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Chicago Department of Public Health Attn: Environmental Permitting and Inspections 333 South State St, Room 200 Chicago, IL 60604

Re: Proposed Regulations - For the Handling and Storage of Bulk Material Piles

Ozinga Ready Mix Concrete, Inc. (Ozinga RMC) appreciates the opportunity to comment on the City of Chicago's Proposed Regulations – For Bulk Material Storage Piles. As currently written, the proposed regulations could apply to ready mix concrete plants. While this may not have been the intent, we request that ready mix concrete plants be specifically excluded from these proposed regulations because:

- 1. These facilities do not handle coal or coke products;
- 2. Fugitive emissions from these facilities are not problematic;
- 3. Fugitive emissions are minimized and controlled under the provisions of Lifetime Operating Permits issued by the Illinois EPA;
- 4. Pollution from runoff is minimized and controlled under the provisions of NPDES permits issued by the Illinois EPA;
- 5. Materials stored in stockpiles at these facilities are coarse and not subject to being wind borne;
- 6. Many of the requirements in the proposed regulations are unworkable at the ready mix concrete facilities; and
- 7. Application of the unworkable regulations would force ready mix concrete operations to leave the city limits, unnecessarily increasing construction costs, increasing unemployment and reducing tax revenue in the city.

Our investigation into the feasibility and costs associated with various provisions of the proposed regulations has been limited due to the time available for comment, the engineering work required to apply the provisions to specific operations and the availability of personnel to perform the work. Therefore, we have not been able to provide specific cost estimates and technical alternatives, but would be willing to enter into discussions with the Department to address specific issues or options.

## BACKGROUND AND GENERAL COMMENTS

Ozinga RMC operates four concrete plants within the City of Chicago. These plants produce ready mix concrete from materials such as Portland cement, sand, limestone and water. These materials are received, stored, reclaimed, transported, proportioned, mixed



and placed into the familiar concrete mixer trucks as wet concrete to be transported to construction sites around the city.

At these ready mix concrete facilities, cement is received in covered barges or enclosed bulk tanker trucks, unloaded pneumatically into silos and reclaimed from the silos into enclosed conveyor systems that transport it into the weighing and mixing systems. The entire system is operated with proper dust collection as required by the applicable permits.

Limestone, sand and gravel arrive at the concrete plant in open barges or dump trucks and are received into outside storage piles. Since these materials are coarse, wind borne fugitive emissions are not an issue with these aggregates.

Each of Ozinga RMC's concrete plants is subject to the conditions of a Lifetime Operating Permit issued by the Illinois EPA. In addition, each plant has been issued permits from the City of Chicago and is subject to a Certificate of Operation.

Concrete is one of the most widely used and cost effective construction materials on earth. The physical and chemical reactions that make concrete hard and durable begin to occur as soon as the ingredient materials are mixed together. Freshly mixed concrete has a limited time window (usually about 2 to 3 hours) in which to be transported to a construction site, placed and finished. Therefore, the location of ready mix concrete plants is an important consideration, and locating plants outside of the city limits would significantly increase construction costs.

Each year, millions of cubic yards of concrete are used in the City of Chicago. Increasing the cost of producing and transporting concrete would have a significant impact on construction costs in Chicago.

The proposed regulations as currently written are unworkable for Ozinga RMC facilities because they are overly prescriptive and lack the flexibility required to operate effectively. Ozinga RMC controls fugitive emissions through its equipment and work practices. The space and setback requirements of the proposed regulations cannot be met at existing facilities, and the enclosure requirements for new facilities are prohibitively expensive. The proposed requirements for continuous water sprays and chemical stabilizers would create significant runoff and product quality problems while achieving little, if any, improvement in air quality.



## SPECIFIC COMMENTS

We offer the following comments to provisions of the proposed regulations:

- 1. The alleged need for these regulations ostensibly arises from problems with emissions from coke piles. While the Department may have had complaints related to other materials, all of the media attention, public notices and Public Hearing comments focus exclusively on coke. It is unlikely that all facilities that would be impacted by these proposed regulations have been considered. In fact, during a stakeholder meeting, a Department representative stated that the intent was not to regulate ready mix concrete facilities. However, the language of the proposed regulation is vague, unnecessarily broad and open to interpretation.
- 2. The Department has publically stated that salt is excluded from regulation under the proposal, because it "does not fit the definition" of a Bulk Solid Material. The rationale for this was unstated and is unclear. However, if salt does not fit the definition because fugitive emissions are considered unlikely, then natural sand, crushed limestone and gravel should be excluded as well. These materials should be specifically itemized and named as excluded materials to avoid differing interpretations.
- 3. Since the proposed regulations can be interpreted to apply to salt and to aggregates at a ready mix concrete facility, the regulations would have unintended consequences, raising the cost of salt and concrete (and therefore raising costs for the City and for the construction sector of the economy).
- 4. While Ozinga RMC operates four plants in Chicago, our competitors operate an additional seven plants. The impact of the proposed regulations in Chicago would be significant. If concrete costs rise due to unnecessary regulation, it follows that construction costs in Chicago will rise, limiting economic recovery and growth.
- 5. The Department stated during a stakeholder meeting that sand and stone at a ready mix plant might be considered construction materials and would therefore be exempt under paragraph 2.0(2) of the proposal. The stated rationale was that construction and demolition materials are regulated elsewhere, which assumes that materials to be used in construction fall under the definition of construction and demolition debris. This is not typically understood to be the case. The Department should clarify that bulk aggregates at a ready mix plant are specifically excluded.



- 6. The definition of Existing Facility would limit expansion of a facility by purchase or lease of adjacent properties. Existing ready mix facilities simply could not expand, even if the resulting operation would be more efficient.
- 7. The requirement in paragraph 3.0(2)b) is impractical and unenforceable. It is unlikely that a Method 9 observer could monitor emissions under the proper reading conditions in a manner sufficient to collect data to support a determination of compliance or violation. The requirement is unnecessarily complex.
- 8. While we generally support the requirement in paragraph 3.0(3) for a Fugitive Dust Plan, certain provisions are unworkable and provide no benefit in terms of air quality or enforceability.
  - a. While the footprints of storage piles can be generally depicted on a drawing, the size and location of the aggregate storage piles at a ready mix facility may vary on a daily basis according to production needs.
  - b. Paragraph 3.0(3)b) requires a sworn statement if the total storage capacity is "less than" 100,000 cubic yards. We suspect that this is a typographical error, and that the intent was to require a sworn statement if the total storage capacity is "more than" 100,000 cubic yards.
  - c. The information on the maximum quantity of materials received at the facility in any period of five consecutive operating days in the prior year required by paragraph 3.0(3)c) is not available.
  - d. There are no objective criteria upon which to determine the "reportable action level" required in paragraph 3.0(3)f). In addition, this is to be required within 90 days, hardly enough time to establish a baseline or background level.
- 9. The requirement in paragraph 3.0(4) that new facilities maintain bulk solid materials in fully enclosed structures would be financially prohibitive. It would not only increase the cost of these facilities greatly, but also require significantly more land with more complex traffic patterns.
- 10. Paragraph 3.0(5) would require that no material Processing occur outdoors. Since space for enclosures is not available, this would require the closure of two Ozinga RMC plants in Chicago.
- 11. Paragraph 3.0(5)a) would limit the quantity of material received over five days to 10,000 tons. We routinely receive and use in excess of that amount at a facility, depending on production needs. Since there is no space for enclosures, this limitation would force the closure of our Chicago operations.



- 12. Paragraph 3.0(5)c) would force the closure of our Chicago operations. All four existing facilities operate within 100 feet of public ways. They also operate within 300 feet of occupied buildings with no complaints from tenants.
- 13. At all four facilities operated in Chicago by Ozinga RMC, there is insufficient space to install the wind barrier screens required under paragraph 3.0(6)c).
- 14. Paragraph 3.0(6)e) requires operations to be suspended whenever wind speeds exceed 15 mph with no provisions for gusting conditions. This is impractical, since winds in Chicago often exceed 15 mph.
- 15. Aside from the high cost associated with the installation, operation, monitoring and maintenance of the PM10 monitors required by paragraph 3.0(6)f, we can see no objective use for the data collected by the monitors. As stated previously, there are no criteria on which to base a "reportable action level" and no procedures established to determine the source of any increases. While there may be application for PM10 monitors in some areas, they are of little value in an urban setting with vehicle traffic, multiple sources and changing conditions.
- 16. Paragraph 3.0(6)g) places a limit on the time each load of material is kept in the storage pile. At a ready mix plant, this is not workable. Loads are combined in storage piles, and reclaiming is not done on a first-in-first-out basis. Reclaiming is typically done from the toe of the pile. This method of reclaiming reduces the variability of the material as it is used, and improves the consistency and quality of the concrete produced.
- 17. Continuous operation of water sprays as proposed in paragraph 3.0(6)h) would not only result in massive runoff issues, but would also inhibit the plant's ability to control the moisture content of the concrete mix. Water is a necessary ingredient in concrete, but excess water beyond what is necessary for the hydration reactions and for workability compromises the strength properties of concrete. While water sprays can be used in some cases to control fugitive emissions, continuous use is impracticable.
- 18. The use of Chemical Stabilizers on material piles would result in the addition of these stabilizers to the concrete mix, which would have a negative impact on the performance of concrete.



- 19. Since wind screens cannot be constructed in an effective configuration at existing ready mix facilities, paragraph 3.0(7) effectively requires truck loading and unloading to be done in an enclosure. This would require additional transfer points and conveying, which would be unworkable for outdoor storage at the ready mix facilities.
- 20. The barge unloading provisions of paragraph 3.0(9) are workable for powdered materials, and we already use these methods. However, for the coarser materials such as aggregates, the methods are ineffective or impractical. For example, extending the chute of a barge unloading screw five feet below the coaming would have no impact on emissions. In addition, such enclosed systems for coarse materials are extremely expensive estimated to be in excess of \$4MM for each installation.
- 21. Paragraph 3.0(10) effectively requires paving of the entire site of our ready mix plants. This would increase runoff and, in the case of non-road ground surfaces, do nothing to limit fugitive emissions.
- 22. Ozinga RMC currently sweeps paved areas of the ready mix plants as needed to control fugitive emissions. However, the street sweeping provisions of paragraph 3.0(11) require dangerous sweeping on active roadways in the city and do not allow the flexibility to match street sweeping to silt level, wind conditions, traffic conditions, weather conditions etc. The requirements are arbitrary and will result in wasted resources (labor, capital, fuel, etc.). In addition, enforcement of the requirements of paragraph 3.0(11)d) is practically impossible.
- 23. In order to comply with the provisions of paragraph 3.0(13), the four Ozinga RMC plants in Chicago would have to enclose (not just cover) approximately 1,500 feet of conveyor used to convey aggregates. We estimate the cost for these enclosures to be on the order of \$1MM.
- 24. The wheel wash and truck cleaning operations required by paragraph 3.0(15)c)&d) would add to the operating cost at each facility, and would also create the need for a recirculation system to minimize environmental impacts from runoff. Some facilities would not have the space to install such a system.
- 25. The recordkeeping requirements of paragraph 4.0 are onerous and impractical. The estimated cost to comply is \$75,000 per year per facility.
- 26. The implementation schedule of paragraph 6.0 is unworkable and should be revised to allow adequate time for practical compliance.



## **SUMMARY**

Implementation of the proposed regulations as currently written, would add significantly to the cost of producing ready mix concrete in Chicago. This would increase construction costs and cause a curtailment of the construction sector economic recovery.

The prescriptive nature of the proposed regulations, and the impetus they provide toward a requirement of total enclosures for all storage piles make them unworkable for existing ready mix facilities. The building of future facilities would be discouraged, and construction costs would necessarily increase.

Fugitive emissions can be, and are, controlled in much less expensive, more effective ways from ready mix concrete plants. Complaints of fugitive emissions from these facilities are rare and are dealt with promptly. The materials being handled do not pose significant health risks and are not particularly prone to becoming wind borne. For these reasons, we request that ready mix concrete plants currently regulated by the Illinois EPA and the City of Chicago Department of Health be specifically exempted from the proposed regulation.

Sincerely,

Lloyd H. Mayer

President, Chicago Division

