

## Response Letter to Proposed Rules for Reprocessable Construction/Demolition Material Facilities

Dan Eichholz <dan@iaap-aggregates.org>

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To: envcomments <envcomments@cityofchicago.org>

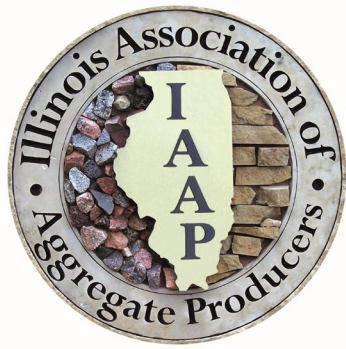
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To Whom it May Concern,

Attached is the IL Association of Aggregate Producers comment letter in response to the CDPH's [Proposed Rules for Reprocessable Construction/Demolition Material Facilities](#). We appreciate the opportunity to provide these comments. Please confirm receipt.

Thanks,

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***2021 IAAP Convention & Safety Conference***  
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October 29, 2021

Chicago Department of Public Health (submitted via email)

### **Re: Response to Proposed Rules for Reprocessable Construction/Demolition Material Facilities**

The Illinois Association of Aggregate Producers (IAAP), the trade association representing companies that produce and recycle crushed stone, sand and gravel in Chicago and Illinois, submits the following written comments to the Proposed Rules for Large Recycling Facilities dated September 17, 2021 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 in order to put into context the opposition to these proposed rules and the potentially unintended and detrimental effect it will have on construction costs and sustainability in general.

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 years, more than 2.5 million tons of concrete and asphalt from City-specific public works and infrastructural projects have been recycled. Much of the asphalt and concrete that is recycled are currently taken to a nearby recycling center. If those facilities close, 2.5 million tons or roughly 125,000 additional truck trips would need to be taken out of Chicago and disposed of or land filled. That would generate significant additional amounts of traffic, carbon, NO<sub>2</sub>, and particulate emissions associated with the transport out of the City - all of which would work counter to our shared goal of a cleaner city. 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 (CO<sub>2</sub> emissions) will increase due to greater distances to haul debris to landfills, recycling as a whole 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.

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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.

Simply put, the proposed rules set forth by the City of Chicago, Department of Public Health discourage recycling. The costs borne by the operator to continue to recycle these materials are increasing significantly and will result in the stoppage of these types of operations. In some cases, smaller facilities will close and hauling and disposal costs will begin to 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 reprocessible 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 IAAP offers these specific comments to the following proposed rules. 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.

#### [Comment 1: Definition of “Modify” or “Modification”](#)

##### Suggested Language Change & Reasoning:

Alterations to site configuration or processes that will not result in increased dust or particulate matter should not require notice to the City or an amended permit. Facilities may change site layouts or configurations seasonally; such adjustments should not require an amendment to the permit. Facilities may improve mechanisms or controls to reduce dust or emissions. In either circumstance, the City should not discourage these improvements by requiring an operator to assume the cost of application to modify the permit.

#### [Comment 2: Section 3.5 – Property Owner’s Authorization](#)

##### Suggested Language Change & Reasoning:

This requirement makes it difficult for situations when the property owner is not the applicant and an operating agreement may require the operator to obtain all permits and approvals in order for the facility to operate. This requirement should allow for the operator to provide an affidavit attesting to having the authority to operate at the site or otherwise be stricken entirely.

#### [Comment 3: Section 3.8.4.1.1 – Residential Setbacks](#)

##### Suggested Language Change & Reasoning:

Recycling sites that handle reprocessible construction demolition materials are simply processing materials made from naturally occurring elements, not hazardous materials. These facilities should not be subject to the same residential separation requirements as waste-related uses. This section should be removed or rewritten.

#### [Comment 4: Section 3.8.4.1.6 – Historical and Natural Areas](#)

##### Suggested Language Change & Reasoning:

More specificity should be added to this section as the requirement is too vague. The City should clarify what standards are used to assess or determine what “posing a threat” is. In its current state, the requirement is subjective and arbitrary and cannot adequately be satisfied without further clarification.

#### [Comment 5: Section 3.8.6 – Pavements](#)

##### Suggested Language Change & Reasoning:

With respect to paving of roads and parking areas within a facility using concrete, hot-mix asphalt, gravel or asphalt grindings, the Commissioner's approval should not be necessary. If this provision is retained, CDPH should define circumstances under which the Commissioner may consider such materials appropriate. Otherwise, the discretion is arbitrary.

#### [Comment 6: Section 3.8.10 – Structures and Fixed Equipment](#)

##### Suggested Language Change & Reasoning:

The City should define structures as "Material Processing / Handling Structures" to avoid having to include office buildings, security gate houses, or toilets in the calculations and maintenance plans for the Site Design Report.

#### [Comment 7: Section 3.8.13 – Traffic](#)

##### Suggested Language Change & Reasoning:

This section should be revised as a traffic study should not be required every three (3) years. The cost of an engineered traffic study is estimated to range from approximately \$5,000 to \$15,000. In some cases, the costs could be much more if a Facility impacts a broader set of transportation elements. Further, this requirement is not reasonably related to CDPH's mission. The Zoning Ordinance Administration and Chicago Department of Transportation (CDOT) are charged with reviewing traffic studies when analyzing whether a facility may be sited at a property. Traffic regulation is outside the purview of CDPH.

#### [Comment 8: Section 3.8.17 – Perimeter Barrier](#)

##### Suggested Language Change & Reasoning:

With respect to the proposed height requirement of 8 feet, CDPH should review the Chicago Zoning Ordinance and Municipal Code, which allows a height limit of 6 feet. More importantly, and as a whole, the perimeter barrier should not be an unnecessary expense, especially when an existing facility has already engineered and installed a perimeter barrier that complies with other program or permit requirements. An existing facility should not have to remove a fence to install a solid, concrete barrier. A solid concrete barrier or block wall can force an existing facility into an expense in excess of \$150,000 (depending on perimeter length) for removal of an existing structure and installation of a new barrier. If a Facility had to install a steel fence around its entire perimeter the cost could be even more detrimental at upwards of \$500,000 - \$750,000 for 10,000 linear feet. Provided that the facility complies with the requirements outlined in the existing zoning rules and permit issued for the site, the composition and height of the perimeter barrier should not be changed.

#### [Comment 9: Section 3.10 – Environmental Assessment](#)

##### Suggested Language Change & Reasoning:

If CDPH will uphold this requirement, then the rule should specify or reference the section of the Chicago Zoning Ordinance that requires an Environmental Assessment.

#### [Comment 10: Section 5.6 – Testing of Materials](#)

##### Suggested Language Change & Reasoning:

Testing of reprocessible construction demolition materials for lead is unnecessary and this requirement should be stricken. Reprocessible construction demolition materials are not known to contain any known concentrations of lead. Upon registration of these sites with the Illinois Environmental Protection Agency, if a site believed that lead was present in any of its material they would be required to identify this source of emissions and type of pollutant. This unnecessary testing will require an annual expense of approximately \$3,000 per site to complete this requirement. Again, these types of facilities do not handle recyclable materials with known lead concentrations and this requirement should be removed.

#### [Comment 11: Section 5.8.12 – Fire Plan](#)

##### Suggested Language Change & Reasoning:

This requirement is onerous and unnecessary. In addition, it is redundant with the Site Design Report requirements. To comply, a facility will have to develop a plan compliant with NFPA standards and it will have to be outsourced to ensure

it meets the appropriate requirements. Each facility has an emergency action plan and would contact the local Fire Department for any issues related to an open fire or fire prevention. Many, if not all, of these facilities must provide a Tier II report to the appropriate local emergency planning committee (LEPC) or the fire department with jurisdiction over the facility. The Tier II report identifies what materials are stored on-site to provide information to an emergency response agency in the event of a fire or serious incident. Facilities should not have to develop a separate plan outside of the Tier II reports as it is redundant. This requirement should be removed.

#### Comment 12: Section 5.8.4 – Opacity Limit

##### Suggested Language Change (in bold):

**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 area that exceeds an opacity of 10% based on: 1) a six-minute average of 24 consecutive observations recorded at 15-second intervals; and 2) visual reading conducted by a person trained and certified to evaluate visible emissions (Method 9).**

##### Reasoning:

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 six-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.

**Section 5.8.2** – This section should include a reference to 35 IAC 212.314 and provide an operator of a recycling facility that handles reprocessible construction demolition materials the ability to utilize the “Exception for Excess Wind Speed”, particularly during routine inspections or enforcement actions.

#### Comment 13: Section 3.8.21 – Air Quality Impact Assessment

The requirement for an Emissions and Air Dispersion Modeling Study in Section 3.8.21.1.1 is overly excessive, lacks specificity and should be removed from the proposed rule. The purpose of air dispersion modeling is to understand impacts in the ambient air and not to evaluate emissions from each point or fugitive source of emissions. The modeling must also account for impacts from adjacent or surrounding sources, separate from the subject facility. The proposed rules do not provide for specific criteria for parameters of concern (i.e. PM, PM10, PM2.5) to produce effective and actionable modeling results.

Section 4.0 of the proposed rule requires an existing facility, regardless of whether the facility is undergoing an expansion or modification, to conduct modeling every three (3) years. Absolutely no federal or state regulatory program requires such frequent, costly, and unnecessary air dispersion modeling without a triggering event. There is no purpose for conducting source specific modeling if there are no changes to operations conducted at the source itself. This section of the proposed rule should be stricken or revised to exempt an existing facility from these requirements unless a triggering event (i.e. modification, expansion, increase in capacity) occurs.

## **State Permit Review Process**

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. In order 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.

For perspective, PTE is the maximum amount of air contaminants a source could emit if:

- Each process is operated at 100% of its design capacity
- Each process operated 24 hours per day, 365 days per year
- Materials that emit the most air contaminants are used or processed 100% of the time; and
- Air pollution control equipment (i.e. dust suppression) is turned off

In rare instances, the IEPA may require emission and air dispersion modeling for the following types of sites:

- CAAPP (Title V Air Permit) sites
- FESOP (Synthetic Non-Major Source) sites
- Sites which must adhere to the Toxic Air Contaminant requirements listed in 35 IAC 232

Currently, the IEPA does not mandate or require Emission and Air Dispersion Modeling Studies for ROSS and Lifetime Air Permit Facilities. 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 perform an Emission and Air Dispersion Modeling Study. 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. The state permit review process does not include a requirement to conduct any modeling of any type.

Given the type and quantity of emissions generated by these types of facilities, modeling should not be required in order to operate a Reprocessable Construction Demolition Materials facility in the City of Chicago.

### **Comment 14: Section 5.8.7 – Air Monitoring Requirements**

**Section 5.8.7.16** – The proposed Reportable Action Level (RAL) of 150 ug/m<sup>3</sup> appears to be based on the current primary NAAQS standard for PM10. This is inappropriate for two reasons. First, the primary NAAQS standard for PM10 is based upon a 24-hour, not a 15-minute averaging period (more specifically, 150 ug/m<sup>3</sup> on a 24-hour averaging period, not to be exceeded more than once per year on average over three 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.

Second, notwithstanding the above, there is no apparent technical or scientific basis to base the RAL on a NAAQS standard where neither the air dispersion modeling required under Section 3.8.21.1.1 nor the PM10 monitors required under Section 5.8.7.1.1 are required to (or will) demonstrate compliance with the NAAQS. Illinois already operates a U.S. EPA- approved ambient monitoring network, which includes PM10 monitors, to demonstrate compliance with the PM10 NAAQS. See Illinois Ambient Air Monitoring 2022 Network Plan <https://www2.illinois.gov/epa/topics/air-quality/outdoor-air/air-monitoring/Documents/Draft%20Network%20Plan.pdf>. 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.

Further, 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 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 (i.e., mitigative actions under Section 5.8.7.1.12) – and the obligation for Facilities to *determine* through their “Contingency Plan” under Section 5.8.7.1.12 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/m<sup>3</sup> 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.

**Section 5.8.7.13** – The requirement of video recording equipment 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. 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.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Dan Eichholz". The signature is stylized and cursive, with the first name "Dan" written in a larger, more prominent script than the last name "Eichholz".

Dan Eichholz, Executive Director  
Illinois Association of Aggregate Producers