

February 2, 2015

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

SENT BY EMAIL AND FEDERAL EXPRESS

Re: NRDC, SETF, Respiratory Health Association, Sierra Club, Illinois Chapter, and Southeast Side Coalition to Ban Petcoke Comments on KCBX Terminals Company's Petition for Variance from the Deadline for Enclosure of Piles

To Whom It May Concern:

Thank you for the opportunity to comment on the petition of KCBX Terminals Company for a variance from the Department of Health's Rules and Regulations for Control of Emissions from the Handling and Storage of Bulk Material Piles ("Rules"), dated December 17, 2014 ("Enclosure Variance Petition"), and noticed December 23, 2014.¹ The Enclosure Variance Petition asks for an additional 14 months, until August 2017, to enclose the company's petroleum coke and coal piles at its South Site. We submit these comments on behalf of the Natural Resources Defense Council ("NRDC") and our nearly 10,000 members and activists in the City of Chicago, including those who reside on the Southeast Side in the Calumet area; the Southeast Environmental Task Force ("SETF"), an active community group

¹ KCBX Terminals Company's Petition for Variance from Sections 6.0(5) and 6.0(6), December 17, 2014, *available at* http://www.cityofchicago.org/content/dam/city/depts/cdph/environmental_health_and_food/Dec192014/KCBXPetitionVarianceSec605606.pdf; City of Chicago, Dep't of Pub.

Health, Rules and Regulations for Control of Emissions from the Handling and Storage of Bulk Material Piles [sic], *available at* http://www.cityofchicago.org/content/dam/city/depts/cdph/environmental_health_and_food/DoHRRegCntrlEmiHdlin gStrgeBulkMaterPiles4302014.pdf; City of Chicago, Dep't of Pub. Health, Notice of Variance Application, *available at* http://www.cityofchicago.org/content/dam/city/depts/cdph/environmental_health_and_food/Dec192014/NotVariAppSolicitWritComKCBXTermCoDec2314.pdf (public comments accepted through January 22, 2015). The City extended the time for public comment on KCBX's Variance Petition until February 2, 2015, following a request for an extension by NRDC and SETF. *See* Notice of 10-Day Extension of Comment Period for Variance Application from KCBX, City of Chicago, Dep't of Pub. Health, *available at* http://www.cityofchicago.org/content/dam/city/depts/cdph/environmental_health_and_food/Jan132015NotExtComPerVarApplKCBXTerm.pdf.

dedicated to improving the Calumet neighborhood's environment; Respiratory Health Association; Sierra Club, Illinois Chapter; and the Southeast Side Coalition to Ban Petcoke, a grassroots community organization focused on promoting environmental justice and protecting the health and wellbeing of the residents and communities on Chicago's Southeast Side.

As set forth below, KCBX once again fails to meet its burden of showing that operation of its sites without full enclosure for an additional 14 months will not adversely impact the community. KCBX relies on a thin request that lacks the demonstrations required to justify a variance from the City's Rules to protect public health. The City therefore must deny the Enclosure Variance Request.

The previous comments submitted by NRDC, SETF, Environmental Law and Policy Center, Faith in Place, Respiratory Health Association, Sierra Club, Illinois Chapter, and the Southeast Side Coalition to Ban Petcoke on the City's Rules and KCBX's June 2014 variance petition, which we incorporate in full by reference, describe the health and welfare threats from petroleum coke and coal dust, and the community's ongoing struggle with the KCBX Sites.² While we continue to believe that a ban on petroleum coke and coal handling is the only way to assure no adverse impacts from KCBX's operations, we recognize the importance of pile enclosure, and of enclosing the piles as quickly as possible. We urge the City, however, not to dilute its variance process in order to get a quick result, in particular here where KCBX has failed to demonstrate that it cannot move to enclose before August 2017 and that adverse impacts will not occur due to or during any delay in pile enclosure.

The pile enclosure requirement is a cornerstone of the City's Rules. Pile enclosure will reduce, or drive reductions in, dust from many sources and operations at the site, including wind blowing against the currently open piles, dozers working on the piles, and the many transfer points throughout the facility. The Rules provide two years from their issuance date for companies to enclose their outdoor petroleum coke and coal piles; in addition, since the draft regulations included an enclosure requirement for larger facilities, companies in the City have been on notice since at least December 2013 that the City would likely require

² See Exhibit 1, Natural Resources Defense Council, Southeast Environmental Task Force, Alliance for the Great Lakes, Environmental Law and Policy Center, Faith in Place, Respiratory Health Association, and Sierra Club, Comments on Proposed Rules and Regulations for the Handling and Storage of Bulk Material Piles ("NRDC, et al. Proposed Rule Comments"), available at http://www.cityofchicago.org/content/dam/city/depts/cdph/environmental_health_and_food/PetCoke_Public_Comments/NRDC_SETF_Alliance_for_the_Great_Lakes_ELPC_Faith_in_Place_RHAMC_and_Sierra_Club_Recvd_2-7-14.pdf; Exhibit 2, NRDC, SETF, Environmental Law and Policy Center, Faith in Place, Respiratory Health Association, Sierra Club, Illinois Chapter, and Southeast Side Coalition to Ban Petcoke Comments on KCBX Terminals Company's Petition for Variance, September 2, 2014 ("NRDC, et al. September Variance Comments").

enclosure at their sites. As noted in the comments submitted by NRDC, SETF, Environmental Law and Policy Center, Faith in Place, Respiratory Health Association, Sierra Club, Illinois Chapter, and the Southeast Side Coalition to Ban Petcoke on KCBX's prior variance request, this company was familiar with enclosed operations years before it bought the South Site and chose to use a less protective operational design. Given this picture, meeting the two-year requirement should pose no challenge to KCBX.

Yet the company now asks for an additional 14 months, until August 2017, to comply with the pile enclosure requirement. It does so through another thin application that lacks the "detail" required by the Rules and that relies on consultant studies that the City has already rejected in its consideration of the company's prior variance request.³ While the company refers to new consultant materials,⁴ KCBX did not include those materials in its original submission, and only submitted them to the City on January 27, 2015, a mere six days before the close of the public comment period.⁵ KCBX also cites steps that it will take pursuant to an updated Fugitive Dust Plan, but once again commits to submitting that important document "in the near future."⁶ For these reasons and others, KCBX has failed to demonstrate that the variance it seeks will not adversely impact the community.

Nor has the company made its case that compliance with the Rules' deadline would impose an undue hardship. While KCBX claims that enclosure "cannot be

³ Exhibit 3, Letter from Dr. Bechara Choucair, Commissioner, City of Chicago Department of Public Health, to Stephen A. Swedlow, Attorney for KCBX, December 9, 2014 ("December Variance Determination"), available at http://www.cityofchicago.org/content/dam/city/depts/cdph/environmental_health_and_food/CDPHDeterminationKCBXVarReq_1292014.pdf.

⁴ Enclosure Variance Petition at 14 ("Late last week, consultants for the City raised questions about whether KCBX's operations could affect its neighbors. KCBX disagrees with these consultants' opinions, and has asked for the data on which those consultants relied. KCBX has not had time to finalize its formal responses to the City's consultants' opinions, but will do so soon and file those responses as a supplement to this variance request.").

⁵ See Exhibit 4, Letter from Stephen A. Swedlow, Counsel for KCBX Terminals Company, to Commissioner Julie Morita, Chicago Department of Public Health, January 27, 2015, available at http://www.cityofchicago.org/content/dam/city/depts/cdph/environmental_health_and_food/SuppKCBXTermCoPetitionVarifromSections6.0.5.pdf ("January Analyses"). The City posted the new materials on its website on January 29, 2015.

⁶ See Enclosure Variance Petition at 21. NRDC, SETF, Environmental Law and Policy Center, Faith in Place, Respiratory Health Association, Sierra Club, Illinois Chapter, and the Southeast Side Coalition to Ban Petcoke raised serious concerns with the company's Fugitive Dust Plan in previous comments, incorporated here by reference, which show that KCBX has not met its burden to demonstrate that adverse impacts will not occur.

accomplished within 2 years due to events beyond KCBX's control,"⁷ it does not substantiate that the barriers it faces are solely permitting delays or natural disasters or other analogous events recognized under the Rules as "[b]eyond the Facility Owner or Operator's control."⁸ A significant portion of the delay involved with enclosing KCBX's petroleum coke and coal appears to arise instead from the company's desire to continue substantial operations while the enclosure is being constructed. But the standard for a variance is not whether the company can continue to move as much material as before or as it desires moving forward, but whether complying with the Rules is beyond the control of the company or would impose an undue hardship on its business. KCBX's operational plan is most certainly under the control of the company, and as before, KCBX's request contains little to no information by which to judge the necessity of maintaining operations at the company's desired levels in order to avoid an undue hardship.

Finally, the record lacks detailed information about operations at the North and South Sites leading up to and after enclosure, leaving the Commissioner to guess at what quantities and types of materials are involved in the request and what conditions may be necessary to abate any negative impacts from enclosure delay. The Commissioner has the authority and duty to attach reasonable conditions to a variance to ensure minimization of any adverse impacts on the community. Here, the City should not even reach the question of conditions to attach to a variance because KCBX has failed to adequately demonstrate that a grant of its Enclosure Variance Request would not result in adverse community impacts and that a grant is necessary to avoid undue hardship or is due to events beyond KCBX's control. Nonetheless, it is worth noting that the current record regarding the Sites' operations is inadequate to determine which conditions would ensure minimization of adverse impacts from any delay in enclosure.

Any one of these shortcomings on its own renders the Enclosure Variance Request unsupported, and so the City must deny the request. That the request poses so many omissions and inadequate analyses only drives home how far it falls from meeting the high bar for obtaining a variance under the Rules.

I. Legal Standard.

In the comments submitted by NRDC, SETF, Environmental Law and Policy Center, Faith in Place, Respiratory Health Association, Sierra Club, Illinois Chapter, and the Southeast Side Coalition to Ban Petcoke on KCBX's prior variance request,

⁷ Enclosure Variance Petition at 27. KCBX mentions that it must obtain permits, but does not assert that the permitting bodies have in fact delayed or are expected to delay consideration of the company's permit applications so as to make compliance with the timeline infeasible. *See id.* at 28. It thus has not demonstrated any exceptional circumstances beyond its control necessitating a variance from the Rules.

⁸ Section 8.0(2)(e)(ii).

we set out the standard for granting a variance. The standard is a high one, and must be made based on a detailed application from the requester. The applicant must describe the process or activity for which the variance is sought, as well as the quantity and types of materials used in the process or activity. Most importantly, the application must demonstrate why the variance will not result in a public nuisance or “adversely impact the surrounding area, surrounding environment, or surrounding property uses.”⁹ The applicant also must explain why compliance would impose an arbitrary or unreasonable hardship, why the proposed alternative measure is preferable, or why “compliance cannot be accomplished during the required timeframe” due to events beyond the facility operator’s control.¹⁰ All of this information must be provided “in detail.”¹¹ In turn, in making a determination on a variance application, the Commissioner is to consider public comments, and give particular consideration to, among other things, whether KCBX has demonstrated that any adverse impacts will be minimal.¹² KCBX has not.

A demonstration of arbitrary and unreasonable hardship, as the City has recognized, requires more than mere vague, general assertions of impact on an applicant’s operations and business.¹³ Rather, the requester must affirmatively show through evidence that its compliance burdens will be both prohibitively high (both in absolute terms, and relative to the costs the public will suffer if the variance is granted), and specific to the requester. As we previously commented, guidance to this end can be found in the approach taken by the Illinois Pollution Control Board under the provision of the state Environmental Protection Act providing for variances. Looking to the standard applied by the Pollution Control Board is appropriate here, as the City’s task involves a parallel analysis of harm to the environment and public health versus hardship to the company.¹⁴ The burden in

⁹ *Id.* at Section 8.0(2).

¹⁰ *Id.* at Section 8.0(2)(e). While Section 8.0 does not lay out additional guidance on what constitutes an arbitrary or unreasonable hardship, guidance may be found in the City’s parallel criteria for review of a variation from the zoning ordinance, as summarized in City of Chicago, Dep’t of Housing and Economic Development, “Zoning Board of Appeals Rules and Regulations,” (Aug. 2011), at 12-13, *available at* http://www.cityofchicago.org/content/dam/city/depts/zlup/Administrative_Reviews_and_Approvals/Publications/ZBA_Rules_and_Regulations.pdf.

¹¹ Rules at Section 8.0(2).

¹² *See id.* at Section 8.0(3)(a).

¹³ December Variance Decision at 14 and 18 (regarding KCBX’s claims about the impacts of covering conveyors and reducing pile heights).

¹⁴ *See Allaert Rendering, Inc. v. Ill. Pollution Control Bd.*, 91 Ill. App. 3d 160, 162 (1980); *see also Willowbrook Motel Partnership v. Pollution Control Bd.*, 135 Ill. App. 3d 343, 350 (1985) (affirming the Pollution Control Board’s denial of a variance request, and explaining that “the burden was upon petitioner to show that arbitrary or unreasonable hardship *outweighed* the public interest in compliance with regulations designed to preserve the environment and protect human health” (emphasis added)).

such variance proceedings lies with the requester, who must provide concrete evidence of the claimed economic harms, such as income or earnings data.¹⁵

The Rules provide that “[t]he Commissioner may grant a variance in whole or in part, and may attach reasonable conditions to the variance to ensure minimization of any adverse impacts.”¹⁶ As set forth below, the Commissioner must deny KCBX’s variance request in whole because KCBX has failed to demonstrate that no adverse impacts on the surrounding community will result from a grant of its request. Nonetheless, if the Commissioner determines that any extension of the deadline to achieve full enclosure is warranted, the Commissioner should impose such reasonable conditions as are necessary to *ensure* minimization of any adverse impacts from the North and South Sites on the surrounding community.

II. Failure to Describe the Quantity and Types of Materials Connected to 14 Months of Delay in Pile Enclosure.

Rather than provide the City with a clear picture of the amount and types of material handled by various operations at KCBX’s dynamic site and how that information will change in connection with the requested enclosure delay, the company provides only its current maximum stockpile capacity at each site.¹⁷ This thin offering fails to provide the before, during, and after pictures of actual operations at the Sites that are necessary to determine the impact of a delay in enclosure. KCBX must provide, “in detail,” a description of “[t]he quantity and types of materials used in the process or activity in connection with which the variance is requested, as appropriate.”¹⁸ As the City has described in its prior variance decision, this portion of the Rules requires KCBX to submit information enabling a comparison of current operations and emissions to future operations and emissions,¹⁹ recognizing that “quantities of material may change with time.”²⁰

Nowhere does KCBX provide the capacity of the enclosure, or the amount that it expects to store inside. Nor does it give a gauge for how much material currently is stored in piles versus exchanged between incoming and outgoing vehicles, or how this picture is expected to change during the construction period and upon commencement of enclosed operations. For these reasons, the petition is incomplete and must be denied.

III. Failure to Demonstrate that Operating Open Piles for an Additional 14 Months Will Not Result in a Nuisance or Adversely Impact the Community.

¹⁵ *Id.*

¹⁶ Section 8.0(3)(c).

¹⁷ *See* Enclosure Variance Petition at 26.

¹⁸ Section 8.0(2)(c).

¹⁹ *See* December Variance Determination at 14.

²⁰ *Id.* at 12.

KCBX's claimed demonstration that a 14-month extension of the enclosure deadline will not result in a nuisance or adversely impact the surrounding area, environment, or property uses falls short for a number of reasons, as set forth below. KCBX relies on the following in support of its variance petition:²¹

- Citation to its Fugitive Dust Plan, in combination with Exhibit 8, PM₁₀ monitoring data;
- Re-submission of earlier analyses conducted by consultants retained by the company;
- Vague reference to additional future analyses by these consultants that are not part of the original variance petition and, as noted above, were only submitted by KCBX six days before the close of the public comment period;
- Exhibits 2 and 3, a "preliminary" lab analysis of furnace filters from homes nearby the South Site posted on U.S. EPA's website and a letter from KCBX's consultant to U.S. EPA Region 5 regarding those samples;²² and
- Exhibits 4 and 5, two brief letters from KCBX's retained air quality modeling consultant, dated December 15, 2014, and June 5, 2014, respectively, regarding (a) PM₁₀ monitoring data from 2014, and (b) the consultant's critique of a March 2014 air quality modeling analysis conducted by the City's consultant.

These sources fail to demonstrate that continuing to store and handle huge quantities of petroleum coke and coal using outdoor piles will not adversely impact the surrounding community.

NRDC, SETF, Environmental Law and Policy Center, Faith in Place, Respiratory Health Association, Sierra Club, Illinois Chapter, and the Southeast Side Coalition to Ban Petcoke provided an extensive critique of KCBX's June 2014 Fugitive Dust Plan in the September comments on the company's previous variance request.²³ For the reasons provided in those comments, and in light of the PM₁₀ monitoring data results taken up in more detail below, the Fugitive Dust Plan does not demonstrate that granting an additional 14 months to enclose the open piles will not create a public nuisance or adversely impact the surrounding community.

²¹ See Enclosure Variance Petition at 26.

²² The furnace-filter analysis cited by KCBX provides no support for its argument that the North and South Sites are not creating adverse impacts on the community. Furnace filters are not designed for assessing outdoor (or even indoor) air quality. The City has before it much more dispositive evidence that the open storage of petroleum coke and coal at the North and South Sites is adversely impacting the surrounding community.

²³ NRDC, et al. September Variance Comments at 7-13. To our knowledge, the City has not approved KCBX's Fugitive Dust Plan.

Regarding the earlier consultant analyses, the September comments on KCBX's prior variance request, which the company supported with the same air quality modeling and soil sample studies it relies on in this request, NRDC, SETF, Environmental Law and Policy Center, Faith in Place, Respiratory Health Association, Sierra Club, Illinois Chapter, and the Southeast Side Coalition to Ban Petcoke outlined a number of deficiencies with KCBX's consultant studies, which apply equally here.²⁴

Moreover, the City has already addressed these consultant analyses and found that they do not meet KCBX's burden to show lack of a nuisance or adverse impacts to the community. In particular, based on its own consultant analyses, which we incorporate in full by reference,²⁵ the City found that:

- Regarding the air quality modeling exercise, "STi cannot be certain that it has identified the specific sources of dust emissions that caused the high PM₁₀ concentrations",²⁶ and "[r]ecognizing th[e] impossibility of isolating and identifying the precise emission sources, one cannot 'validate' a modeling scenario that can be confidently used to model/extrapolate PM₁₀ impacts at residential locations (even assuming that only residential locations are relevant)"; and
- Regarding dust sampling, "results of electron microscopy analyses of off-site dust performed by CDM Smith indicate the likely presence of petcoke particles [based on the identification of high sulfur/low accessory element carbon rich grains consistent with petcoke]." ²⁷

²⁴ See *id.* at 15-20.

²⁵ Exhibit 5, Appendix 1 to CDPH Determination – CDM Smith Technical Analysis Letter, available at http://www.cityofchicago.org/content/dam/city/depts/cdph/environmental_health_and_food/App1CDMSmithTechAnalysisLtr.pdf; Exhibit 6, Appendix 2 to CDPH Determination – CDM Smith Technical Memorandum regarding Soil Sampling, available at http://www.cityofchicago.org/content/dam/city/depts/cdph/environmental_health_and_food/App2CDMSmithTechMemoreSoilSamp.pdf; Exhibit 7, Appendix 3 to CDPH Determination – CDM Smith Technical Memorandum regarding Dispersion Modeling, available at http://www.cityofchicago.org/content/dam/city/depts/cdph/environmental_health_and_food/App3CDMSmithTechMemoreDispersionMod.pdf; Exhibit 8, Appendix 4 to CDPH Determination – CDM Smith Technical Memorandum regarding Electron Microscopy, available at http://www.cityofchicago.org/content/dam/city/depts/cdph/environmental_health_and_food/App4CDMSmithTechMemoreElectronMicro.pdf.

²⁶ December Variance Determination at 11.

²⁷ December Variance Determination at 13.

The City also noted gaps in the PM₁₀ monitors, in particular the lack of a monitor directly between the Sites and the closest residential areas.²⁸ Thus “it is possible for dust releases from certain portions of the KCBX property to migrate off-site toward residential areas and not be detected by any of the existing monitors.”²⁹ Nor do any of the current monitors measure PM_{2.5}, a dangerous fraction of particulate matter which is to be expected from petroleum coke and coal handling facilities and has posed serious air quality issues for the area.³⁰

Because KCBX relies on these same analyses to claim a lack of adverse impacts from operations substantially similar to those under consideration in the previous variance proceeding, the same critiques of its request apply here. The variance request thus fails to make the required demonstration regarding adverse impacts and must be denied.

Regarding the PM₁₀ monitoring data, KCBX’s position appears to be that since its operations account for only part of the pollution problem, it should not be considered as causing *any* adverse impacts on the community or that its adverse impacts are minimal.³¹ Yet, assuming as accurate the company’s own characterization of the “net contributions to observed PM₁₀ from KCBX’s operations,” these operations alone brought air quality levels a full third of the way towards the 24-hour National Ambient Air Quality Standards (“NAAQS”) for PM₁₀ – or 50 µg/m³ – on one occasion when ambient levels at the edge of the North Site exceeded the national standards, and a significant portion of the way on another such occasion.³²

Also of note, this monitoring data and KCBX’s own assessment of its net contribution to observed PM₁₀ levels at perimeter monitors belies KCBX’s assertion that “no evidence exists of pet coke or coal on surfaces or in the soil of the East Side and South Deering neighborhoods.” It is simply not conceivable that the site would

²⁸ *Id.*

²⁹ *Id.* The Rules specifically anticipate that additional monitors may be needed to characterize pollution from the sites. *See* Section 3.0(4) (requiring “at least” one monitor at each cardinal direction during the first year of monitoring, and “additional monitors as appropriate” beyond the baseline two upwind and two downwind monitors). U.S. EPA has made no explicit finding that KCBX’s current monitoring approach is adequate to fully characterize emissions from the site and/or that no additional monitors are warranted.

³⁰ *See* NRDC, et al. Proposed Rule Comments at 3-6.

³¹ Exhibit 9, Letter from Stephen A. Swedlow, Counsel for KCBX Terminals Company, to Commissioner Bechara Choucair, Chicago Department of Public Health, September 26, 2014, at 9-10, available at http://www.cityofchicago.org/content/dam/city/depts/cdph/environmental_health_and_food/KCBXResNRDCetalComments9262014.pdf.

³² *Id.* at 9 (citing contributions of 50 µg/m³ and 9 µg/m³ on May 8 and April 12, 2014, respectively).

contribute 50 µg/m³ to ambient PM₁₀ levels at the very edge of the facility and yet no petroleum coke or coal is escaping into the surrounding area and depositing on soil and surfaces. The more plausible explanation, and the one that the City has arrived at, is that KCBX's earlier sample studies were inadequately designed to detect levels of petroleum coke and coal from the sites in the community.³³

KCBX's late submission of additional consultant analyses is taken up below.

Finally, regarding KCBX's reliance on the claimed absence of PM₁₀ NAAQS violations to show no adverse impacts on the community, it is important to note that the City is not limited in the exercise of its police and home rule powers to air quality levels that violate NAAQS. Indeed, the Clean Air Act recognizes and contemplates that states may adopt air quality requirements that are more stringent than federal requirements,³⁴ and the state of Illinois has granted Chicago broad home rule authority³⁵. The Commissioner thus may take proactive steps to ensure that air pollution (including PM₁₀ and PM_{2.5}) does not reach harmful levels looking at gauges in addition to the NAAQS, and is not restricted to acting only *after* federal violations have occurred.

This authority and duty to protect its residents is particularly important when it comes to particulate matter, a pollutant for which experts are in agreement there is no threshold below which negative impacts cease to occur,³⁶ and for which

³³ See December Variance Determination at 12 and Appendix 2, CDM Smith Technical Memorandum Regarding Soil Sampling at 4 ("Consequently, due to the low modeled effect relative to background levels, using traditional bulk soil sampling methods to look for evidence of petcoke deposition at present or in the next few years is extremely unlikely to indicate that petcoke has been transported and deposited to off-site locations.")

³⁴ See 42 U.S.C. § 7416.

³⁵ See IL CONST. art. VII, § 6.

³⁶ See, e.g., Exhibit 10, U.S. EPA, "Summary of Expert Opinions on the Existence of a Threshold in the Concentration-Response Function for PM_{2.5}-related Mortality," Technical Support Document, June 2010, at 6-7 and 23, available at <http://www.epa.gov/ttnecas1/regdata/Benefits/thresholdstd.pdf>; Exhibit 11, World Health Organization, "Health Effects of Particulate Matter: Policy implications for countries in eastern Europe, Caucasus and central Asia," at 6, 8 (discussing "air quality guidelines" of 25 and 50 µg/m³ on a 24-hour average for PM_{2.5} and PM₁₀, respectively: "In addition to these guideline values, the AQGs provide interim targets for each air pollutant, aimed at promoting a gradual shift to lower concentrations in highly polluted locations. If these targets were to be achieved, significant reductions in risks for acute and chronic health effects from air pollution could be expected. Progress towards the guideline values should, however, be the ultimate objective. As no threshold for PM has been identified below which no damage to health is observed, the recommended values should be regarded as representing acceptable and achievable objectives to minimize health effects in the context of local

the state of California and the European Union have adopted air quality standards significantly below the U.S. federal standards.³⁷ As noted above, the PM₁₀ monitoring data continues to show troubling levels, including numerous readings in excess of 100 on a 24-hour average (four of which occurred during the Sites' alleged slow season), in addition to the April and May 2014 readings that exceeded the 24-hour PM₁₀ NAAQS (and for which KCBX acknowledges a significant net contribution).³⁸ KCBX has provided no information on its operations during these periods to absolve the company from responsibility for significantly contributing to these problematic levels.

For these reasons, the City must reject KCBX's claim that continuing to operate with potentially hundreds of thousands of tons of petroleum coke and coal per month held in open piles for an additional 14 months will not result in a nuisance or adversely impact the surrounding community.

IV. Failure to Show Why Compliance with the Enclosure Deadline Would Impose an Arbitrary or Unreasonable Hardship, or Cannot Be Accomplished During the Required Timeframe Due to Events Beyond KCBX's Control.

KCBX provides scant support for its claim that "it simply is not feasible to design, plan, permit and safely construct an enclosure of this complexity and magnitude in two years."³⁹ Of key importance, among other issues, KCBX omits any discussion of how ongoing operations are expected to impact the time needed to achieve compliance with the enclosure deadline. With respect to its construction timeline, KCBX has not claimed, nor does the limited information it has submitted suggest, that KCBX could not build its proposed enclosure in 18 months by cutting back or halting bulk-storage operations in the interim.

constraints, capabilities and public health priorities."), available at http://www.euro.who.int/_data/assets/pdf_file/0006/189051/Health-effects-of-particulate-matter-final-Eng.pdf.

³⁷ Both California and the European Union have adopted 24-hour standards of 50 µg/m³, the same amount that KCBX calculated as its net contribution on May 8, 2014. *See* Exhibit 12, California Air Resources Board, "Particulate Matter – Overview," PM₁₀ 24-hour standard of 50 µg/m³, available at <http://www.arb.ca.gov/research/aaqs/caaqs/pm/pm.htm>; Exhibit 13, European Environment Agency, "Air quality in Europe – 2014 report," (2014) at 28, Table 2.1 (PM₁₀ one-day limit of 50 µg/m³, not to be exceeded on more than 35 days per year), available at <http://www.eea.europa.eu/publications/air-quality-in-europe-2014>.

³⁸ *See* Exhibit 14, U.S. EPA, "KCBX Fenceline Air Monitoring Data," Summary Data, available at <http://www2.epa.gov/petroleum-coke-chicago/kcbx-fenceline-air-monitoring-data#summarydata>; *see also* Exhibit 8 to KCBX's Enclosure Variance Petition (PM₁₀ monitoring data).

³⁹ Enclosure Variance Petition at 1.

Since the company intends to continue operating both Sites as it moves to enclosure, it must provide clear and detailed information on its expected levels of operation, why it needs to operate at these levels to avoid arbitrary or undue hardship, and how such operations will impact the schedule for enclosure. Only with this information can the Commissioner determine whether the additional time for enclosure that KCBX seeks is in fact justified and minimizes the adverse impacts to the community, in keeping with the standard for granting a variance. Because the current Enclosure Variance Petition, like KCBX's previous variance petition, is again devoid of information on operating levels and financial impacts, the City must deny the variance.

Similarly, KCBX has failed to explain why it needs a full three months to transition to fully enclosed operations *after* construction is completed. No supporting information is provided for this lengthy transition period.

V. The Commissioner Cannot Grant the Enclosure Variance Without Assessing and Imposing Reasonable Conditions to Minimize Adverse Impacts From Any Enclosure Delay Period.

If the City is inclined to grant the requested enclosure variance in whole or in part, notwithstanding the fatal problems discussed above, it must also assess and impose reasonable conditions to minimize adverse impacts during the enclosure delay period. Yet KCBX omits from its request any discussion of additional methods for dust control during the requested 14-month period that would reduce impacts from extended, open pile operation, and/or that would apply after enclosure to make up for any additional, unmitigated dust reaching the community during the 14 months. This omission compounds the company's silence on quantities and types of materials connected to the requested delay, and failure to provide details on its operations on days with high monitored PM₁₀ levels, as noted above. For these reasons, the petition must be denied.

In several portions of the company's request, KCBX describes its current compliance with other portions of the Rules.⁴⁰ But the Rules' requirements that apply during the period prior to enclosure were premised on enclosure within two years, and thus can be viewed as already striking a compromise. If KCBX seeks to extend that period by more than fifty percent, it must also be expected to apply additional measures to enhance dust control during the long delay period to minimize adverse impacts from its failure to comply with the Rules' enclosure timeline.

KCBX does mention that it paved internal roads by September 2014, ahead of the March 2015 deadline set by the Rules.⁴¹ It also notes a change in its response to PM₁₀ monitoring results above 300 µg/m³, and more frequent moisture sampling,

⁴⁰ Enclosure Variance Petition at 15-17.

⁴¹ *Id.* at 17.

than it originally proposed in its Fugitive Dust Plan.⁴² These changes, however, are relatively minor. Moreover, as set forth above, even with the measures KCBX claims to be applying, the PM₁₀ monitors continue to register concerning levels, including during the Sites' allegedly slower season. More needs to be done if enclosure is to be delayed 14 months.

In its recent revision of the petroleum coke and coal zoning ordinance, the City recognized that delay in enclosing the piles is grounds for requiring caps on the throughput and daily storage capacity of the Sites.⁴³ If the City is inclined to grant the Enclosure Variance Petition in full or in part, despite the failings identified above, it must also consider whether it is possible to use these and other conditions to minimize adverse impacts on the community. Besides capacity and throughput limits, the City should consider conditions including, but not limited to:

- Limits on storage capacity;
- Limits on throughput;
- Limits on vehicle traffic to, from, and within the sites, and use of covers or other controls on the vehicles themselves;
- Maintenance of moisture levels of at least 8.3% for petroleum coke and 7.6% for coal;⁴⁴
- Enhancement of the water spray system at the North Site;
- Use of clean water meeting objective limits on total dissolved solids in the spray systems at both Sites;
- Use of tarps or other temporary covers on piles;
- Use of fully enclosed conveyors that do not permit air to circulate around the petroleum coke and coal;⁴⁵
- Use of a vacuum system or some other equivalent closed technology for loading and unloading barges and ships, instead of clam shell buckets; and
- Installation of additional PM₁₀ monitors and of PM_{2.5} monitors, at the perimeter as well as near and within bordering residential areas, to help address gaps in the current monitoring.

⁴² *Id.* at 21.

⁴³ See City of Chicago, Amendment of Municipal Code Section 17-9-0117 regarding petroleum coke and coal bulk materials throughput reporting requirements, passed January 21, 2015, available at <https://chicago.legistar.com/LegislationDetail.aspx?ID=2099854&GUID=17B84FFB-22EB-4B9E-94D2-8A0F212E022D>

⁴⁴ See South Coast Air Quality Management District, Rule 1158, "Storage, handling, and transport of coke, coal and sulfur," at (c)(21) (definition of "moist material").

⁴⁵ It appears that KCBX plans to use covered conveyors that are open to air along the length of the conveyor. See Enclosure Variance Petition at 13.

The September comments submitted by NRDC, SETF, Environmental Law and Policy Center, Faith in Place, Respiratory Health Association, Sierra Club, Illinois Chapter, and the Southeast Side Coalition to Ban Petcoke on KCBX's Fugitive Dust Plan outline additional possible conditions.⁴⁶

Requiring these and other measures will not only reduce dust relative to current and planned operations, but will give KCBX an additional incentive to minimize the extra time it takes to enclose the piles. Nor should conditions to minimize adverse impacts connected to the requested variance be restricted to the extension period, as additional controls following enclosure may be warranted to offset dust that accumulated in the community during the delay period.

VI. To the Extent that KCBX's Late-Submitted Analyses are Part of the Company's Required Demonstration Regarding Nuisance and Adverse Impacts, Consideration of the Analyses Violates Due Process.

The Rules require KCBX to make its demonstration that a variance will not result in a nuisance or adverse impacts in its variance application,⁴⁷ and the Commissioner may not grant a variance unless the public has been afforded a 30-day period to comment on that variance application.⁴⁸ To the extent that KCBX relies on its late-submitted analyses to make the required demonstration, the failure to provide the public with 30 days to review and comment on these analyses runs afoul of due process.

VII. KCBX's Late-Submitted Analyses Do Not Demonstrate that the Requested Variance Will Not Result in a Nuisance or Adverse Impacts on the Community.

Without waiving any due process claim and based on the very limited time afforded for public review, we provide the following comments on the late-submitted analyses:

Nothing in KCBX's previous or late-submitted air quality modeling analyses detracts from the weight of the PM₁₀ monitoring data and community complaints in showing that the company has failed to meet its burden. The PM₁₀ monitoring data shows problematic levels at the perimeter of the sites, and on this basis the City may reasonably find that KCBX has not met its burden to show no adverse impacts. As described above, monitoring data from the past year shows levels that exceeded the NAAQS on two occasions, and that surpassed health-based standards adopted by several government bodies on many additional days. Monitors are located at the perimeter of the facility, and so levels just over the property boundary in areas to

⁴⁶ NRDC et al. September Comments at 7-13.

⁴⁷ Section 8.0(2)(d) and (h).

⁴⁸ Section 8.0(5).

which the public has access are likely to be similarly high.⁴⁹ The company has acknowledged a “net contribution” to these levels, in at least one case as high as 50 µg/m³ on a 24-hour average. KCBX provides no information about its operations on days when PM₁₀ levels were high that would absolve it of responsibility for a significant contribution. It also has failed to provide information sufficient to show that NAAQS exceedances like the ones in April and May, and the high levels seen in October and late December to early January and on other dates, will not recur during any delay in enclosure.

In addition, KCBX attempts with its soil and surface sampling to downplay the industrial history and current conditions at and surrounding its site, and to overplay the significance of the soil and surface sampling results to its required demonstration. Without addressing the technical claims of the new EH&E studies due to the short time available for the public’s review, we provide these comments on the general premises behind the analyses:

- *Soil and surface sample studies show that KCBX has met its burden regarding nuisance and adverse impacts.* As noted above, the City may conclude based on the air quality monitoring data and community complaints alone that KCBX has failed to meet its burden to show no adverse impacts. KCBX’s consultant’s conclusion that “information gathered to date reveals no evidence that petcoke or coal has migrated from KCBX’s facilities to off-site locations”⁵⁰ ignores the PM₁₀ monitoring data, which *does* show such migration into the air beyond the perimeter of the facility. To the extent that the soil and surface sampling analyses in the record are inconclusive regarding how much petroleum coke and coal is *depositing* on soil and surfaces in the area, the City may find as such and yet still must deny the variance.
- *The City must define a quantitative threshold at which adverse impacts occur.* It is not the City’s burden in a variance proceeding to identify a “benchmark for the levels of pet coke or coal deposition in the soil that would rise to the level of a nuisance or adverse impact.”⁵¹ Rather, it is the company’s duty to show that there will be no adverse impact, which

⁴⁹ Assessing impacts at the supposedly most-affected residence is an improper focus, as it ignores that the public has access to areas immediately abutting the property.

⁵⁰ Exhibit 1 to January Analyses at 1.

⁵¹ January Analyses at 1; Exhibit 1 to January Analyses at 2 (“the report does not determine the amount of concentration of material in the sidewalk dust identified as petcoke by CDM Smith. For that reason, the potential impact, if any, cannot be quantified.”) Note that the lack of a quantitative threshold for *deposition* and adverse impacts does not detract from evidence in the record regarding air quality thresholds and adverse impacts discussed above, e.g., the NAAQS and other government PM standards.

necessarily includes a showing of the threshold of deposition below which it asserts no adverse impacts will occur. KCBX has provided no such context, due in large part to its untenable position that no petroleum coke or coal is migrating offsite.

VIII. Conclusion

For these reasons, KCBX's Enclosure Variance Petition is unsupported and must be denied.

Sincerely yours,



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