



June 21, 2019

Chicago Dept. of Public Health
Via e-mail

RE: Large Recycling Facilities

The Construction & Demolition Recycling Association (CDRA), promotes the environmentally sound recycling of the more than 583 million tons of recoverable construction and demolition (C&D) materials that are generated in the United States annually, and is considered the leading expert on the subject. These materials include aggregates such as concrete, asphalt, and also asphalt shingles, gypsum wallboard, wood, construction plastics and metals.

To be clear, the proposed rules and regulations regarding Large Recycling Facilities in the City of Chicago will cause undue harm to construction companies and the developments and projects they serve. CDRA is opposed to these rules as they impede the progress of sustainable construction practices, and will harm an industry that provides attainable green jobs.

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. In addition, 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 the proposed rules is a step in the opposite direction that will impede the achievement of these initiatives when you consider that over the past 5 years, more than 2.5 million tons of concrete and asphalt from city specific public works and infrastructural projects have been recycled, in addition to hundreds of thousands of mixed C&D materials. The limitations proposed in these rules appear to discourage recycling efforts in the construction materials industry and as a result, recycling sites that handle Type D materials will close and the carbon footprint will increase due to greater distances to haul debris. This added trucking will also more quickly erode roads and add to traffic congestion.

In broad terms, C&D materials removed as part of typical construction projects were historically destined for landfill disposal. Whether asphalt removed from a parking lot, concrete taken from a building demolition or sidewalk removal, or wood, drywall and asphalt shingles from building projects, 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.

In addition, a ripple effect for the entire region will be that if these materials are not recycling, it will increase mining activity, and again cause more emissions and road wear and tear to get virgin aggregate materials into Chicago from far off sources.

For mixed C&D materials, the market has grown from nearly nothing 10 years ago to a vibrant market connected to all of Chicago. For example, instead of shipping post-consumer dimensional lumber to a landfill, the material is now processed into mulch and similar products

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, and no new ones will be built. 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 Type D construction 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.

CDRA 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: Section 3.9 – Design Report

Suggested Language Change (in bold):

The application for **New or Expanding Facilities, not to include Expanding Facilities only in storage or processing volume**, shall contain a design report for the Facility (“Design Report”) that shall include the following components, in order:

Reasoning:

This exception is needed as there is no discernible purpose to penalize a facility that is requesting to recycle a larger volume of materials, which are benign and non-hazardous, in accordance with the standard conditions listed in the existing permit approved by the City of Chicago, Department of Public Health. Existing facilities should be allowed to request changes to the permitted volume of materials to be recycled without requiring a new Design Report.

Comment 5: Section 3.9.18 – Perimeter Barrier

Suggested Language Change (in bold):

Unless otherwise enclosed by a fence or other appropriate structure, rail line, or waterway, the Design Report shall Demonstrate that the barrier around the Facility will adequately control noise, dust, and blowing litter...

Reasoning:

The perimeter barrier should not be an unnecessary expense, nor should it restrict the facility’s ability to access either the rail or water to load and/or unload materials for the site. Storage space and material placement layout for these recycling facilities fluctuates with market conditions. Provided that the facility complies with the requirements outlined in the existing rules and permit issued for the site, the perimeter barrier limit should not be increased.

Comment 6: Section 3.9.20 – Noise Impact Assessment

Suggested Language Change (in bold):

Section 3.9.20.2 should include the following – Ambient noise levels of the area surrounding the subject site shall be collected. These levels shall be factored into the overall assessment to establish ambient noise concentrations of the entire area surrounding the subject property.

Reasoning:

Facilities that conduct recycling of Type D materials should be given an opportunity to demonstrate compliance through the permit application process which outlines standard operating hours and controls for managing noise. If an assessment is required, ambient conditions must be included to establish an appropriate baseline level to determine compliance, if the controls outlined in the permit application are deemed insufficient.



Comment 7: Section 3.9.22 – Air Quality Impact Assessment

Suggested Language Change (in bold):

This entire section should be removed.

Reasoning:

With the inclusion of this Section of the proposed rules, the City begins an overreach of its purview. The requirement for an Emissions and Air Dispersion Modeling Study is overly excessive. The majority of facilities which crush Type D recyclable materials currently operate under an Illinois Environmental Protection Agency (IEPA) granted Lifetime Operating Permit or a Registration of Smaller Source (ROSS). 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 Type D Recyclable Material 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 Type D Recyclable Material 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. Fugitive Dust Control Plans and/or Dust Monitoring Plans which are prepared properly and adhered to on a daily basis provide more than enough assurance for compliance of all applicable regulations. Finally, to require these rules only of Consequential Facilities is biased and unfair, particularly in a case where a site has operated in compliance with no findings of liability and no sustained violations have been issued over a period of time (i.e. 3 years).

Comment 10: Section 4.3 – Material Volume Limitations

Suggested Language Change (in bold):

With the exception of New, Existing, Modifying, Expanding or Consequential Facilities handling Type D or Class V C&D materials, the Facility may not exceed the volume limits specified in the permit. If, in response to an emergency involving impacts to health, safety, or environmental conditions, the Facility is required to receive a volume that exceeds the permitted limit, a written record of the date, time, additional volume, and reason shall be made part of the Facility's Operating Record, and the



Operator shall notify the Department by email at envwastepermits@cityofchicago.org by no later than 10:00 am of the next business day following the emergency.

Reasoning:

This exception is needed as there is no discernible purpose to penalize a facility that is requesting to recycle a larger volume of materials, which are benign and non-hazardous, in accordance with the standard conditions listed in the existing permit approved by the City of Chicago, Department of Public Health.

Comment 11: Section 4.4 – Stockpiles

Suggested Language Change (in bold):

In Section 4.4.1.1 - Except as provided below or currently permitted for an Existing Facility, the height of any outdoor stockpile within the Facility shall not exceed 20 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.

In Section 4.4.1.2 – All outdoor stockpiles adjacent to property lines, except windrow compost piles, shall be **bounded** by concrete blocks...

The language in section 4.4.2.2 and 4.4.2.3 should be stricken entirely.

In Section 4.4.2.4 - With the exception of New, Existing, Expanding, Modifying or Consequential Type D or Class V C&D Facilities, the Facility submits daily stockpile mass-balance calculations to CDPH on forms provided by CDPH.

Reasoning:

The storage stockpile height limit of 20 feet should not apply to Type D Recyclable Materials as the proposed limit does not serve any environmental benefit or purpose. Type D Recyclable Materials, such as crushed stone, concrete, and asphalt do not emit dust while remaining in a storage pile. The moisture content of these materials is typically three to 4 times higher than the limit required to be maintained on site as specified in the Standard Conditions of Lifetime Air Operating General Permits issued by the Illinois EPA. The proposed conditions that require processing of materials within 2 days and limit stockpile volume to material processed in 2 days are grossly inconsistent with industry standards. Handling and production of these recyclable materials must be balanced and made available throughout the construction season. Typical construction projects are performed in phases; in many cases, it is a significant period of time between the demolition phase and the construction phase where finished recycled product is needed. Requiring a facility to process material within 2 days while limiting what they can stockpile to what is produced in 2 days limits the economies of scale for the operator. These operations can only be conducted through cost effective



means. To address concerns with speculative accumulation or total volume to be received and handled at a site, the City should adopt language that mimics the Illinois EPA requirement where recycled concrete and asphalt cannot be stored on a site for a period longer than 4 years provided at least 25% of the total volume on-site is processed and sold during the following calendar year. Further, the industry practice normally involves demolition work followed by new construction work. The demolition activity can often occur, weeks, months or even years before the new construction activity starts. The demolition material becomes the raw material stockpile which is available when needed to produce the recycled aggregates needed for the new construction. The recycled aggregates should not be produced unless and until needed to minimize the degradation in quality that will result if the material is exposed to the elements any longer than necessary.

Comment 12: Section 4.5.2 – Rails and Barges

Suggested Language Change (in bold):

For a New, Existing, Expanding, Modifying, or Consequential Facility, vehicle traffic, processing volumes, and storage volume of recycled materials through the Facility as reported on the triennial permit review will be reduced by the total volume reported of outbound barge or rail shipments that illustrate the benefit of the reduction in daily vehicle traffic due to the alternative shipping methods.

Reasoning:

The use of a barge to transport recyclable materials provides significant environmental benefits by reducing truck traffic and volumes. To the extent feasible, the use of a single barge to transport materials removes approximately 75-90 trucks from the roadways. For reference, RAC has imported almost 4 million tons of materials over the last 3.5 years which has removed 191,447 trucks from the road. That reduction is equivalent to 1 MMTCO_{2e} (million metric tons carbon dioxide equivalent) which is a major contributing factor to helping the City achieve the primary mitigation strategies outlined in the Chicago Climate Action Plan.

Comment 13: Section 4.7 – Water Quality Standards and Monitoring

Suggested Language Change (in bold):

Section 4.7.1.1 A & B should be stricken entirely.

Justification:

Requiring any facility to install, operate, and maintain a water quality monitoring system is severely burdensome. The Illinois EPA requires a NPDES Stormwater permit for these types of facilities where there is a discharge present. The benchmarking, monitoring, and recordkeeping requirements under the new NPDES General Permit for Stormwater from Industrial Activities do not require a continuous



water monitoring system. These requirements on their own are more than sufficient when applied properly at a recycling facility to maintain proper stormwater management and compliance with regulatory limits. A water quality monitoring system that includes a turbidity requirement will result in false positives and overall inaccurate indications of actual conditions. Maintaining the required Storm Water Pollution Prevention Plan (SWPPP) in accordance with NPDES requirements and conducting the routine sampling and observations is more than enough to ensure compliance at these types of facilities.

Comment 14: Section 4.8.2.2 – 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.

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 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. 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, Appendix A. Without proper training or adequate experience and certification, opacity determinations are not verifiable.

Comment 15: Section 4.8.3 – Consequential Facility Air Monitoring Requirements

Suggested Language Change (in bold):

Section 4.8.3.5 – The Reportable Action Limit is the concentration of PM10 measured at a monitoring location at the Facility that will trigger response activities under a contingency plan. The RAL shall be the positive differential between the established ambient background concentrations for the site plus 150 micrograms per cubic meter calculated over a 24-hour period.

Reasoning:



This section is problematic in that there is no clear consideration for ambient background concentrations at a facility during periods of inactivity. The proposed Reportable Action Level (RAL) has to consider the ambient background concentrations before applying a threshold for compliance. In other words, the RAL should be a set number on top of the ambient background concentrations collected by the site operator. The set number should be based on the U.S. Environmental Protection Agency (USEPA) National Ambient Air Quality Standards (NAAQS) maximum allowable concentration of 150 micrograms per cubic meter calculated over a 24-hour period. Therefore, the RAL is 150 micrograms per cubic meter above the ambient background concentrations for the recycling facility. The facility should not be penalized for differences in upwind and downwind monitoring stations given that PM-10 monitors do not account for the source of dust. Particulate matter detected by a monitor can be attributed to a variety of sources outside of the subject property including an adjacent site, roadway, or even a vacant field. Each of these external sources can trigger a false positive when detecting dust and cause challenges for the City and the permitted site in determining the actual origin of the dust and the actual concentrations of particulate matter that can be attributed to the facility.

Respectfully submitted,

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