

BEFORE THE ILLINOIS POLLUTION CONTROL BOARD

IN THE MATTER OF:)
)
EMERGENCY RULEMAKING REGARDING)
REGULATIONS OF COKE/COAL BULK) R14-20
TERMINALS) (Rulemaking – Air/Land/Water)
NEW 35 ILL. ADM. CODE PART 213)


NOTICE OF ELECTRONIC FILING

To: **Service List**

PLEASE TAKE NOTICE that on January 21, 2014, I electronically filed with the Clerk of the Pollution Control Board of the State of Illinois, the **JOINT ENVIRONMENTAL RESPONSE TO ILLINOIS EPA'S PROPOSAL AND MOTION FOR EMERGENCY RULEMAKING** on behalf of the Environmental Law & Policy Center, Natural Resources Defense Council, Illinois Environmental Council, Respiratory Health Association, and Southeast Environmental Task Force, a copy of which are attached hereto and herewith served upon you.

Dated: January 21, 2014

Respectfully Submitted,



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JOINT ENVIRONMENTAL RESPONSE TO ILLINOIS EPA’S PROPOSAL AND MOTION FOR EMERGENCY RULEMAKING

Pursuant to the Hearing Officer’s Order in this matter dated January 17, 2014, Environmental Law and Policy Center (“ELPC”), Illinois Environmental Council (“IEC”), Natural Resources Defense Council (“NRDC”), Respiratory Health Association (“RHA”), and Southeast Environmental Task Force (“SETF”) (collectively, the “Environmental Groups”) hereby file this Response to Illinois EPA’s (“IEPA”) Proposal and Motion for Emergency Rulemaking (“Motion”), filed with the Board on January 16, 2014.

The Environmental Groups wholly support IEPA’s decision to address the coal and growing petroleum coke (“petcoke”) problems as the “threat to the public interest, safety, or welfare” that they pose. But the proposed emergency rules, as drafted, fail to address those problems as the emergencies that they are. As discussed in detail herein, the rules must be significantly modified to clarify that they are not intended to justify issuance of permits for new or expanded sources of fugitive dust. The rules should make clear that compliance with them does not establish compliance with the Illinois Environmental Protection Act (“the Act”); and that permits for new or expanded fugitive dust sources shall not be issued regardless of any such compliance. In addition, the rules must be modified in order to immediately abate the serious threats to public health and safety and wellbeing of the environment that they are intended to help address. Specifically, the rules should require immediate commencement of preparations to fully enclose the coke and coal bulk terminals within one year, and should halt all operation of those bulk terminals until appropriate enclosures are completed and ready for use. Moreover, if the Board is to allow any operation of coal and coke bulk terminals in the interim period before enclosures are completed, it should do so only if those terminals comply with a comprehensive set of protective requirements that can be implemented right away.

I. Coke and Coal Bulk Terminals Pose a Serious Threat to Illinois’ Citizens and Environment, Necessitating Emergency Rules That Immediately Abate that Threat.

Emergency rules are promulgated when a state agency finds that a situation “constitutes a threat to the public interest, safety, or welfare.” 5 ILCS 100/5-45. The Governor and IEPA have both recognized, in no uncertain terms, that coke and coal bulk terminals present such a threat. In Governor Quinn’s words, “We need to make sure that every neighborhood in the state of Illinois is protected from the hazard of petroleum coke,” (*Chicago Sun-Times* 01/14/14), and “[w]e need to make sure the health and safety of people come first. No side of Illinois should be

a dumping ground.” (*Chicago Tribune* 01/14/14). Likewise, in its Motion, IEPA states that “[i]nadequately controlled fugitive [particulate matter (“PM”)] emissions, along with inadequately controlled discharges of stormwater and wastewater to waters of the State, from handling, processing, transport, and storage operations at coke or coal bulk terminals reasonably constitute a threat to the public interest, safety, or welfare, necessitating immediate adoption of emergency regulations....” (Motion at ¶12).

As IEPA notes, the coke and coal handled at bulk terminals are forms of PM – a pollutant with well documented and serious adverse health impacts. IEPA explains: “dust from both coke and coal is a type of fugitive PM.... Exposure to PM can have serious health consequences, such as cardiovascular and respiratory effects and increased mortality.” (Motion at ¶ 3). Already, this dangerous PM is blanketing communities in our state, aggravating health problems and coating homes and schools near coke and coal terminals on Chicago’s southeast side. Many southeast side residents testified at a recent hearing concerning Chicago’s proposed regulations that black clouds from the storage piles adjacent to the Calumet River are blowing into parks, homes and yards, blackening residents’ *indoor* air filters within a matter of weeks, and forcing residents to keep their kids inside and stay inside themselves. In Governor Quinn’s words, “It’s blown off of these mountains of petcoke, into the homes of good people who are trying to raise their children and make sure that they’re healthy.” (*Progress Illinois*, 1/13/2014).

Emergency rules are an appropriate first step to address this serious, present threat to Illinois residents’ health and wellbeing. But the purpose of emergency rules is to immediately abate these threats to the public interest, safety, health and welfare. As detailed below, the proposed rules fail to do that. They must be significantly modified to achieve that essential purpose.

II. The Rules Must Make Clear that the Controls Established for Existing Facilities Do Not Provide a Basis for Permitting New or Expanded Facilities.

IEPA Director Lisa Bonnett has stated that IEPA will not approve any pending permit applications for petcoke bulk terminals “until we are assured there will be no adverse environmental impact.”¹ That approach is appropriate: no permits for new or expanded coke and coal bulk terminals should be issued until it can be demonstrated that those terminals can and will comply with the Act and not put Illinois citizens’ health and welfare at risk.

However, the proposed emergency rules do not effectively implement this approach. While it is clear from the Director’s statements that the emergency limitations on operation of existing facilities set forth in the proposed rules cannot be used to justify permitting of *new or expanded* sources of fugitive dust, that intention is not made clear in the rule proposal. Specifically, the rules should clarify that compliance with the proposed rules shall not constitute compliance with the standard for permit issuance set forth at 35 Ill. Adm. Code 201.160; and should further state that the standard for permit issuance for new or expanded facilities cannot be met pending

¹ IEPA Press Release, “Illinois EPA files Emergency Rules Addressing Coke and Coal Piles Permit Decisions Suspended for All Petcoke Operations,” January 16, 2014, *available at* <http://www3.illinois.gov/PressReleases/ShowPressRelease.cfm?SubjectID=1&RecNum=11862> (last accessed Jan. 20, 2014).

further investigation, and hence no such permits shall be issued regardless of compliance with the emergency rules.

This clarification is essential to protecting public safety. The emergency limitations on existing sources, while welcome, have been hastily formulated, and as discussed in the sections below have numerous technical shortcomings. More importantly however, even if all of the technical improvements we have requested were made, further research and investigation is necessary to determine the level of control, if any, that will actually protect public health. Indeed, it is possible that there is no currently available means to render these sources sufficiently benign that they can be allowed to exist in our state. The information necessary to determine whether permits for new and expanded sources can be issued consistent with the requirements of 35 Il. Adm. Code 201.160 is simply lacking at present. The Director has effectively acknowledged that fact, and the emergency rules should as well.

III. The Rules Should Be More Broadly Applicable to Additional Facilities and Sources of Particulate Matter.

Section 213.110 provides that the requirements in this part apply to “coke or coal bulk terminals,” thereby presumably limiting the protections set forth in these emergency regulations to those terminals. The definition of “Coke or Coal bulk terminal,” set forth at Section 213.115, exclude sources, sites and facilities “where the coke or coal is produced or consumed.” This exclusion is problematic. Sources which produce coke or coal, or bulk solid materials could potentially have large-scale storage of those materials onsite. Illinois has numerous facilities that produce petcoke, including but not limited to the ExxonMobil refinery in Joliet, the Citgo refinery in Lemont, the Wood River refinery in Roxana, Illinois, and the Marathon Petroleum Refinery in Robinson, Illinois. Many of these facilities, while governed by major source air permits, have dated and insufficient provisions governing fugitive emissions from petcoke piles. The permit for Indiana’s BP Whiting refinery, issued more recently, at least requires enclosure of coke handling and storage facilities, but these requirements were obtained through litigation and it is our understanding the permits for the referenced Illinois refinery facilities do not contain similar provisions. Therefore, to ensure that these emergency rules achieve what they set out to do – protect the public and the environment from the present and growing threat posed by petcoke, coal, and other bulk solid materials that create PM – the definition of “bulk terminals” should be revised to include any facilities where coke, coal or other bulk solid material is stored, handled, blended, processed, transported or managed, including at facilities where those bulk solid materials are produced or consumed.

For similar reasons, the sources of PM that are covered by these rules should likewise be expanded. Instead of restricting applicability solely to coke and coal, these rules should cover a broader set of sources of PM, as is called for in the draft rules recently released by the City of Chicago (attached hereto as Exhibit A). Specifically, the rules should cover all bulk solid materials, defined as “any solid substance or material that can be used as fuel or as an ingredient in a manufacturing process that may become airborne or be scattered by the wind, including but not limited to ores, coal, and coke, including petcoke and metcoke.” Further, to ensure all petcoke is covered by the rule, the definition of petcoke should petcoke “be clarified to include such residues produced by petroleum upgraders in addition to petroleum refining.”

IV. The Rules Should Immediately Halt Operation of All Coke and Coal Bulk Terminals Until Appropriate, Safe Enclosures Are Completed and Ready to Use.

By its own admission, IEPA's rules are inadequate to address the severe threat to public welfare that coke and coal bulk terminals are already posing. In its Motion, IEPA states: "Emissions of fugitive PM from coke or coal bulk terminals are inadequately controlled, *and cannot be adequately controlled* unless certain operations at the facilities, including storage, processing, handling, and transfer operations, *are enclosed within a building or structure.*" (Motion at ¶ 14) (emphasis added). Notwithstanding this admission, IEPA proposes rules that require neither enclosure nor cessation of coke and coal bulk storage operations until they are performed within fully enclosed, properly designed buildings or structures. On their face, these rules are inadequate to abate the threat to the public interest, safety and welfare and coke and coal bulk terminals pose.

The only way to adequately control PM emissions, and therefore to adequately abate the threat these bulk terminals pose, is to *immediately* prohibit the continued operation of coke and coal bulk terminals until all storage, processing, handling and transfer operations are conducted *inside* properly designed, fully enclosed structures, with strict emissions control requirements for all loading/unloading operations. Specifically, no operations should be permitted unless and until all the requirements for the Plan for Total Enclosure, in draft Section 213.220(a) – (e), are completed and the structure is ready for use.

V. If Immediate Cessation of Coke and Coal Bulk Terminals is Not Feasible, the Rule Must Require Immediate Implementation of Comprehensive Protective Measures.

The rules' requirement that bulk terminal operators submit a plan to enclose coke or coal bulk terminals in *two years*, with no clear requirement that the piles must actually be enclosed even at that time or even that operators comply with that plan, without significant protective measures to be taken in the meantime, is a prime example of the rule's failure to address petcoke and other PM sources as the existing, urgent threat they already pose. Even if full enclosure of piles is not feasible within the 150 day period of the emergency rules, many protective measures can be taken within that period. To ensure meaningful, immediate protection of public health and the environment, the rules should require:

- Immediate, stringent restrictions on fugitive dust. The rules should make clear that 35 Ill. Adm. Code Section 212.301, which provides that "No person shall cause or allow the emission of fugitive particulate matter from any process, including any material handling or storage activity, that is visible by an observer looking generally toward the zenith at a point beyond the property line of the source," applies to coke and coal bulk terminals. The rules should further establish a stringent opacity limit of no more than 5% opacity for no more than 3 minutes in any 1 hour, to apply within the property line. A 5% opacity limit applies to a number of parallel fugitive dust sources, including barge loading, in Granite City, Illinois, under the state's fugitive dust regulations (Michigan similarly imposes a 5% limit on a number of sources). The Calumet area, unlike Granite City, has numerous fugitive dust sources located in close proximity to neighborhoods; thus, it is appropriate to require sources in more densely populated areas to

comply with at least as rigorous an opacity standard as that which already applies in less densely populated areas.

- Clear requirements for fugitive dust compliance demonstration. To make the limits on opacity and visible emissions meaningful, critical compliance demonstration provisions must be added to the rules. First, the rules should make clear that testing for opacity must be completed using Method 9, 40 CFR part 60, Appendix A, pursuant to 35 Il. Adm. Code 212.109, and that testing for visible emissions should be conducted using Method 22, 40 CFR part 60, Appendix A, pursuant to 35 Il. Adm. Code 212.107. Second, the rules should establish a testing schedule, with testing occurring at least quarterly. Third, the rules should set out a full range of weather and atmospheric conditions under which such testing must occur, such that representative conditions at the facility are covered. Fourth, the rules should prohibit nighttime operations because measurement of opacity at night is infeasible. Finally, the rules should specify a cumulative daily limit on excess opacity levels (for ex., operators shall not exceed three three-minute periods of excess opacity in any consecutive 24-hour period), as 24 episodes of three minute exceedances can equal a significant amount of fugitive dust in a single day.

- Removal of all bulk storage materials that have been stored over six months. Under Section 213.215, within 60 days after the effective date of these rules, owners or operators must remove all coke and coal that have been at the source for more than one year. While the Environmental Groups support the prohibition on long-term storage reflected in Section 213.215, we believe the limit should be 6 months rather than one year, which is more consistent with RCRA requirements. As noted above, this requirement should apply not just to coke and coal, but also to other bulk solid materials, and removal should be required as soon as possible, but no later than 60 days after the rules are adopted.

- Additional significant protective measures. The rules should require that, effective immediately, operators must put tarps over any unenclosed storage piles during Wind Events as defined at Section 213.240 (as modified per this Response). The rules should further require that, within 60 days² of adoption of the rules, each operator must erect a wind barrier for all bulk solid material piles, which wind barrier must be (1) located a distance of twice the height of the pile upwind from that pile, (2) at least 125 percent as high as the pile,³ and (3) at least 1.5 times as wide as the pile is tall, in order to protect the public from PM emissions before enclosure of the terminals is complete. The rules should further require implementation, as promptly as possible, of the pile height restrictions, wind event prohibitions, setbacks and other restrictions on fugitive dust emissions called for in the draft rules, with the recommended changes to those provisions included herein.

² Per our communications with Dust Solutions, Inc., a company which constructs and erects wind barriers, 60 days for a 40 foot high fence is eminently achievable.

³ A recent study conducted by Australian company SLR Global Environmental Solutions found that wind barriers are most effective if they are at least 1.25 times the height of the piles they enclose, are at least 1.5 times as wide as the piles are tall, and are located a distance of 2 times the height of the pile upwind from that pile. The study further found that fugitive dust control was enhanced when wind barriers were used in conjunction with additional controls, such as chemical stabilizers and pile height restrictions, as we request here. That study is available at <http://www.peabodyenergy.com/mm/files/Operations/Australia/Metrop/environmental-reporting/120917%20Dust%20PRP%20Metropolitan%20Coal.pdf>

- Prompt submission of a plan for enclosure of all storage piles within one year, with initial preparations to be undertaken immediately following plan approval. Based on our communications with a company that constructs storage pile enclosures, we understand that enclosure – with engineering studies, shipment of materials and construction – may take up to nine months.⁴ But even if enclosure cannot be completed within the period of the emergency rules, the rules should require that, within 30 days of the rules’ adoption, operators submit a plan to fully enclose bulk terminals within *one year* of filing that plan, which plan must be approved or disapproved by IEPA following public review and comment of the plan. The rules should also require that operators begin preparations for enclosure, including undertaking any necessary engineering studies, soil studies, and structure design, immediately after the plan is approved.
- Shorter time frames for enclosure of non-storage pile aspects of operations: Since far less than two years is necessary even for enclosure of storage piles, there is no reason why two years would be necessary to enclose other, much less expansive aspects of operation identified in this section – *i.e.*, conveyors, transfer points, loading and unloading areas, screening areas, crushing areas, and sizing areas. Instead of lumping all of these disparate components together, the State should follow the City’s lead and identify separate time frames for enclosure of each. *See* subsection 6.0 of the City’s draft ordinance – although we do not endorse the specific time frames the City has proposed.⁵
- Additional setbacks which remain in effect even after enclosure. The Environmental Groups appreciate the inclusion in the rule of a setback for unenclosed piles inside the property line, as it is critical that there be a wide separation between the piles and neighboring properties. However, 200 feet is extremely minimal when dealing with fugitive dust that can travel much further, especially given the high wind speeds seen in the Chicago area, and we therefore strongly encourage you to expand the setback distance, going beyond the facility boundary if necessary to ensure that dust does not burden health and welfare.

We note that, while we are not confident that the setbacks proposed by the City of Chicago in its draft regulations are sufficient, they are for the most part far greater than those proposed here. The City’s draft rules establish setbacks of 660 feet from childcare facilities, preschools, primary and secondary schools, outdoor recreational areas, and hospitals; 300 feet from residential buildings and other buildings not protected by the 660-ft. setback, excluding buildings located on the bulk terminal’s property; and 100 feet from public ways.

The setback provisions concerning water sources are likewise insufficient. Section 213.320 a) requires a minimum setback of 200 feet from all waters of the United States, all public water supply reservoirs and intakes, and all potable water wells. To begin with, we do not believe that 200 feet is a sufficient minimum distance. Fugitive dust can travel much further than 200 feet at

⁴ Geometrica, Inc. sales representative Cecilio Zalba told us that the largest full pile enclosures will take, at the longest, 9 months to complete.

⁵ As will be set forth in more detail in comments on the City’s proposal, the timelines are both too long (e.g., a year is not needed for enclosing conveyors or loading/unloading areas), while some timelines do not make sense in context (one cannot comply with obligations triggered by a factor that itself does not apply until later on).

the wind speeds seen in Chicago. A second important concern about these setbacks is that it is unclear in which circumstances the setback must exceed the minimum. Subsection a)'s requirement that 200 feet be the "minimum" setback indicates – correctly – that in some instances a larger setback will be required. However, the section does not define what those instances are, or provide the Agency with discretion to establish them pursuant to some standard. The setback provision should state (i) that setbacks must protect public health and the environment, *and* (ii) that such setbacks must be 200 feet at minimum. To clarify and ensure compliance with (i), this provision should specify standards for ensuring protection of affected waterbodies and water sources.

Finally, the rules should require that setbacks and other controls continue after enclosure. Even enclosed, bulk solid material storage can pose a public health hazard to communities, both through the risks of fire and explosion that such facilities pose as well as the continued risk of fugitive emissions escaping from those enclosures. As such, numerous requirements contained in these rules (as modified per the recommendations herein) should continue to apply even after enclosure is complete. Those include (1) the setback requirements (including additional setbacks noted above) contained in Sections 213.230 and 213.320; (2) the transfer point requirements, as modified per the comments herein, contained in Section 213.260; and (3) the dust suppression system requirements, as enhanced per the comments herein, contained at Section 213.265.

- More stringent pile height restrictions: There is no justification for allowing 30-foot piles, which correspond to the height of a 3-story building, under Section 213.235 of the proposed rules. It is quite clear that piles at this height will be subject to significant wind disturbance given the wind gusts that can occur at these heights. In just 2013 alone, the highest wind gust speed recorded in Chicago at that height⁶ was 67 miles per hour and highest sustained wind speed was 41 mph at Midway Airport.⁷ Spray systems are known to be of limited effectiveness at high winds, as spray can be redirected away from piles by the wind. To ensure the effectiveness of the wind barriers recommended herein, the pile height should be limited to no more than ten feet,⁸ which should be required as soon as possible but no later than 60 days after the rules are adopted.
- Immediate Prohibition of Operations during Wind Events of 15 miles per hour or greater: While the Environmental Groups support immediate prohibitions on operations during wind events, as set forth at Section 213.240, the definition of "Wind Events" must be modified to encompass all occasions when wind speeds exceed *fifteen* miles per hour (not twenty five), as is called for in the City of Chicago's draft regulations. Wind speeds exceeding 15 miles per hour

⁶ Typically, wind speeds are measured at the standard anemometric height of 10 meters.

⁷ See <http://weatherspark.com/history/30851/2013/Chicago-Illinois-United-States>. Such wind speed data is typically recorded at a height of 30 meters, approximately equal to the maximum pile height allowed by the Proposed Rules.

⁸ The Australian study on wind barriers, discussed above at footnote 2, based its recommendations regarding wind barrier effectiveness on earlier studies that evaluated the impact of those wind barriers on piles with heights of appropriately 8-9 feet. See Zimmer, Robert A. et al, US EPA, "Project Summary: Field Evaluation of Wind Barriers as a Fugitive Dust Control Measure for Material Storage Piles," at 1 (1986), available at <http://nepis.epa.gov/Exe/ZyNET.exe/2000TITF.PDF?ZyActionP=PDF&Client=EPA&Index=1986%20Thru%201990&File=D%3A%5CZYFILES%5CINDEX%20DATA%5C86THRU90%5CTXT%5C0000009%5C2000TITF.txt&Query=&SearchMethod=1&FuzzyDegree=0&User=ANONYMOUS&Password=anonymous&QField=&UseQField=&IntQFieldOp=0&ExtQFieldOp=0&Docs=>

have the potential to create significant fugitive dust emissions, which is a major hazard that is precisely what these emergency regulations are being drafted to avoid.

Moreover, further definition is needed to make this provision effective. Although Subsection 213.240 indicates that it applies during wind events of less than an hour in duration (“in cases where the duration of operations subject to this Section is less than one hour, wind speed may be averaged...”), it does not make absolutely clear that operators must commence cessation of operations whenever wind speeds of greater than the Wind Event definition are detected. It should do so. Second, the definition should specify at what elevation the wind speed is to be measured. While typically wind speed is measured at a height of 10 meters, in this case it may be more appropriate to base the wind speed measurement at an elevation specific to the expected heights of sources such as piles or loading activities. Third, the section should establish a protocol for weather station design and operation, to ensure that wind speed measurements are accurate. USEPA protocols and guidance should be the metric for weather stations. Finally, facilities must follow protocols for siting weather stations, such that they are located in an unsheltered position, centrally placed in relation to the sources, and that installation of the weather stations does not itself create significant fugitive dust emissions.

- Immediate Prohibitions on Accumulations: The City of Chicago’s draft regulations requires owners or operators to maintain “all areas within the [bulk terminal] free of any Accumulation,” which they define as “any surface deposit of material greater than three ounces in one square foot other than inside an approved storage area, conveyor, transport Vehicle, slurry bin, water collection channel or separation pond.” See Draft City Regs at 2.0 and 3.0(12). These emergency rules should likewise include an immediate prohibition on accumulations, which should be less than the amount proposed by the City and should be measured in grams per square meter.
- Prompt Requirements for Paving all Roads Within the Terminal and Prohibition on Travel on Unpaved Roads within One Quarter Mile of the Terminal. Section 213.245 provides only that roadways “within the source” must be paved. This is insufficiently protective, as dust disturbance on unpaved roads outside the facility creates a significant public health risk. Residents of the Calumet area report significant dust from truck traffic on unpaved sections of road surrounding the KCBX south facility. Conversely, USEPA has found that paving unpaved roads can significantly reduce PM10. We note also that Rule 1158 from the South Coast Air Quality Management District, on which this provision was based, does not exempt any facilities from the requirement to have truck traffic only travel on paved roads within a quarter mile radius of the facility. Instead, it requires paved roads around all facilities served by trucks, and sweeping on those roads.

The limited paving requirement is additionally insufficient in view of Section 213.250 (a), which requires use of a street sweeper and vacuum system to “clean all roads used to transport coke or coal inside the source or within one quarter mile of the perimeter of the source.” Sweeping unpaved roads is not an effective PM control mechanism, so this requirement only makes sense if the roads used to transport bulk solid materials within ¼ mile of the bulk terminal are paved. Accordingly, the rules should restrict truck transport of bulk sold materials within one quarter mile of bulk terminals to paved roads, and transport on unpaved roads should be

explicitly prohibited. These restrictions should apply as soon as feasible, but no later than the 90 day limit set forth at Section 213.245.

VI. The Rules Concerning Transfer Points and the Dust Suppression System Should Clearly Require Achievement of Strong Fugitive Dust Restrictions.

Both Section 213.260(b), concerning Transfer Points, and Section 213.265(a), concerning the Dust Suppression System, should be clear that the requirements to install and operate chemical dust suppressant agents and/or “water spray bars, a misting system, water hoses,” or other devices to “prevent” or “control” fugitive dust emissions requires those devices to be installed and operated sufficient to prevent all offsite fugitive dust emissions and to control onsite fugitive dust emissions sufficiently to achieve the stringent 5% opacity limit discussed above.

VII. Additional Transport Restrictions Should Be Required, Including Covers on Trains and Barges.

Further restrictions are necessary to limit fugitive dust from trains, trucks and barges used to transport petcoke, coal or other sources to PM to bulk terminals. First, the emergency rules are markedly weaker than those drafted by the City of Chicago concerning the covering of vehicles. While the City of Chicago’s draft rules provide that “The Facility Owner or Operator shall not load material into any truck trailer, railcar or barge unless it is subsequently and immediately covered, before leaving the Facility, and shall not accept any materials delivered to the Facility unless the delivery Vehicle⁹ is covered...,” the emergency rules contain *no requirements whatsoever* for the covering of railcars or barges. Significant fugitive dust emissions can and do blow off the top of barges and trains carrying loose materials. Moreover, covers are feasible and available¹⁰: in fact, we observed a solid barge cover on a barge docked at the Beemsterboer facility during a boat trip in mid-October 2013. Accordingly, to adequately address the threat of fugitive dust emissions from barges and railcars, it is imperative that the rules require that railcars and barges, including both those loading materials at the bulk terminals, as well as those from which the bulk terminal accepts materials, be covered.

Second, Section 312.250(c) [sic; it probably should be 213.250] should prohibit the use of bottom-dump rail road cars, which can leak dust-forming materials onto the tracks. Third, Section 213.275 should prohibit leaks of both liquid and solid material (solids can “leak” from vehicles¹¹), and should add measures equivalent to those for trucks for railcars and barges. Specifically, all outgoing railcars should be cleaned, and there should be a prohibition on holes in railcars and barges such that material leaks (in solid or liquid form) from the cars.

⁹ Vehicle is defined in Chicago’s draft regulations as “any car, truck, railcar, off-road mobile heavy equipment, or marine vessel.” Draft Chicago Regulations at 2.0(19).

¹⁰ See, e.g., <http://www.railcarcovers.com> (last accessed Jan. 21, 2014) and <http://www.heartlandbarge.com/barge-equipment-sales-leasing-2/barge/hopper-barges/>.

¹¹ See Guardian Carleton, Fugitive Dust Program, October 2013 (“Guardian Carleton”) (requested by the Michigan Department of Environmental Quality), available at http://www.deq.state.mi.us/aps/downloads/ROP/pub_ntce/B1877/October%202013%20Fugitive%20Dust.pdf (describing leakage of solid materials onto tracks and obligations to keep the tracks free of raw materials).

Finally, the basis for the 8 mph speed limit for trucks under Section 213.275 is not stated or clear. The ability of trucks to pulverize, create and entrain fugitive dust depends on many factors including truck weight, number of tires, speed, etc. Thus, simply setting a speed limit, without basis, does not ensure effectiveness in dust control so as to achieve compliance with the visual emission limit and opacity limits applicable to roadways under the existing code (see also comment about a 5% opacity limit). Thus, IEPA should either (1) justify and confirm that the 8 mph speed limit is sufficient to comply with the visual emission limits and opacity limits for roadways under existing code, or (2) modify the speed limit accordingly.

VIII. The Rules Should Establish a Review Period and Criteria for Approval of Plans, Ensuring that Public Comments Are Taken Into Account.

The rules require that four critically important plans be developed to flesh out fugitive dust and water protection controls for bulk terminals: (1) a Plan for Total Enclosure (Section 213.220); (2) a Coke and Coal Fugitive Dust Plan (Section 213.225); (3) a plan for dust suppression when temperatures fall below 32 degrees Fahrenheit (Section 213.265(c)); and (4) a truck traffic plan (Section 213.275(b)). Nowhere do the rules require that IEPA review or approve the plans, nor do the rules specify criteria for IEPA to do so, or a deadline by which IEPA must review and approve or disapprove those plans. That omission is huge. Emergency rules promulgated to address an existing, serious threat such as that posed by petcoke and PM emissions cannot allow owners/operators to simply follow a plan of their own design to address that threat, with no required oversight by IEPA.

It is essential that all Sections and subsections requiring development of plans incorporate a requirement that IEPA review the plans required to be submitted to it within a certain deadline, concluding with a determination as to whether the plan is adequate, and establish criteria for IEPA to take into account when determining the adequacy of those plans. The criteria set out in those sections should be grounded in protection of public health, not merely compliance with minimum control requirements required by the letter of the regulations. That is, the sections should provide that IEPA will reject any plans that (i) are found not to be sufficiently protective of public health and the environment, *and* (ii) do not *at minimum* demonstrate compliance with the requirements of the applicable Section or Subsection mandating development of those plans. The sections should further make clear that, in determining whether to approve or disapprove a plan, IEPA must take into account all public comments on that plan received pursuant to Section 213.135. Accordingly, a requirement that IEPA post the plans on its website promptly after it receives them must be added to Section 213.135, to ensure that public comment on the plans can begin right away, allowing IEPA's review and approval process to proceed without delay.

Finally, in stating that IEPA must post all plans submitted to it "pursuant to Sections... 213.325 of this Part," Section 213.135 appears to contemplate public review and comment of water pollution controls under Section 213.325. However, the controls required at 213.325 are not required to be submitted to IEPA in the form of a plan to be reviewed and approved or disapproved by that agency. To ensure that proper controls are utilized which benefit from public participation and are subject to IEPA oversight, Section 213.325 should be modified to require that a comprehensive wastewater and runoff control plan to be submitted to IEPA (and consequently made available for public comment pursuant to 213.135). As discussed above for

other plans called for in the regulations, Section 213.325 should provide a deadline for IEPA review of the plan, concluding with IEPA's determination of its adequacy, as well as specific, health-based criteria for IEPA to use in determining the plan's adequacy and a requirement that public comments be taken into account.

IX. Recordkeeping and Recording Requirements Must Be Improved.

The Recordkeeping and Recording rules set out at Section 213.285 should be clarified and additional requirements included.

- First, the Section should require that a person trained and certified in dust management be responsible for and certify all records and reports under this section.
- Second, the term "type" of coke and coal, used at subsection a)1), is vague. The section should specifically require reporting of the composition of the material, derived through testing.
- Third, subsection a)6) requires owners or operators to report "[t]he date and time of periodic visual observations of the coke and coal at the source, noting the areas with visible emissions and the corrective actions taken to reduce visible emissions." This provision should be clarified and expanded to require reporting demonstrating compliance with the requirements for the fugitive dust compliance demonstration discussed herein, including: (a) reporting demonstrating that testing for opacity was completed using Method 9, 40 CFR part 60, Appendix A, and that testing for visible emissions was conducted using Method 22, 40 CFR part 60, Appendix A, and the results thereof, including a demonstration that the both hourly and cumulative opacity limits were not exceeded (and if they were, report the corrective actions that were taken to reduce visible emissions); (b) reporting demonstrating compliance with the testing schedule; (c) reporting demonstrating compliance with the requirements that testing be conducted under a range of weather and atmospheric conditions; and (d) reporting demonstrating compliance with the prohibition on nighttime operation.
- Fourth, under subsection c), the operator should not be allowed to submit only the raw data, which may be difficult and time consuming for the Agency and the public to review. Rather, it should be required to submit quarterly summary reports concerning the referenced records, along with the monthly data. As noted above, this report should be certified by a trained and licensed dust control professional.

X. Water Protection Provisions Must Be Strengthened.

Section 213.325 a)2)'s provision for designing the sedimentation ponds to treat the runoff from the 100-year storm event is insufficient. Likely due to climate change, the frequency and severity of storm events has significantly increased in recent years, such that the 500-year event would be a more appropriate benchmark. Our concern has significant real-world implications, as one facility's sedimentation pond is located directly adjacent to the Calumet River.

XI. The Rules Should Explicitly Allow for Local Authorities To Adopt More Stringent Restrictions.

To ensure maximum protection of the public and the environment against the growing threat posed by petcoke, coal and other PM sources, the rules should explicitly provide that Home Rule municipalities may promulgate their own PM bulk terminal rules that go above and beyond the state rules, as well as empower non-Home Rule municipalities to promulgate such more-stringent rules.

XII. Conclusion.

The Environmental Groups support IEPA's decision to address the coal and growing petcoke problems as the "threat to the public interest, safety, or welfare" that they pose. But the proposed emergency rules, as drafted, fail to address those problems as the emergencies that they are. As discussed in detail herein, the rules must be significantly modified in order to immediately abate these serious threats. Specifically, the rules should require immediate commencement of preparations to fully enclose the coke and coal bulk terminals within one year, and should halt all operation of those bulk terminals until appropriate enclosures are completed and ready for use. If the Board is to allow any operation of coal and coke bulk terminals in the interim period before enclosures are completed, it should do so only if those terminals comply with a comprehensive set of protective requirements that can be implemented right away. Last but not least, the rules should make clear that compliance with these rules does not, alone, establish compliance with the Illinois Environmental Protection Act, and that no new permits for coke and coal bulk terminals will be issued until it can be demonstrated that those terminals can and will comply with the Act and not put either the public health or the environment in jeopardy.

Respectfully submitted,



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Exhibit A

*City of Chicago
Department of Public Health*

*Article II. Air Pollution Control Proposed Rules and Regulations
For The Handling and Storage of Bulk Material Piles*

**CITY OF CHICAGO
DEPARTMENT OF PUBLIC HEALTH**

**ARTICLE II. AIR POLLUTION CONTROL
PROPOSED RULES AND REGULATIONS**

For the Handling and Storage of Bulk Material Piles

Whereas, pursuant to Chapters 2-112 and 11-4 of the Municipal Code of Chicago (the “Code”), the Department of Public Health (the “Department”) is charged with enforcement of environmental regulations within the City of Chicago, including the enforcement of regulations intended to reduce the risk of harm to public health or the environment from air pollution; and

Whereas, pursuant to the authority granted by Section 2-112-160(b) of the Code, the Commissioner of Health (the “Commissioner”) is authorized to issue rules and regulations necessary or proper for the implementation of environmental ordinances and to accomplish the purposes of Chapter 11-4 of the Code, and is further authorized to make reasonable administrative and procedural regulations or rules interpreting or clarifying the requirements which are specifically prescribed in Chapter 11-4 of the Code; and

Whereas, this general rule-making authority includes any rules necessary to implement Article II of Chapter 11-4 of the Code, Sections 11-4-600 through 11-4-810, the “Air Pollution Control Ordinance”; and

Whereas, this general rule-making authority also includes any rules necessary to implement Article VIII of Chapter 11-4 of the Code, Sections 11-4-1410 through 11-4-1460, “Pollution of Waters”; and

Whereas, Section 11-4-800 of the Code further authorizes the Commissioner to issue rules and regulations to implement Article II of Chapter 11-4 of the Code; and

Whereas, Section 11-4-760(e) of the Code authorizes the Commissioner to promulgate additional rules and regulations for the proper management of any substance or material that may become airborne or be scattered by the wind; and

Whereas, in addition, Section 11-4-770 of the Code provides that, for the purpose of minimizing air pollution, the Commissioner may prescribe, by rules and regulation, reasonable, specific operating and maintenance practices for buildings, structures, premises, open areas, automobiles and/or truck parking and sales lots, private roadways, rights-of-way, storage piles of materials, yards, vessels, Vehicles, construction, sandblasting, alteration, building, demolition or wrecking operations and any other enterprise which has or involves any matter, material or substance susceptible to being windborne and for the handling, transportation, disposition or other operation with respect to any material subject to being windborne; and

Whereas, Chicago is a densely populated metropolitan area, such that industrial uses are sometimes in close proximity to residential uses; now, therefore,

I, Bechara Choucair, M.D., Commissioner, Department of Health, City of Chicago, issue the following proposed rules and regulations pursuant to the authority granted to me by Sections 2-112-160, 11-4-760(e), 11-4-770, and 11-4-800 of the Municipal Code of Chicago.

1.0 Scope and Purpose. The purpose of these rules and regulations is to prescribe reasonable, specific operating and maintenance practices to minimize emissions of airborne particulate matter from the storage, blending, handling, Processing, and transport of Bulk Solid Materials as defined herein, including but not limited to ores, coal, and coke, including petroleum coke (“petcoke”) and metallurgical coke (“metcoke”). These rules and regulations apply to any owner, operator, or other person who stores, blends, handles, Processes, transports, or uses Bulk Solid Materials.

2.0 Definitions. For purposes of these rules and regulations, the following definitions shall apply:

- (1) ACCUMULATION is any surface deposit of material greater than three ounces in one square foot other than inside an approved storage area, conveyor, transport Vehicle, slurry bin, water collection channel or separation pond.
- (2) BULK SOLID MATERIAL means any solid substance or material that can be used as a fuel or as an ingredient in a manufacturing Process that may become airborne or be scattered by the wind, including but not limited to ores, coal, and coke, including petcoke and metcoke, but shall not include construction and demolition materials or materials that are handled or stored pursuant to a recycling, reprocessing, or waste handling Facility permit under Chapter 11-4 of the Code, or materials used in manufacturing cement at a facility that has obtained a construction permit and prevention of significant deterioration approval from the Illinois Environmental Protection Agency.
- (3) CHEMICAL STABILIZER is any non-toxic chemical dust suppressant which is not prohibited for the uses proposed in these rules or by any other applicable law, and which meets all applicable specifications required by any federal, state, or local agency.
- (4) COAL is a solid, brittle, carbonaceous rock classified as anthracite, bituminous, subbituminous, or lignite by ASTM Designation D388-77.
- (5) COKE is a solid carbonaceous material derived from the distillation of coal (including metallurgical coke) or from oil refinery coker units or other cracking Processes (including petroleum coke).
- (6) EXISTING FACILITY is a Facility that is properly permitted by the Commissioner, and subject to a Certificate of Operation issued by the Commissioner, as of the issuance date of these Rules and Regulations and is limited to operations within Facility boundaries as the boundaries exist on the issuance date of these Rules and Regulations.

- (7) FACILITY is all contiguous land, and structures, other appurtenances, and improvements on the land, used for Processing Bulk Solid Material.
- (8) FUGITIVE DUST means any solid particulate matter that becomes airborne by natural or human-made activities, excluding particulate matter emitted from a properly permitted exhaust stack equipped with a pollution control device.
- (9) HIGH WIND CONDITIONS is when wind speeds exceed 15 miles per hour.
- (10) MATERIALS RECEIVED means Bulk Solid Materials received at the Facility by any means, including by truck, rail, boat, or barge.
- (11) METALLURGICAL COKE, or METCOKE, is a carbon material resulting from the manufactured purification of multifarious blends of bituminous coal.
- (12) OWNER OR OPERATOR means any person who has legal title to any Facility, who has charge, care or control of any Facility, who is in possession of any Facility or any part thereof, or who is entitled to control or direct the management of any Facility.
- (13) PERSON is any individual, partnership, co-partnership, firm, company, limited liability company, corporation, association, joint stock company, trust, estate, political subdivision, state agency, or any other legal entity, or their legal representative, agent or assigns.
- (14) PETROLEUM COKE, or PETCOKE, is a solid carbonaceous residue produced from a coker after cracking and distillation from petroleum refining operations.
- (15) PROCESS OR PROCESSING means any chemical, industrial, commercial, or manufacturing operation or activity that causes, or has the potential to cause, the emission of airborne particles including, but not limited to, handling, blending, mixing, screening, transferring, loading, unloading, and stockpiling.
- (16) ROAD means any route with evidence of repeated prior travel by Vehicles.
- (17) SEPARATION POND means a container for separating coke from water by gravity, which has a liquid water surface at all points.
- (18) TRANSFER POINT is the location in the storage, handling or transport Process where material being moved, carried, conveyed, or transported is dropped or deposited.
- (19) VEHICLE is any car, truck, railcar, off-road mobile heavy equipment, or marine vessel.
- (20) WATER SPRAY SYSTEM means a dust suppression technique that uses water or water-based solutions delivered through pipes, tubes, or hoses that are fitted with one or more nozzles and operated at pressures ranging from 1 to 1500 psi.

3.0 Operating and Maintenance Practices. Any Facility that Processes, transports, or stores Bulk Solid Materials shall comply with all of the following requirements:

- (1) Certificate of Operation – Required. Every Owner or Operator of a Facility subject to these Rules and Regulations must possess a certificate of operation issued in accordance with Section 11-4-660 of the Code. The Department reserves the right to

impose dust control requirements, in addition to the requirements set forth in these Rules and Regulations, as conditions of the Facility's certificate of operation.

- (2) Fugitive Dust – Prohibited. The Facility Owner or Operator shall not cause or allow the discharge into the atmosphere of:
- a) Any Fugitive Dust that is visible beyond the property line of the Facility; or
 - b) Any Fugitive Dust within the property line of the Facility at any Bulk Solid Material storage pile, Transfer Point, roadway or parking area that, for a period or periods aggregating more than three minutes in any one hour, is equal to or greater than 10% opacity.
- (3) Fugitive Dust Plan – Required. Every Owner or Operator of a Facility subject to these Rules and Regulations must prepare, submit, and follow a Fugitive Dust Plan. The Fugitive Dust Plan shall be updated on an annual basis and submitted to the Department for review and approval on or before January 31 every year, provided that the first Fugitive Dust Plan shall be due within ninety (90) days of the issuance of these Rules and Regulations. If there is any change, modification, or addition to any Facility component described in an approved Fugitive Dust Plan, the Facility Owner or Operator shall submit an amended Fugitive Dust Plan to the Department for review and approval within thirty (30) days of such change, modification, or addition. The Fugitive Dust Plan shall include, at a minimum, the following components:
- a) A site map, drawn to scale, depicting the Facility boundaries and all buildings, roadways and utilities. In addition, the site map shall identify all potential emissions points and depict the footprints of all Bulk Solid Material storage piles;
 - b) A calculation showing the Facility's maximum total outdoor Bulk Solid Material storage capacity in cubic yards. If the computed total outdoor Bulk Solid Material storage capacity is less than or equal to 100,000 cubic yards, the Owner or Operator shall provide a written sworn statement that at no time will the total volume of materials stored outdoors at the Facility ever exceed 100,000 cubic yards. In the first Fugitive Dust Plan, due within ninety days of the issuance of these Rules and Regulations, the calculation and, if applicable, written sworn statement shall be certified by signature of an authorized representative of the Owner or Operator and shall be accompanied by evidence of authority to sign on behalf of the Owner or Operator.
 - c) A statement showing the maximum quantity of Materials Received at the Facility, in tons, in any period of five consecutive operating days in the prior year. In the first Fugitive Dust Plan, due within ninety days of the issuance of these Rules and Regulations, the statement of Materials Received in 2013 shall be certified by signature of an authorized representative of the Owner or

Operator and shall be accompanied by evidence of authority to sign on behalf of the Owner or Operator.

- d) A description of the wind barrier and all wind barrier specifications pursuant to (6)(c) or (6)(d) below, as applicable.
 - e) A description of all control measures, devices, and technologies to be used to minimize and control Fugitive Dust;
 - f) A dust monitoring plan that describes the placement, operation, and maintenance of the PM10 monitors required under paragraph 3.0(6)(f), including an explanation of background levels that will determine the reportable action level;
 - g) A contingency plan describing the Owner's or Operator's response activities when the monitors required under paragraph 3.0(6)(f) detect PM10 that exceeds the reportable action level established pursuant to 3.0(3)(f) above, and a contingency plan for an alternative method of monitoring in the event of malfunction or failure of the approved PM10 monitors; and
 - h) A description of the Facility's recordkeeping system, which shall include a schedule for routine inspection and maintenance of the control measures, devices, and technologies, and the identity of the person or persons responsible for such maintenance and testing.
- (4) Enclosure of Bulk Solid Material. The Owner or Operator of a Facility shall maintain all Bulk Solid Materials in fully enclosed structures, except as provided in paragraph (5) below. Fully enclosed structures must meet the following requirements:
- a) Structures used to store Bulk Solid Materials shall be properly maintained, and equipped with and use a permitted air pollution control system sufficient to control Fugitive Dust emissions at designed vents and at any other openings, including entrances and exits;
 - b) Structures used to store Bulk Solid Materials shall be designed, permitted and constructed in accordance with applicable Building Code requirements, and shall be situated on an impermeable base or pad; and
 - c) Any entrances or exits for material or Vehicles shall have overlapping flaps, sliding doors or other devices(s), which shall remain closed except to allow material or Vehicles to enter and leave or to allow people to enter and exit.
- (5) Outdoor Bulk Solid Material Storage – When Allowed. For Existing Facilities only, the Facility Owner or Operator may maintain outdoor Bulk Solid Material storage if the Facility at no time exceeds the following limitations; provided, however, that no material Processing, including but not limited to blending, mixing, crushing, and

screening, may occur outdoors, except that truck loading and unloading may occur within a wind barrier as provided in paragraph 3.0(7) below:

- a) Five-Day Quantity of Materials Received. The quantity of Materials Received, as measured on a rolling five-day basis, where five-days means five consecutive operating days, shall not exceed 10,000 tons;
- b) Total Outdoor Storage Capacity. The total outdoor Bulk Solid Material storage capacity, calculated pursuant to paragraph 3.0(3)(b) above, shall not exceed 100,000 cubic yards;
- c) Setbacks. Setbacks shall be measured as the shortest distance between the Facility's property boundary and the closest exterior wall of the buildings referenced in (5)(c)(i) and (ii) below; the property line of the outdoor recreational area referenced in (5)(c)(i) below; and the boundary of the public way referenced in (5)(c)(iii) below, as applicable. Setbacks from Facility boundaries shall be equal to the following distances:
 - i. 660 feet from childcare facilities, preschools, primary and secondary schools, outdoor recreational areas, and hospitals;
 - ii. 300 feet from residential buildings and other buildings not listed in (5)(c)(i) above, excluding buildings located on Facility property; and
 - iii. 100 feet from public ways.

(6) Outdoor Bulk Solid Material Storage – Best Management Practices. Facilities allowed to maintain outdoor Bulk Solid Material storage piles pursuant to paragraph (5) above shall comply at all times with all of the following requirements:

- a) Height Limit. The vertical distance from grade immediately adjacent to a pile to the highest point of that pile shall be no greater than 30 feet. The Facility Owner or Operator shall install and maintain a post or other visible measurement marker to demonstrate the height of each pile;
- b) Protection of Waterways. Outdoor storage piles shall be situated on an impermeable base or pad and shall be set back and separated from waterways at a distance sufficient to ensure that no materials will fall, erode, be thrown, discharged, dumped, disposed of, or deposited in the waterway at any time.
- c) Wind Barrier. The Facility Owner or Operator must install and maintain a wind barrier meeting the following requirements, unless an alternate barrier is approved by the Commissioner pursuant to (6)(d) below:
 - i. The barrier shall completely surround the storage pile and immediately adjacent material Processing area(s).

- ii. For access, a movable barrier or a staggered barrier configuration may be employed on one or more sides of the storage pile. Such installation shall be designed and implemented to provide continuous wind protection over the length of the open side(s). At a minimum, the outer barrier shall overlap the inner barrier by at least a tenth of the length of the outer barrier segment at each end of any opening.
- iii. The minimum barrier height shall be the greater of the heights specified in (6)(c)(iii)(1) and (6)(c)(iii)(2) below, plus five feet:
 - 1. The tallest point of the material storage pile; or
 - 2. The maximum operating height of any conveyor and/or equipment used to load, unload or otherwise handle stored material. Such height shall include the elevation, relative to grade, of any platform, ramp, or pile that the conveyor and/or equipment is/are expected to operate on.
- iv. The barrier screen material must be between 30 percent and 50 percent porous and shall meet the following requirements:
 - 1. Screen material must have a demonstrated track record of use for industrial applications for the specific purpose of slowing wind for controlling dust from large dust sources;
 - 2. Screen manufacturer, supplier, and/or constructor must provide documentation (both field and laboratory) that the proposed screen material has performed as intended for this purpose;
 - 3. Screen material shall be able to withstand maximum local design wind speeds without any reduction in performance. For the purposes of this requirement, performance is defined as the ability of the screen material to stay in place and not tear or release from the fence structure;
 - 4. The screen material design must demonstrate the ability not to become plugged with particulate in most conditions. This provision is to prevent the decrease of the screen material's original porosity; and
 - 5. Screen material must be resistant to the effect of UV rays, exhaust fumes, stored/stockpiled materials and spray from any dust-control and de-icing agents.

- v. A setback distance at least equal to the barrier height shall be provided between the base of the storage pile and the barrier sides.
- d) Alternate Wind Barrier. The Facility Owner or Operator may install and maintain an alternate wind barrier if the Facility Owner or Operator demonstrates, to the satisfaction of the Commissioner, that the alternate barrier design is at least as effective in controlling Fugitive Dust emissions as the wind barrier specified in (6)(c) above, and the Commissioner approves in writing the alternate design.
- e) High Wind Events. Disturbance of outdoor Bulk Solid Material piles, including but not limited to outdoor loading, unloading, and any other Processing, shall be suspended during High Wind Conditions. The Facility Owner or Operator must install, operate and maintain, according to manufacturer's specifications, a weather station or other permanent device to monitor wind speed at the Facility.
- f) Fugitive Dust Monitoring. The Facility Owner or Operator must install, operate, and maintain, according to manufacturer's specifications, permanent, continuous Federal Equivalent Method (FEM) real-time PM10 monitors around the perimeter of the Facility, with at least one monitor along each side facing the four cardinal directions (north, south, east, and west) around the Facility, or at other locations described in the Fugitive Dust Plan reviewed and approved by the Commissioner, to monitor for Fugitive Dust in the ambient air around the Facility. All data collected shall be consistent with units in the National Ambient Air Quality Standards for PM10. A data logger shall be attached to the monitors to record readings from the monitors, and the Facility Owner or Operator shall notify the Department, in writing within 24 hours, each time the monitors exceed the reportable action level set forth in the Fugitive Dust Plan and any time monitoring equipment has malfunctioned preventing readings or logging of data.
- g) Time Limit on Piles. Under no circumstances may any load of Bulk Solid Material remain on site for more than one year. The time limit begins when the material is unloaded and placed in a Bulk Solid Material pile.
- h) Dust Suppressant System. The Facility Owner or Operator must apply Chemical Stabilizers and/or maintain and operate water spray bars, a misting system, Water Spray Systems and/or water trucks to control Fugitive Dust emissions, in accordance with the following requirements:
 - i. The dust suppressant system shall be operating and dispensing water, water-based solutions, and/or Chemical Stabilizers at all times unless all bulk storage material piles are covered.
 - ii. The Water Spray System shall not be out of operation for more than 24 consecutive hours unless the temperature falls below 32 degrees

Fahrenheit, unless the Water Spray System is capable of operating in temperatures below 32 degrees Fahrenheit.

- iii. When the temperature falls below 32 degrees Fahrenheit, the Facility must use Chemical Stabilizers.
 - i) Runoff Management. The Facility Owner or Operator shall install and maintain stormwater management, erosion and sediment controls to prevent runoff from the pile onto neighboring parcels, the right of way, any water bodies, or into groundwater or the public sewers, subject to an approved Stormwater Management Plan pursuant to Chapter 11-18 of the Municipal Code, as applicable.
- (7) Truck Loading and Unloading. For enclosed Bulk Solid Material storage piles, the Facility Owner or Operator shall conduct material truck loading and unloading only in an enclosed structure that is either equipped with a Water Spray System to be used as needed to prevent visible dust emissions or vented to permitted air pollution control equipment that is operated during loading and unloading activities. The ends of the structure shall have overlapping flaps that reduce the opening to no greater than 11 feet high by 10 feet wide, sliding doors which shall remain closed except to allow the trucks to enter and leave, or other equally effective devices. For outdoor Bulk Solid Material storage, the Facility Owner or Operator shall ensure that loading and unloading occurs within the wind barrier specified in (6)(c) and in compliance with the requirements for Transfer Points specified in paragraph (14) below.
- (8) Railcar Loading and Unloading. The Facility Owner or Operator shall conduct railcar material loading and unloading only in an enclosed structure that is either equipped with a Water Spray System operated to prevent visible dust emissions, or vented to permitted air pollution control equipment that is operated during loading and unloading activities. The ends of the structure shall have overlapping flaps, sliding doors or other equally effective devices, which shall remain closed except to allow the railcars to enter and leave.
- (9) Barge and Boat Loading and Unloading. The Facility Owner or Operator shall conduct barge/boat material loading and unloading only through an enclosed chute that uses a Water Spray System, or an air pollution control system, sufficient to control Fugitive Dust emissions during operations, and which is extended to within five feet of the top of the pile; or is at least five feet below the hatch coaming.
- (10) Paving. The Facility Owner or Operator shall pave, with an impermeable material and in a manner sufficient to handle the expected level of traffic at the Facility, and maintain as paved, the following areas:
 - a) All non-road ground surfaces within the Facility where material Accumulations routinely occur; and,
 - b) All roads and Vehicle movement areas within the Facility that are used for transporting or moving material.

- (11) Roadways. In order to clean roads of Accumulations, the Facility Owner or Operator shall use a street sweeper to clean any road that is used to transport material inside or within one quarter mile of the perimeter of the Facility and shall comply with all of the following requirements:
- a) The street sweeper shall be equipped with a water spray and vacuum system to prevent Fugitive Dust during street sweeping;
 - b) The street sweeping shall be sufficient so that not more than 4 hours elapses between each street sweeper cleaning or after every 100 truck material receipts or dispatches, but not less than one time daily when the Facility is open for business.
 - c) Each 24 hour day, the day beginning at 12:01 A.M., the Facility Owner or Operator shall designate and record whether for that day the Facility Owner or operator is street sweeping every four hours or every 100 trucks. The record shall show the date and time when street sweeping was performed and the truck count.
 - d) The Facility Owner or Operator shall begin cleaning up material spills of more than three pounds, or that cover more than a square foot, within one hour and continue cleanup operations until the spill is removed.
- (12) Accumulations. The Facility Owner or Operator shall maintain all areas within the Facility free of any Accumulation, as defined herein.
- (13) Conveyors. All conveyors shall be enclosed conveyors.
- (14) Transfer Points. The Facility Owner or Operator shall maintain all material transfer points in compliance with one of the following:
- a) Total enclosure;
 - b) Water Spray System sufficient to control Fugitive Dust emissions during operations;
 - c) Vented to air pollution control equipment which is in full operation and permitted by the Commissioner; or
 - d) Transfer only moist material and conduct such transfer only in an overhead truck trailer or railcar loader, or chute with a hopper, such that the exposed drop does not exceed four feet from the top of the truck or railcar.
- (15) Transport. When transport is by truck, the Facility Owner or Operator shall ensure that:

- a) All trucks adhere to the posted speed limit within the Facility, which shall be no more than 8 miles per hour;
- b) Except for Existing Facilities, material is received or transferred only in truck trailers that, within one quarter mile of the perimeter of the Facility, are driven only on paved roads;
- c) All outgoing material transport trucks, whether loaded or empty, are cleaned so that:
 - i. Any part of any tractor, trailer or tire exterior surface, excluding the inside of the trailers, are free of all loose material; and
 - ii. The material removed by the truck cleaning operation is collected and recycled or otherwise disposed of so that it does not result in Fugitive Dust emissions.
- d) All outgoing material transport trucks, whether loaded or empty, pass through a wheel wash station and pass over rumble strips that will vibrate the trucks and shake off loose material and dust.

(16) Vehicle Tarping. The Facility Owner or Operator shall not load material into any truck trailer, railcar, or barge unless it is subsequently and immediately covered, before leaving the Facility, and shall not accept any materials delivered to the Facility unless the delivery Vehicle is covered, in one of the following manners sufficient to prevent material from escaping from the truck trailer, railcar, or barge,

- a) For truck trailers or railcars, a solid sliding cover on the top of the truck trailer or railcar that is kept completely closed; or
- b) For truck trailers, a slot-top type cover that reduces the uncovered open surface area by at least 50% and extends above the trailer top edges without gaps; and either the material contained in the trailer is moist material, or a Chemical Stabilizer is applied to the surface of the material in sufficient amounts and concentration, so as to prevent Fugitive Dust emissions during transport; or
- c) For truck trailers, railcars or barges, a continuous tarp that completely covers the truck trailer, railcar top, or barge, and for truck trailers, does not contact the material within the trailer. In addition, the tarp shall be installed or the trailer/railcar/barge constructed to prevent wind from entering over the leading edge of the trailer/railcar/barge rim into the interior of the trailer/railcar/barge.

(17) Leaking. Facility owners or operators shall not load material into truck trailers or railcars such that a trailer or railcar leaks liquid that contains material onto the Facility property. If a truck trailer or railcar leaks liquid that contains material onto the Facility property, the Facility Owner or Operator shall clean the affected property within one hour with a street sweeper or water.

(18) Variance from Operating and Maintenance Practices. The Facility Owner or Operator may apply to the Commissioner for a variance from any Operating and Maintenance Practice set forth in paragraph 3.0 above, other than paragraphs 3.0(1), 3.0(2), 3.0(5)(a), 3.0(5)(b), 3.0(6)(b), and 3.0(6)(i), provided that a variance from 3.0(4) shall not be granted to any Facility that exceeds the thresholds set forth in 3.0(5)(a) and 3.0(5)(b). The request for a variance must be in writing and must set forth, in detail: 1) the reason for the request; and 2) a demonstration that issuance of the variance will not create a public nuisance or adversely impact the surrounding area, surrounding environment, or surrounding property uses. Issuance of a variance is at the sole discretion of the commissioner. A variance may be revoked at any time if the commissioner finds that operation of the Facility is creating a public nuisance or otherwise adversely impacting the surrounding area, surrounding environment, or surrounding property uses.

4.0 Recordkeeping.

- (1) Required records. The Facility Owner or Operator shall keep and maintain Facility logs as follows:
- a) Record daily the type and amount of material, in tons, delivered to and from the Facility;
 - b) Record on a monthly basis, the total quantity of material, in tons or cubic yards, currently at the Facility;
 - c) Record daily, all cleaning and street sweeping;
 - d) Record the application of water and/or Chemical Stabilizer pursuant to paragraph 3.0(6)(h) and note any instances when such application is suspended for any reason, including but not limited to, weather conditions;
 - e) Record any instances when activities are suspended due to high winds as required by paragraph 3.0(6)(e);
 - f) Record the time of discovery, condition (moist or dry and/or depth of material) and removal of any Accumulations pursuant to paragraphs 3.0(11) and (12);
 - g) Record the results of the continuous monitoring for Fugitive Dust as required in paragraph 3.0(6)(f), indicate any instances when a monitor detects Fugitive Dust that exceeds the reportable action level set forth in the Fugitive Dust Plan, and record the action taken to respond to the detection of Fugitive Dust.
- (2) Timeframe for Maintenance of Required Records. All records required to be kept pursuant to these Rules and Regulations shall be kept and maintained at the Facility and be available for inspection for a minimum of three (3) years from the date the record is created.

5.0 Other Laws. These regulations in no way affect the responsibilities of the Facility owner and operator to comply with all other applicable federal, state or City laws, ordinances, or regulations, including but not limited to those regarding the construction, operation, maintenance, and closure of the Facility.

6.0 Implementation Schedule. These Rules and Regulations shall take effect in three phases as follows:

- (1) The following paragraphs shall take effect immediately upon issuance of these Rules and Regulations:

1.0	Scope and Purpose
2.0	Definitions
3.0(1)	Certificate of Operation - Required
3.0(2)	Fugitive Dust Prohibited
3.0(6)(b)	Outdoor Bulk Solid Material Storage - Protection of Waterways
3.0(6)(e)	Outdoor Bulk Solid Material Storage - High Wind Events
3.0(6)(i)	Outdoor Bulk Solid Material Storage - Runoff Management
3.0(11)	Roadways
3.0(12)	Accumulations
3.0(16)	Vehicle Tarping
3.0(17)	Leaking
3.0(18)	Variance from Operating and Maintenance Practices
4.0(1)(a)	Recordkeeping - Daily tonnage
4.0(1)(b)	Recordkeeping - Monthly onsite quantity
4.0(1)(c)	Recordkeeping - Daily cleaning
4.0(1)(e)	Recordkeeping - High wind events
4.0(1)(f)	Recordkeeping - Accumulations
4.0(2)	Timeframe for Maintenance of Required Records
5.0	Other Laws

- (2) The following paragraphs shall take effect ninety days from the issuance of these Rules and Regulations:

3.0(3)	Fugitive Dust Plan Required
3.0(5)(c)	Outdoor Bulk Solid Material Storage - Setbacks
3.0(6)(a)	Outdoor Bulk Solid Material Storage - Height Limit
3.0(6)(f)	Outdoor Bulk Solid Material Storage - Fugitive Dust Monitoring
3.0(6)(g)	Outdoor Bulk Solid Material Storage - Time Limit
3.0(6)(h)	Outdoor Bulk Solid Material Storage - Dust Suppressant System
3.0(14)	Transfer Points
3.0(15)	Transport
4.0(1)(d)	Recordkeeping - Application of Water or Chemical Stabilizer

4.0(1)(g) Recordkeeping – Dust Monitoring Results

(3) The following paragraphs shall take effect one year from the issuance of these Rules and Regulations:

- 3.0(5)(a) Outdoor Bulk Solid Material Storage – Quantity of Materials Received
- 3.0(5)(b) Outdoor Bulk Solid Material Storage - Total Outdoor Storage Capacity
- 3.0(6)(c) Outdoor Bulk Solid Material Storage - Wind Barrier
- 3.0(6)(d) Outdoor Bulk Solid Material Storage - Alternate Wind Barrier
- 3.0(7) Truck Loading and Unloading
- 3.0(8) Railcar Loading and Unloading
- 3.0(9) Barge and Boat Loading and Unloading
- 3.0(10) Paving
- 3.0(13) Conveyors - Enclosure Required

(4) The following paragraph shall take effect two years from the issuance of these Rules and Regulations:

3.0(4) Enclosure of Bulk Solid Material

(5) During the one-year period provided in 6.0(3) above and the two-year period provided in 6.0(4) above, the Facility Owner or Operator shall submit to the Commissioner monthly reports describing the work completed within the previous month, and the work planned in the upcoming month, towards compliance with this section. The address to submit the monthly reports is 333 South State Street, 2nd Floor, Chicago, Illinois, 60604, ATTN: Environmental Inspections.

(6) The Commissioner may, at the Commissioner's sole discretion, grant extensions of the timeframes provided in 6.0(2), 6.0(3), and 6.0(4) upon request and only for good cause shown by the Facility Owner or Operator.

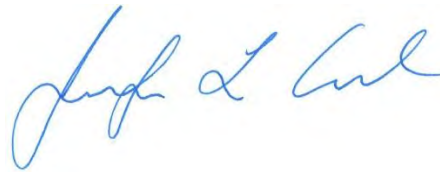
I, Bechara Choucair, hereby promulgate the foregoing Bulk Material Storage Rules and Regulations on this ___ day of _____ 2013.

Bechara Choucair, M.D.
Commissioner of Health
City of Chicago

CERTIFICATE OF SERVICE

I, Jennifer Cassel, hereby certify that I have filed the attached JOINT ENVIRONMENTAL RESPONSE TO ILLINOIS EPA'S PROPOSAL AND MOTION FOR EMERGENCY RULEMAKING on behalf of the Environmental Law & Policy Center, Natural Resources Defense Council, Illinois Environmental Council, Respiratory Health Association, and Southeast Environmental Task Force in R14-020 upon the attached service list by depositing said documents in the United States Mail, postage prepaid, in Chicago, Illinois on January 21, 2014.

Respectfully Submitted,



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R14-20

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