of the deficiencies. If the permit is denied, the applicant will be informed of the appeal process per Code requirements.

[3] As used in these Guidelines, a "supplemental application" is a revised application submitted in response to an inquiry or deficiency letter from CDPH.

(5) Draft Permit and Public Comments on Draft Permit.

(a) If, within **sixty (60) days** of posting of the application or supplemental application, CDPH finds that the application is complete and meets all requirements of the Code and Rules, and if there were not significant issues raised during the public comment period on the application, then CDPH will proceed with permit issuance.

If, however, there are significant issues raised during the public comment period on the application, then, upon finding that the application is complete and meets all requirements of the Code and Rules, CDPH will prepare and post a draft permit on the City's website for public review and comment. Interested members of the public may submit comments on the draft permit to CDPH through envcomments@cityofchicago.org. CDPH requests that public comments address whether or not the draft permit meets all applicable requirements in the Code and Rules, and that they be as concrete and specific as possible.

(b) If a draft permit is issued, CDPH will accept and consider written public comments on the draft permit for **thirty (30) days** from posting of the draft permit.

(6) Permit Issuance and Summary Document.

(a) Within **thirty (30) days** of the close of the public comment period on the draft permit, CDPH will review all public comments and will make any necessary adjustments to the draft permit. If all requirements for permit issuance are met, CDPH will finalize the permit and proceed with permit issuance. In addition, as soon as practicable following a review of the public comments, CDPH will prepare a response document that summarizes the comments received during the public comment periods (both written and expressed verbally at the community meeting, if one is held) and describes the basis for CDPH's decision regarding the permit application and issuance of the permit**.**

If, however, CDPH determines that all requirements for permit issuance are not met, CDPH will either request supplemental information from the applicant (following the process described above) or else will issue a permit denial letter and inform the applicant of the appeal process provided in the Code.

(b) If a permit is issued, the final permit and response summary document will be posted on the City's website when the permit is issued or shortly thereafter.

(7) Timeframes for Permit Decisions

(a) For waste handling facilities, the Commissioner will render a decision on the application within the timeframes set forth under Section 11-4-1660 of the Ordinance.

For C/D material facilities, the Commissioner will act on the application in accordance with the timeframe set forth in Section 11-4-1930.

(b) For recycling permit applications, the above timeframes may be extended for good cause at the Commissioner's discretion.

(8) Exception for Certain Renewal Permits

The guidelines contained herein do not apply to renewal applications that:

(a) Do not require a special use variance from the Zoning Board of Appeals;

(b) Are not otherwise subject to any new rule or ordinance requirements since the applicant's most recent application approved by CDPH; and

(c) Are not seeking an increase in the horizontal or vertical boundary of the facility or a permit capacity increase of more than 10% above the limits established under the current permit.

CDPH PERMIT PROCESS GUIDELINES FOR CONSEQUENTIAL FACILITIES

The Chicago Department of Public Health (CDPH) has expanded public engagement for consequential large recycling, reprocessable construction/demolition material and waste handling facilities. All permit materials will be posted on the CDPH website.

= Opportunity for public comment

APPLICATION SUBMITTED

Application posted on CDPH website within 10 business days.

Public comments accepted for at least 30 days by email at envcomments@cityofchicago.org.

Facilities subject to public hearing or those with significant public interest will have a **community meeting** within the 30-day comment period. CDPH provides 10 business days' notice of the meeting.

Within 60 days of application posting or 30 days from end of comment period, CDPH will do one of the following:

If CDPH finds application deficient in a way that cannot be remedied, **CDPH will deny the permit.**

If CDPH requires additional information and/or finds application deficient in a way that can be remedied, **CDPH may post a deficiency letter** within 10 business days.

CDPH posts applicant's response within 10 business days. Such postings each require a new 30-day comment period.

If all requirements are met, **CDPH will issue the permit.**

If application meets all technical requirements but significant issues are raised by the public, CDPH **posts draft permit** on CDPH's website and **accepts comments** for 30 days by email at envcomments@cityofchicago.org.

Within 30 days of the end of the comment period, CDPH amends draft permit as needed and **will issue the final permit.**

CDPH will prepare response documenting comments and its decision, to be posted when the permit is issued or shortly thereafter.

If CDPH finds application meets all requirements and no significant issues raised by the public, **CDPH will issue the permit.**

CDPH will adhere to this process to the extent possible. CDPH may modify the guidelines as necessary to promote the public interest, including to accomodate other public agencies' processes. Guidelines here do not apply to renewal applications that (a) Do not require a special use variance from the Zoning Board of Appeals; (b) Are not subject to any new rule or ordinance requirements since the applicant's most recent application was approved by CDPH; and (c) Are not seeking an increase in the horizontal or vertical boundary of the facility or a permit capacity increase of more than 10% above the limits established under the current permit.

Notices for waste handling and reprocessable construction/demolition material facilities will be posted in accordance with the Rules of Procedure for Notice of Hearings. To view the Rules requirements for permit applicants, please visit here. To view the Code requirements for permit applicants, please visit here.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

December 22, 2022

OFFICE OF
AIR AND RADIATION

MEMORANDUM

SUBJECT: Principles for Addressing Environmental Justice in Air Permitting

FROM: Joseph Goffman
Principal Deputy Assistant Administrator
Office of Air and Radiation

TO: Air and Radiation Division Directors
Regions I-X

I am pleased to share the attached "Principles for Addressing Environmental Justice in Air Permitting" for your immediate use. These principles provide an interim operating framework for identifying, analyzing, and addressing environmental justice concerns in the context of Clean Air Act (CAA) permitting as EPA continues to build more tools and explore additional opportunities to advance environmental justice and equity with our co-regulatory partners, communities, and other stakeholders. EPA regional air permitting staff are encouraged to apply these eight principles in developing federal CAA permit decisions. Regions are equally encouraged to share these principles with state, tribal, and local partners and to work proactively and collaboratively with those partners to facilitate consideration and application of these principles in their air permitting actions.

I want to thank the national EPA workgroup that developed these principles and supporting information resources for EPA permit writers. The principles reflect a number of best practices the regions have developed over many years, including early identification of potential environmental justice concerns in specific locations and early, ongoing engagement with communities throughout the permitting process. The principles also recognize the various types of Clean Air Act permits and the need to determine the appropriate scope of an environmental justice analysis on a case-by-case basis. Similarly, opportunities for addressing disproportionately high and adverse effects associated with a permitting action may also vary from one situation to another. The principles encourage consideration of all relevant statutory and regulatory authorities available to develop permit terms and conditions to address or mitigate identified air quality impacts to the extent feasible. These may include state and local authorities as well as discretionary authorities under federal laws. Examples of legal discretion under existing federal authorities may be found in *EPA Legal Tools to Advance Environmental Justice.* The principles also recognize the importance of

ensuring that permitting decisions do not, either intentionally or in effect, discriminate against people on the basis of race, color, or national origin (including limited English proficiency), disability, age or sex in violation of federal nondiscrimination laws, including Title VI of the Civil Rights Act of 1964. Compliance with the federal civil rights laws by EPA recipients of federal financial assistance is mandatory and represents an important enforcement tool for achieving environmental justice. The principles also cross-reference the "Interim Environmental Justice and Civil Rights in Permitting Frequently Asked Questions (FAQs)" at appropriate junctures.

The goal in applying these principles is to improve and consistently practice meaningful stakeholder involvement and fair treatment at all stages of the permitting process, promote issuance of air permits containing terms that are appropriately protective of public health and the environment consistent with applicable environmental laws, and improve transparency in the permitting process.

Please share these principles with your staff, as well as colleagues at state, tribal and local air agencies. We anticipate refining the principles as we gain experience in their application and welcome your feedback on them. We have set up a mailbox at ejinairpermitting@epa.gov where such feedback can be sent. I will also be sharing the principles with state and tribal associations for their use and feedback and look forward to additional robust conversation on the principles with our implementation partners in the months ahead.

If you have any questions concerning this memorandum, please contact John Mooney (mooney.john@epa.gov) or Scott Mathias (mathias.scott@epa.gov). If states, tribes, or stakeholders have questions, we encourage them to reach out to relevant regional office contacts. This memorandum is posted on EPA's website at: https://www.epa.gov/caa-permitting.

Attachment

cc: Regional Administrators
Deputy Regional Administrators
Tomas Carbonell
Alejandra Nunez
Elizabeth Shaw
John Shoaff
John Millett
Peter Tsirigotis
Robin Dunkins
Scott Mathias

Michigan Environmental Compliance Guide for Nonmetallic Mineral Crushing Facilities

EGLE MICHIGAN DEPARTMENT OF ENVIRONMENT, GREAT LAKES, AND ENERGY

Michigan.gov/EGLE • 800-662-9278

Rev. 2/2020

The **Michigan Environmental Compliance Guide for Nonmetallic Mineral Crushing Facilities** is intended for guidance only and may be impacted by changes in legislation, rules, and regulations adopted after the date of publication. Although the guide makes every effort to teach users how to meet applicable compliance obligations, use of this guide does not constitute the rendering of legal advice.

This guide has been reviewed by a steering committee and outside reviewers. Diligent attention was given to assure that the information presented herein is accurate as of the date of publication; however, there is no guarantee, expressed or implied, that use of this guide will satisfy all regulatory requirements mandated by laws and their respective enforcement agencies. Reliance on information from this document is not usable as a defense in any enforcement action or litigation. The state of Michigan shall be held harmless for any cause of action brought on as a result of using of this publication.

Rev. 2/2020

Contents

PART 1: AIR QUALITY REQUIREMENTS

WHY ARE AIR EMISSIONS FROM CRUSHING FACILITIES REGULATED?

Environmental regulations exist to protect our land, air, and water from absorbing an excessive amount of pollution. Air pollution that comes in the form of fine dust, smoke, or soot particles, also known as particulate matter (PM), is just one of six major pollutants regulated by the U.S. Environmental Protection Agency (U.S. EPA) and the Air Quality Division (AQD) of the Michigan Department of Environment, Great Lakes, and Energy (EGLE). The other criteria air pollutants are ground-level ozone, nitrogen dioxide, sulfur dioxide, carbon monoxide, and lead.

The U.S. EPA sets the National Ambient Air Quality Standards (NAAQS) for the six criteria air pollutants. These standards protect public health, including the health of sensitive populations such as asthmatics, children, and the elderly, and the public welfare, including protection against decreased visibility and damage to crops, vegetation, and buildings. The unit of measure for the PM standard are micrograms per cubic meter of air.

The U.S. EPA classifies and regulates dust, smoke, and soot by particle size. The particle size is measured in microns. Dust or PM less than or equal to 10 microns in diameter is commonly referred to as PM_{10}. Most dust associated with crushing facilities falls into this category. Finer sources of PM equal to or smaller than 2.5 microns ($PM_{2.5}$) are typically a result of photochemical reactions.

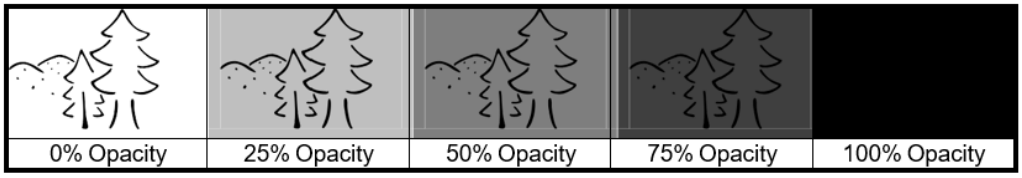
Research has shown that inhaling too much dust lowers the body's natural defenses because dust builds up in our respiratory system and irritates the sensitive tissues in our lungs. Therefore, breathing a lot of dust over a long period of time can cause chronic breathing and lung problems. Another consequence of dust generation is reduced visibility (also known as haze).; Haze can contribute to excessive soiling, discoloration, and damage to personal property. Fine particles can remain suspended in the air and travel long distances. For example, emissions from a factory in Gary, Indiana, can end up in Grand Rapids, Michigan.

The crushing of nonmetallic minerals is just one of a number of dust-generating activities regulated by the U.S. EPA and EGLE. Other industries where dust is controlled by similar federal and state regulations include asphalt and concrete batch plants.

OVERVIEW OF FEDERAL AND STATE AIR QUALITY REGULATIONS

Dust and fine particulate are measured by opacity. Opacity is a measurement of how light is obscured by the density of the dust particles in the air. Opacity is measured in percentages from 0 to 100 percent and measurement is performed by visible observation. When there is no visible dust, the opacity is zero percent, meaning light around a crushing facility is not obscured. Therefore, when the statement is made that an activity is operating at a "25 percent opacity" level, it means the PM in the air is blocking 25 percent of the visual background light, leaving 75 percent of the background light clearly visible. An example of standard opacity levels is illustrated by Figure 1-1. The more dust or PM generated, the more difficult it is to see the landscape background.

Figure 1-1: Opacity Levels



The U.S. EPA regulates the emissions of particulate matter from nonmetallic mineral crushing facilities through the New Source Performance Standards (NSPS), Subpart OOO. 40 CFR 60.670(a) defines, in part, an affected facility in fixed or portable nonmetallic mineral processing plants as each crusher, grinding mill, screening operation, bucket elevator, belt conveyor, bagging operation, storage bin, enclosed truck or railcar loading station which commences construction, reconstruction or modification after August 31, 1983. Based on this definition, the requirements of Subpart OOO apply to individual pieces of equipment and include, but are not limited to, equipment specific opacity limits, notification of equipment startup, as well as reporting and recordkeeping provisions. Subpart OOO also requires an initial performance test for most subject equipment.

There are some exceptions, however. Facilities at the following plants are **not** subject to Subpart OOO:

a) Fixed sand and gravel plants and crushed stone plants with capacities of 25 tons per hour or less.

b) Portable sand and gravel plants and crushed stone plants with capacities of 150 tons per hour or less.

EGLE enforces the *Michigan Air Pollution Control Rules*, which restrict the level of dust or PM that can be emitted into the air. The *Michigan Air Pollution Control Rules* require owners/operators of crushing facilities to obtain a pre-construction air pollution control permit, which is known as a Permit to Install. This permit contains a set of general and special conditions for the operation of your crushing facility and incorporates the testing, monitoring, and recordkeeping requirements from Subpart OOO. Together, both the state and federal regulations set the maximum levels of dust which can be emitted from your crushing facility. If you want to operate a crusher of any size in Michigan, you must first apply for and receive a Permit to Install. The permit must be issued prior to commencement of crushing activities at your first job site.

Who Must Comply with the Permit to Install Requirements?

A Permit to Install is required for all crushing facilities, whether the equipment is leased from a second party on a temporary basis or owned outright. A crushing facility is defined as the crusher(s) and associated equipment, for the purpose of processing nonmetallic rocks, stone, sand, gravel, concrete or recycled asphalt. Owner/Operators must comply with the Permit to Install requirements and can be held liable for state and federal air quality rules.

Leased Equipment

Companies that lease their equipment should ask the leasing company the following questions:

- **Has a Permit to Install been applied for by the leasing company (i.e., the owner of the equipment)?** As an operator of the crushing equipment, it is important to verify that a valid Permit to Install exists for the equipment you wish to lease. If not, you will need to apply for an air quality permit in order to use the equipment. If there is a permit already assigned to this equipment, the leasing company may allow you to operate under the Permit to Install for that equipment. In this case, ask for a copy of the Permit to Install for your records because one of the requirements is to post a copy of the Permit to Install at your job site. You must understand and comply with all of the permit conditions. EGLE will issue a Permit to Install to either the owner of the equipment or the operator of the equipment. The *General Permit for Nonmetallic Mineral Crushing Facilities* currently lists both the owner and operator as viable entities.

- **Has the necessary initial performance test has been completed for the equipment?** Ask the leasing company for a copy of the test documentation to demonstrate that the equipment has passed the necessary initial performance test. Keep a copy of this test documentation for your records. EGLE will hold the permittee responsible for complying with all of the Permit to Install's requirements. If no permit has been obtained, EGLE may take action against the lessee and/or lessor for failing to obtain the Permit to Install and failure to conduct performance testing. According to the Permit to Install, both the owner and operator are liable for violations. It is important to remember that violations can be enforced by either EGLE or the U.S. EPA depending on what air quality requirements were violated.

Activities Exempt from Air Pollution Requirements

All nonmetallic mineral crushing facilities must obtain a Permit to Install, but there are some related activities that are exempt from the Permit to Install requirements. For example, equipment for the mining and screening of uncrushed native sand and gravel is exempt, but only if it is standalone equipment and not associated with a crushing operation. Although this equipment is exempt from the permitting requirement, any visible emissions resulting from that equipment must be at or below 20% opacity, unless it is part of a permit with lower opacity limits. If you would like to discuss your specific circumstance, or if you have questions regarding the exemption status of other potential sources of air pollution, contact EGLE's Office of Environmental Assistance at (800) 662-9278.

There are also some nonmetallic mineral crushing activities that require a Permit to Install but are not required to comply with the performance testing, recordkeeping, and reporting requirements found in NSPS Subpart OOO. These operations include:

- Fixed sand and gravel plants, and crushed stone plants with capacities of 25 tons per hour or less.
- Portable sand and gravel plants, and crushed stone plants with a capacity of 150 tons per hour or less.
- Common clay and pumice plants with capacities of 10 tons per hour or less.
- Underground mines.
- Stand-alone screening operations NOT attached to a crusher.

Grandfathered Sources of Air Pollution

Not all crushing equipment requires a Permit to Install. If you own equipment that was installed **but never modified, or reconstructed** since August 15, 1967 (i.e., the date the *Michigan Air Pollution Control Rules* became effective), your equipment would be considered "grandfathered" and would not require a Permit to Install.

It is important to note there are very few sources of air pollution still in operation that would meet these criteria. Most pre-1967 constructed crushing equipment has been modified or reconstructed over the years and is now required to have an air quality permit. To learn more about what it means to modify or reconstruct your equipment, please see pages 1-17 and 1-18.

NEW INSTALLATION OF A CRUSHING FACILITY

According to Rule 201 of the *Michigan Air Pollution Control Rules*, you must not start construction of a source of air pollution without first obtaining an approved Permit to Install.

Types of Permits to Install

There are two types of Permits to Install crushing facilities can apply for in Michigan. One is a Site-Specific Permit to Install and the other is a General Permit to Install. What is the difference between the two permits? Both the Site-Specific Permit to Install and General Permit to Install can be used by companies crushing and processing nonmetallic minerals, but the General Permit to Install can only be used by companies meeting the following:

- ✓ Crush no more than 2 million tons per year at any one site.
- ✓ Locate and operate their crusher a minimum of 500 feet from any residential or commercial establishment or place of public assembly.
- ✓ Have established and implemented a fugitive dust control program.
- ✓ Do not have any unresolved air quality enforcement violations with the U.S. EPA or EGLE.
- ✓ Have an operation not currently covered under another company's Permit to Install.

General Permit to Install

The General Permit to Install (general permit) is intended for crushing facilities that move from site to site during the year. This permit is designed to be more flexible than a Site-specific Permit to Install as well as easier to apply for. In general, an administratively complete general permit application can be issued within 30 days or less. The biggest benefit of this type of permit is it linked to the crusher and its associated equipment, not a specific location. Once you are issued this permit, it is very easy for you to move your process and equipment from site to site as long as you submit the proper notification forms. A general permit allows the owner and/or operator more flexibility in meeting the needs of their customers.

Site-Specific Permit to Install

If your proposed location does not meet the 500-foot set back requirements, what can you do? You can apply for a site-specific permit to install. It is recommended you utilize the existing crusher general permit application forms, and in addition use the Permit to Install (PTI) form (EQP5615E) as a cover sheet. Since a site-specific permit may take more time to issue, consider including the following information with your application:

- A site map indicating you do not meet the 500-foot setback requirement in the general permit,
- How you plan to ensure you minimize dust to comply opacity limits.
- A fugitive dust management plan
- Whether you plan to crush building demolition material. For example, if you will crush concrete from an old stamping plant, you MUST identify whether you will be crushing contaminated material. This will allow AQD permit staff to evaluate whether crushing is appropriate at that location.

The General Permit to Install Application

Most crushing facilities can meet the applicability requirements for a General Permit to Install.

Submitting a General Permit to Install application for a new installation involves filling out each of the following permit forms and providing additional documentation to the AQD so they can begin processing your application.

- One General Information form (EQP5727)
- One or more Process Information forms (EQP5756)
- One or more Additional Information forms (EQP5729)

Where to Get a Permit to Install Applications

You can obtain a hard copy of the *General Permit to Install Application for Nonmetallic Mineral Crushing Facilities* by visiting **www.michigan.gov/air**. Select *"Permits,"* then "Permits to Install/New Source Review" then *"General Permits – Applications Forms and Instructions"* and then scroll down to *"General Permit to Install Application for Nonmetallc Mineral Crushing Facilities."*

The General Permit Application Forms

The General Permit to Install application consists of three primary forms: **General Information**, , **Process Information** and **Additional Information** forms. You will use these three forms to apply for a new, or modify an existing, nonmetallic crushing facility. You can find the form number in the lower right-hand corner of the form.

A step-by-step guide on how to properly fill out the permit application forms is available in Appendix A of this document.

The General Information Form (EQP5727)

The General Information form is used to gather contact and physical company location information from the permit applicant. It is also used to track any additional forms or documentation the permit applicant submits as part of the overall permit application. This is a standard form that is used in each of the other seven types of General Permit to Install applications the AQD offers.

The Process Information Form (EQP5756)

The Process Information form collects specific information about each component of your crushing facility. It has dual purposes. Use the form to list all of the process equipment you will in installing under the initial permit. Use the form to identify equipment that has been added, removed or modified since the initial permit was issued.

The Additional Information Form (EQP5729)

The Additional Information form is used to indicate you are attaching supplemental information along with your permit application. The types of supplemental information you can attach include plant set up diagrams, local area maps, drawings, charts, equipment documentation, or other information you believe is important to expedite the processing of your permit application request.

Examples of these three forms can be found in Appendix A. Fillable forms are linked above and at Michigan.gov/air, choose "Permits," then "Permits to Install (PTI) / New Source Review (NSR)," then "General Permits to Install".

See "Available Resources" on page 1-22 if you need assistance on completing a Permit to Install application or have questions on which Permit to Install application to use.

Site-Specific Application Forms

If you cannot meet the applicability requirements for a General Permit to Install, you will need to fill out a Permit to Install (PTI) Application Form (EQP5615E). You should also fill out the general permit application forms discussed above and attach them to EQP5615E. Remember to provide additional documentation to the AQD so they can begin processing your application.

Submitting Your Permit Application Package

Once you have completed the forms, you are ready to submit your application package to the AQD. Make two copies of the entire General Permit to Install application, including any attachments or other documentation that will be included with the application, and mail both copies, including the original copy **with an original signature,** directly to:

Michigan Department of Environment, Great Lakes, and Energy
Air Quality Division - Permit Section
P.O. Box 30260
Lansing, MI 48909

What Happens After I Submit My Permit Application?

The Permit Section of the AQD receives, reviews, and issues all permit applications. Each application is date stamped and then screened to ensure the application form and its attachments have been filled out correctly, and that it contains all of the information that the AQD requires in order to consider the application is administratively complete. If any information is missing or unclear, the application will be sent back with a letter explaining what information is needed for the application to be administratively complete.

The AQD assigns each permit a unique number. The permit number consists of two number fields separated by a dash (NNN-XX). The AQD also determines whether there is a state registration number (SRN) associated with the equipment. If not, one will be assigned. A permit engineer will review your application and determine if all necessary

information has been submitted. Once approved, you will receive an e-mail from the permit engineer indicating your permit has been issued. After you receive this e-mail, your permit is valid and you may begin construction/operation of your equipment.

How Long Will It Take to Get my Permit?

General Permit to Install applications are typically processed in 30 days or less, depending on the work load of the AQD. Site-specific permits may take longer because the review process is more complication and involved. You will know your permit is approved once the AQD sends a copy to your company with a letter acknowledging the AQD is aware your company intends to install and operate a crushing facility in accordance with the terms and conditions of the General Permit to Install. Your permit engineer will communicate regularly with you on the status of your project. It is important to remember that the AQD is obligated to maintain and make available to the public, upon request, a copy of your General Permit to Install.

Complying with Permit Conditions

The compliance requirements of your permit are a combination of federal and state regulations. It is important that, upon receiving your permit, you become very familiar with all the general and special conditions of the permit because it is your responsibility to operate the equipment according to the conditions or face possible fines and penalties. The following is a short description of each requirement and tips on how to comply. For a listing of all the general and special conditions, follow the instructions under "Available Resources" on page 1-22.

Controls

It is important to implement your control equipment to minimize dust from your process equipment. Some ways to do this are as follows:

- Install water sprays or bag house on each crusher and screen and make sure they are fully operational.
- Review, maintain, and implement a fugitive dust plan as specified in Appendix A of the General Permit to Install.
- If using a baghouse collector to control particulate emissions, remove collected air contaminants and dispose of them properly and frequently to minimize the amount of dust released to the air.

Labeling

Label all crushing equipment within 45 days of the facility's start up. Equipment labels should be placed in an easy-to-see location on the equipment and should be the same as the Device IDs indicated on the permit application's Process Information form (EQP5756). Inspectors will cross reference these IDs as well as any serial numbers associated with the equipment.

Local Permitting Requirements

Permits issued by the AQD does not absolve you from having to obtain other permits and approvals from other governmental agencies. For example, a *Soil Erosion and Sedimentation Control Permit* may be required before you begin preparing your site. See page 2-6 for more information.

Maintenance

Ensure all process equipment has properly operating water sprays. Additionally, any baghouse dust collector or wet scrubber controlling emissions from crushers and/or screens should be operated to minimize emissions. One of the best ways to ensure equipment is operating properly is to establish what parameters constitute proper operation. For instance, at what pressure range is your baghouse achieving optimum control. It is prudent to document parameters such as this and check them on a schedule documenting any inconsistencies and any maintenance done to correct issues.

Material Specifications

The allowed materials detailed in your permit are important and ensuring you are only processing those materials is a key to compliance. You should consider the following:

- Verify the material you are to crush is not contaminated with asbestos tailings or other asbestos waste material.
- Any material processing change at your plant (e.g., a move from crushing concrete to crushing asphalt) requires that you complete and submit a new Process Information Form (EQP5756) to the AQD.

Monitoring

If you are using a wet scrubber to control dust, it must be equipped with a continuous monitoring device measuring the pressure drop across the scrubber and measures the liquid flow rate. These devices must be calibrated annually. If the change in pressure and liquid flow rate readings varies +/- 30 percent from the values recorded during the most recent initial performance test, you are required to submit a semiannual report to the AQD within 30 days of the second and fourth calendar quarters.

Processing Limitation

The General Permit to Install will not allow you to process more than 2 million tons of crushed material per year at one location. If you exceed this amount, you will need to apply for a Permit to Install prior to beginning operations causing you to exceed this limit.

Recordkeeping

Recordkeeping is part of your permit and helps your facility inspector determine your compliance status. Some required notifications are listed below:

- Monitor and keep **daily** and **annual** records of the amount of material processed for each job site. Records must be kept for at least five years and made available to the AQD upon request.
- Keep accurate and complete records of all replacements, reconstructions, and modifications made to equipment at your crushing facility. This includes documentation such as:
  - Purchase orders.
  - Manufacturers' equipment manuals (equipment descriptions) and specifications.
- Record the maximum rated capacities of existing and replacement crushers, bucket elevators, bagging operations, or enclosed trucks, including:
  - The total surface areas of the top screen of existing and replacement screening operations.
  - The width of the existing and replacement conveyor belt. The rated capacities (in tons) of existing and replacement storage bins.
  - The date the equipment was installed, developed, and made operational.

Posting

Clearly post or keep on file a copy of your permit and associated application forms at the site.

Opacity or Visible Emissions Standards

Opacity is degree of which the emissions obscure the view of the observer. Opacity limits are an important part of assuring compliance with your permit and ensuring your process equipment is operation properly.

- The opacity of PM leaving the various pieces of equipment from your crushing facility shall not exceed the limits contained in Table 1-1.
- Maintain an opacity level of under 20 percent for all diesel-fueled stationary and portable on-site generators.

Table 1-1: Monitoring Equipment Opacity Limits During Operation

Equipment	Opacity Limit (%)
Any equipment enclosed within a building	No visible emissions
All crushers	15
Screens	10
Rock drills	5
Conveyors/Transfer points	10
Wash screens and all subsequent equipment downstream up to the next crusher or storage bin	No visible emissions
All equipment controlled by a baghouse dust collector	7
Wheel loaders and truck traffic	5
Material storage piles	5
Any other process equipment which is part of the nonmetallic mineral crushing facility or related processes	10

Performance Testing

Within 60 days of achieving the maximum production rate but no later than 180 days after you initially start up the crusher and its associated equipment, conduct the required visible emission performance test (see Figure 1-2).

- The performance test must be conducted by a person certified to evaluate visible emissions in accordance with U.S. EPA Reference Method 9. See page 1-11 for more information about this U.S. EPA test method.
- Complete the performance test demonstrating that the crushing facility meets the opacity limits stated in Table 1-1 and in the Special Conditions portion of the permit.
- Submit a copy of the completed opacity observations report to the AQD District Office within 30 days of the test date.
- If a baghouse collector or wet scrubber is installed in lieu of a water spray, conduct a performance test to verify compliance with the PM emission rate of 0.05 grams per dry standard cubic meter of exhaust gas.

For more information regarding performance testing, see page 1-11

Complying with Initial Performance Test Requirements

- Crushers
- Grinding mills
- Screens
- Bucket elevators
- Belt conveyors/transfer points
- Baghouse dust collectors
- Storage bins/piles
- Wheel loaders and truck loading stations+

An initial performance test is required in order to determine if the opacity of the dust or particulate matter emitted from the components of a crushing facility stay at or below the established limits. The following components of a crushing facility subject to NSPS Subpart OOO must undergo an initial performance test:

The following components of the crushing facility do not have to undergo an initial performance test:

- Wet screens and associated bucket elevators and belt conveyors that lead up to the next crusher, grinding mill, or storage bin.
- Screens and associated bucket elevators and belt conveyors that are downstream of a wet mining operation and lead up to the first crusher, grinding mill, or storage bin.

EQUIPMENT RENTALS

If you are renting any type of crusher and associated equipment, you must verify that an initial performance test has been performed on that equipment. If not, as the operator of the equipment, you will be responsible for conducting an initial performance test to verify compliance with opacity limits.

The initial performance test requires the use of an established U.S. EPA protocol or method in order to accurately complete the test and comply with the General Permit to Install requirements. The most common protocol or method used today for performance testing is U.S. EPA Test Method 9, also known as the "Visible Determination of Opacity of Emissions from Stationary Sources." The initial performance test must be completed by a visible emissions reader who is certified in the U.S. EPA Test Method 9 performance test method. During a performance test, the certified visible emissions reader records the level of dust that comes off various parts of the crushing facility. The levels of dust are measured as percentages of opacity. The initial performance test is completed over a specified period, and the visible emissions reader determines whether the crusher's components emit dust within the acceptable opacity limits (as specified in Table 1-1).

Where Do I Find a Certified U.S. EPA Test Method 9 Visible Emissions Reader?

As the owner/operator of a crushing facility, you have two options when it comes to conducting the initial performance test:

1. Hire an environmental consultant who is certified to conduct the U.S. EPA Test Method 9 visible emissions test.
2. Have someone from your company become certified.

Most environmental consultants have at least one person on staff who is certified to evaluate visible emissions in accordance with U.S. EPA Test Method 9. The *Michigan Clean Air Consultant Directory* is available on EGLE web site at Michigan.gov/air hover over the "Compliance" tab, click on the "Compliance Assistance Resources" button," then select "Environmental Consultant Assistance."

If you chose to have an employee from your company certified in the U.S. EPA Test Method 9 protocol, you may send that employee to Michigan's Smoke School. Twice a year, the AQD partners with a private training company to certify opacity readers in the state. Smoke School is generally offered spring (April) and fall (October) of each year in the Detroit, Grand Rapids and Gaylord metro areas. Information about registering for the bi-annual smoke school can be found on the AQD Web site at Michigan.gov/air.

What are the Benefits of Having a Certified U.S. EPA Test Method 9 Visible Emissions Reader on Staff?

The benefits are two-fold:

1. The employee who is certified in a test protocol can accurately document the opacity levels of your crushing equipment as it operates at each job site. This provides the AQD with strong documentation of your operating opacity levels and demonstrates your commitment to be a good environmental steward.
2. The up-front costs associated with training an employee may be the most economical option for your company if your company has an ongoing replacement schedule for its equipment. New, modified, or reconstructed equipment may need to have additional performance tests conducted.

Maintaining Certification

Those who are certified in U.S. EPA Test Method 9 protocol must renew and maintain their certifications every six months in order to remain up-to-date.

Conducting Visible Emission Observations

When using U.S. EPA Test Method 9 to conduct an initial performance test for each component of a crushing facility, the observer must:

- Be a minimum of 15 feet away from the dust source.
- Select an observation position that minimizes the interference from other dust sources at the job site (i.e., road dust).
- Where a water spray mist is used, take readings at the point in a crushing process where the mist is no longer visible in the observation.

U.S. EPA Test Method 9 requires that readings be taken every 15 seconds, averaging 24 consecutive readings over a 6-minute averaging period. During the observation for dust generation of the various components of a crushing facility, a certified U.S. EPA Test Method 9 reader can reduce the observation time from 3 hours to 1 hour (ten, 6-minute averages) in the following situations:

- Where baghouses are attached to an individually enclosed storage bin.
- If no individual opacity readings are greater than 10 percent for any crusher component, and there are no more than three recorded opacity readings of 10 percent in a one-hour period.
- If no individual opacity readings are greater than 15 percent for a crusher without a capture system, and there are no more than three recorded opacity readings of 15 percent in a one- hour period.

U.S. EPA Test Method 22 is used to determine the level of dust that might escape a building from equipment that is housed within. The performance test protocol for this method requires that the test last 75 minutes and that each side of the building and roof is observed for escaping dust over a period of 15 minutes.

Notifications to EGLE

Notifications are part of your permit and helps your facility inspector determine your compliance status. Some required notifications are listed below:

- Notify the AQD of the start-up date of your crushing facility within 15 days after the start up begins.
- If moving from a wet operation (i.e., saturated materials from a wet screening or wet mining operation) to a dry operation (and vice-versa), you must notify the AQD within 30 days following this change in material handling and adhere to the respective opacity limits as stated in Table 1-1.
- Notifications pertaining to performance testing:
  - Fourteen days prior to the performance test, have the AQD district supervisor approve your test procedures.
  - Seven days prior to the performance test, notify the AQD district supervisor of the performance test date.
  - If the performance test is delayed, notify the AQD of the new test date at least three days before the test is scheduled to be performed.
- If there is a problem with any component of your crushing facility where excessive amounts of dust are generated for more than two hours, you are required to notify the AQD of this abnormal condition or equipment malfunction within two business days of discovery of the occurrence. Notification is made to the appropriate AQD district office. If the AQD requires a written report, that report must be submitted within 10 days after the abnormal condition or equipment malfunction has been corrected or within 30 days of discovery, whichever is first.
- Notify the AQD of the start-up date of any replacement or additional equipment.

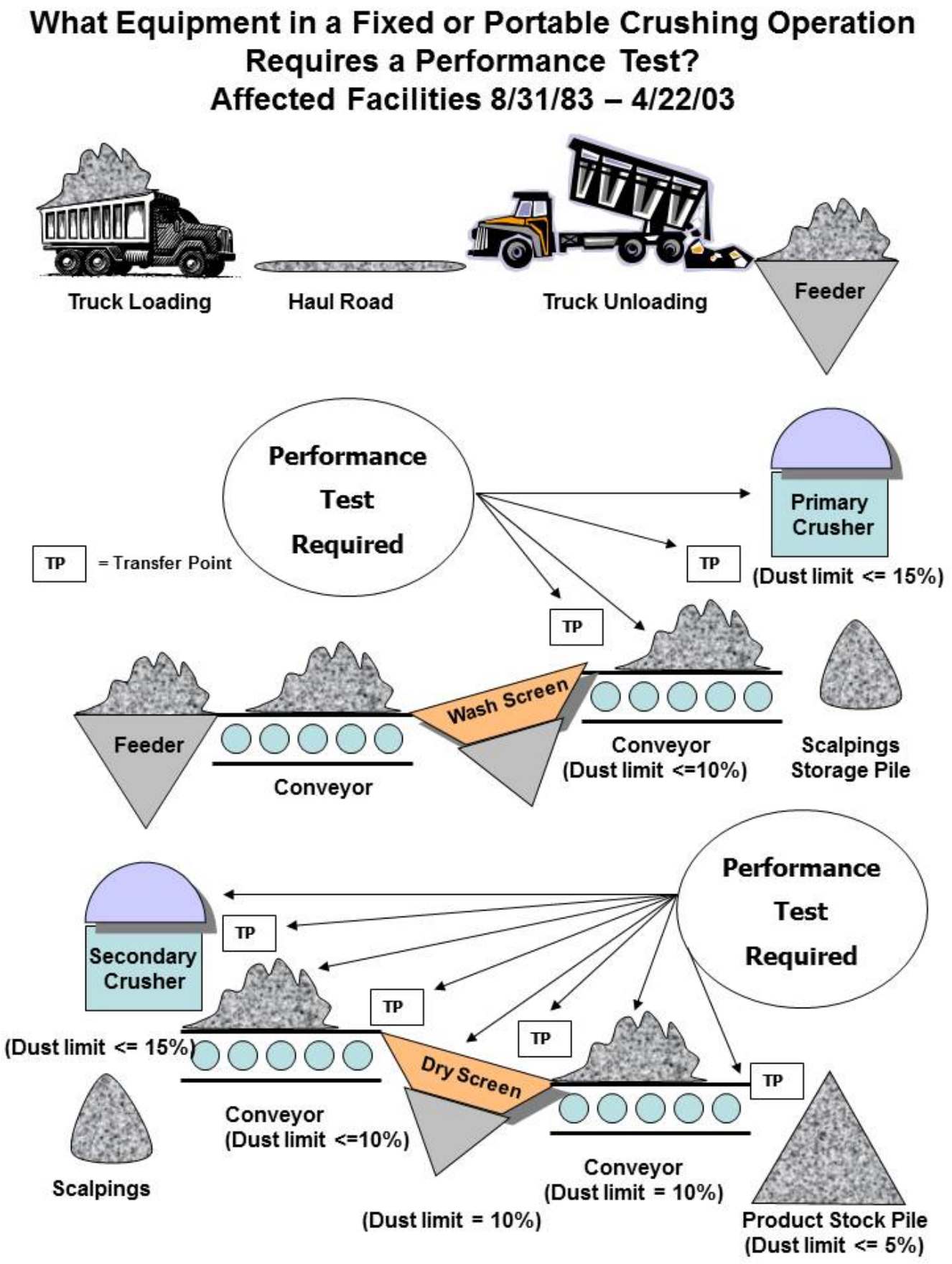


Figure 1-2: Determining What Equipment in a Fixed or Portable Crushing Facility Requires a Performance Test – Affected Facilities 8/31/1983 – 4/22/2003

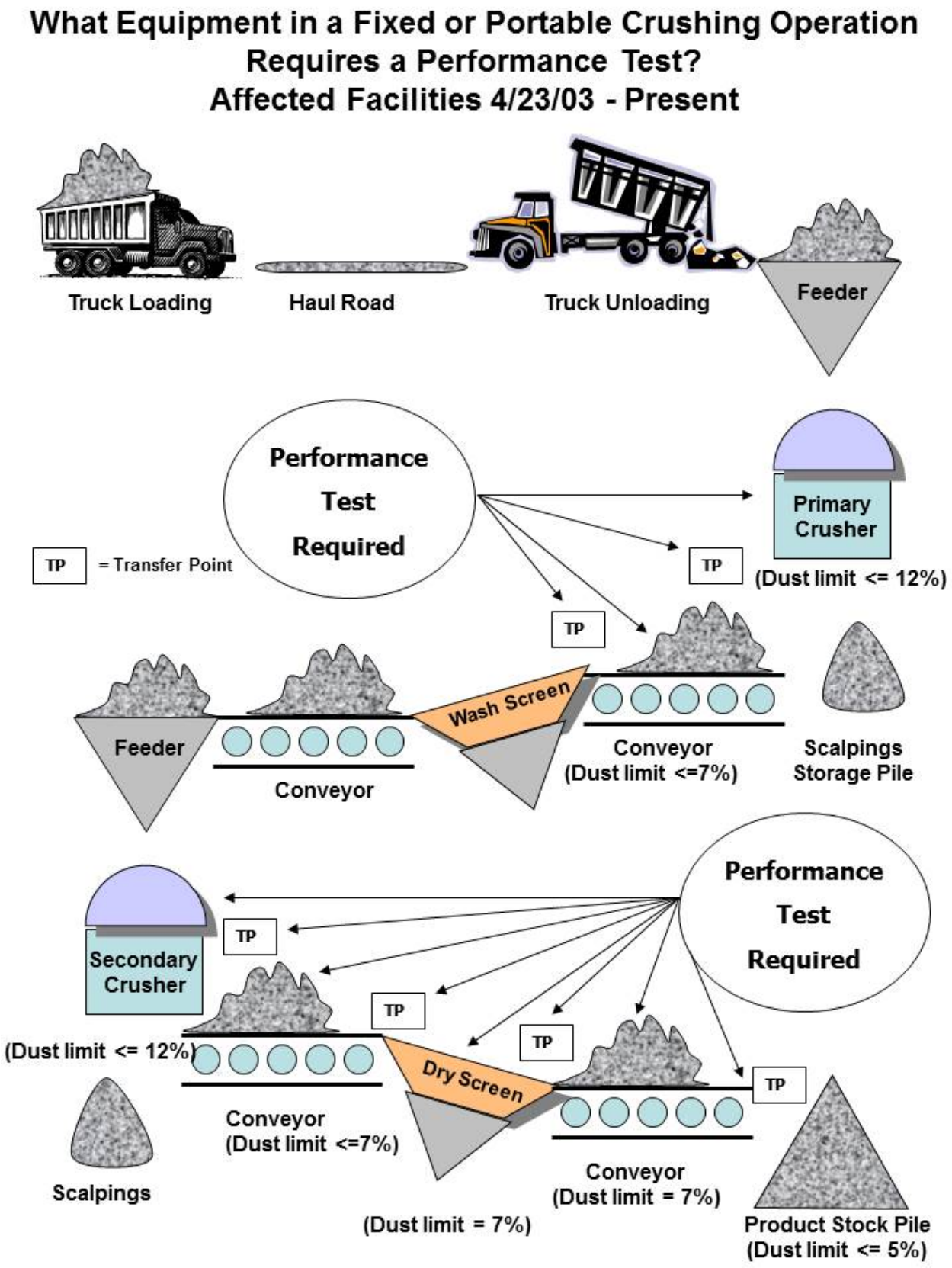


Figure 1-2: Determining What Equipment in a Fixed or Portable Crushing Facility Requires a Performance Test – Affected Facilities 4/22/2003 - Present

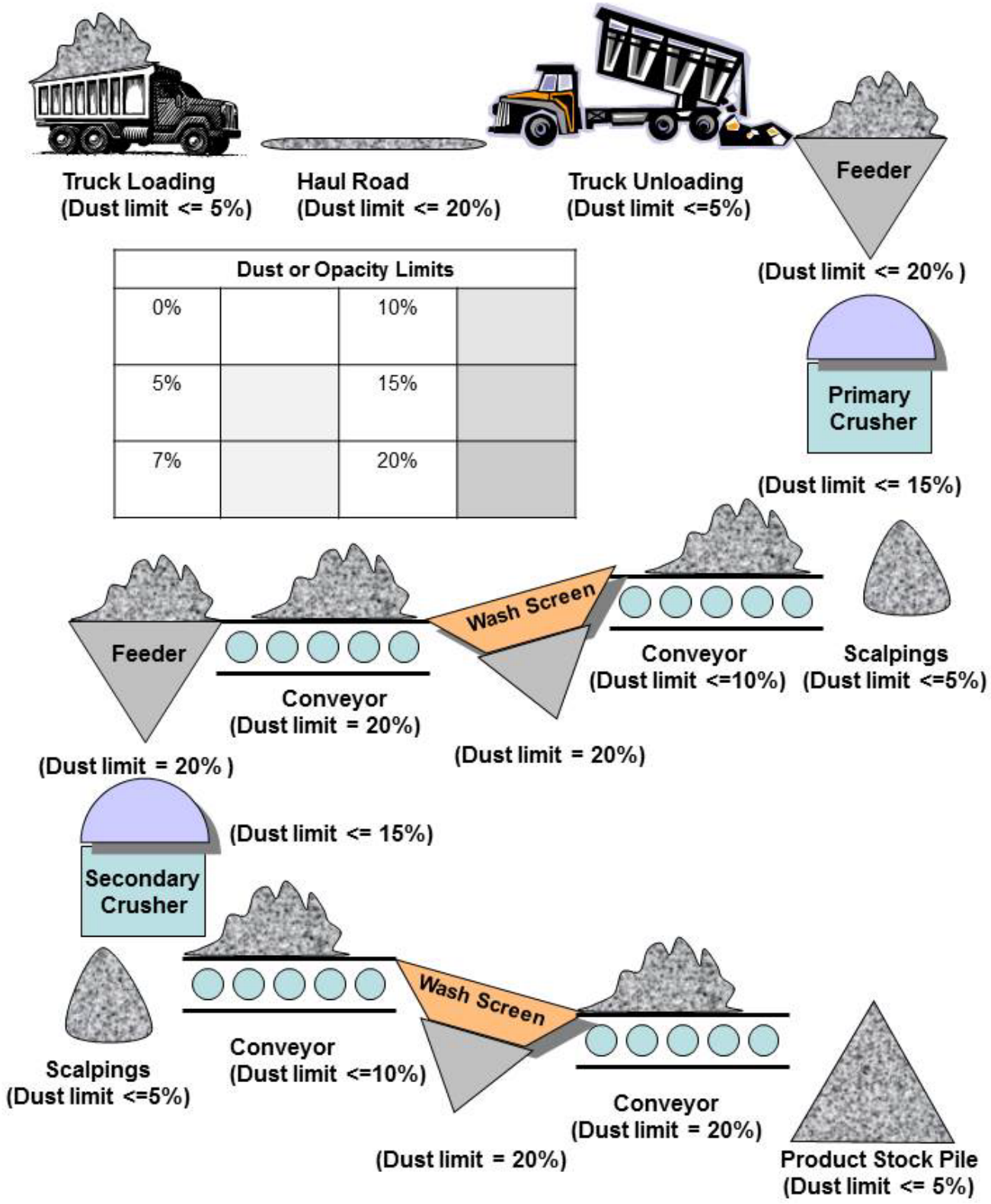


Figure 1-4: Complying with the Dust or Opacity Limits in the Nonmetallic Mineral Crushing General Air Permit

Relocating Your Crushing Equipment

If you have a General Permit to Install and you are planning to move to a new location, the information in this section will be important.

Once you have been issued a permit for your first location of operation there may be need to move to a new location to continue operations at a new job site. A relocation means moving all or a part of the crushing facility to a new job site. In order to continue to operate the crusher, a *Relocation Notice Form (EQP5757)* must be filled out and submitted to the appropriate AQD district office.

To relocate your equipment, your company must first comply with all the applicable requirements of the General Permit to Install (i.e., no outstanding or unresolved violations). Filling out and submitting a *Relocation Notice Form (EQP5757)* is important because no two job sites are the same. There may be different products crushed, the crusher may be in a different jurisdiction, or your crushing equipment may impact the surrounding community or the environment differently.

It is also important to remember the General Permit to Install's conditions for operation continue to be applicable at your new job site. If you are changing the type of equipment you will use at your next location, you will need to modify your General Permit to Install by submitting a new *Process Information Form (EQP5756)* to identify existing and new equipment. This is especially important when utilizing rented or leased equipment. By filling out and filing these two forms, you are letting the AQD know your crushing facility will be moving to a different location and whether there will be any significant change in your process since your last job.

The Relocation Notice Form (EQP5757)

Whether you rent or own the crushing equipment, a *Relocation Notice Form (EQP5757)* must be filed with the AQD prior to the scheduled relocation to your next job site. This requirement is contained in the Natural Resources and Environmental Protection Act 451, which codifies and classifies laws relating to the environment and natural resources of the state.

To relocate a nonmetallic mineral crushing plant that is covered by a general permit to install

- Complete a *Relocation Notice form* (EQP5757) to request authority to relocate a nonmetallic mineral crushing plant under the terms and conditions of a general permit to install pursuant to Rule 201a.
- Attach a copy of the original general permit forms (EQP5727, EQP5729, and EQP5756) and any additional Process Information forms previously submitted for modifications to the plant.
- Attach a detailed site map for the new location, which shows all site characteristics including the location of any residential and/or commercial establishments and places of public assembly which are located within 1,000 feet of the proposed site.
- Certify and submit the Relocation Notice form along with the attachments listed above to both the Permit Section and the appropriate District Supervisor for the new location. A state map identifying all district office locations and addresses is available on the General Permit to Install website.
- Notification timeline: estimated dates of operation at the new site shall be provided to the appropriate district office and the Permit Section not less than 10 days prior to the scheduled relocation. However:
    - If electronic notification is used, the notification may be given at least 5 business days prior to relocation.
    - If the owner/operator provided the AQD a list of anticipated operating locations for the current calendar year at least 10 days before the change of location, and the change of location is on that list, then notification within 2 business days is acceptable.

Relocation Submittal Checklist

Include:

- ☐ A completed, original copy of the **Relocation Notice** form (EQP5757) or a copy of the original Relocation Notice with updated dates if the department was previously notified about the proposed location.
- ☐ A copy of the original General Permit application forms. Include copies of the General Information form (EQP5727), a copy of the original Process Information form (EQP5756), and a copy of the original Additional Information form(s) (EQP 5729). If the plant has been modified since the original submittal, attach copies of all Process Information forms (EQP5756) submitted for each modification.
- ☐ A site plan for the proposed new location, identifying all residential or commercial establishments and places of public assembly within 1,000 feet of the proposed plant site.

Attach a copy of any new information for:

- ☐ Plant/building layouts or changes to process flow (i.e. plat maps, diagrams, etc.)
- ☐ Documentation from the equipment operator's manual or specification that states maximum rated capacity.
- ☐ Design parameters or descriptions of equipment.
- ☐ Mail original copies of the paperwork to your AQD district office for your next job site **and** the AQD Permit Section in Lansing, Michigan. See Appendix E for the district office mailing addresses.

Figure 1-4: Relocation Checklist

Making Changes to Your Crushing Facility

Changes to your facility set up may require some additional actions on your part to stay in compliance with the General Permit to Install. In order to understand what steps need to be taken by your company, it is important that you become familiar with certain key terms and definitions.

Definitions

- **Equipment:** Any crusher, grinding mill, screening operation, bucket elevator, belt conveyor, bagging operation, storage bin, enclosed truck, or railcar loading station.
    - **Existing Equipment:** Any equipment that was manufactured prior to August 31, 1983, and was never modified or reconstructed on or after that date.
    - **New Equipment:** Any equipment that was manufactured, modified, or reconstructed on or after August 31, 1983.
- **Production Line:** All equipment which is directly connected or connected together by a conveying system.
- **Reconstruction** means the replacement of components of a piece of equipment to such an extent that the fixed capital cost of the new components exceeds 50 percent of the fixed capital cost required to construct a comparable, entirely new piece of equipment. The cost of replacement of surfaces which come in direct contact with the nonmetallic mineral (i.e., crushing surfaces, screen meshes, bars and plates, conveyor belts, and elevator buckets) should not be considered in calculating either the fixed capital cost of the new components or the fixed capital cost required to construct a comparable new piece of equipment. The AQD considers reconstructed equipment to be new equipment.
- **Size** means:
    - Maximum rated capacity in tons per hour for a crusher, grinding mill, bucket elevator, bagging operation, enclosed truck, or railcar loading station.
    - Total surface area of the top screen for a screening operation.
    - Width for a conveyor belt.
    - Rated capacity in tons for a storage bin.

Equipment Changes to Crushing Operations

For all equipment changes, the following actions are required **before** operation begins:

- Ten days before the equipment is installed, submit a new *Process Information Form (EQP5756)* for all equipment to be added to production.
- Send copies to both the AQD district office and the AQD Permit Section.
- Notify the AQD district Office within 15 days of the equipment's actual date of startup.

Actions to be taken during operations **after** equipment changes are summarized below:

Equipment Change	Testing	Monitoring	Recordkeeping
Replacement of equipment with **new** equipment that is LARGER in **size.** or Addition of **new** equipment. or Equipment reconstruction	Conduct a performance test within 60-180 days after equipment startup. 14 days prior to test, have AQD District Supervisor approve test procedures. 7 days prior to test, notify AQD District Supervisor of test date. If delayed, notify AQD District Supervisor of the delay at least 3 days before test is scheduled. Submit a copy of completed opacity observations report to the AQD within 30 days of the test date. Submit reports to your AQD district office (see *Appendix E.*)	Monitor the opacity of all equipment to ensure it is within the acceptable levels specified in Table 1-1 of this document.	Keep accurate records of the amount of material processed and the date of manufacture, installation date, and description of each piece of equipment.
Replace equipment on the production line (on a one-for- one basis) with **new** equipment that is EQUAL or SMALLER in **size**.	Since this is a one-for-one replacement, no performance testing is required until all equipment in the production line is replaced. At that point, testing is required of all components within the production line.		
Replace equipment on production line (on a one-for-one basis) with equipment that is of equal or smaller size.	The equipment is not subject to the NSPS Subpart OOO standards; however, you still need to submit new a *Process Information Form(s) (EQP5756)*		

Table 1-2 Required Actions During Operations as a Result of Changes to a Crushing Facility

Non-Equipment Changes to Crushing Operations

If you are not making equipment changes but are increasing your production rates or hours of operation, please be aware that:

If you increase your production to a level greater than 2 million tons per year at a single site, you are no longer eligible for the General Permit to Install. Apply for a Permit to Install.

The Michigan Air Emission Reporting System (MAERS)

The federal Clean Air Act requires each state to maintain an inventory of air pollution emissions and update this inventory every year. The AQD gathers this information and compiles it in the Michigan Air Emissions Reporting System (MAERS). MAERS contains emission data for commercial, industrial, and governmental sources of air pollution in Michigan. This information is submitted to the U.S. EPA and added to the national data bank to:

- Track air pollution trends.
- Determine the effectiveness of current air pollution control programs in each state.
- Serve as a basis for future year projections of air quality.
- Track a company's compliance and provide information for permit review.
- Calculate the emissions portion of the air quality fee.

Companies are sent a MAERS email in mid-January. The completed MAERS forms must be submitted to the AQD by March 15 of each year. You can access the MAERS website at Michigan.gov/MAERS. This page offers both a workbook and a series of annual workshops for first-time submitters of the MAERS report. For help in completing the MAERS forms or for more information on this reporting program, call the Office of Environmental Assistance at 800-662-9278.

Air Quality Fees

The Clean Air Act requires each state to develop a Title V, Renewable Operating Permit (ROP) Program supported by air quality fees. An annual air quality fee program for Michigan, including the specific fee structure, was established by the legislature in 1993. The fee program was reauthorized by Governor Whitmer on November 14, 2019.

The Michigan legislation establishes the following formula for calculating the annual air quality fee for each fee-subject facility:

ANNUAL FEE = FACILITY CHARGE + EMISSIONS CHARGE

The facility charge used in the fee formula is based on the classification or category of a company. There are six different category schedules for fees. Category D is the category applicable to any company with operations subject to a federal NSPS regulation such as nonmetallic mineral processing facilities. The current facility charge and emission fee for Category D facilities is as follows:

Category Type	Emissions Range (tons)	Facility Charge	Emissions Charge/Ton
D	>=60 tons	$2,500.00	$53.00
D	>=6	$2,000.00	$53.00
D	>=0	$1,795.00	$53.00

Example of a Fee Calculation for a Typical Crushing Operation Subject to NSPS

ABC Aggregates of southeast Michigan is a Category D facility that has a crusher capacity of 155 tons per hour and processed 600 tons of material in 2019.

PM_{10} /Year =

(Tons processed/ Year) x (Emission factor)* x (1 Ton/ 2000 Pounds) x (80% Control Efficiency)**

PM_{10} /Year =

[600,000 Tons of Product/Year] x [0.05 Pound PM_{10}/Ton Product] x [0.0005 Ton/Pound] x [(100 - 80) / 100]

PM_{10}/Year = 3 tons

* This emission factor comes from the U.S. EPA's AP-42 for plant-wide processes. The source classification code is 3-05-025-01 for a typical plant-wide sand and gravel operation.

**Assume an 80% control efficiency for properly installed and operating water sprays.

Billable Emissions under MAERS are rounded to the nearest whole number.

Emission Charge: 3 x $53/ton	$ 159.00
Facility Charge (tons of emissions >=0):	+ $1,795.00
TOTAL ANNUAL AIR QUALITY FEE	= $1,954.00

Who is Responsible for MAERS Reporting and Fees?

The entity issued a permit for the equipment is responsible for reporting emissions generated by this equipment and any fees associated with those emissions.

Why Should I Comply?

When air pollution interferes with the comfortable enjoyment of a community's life and property, it is usually reported directly to the AQD district offices. When a complaint is lodged, an air quality inspector is sent out to the site where the complaint is believed to originate. If an inspector is sent to your job site, he/she may talk with you about the problem in order to substantiate the merits of the complaint. The most common violations cited about crushing operations are:

- Not having an air quality permit.
- Not completing the initial performance test on the equipment.
- Making a change to the equipment and not updating the AQD on the change.
- Excessive dust generation with no ongoing monitoring and implementation of a fugitive dust plan.
- Failure to submit a complete Relocation Notice on time.
- Failure to label equipment
- Failure to keep records required by the permit.
- Failure to post or have a copy of the permit at the site.

These violations often occur because an owner/operator of a crushing facility is not aware of the compliance requirements (i.e., monitoring opacity levels, implementing a fugitive dust plan, etc.).

EGLE can issue a Violation Notice (VN) if you are violating any of the air pollution control requirements. If the violation is not corrected, the inspector can escalate it for further enforcement action. The following are some typical actions companies take in order to achieve compliance after a VN has been issued:

- Establish a tree berm.
- Install a truck wheel wash system.
- Keep records of water usage.
- Pave access roads to a job site.
- Submittal of records to demonstrate dust minimization efforts.
- Develop a site or company-specific fugitive dust plan.
- Install additional water sprays at transfer points along the process.

The goal of AQD inspectors is to help you achieve and maintain compliance with the air quality regulations. This involves working with you and your company to address the reasons behind any issued VN.

Available Resources

There are many resources available to help you stay in compliance with air quality rules and regulations. The AQD has a web page containing the General Permit to Install application forms, instructions, and listing of general and special conditions. Go to www.michigan.gov/air, select *"Permits,"* then "Permits to Install/New Source Review" then *"General Permits – Applications Forms and Instructions"* and then scroll down to *"General Permit to Install Application for Nonmetallic Mineral Crushing Facilities."*

Call EGLE's Office of Environmental Assistance at 800-662-9278 for assistance on any environmental-related question, including those related to air quality.

The AQD district office staff are available for consultation and advice. Staff from these offices conduct the inspections of your facilities. See Appendix E for a listing of the district offices.

EGLE maintains a directory of environmental consultants. Go to www.michigan.gov/air, select "Compliance" then "Compliance Assistance Resources" and "Environmental Consultant Assistance."

PART 2: WATER QUALITY AND WATER WITHDRAWAL REQUIREMENTS

When properly operated, a crushing facility is a dry operation; and water is only used as a mist for dust suppression. This mist is generally evaporated into the air surrounding the equipment and absorbed by the material before it is conveyed to the screening operation. If there is no release (discharge) from this process to the ground or a water body, water discharge permits are not needed by your facility for this specific activity. However, there are other activities closely associated with the crushing

facility that may require wastewater discharge permits. The wastewater discharge permit program may apply to the wastewater generated from:

- Wash screen operations.
- Vehicle wash stations such as truck wheel washes.
- Mining activities where groundwater and storm water are dewatered.
- Storm water that comes in contact with industrial materials at the site.

In addition, water withdrawal permits and reporting requirements may apply to mining operations.

AN OVERVIEW OF EGLE'S WATER QUALITY PERMIT PROGRAMS

There are three water quality operational permit programs that may apply to a crushing facility:

- The Groundwater Discharge Permit Program.
- The National Pollutant Discharge Elimination System (NPDES) Permit Program.
- The Industrial Storm Water Program (which is included in the NPDES Program).

Each program is administered through the Water Resources Division (WRD) and is designed to protect against wastewater pollutants getting into the groundwater or surface water (such as rivers, lakes, and streams) of the state.

To determine which of these water programs applies to your crushing facility, you must first know the discharge destination of the wastewaters that are generated at your site. If all of the waste and/or dewatering water will enter the ground or groundwater, the Groundwater Discharge Permit Program applies. If the wastewater and/or dewatering water has the possibility of entering a surface water (rivers, lakes, and streams) of the state, the NPDES Permit programs apply.

Finally, a construction storm water NPDES Permit-by-Rule would likely apply to the job site during the initial development phase (to control runoff of soil and sediment into water bodies and neighboring properties.)

What permit is required for ponds?

For water quality permitting purposes, if a discharge is made into a pond from the mining of sand and gravel and the pond does not have an outlet to a surface water body, a groundwater discharge permit would likely be required.

Each of these wastewater discharge permit programs protects the waters of the state pursuant to Section 3109 of Part 31, Water Resources Protection, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (Act 451), so the state's water can be used for activities such as irrigation; recreation; industry; drinking; and the health of plants, animals, and people. For example, dewatering groundwater often contains high levels of total dissolved solids (it may look like milk) or hydrogen sulfide (it may have a significant "rotten egg" odor). In some cases, discharging water with these characteristics can severely impact the uses of the state's water.

The Groundwater Discharge Permit Program

The Groundwater Discharge Permit Program applies to sites where the wastewater or wash water is directed to and discharged back into the ground or, as mentioned earlier, a pond with no surface water outlet that may have been created as a result of the sand and/or gravel mining activity. The discharge authorizations in the Groundwater Discharge Permit Program Rules (Part 22 Rules, Groundwater Quality, R 323.2201 et seq.) are established in order of relative threat to the environment, and the program's annual fees are set in the same manner. There is an annual fee for groundwater permit coverage. The annual fee can be $200, $1,500 or $3,650, depending on the type of permit appropriate for your company.

Certain activities are exempt from having to obtain a permit. These activities are listed in Michigan Rule 323.2210(a-x) while other types of discharges require prior authorization and are issued under the following rules:

Rule **323.2210(y)**	(site specific discharge)
Rule **323.2211**	(notification only)
Rule **323.2213**	(notification with certification)
Rule **323.2215**	(general permit)
Rule **323.2216**	(permit with specific treatment system requirements)
Rule **323.2218**	(full permit)

Exemptions to the Groundwater Discharge Permit Program (Rule 2210)

Certain discharges to the ground are exempt from needing prior authorization from EGLE's Water Resources Division. Examples of exempt discharges to the ground include controlled application of certain dust suppressants, domestic equivalent uses, and development water from groundwater monitoring wells. A more complete list of these discharges can be found in the Part 22 Permit Application Instructions. These instructions are available online at michigan.gov/EGLEwater. Select "Groundwater Discharge" from the Quicklinks on the right. Under "Permits and Fees select "Groundwater Permit Application Forms and Technical Information."

While the law and rules provide that a person does not need a permit to discharge a material that is exempt, the law also does not waive liability for causing injury (i.e., contamination) to the waters of the state. A discharge cannot cause the waters of the state to lose their usefulness for drinking, agriculture, recreation, industry, or other protected uses. Even though these activities do not require a permit, there are certain conditions that must be met according to the law; and the following activities are prohibited:

- Causing physical damage to neighboring properties or creating nuisance conditions (i.e., runoff onto adjacent properties, ponding or flooding of adjacent properties, odors, etc.).
- Creating a site of environmental contamination which would need to be cleaned up.

Discharges to the ground falling into this category do not have to submit a permit application form. Yet other discharges to the ground or groundwater, which are not specifically listed as exempt activities under Rule 2210(a-x) or elsewhere in the rules, may be authorized on a case-by-case basis by EGLE's Water Resources Division. If your company demonstrates the discharge will not have a significant potential to be injurious based on volume or content, the Water Resources Division may grant an authorization to discharge to the ground under Rule 2210(y). To request this authorization, you must submit an application form that includes a narrative description justifying the request for the Rule 2210(y) authorization with the permit application form.

The Groundwater Discharge General Permit

An authorization for certain classes of discharges can be granted by the Water Resources Division under a general permit. Often this is used for operations where wash water is associated with gravel, sand, limestone, or dolomite mining that contains no additives.

To apply for the general permit, submit a *Groundwater Discharge Permit Application* to the Water Resources Division with information that characterizes the discharge. The specific General Permit for sand and gravel wash water can be found at www.michigan.gov/EGLEwater. Select "Groundwater Discharge." Under "Permits and Fees" select "Groundwater Permit Application Forms and Technical Information." From here, select GW154000 – Gravel Mining. A company is authorized to discharge to the ground or to groundwater when it receives a *Certificate of Coverage* (COC) from the Water Resource Division that verifies the discharge is authorized under this rule. The annual permit fee for this authorization is $1,500.

To submit a Groundwater Discharge Permit Application for a General Permit access miwaters.EGLE.state.mi.us. This is the site of the web based program launched in August 2015. This program introduces online submission of permit applications and schedules of compliance, as well as monitoring data. You can also gain access to this site through www.michigan.gov/EGLEwater. Choose "MiWaters is now online" from the Quicklinks column on the right. Link to MiWaters is in the middle of the page. Near the bottom are links to training videos. All applications must be submitted through the MiWaters site. The Part 22 application instructions, the current General Permit documents, guidesheets, and technical information can still be found at www.michigan.gov/EGLEwater.

All applicants new to the groundwater program and MiWaters must create an account. Those seeking reissuance of a previous permit should have received instructions from us about becoming associated with your existing account; now in MiWaters. If you did not receive the letter, please contact your district office for assistance in completing this part. Creating an account is a two-step process. Upon accessing the site choose "Create an Account" located in the upper-right section of the page. Complete the information requested on the page and download the Certifier Agreement Form you will need for step two. Once you create an account you will receive an emailed acknowledgement with further instructions for logging in. With this access you can view and begin filling out an application. In step two, complete the downloaded Certifier Agreement Form and mail it as instructed. Once the certifier status has been approved your e-mail address will identify your security status, enabling you to submit the application.

Having created an account, you can sign-in to MiWaters. Choose "Apps, requests and reports." Choose the groundwater discharge general permit application Rule 323.2215 and begin submission. This is an interactive form to be completed and submitted online. The application is divided into several sections. The first few sections require the type of information that is general to all applicants. Questions specific to sand and gravel wash water are found beginning in the section "Rule 323.2215 Specific Information". Here you will choose "Gravel, sand, limestone, or dolomite mining" from the list. From this point you will continue filling in only the information requested for gravel, sand, limestone, or dolomite mining. Finish by submitting the competed form.

For additional information you can call the Groundwater Permit Unit in Lansing at 517-373-8148; or your local district office.

SURFACE WATER DISCHARGES AND THE NATIONAL POLLUTION DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT

NPDES Individual Permits

An individual NPDES permit is site specific. Companies engaged in limestone, sand/silica mining, and other associated processes with a direct discharge into surface waters of the state often need permits from this program. The limitations and requirements in an individual permit are based on the perlite's discharge type, the amount of discharge, company operations (if applicable), and the receiving water body's characteristics. Applications for discharge permits shall be completed using the WRD's MiWaters system. Get help filling out your application by

contacting the Water Resource Division at 517- 241-1300 or your local WRD district office. Additional information is also available on the Web at www.michigan.gov/EGLEwater.

It is suggested that those needing this type of permit seek the assistance of an environmental consultant for assistance in completing the NPDES individual permit application.

NPDES General Permits

A general permit is available to permitees with certain similar operations and/or types of discharges. Coverage under an NPDES general permit will only be granted when the general permit provides the needed level of protection for the water receiving the discharge. Wastewater discharges at certain locations may require an individual permit based upon site-specific concerns. Companies that are eligible for coverage under a general permit receive a Certificate of Coverage (COC) from the Water Resources Division-Resources. Two of the general permits most relevant to crushing facilities include Storm Water from Industrial Activities (discussed below) and Sand, Gravel, and Clay Mining (for process wastewater and pit dewatering water).

Storm Water from Industrial Activities General Permit

If a site has a site-specific individual NPDES permit, industrial storm water permit conditions and requirements will be included within the individual permit (general storm water permit coverage will not be necessary).

Companies with coverage under a general NPDES permit for sand, gravel, and clay mining may need to apply for coverage under a general storm water permit if storm water is separate from other waters at the site (such as dewatering or other wastewater). If all of the storm water at the site is intermingled with the dewatering or process wastewater, the storm water is no longer considered storm water and should be covered accordingly (e.g., by an individual NPDES permit or a general NPDES permit for sand, gravel, and clay mining). Industrial storm water permit coverage may be necessary for companies that:

- Do not have other wastewater requiring an NPDES permit at the site, and the storm water associated with the facility's industrial activity is discharged to a separate storm sewer system or to nearby surface waters of the state (e.g., river, lake, stream); or
- Have wastewater or dewatering water which requires other NPDES coverage, but the storm water is separated from the other wastewaters that are directed to surface waters of the state.

The industrial storm water program applies to industrial sectors identified in the federal storm water regulations. Standard Industrial Classification (SIC) codes, prepared by the federal Office of Management and Budget or narrative descriptions, are used to identify regulated companies. SIC codes describe the primary nature of business in which a facility is engaged. The following industrial categories applicable to sand, gravel, and clay mining are regulated:

- Transportation (SIC 40 – 45, including SIC 41)
- Mining (SIC 10 – 14)

It is likely that crushing facilities fall under one of these SIC codes. You can find your four-digit SIC code, for comparison, in your corporate tax returns under Schedule K listed as either "Business Activity Code" or "Manufacturers Identity Code." You may also call Michigan's Unemployment Insurance Agency at 800-638-3994 and provide your federal identification number to get your official SIC code.

Next, you must identify areas where storm water could come into contact with industrial materials or activities at your site. These are areas where you store or transport materials related to your industrial activity outside without some type of permanent covering such as a storage yard (final products manufactured for use outside are exempt). Upon contact with these areas, the quality of the storm water that runs off from these materials could be altered. The term "exposure" is used in the storm water program to indicate the potential for contact between storm water and your industrial materials. This includes outside storage of raw materials, intermediate products, waste materials, and material handling activities associated with your industrial activity.

If your company falls under one of the regulated SIC codes and you have a discharge of storm water to surface waters of the state from areas associated with your industrial activity, you will likely need a storm water permit. There is a no-exposure exemption for the storm water permit program, but most crushing and associated operations are conducted outside so the no-exposure exemption will probably not apply. However, for guidance on the "no-exposure exemption" go to the industrial storm water program Web site at **www.michigan.gov/EGLEwater**. Select "Permits" from the left-hand menu, then "Storm Water" from the drop-down menu under "Surface Water". Then select "Industrial Program" under "Information" in the middle of the page and pick the document entitled "No Exposure Certification Guidance."

To begin the process to get a COC, a document that demonstrates coverage under the *Storm Water from Industrial Activity General Permit*, you first have to submit a *Notice of Intent* (NOI). To complete the NOI, go to the MiWaters website at https://miwaters.EGLE.state.mi.us/, create an account, submit a Certifier Agreement, and complete the appropriate nForm for the NOI. If your NOI is appropriate and complete, then a COC will be issued by the Water Resources Division-Resources Division. Once the COC is issued, your company can begin its operation. There is an annual permit fee of $260 for storm water discharges associated with industrial activity or from a commercial site that is assessed at the end of each calendar year. Invoices usually are mailed in February of the following year. It is important to note that before a COC is granted, you must have:

- A certified operator who has supervision over the control structures at the company.
- Eliminated any unauthorized non-storm water discharges to the storm sewer system and waters of the state.
- A Storm Water Pollution Prevention Plan (SWPPP) developed and implemented (for existing facilities), and new facilities must have a SWPPP developed and ready for implementation.

How do you know if you need an Industrial Storm Water General Permit?

Answer: If you can answer yes to the following questions, you will need general permit coverage.

- Does the SIC code for my company fall under the categories that are regulated?
- Are there any areas on my job site where storm water is exposed to my industrial activities (i.e., storage or process equipment) and then discharged into surface waters of the state (e.g., any storm water that is not co-mingled with another wastewater stream, dewatering water, or otherwise covered under a different NPDES permit)?

Notice of Coverage for NPDES Storm Water Discharges from Construction Activity or Permit-By-Rule

A Notice of Coverage for NPDES Storm Water Discharges from Construction Activity (NOC) or Permit-by-Rule would in all probability apply to your site at the initial development phase or ground breaking. A NOC or Permit-by-Rule is used to control run-off of soil and sediment into water bodies and neighboring properties if the construction activity will result in a discharge of storm water to surface waters of the state at any point during the construction process. The NOC and Permit-by-Rule controls storm water runoff from the site in the initial development period. This usually lasts until the initial earth change activity has been stabilized. Discharges associated with operation of the facility may then be covered by one of various types of permits depending on the process.

Construction sites of one acre or greater of earth disturbance are covered by a "permit-by-rule." "Permit-by-rule" means that permit requirements are stated in a formally promulgated administrative rule by the Water Resources Division. A facility requiring coverage under a "permit-by-rule" must abide by the provisions written in the rule. The rule requires that an application (Notice of Coverage) be submitted for construction sites five acres or greater in earth disturbance; construction sites between one and five acres have no application requirement and are automatically covered under Permit-by-Rule provided they comply with the provisions outlined in Permit-by-Rule.

Owners or recorded easement holders of earth change sites of five acres or more must submit a form called a Notice of Coverage (NOC) to apply for NPDES permit coverage. In order to submit an NOC, the applicant must first obtain a Soil Erosion and Sedimentation Control (SESC) permit. The SESC permitting programs are administered by local jurisdictions and counties in your area. SESC agencies can be identified online at www.michigan.gov/soilerosion or by calling the Environmental Assistance Center at 800-662-9278. Authorization to discharge water from your job site is automatically granted upon submittal of a completed NOC and paying a one-time fee of $400 to the Water Resources Division through the MiWaters web-based permitting and compliance database. Access to MiWaters can be found at miwaters.EGLE.state.mi.us.

Earth change sites that disturb one to five acres are provided automatic coverage under the NPDES Storm Water Construction Permit (Permit-by-Rule) as long as the earth change is first covered under a local or county Soil Erosion and Sedimentation Control (SESC) Program. Even though there is no application requirement or permit fee for one to five acre sites, construction site owners/operators must comply with the Permit-by-Rule requirements. Sites disturbing less than one acre could be required to have Permit-by Rule coverage if the earth change is part of a larger common plan of site development.

The Permit-by-Rule requires an owner/operator of a construction site to provide for weekly inspections of the soil erosion and sedimentation control practices identified in their SESC Permit. In addition, the site must be inspected within 24 hours of a rain event that causes run off from the site. These inspections must be conducted by, and recorded in, inspection logs by a Certified Storm Water Operator. The certification materials and testing to become a Storm Water Certified Operator are available in each of the, EGLE district offices.

To find out more about training go to www.michigan.gov/soilerosion and follow the links for Training.

For more information on the Permit-by-Rule, including certified operator exam training materials and exam schedules, or storm water program contact information, contact any Water Resources Division district office or go to **www.michigan.gov/EGLEwater** (select "Permits" then "Surface Water" then "Storm Water", then "Construction Site Program").

Large Quantity Water Withdrawal Regulations

Mining operations that have large quantity water withdrawal capacity (combined capacity of all pumps) of over 100,000 gallons per day must be registered with EGLE Water Use Program. New withdrawals, or increases of additional withdrawal capacity greater than 100,000 gallons per day must be authorized by EGLE Water Use Program via the online Michigan Water Withdrawal Assessment Tool (www.EGLE.state.mi.us/wwat) prior to making the withdrawal. New or increased withdrawal capacity greater than two million gallons per day bypass the Water Withdrawal Assessment Tool and must obtain a water withdrawal permit under Part 327.

This regulation was passed into law to comply with the interstate Great Lakes Compact, and to prohibit a new or increased large quantity withdrawal from causing an "adverse resource impact." An adverse resource impact is defined as decreasing the flow of nearby rivers or streams, or decreasing the level of a natural lake if the withdrawal is made directly from a lake, by an amount that would impair the characteristic fish populations. Removing too much groundwater near a river or stream will change the flow and temperature of the stream, and hence the types and number of fish expected to be found there. The Water Withdrawal Assessment Tool and Part 327 permit review processes analyze the proposed withdrawal, and assess the likelihood of the groundwater or surface water withdrawal causing an adverse resource impact.

In addition, the owner of property with the capacity to make a large quantity water withdrawal must annually report the volume of that withdrawal to EGLE by April 1 on a form provided by EGLE. There is also an annual $200.00 fee for all withdrawals in excess of 1,500,000 gallons for the given year. Annual water use reports require the withdrawal volume, source and location, capacity, purpose of use, and discharge volume and location.

For a permit application or to learn more about this program, please call the Water Resources Division, Water Use Program, at 517-284-5563 or go to www.michigan.gov/EGLEwateruse.

PART 3 - MATERIALS MANAGEMENT REQUIREMENTS

The waste requirements that a crushing facility must follow depend on what kind and how much waste is generated from a facility's activities. The three most common types of waste are hazardous waste, liquid industrial waste, and solid waste. Some materials may also exhibit radioactivity. When evaluating what kind of waste you have, you need to "characterize" the waste by evaluating the character and composition following prescriptive steps found under the waste regulations. These steps are required to ensure that human health and environment are protected from the hazards posed by the waste. Once waste is characterized and determined to be a hazardous waste, liquid industrial waste, solid waste or radioactive waste, you can identify the management requirements that must be met when handling the waste. To encourage waste minimization, the hazardous waste regulations have less rigorous regulatory requirements for a site that generates smaller volumes of hazardous waste. Waste characterization and the specific management requirements that apply are discussed in greater detail later in this part.

Several state agencies oversee the following regulations including the EGLE's Materials Management Division (MMD), Air Quality Division (AQD), and Water Resource Division (WRD); the Michigan Department of Licensing and Regulatory Affairs (LARA), Michigan Occupational, Safety and Health Act Program (MIOSHA); and the Michigan State Police, Commercial Vehicle Enforcement Division.

By using the steps outlined below, you can determine which of the state and federal regulations apply to the waste at your crushing facility to ensure you are properly managing your waste.

AN OVERVIEW OF EGLE'S MATERIALS MANAGEMENT PROGRAMS

First, it is important to understand that different types of waste have different regulations. The following is a short description of each.

- **Hazardous waste** – Part 111 of Act 451 and the Part 111 rules. Includes characteristic waste (ignitable, corrosive, reactive, and toxic) or listed waste which includes chemicals and processes that create the waste; overseen by EGLE MMD.
- **Universal waste** – Specified wastes (e.g., electric lamps, electronics, antifreeze, batteries, etc.) that a facility may choose to handle under the alternative hazardous waste rule R 299.9228; overseen by EGLE MMD.
- **Liquid industrial by-product** – Part 121 of Act 451. Includes non-hazardous liquid wastes that fail the paint filter test and used oil being recycled; overseen by EGLE MMD. If waste oil is burned, there are additional requirements under Part 55 of Act 451; overseen by EGLE AQD.
- **Solid waste** – Part 115 of Act 451 and the Part 115 rules. Includes non-hazardous solid waste; overseen by EGLE MMD.
- **Radiological waste** – Part 135 Ionizing Radiation Rules of Act 368 and the Part 135 rules; overseen by EGLE MMD.
- **Scrap tires** – Part 169 of Act 451; overseen by EGLE MMD.

There are also other regulations that may be applicable to the types of waste coming from your facility. These include:

- **Flammable and combustible liquids regulations and Fire Protection Code** – Overseen by the Michigan Department of Licensing and Regulatory Affairs, Fire Services Bureau, Storage Tank Division when waste has a flashpoint below 200 degrees Fahrenheit. The local fire department and MIOSHA also have requirements.
- **US Department of Transportation hazardous materials regulations** – Overseen by Michigan State Police when transporting hazardous waste.
- **Worker health and safety standards for aboveground operations** – Overseen by MIOSHA.
- **Discharges of wastewater on site** – Overseen by EGLE WRD.

To find more information about waste requirements and the regulations, go contact the Environmental Assistance Center at 800-662-9278 or go to **www.michigan.gov/EGLEwaste**.

A STEP-BY-STEP APPROACH TO IDENTIFYING, CHARACTERIZING, AND DISPOSING OF YOUR WASTE MATERIALS

Step 1: Identify

Identify all the different wastes you have on site and determine what types of waste your facility generates, including how much hazardous waste is generated in a calendar month.

Waste streams at your site may include those from:

- the office
- equipment and building maintenance
- any area where you are receiving or handling material to crush.

Common examples of wastes and applicable waste codes from crushing companies are listed in Tables 3-1a through 1d. The waste codes are used for labeling hazardous waste containers and for manifesting the waste when shipping it off-site. Waste codes also apply to manifesting liquid industrial waste. Sometimes additional information is needed to determine which hazardous waste codes apply if you have used solvents. It may be necessary to read the waste description in the rules to determine which code applies. The table does not include waste codes that may apply if you have some specialty operation or if other chemicals or wastes were mixed with the waste. For example, cross contamination may occur in the maintenance area if overspray from an aerosol brake cleaner was used near some used antifreeze. Review the Table 3-1 waste details and view the 1-hour recorded ***Waste Characterization and Generator Status*** webinar available at www.michigan.gov/EGLEwaste to verify the regulatory status of your waste and the management requirements that apply for handling, transport, and disposal. Discuss any questions you have with the MMD District Office, your waste disposal company, waste consultant, or contact the Environmental Assistance Center.

F002 Description in Rule R 299.9220

The following spent halogenated solvents:

tetrachloroethylene, methylene chloride, trichloroethylene, 1,1,1-trichloroethane, chlorobenzene, 1,1,2-trichloro-1,2,2-trifluoroethane, ortho-dichlorobenzene, trichlorofluoromethane and 1,1,2-trichloroethane; all spent solvent mixtures and blends containing, before use, a total of 10% or more by volume of one or more of the above halogenated solvents or those solvents listed in F001, F004, and F005; and still bottoms from the recovery of these spent solvents and spent solvent mixtures.

Tables 3-1a-d: Common Wastes at Crusher Facilities

Table 3-1a. Oils and Fuels

Waste Stream	Usual Type of Waste	Disposal or Recycle Recommendations Waste Codes for Shipment	Additional information available	Amount generated at your site?
Used Oil	Liquid industrial waste when recycled	Recycle 017L for crankcase oil, 021L for other oils, 019L for coolants and water soluble oils	Used Oil Overview with links to related guidance and Used Oil Common Violations Checklist	
Used Oil Filters	Solid waste when recycled and drained	Recycle Code not applicable when oils properly drained	Used Oil and Spent Filters	
Waste Fuel	Liquid industrial waste when recycled including being used in fuel blending, or hazardous waste	Recycle (e.g., used as fuel): 029L If unusable as is and being disposed, D001 and D035	No	

If the total amount of ALL oils (both waste and products including fuels) on site meets or exceeds1,320 gallons. Refer to Chapter 4 on Product Storage and Emergency Planning Requirements.

Table 3-1b. Maintenance Related Waste

Waste Stream	Usual Type of Waste	Disposal or Recycle Recommendations Waste Codes for Shipment	Additional information available	Amount generated at your site?
Antifreeze	Usually liquid industrial waste but may be hazardous waste. If hazardous, it can be managed as universal waste. Note: There is a 2007 proposed rule to include this as universal waste.	Recycle 030L, unless hazardous due to metal concentrations or cross contamination	Antifreeze	
Batteries-Lead Acid	Hazardous waste with exemption when recycled or universal waste	Code not applicable when being recycled	Universal Waste	
Batteries-Dry cell (e.g., AA, C, D sizes)	Recommend handling as universal waste or determine if hazardous waste	Code not applicable when handled as universal waste; code varies with type of battery if handled as hazardous waste	Universal Waste	
Laboratory Wastes	Varies, may be hazardous due to flashpoint or type of solvent used.	D001 or F listing depending on solvents used for quality control testing		

Waste Stream	Usual Type of Waste	Disposal or Recycle Recommendations Waste Codes for Shipment	Additional information available	Amount generated at your site?
Light Bulbs	Recommend handling as universal waste, if not hazardous waste	Code not applicable when handled as universal waste; code varies with type of bulb if handled as hazardous waste	Electric Lamp and Spent Ballast Universal Waste	
Painting Wastes	Paints and painting equipment cleaning solvents may be hazardous or liquid industrial waste depending on product formulation	Varies: Some solvents used to clean painting equipment: F003-F005 Paints: if oil based, may be D001, other codes vary depending on formulation. If non-hazardous: 029L	Chapter 2, of the Michigan Guide to Environmental, Health and Safety Regulations	
Part Washer Solvents	May be hazardous or liquid industrial waste depending on type of solvent and flashpoint	Recommend recycling. Codes vary depending on used solvent and concentration. If solvent-based product has flashpoint below 140 degrees Fahrenheit: D001; Listed waste codes (F003, F005, F001, F002, D039, D040) may apply depending on type of solvent used. Water-based cleaning solutions (034L) or may have additional hazardous waste codes if cross contaminated.	Chapter 2, of the Michigan Guide to Environmental, Health and Safety Regulations	
Shop Rags	May be hazardous waste due to spontaneous combustion. If not hazardous and no liquids present in container, then solid waste	Recommend laundering for reuse to meet hazardous waste recycling exemption. If disposed, codes vary: D001 if spontaneously combustible or possible listed waste depending on what solvent used with the rag.	Chapter 2, of the Michigan Guide to Environmental, Health and Safety Regulations	

Table 3-1c. Crusher By-products

Waste Stream	Usual Type of Waste	Disposal or Recycle Recommendations Waste Codes for Shipment	Additional information available	Amount generated at your site?
Grinding Slurry	Solid waste when handled under exemption or liquid industrial waste	029L when handled as liquid industrial waste	Part 115 concrete grinding slurry exemption Beneficial Use 1, 2, 3, or 4	
Wash Waters from Stone and Sand Processing	Liquid industrial waste if not discharged on site under requirements as described in Chapter 1 on Water Quality Requirements	029L	No	
Fines and	Solid waste (handle under	Codes not applicable	No	

Waste Stream	Usual Type of Waste	Disposal or Recycle Recommendations Waste Codes for Shipment	Additional information available	Amount generated at your site?
Organics from Operations	site-specific designation that allows the materials to be left on site with clean cover and possible deed restriction)			
Tree, Stumps, other Land Clearing Debris	Handled on site as inert material under conditions listed in Part 115 rule 299.4114(2)(b)	Codes not applicable	Solid Waste Common Violations	
Concrete and Asphalt	Solid waste when meets conditions listed in Part 115 rule R 299.4114(2)(d)	Codes not applicable. If bringing materials on site for recycling, make sure it isn't contaminated. Do you know where it came from? What tests were done to ensure it is not hazardous waste? Do you receive copies of waste determinations/test results? Have you done visual inspections of loads? Is it stained, have an odor, or have paint on it?	Solid Waste Common Violations If you accept material for recycling, consider listing your services in the Recycled Materials Market Directory	

Table 3-1d. Other

Waste Stream	Usual Type of Waste	Disposal or Recycle Recommendations Waste Codes for Shipment	Additional information available	Amount generated at your site?
Scrap Tires	Scrap tires/solid waste	Whole tires are banned from landfill disposal Codes not applicable	Scrap Tire Common Violations	
Packaging Materials (Cardboard, Wood Pallets, etc.)	Solid waste	Recycling recommended Codes not applicable	Recyclers can be found in the Recycled Materials Market Directory	
Break Room Waste (Food, Paper, etc.)	Solid waste	Codes not applicable	No	

Step 2: Notify EGLE about your regulated waste activities.

Use the information you gathered during Step 1 and notify the MMD about your current regulated waste activities if a site identification number is required for transport of hazardous waste or liquid industrial waste. This number is site specific and does not move with the facility to new locations. Do this before it is time to have the waste shipped off-site. If you know you have already notified and the information is current, skip to Step 3.

If you are unsure if your facility previously notified the MMD or whether the waste information on file for your facility is current, go to the Waste Data System on EGLE Web site (**EGLE.state.mi.us/wdspi/**). After selecting "Advance Search" on the top bar, enter your street number and zip (postal) code in those fields and hit "Run Query." For assistance searching, call the Environmental Assistance Center at 800-662-9278.

If you need to notify EGLE of your of your liquid industrial waste or hazardous waste activities to and obtain a site identification number or update information on file, submit the *Site Identification Form EQP 5150*. Follow the instructions and links to the form EQP5150 and online. When applying for a new number, or if you have had an owner/operator change or moved locations, there is an application fee. If you need help applying for a site identification number or updating your notification, contact the Environmental Assistance Center at 800-662-9278.

Helpful Hint

For first time applications, select initial notification in Box I. For update of information, select subsequent notification in Box I. You can request a pre-populated form for updating your information by calling the Environmental Assistance Center at 800-662-9278.

Potential Problems

The following fields are commonly **not** filled out correctly on the EQP 5150 form. The application will not be processed without all the required information.

Box IV – Inappropriate or missing NAICS code. More detailed descriptions of NAICS codes can be found at www.naics.com. Some common aggregate industry NAICS codes include:

212312	Crushed and Broken Limestone Mining and Quarrying
212313	Crushed and Broken Granite Mining and Quarrying
212319	Other Crushed and Broken Stone Mining and Quarrying
212321	Construction Sand and Gravel Mining
212322	Industrial Sand Mining

Box V – Missing or wrong Federal Identification Number (e.g., your federal tax number) and missing Number of Employees information.

Box IX – Failing to list information for both the site owner and operator along with missing or incomplete month/date/year information for when they became the site owner and operator.

Box X – Failing to select ALL types of regulated waste activities that are applicable to the work site and facility.

Liquid industrial waste is often generated from rock crushing and maintenance activities and some facilities may generate hazardous waste from equipment or building maintenance activities. Used oil generators would select "Box E Liquid Industrial Waste Generator" in addition to any other waste activities.

When hazardous waste is generated, the crushing facility needs to determine the facility's generator status based on how much hazardous waste is generated in a calendar month.

Crushing operations normally notify as:

- Liquid industrial waste generators because their operations normally have generated used oils they recycle, and other non-hazardous liquid wastes like stone and sand wash waters they recycle or dispose of off-site.
- Conditionally exempt small quantity generator (CESQG) which means that less than 220 pounds of all hazardous waste is generated on site in a calendar month, and they never store more than 2,200 pounds of hazardous waste.
- Small quantity generator (SQG) which means between 200 and less than 2,200 pounds of all hazardous waste is generated on site in a calendar month, and they never store more than 13,200 pounds of hazardous waste.

Step 3: Determine if wastes are being properly managed, recycled, or disposed on-site.

The environmental requirements for waste depend on the type of waste you have and where it ultimately will be disposed or recycled. To help you make a thorough assessment of how waste is managed at your job sites, go through the checklist in Table 3-2 and indicate "yes" or "no" to these basic questions. If you find yourself answering "no" to the question, it could be an indication your facility could use a better method or management plan to properly handle your waste.

Table 3-2: Audit Checklist on Current Facility Waste Handling Methods

	QUESTION	Yes	No	Problem Corrected?
Waste Type: Wastewater or wash water, septage				
1	If disposing of waste or wash water on site, is the facility meeting the Water Resource Division requirements in Chapter 2 of this guide?			
2	If waste or wash water is being shipped off-site for recycling or disposal, are containers kept closed and protected from weather, fire, physical damage, vandals? Are containers labeled so workers and emergency responders know what is in them? Are containers compatible with waste and in good condition?			
3	If porta-johns are used on site or if septic tanks are installed at permanent locations, is the pumping company licensed by the Water Resources Division Septage Program?			
Waste Type: Used Oil				
4	Are used oils being burned at the site for space heating, service water heating, or indirect heating, and are you meeting the following conditions? • Does the used oil burner have a rated heat input capacity 500,000 or less BTU per hour? If not, does the facility have an AQD permit for it? • Is the oil you use only generated at the same geographical site where the burner is located? If not, does the facility have an AQD permit for the burner? • Are you burning anything else besides used oil? • Has the facility obtained any local permits required by fire officials, zoning, etc. for the oil burner? • Are you required to meet any insurance company restrictions? If you answered "yes" to any of these questions, you may need to discuss your used oil burning activities with your AQD district office. See the Used Oil Burning guidance for more details.			

	QUESTION	Yes	No	Problem Corrected?
5	If the facility is bringing used oil from its other sites to a central location for either burning or to consolidate it for shipping it to a recycler, has the facility notified the MMD that it is operating a used oil collection or aggregation point? See the Used Oil Collection Centers and Aggregation Points guidance for more details.			
6	Are waste oil storage containers labeled "Used Oil;" kept closed; and protected from weather, fire, physical damage, and vandals? See the Used Oil guidance for more details on storage. If the oil flashpoint is below 200 degrees Fahrenheit, does it meet the storage conditions listed in Chapter 4 of this guide on storage tanks? If there are more than 1,320 gallons of all oils on site, is the facility in compliance with the federal Spill Prevention Control and Countermeasures (SPCC) Requirements? See Chapter 4 on Product Storage and Emergency Planning.			
Open Burning or Burying Waste				
7	Are any other wastes being burned without an AQD permit? It is illegal to open burn waste from a business.			
8	Is land clearing debris being buried on-site or at another location approved by the landowner? Does it meet the following conditions? • Amount buried is no more than 1 acre in size and not more than 20 feet in depth. • Burial is not in a floodplain or wetland without the Water Resource Division approval. • Buried land clearing debris is placed at least 3 feet above groundwater table as observed at the time of placement. • Burial does not create a nuisance. • Burial does not violate other laws including local ordinances.			
9	Is any concrete or asphalt being reprocessed or disposed on site? • Is it materially contaminated by staining, covered in part with lead paint, or is it a hazardous waste? If so, you cannot accept it from others, use it as fill, or bury it. • If used on-site as fill, does it have exposed rebar? If so, burial is not allowed. • Does it contain other construction and demolition waste? If so, acceptance and burial are not allowed. • Have you received a permit from the Water Resource Division if you want to put it in a floodplain or wetland area?			
10	Are all liquid industrial waste containers kept closed and labeled so you can tell what is in the container? Are containers compatible with waste and in good condition? Are the containers protected from weather, fire, physical damage, and vandals?			
11	Are all hazardous waste containers properly labeled and managed on site? Specific requirements will depend on your hazardous waste generator status. For more information, see EGLE's CESQG and SQG guidance documents.			
12	If your crushing activity is aboveground, are waste rags used with solvents put in metal waste baskets and properly disposed at least once a day at the end of shift? If so, discuss this requirement with MIOSHA Consultation Education and Training Division at 517-322-1809.			

	QUESTION	Yes	No	Problem Corrected?
13	Are there any scrap tires stored on site in compliance with any local restrictions? If 500 or more scrap tires are on site, is the site registered with the MMD and meeting the scrap tire storage requirements? Questions can be directed to the MMD scrap tire inspector for your district.			
14	Is solid waste stored in containers and not on the ground? Are you meeting your solid waste hauler and disposal company's requirements? Are any local requirements being met including privacy fencing?			

Step 4: Determine if off-site shipments of hazardous and liquid industrial by-products are being properly managed for recycling or disposal.

Specific requirements for your facility will depend on who is doing the waste hauling and what materials are slated to be disposed. These options will be discussed in the following sections. The specific shipping labels and other management requirements to prepare materials for shipment will depend on whether the waste is hazardous waste or not and the hazardous waste generator status of the facility. To learn more about the CESQG and SQG requirements, see the MMD's guidance documents on the Web.

Helpful Hint

Check with your recycling and disposal company to see what services they offer for exempted hazardous waste. If you are a CESQG and have hazardous wastes that do not contain liquids, check to see if your solid waste disposal company and waste hauler will accept the waste for recycling or disposal. Often, they have special waste programs to service your needs. Even if the waste regulations allow for landfill disposal, often landfills will divert the waste to environmentally preferred management methods reducing liabilities for landfills owners and operators and the waste generators they serve.

Hiring Commercial Transporters to Haul Liquid Industrial Waste or Hazardous Waste

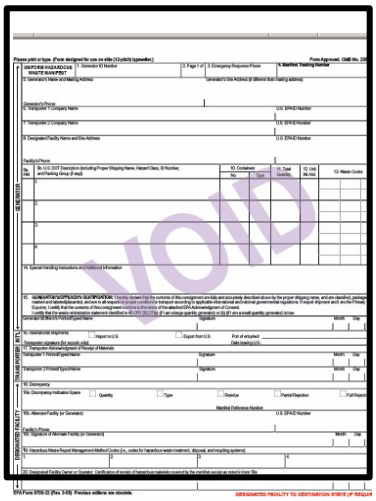
All liquid industrial waste and hazardous waste transport companies must be permitted and registered with the MMD. Select a transport company with the appropriate waste permit and registration based on the type of waste hauled. If the waste is:

- Non-hazardous liquid — hire a permitted and registered liquid industrial waste transporter.
- Hazardous waste generated at a CESQG — hire a permitted and registered liquid industrial waste or hazardous waste transporter.
- Hazardous and you generate more than 220 pounds of hazardous waste in a calendar month — hire a permitted and registered hazardous waste transporter.

Use the Waste Data System (WDS) to locate permitted and registered transporters in your area. The MMD uses the WDS to track program activities at facilities related to solid waste, scrap tire, hazardous waste, and liquid industrial waste. WDS can provide you with:

- Information on ownership and operation of a company.
- The status of any required permits, licenses, or registrations.
- The compliance history of a company.
- A list of permitted and registered transporters.
- Manifest records for shipments of hazardous waste.

For instructions to locate a permitted and registered transporter, go to www.michigan.gov/deqwaste, select the "Transporters" tab on the left side of the page, then select "Participating Transporters."



As a waste generator, you are also required to meet the manifest requirements when shipping hazardous waste from a small quantity or large quantity generators of hazardous waste. There are similar shipping documentation requirements for shipping liquid industrial by-product. Most commercial transporters and disposal companies can assist with completion of the required national "Uniform Hazardous Waste Manifest" or "shipping document" required for the transport of these materials. Generators must retain records of the pick-up documentation. Generators must also track getting copies of the manifest back from the receiving hazardous waste treatment, storage, or disposal facility and the confirmation of delivery received back from any designated facilities accepting liquid industrial by-product. Consider using the optional EGLE Manifest Tracking Log to track shipments of hazardous waste and by-product. For additional details on liquid industrial by-product shipping documents, see the Part 121 Liquid Industrial By-product Frequently Asked Questions (www.michigan.gov/documents/deq/deq-oea-faq-Waste-Part121Changes_515763_7.pdf) . For additional details on use of the manifest, please see the manifest instructions.

Hauling Your Own Generated Liquid Industrial Waste (includes used oil) and Hazardous Waste When the Facility is a CESQG

Generators can transport their own liquid industrial by-product and CESQG hazardous waste liquids if desired, The shipping document requirements of amended Part 121 must be met and spill insurance is maintained. No permit and registration to transport is required if the waste was generated from equipment in the generator has an ownership interest, If self-transporting, the generator also has to notify as a transporter of liquid industrial by-product using the Site Identification Form. There are no specific documentation requirements for transporting solid waste or CESQG hazardous wastes that are solid.

Shipping document for the transport of liquid industrial by-product and/or CESQG hazardous waste liquids, generators may be a manifest, bill of lading, invoice, log or other document that includes all of the following information and the required generator certification:

- The name and address of the generator
- The name of the transporter
- The type and volume of liquid industrial by-product in the shipment
- The date the liquid industrial by-product was shipped off-site from the generator
- The name, address, and Site Identification (Site ID) number of the designated facility

The March 2016 amendment of Part 121 eliminated the requirement to use a manifest for shipping liquid industrial by-product and the eliminated the use of liquid industrial waste codes that accompanied the manifest process. For more information about the shipping document certification and distribution process, please see the Part 121 Liquid Industrial By-product Frequently Asked Questions.

When using a manifest as the shipping document for a site that does not have a Site ID, enter the following in Item 1 for the generator Site ID:

- Enter "MICESQG" if the shipment includes only CESQG liquid hazardous waste.
- Enter "MILIB" if the shipment include only liquid industrial by-product.
- Enter "MICESQGLIB" if the shipment includes both CESQG liquid hazardous waste and liquid industrial by-product.

Determine if solid waste is properly handled and shipped off site for disposal or recycling.

Local ordinances may require fencing around the waste dumpsters. Do not store solid waste directly on the ground. Use closed containers to control blowing of waste, and to prevent odors and the presence of rodents.

NOTE: Do not put banned waste in the trash that might be headed for a landfill. Banned waste includes certain types of beverage containers, yard clippings, liquid waste, lead acid batteries, whole scrap tires, etc. Contact the commercial solid waste hauler, landfill, transfer facility, or incinerator operator for their requirements.

Your facility has two options for hauling trash (solid waste) off site:

1. Haul your own waste to a permitted transfer station, licensed landfill, or incinerator. As you transport your trash, use a cover to prevent waste from blowing out of your transport vehicle. Additionally, you should not have any liquids dripping out of bags or containers.

2. Hire a waste hauler. The MMD does not license solid waste haulers. Check the yellow pages or contact a landfill or incinerator for waste hauling companies that service your area.

Determine if scrap tires are properly handled and shipped off site for disposal or recycling.

Contact your local fire department or local health department about local storage requirements. Ideally, avoid collecting 500 or more used tires on your property. Those with 500 or more used tires must register with the WHMD as a collection site. Whole scrap tires are prohibited from disposal in landfills.

There are several disposal options available depending on the number of scrap tires you have. You can:

- Haul 7 or less of your own scrap tires at a time to a registered collection site or disposal area licensed under Part 115. Lists of registered companies are available online at www.michigan.gov/scraptires.
- Ask if your solid waste hauler will accept them.
- Hire a registered scrap tire hauler. The registered scrap hauler must give you a Scrap Tire Transportation Record form (EQP 5128). You are required to keep that at least three years from the shipment date. Lists of scrap tire haulers are on the above Web site

PART 4 - PRODUCT STORAGE AND EMERGENCY PLANNING REQUIREMENTS

CHEMICAL STORAGE

You must meet certain requirements if you have any of the chemicals listed in the Part 5 rules of Part 31 of Act 451 (e.g., solvents, ethylene glycol used in antifreeze, sulfuric acid in lead acid batteries, etc.). These requirements apply if you store these chemicals outside in an amount equal to or greater than 220 pounds, or inside a building in amounts equal to or greater than 2,200 pounds. The requirements include preparing a Pollution Prevention Incident Plan (PIPP) along with surveillance, storage requirements, secondary containment, release reporting, and notifications to local agencies and EGLE when a company falls under these chemical storage criteria. A PIPP documents information such as what chemicals are on site and how the company will respond to releases of these chemicals. Go to the Web at Michigan.gov/Part5 for a checklist of what is in a PIPP, a list of regulated chemicals, and other information along with a list of Water Res staff contacts.

Handling Oil Products Including Vehicle and Heating Fuel Storage

There are several agencies that oversee the environmental regulations pertaining to the storage of oil products and heating fuel storage. A federal Spill Pollution Control and Countermeasure (SPCC) Plan that addresses storage requirements including secondary containment and emergency response measures, is required when a company's site has 1,320 gallons or more of storage capacity for all oil products and wastes. The definition of oil products includes lubricating oils, motor oils, hydraulic oils, diesel fuel, and gasoline. If you would like more information on the proposed changes to the SPCC, go to the U.S. Environmental Protection Agency's (U.S. EPA's) Web site at www.epa.gov/oilspill or contact a U.S. EPA Region 5 staff person at 312 886-0185.

Storage Tanks

Many crushers utilize aboveground storage tanks (ASTs), liquefied petroleum gas (LPG) tanks, LPG containers, and other storage containers in their day-to-day operations. The storage and handling of products such as gasoline, diesel fuel, fuel oils, and other liquid chemicals can have environmental and safety consequences if the tanks are not properly installed and maintained. Also, the product transfer operations must be properly managed to minimize the possibility of spillage, releases, and possible fire hazards. Storage tank regulations were designed to promote the safe storage and handling of flammable and combustible liquids such as petroleum products and other hazardous substances. The following requirements are designed to promote safer storage and handling practices at a company, and result in overall economic benefits to crushing operations and consumers.

AN OVERVIEW OF THE STORAGE TANK PROGRAM

The Storage Tank Division of the Bureau of Fire Services in the Department of Licensing and Regulatory Affairs oversees the storage and use of the flammable and combustible liquids (FL/CL) and regulates ASTs. It also oversees the regulations for LPG systems in Michigan. Proper certifications for these tank units must be in place prior to conducting a fueling or storage activity. Companies that supply flammable or combustible liquids with flash points less than 200 degrees Fahrenheit and that have an individual tank storage capacity of more than 1,100 gallons must obtain a permit from the Storage Tank Program.

The tank systems, storage tanks, portable tanks, generator tanks, or containers must have their engineering and layout plan reviewed and certified and the tanks inspected. In order for the permit to be granted, a fee must also

be paid. Additionally, any FL/CL AST system greater than 660 gallons and containers 60 gallons or more in capacity must meet secondary containment requirements.

Basic Requirements for FL/CL Aboveground Storage Tank Systems

- Have spill containment of 110 percent for the largest container at the company (which is the volume of the container plus 10 percent in case of precipitation).
- Meet isolation distances from property lines and buildings based on the size of the storage system.
- Protect storage area from trespassers.
- Keep area free from weeds, combustible materials, and other debris.

Liquid Petroleum Gas (LPG) Tanks

Companies with any of the following are also regulated by the WHMD STU program:

- Any flammable compressed gas or LPG container filling location.
- A company that supplies flammable compressed gas or any LPG that has a tank with a water capacity of more than 2,000 gallons or two or more tanks with an aggregate water capacity of more than 4,000 gallons.

The LPG systems listed above require an installation application, must pay annual fees, have field inspections, and be certified. Any LPG tank in connection with a building heating system or its equipment is also regulated by the Mechanical Division of the Michigan Department of Licensing and Regulatory Affairs (LARA) under the State Construction Code Act. For more information about these separate requirements, visit LARA's Web site at www.Michigan.gov/lara.

Basic Requirements for LPG Tank System or Containers

LPG storage is defined as any vessel containing a material having a vapor pressure not exceeding that allowed for commercial propane, which is composed predominately of the following hydrocarbons, either by themselves or as mixtures, and is used to store or transport this mixture:

- Propane
- Propylene
- Butane (normal butane or isobutane)
- Butylene

In addition, LPG tank systems or containers must:

- Meet isolation distances from property lines and buildings based on the size of the storage system.
- Have a protected storage area from trespassers.
- Have an area free from weeds, combustible materials, and other debris.

Transportation of LPG, Similar Hydrocarbons, and Mixtures

The Michigan State Police Traffic Safety Division oversees the transportation of LPG and other similar hydrocarbons in Michigan. To learn more about the transportation regulations, please visit the Michigan State Police Web site at **www.michigan.gov/msp**. Mobile fueling tanks are not regulated by EGLE if the tank meets the transportation requirements, is insured, and has a current vehicle license (i.e., sticker).

Finally, in association with the transportation requirements for fuel sources, it is also important to contact your local fire authority and LARA's Michigan Occupational Safety and Health Administration (MIOSHA) program at 517-322-1809 regarding their requirements for flammable and combustible liquids used above ground. MIOSHA's web site is www.Michigan.gov/MIOSHA.

PART 5 - LAND DEVELOPMENT AND LAKE/POND CREATION REQUIREMENTS

Significant changes to the landscape, and the creation of lakes and ponds are a common result of rock crushing facilities and their associated mining operations.

Frequently, regulated impacts to natural features such as wetlands, floodplains, lakes, and streams, occur with the development of land for mining or rock crushing facilities. Except for designated sand dune areas along the Lake Michigan shoreline, non-metallic mining is not specifically regulated as an activity. Yet the creation of water bodies, and impacts to wetlands, floodplains, lakes, streams, and sand dunes that occur as a result of rock crushing and mining operations may require authorization from EGLE.

OVERVIEW OF PERMIT PROGRAMS

EGLE, Water Resources Division (WRD) administers several parts of the Natural Resources and Environmental Protection Act, Public Act 451 of 1994, as amended (Act 451), that regulate activities that occur on, within, or involve any of the following land/water features:

- A 100-year floodplain or floodway
- A stream, river, ditch, drain, channel, or canal
- An inland lake
- Land change activities that result in the creation or alteration of a canal, ditch, lagoon, pond, or lake within 500 feet of an existing inland lake or stream
- A wetland
- A dam
- A Great Lake
- High-risk erosion areas, critical dune areas, andIn Great Lakes coastal counties, the EGLE also regulates activities in designated high- risk erosion areas, critical dune areas, and coastal wetland areas.

The U.S. Army Corps of Engineers (USACE) regulates some of the above activities at the federal level that occur within Great Lakes coastal counties, as well. To simplify the permit process for Michigan's residents, EGLE has developed a "EGLE/USACE - Joint Permit Application" process with the USACE to jointly regulate activities at or near the land/water interface.

Part 301 of Act 451: Inland Lakes and Streams

Open pit mining that occurs below the groundwater table frequently results in the creation of a lake or pond. Creation of water bodies are regulated under Part 301, Inland Lakes and Streams, of Act 451. Other land development activities in lakes or streams that may be associated with rock crushing operations may also be regulated under Part 301. For example, road crossings of streams, stormwater outfalls, stream relocations or enclosures, and ditches connected to a lake or stream created as part of rock processing facilities may also require a Part 301 permit.

Under Part 301, a permit is required for the following activities below the ordinary high-water mark of inland lakes and streams:

- Dredge or fill bottomlands.
- Construct, enlarge, extend, remove, or place a structure on bottomland.
- Erect, maintain, or operate a marina.
- Create, enlarge, or diminish an inland lake or stream.
- Structurally interfere with the natural flow of an inland lake or stream.
- Construct, dredge, commence, extend, or enlarge an artificial canal, ditch, lagoon, pond, lake, or similar waterway through which the purpose is ultimate connection with an existing inland lake or stream, or where any part of the artificial waterway is located within 500 feet of the ordinary high- water mark of an existing inland lake or stream.
- Connect any natural or artificially constructed waterway, canal, channel, ditch, lagoon, pond, lake, or wetland with an existing inland lake or stream for navigation or any other purpose.

Under Part 301, a lake is defined as a body of surface water greater than 5 acres in size, and a pond any water body smaller than 5 acres. If dewatering of the mining pit occurs during operations, a permit is still required for creation or alteration of a lake or pond even if it is completed in dry conditions.

As indicated in Part 2, a National Pollution Discharge Elimination System (NPDES) permit may also be required for a wastewater discharge from a dewatering operation. Construction of an outfall pipe in a lake or stream for the dewatering operation may require a permit under Part 301, in addition to a NPDES permit.

Part 303 of Act 451: Wetlands Protection

Part 303 defines a wetland as "land characterized by the presence of water at a frequency and duration sufficient to support, and that under normal circumstances does support, wetland vegetation or aquatic life, and is commonly referred to as a *bog, swamp, or marsh."* The definition applies to public and private lands regardless of zoning or ownership. The following activities are prohibited in wetlands unless a Part 303 permit has been obtained from EGLE:

- Deposit or permit the placing of fill material in a wetland.
- Dredge, remove, or permit the removal of soil or minerals from a wetland.
- Construct, operate, or maintain any use or development in a wetland.
- Drain water from a wetland.

Development of a property for mining or rock crushing operations that may involve wetland filling, draining, or excavating may require a permit under Part 303.

The drainage of surface or sub-surface water from wetlands is often associated with dewatering of open pit mines. Dewatering operations frequently result in a drawdown of local groundwater tables. Wetlands located within the area of influence of a groundwater drawdown could be incidentally drained by the dewatering operations. This influence of wetland hydrology by sub- surface drawdown of groundwater may require a permit under Part 303.

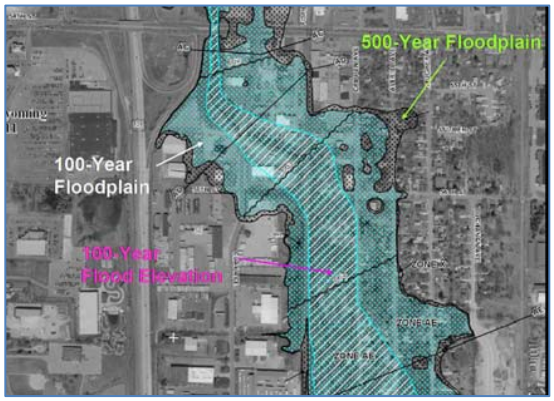
Wetlands Identifications

While wetland inventory maps and other online tools are helpful in determining the potential for wetlands, an on-site investigation is required to actually identify wetlands on a property. EGLE's Wetland Identification Program (WIP), is a fee-based program that offers two levels of service to identify wetland and upland areas on a property. For a Level 2 Identification, a Wetlands Specialist conducts an on-site review to determine the presence or absence

of wetlands, and physically marks the wetland boundaries in the field. A Wetlands Specialist can also provide a Level 3 Identification, which is an on-site review to confirm specific wetland boundaries marked by a wetland consultant. Both levels of service include a letter and map from EGLE summarizing the findings, which is guaranteed for a period of three years. Individuals interested in WIP services must submit a WIP application to the WRD, Wetlands, Lakes and Streams Unit. The WIP application and a fee calculator can be downloaded at Michigan.gov/Wetlands or you may call 517-284-5543.

Part 31 of Act 451: Water Resources Protection, Floodplain Regulatory Authority

A Part 31 permit is required for any occupation, construction, filling, or grade change that occurs within the 100-year floodplain of a river, stream, drain, or lake. Bridges, culverts, access roads, and stockpiles are considered an occupation of the floodplain. Stockpiling material, whether temporarily or permanently, within the floodplain is regulated under Part 31.



These activities are regulated under Part 31 with the purpose of ensuring that the channels and floodways are kept clear and uninhabited, and that filling and grade changes do not result in harmful increases in flood stages or stage characteristics of the water body. The floodway includes the stream channel and that portion of the floodplain that is required to convey the flow of floodwater. Any grade changes, filling, or stockpiling of material within the floodway must be placed so that it will not result in harmful increases in flood stages to obtain a permit under Part 31. Permanent grade changes, filling, or stockpiles of material that are placed outside of the floodway portion of the floodplain must be properly compensated by removing material from the site to prevent harmful changes in flood stages. This can be accomplished by excavating an equivalent volume of material from the floodplain at similar elevations to the fill that has been placed on the site.

Under Part 31, the 100-year floodplain is defined by the 100-year flood elevation. A 100-year flood has a one (1) percent chance of occurring or being exceeded in any given year. The 100-year floodplain elevation for a given location can be obtained from Flood Rate Insurance Maps produced by the Federal Emergency Management Agency at www.msc.fema.gov.

Section 404 of the Federal Clean Water Act of 1977 and Section 10 of the Rivers and Harbors Act of 1899

Section 404 of the Clean Water Act (CWA) prohibits the discharge of dredged or fill material into waters of the United States, including inland lakes and streams, the Great Lakes, and wetlands, without a permit. Michigan was the first of only two states currently authorized to administer the permit program for the federal government through state law. In most areas of the state, issuance of a permit by EGLE's WRD in accordance with the CWA requirements also authorizes a project under Section 404, and no separate federal permit is required. However, since Section 10 does not provide for similar transfer to states, the U.S. Army Corps of Engineers (USACE) retains Section 404 jurisdiction within those waters that are navigable waters of the U.S. and their adjacent wetlands. Therefore, authorization is also required from the USACE for projects in traditionally navigable waters including the Great Lakes, connecting channels, other waters connected to the Great Lakes where navigational conditions are maintained, and wetlands directly adjacent to these waters. Submittal of a single, completed EGLE/USACE - Joint Permit Application to the WRD ensures that Section 404 permit applications will be processed by all appropriate agencies, including projects that require both EGLE and USACE authorization.

Information on the EGLE/USACE – Joint Permit Application may be found at www.Michigan.gov/JointPermit.

APPENDIX A - The Air Quality General Permit to Install Application

The *"General Permit to Install Application for Nonmetallic Mineral Crushing Facilities"* consists of three forms: the General Information form (EQP5727), the Process Information form (EQP5756), and the Relocation Notice form (EQP5757). These can be downloaded from the Air Quality Division (AQD) Web page at Michigan.gov/air, select "Permits" then select "General Permits – Application Forms and Instructions" or contact the Environmental Assistance Center at 800-662-9278.

The General Information Form (EQP 5727)

Michigan Department Of Environment, Great Lakes and Energy
Air Quality Division

EGLE

GENERAL PERMIT TO INSTALL APPLICATION GENERAL INFORMATION

For EGLE Use Only
Permit Number

Authorized under 1994 PA 451, as amended. Completion of form is required. Applicant may be subject to civil and/or criminal penalties for providing false information.

Instructions: Use this form to request authority to install and operate a source, process or process equipment under the terms and conditions of a general permit to install pursuant to Rule 201a. Prepare this form, the appropriate Process Information form(s) and the Additional Information form (if needed). Submit all information, including forms, in duplicate. **NOTE:** A general permit cannot apply to a source, process, or process equipment, that is covered by a Permit to Install pursuant to Rule 201 and is further referenced in an outstanding consent order or consent judgment.

1. FACILITY CODES
State Registration Number (SRN): North American Industry Classification System (NAICS)

2. APPLICANT NAME *(Business license name of the corporation, partnership, individual or government agency that owns the facility)*

3. APPLICANT MAILING ADDRESS *(Street Address or P.O. Box Number)*

CITY | STATE | ZIP CODE

4. AUTHORIZED EMPLOYEE | TITLE | PHONE NO. *(Include Area Code)*

5. CONTACT: *(If different than Authorized Employee - for questions regarding this application)* | PHONE NO. *(Include Area Code)*

6. EQUIPMENT OR PROCESS LOCATION *(Number and street, if different than mailing address)*

CITY | ZIP CODE | COUNTY

7. THE EQUIPMENT IDENTIFIED IN THE APPLICATION IS ☐ NEW ☐ EXISTING - DATE INSTALLED:

8. IS THERE AN EXISTING PERMIT TO INSTALL FOR ANY EQUIPMENT IDENTIFIED IN THIS APPLICATION? ☐ YES ☐ NO
IF YES, INCLUDE PERMIT TO INSTALL NUMBER(S)

9. DOES THIS SOURCE HAVE AN EXISTING RENEWABLE OPERATING PERMIT? ☐ YES ☐ NO ☐ NOT APPLICABLE
IF YES, INCLUDE RENEWABLE OPERATING PERMIT NUMBER:

10. IS ANY OF THE EQUIPMENT INCLUDED IN AN OUTSTANDING CONSENT ORDER OR CONSENT JUDGMENT? ☐ YES ☐ NO

11. THE FOLLOWING FORMS ARE ATTACHED AS PART OF THIS PERMIT APPLICATION *(check all that apply)*
☐ PROCESS INFORMATION (EQP _____)
(Complete the appropriate form for the process or equipment to be installed and insert the form number in the space provided.)
☐ ADDITIONAL INFORMATION (EQP5729)

Applicant Certification: I certify, under penalty of law, that this permit application and any attachments were prepared by me, or under my direction or supervision in accordance with a system to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. In addition, the equipment described in this application meets the necessary criteria for applicability for a General Permit to Install. Furthermore, I certify that I can and will comply with all conditions outlined in the General Permit to Install. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for known violations.

SIGNATURE OF AUTHORIZED EMPLOYEE *(Person identified in item 4)* | DATE | E-MAIL ADDRESS

Submit original completed application and all attachments to:

MICHIGAN DEPARTMENT OF ENVIRONMENT, GREAT LAKES AND ENERGY
AIR QUALITY DIVISION - PERMIT SECTION
P.O. BOX 30260
LANSING, MI 48909-7760

EGLE USE ONLY - DO NOT WRITE BELOW

DATE APPLICATION COMPLETE

DATE GENERAL PERMIT TO INSTALL GRANTED | SIGNATURE

DATE GENERAL PERMIT TO INSTALL VOIDED | SIGNATURE

EQP5727 (Revised 1/2020)

Facility Codes - Two Facility Codes are required. The State Registration Number (SRN) is an alphanumeric identifier assigned to a stationary source by the AQD. The SRN is unique to the physical location of a source (except for portable equipment) and is comprised of a letter followed by four digits (i.e., A1497). The SRN for a facility can be found on the Michigan Air Emissions Reporting (MAERS) forms that are submitted annually to the AQD or on a previously issued PTI. If the application is for a new facility or one that has not had previous business with the AQD an SRN may not exist. The AQD will assign an SRN during the review of the permit application. If you are a new owner of an existing company, it is likely the source already has an SRN. To verify the existence of an SRN for your company, contact your local AQD district office (see *Appendix E*).

The North American Industry Classification System (NAICS) provides a numeric code that identifies an industry. The NAICS, which has replaced the Standard Industrial Classification (SIC) system, was developed jointly by the USA, Canada and Mexico to provide new comparability in statistics about business activity across North America. Information about NAICS and links to the NAICS codes are available at the following sites:

- www.census.gov/epcd/www/naics.html
- rcrapublic.epa.gov/rcrainfoweb/action/modules/br/naics/view

A six digit code is preferred for a more exact description, however five digits are acceptable. Table A-1 lists some common NAICS codes used for the crushing industry:

Table A-1: Common NAICS Codes for the Crushing Industry

NAICS Code	INDUSTRY DESCRIPTION
212311	**Dimension Stone Mining and Quarrying**
212312	**Crushed and Broken Limestone Mining and Quarrying**
212313	**Crushed and Broken Granite Mining and Quarrying**
212319	**Other Crushed and Broken Stone Mining and Quarrying**
212321	**Construction Sand and Gravel Mining**
212322	**Industrial Sand Mining**
212391	**Potash, Soda, and Borate Mineral Mining**
212392	**Phosphate Rock Mining**
212393	**Other Chemical and Fertilizer Mineral Mining**
212399	**All Other Nonmetallic Mineral Mining**

Applicant Name – The applicant should be the entity (e.g., corporation, partnership, individual owner, or government agency) that owns and/or is responsible for the operation of the process or process equipment. If the crushing equipment is leased from another company, you must first establish who has the legal responsibility to complete this application to meet the state of Michigan's air permitting requirement. In most cases, the operator of the equipment bears the responsibility for applying for state environmental permits; however, the leasing agent of the equipment may already have applied for and received an air quality permit for the equipment.

If the leasing agent already has a permit, the operator may operate the equipment under the existing permit; however, the permit must be updated to reflect the new job site where the equipment will be used. Either you or the leasing agent must provide this update by using the *Relocation Notice* form (EQP5757). For more information on how to relocate your equipment, see page 1-15.

Applicant Mailing Address - This is the mailing address to receive correspondence regarding the application. Include the actual street address, post office box (if applicable), city, state, and zip code.

Authorized Employee – The application must be signed by an authorized employee of the applicant. This signature certifies the truth of the information provided in the application. Provide the name, title, telephone number (extension if applicable) and e-mail address for the individual signing the application.

Contact – Complete this if someone other than the authorized employee should be contacted with questions regarding this application. Provide the name, title, telephone number (extension if applicable) and e-mail address for the contact. A contact person not employed directly by the applicant, such as an attorney or a consultant, may file an application as an agent of the applicant; however, an agent may not sign the application. If the contact is an agent, include the name of the company the agent is affiliated with (e.g., consulting firm, law firm).

Equipment or Process Location – This is the site where the crushing facility will be located. This item need only be completed if the process location is different from the mailing address or if the mailing address is a P.O. Box.

Equipment New/Existing – Check the appropriate box. If the equipment is existing, either purchased from a previous owner or already owned by your company, please include the installation date (approximate month and year) when the equipment was first put into use.

Existing Permits – If any or all the equipment in the application has been covered by a previously issued Permit to Install, either obtained by your company or another company if the equipment was purchased from a previous owner, include the permit number. If you are unsure whether the equipment may have been covered under a previous permit, contact the local AQD district office (*see Appendix E*).

Renewable Operating Permit (ROP) - Facilities that meet the definition of a major source are required to obtain an ROP. A source that has the potential to emit 10 tons/year of a single hazardous air pollutant (HAP), 25 tons/year of all HAPs combined, or 100 tons/year of any regulated air pollutant like particulate matter (PM) is considered a major source. Guidance on how to calculate potential to emit is available at Michigan.gov/air. Select "Clean Air Assistance," and then "Potential to Emit." However, most nonmetallic mineral processing facilities are not large enough to meet the definition of a major source.

Consent Orders – If your company has an outstanding consent order or judgment, or is currently involved in an environmental enforcement case, you cannot use the General Permit to Install. A consent order or judgment may be issued against your company or against you as a subcontractor of another company. An outstanding consent order or consent judgment means your equipment is not in compliance with the environmental regulations. You must apply for a regular Permit to Install.

Forms Submitted - You are required to fill out the Process Information form (EQP5756). Check the box and write the form number in the space provided. Check the box for Additional Information for all additional information submitted such as a detailed site map (required), process layout drawings or equipment specifications.

Signature of Authorized Employee – The application must be signed by an authorized employee of the applicant. This signature certifies the truth of the information provided in the application. A missing signature will result in an application being returned and a delay in processing.

The Process Information Form (EQP5756)

The Process Information form must be completed for each crushing facility (production line). A production line means all the equipment (crushers, grinding mills, screening operations, elevators, conveyors, bagging operations, storage bins, and enclosed truck and railcar loading stations) which are directly connected or connected by a conveying system.

EGLE Michigan Department Of Environment, Great Lakes, and Energy - Air Quality Division

GENERAL PERMIT TO INSTALL APPLICATION

PROCESS INFORMATION - NONMETALLIC MINERAL CRUSHING (PAGE 1 OF 2)

FOR EGLE USE ONLY | PERMIT NUMBER

Authorized under 1994 PA 451, as amended. Completion of form is required. Applicant may be subject to civil and /or criminal penalties for providing false information.

Instructions: Use this form to request authority to install and operate a nonmetallic mineral crushing facility, under the terms and conditions of a general permit to install pursuant to Rule 201a. If two or more primary crushers operate in parallel, each constitutes a separate facility. Complete a separate copy of this form for each facility. Prepare and submit this form with the General Information form (EQP5727). **For a Modification:** Complete Items 1 - 9. Identify all existing and new or additional process equipment. Certify and submit pages 1 and 2 of this form to the Permit Section and the appropriate district office. See map for district office locations.

1. FACILITY CODE
STATE REGISTRATION NUMBER (SRN) [ ][ ][ ][ ][ ]

2. MINE/QUARRY NAME

SECTION | TOWNSHIP | RANGE | 3. AMOUNT PROCESSED AT THIS SITE (tons per year)

4. DESCRIPTION *(Brief description of this facility or proposed modification. Attach a detailed site map showing all site characteristics including the location of any residential and/or commercial establishments and places of public assembly located within 1,000 feet of the proposed site)*

5. DOES THIS FACILITY HAVE ANY OUTSTANDING UNRESOLVED AIR VIOLATIONS? ☐ YES ☐ NO

6. ARE THE CRUSHER(S) LOCATED A MINIMUM OF 500 FEET FROM ALL RESIDENTIAL OR COMMERCIAL ESTABLISHMENTS OR PLACES OF PUBLIC ASSEMBLY? ☐ YES ☐ NO

7. WAS THIS FACILITY PREVIOUSLY PERMITTED PURSUANT TO RULE 201? IF YES, PERMIT NO. ☐ YES ☐ NO

8. APPLICATION IS FOR ☐ NEW GENERAL PERMIT ☐ MODIFICATION TO EXISTING GENERAL PERMIT - PERMIT NO.

9. **FOR A MODIFICATION:** IS THE FACILITY CURRENTLY IN COMPLIANCE WITH ALL CONDITIONS OF THE EXISTING GENERAL PERMIT, INCLUDING BUT NOT LIMITED TO THE TESTING OF ALL NSPS SUBJECT EQUIPMENT? ☐ YES ☐ NO

Instructions for completing the following Items: Each piece of equipment must have a unique Identification number (ID). The ID may be any combination of up to 10 letters, numbers or keyboard characters with no spaces between characters. Provide an ID and complete all items for each piece of process equipment at the facility. If equipment is shop built, the manufactured date may be estimated. This data is mandatory. Use as many copies of page 2 as needed to list all process equipment. Use Additional Information form EQP5729 if needed to describe why a device is not subject to NSPS.

DEVICE DESCRIPTION *(crusher-type, screen, conveyor, drill, etc.)* | DEVICE ID *(Assign an identification number for this device)*

MAKE AND MODEL | SERIAL NUMBER | MANUFACTURED DATE *(year)*

MAXIMUM RATED CAPACITY *(tons per hour)* | CONTROL? ☐ YES ☐ NO | CONTROL TYPE

IS DEVICE SUBJECT TO NSPS?
☐ YES, HAS DEVICE BEEN TESTED? ☐ YES, DATE TEST PASSED ☐ NO, DATE TEST SCHEDULED
☐ NO, REASON NOT SUBJECT

DEVICE DESCRIPTION *(crusher-type, screen, conveyor, drill, etc.)* | DEVICE ID *(Assign an identification number for this device)*

MAKE AND MODEL | SERIAL NUMBER | MANUFACTURED DATE *(year)*

MAXIMUM RATED CAPACITY *(tons per hour)* | CONTROL? ☐ YES ☐ NO | CONTROL TYPE

IS DEVICE SUBJECT TO NSPS?
☐ YES, HAS DEVICE BEEN TESTED? ☒ YES, DATE TEST PASSED ☐ NO, DATE TEST SCHEDULED
☐ NO, REASON NOT SUBJECT

This page must be certified by an authorized employee

Applicant Certification: I certify, under penalty of law, that this permit application and any attachments were prepared by me, or under my direction or supervision in accordance with a system to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. In addition, the equipment described in this application meets the necessary criteria for applicability for a General Permit to Install. Furthermore, I certify that I can and will comply with all conditions outlined in the General Permit to Install. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for known violations.

SIGNATURE OF AUTHORIZED EMPLOYEE | DATE

EQP5756 (Revised 1/2020)

Michigan Department Of Environment, Great Lakes, and Energy - Air Quality Division

EGLE GENERAL PERMIT TO INSTALL APPLICATION NONMETALLIC MINERAL CRUSHING- (PAGE 2 OF 2)

FOR EGLE USE ONLY
PERMIT NUMBER

Authorized under 1994 PA 451, as amended. Completion of form is required. Applicant may be subject to civil and /or criminal penalties for providing false information.

Instructions: Page 1 of this form must be completed and certified by an authorized employee. Provide an ID and complete all items for each piece of process equipment at the facility. If the equipment is shop built, the manufactured date may be estimated. This data is mandatory. Use as many copies of this page as needed to list all process equipment. Us Additional Information form EQP5729 if needed to describe why a device is not subject to NSPS.

For a Modification: Provide the information for all existing and new or additional process equipment. Submit pages 1 and 2 to the Permit Section and the appropriate district office. See map for district office locations.

DEVICE DESCRIPTION *(crusher-type, screen, conveyor, drill, etc.)* | DEVICE ID *(Assign an identification number for this device)*

MAKE AND MODEL | SERIAL NUMBER | MANUFACTURED DATE *(year)*

MAXIMUM RATED CAPACITY *(tons per hour)* | CONTROL? ☐ YES ☐ NO | CONTROL TYPE

IS DEVICE SUBJECT TO NSPS?
☐ YES, HAS DEVICE BEEN TESTED? ☐ YES, DATE TEST PASSED ☐ NO, DATE TEST SCHEDULED
☐ NO, REASON NOT SUBJECT

DEVICE DESCRIPTION *(crusher-type, screen, conveyor, drill, etc.)* | DEVICE ID *(Assign an identification number for this device)*

MAKE AND MODEL | SERIAL NUMBER | MANUFACTURED DATE *(year)*

MAXIMUM RATED CAPACITY *(tons per hour)* | CONTROL? ☐ YES ☐ NO | CONTROL TYPE

IS DEVICE SUBJECT TO NSPS?
☐ YES, HAS DEVICE BEEN TESTED? ☐ YES, DATE TEST PASSED ☐ NO, DATE TEST SCHEDULED
☐ NO, REASON NOT SUBJECT

DEVICE DESCRIPTION *(crusher-type, screen, conveyor, drill, etc.)* | DEVICE ID *(Assign an identification number for this device)*

MAKE AND MODEL | SERIAL NUMBER | MANUFACTURED DATE *(year)*

MAXIMUM RATED CAPACITY *(tons per hour)* | CONTROL? ☐ YES ☐ NO | CONTROL TYPE

IS DEVICE SUBJECT TO NSPS?
☐ YES, HAS DEVICE BEEN TESTED? ☐ YES, DATE TEST PASSED ☐ NO, DATE TEST SCHEDULED
☐ NO, REASON NOT SUBJECT

DEVICE DESCRIPTION *(crusher-type, screen, conveyor, drill, etc.)* | DEVICE ID *(Assign an identification number for this device)*

MAKE AND MODEL | SERIAL NUMBER | MANUFACTURED DATE *(year)*

MAXIMUM RATED CAPACITY *(tons per hour)* | CONTROL? ☐ YES ☐ NO | CONTROL TYPE

IS DEVICE SUBJECT TO NSPS?
☐ YES, HAS DEVICE BEEN TESTED? ☐ YES, DATE TEST PASSED ☐ NO, DATE TEST SCHEDULED
☐ NO, REASON NOT SUBJECT

DEVICE DESCRIPTION *(crusher-type, screen, conveyor, drill, etc.)* | DEVICE ID *(Assign an identification number for this device)*

MAKE AND MODEL | SERIAL NUMBER | MANUFACTURED DATE *(year)*

MAXIMUM RATED CAPACITY *(tons per hour)* | CONTROL? ☐ YES ☐ NO | CONTROL TYPE

IS DEVICE SUBJECT TO NSPS?
☐ YES, HAS DEVICE BEEN TESTED? ☐ YES, DATE TEST PASSED ☐ NO, DATE TEST SCHEDULED
☐ NO, REASON NOT SUBJECT

EQP5756 (Revised 1/2020)

Facility Code – This is the SRN from the General Information form. See detailed explanation on page A-1.

Mine/Quarry Name and Location - Enter the mine/quarry site name. This may be the same as the parent company name or may have a unique identifying name that denotes the physical location of the site. If the mine/quarry does not have a street address, provide the section, township, and range where the crushing facility will be located. These coordinates can be determined from a plat map. Plat maps are coordinate-based maps, with all distances and location bearings based on the directions of north-south and east-west. Plat maps are considered legal records showing real estate divisions in Michigan's cities, townships, and villages.

- A *section* comprises one mile square (640 acres).
- A *township* is defined as land that is divided into 6-mile-squares and runs north to south.
- A *range* is defined as the east or west position of a land site.

Plat maps can be obtained from your local city, township, village, or county clerk office.

New General Permit or Modification - Identify if this application is for a new General Permit to Install or if you are making a significant change to an existing General Permit to Install. A modification to an existing General Permit is required if equipment is being added or removed. Refer to the section of this guide that discusses modifications beginning on page 1-17. Include the existing General Permit number for a modification.

Process Description - Provide a brief description of the crushing operation and accurately describe the type of product being crushed (i.e., concrete building debris, limestone, rocks, sand and gravel, etc.). A site map is also required to identify where equipment will be located on the property and to document any residential homes, commercial establishments, and places of public assembly located within 1,000 feet of the site.

Amount of Material Processed at the Site – The General Permit limits production to 2 million tons per year of nonmetallic mineral products at any one site. If the facility will process more than this amount, a regular Permit to Install is required.

Outstanding or Unresolved Violations – A Violation Notice (VN) is issued if a company is not in compliance with the state air pollution control rules and/or federal regulations. A VN is not the same as an environmental consent order or judgment. It is a tool used to initiate enforcement action to bring a company into compliance. If you have a pending VN, you do not qualify for the General Permit to Install.

Distance of Crusher to Other Area Residents/Establishments - The General Permit requires your crushing operation be a minimum of 500 feet from residential or commercial establishments, and places of public assembly such as a government building, church, or school. This distance is needed to limit the adverse health effects or damage to personal property from the dust. Include a standard map that clearly identifies the distances from your crushing process to the nearest property line in all directions.

Compliance Verification with an Existing Permit – If this application is to modify a current General Permit, verify whether the facility is in compliance with the current permit. If your company has received a VN or is referenced in an ongoing VN through your contractual services with another company, you must check NO.

Process/Equipment Information – Each piece of equipment must be identified and described. For each crusher, screen, conveyor, elevator, grinder, etc. provide the following:

Device Description and Device ID - Describe the type of equipment using the technical name (i.e., jaw crusher, cone crusher, impact crusher, etc.), as well as the role it plays in the crushing operation (i.e., primary jaw crusher, secondary cone crusher, etc.). The Device ID is a unique equipment identifier. A Device ID may be any combination of up to 10 letters, numbers, or keyboard characters (i.e., SCREEN01, Conveyor #3, PRICRUSHER).

Make and Model, Serial Number, and Manufactured Date - Identify the manufacturer of the equipment, model number, and a serial number. You may need to contact the manufacturer of the equipment to obtain the make and model information. A manufactured date is required. This date can be obtained from the equipment name plate. Do not confuse the manufactured date with the installation date. If the equipment was shop built (i.e., from miscellaneous parts), indicate that the equipment is shop-built in the Make and Model field and write NA in the Serial Number field. Try to approximate the date (month and year) when the equipment was built and added to the crushing operation. The AQD will not process your application without this information.

Maximum Rated Capacity or Dimensions - The maximum rated capacity can be found in an equipment manual or specification book. The maximum rated capacity for crushers is measured in tons/hour. For screening operations or conveyor belts, give the dimensions for the total surface area of the top screen or the width of the conveyor belt. Storage bin capacity is measured in tons.

Device Control - Each crusher and screening operation must have water sprays installed prior to operation. A baghouse dust collector or wet scrubber may be used in place of the water sprays. Conveyors, material storage piles, and other process equipment related to the crushing operation are required to have dust control on an as-needed basis.

Federal New Source Performance Standard (NSPS) - Indicate whether the equipment is subject to the NSPS for nonmetallic mineral processing facilities (Subpart OOO). If the equipment is not subject, you must include a reason. Equipment that is not subject to the NSPS includes:

- Equipment at fixed sand and gravel plants and crushed stone plants with capacities of 25 tons per hour or less.
- Equipment at portable sand and gravel plants and crushed stone plants with capacities of 150 tons per hour or less.
- Equipment that replaces existing equipment and is of equal or smaller size and has the same function as the existing equipment, unless all existing equipment in a production line is being replaced.
- Equipment listed in the Table A-2 that was manufactured prior to August 31, 1983, and was never modified or reconstructed after that date. See page 1-17 for definitions of modification and reconstruction.
- Equipment not listed in the Table A-2.

Table A-2: Crusher Equipment Subject to NSPS Subpart OOO

Crushers	Belt conveyors
Grinding mills	Bagging operations
Screening operations	Storage bins
Bucket elevators	Enclosed truck or railcar loading station

If the equipment is subject to the NSPS Subpart OOO, it may be subject to an initial performance test. Performance testing is discussed on page 1-13. If the equipment requires a performance test, include the date the equipment passed the performance test, or if a performance test has not yet been done, the date that the test is scheduled. If the equipment does not require a performance test, you must explain why. Equipment that is **not** subject to a performance test under the NSPS includes:

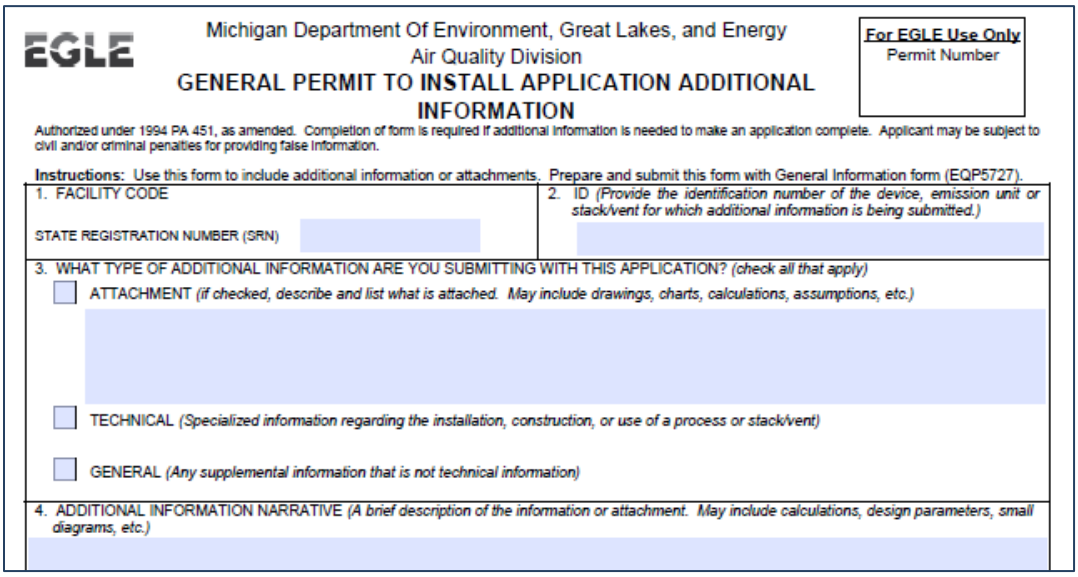
- Equipment in Table A-2 that was manufactured prior to August 31, 1983, and never modified or reconstructed on or after August 31, 1983.
- Equipment in Table A-2 that was manufactured, modified, or reconstructed on or after August 31, 1983, and replaces equipment that was larger in size. Testing will not have to occur until all existing equipment has been replaced with new equipment.
- Wet screening operations and subsequent wet screening operations, bucket elevators, and belt conveyors that process saturated material in the production line up to, but not including the next crusher, grinding mill, or storage bin.
- Screening operations, bucket elevators, and belt conveyors in the production line downstream of wet mining operations, that process saturated materials up to the first crusher, grinding mill, or storage bin the in the production line.

Signature - Include a signature by an authorized employee of the applicant as on the General Information form. This signature certifies the truth of the information provided in the application. A missing signature will result in an application being returned and a delay in processing.

Make additional copies of Page 2 of the Process Information form (EQP5727) to include all equipment associated with your crushing process.

The Additional Information Form (EQP5729)

An Additional Information form should be filled out for any piece of equipment for which you plan to submit additional documentation. Failure to complete this form and include the attachments can result in delay of processing the application.



EGLE

Michigan Department Of Environment, Great Lakes, and Energy
Air Quality Division
GENERAL PERMIT TO INSTALL APPLICATION ADDITIONAL INFORMATION

For EGLE Use Only
Permit Number

Authorized under 1994 PA 451, as amended. Completion of form is required if additional information is needed to make an application complete. Applicant may be subject to civil and/or criminal penalties for providing false information.

Instructions: Use this form to include additional information or attachments. Prepare and submit this form with General Information form (EQP5727).

1. FACILITY CODE
STATE REGISTRATION NUMBER (SRN)

2. ID *(Provide the identification number of the device, emission unit or stack/vent for which additional information is being submitted.)*

3. WHAT TYPE OF ADDITIONAL INFORMATION ARE YOU SUBMITTING WITH THIS APPLICATION? *(check all that apply)*

☐ ATTACHMENT *(if checked, describe and list what is attached. May include drawings, charts, calculations, assumptions, etc.)*

☐ TECHNICAL *(Specialized information regarding the installation, construction, or use of a process or stack/vent)*

☐ GENERAL *(Any supplemental information that is not technical information)*

4. ADDITIONAL INFORMATION NARRATIVE *(A brief description of the information or attachment. May include calculations, design parameters, small diagrams, etc.)*

The Facility Code - This is the SRN from the General Information form.

Device ID – This is the ID created on the Process Information form.

Type of Additional Information - Check one or more of the boxes as applicable. Attachments include:

- A site map, a building layout map, or information such as a plat map. Site drawings or building layout maps should be properly marked showing:
  - The spot where the crusher operation, equipment, storage piles, etc. are located.
  - A scale showing the distance in feet, yards, or meters to surrounding population areas and places of public assembly.
  - A north pointing directional arrow.
- Process diagrams or drawings showing equipment type and layout.

Examples of a site or building layout map and a process diagram/drawing are available in Appendix C.

Technical information includes documentation which pertains to the installation, construction, or use of your company's equipment such as:

- Flow charts and production rates
- Flow rate calculations
- Design parameters or descriptions
- Documentation from an operator manual (i.e., maximum rated capacity of the equipment) An example of a flow chart showing production rates is available in Appendix D.

General information includes any supplemental information that is not technical in nature such as written descriptions of the process layout and production schedule.

Additional Information Narrative - Use this space to describe or explain any of the additional information rather than providing it as an attachment.

APPENDIX B - Completing the Relocation Notice Form

Facility Codes, Applicant Name, Applicant Mailing Address, Authorized Employee, and Contact – See detailed instructions for these fields in Appendix A.

EGLE

MICHIGAN DEPARTMENT OF ENVIRONMENT, GREAT LAKES, AND ENERGY
AIR QUALITY DIVISION

GENERAL AIR PERMIT TO INSTALL APPLICATION
RELOCATION NOTICE

Authorized under 1994 PA 451, as amended. Completion of form is required.
Applicant may be subject to civil and /or criminal penalties for providing false information.

For EGLE Use Only
Permit Number

Instructions: Use this form to request authority to relocate a nonmetallic mineral processing facility under the terms and conditions of a general permit to install pursuant to Rule 201a. A copy of the original general permit forms (EQP5727, EQP5729, and EQP5756) and any additional Process Information forms for modifications to this plant must be submitted with this form. Attach a detailed site map for the new location which shows all site characteristics including the location of any residential and/or commercial establishments and places of public assembly which are located within 1,000 feet of the proposed site. Certify and submit this form and any attachments to the Permit Section and the appropriate district office for the new location. See map for district office locations.

1. FACILITY CODES STATE REGISTRATION NUMBER (SRN):		STANDARD INDUSTRIAL CLASSIFICATION (SIC) CODE:
2. APPLICANT NAME *(Business license name of the corporation, partnership, individual or government agency that owns the facility)*		
3. APPLICANT MAILING ADDRESS *(Street Address or P.O. Box Number)*		
4. CITY:	5. STATE:	6. ZIP CODE:
7. NAME OF AUTHORIZED EMPLOYEE:		
8. TITLE *(person identified in item 7)*		9. TELEPHONE NO. *(person identified in item 7)*
10. CONTACT PERSON *(technical point of contact, if different than name in item 7)*		11. TELEPHONE NO. *(contact person)*
12. Is any equipment (e.g. crusher, screens, etc.) associated with this permit rented? ☐ YES ☐ NO If **Yes**, provide the name of the company renting the equipment as well as the rental company. Be sure to include any rented equipment on form EQP 5756 RENTER:		RENTAL COMPANY:

CURRENT PLANT LOCATION

13. MINE/QUARRY NAME:		14. GENERAL PERMIT NUMBER:
15. STREET ADDRESS:		
16. CITY:	17. ZIP CODE:	18. COUNTY:
19. SECTION:	20. TOWNSHIP:	21. RANGE:

NEW PLANT LOCATION

22. MINE/QUARRY NAME:		
23. STREET ADDRESS:		
24. CITY:	25. ZIP CODE:	26. COUNTY:
27. SECTION:	28. TOWNSHIP:	29. RANGE:
30. DATES PLANT IS TO BE LOCATED AT THIS SITE TO		31. AMOUNT TO BE PROCESSED AT THIS SITE *(tons per year)*
32. DIRECTIONS FROM NEAREST TOWN:		

Applicant Certification: I certify, under penalty of law, that this permit application and any attachments were prepared by me, or under my direction or supervision in accordance with a system to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. In addition, the equipment described in this application meets the necessary criteria for applicability for a General Permit to Install. Furthermore, I certify that I can and will comply with all conditions outlined in the General Permit to Install. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

SIGNATURE OF AUTHORIZED EMPLOYEE _____ DATE _____

800-662-9278 Michigan.gov/EGLE Page 1 of 1 EQP5757 Rev. 1/2020

CURRENT PLANT LOCATION

Facility/Site Name and General Permit Number – Provide the facility/site name at the current location. Include the General Permit Number issued by the AQD for this facility.

Address – Provide the current location of the facility. This item need only be completed if the process location is different from the mailing address or if the mailing address is a P.O. Box. If a street address is not available, provide the section, township, and range for the facility.

NEW PLANT LOCATION

Facility/Site Name – Provide the proposed facility/site name.

Address – Provide the proposed location for the facility. Include the street address, city, zip code, and county. If a street address is not available, provide the section, township, and range of the proposed site.

Location Dates and Process Amounts – Include the dates the facility will be located at the proposed site and the amount of material to be processed at the site. Note that the General Permit limits the amount of material processed at any one site to 2 million tons per year.

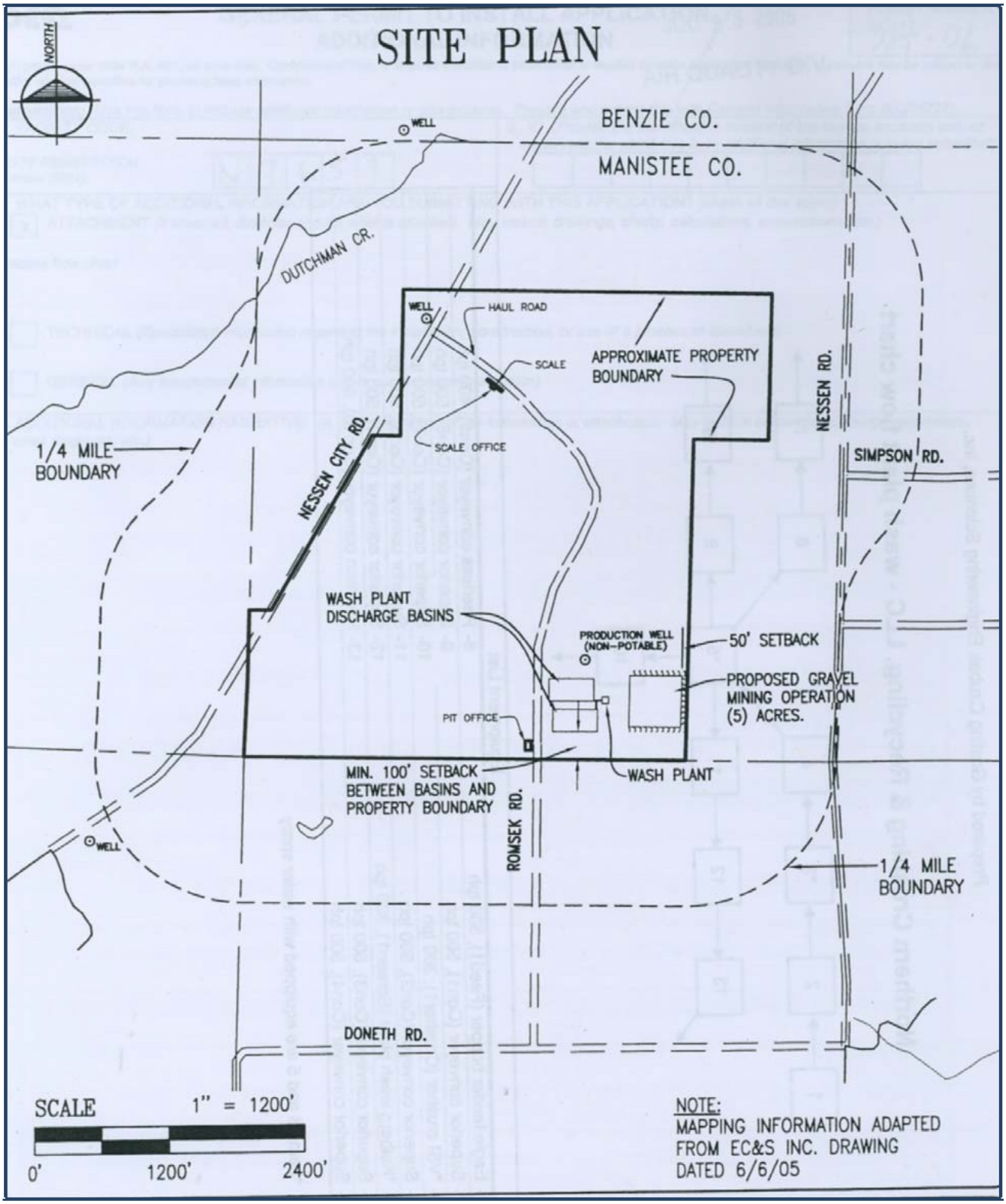
Directions from the Nearest Town – Include brief driving directions to locate the plant.

Attach Additional Information – Attach a copy of the original General Permit forms (EQP5727, EQP5729, and EQP5756) plus any Process forms for modifications that have been approved. A detailed site map showing any residential and/or commercial establishments and places of public assembly within 1,000 feet of the proposed site is also required.

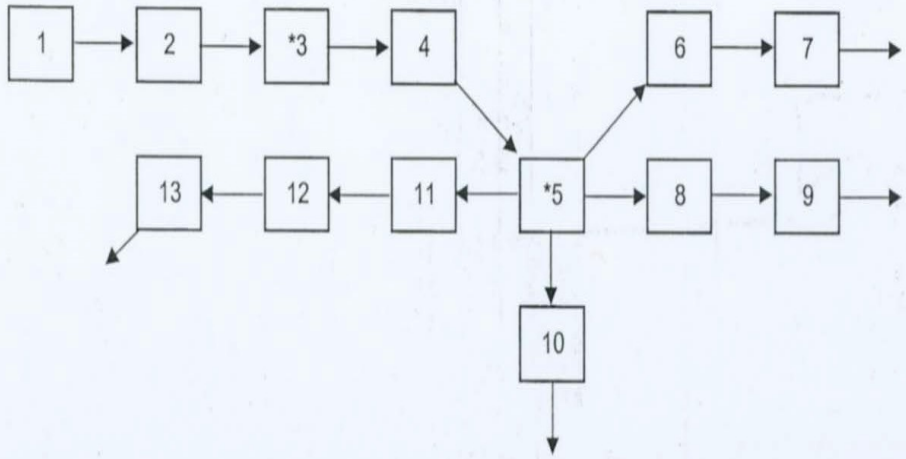
Signature of Authorized Employee – The application must be signed by an authorized employee of the applicant. This signature certifies the truth of the information provided in the application. A missing signature will result in an application being returned and a delay in processing.

Submit the completed form and attachments to both the AQD Permit and the AQD district office for the proposed plant location. To locate the appropriate district office, see Appendix E.

APPENDIX C - Sample Site/Plan Layout Map



APPENDIX D - Sample Flow Chart



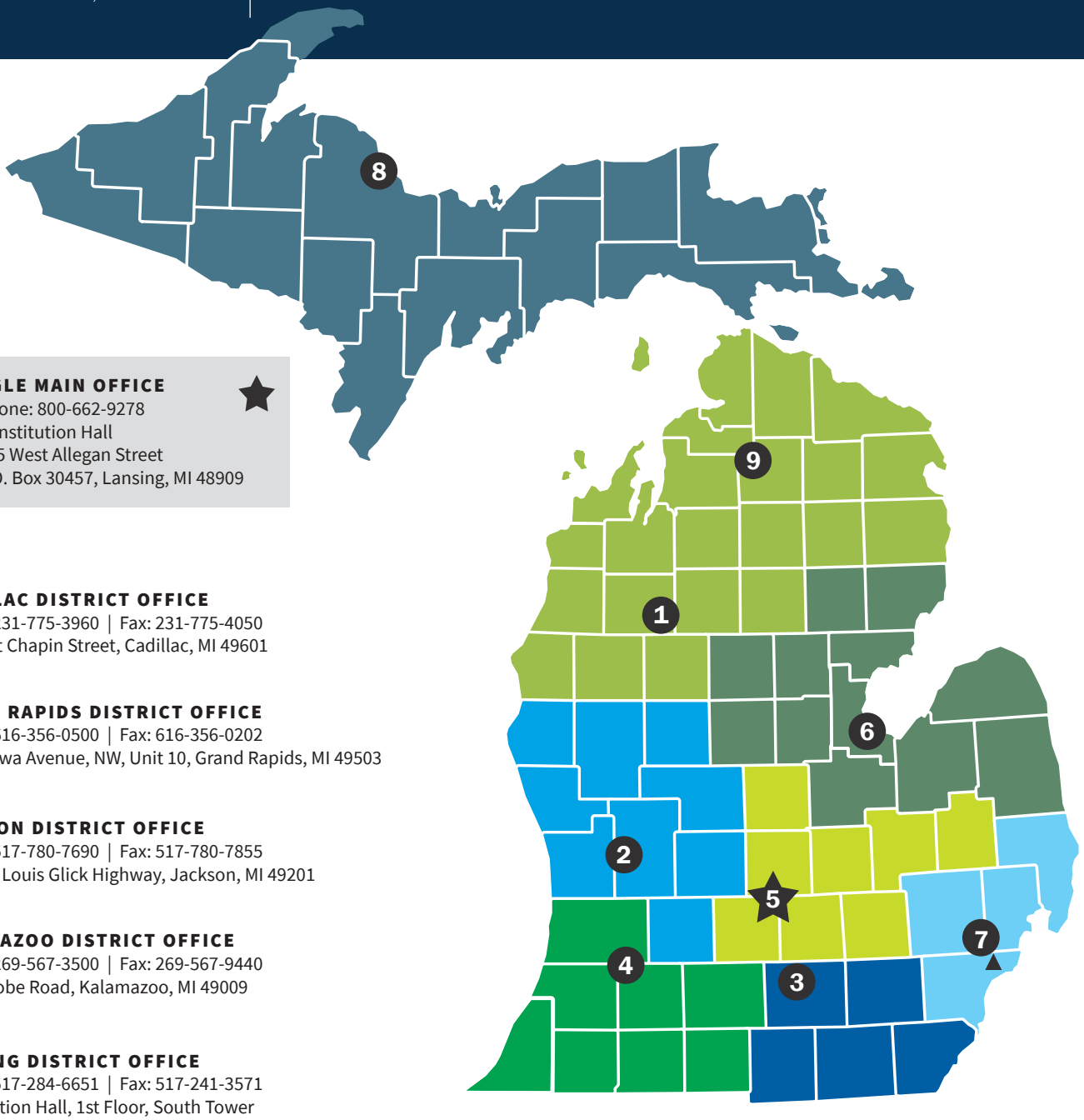
Equipment List	
1- Eagle feeder hopper (Feed1), 500 tph	8- Peerless conveyor (Con5), 400 tph
2- Superior conveyor (Con1), 500 tph	9- Superior conveyor (Con6), 500 tph
3- *VSI crusher (Crusher1), 300 tph	10- Superior conveyor (Con7), 500 tph
4- Superior conveyor (Con2), 500 tph	11- Superior conveyor (Con8), 500 tph
5- *Kolberg wash plant (Screen1), 300 tph	12- Superior conveyor (Con9), 500 tph
6- Superior conveyor (Con3), 500 tph	13- Hartman conveyor (Con10), 500 tph
7- Superior conveyor (Con4), 500 tph	

*Items 3 and 5 are equipped with water spray

APPENDIX E - District Information

EGLE
MICHIGAN DEPARTMENT OF ENVIRONMENT, GREAT LAKES, AND ENERGY

District Offices



EGLE MAIN OFFICE
Phone: 800-662-9278
Constitution Hall
525 West Allegan Street
P.O. Box 30457, Lansing, MI 48909

1 CADILLAC DISTRICT OFFICE
Phone: 231-775-3960 | Fax: 231-775-4050
120 West Chapin Street, Cadillac, MI 49601

2 GRAND RAPIDS DISTRICT OFFICE
Phone: 616-356-0500 | Fax: 616-356-0202
350 Ottawa Avenue, NW, Unit 10, Grand Rapids, MI 49503

3 JACKSON DISTRICT OFFICE
Phone: 517-780-7690 | Fax: 517-780-7855
301 East Louis Glick Highway, Jackson, MI 49201

4 KALAMAZOO DISTRICT OFFICE
Phone: 269-567-3500 | Fax: 269-567-9440
7953 Adobe Road, Kalamazoo, MI 49009

5 LANSING DISTRICT OFFICE
Phone: 517-284-6651 | Fax: 517-241-3571
Constitution Hall, 1st Floor, South Tower
525 West Allegan Street, Lansing, MI 48933

6 BAY CITY DISTRICT OFFICE
Phone: 989-894-6200 | Fax: 989-891-9237
401 Ketchum Street, Suite B, Bay City, MI 48708

7 WARREN DISTRICT OFFICE
Phone: 586-753-3700 | Fax: 586-753-3831
27700 Donald Court, Warren, MI 48092

8 MARQUETTE DISTRICT OFFICE
Phone: 906-228-4853 | Fax: 906-228-4940
1504 West Washington Street, Marquette, MI 49855

9 GAYLORD DISTRICT OFFICE
Phone: 989-701-9920 | Fax: 989-731-6181
2100 West M-32, Gaylord, MI, 49735

Map includes 9 district offices, 1 field office, and Lansing lab

▲ *Field office in Detroit*

Michigan.gov/EGLE | 800-662-9278

03/2020

APPENDIX C

January 20, 2023

City of Chicago, Department of Public Health
Attn: Environmental Permitting and Inspections
333 South State Street, Room 200
Chicago, IL 60604
Submitted via email: EnvComments@cityofchicago.org

Re: NRDC Comments on New Proposed Rules for Reprocessable Construction/ Demolition Material Facilities (November 2022 version)

To Whom It May Concern,

We submit these comments on the New Proposed Rules for Reprocessable Construction/ Demolition Material Facilities ("New Proposed Rules"), noticed by the Chicago Department of Public Health ("CDPH") in November 2022, on behalf of the Natural Resources Defense Council ("NRDC") and our millions of members and activists, including thousands of members and activists in the City of Chicago, some of whom live, work and/or play along the I-55 corridor and on the Southeast Side within a short distance of facilities that would be regulated by the New Proposed Rules. The Chicago Environmental Justice Network ("CEJN") and several of its individual members support these comments as well. NRDC also supports the comments of CEJN and its individual members submitted in this rulemaking, including those submitted in response to the prior version of the proposed rules.

At the outset, we note the continuing and ever-more pressing need for regulations and enforcement that address the many sources of pollution from facilities impacting environmental justice communities in Chicago. Based on a review of the City's environmental complaints database, community members have logged dust and other complaints about rock crushing facilities for years if not decades. Based on discussions with EJ advocates and other community representatives, these logged complaints are only the tip of the iceberg and do not reflect the true scale of impacts from these facilities experienced by community members. These same communities have been devastated by COVID and are facing increased industrial development and so pollution as the economy begins to recover.

And we reiterate that while we welcome CDPH's regulations for reprocessable construction and demolition material facilities, environmental regulations are only one piece of the needed reforms. Regulating individual industries on the back-end without addressing distributive siting issues and cumulative impacts, and without more broadly upholding civil rights, is not enough. We look forward to further working with CDPH and other committed city staff and stakeholders at this higher level to ensure a clean, safe, productive and equitable Chicago for all residents.

Finally, we note the long delay in finalizing these rules, first proposed in September 2021 (and supposedly in development long before that).[1] We urge CDPH to finalize strong rules without further delay, especially given increases in construction and demolition activity underway as the economy begins to recover from the impacts of COVID and other stressors, and as unprecedented levels of federal infrastructure funding get dispersed.

I. Air Dispersion Modeling for Existing Facilities.

The new proposed rules remove entirely the requirement for any air quality modeling to be conducted by existing sources. It appears that CDPH made this change in response to company complaints about the cost of modeling. CDPH justified the removal of any modeling obligation by noting that new/expanding sources have to do modeling in the zoning process, and that CDPH can do a modeling exercise at its discretion based on the required inventory information.

This proposed revision leaves a potentially harmful gap: the public may never know what modeled impacts existing facilities have, because the existing facilities came into being before the new zoning requirement to conduct an air quality modeling study. CDPH itself highlights in its response to comments the significant impact that rock crushing facilities can have on air quality and so public health, citing to air dispersion modeling by the Reliable Asphalt facility on W Grand Ave. The public should not have to rely on CDPH's discretion to produce an air dispersion modeling study for other existing facilities, nor should the public bear the cost of such demonstrations. CDPH should instead require every existing facility to do an air dispersion modeling demonstration upfront in its first application under the new rules, not only at CDPH's discretion and on the public's dollar. As noted above, historic and current community complaints (along with inspections verifying dust issues at the existing facilities) justify such an upfront requirement. A modeling demonstration additionally is important beyond the PM10 monitoring requirement for existing facilities, as it may help identify areas of potential heightened impact that are not picked up by the handful of perimeter monitors required under the rules (we also note the concerns with near-reference monitor accuracy discussed in more detail below).

II. PM10 Monitors/Sensors.

We reiterate our request for regulatory grade monitors to be required by the rules. There is currently a dearth of high-quality air quality monitoring in EJ communities. Community members have long criticized the lack of quality monitoring in their neighborhoods, especially relative to the pollution burdens they face. In fact, USEPA recently proposed establishing a formal requirement to locate more regulatory monitors in EJ communities, noting that these groups are at heightened risk from exposure to particulate matter and that more monitors are

[1] We incorporate by reference our prior comments on the proposed rules, dated November 1, 2021.

needed in such communities in order to properly characterize the localized risk that their populations are disproportionately likely to face.[2] More quality monitors are especially important with respect to categorizing sources of primarily localized air pollution, like rock crushing facilities.

We further note our concern that lower-quality air sensors relied upon/allowed by the proposed rules (and the Large Recycling Facility Rules) may systematically underestimate emissions if not operated and maintained correctly, and face other limitations making them potentially inappropriate in real-life Chicago EJ community settings. Such underperformance may deprive the public from consistent, reliable, and accurate data. These concerns arise in part from our evaluation of the Met One E-Sampler employed by the Chicago Rail and Port facility, located adjacent to residential EJ neighborhoods on the Southeast Side.

CDPH in 2022 issued Chicago Rail and Port a permit application deficiency letter including items related to the poor data completeness and quality from the facility's existing Met One E-Samplers in place pursuant to the Large Recycling Facility Rules (and yet issued Chicago Rail and Port a renewed permit despite the company's lack of a track record of compliance on this issue). On top of this exchange between CDPH and the company, we note California's South Coast Air Quality Management District's evaluation of the performance of the Met One E-Sampler in the field.[3] After comparing both the 1-hour and 24-hour PM2.5 (PM10 was not tested), the agency drew the preliminary conclusion that "Met One E-Samplers seem to underestimate the FEM [reference equivalent method] measurement data." A comparison of performance by two Met One E-Samplers with an FEM monitor can be seen in Figure 1.

[2] *See* USEPA, "Notice of Proposed Rulemaking for the Reconsideration of the National Ambient Air Quality Standards for Particulate Matter, prepublication (January 6, 2023) available at https://www.epa.gov/system/files/documents/2023-01/PM%20NAAQS%20NPRM%20-%20prepublication%20version%20for%20web.pdf.

[3] *See* South Coast AQMD, "Field Evaluation Met One E-Sampler," available at http://www.aqmd.gov/docs/default-source/aq-spec/field-evaluations/met-one-e-sampler---field-evaluation.pdf?sfvrsn=6.

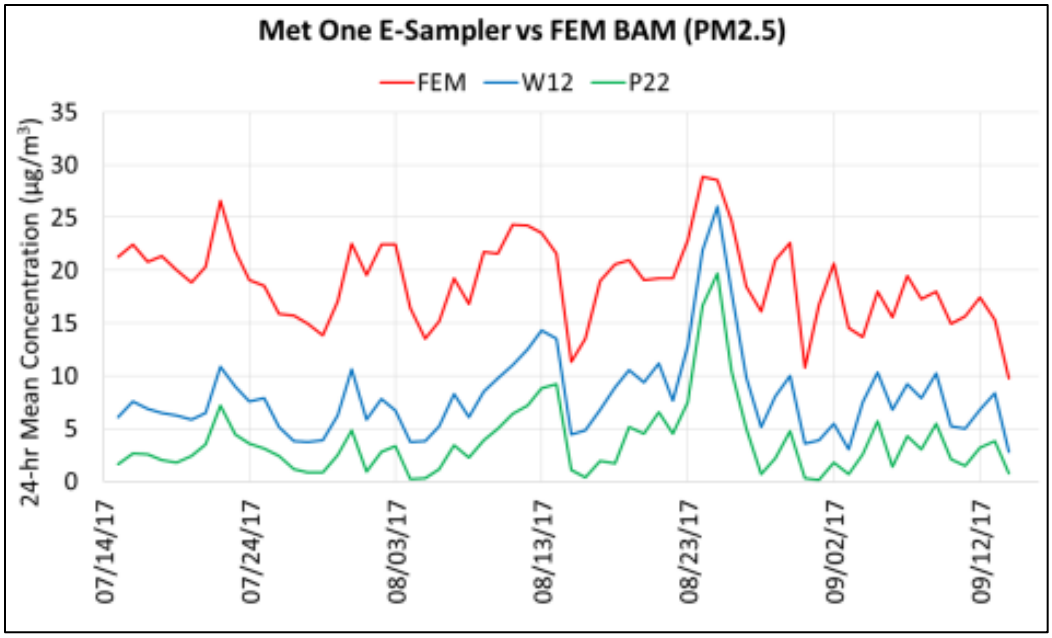


Figure 1: South Coast Air Quality Management District Field Evaluation of two Met One E-Samplers with one co-located FEM monitor (PM2.5 24-hr average).

Moreover, as seen in Figure 2, the Met One E-Sampler's manufacturer states that irregularities between the sensor and co-located reference monitors could be caused by any number of issues, such as: improper scaling (K-factor); improper maintenance (lack of monthly inlet and cyclone cleaning); or more fundamental limitations of the machine, such as its lack of accuracy when the particulate type changes or the fact that the sampler is not designed for accuracy in high winds.[4]

Problem:	**The E-Sampler data does not match BAM or FRM data at the same site**
Cause/Solution:	• A K-Factor (multiplier) must be established for good accuracy and correlation to collocated instruments. The K-Factor will sometimes be very significant, such as a multiplier of 3 or 5. See Section 5.5. • The E-Sampler is calibrated on latex 0.6 micron micro-spheres. These provide an extremely consistent calibration, but do not generally match the characteristics of ambient particulate. • The K-Factor is only valid at the same site and for the same particulate type. If the local particulate source changes, the K-Factor may no longer be valid. • The E-Sampler TSP inlet is designed for low winds only. High winds may cause a cut-point in the TSP inlet itself. • Make sure the correct cyclone is used on the E-Sampler. The PM_{10}, $PM_{2.5}$ and PM_1 cyclones look very similar. The cyclone cut point must match the cut point used on any collocated instruments. • Clean the TSP inlet and any cyclones at least monthly. • Check the sample RH data and filter RH sensor operation. High sample RH will cause E-Sampler over-reading. The sensor itself can occasionally fail. • Check the E-Sampler for flow leaks and flow calibration problems. • Check the alarm log for optical system alarms.

Figure 2: Possible causes for irregularity between E-Samplers and regulatory-grade data, from the Met One E-Sampler Operation Manual.

[4] *See* Met One Instruments, Inc., "E-Sampler Particulate Monitor Operation Manual Revision M," 2011, available at https://metone.com/wp-content/uploads/2019/05/E-Sampler-9800-Rev-M.pdf, at 44.

These last two factors are of particular concern for Chicago EJ communities faced by rock crushing and similar facilities (like metals facilities), given that such facilities likely handle a wide range of materials and experience high winds on a regular basis. To put it another way, it's not clear that proper operation and maintenance can address the shortcomings of these sensors with respect to monitoring air quality impacts of rock crushing facilities in the city.

Nor are our concerns about the reliability of non-regulatory-grade monitors in Southeast Chicago hypothetical. As described below, PM10 measurements made at two co-located monitors at/near the Chicago Rail and Port site — one regulatory, and one "near-reference" E-Sampler — show that the near-reference monitor appears to *consistently* record pollutant levels well below those recorded by the regulatory-grade monitor. For the time period of November 2021 through August 2022, we were able to directly compare monitoring data from these two monitors: a regulatory-grade monitor at S.H. Bell Company ("SHB S1") and a near-reference sensor at Chicago Rail and Port ("CRP NW"). The monitors are located approximately 200 feet apart from each other, as seen in Figure 3).

SHB S1 regulatory grade monitor recorded PM10 levels once per hour, while CRP NW near-reference sensor recorded PM10 levels every 15 minutes. Over the 10-month period for which we have data from both monitors, there are over 7,000 instances where the two monitors recorded a measurement at the same time. On average, each measurement by the "near-reference" CRP NW monitor was only 84% as high as the corresponding measurement made by the regulatory-grade SHB S1 monitor. The vast majority of measurements made by CRP NW fall below the 1:1 line compared against SHB S1 (see chart of simultaneous readings, Figure 4). Whether this is a result of technological limitation or the result of unsatisfactory calibration and maintenance practices, this consistent undersampling indicates that the use of non-regulatory-grade monitors should be a concern for CDPH and for local communities.

Figure 3: Location of the regulatory-grade SH Bell S1 monitor and the "near-reference" Chicago Rail and Port NW Monitor.

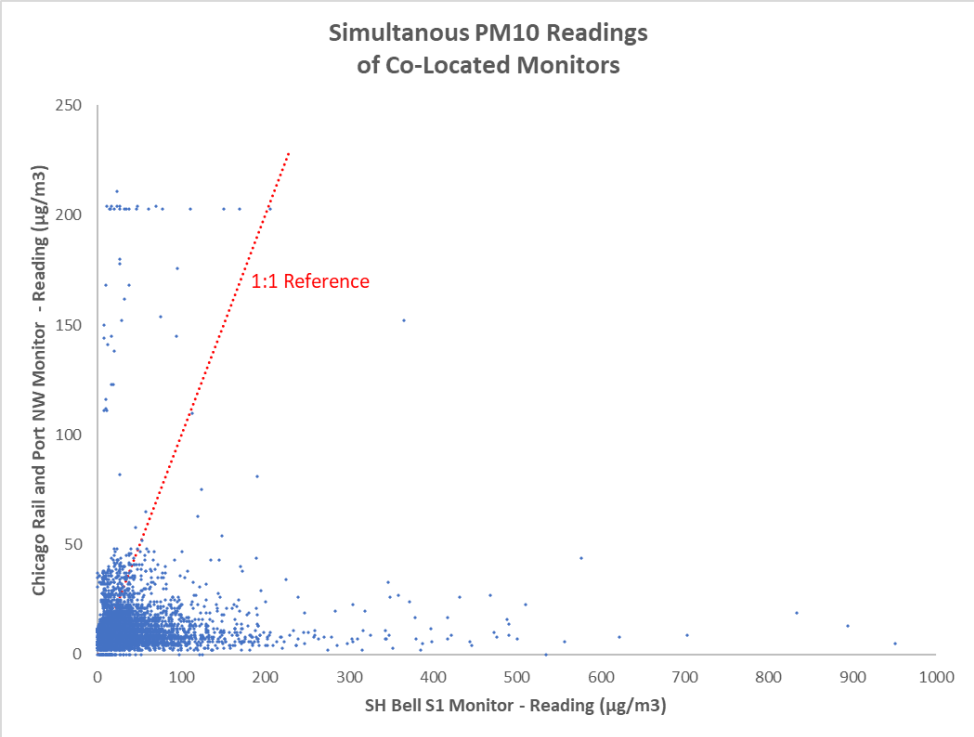


Figure 4: Comparison of simultaneous PM10 readings made by two co-located monitors. Red dashed line indicates equivalent measurements from both monitors.

The monitors can also be compared by tracking a rolling 24-hour average of their PM10 readings across the ten-month period (see Figure 5). The difference between the two monitors here is even more stark than one might guess from the 84% figure derived by comparing individual measurements. Not only does CRP NW consistently output a far lower 24-hour average than SHB S1; it also does not seem consistently sensitive to the recurring peaks that are picked up on the regulatory-grade monitor. This is concerning because it indicates problems which cannot be corrected by scaling to an appropriate K-factor alone. On multiple occasions during this period, SHB S1 recorded pollutant levels that approached or exceeded the 24-hour NAAQS standard for PM10; the same events often did not even register as spikes on CRP NW. In an industrial area so near to fence-line residential communities, these recurring peaks and exceedances are exactly the type of data that need to be accurately measured and addressed in order to protect public health.[5]

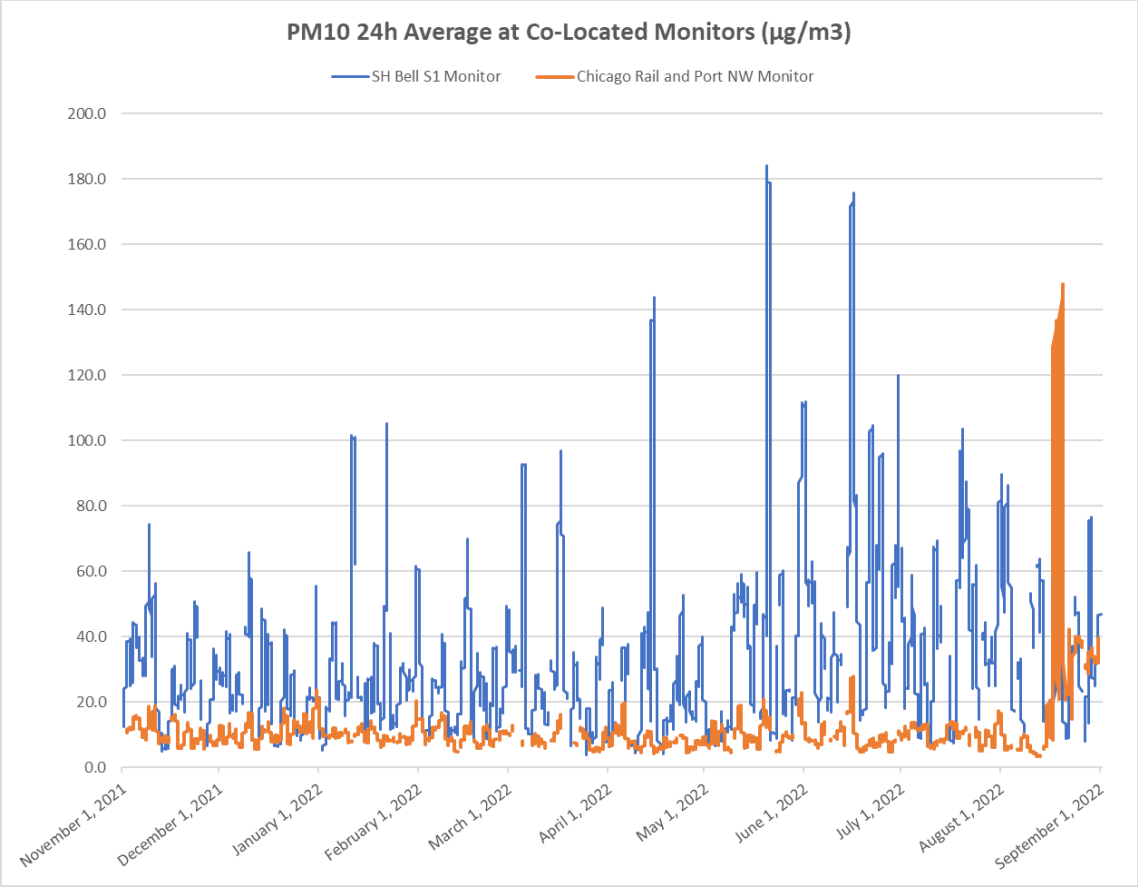


Figure 5: Comparison of rolling 24-hr average of PM10 readings made by two co-located monitors.

[5] It appears that CDPH's evaluation of PM levels during high wind events, which the agency cites in both the current rulemaking and the Large Recycling Facility Rule rulemaking, is based on the problematic Chicago Rail and Port data. CDPH should determine whether the underlying issues with this data impact the conclusions of that wind evaluation and of the agency's resulting regulatory decisions with respect to high winds.

In sum, CDPH should not continue to allow sensors that are not appropriate for the task at hand and that may pose unacceptable issues with data quality and coverage, especially where those issues appear to bias results by underestimating impacts to communities. CDPH should instead require regulatory grade monitors at rock crushing facilities, especially given that such existing facilities have already resulted in numerous community complaints about dust and other air issues. At the very least, CDPH must provide a full justification for allowing facilities to employ sensors, including whether such sensors are appropriate in this application in light of varying particle types and high winds likely existing at these and similar facilities.

III. Emissions Inventory Reporting.

The acceptable format for reporting data should be standardized to CSV, rather than the proposed variety of options which includes PDF. Section 7.18 of the New Proposed Rules would require facilities to submit emissions inventory data on an annual basis in the form of "a spreadsheet, portable document format (.pdf), online or mobile application format." Certain formats, particularly PDF, are hostile to third-party analysis. PDFs often must be translated by hand into manipulable spreadsheets by those wishing to interpret the data. This process ends up being highly burdensome to the public, while creating no benefit to the facility (which likely maintains these data via more accessible spreadsheet formats in the first place). The value of accessibility of these data to third parties is particularly heightened since — as is discussed earlier in this comment — the proposed rules eliminate the requirement for existing facilities to conduct their own air dispersion modeling.[6] Therefore, the city should require that all emissions inventory data be made available to the public in .csv spreadsheet format.

Respectfully submitted,

/s/ Meleah Geertsma
Meleah Geertsma
Director of Environmental Justice Policy
Environment, Equity & Justice Center
Natural Resources Defense Council
20 N. Upper Wacker Drive, Suite 1600
Chicago, IL 60606
Mgeertsma@nrdc.org

[6] We note that requiring the inventory data to be provided in CSV format is not an acceptable alternative to requiring existing facilities to conduct an air dispersion modeling study in the first instance.

/s/ Ihab Mikati
Ihab Mikati
Environmental Justice Attorney
Environment, Equity & Justice Center
Natural Resources Defense Council
20 N. Upper Wacker Drive, Suite 1600
Chicago, IL 60606
Imikati@nrdc.org

APPENDIX D

January 20, 2023

Commissioner Allison Arwady, M.D.
Department of Public Health
City of Chicago
333 South State Street, Room 200
Chicago, Illinois 60604

Honorable Commissioner Arwady,

Thank you for the opportunity to provide comments concerning the Proposed Rules for Reprocessable Construction/Demolition Material Facilities; Revised November 21, 2022 ("Revised Proposed Rules").

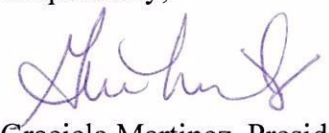
These rules seem to the average local hauling business to be over-complicated and unnecessary. The most recent US EPA report on the City of Chicago demonstrates that the air in Northbrook, IL is the same or worse than the air on the southeast side of the City. https://www.epa.gov/system/files/documents/2021-10/southeast-chicago-air-quality-report-202110-26p.pdf

The Department has not provided any cost-benefit or economic analysis to confirm that the Revised Proposed Rules will not reduce recycling and increase the amount of waste that is sent to landfills. In the absence of this analysis, the Department may face criticism that the Proposed Rules are arbitrary in nature.

The proposed rules would be simply shifting any perceived burden to other communities and increase the miles driven to projects that will be built. Increased transportation costs will result in taxpayers being forced to pay higher rates for waste hauling, processing, and disposal.

We respectfully request the Department reconsider implementation of these Proposed Rules that will reduce recycling and increase the carbon footprint of construction within the City of Chicago.

Respectfully,



Graciela Martinez, President
Five Star Hauling Inc

APPENDIX E

RELIABLE

Asphalt Corporation

January 20, 2023

Commissioner Allison Arwady, M.D.
Department of Public Health
City of Chicago
333 South State Street, Room 200
Chicago, Illinois 60604

Honorable Commissioner Arwady,

Thank you for the opportunity to provide comments concerning the Proposed Rules for Reprocessable Construction/Demolition Material (RCDM) Facilities [Revised November 21, 2022 ("Revised Proposed Rules")].

As noted in our original comments, before adopting the Revised Proposed Rules the Department should produce evidence verifying that the regulations are required to address a documented need or problem. Neither the Department nor any government source has publicly provided an evidence-based justification for the proposed new rule. Moreover, the Department has not provided any study or authority affirming the assertion that RCDM facilities "can be significant sources of dust and contaminated storm and process water discharges with the potential to harm human health and the environment and cause a public nuisance or adversely impact the surrounding area or surrounding users."

Likewise, the Department has not provided any economic analysis or predictive analytics to confirm that the Revised Proposed Rules will not curtail recycling and increase the amount of waste that is sent to landfills. If the Department acts in the absence of evidence that defines the need for the regulation or confirms that the regulation will not create unintended negative consequences, the Department may face criticism for creating an arbitrary and capricious rule.

Most of the RCDM facilities within the City limits serve as recycling centers for public works projects conducted by the Departments of Transportation and Water Management. If the Revised Proposed Rules drive RCDM facilities outside city limits, the City will increase its carbon footprint by hauling waste to be processed beyond the municipal boundaries. Increased transportation costs will result in taxpayers being forced to pay higher rates for waste hauling, processing, and disposal. The City of Chicago has sufficient contractual requirements for RCDM facilities to process materials in a clean, compliant, and safe manner. The Revised Proposed Rules are unnecessary and burdensome and, if adopted, these regulations will increase taxpayer costs, eliminate local jobs, and stymie recycling.

3741 South Pulaski Road, Chicago, Illinois 60623
Ph. 773-254-1121 * Fax 773-254-7489

We respectfully request reconsideration of the comments that Reliable Asphalt Corporation previously submitted concerning the Proposed Rules for Reprocessable Construction/Demolition Material Facilities (Dated September 17, 2021), and also submit the attached additional comments.

Respectfully,

Josh Quinn
Director of Safety, Environmental Services & Compliance
Reliable Asphalt Corporation

1. The definition of "Capital Improvement" is overly broad. The proposed definition of "Capital Improvement" will needlessly subject all facilities to the Revised Proposed Rules immediately. The proposed definition should be amended to include only changes that require an amendment to an existing permit issued by CDPH or a new permit.

2. The Department need not regulate "Incidental Debris" as newly defined in the Proposed Revised Rules. The materials listed as "uncontaminated debris" do not compromise the air quality in Chicago. Material storage and handling are sufficiently regulated by the limits on pile height and existing stormwater management regulations.

3. Sections 3.8.6 and 4.8.2 should be more specific. The standard of whether "internal roads and parking areas are maintained to meet the paving objectives of these rules" is too subjective. Moreover, these sections should not eliminate the opportunity for facility operators to use asphalt grindings as paving. Finally, the Department should clarify why it references the Washington State Department of ***Transportation*** Pavement Surface Condition Rating Manual rather than the existing specifications and regulations published by the Illinois Department of Transportation or the Guide for the Design of Pavement Structures, published by the American Association of State Highway and Transportation Officials (AASHTO).

4. Sections 3.10.20 and 4.8.11. Additional Requirements should be amended to limit the Commissioners' authority to seek "additional information." The Commissioner's authority should be limited only to additional information regarding the design or proposed operation plans of a facility.

5. Section 4.1. Professional Engineer should be eliminated. Operators of existing facilities should be allowed, if able, to prepare applications, including the required information, without the seal of a Professional Engineer ("PE").

6. Section 4.6. Property Taxes should be eliminated. The City is not likely to improve air quality or otherwise protect the environment by requiring the applicant to provide "Documentation evidencing the payment of real estate property taxes by providing copies of the most recent tax bill and check; or by providing a copy of the most recent tax bill that has been stamped paid by the Cook County Treasurer's office, or payment receipts issued by said office."

3741 South Pulaski Road, Chicago, Illinois 60623
Ph. 773-254-1121 * Fax 773-254-7489

7. The requirement for continuous Dust Monitoring, Air Monitoring, and related plans should be eliminated.

   In the alternative, Section 5.5 (a)(ii) should be revised to eliminate modeling "performed by others," as such an allowance may subject applicants to standards set by parties whose work may not conform to general standards of professionalism. Suggested substitute language follows:

   > At each location within the Facility as found in an air quality impact assessment created by a professional engineer or the Air Quality Impact Assessment (AQIS) or other equivalent air impact analysis performed by CDPH ~~or others~~, ~~to potentially~~ and found to be potentially more likely than not to exceed EPA's 24-hour standard for PM10 more than one time per 30-day period ~~or relevant acute or chronic health screening limits or standards~~.
   >
   > For PM10, a potential exceedance shall mean the highest 24-hour annual concentration modeled latest Ambient Air Background Concentrations table posted in the City's Air Quality Ordinance, Resources for Applicants web page (https://www.chicago.gov/city/en/sites/air-qualityzoning/home/resources-for-applicants.html).
   >
   > The applicant may propose an alternate monitor-siting approach or may request a waiver from this requirement for the Commissioner's review and approval, which shall not be unreasonably denied. Proposals for alternate approaches or waivers shall be supported by sound science and statistics that consider meteorological conditions, pollutant sources and concentrations, and topography. ~~and other pertinent factors.~~

8. If the Department insists on adopting the Revised Proposed Rules, existing facilities should be granted a three-year amnesty period. The amnesty period will allow operators to seek adjustments to long-term contracts and to operating permits granted by the Department to increase the amount of tonnage processed at each site. Without a substantial increase in processing, most RDCM operators will not be able to bear the substantial financial burden that will be caused by the new regulations.

APPENDIX F

January 20, 2023

Commissioner Allison Arwady, M.D.
Department of Public Health
City of Chicago
333 South State Street, Room 200
Chicago, Illinois 60604

Honorable Commissioner Arwady,

Thank you for the opportunity to provide comments concerning the Proposed Rules for Reprocessable Construction/Demolition Material Facilities; Revised November 21, 2022 ("Revised Proposed Rules").

These rules seem to the average local hauling business to be over-complicated and unnecessary. The most recent US EPA report on the City of Chicago demonstrates that the air in Northbrook, IL is the same or worse than the air on the southeast side of the City. https://www.epa.gov/system/files/documents/2021-10/southeast-chicago-air-quality-report-202110-26p.pdf

The Department has not provided any cost-benefit or economic analysis to confirm that the Revised Proposed Rules will not reduce recycling and increase the amount of waste that is sent to landfills. In the absence of this analysis, the Department may face criticism that the Proposed Rules are arbitrary in nature.

The proposed rules would be simply shifting any perceived burden to other communities and increase the miles driven to projects that will be built. Increased transportation costs will result in taxpayers being forced to pay higher rates for waste hauling, processing, and disposal.

We respectfully request the Department reconsider implementation of these Proposed Rules that will reduce recycling and increase the carbon footprint of construction within the City of Chicago.

Respectfully,

Juan Guerra
President
Guerra Trucking, Inc.

Illinois Association of Aggregate Producers
1115 S. 2nd Street • Springfield, Illinois 62704
Phone (217)241-1639 Fax (217)241-1641 www.iaap-aggregates.org

Dan Eichholz, Executive Director	dan@iaap-aggregates.org
Shawn McKinney, Assistant Director	shawn@iaap-aggregates.org
Jodi Crowe, Office Manager	jodi@iaap-aggregates.org

January 19, 2023

Chicago Department of Public Health
333 South State Street #200
Chicago, IL 60604
Submitted via email: envcomments@cityofchicago.org and CDPH Website

Re: Proposed Rules for Reprocessable Construction/Demolition Material Facilities
Comments to Proposed Rules

The Illinois Association of Aggregate Producers (IAAP), the trade association representing companies that produce and recycle crushed stone, sand, gravel and other industrial minerals in Chicago and Illinois, submits the following written comments to the Revised Proposed Rules for Reprocessable Construction/Demolition Material Facilities dated November 21, 2022, and prepared by the City of Chicago, Department of Public Health. These comments outline the historical development of concrete and asphalt recycling practices and the economic benefits these alternatives provide to put into context the opposition to these proposed rules and the potentially unintended and detrimental effect it will have on construction costs in general.

Simply put, the proposed rules set forth by the City of Chicago, Department of Public Health discourage recycling. Consider the following:

- The proposed rules arbitrarily take federal monitoring and measurement standards and make them more stringent without attributing the reason(s) to a specific air quality issue. These same proposed rules related to monitoring and measurements are already regulated by intragovernmental and intergovernmental sister agencies.
- The majority of Reprocessable Construction Demolition Materials (CDM) Facilities subject to these proposed rules currently emit 95% less than the Clean Air Act Permit Program (CAAPP) annual threshold of particulate matter. Further, the quantity of emissions at maximum production levels at the majority of these same CDM facilities is approximately 50% less than the Registration of Smaller Sources (ROSS) program permit requirements. Therefore, it is excessive and burdensome for these recycling sites to comply with the proposed rules.
- Surrounding industries and facilities emit higher levels of the same constituents of concern listed in this proposed rule, while operating under more stringent air permits than those facilities targeted by this rulemaking.

- The increased and disproportionate costs associated with operating a reprocessable construction demolition material facility under these proposed rules will ultimately discourage compliant industrial recycling operations in the City of Chicago.

As a result, the focus should remain on protecting and maintaining the ozone standard and not punishing operators who generate minor quantities of PM10 emissions. The costs borne by the operator to continue to recycle these materials will increase significantly and result in the stoppage of these types of operations. In some cases, smaller facilities will close, and hauling and disposal costs will increase. As such, the City will be able to do less infrastructural work since increased costs will reduce the number of projects that can be completed in a year. Recycling reprocessable construction demolition materials saves money, conserves landfill space, reduces consumption of resources, and promotes sustainable construction practices, which are good for the environment. Advancing such a significant change to a vital system such as infrastructure without consulting industry, other City of Chicago Departments who perform the construction work, as well as seeking input from City Council, requires thoughtful consideration, engagement between stakeholders, and further analysis.

The City of Chicago, in collaboration with the Delta Institute, recently released the *2021 City of Chicago Waste Strategy*, a comprehensive waste and materials management plan that overhauls the City's waste system with a goal to minimize landfilling, increase diversion and recycling, reducing costs and increasing efficiency; maximizing economic investment and workforce development opportunities; and addressing social and environmental justice inequities. Additionally, in accordance with the Chicago Climate Action Plan, one of the primary initiatives is to reduce, reuse, or recycle 90% of the City's waste. Furthermore, the Chicago Sustainable Development Policy has required specific sustainable construction goals to be met for projects receiving financial assistance or special approvals from the City. Implementing these proposed rules is a step in the opposite direction that will impede the achievement of each of these initiatives when you consider that over the past five (5) years, more than 2.5 million tons of concrete and asphalt from city specific public works and infrastructural projects have been recycled. The limitations proposed in these rules appear to discourage recycling efforts in the construction materials industry. Consequently, recycling sites that handle reprocessable construction demolition materials will be forced to close. As a result, the carbon footprint (CO2 emissions) will increase due to greater distances to haul debris to landfills, recycling will decrease, construction costs will increase significantly, and workforce opportunities will shrink. C&D debris from roadway construction, which has the highest potential for recycling, is a significant source of material generation in the City of Chicago in amounts upwards of 1.3 to 1.4 million tons annually. These proposed rules make it increasingly difficult and cost ineffective for these types of facilities to manage such materials.

In broad terms, asphalt and concrete removed as part of typical construction projects were historically destined for landfill disposal. Whether asphalt removed from a parking lot or concrete taken from a building demolition or sidewalk removal, these materials were simply taken to the nearest landfill for final disposition. Managing materials in this fashion comes with significant costs when considering the hauling or freight to transport the materials, the actual landfill disposal cost, and ancillary costs such as filling landfills at a much quicker rate.

Historical concerns related to the reuse of recycled concrete and asphalt limited the placement and usage of the recycled material to mostly fill products. However, with the improvements to the actual crushing process in a recycling operation, issues related to gradation and quality have subsided and the finished recycled product now has many uses and applications across the construction industry. Further, by-products of the recycling process such as steel can also be recycled. In today's market, the various types of concrete used in construction no longer limit what can ultimately be recycled – jointed plain pavement, jointed reinforced pavement, and continuously reinforced pavement can all be crushed and returned to the economic mainstream.

The IAAP offers the following specific comments to the proposed rules. Comments are broken into three (3) sections; rule specific, questions pertaining to proposed rules, and general overview. Additionally, we respectfully

request a meeting with the Department of Public Health staff to express known and potentially unintended industry-specific concerns related to these rules.

Rule Specific Comments

Section 4.8.10 – Fugitive Dust BMP Evaluation
Comment(s):
4.8.10.b is not necessary if the independent third party list their qualifications as part of the evaluation. The relationship to the Owner or Operator is irrelevant if an independent third party completes the work.

Section 5.1.c – Types of Material
Comment(s):
This section references a screening protocol that requires signed affidavits for each source. Facilities accepting reprocessable construction demolition material (CDM) often take material from thousands of sources and trucks annually. This requirement is excessive as facilities have thorough inspection procedures followed for each incoming load and documentation of this inspection is done through the ticketing system. A separate signed affidavit for each source is overly burdensome and should be stricken from the proposed rule.

Section 5.2.a – Quantity of Materials
Comment(s):
This section references detailed calculations to estimate quantity of materials handled at a facility. Given the proposed rule language utilizes tons as well as cubic yards in the various sections when discussing quantities, CDPH should either provide a conversion factor to streamline data into one unit or change the language to one unit for consistency. If CDPH will allow the owner/operator to determine these factors on their own, clarification allowing this should be included in the proposed rules.

Section 5.5.b – Dust Monitoring Plan – Seasonal Variation in Wind Direction
Comment(s):
To comply with this entire section, the Facility will install a continuous air monitoring system that will be approved by the City of Chicago, Department of Public Health. Monitors will be placed in accordance with the conditions of the approved plan, using prevailing wind direction guidance from the City of Chicago Air Quality Ordinance. Further relocation and adjustment of the units from their final places in order to account for seasonal variation in wind direction is impractical and infeasible and will require constant recalibration to ensure proper operation. This requirement is excessive and should be removed.

Section 5.5.g – Dust Monitoring Plan – Triennial Sampling
Comment(s):
The City of Chicago, Department of Public Health should provide additional information as to what the data will be used for and what standards the results will be evaluated against.

Section 5.12 – Housekeeping
Comment(s):
The proposed rules require the Facility to develop maintenance plans related to pavements, stormwater, dust control, fixed and mobile equipment, and material storage, to name a few. The conditions listed in items b, d, e, and f are incredibly excessive and overlap with the components of other plans listed above that are required by the proposed rule. These items should be stricken from this section entirely.

Section 6.7 – Full Application
Comment(s):
The proposed rules require the Facility to submit a full application at least once every three (3) years. If no significant material processing changes have occurred or been made at the Facility, the owner/operator should sign an affidavit attesting to that fact and a full application should not be required until such changes occur.

Section 7.2 – Hours of Operation
Comment(s):
The language at the end of Section 5.14 should be added to this section for the purposes of additional clarification that a request for written waiver shall not require a noise impact assessment in temporary circumstances when the facility is accepting materials from government infrastructure projects.

Section 7.5.1 – Vehicles
Comment(s):
The language in this section should clarify that the owner or operator of the Reprocessable CDM facility should not be responsible for repair or replacement of damaged or torn tarps on inbound and outbound trucks. The facility does not own or operate the inbound/outbound trucks. In many cases, the facility has a tarping policy which refuses service to inbound trucks that enter the site without a tarped load as well as an outbound truck that cannot tarp the load prior to exiting. No comparable equipment compliance rule applies to any other industry relating to commercial vehicle deliveries or pickups.

Section 7.6.2.c – Fugitive Dust – Opacity Limit
Comment(s):
The determination of compliance with the opacity should be done at intervals consistent with state and federal requirements, and in this case, specifically in accordance with the methods and requirements established in 40 CFR Part 60, Subpart OOO, Appendix A. These requirements specifically state that opacity shall be determined as an average of 24 consecutive observations recorded at 15-second intervals, which is equivalent to an average of the readings conducted in a 6-minute period. Given that there is a specific method outlined in the federal standards and incorporated into the state permit requirements, the requirement in these proposed rules should not be more stringent, especially when it is arbitrary and capricious in nature. A more specific method used for roadways and parking lot that depicts site operating conditions as an average over a period of time is a more accurate indicator of whether there is an actual issue with respect to fugitive dust at the site.

Section 7.6.2.d – Fugitive Dust – Quarterly Opacity Measurements
Comment(s):
This section should clarify what specific opacity measurements are required to be completed on a quarterly basis. The language does not identify what pieces of equipment should be tested or if one measurement per quarter is satisfactory.

Section 7.20 – Affidavit of Reprocessing
Comment(s):
This proposed rule creates a reporting requirement that requires an owner/operator to report proprietary information that could also create anti-trust issues with other facilities if the information becomes available through a Freedom of Information Act (FOIA) request, or other publicly shared domains. The language in this requirement should be edited to consider the sensitivity of this information and the need to protect it.

Additional Questions & Comments Pertaining to Proposed Rules Comments

1. Will the City of Chicago, Department of Public Health (CDPH) consider allowing owners/operators to conduct semi-annual or baseline air quality monitoring over a period of time to determine if continuous monitors should be required, in place of a preemptive requirement to install permanent or continuous monitors?

2. Section 5.5.g requires triennial air sampling for specific pollutants. Will CDPH amend the language in this section to allow facilities to establish a baseline concentration for each of the pollutants? Further, if future sampling results are higher (i.e., a percentage that includes a margin for changes in area background or sampling error) than the established baseline, will CDPH consider requiring the facility to perform continuous air monitoring only if an exceedance of the baseline is determined?

3. Section 5.5.g of the proposed rules should not grant the Commissioner or CDPH blanket authority to "require the air monitoring or sampling of other contaminants that may reasonably be emitted from the Facility at harmful levels". Sampling of pollutants other than PM10 can require separate, discrete, and additional air monitors to capture this data. The list of potential contaminants believed to be present in these types of operations has already been identified and cannot be an open ended and random sampling exercise. The proposed rule inappropriately gives CDPH the authority to require additional or differently located monitors without a requirement to explain the reasoning for the change.

4. Section 7.6.3.c appears to allow additional monitoring methods to include video recording. The potential use of "video recording" should be removed from the proposed rule as there is no federal or state regulatory requirement or basis establishing that the recording will provide relevant data to evaluate health impacts or determine compliance with emissions requirements. No U.S. EPA or state reference method requires or prescribes to the use of video recording. Additionally, there is no regulatory or scientific basis for establishing that video recording will provide data relevant for evaluating health impacts or particulate emission levels generated by a Facility. Further, the authority granted to require such video recording provides no criteria or bases for the Commissioner to actually determine when PM10 monitoring does not "adequately assess the health impacts of such emissions." This provision allows the Commissioner or CDPH to arbitrarily determine impacts to health without following a clearly identified method or procedure for such an evaluation.

5. The proposed Reportable Action Level (RAL) of 150 ug/m3 appears to be based on the current primary NAAQS standard for PM10. This criterion is inappropriate given the primary NAAQS standard for PM10 is based upon a 24-hour, and not a 15-minute averaging period (more specifically, 150 ug/m3 on a 24-hour averaging period, not to be exceeded more than once per year on average over 3 years). The primary standard for NAAQS is established – by law – to be protective of human health. U.S. EPA has routinely reviewed the averaging period for the primary standard for PM10 and has consistently determined that no scientific or other basis exists warranting a sub-daily averaging period for PM10 (or, for that matter, fine particulate matter PM2.5). Most recently, on December 18, 2020, U.S. EPA confirmed its intent to preserve the 24-hour averaging period for PM10 primary NAAQS. Establishing a RAL based on a more stringent averaging period for PM10 has not been demonstrated or determined to be more protective of human health or the environment. As a result, the RAL standard is arbitrary and capricious and, at best, should be revised to a 24-hour averaging period consistent with U.S. EPA's PM10 primary NAAQS standard.

6. It should be noted that Illinois already operates a U.S. EPA- approved ambient monitoring network, which includes PM10 monitors, to demonstrate compliance with the PM10 NAAQS. The monitors required

under the proposed rule are not intended to monitor compliance with the PM10 NAAQS and, therefore, the RAL should not be based upon a NAAQS design value. Additional supporting information on the Illinois Ambient Air Monitoring 2022 Network Plan can be found at the attached link: https://www2.illinois.gov/epa/topics/air-quality/outdoor-air/air-monitoring/Documents/Draft%20Network%20Plan.pdf.

7. There is no evidence that PM10 monitors can provide reliable measurements of particulate levels over such a short duration averaging period. Absent such evidence, it is inappropriate to base response actions on potentially inaccurate or unreliable measurements. The RAL should be revised to, at best, require action following an exceedance over a 24-hour averaging period. The current federal PM10 primary NAAQS is set at 150 ug/m3 over a 24-hour averaging period, meaning that U.S. EPA has determined that PM10 levels below 150 ug/m3 over that averaging period *is* protective of human health and the environment. If an Applicant submits monitoring data for a period of a month demonstrating that no exceedance of the 150 ug/m3 particulate level has occurred over a 24-hour averaging period, will CDPH consider this sufficient data to justify an alternative RAL for which the language e in Section 7.6.3.f appears to allow a request to be made?

8. The 15-minute averaging period greatly increases the likelihood that PM10 monitors will be influenced/affected by brief, localized, non-Facility (i.e., offsite) sources of particulate matter. The RAL should be established with a longer (minimum 24-hour) averaging period to increase the likelihood that monitored exceedances reflect particulate emissions emanating from the regulated Facility. Moreover, response actions and the obligation for Facilities to *determine* through their "Contingency Plan" whether mitigative actions are required – should be based on a longer averaging time (i.e., 24-hours or longer) in order to lessen the likelihood of RAL triggers from offsite (non-Facility) sources that cannot be mitigated by the Facility. A brief, episodic, detection in excess of 150 ug/m3 may occur, for example, due to passing vehicles or other offsite sources. Requiring that Facilities evaluate whether mitigative actions are required for *each and every* potential RAL occurring every 15 minutes from any PM10 monitor is infeasible, unduly burdensome, and will not provide a Facility with sufficient time to properly respond to or mitigate actual onsite sources of elevated particulate emissions.

9. It should be strongly emphasized that that PM10 monitors do not account for the actual source of dust. Particulate matter detected by a monitor can either be from a permitted site, a neighboring property such as a restaurant, adjacent roadways, or open field. PM10 monitors can trigger a number of false positives when detecting dust from a permitted site. The proposed rules consider a facility to be in violation regardless of where the dust came from.

General Overview Comments

Comments: Opacity and Measurements

The determination of compliance with the opacity should be done at intervals consistent with state and federal requirements. These requirements are outlined in Method 9 (as referenced above) and specifically state that opacity shall be determined as an average of 24 consecutive observations recorded at 15-second intervals, which is equivalent to an average of the readings conducted in a 6-minute period. Given that there is a specific method outlined in the federal standards and incorporated into the state permit requirements, the requirement should not be more stringent, especially when it is arbitrary and capricious in nature. A more specific method used for roadways and parking lot that depicts site operating conditions as an average over a period of time is a more accurate indicator of whether there is an actual issue with respect to fugitive dust at the site.

Persons conducting inspections of permitted facilities for the purposes of compliance enforcement and making determinations of opacity readings need to be certified to conduct Method 9 testing for visible emissions or opacity in accordance with the methods and requirements established in 40 CFR Part 60, Subpart OOO, Appendix A. Without proper training or adequate experience and certification, opacity determinations are not verifiable.

The Opacity Limit and Quarterly Opacity Measurements should be required in place of real time or continuous air monitoring systems. If an operator cannot demonstrate compliance with either section over a period of time, then the City could require them to implement real time, continuous air monitoring as a basis for improving dust control methods, developing contingency plans, including suspension of operations during certain conditions.

Comments: Potential for Dust at Crushing Facilities

In order to obtain coverage under the Illinois EPA air permit program, a facility must calculate potential to emit (PTE) air contaminants to evaluate which classification the site falls under (i.e., minor or major source). When conducting this evaluation and completing these calculations, facilities that would be covered by these rules fall under the smallest source of emissions, or the registration of smaller sources (ROSS) program. To meet the ROSS program requirements, an applicable facility under these rules must not emit more than 5.0 tons of particulate matter (PM) per year. Even when facilities that would be impacted by these rules calculate their individual PTE, the quantity of emissions at maximum production levels is still below ROSS applicable requirements. As required by the ROSS program, the majority of Reprocessable Construction Demolition Materials Facilities currently operating in the City of Chicago emit less than five tons per year of particulate matter emissions. Note that if the emissions generated at these sites exceed the five tons per year of emissions, the facility is required to obtain a more comprehensive permit.

Specifically, in the Chicago region, the CAAPP Permit threshold for Particulate Matter is 100 tons per year. If the majority of Reprocessable Construction Demolition Materials Facilities emit 95% less than the CAAPP annual threshold of particulate matter, then it is excessive and burdensome for these recycling sites to comply with the proposed rules. Even if the concern is with respect to PM10 non-attainment areas, these facilities again contribute such an insignificant quantity of emissions that could in no way threaten a marginal or serious threshold limit. The focus should remain on protecting and maintaining the ozone standard and not punishing operators who generate minor quantities of PM10 emissions. Fugitive Dust Control Plans and/or Dust Monitoring Plans which are prepared properly and adhered to daily provide more than enough assurance for compliance of all applicable regulations.

The ROSS program applies to more than 3,000 permitted sources which combined produce less than 1% of the air pollution in the State of Illinois. The six (6) facilities impacted by these rules would then contribute only a mere fraction of the 1% of the other 3,000 permitted sources.
These facilities do not emit other pollutants of concern, or any hazardous air pollutants such as mercury or lead.

In conclusion, while the CDPH is focusing this rulemaking effort on crushing facilities in the City of Chicago, most emissions in high decile areas of the Air Quality and Health Index Map of 2020 will remain even after these proposed rules are enacted. Surrounding industries and facilities emit higher levels of the same constituents of concern listed in this proposed rule, while operating under more stringent air permits than those facilities targeted by this rulemaking. Crushing facilities are not significant sources of nitrogen oxide (NOx) and volatile organic compound (VOCs) pollution, especially when compared to diesel powered highway traffic. Overly burdensome and excessive regulations for crushing facilities, especially for ROSS eligible facilities, do not address the air quality issues in the City of Chicago. The increased and disproportionate costs associated with operating a reprocessable construction demolition material facility under these proposed rules will ultimately discourage compliant industrial recycling operations in the City of Chicago. By driving recycling

operations out of Chicago, air pollution will worsen as the emissions from the increase in trucks and rail cars needed to transport recycled materials from areas outside the city.

Thank you for the opportunity to provide these comments. We look forward to your thoughts on the ideas shared in this document and welcome an opportunity to discuss the potentially unintended industry-specific concerns related to these rules with Department of Public Health staff.

Respectfully submitted,

Dan Eichholz, Executive Director
Illinois Association of Aggregate Producers