

October 16, 2017

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

Re: Watco Transloading, LLC Variance Request

To Whom It May Concern:

Thank you for the opportunity to comment on the July 31, 2017 request of Watco Transloading LLC for a variance (“Request”) from the Chicago Department of Public Health’s (“CDPH”) Rules and Regulations for Control of Emissions from the Handling and Storage of Bulk Material Piles (“Rules”). These comments are submitted on behalf of the Natural Resources Defense Council (“NRDC”) and our more than 11,000 members and activists in the City of Chicago (“City”), including those who reside on the Southeast Side in the Calumet area, as well as the Southeast Environmental Task Force (“SETF”), an active community group dedicated to improving the Calumet neighborhood’s environment; and the Southeast Side Coalition to Ban Petcoke (“SSCBP”), a community group fighting for a healthy, thriving neighborhood free of petroleum coke, manganese, and other toxins. Please note that some of the named groups have submitted additional, separate comments that address specific areas of concern or interest.

### **Introduction**

For the reasons set forth below, the Request – which renews the prior owner-operator’s recently denied request to avoid critical monitoring for particulate matter (“PM”) – is incomplete and otherwise fails to demonstrate that the requested variance will not have an adverse impact on the community and environment. Watco’s own opacity testing results demonstrate that it cannot consistently control the site’s dust in a manner that is protective of public health and require CDPH to deny Watco’s Request.

Indeed, CDPH must do more to protect the community from neurotoxic manganese dust by banning handling of the substance in close proximity to residential neighborhoods. U.S. EPA considers the area surrounding Watco an environmentally overburdened community, and its high levels of exposure to particulate matter, air toxics and other respiratory hazards place it in the top 95% in the state of Illinois.<sup>1</sup> Existing data from S.H. Bell’s monitoring and Watco’s opacity testing support the need for CDPH to take immediate action to protect public health. If CDPH won’t act immediately to ban

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<sup>1</sup> See U.S. EPA Website, “Environmental Issues in Southeast Chicago,” <https://www.epa.gov/il/environmental-issues-southeast-chicago>.

manganese in this densely populated community, we call upon CDPH to promptly complete the manganese assessment, that we understand is underway, and move quickly to update the Rules and recommend land use code changes as needed to protect public health. In addition, CDPH must at a minimum require additional monitoring and robust additional controls at Watco due to its handling of manganese and proximity to residential neighborhoods. These measures should include, but are not limited to, installation of at least one filter-based metals monitor, storage of all manganese-containing materials inside, and conducting of all manganese handling/transfer activities indoors as well. While neurotoxic manganese dust was not at the front of people's minds during adoption of the Rules, controlling this community hazard is well within CDPH's general authority and the Rules themselves.<sup>2</sup>

In support of this Request, Watco submits information that actually reinforces the appropriateness of rejecting a variance without any further analysis: Its own opacity test results demonstrate a violation of the City's 10% opacity limit during barge-to-truck operations.<sup>3</sup> This unwitting reporting of a violation illustrates the company's lack of familiarity with the City's Rules and blind eye to their history. Moreover, these are the test results conducted and submitted by the company and submitted to bolster its Request; the actual dust levels are likely even higher when the facility is not putting on a "beauty show" to bolster its variance application, both with regards to the barge-to-truck operations and other outdoor operations such as truck unloading. This test data alone justifies denying Watco's Request.

However, also missing from the record is an updated fugitive dust plan that commits Watco to following the various dust control measures described in its variance Request. CDPH at minimum should not grant a variance before the company provides such a critical piece of the puzzle, and should provide additional opportunity for public comment if and when the company provides the required dust plan.

We also highlight a disturbing theme in the Request: Watco cherry picks data and engages in analytic sleight of hand in an effort to downplay the scale of its operations, discredit reasonable interpretations of evidence of its dust impacts, in particular manganese, and most offensively misrepresent the size and nature of the impacted community. In one part of the Request, the company highlights certain data to make its case; in another, it ignores the same data that would weigh against the point it attempts to

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<sup>2</sup> See Rules Section 3.0(1), "[t]he 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, if the Commissioner finds that the Facility has failed to control fugitive dust." This is in keeping with the broad authority afforded CDPH to protect air under Section 2-112-160 of the Municipal Code to develop "any rules necessary to implement . . . the Air Pollution Control Ordinance." See Dust Rules.

<sup>3</sup> Request at 18.

make. This disingenuous positioning detracts from Watco's credibility and casts the company in a negative light more generally.

The Request not only misleads CDPH, but in so doing also fails to describe elements required for a variance under Section 8.0(2) and Section 3.0(4) of the City's Dust Rules:

- Volume: In describing its operations,<sup>4</sup> Watco downplays the sheer volume of material that it handles by comparing itself to competitor S.H. Bell on a percentage basis;
- Affected Community: In describing the impacted community, Watco narrows its focus to the 60633 zip code and the annual prevailing southerly wind, while omitting the fence-line community immediately to the south of Watco and ignoring the strong northerly winds that prevail at certain times of year, and it omits reference to the socioeconomic status of the surrounding communities; and
- Adverse Impacts: In describing whether the facility poses an adverse impact on the surrounding community, Watco relies on a small percentage of data points for other sources of manganese in the area and claims they make the case that Watco is not a source at all.

Add to these shortcomings a failure to demonstrate that the cost of installing and operating the monitors would be an arbitrary and unreasonable hardship on a subsidiary of one of the largest rail and transloading companies in the U.S., a company based in Kansas with international operations as well as operations throughout the U.S., and the need for the City to deny the Request is clear.

The regulatory background against which Watco makes its Request is also relevant to the City's determination. Several years into implementation of the Rules, we have seen many companies initially submit variance requests moaning about the burden on their facilities of various control and monitoring requirements, with a number ultimately conceding that they actually can comply after all. For example, Watco itself demonstrates that Kinder Morgan's attempt to avoid the weather station requirement was rightly denied by the City.<sup>5</sup> S.H. Bell similarly retracted several variance requests that it initially submitted to the City.<sup>6</sup> S.H. Bell and KCBX resisted installing continuous PM and metals monitors and claimed to control their dust robustly – only to have those monitors identify levels of PM and metals that pose hazards to the surrounding community once installed.<sup>7</sup>

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<sup>4</sup> Section 8.0(2)(b) and (c).

<sup>5</sup> Watco thus has already agreed to incur one of the costs associated with PM monitoring.

<sup>6</sup> Ex. 1, Letter from Kim Walberg, Attorney for S.H. Bell, to Otis Omenazu, Chief Air Engineer, CDPH, Response to January 26, 2015 Request for Additional Information, March 3, 2015, at 2-3, available at [https://www.cityofchicago.org/content/dam/city/depts/cdph/environmental\\_health\\_and\\_food/SHBellResReqAddInfo332015.pdf](https://www.cityofchicago.org/content/dam/city/depts/cdph/environmental_health_and_food/SHBellResReqAddInfo332015.pdf).

<sup>7</sup> See Ex. 2, ATSDR, Health Consultation, Review of Analysis of Particulate Matter and Metal Exposures in Air, KCBX, August 22, 2016, available at [https://www.atsdr.cdc.gov/hac/pha/KCBXPetroleumCoke/KCBX\\_Petroleum%20Coke\\_HC\\_508.pdf](https://www.atsdr.cdc.gov/hac/pha/KCBXPetroleumCoke/KCBX_Petroleum%20Coke_HC_508.pdf).

Similarly, the S.H. Bell experience in East Liverpool demonstrates that manganese dust impacts are much greater at communities closer to the facility. And S.H. Bell acknowledges that evaluation of the monitoring data led the company to identify areas for additional controls, further demonstrating the value of this information.<sup>8</sup>

In sum, experience to date demonstrates that the baseline requirements of the City's Rules are the minimum requirements needed to protect public health, and variances from these requests should only be granted in the truly exceptional case that a company meets the high standard for a variance. The utility of the PM monitoring data in particular has been made clear by this history. Indeed, experience with the Rules shows the need for strengthening, not diluting, them. Watco's Request for a variance thus should be denied.

### **CDPH Must Deny the Applicant's Request to Avoid Installing PM Monitors**

#### *Background: City's Dust Rules and Variance Process*

The City has ample authority to address the health risks posed by Watco's operations. The Commissioner has broad authority and responsibility to protect public health and the environment by regulating activities that have the potential to cause windborne dust; this authority extends to activities, associated with the material handling and storage, that CDPH deemed likely to create airborne dust: bulldozing and grading, material dropping operations, equipment travel on the surfaces of stockpiles, and vehicle travel on paved roads.<sup>9</sup> Under the City's Dust Rules, CDPH appropriately requires that facilities have the capacity to prevent, detect and respond to potential releases of windborne material. To this end, CDPH mandates the development and implementation of a proactive fugitive dust plan. Every fugitive dust plan must contain some required elements, but CDPH also expressly allows flexibility for businesses to develop plans that make the most sense based on their unique operations.<sup>10</sup> However, the actual success of a fugitive dust plan is not left to guesswork. For CDPH, the most reliable means to demonstrate the success of a fugitive dust plan for operators, regulators and residents is through uniform, empirically verifiable PM monitoring.

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<sup>8</sup> Ex. 3, Letter from Kim Walberg, Attorney for S.H. Bell, to Dr. Julie Morita, Commissioner, CDPH, S.H. Bell Company, 10218 South Avenue O September 2017 Revised Fugitive Dust Plan, September 13, 2017 ("S.H. Bell September 2017 Letter").

<sup>9</sup> Ex. 4, City of Chicago Department of Public Health, Official Response to Public Comments on the Proposed Rules and Regulations For The Handling and Storage of Bulk Material Piles, March 13, 2014, at 3-4, available at [https://www.cityofchicago.org/content/dam/city/depts/cdph/environmental\\_health\\_and\\_food/CityofChicagoResponseToCommentsReceivedonBulkMaterialRules.pdf](https://www.cityofchicago.org/content/dam/city/depts/cdph/environmental_health_and_food/CityofChicagoResponseToCommentsReceivedonBulkMaterialRules.pdf).

<sup>10</sup> *Id.* at 21.

It is not an exaggeration to state that PM monitoring is the lynchpin of the CDPH protocol. As stated by CDPH:

The requirement for fugitive dust monitoring is a critical component of the regulations to ensure that the facility's dust control measures are working. CDPH inspectors cannot observe facility operations on a daily basis. And facility workers who are occupied in doing their jobs may not always realize when there is a dust problem. Therefore, the PM monitors are important for alerting facility operators when there might be an issue with their dust control systems. They are also important to ensure compliance with the fugitive dust prohibition, as well as to give neighbors a level of comfort in knowing the air is being monitored.<sup>11</sup>

Because of the importance of PM monitoring, the variance standard for avoiding this critical measure is the most difficult of any requirement in the CDPH regulations.

In response to concerns we raised during the development of the variance process rules,<sup>12</sup> the City added requirements for variance applications, included an opportunity for public comment and criteria for reviewing the variance application.<sup>13</sup> Under the improved variance process, the Commissioner is empowered to hold applicants' demonstrations to high standards and to pay close attention to the interests of the public articulated through their written comments.

In our past variance comments, we provided additional general comments to guide the City's review of variance requests. We emphasized the shortcomings in historic efforts to assess and control fugitive dust, and the need for the City to demand robust demonstrations from variance requestors. We also highlighted that some increased costs to comply with the Rules, above and beyond past obligations, are to be expected and should not themselves be considered an undue burden. With several years of requests and a number of CDPH variance determinations in those years, we are disappointed by the delay in issuing some determinations. At the same time, we are heartened by the line that the City has drawn in denying a number of determinations and rejecting unsupported and unjustified requests, most notably KCBX's request for a variance regarding indoor storage of petcoke and coal and S.H. Bell's request to avoid PM monitoring.

*Standard for Obtaining Variance from PM Monitoring Requirements*

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<sup>11</sup> *Id.* at 23.

<sup>12</sup> Ex. 5, Comments of NRDC et al. on CDPH's Proposed Rules and Regulations for the Handling and Storage of Bulk Material Piles, 2014, at 38-40, available at [https://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](https://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).

<sup>13</sup> Section 8.0.

Section 8.0(2) of the Dust Rules provides the requirements for a variance request which include in relevant part:

- A description of the process or activity for which the variance is requested including pertinent data on location, size and the population and the geographic area affected by, or potentially affected by, the process or activity.
- The quantity and types of materials used in the process or activity in connection with which the variance is requested, as appropriate.
- A demonstration that the issuance of the variance will not create a public nuisance or adversely impact the surrounding area, surrounding environment, or surrounding property uses.
- A statement explaining:
  - a. Why compliance with the regulations imposes an arbitrary or unreasonable hardship;
  - b. Why compliance cannot be accomplished during the required timeframe due to events beyond the Facility Owner or Operator's control such as permitting delays or natural disasters; or
  - c. Why the proposed alternative measure is preferable.
- A discussion of alternate methods of compliance and of the factors influencing the choice of applying for a variance.<sup>14</sup>

In addition to the exacting variance standards in Section 8.0, the standard for a variance from PM monitoring is also addressed in Section 3.0(4), which establishes the following threshold criteria:

Unless...the Facility Owner or Operator establishes that the Facility's operations do not result in off-site fugitive dust emissions, the Facility Owner or Operator must install, operate, and maintain, according to manufacturer's specifications, permanent, continuous Federal Equivalent Method (FEM) real-time PM 10 monitors around the perimeter of the facility...

Simply, the applicant in this case must establish its operations do not result in off-site fugitive dust emissions as a result of any of its activities – *e.g.*, bulldozing and grading, material dropping operations, equipment travel on the surfaces of stockpiles, and vehicle travel on paved roads. The applicant must establish that these kinds of operations do not result in off-site fugitive dust emissions over the full range of weather and operating conditions. The applicant must establish “no off-site fugitive dust emissions” for every compass point around the perimeter of its facility, be it a waterway, public road, or residential neighborhood. If an applicant fails to establish “no fugitive off-site dust

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<sup>14</sup> Dust Rules, Section 8.0(2).

emissions,” it cannot be granted a variance from the requirement to establish a PM monitoring system in accordance with the regulations.

The stringency of this standard is evident in the City’s denial of two out of three other requests to avoid PM monitoring,<sup>15</sup> with permission to forego such monitoring granted only to Gulf Sulphur Services to date based on the CDPH’s finding regarding the “unique nature of prilled sulphur” that “results in a reduced chance of creating fugitive dust as compared to other materials.”<sup>16</sup> While Watco seeks to reverse CDPH’s rejection of its predecessor Kinder Morgan’s attempts to avoid PM monitoring, that effort should fail.

In light of CDPH’s approach – operational flexibility but a mandatory requirement to monitor – Watco’s Request for a variance from PM monitoring is ill-conceived. From our perspective, the applicant must operate a PM monitoring system now and take measures to prevent off-site fugitive dust emissions. If these measures prove effective in eliminating fugitive off site dust emissions at some point in the future, this would be the point at which a variance request could be considered, not before.

For Watco, this does not mean a variance is impossible; instead, it means the applicant cannot meet this exacting standard now. Without irony, we would point out that the best way for the applicant to attempt to demonstrate that there are no off-site fugitive dust emissions is to establish the PM monitoring network now required by the regulations. Following site improvements, if PM monitoring establishes that there are “no off-site fugitive dust emissions” over a representative period of time and range of conditions, then this is the point at which to seek a variance from an ongoing obligation to continue this monitoring. The monitoring would establish an objective empirical basis for the variance that would have credibility for regulators, other regulated entities and residents.

In the meantime, in the event the monitoring system detects off-site dust emissions not anticipated by the applicant, it will provide a basis for further refinement of its fugitive dust plan. Indeed, in its recent submission of a revised fugitive dust plan following CDPH’s rejection of its prior plan and U.S. EPA’s Notice of Violation, S.H. Bell

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<sup>15</sup> See Ex. 6, 7, and 8, CDPH Determinations on variance requests from Kinder Morgan, S.H. Bell, and Gulf Sulphur, respectively, available at [https://www.cityofchicago.org/content/dam/city/depts/cdph/environmental\\_health\\_and\\_food/2017/CDPHDeterVarReqKinderMorgan\\_5032017.pdf](https://www.cityofchicago.org/content/dam/city/depts/cdph/environmental_health_and_food/2017/CDPHDeterVarReqKinderMorgan_5032017.pdf), [https://www.cityofchicago.org/content/dam/city/depts/cdph/environmental\\_health\\_and\\_food/CDPHDeterVarReqSHBellCo10172016.pdf](https://www.cityofchicago.org/content/dam/city/depts/cdph/environmental_health_and_food/CDPHDeterVarReqSHBellCo10172016.pdf), and [https://www.cityofchicago.org/content/dam/city/depts/cdph/environmental\\_health\\_and\\_food/CDPHDeterVarReqfromGulfSulphurSrvc\\_8152016.pdf](https://www.cityofchicago.org/content/dam/city/depts/cdph/environmental_health_and_food/CDPHDeterVarReqfromGulfSulphurSrvc_8152016.pdf).

<sup>16</sup> Ex. 8, CDPH Gulf Sulphur variance determination at 1-4. We note that we continue to take issue with CDPH’s grant of the PM monitoring variance to Gulf Sulphur based on the concerns articulated in our variance comments of June 2014, and reference the agency’s determination solely to support that a variance from PM monitoring requirements is the rare exception rather than the norm.

discusses the role that PM monitoring data played in its identification of its box filling operation as requiring additional dust controls, terming its process “data drive evaluation.”<sup>17</sup> This type of empirically based, data-driven objective analysis has been sorely missing in dust control writ large, and is a major achievement of the City’s Rules that CDPH should uphold. In any event, it is much more likely that the task of developing and implementing a fugitive dust plan will be taken seriously if the results are verified by perimeter PM monitors, operated according to a uniform regulatory protocol.

### *Impacts of Manganese on Public Health*

We incorporate by reference our prior comments on the threats to public health from manganese dust.<sup>18</sup> In sum, manganese is a potent neurotoxin that at higher exposures results in Parkinson-like symptoms and at lower exposures more subtle negative impacts to motor coordination and cognitive functions.

In addition, while few studies to date have looked in-depth at the impacts of acute exposures to manganese on humans due to challenges in assessing exposures and measuring outcomes, there is reason to believe that acute exposures to elevated manganese also have negative impacts on people’s neurological systems. According to the Agency for Toxic Substances and Disease Research’s Toxicological Profile for Manganese, “[r]eports of human exposure at acute and intermediate durations (i.e., 15–364 days) indicate adverse respiratory and neurological effects,” though the reports consist of anecdotal case studies and lack quantitative exposure values needed for derivation of an acute screening level.<sup>19</sup> The toxicological profile also discusses animal studies in which short-term exposures to elevated manganese levels resulted in measurable neurological outcomes, *e.g.*, “a spectrum of exposure-related changes in biochemical markers of neurotoxicity in various regions of the exposed monkeys.”<sup>20</sup> Recently published research on the impact of exposure to manganese fumes among welders, in addition, shows an approximately linear dose-response curve.<sup>21</sup> Thus, CDPH should not only be concerned with annual and longer-term exposure to elevated manganese, but also shorter term daily and monthly exposures, such as those seen with the varying activity levels at bulk material handlers in Chicago.

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<sup>17</sup> Ex. 3.

<sup>18</sup> Ex. 9, Comments of NRDC, SETF, and SSCBP on S.H. Bell’s December 2016 Variance Request, January 11, 2017, available at [https://www.cityofchicago.org/content/dam/city/depts/cdph/environmental\\_health\\_and\\_food/PubCom\\_NatlNursesUnitedII\\_Com\\_SHBellVarReq\\_1-11-17.pdf](https://www.cityofchicago.org/content/dam/city/depts/cdph/environmental_health_and_food/PubCom_NatlNursesUnitedII_Com_SHBellVarReq_1-11-17.pdf).

<sup>19</sup> Ex. 10, ATSDR Toxicological Profile for Manganese, September 2012, at 20, available at <https://www.atsdr.cdc.gov/toxprofiles/tp151.pdf>.

<sup>20</sup> *Id.* at 21.

<sup>21</sup> See Ex. 11, Racette B., et al., Dose-dependent progression of parkinsonism in manganese-exposed welders, *Neurology*, January 24, 2017, Vol. 88, No. 4, 344-351.



*Impacted Community, Section 8.0(2)(b)*

Turning to the Request to avoid PM monitoring, Watco falls far short in describing the impacted community by looking solely at the population density within the facility's own zip code. Section 8.0(2)(b) requires the variance request or to set forth "pertinent data... on the population and geographic area affected by, or potentially affected by, the process or activity." Given that Watco is seeking to avoid entirely PM monitoring around its perimeter, and that there are residential communities in several directions downwind of the facility, Watco should have provided a more complete accounting of the surrounding area than a brief reference to a single, largely irrelevant zip code.

A proper accounting of the community impacted by a variance request is critical at the outset. The number of people in an area and their sensitivity to the health threat at issue, either due to age or other physical factors or socioeconomic status, are critical concerns from a public health perspective. The acknowledgement that this is an environmental justice community relates to the cumulative exposures and disease susceptibility, but also to the appropriateness of permitting a company to add to the community's environmental burden by avoiding required pollution reduction measures. Watco's attempted description fails entirely to provide an accurate picture of the impacted community, and disturbingly demonstrates at best a lack of awareness of its community neighbors and at worst an intentional downplaying of their existence.

Watco's facility operates on the north side of 126<sup>th</sup> Street, which is the dividing line between an industrial area and a densely populated residential neighborhood commonly called Avalon Trails or Hegewisch to the south in the direction of strong northerly winds. Residential streets – Saginaw, Marquette, Manistee and Muskegon – are directly south across 126<sup>th</sup> Street. Youth baseball fields are located to the southwest, also on the other side of 126<sup>th</sup> Street. The Calumet River, which is used extensively by recreational watercraft, is to the north.

Further north, in the direction of the southerly prevailing wind, is the densely populated East Side neighborhood. The eastern boundary of the larger Watco property is Indian Creek, which is fed from Wolf Lake, and flows through the Hyde Lake wetland and then to the Calumet River. Further to the east but less than a mile from the facility, in the direction of strong winds during winter and early spring.

Looking at the census tracts comprising Hegewisch and the East Side, the populated area within 2-4 miles of the facility contains nearly 27,000 residents.<sup>22</sup> Children aged 9 and under, in their critical developmental years, represent roughly 10-17% of this population depending on tract; women of child-bearing age similarly number in the thousands.

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<sup>22</sup> Population for tracts 5501, 5502, 5203, 5204, 5205, and 5026 from the 2010 Census, available at <https://www.census.gov/2010census/popmap/>.

Census tracts 5206 and 5205 – the southern portion of the East Side that Watco recognizes as being upwind of the prevailing south wind from the direction of the facility – alone are home to about 18,000 people, with relative densities of approximately 6,700 and 11,200 people per square mile. While a similar tract-level analysis for Hegewisch is difficult because a significant portion of census tracts 5501 and 5502 consists of open and green/recreational space,<sup>23</sup> the areas to the immediate South and Southeast of the Watco site within these tracts are similarly densely populated.

According to information derived from the demographic feature of U.S. EPA’s ECHO database, there are 3,780 people who live within a one-mile radius of the applicant’s facility. More than 50% of the people who live within this one-mile radius are Hispanic (48.41%) or African-American (2.59%). U.S. EPA’s ECHO database also indicates a total of 1,385 households in this one mile radius, with a total population of 962 children 17 years and younger.

The above figures are in stark contrast to Watco’s sole focus on the 60633 zip code, with its population density of around 1,200 people per square mile,<sup>24</sup> and are more consistent with the population density of Chicago as a whole. Watco’s zip code focus and comparison to the City writ large is misleading with respect to the impacted geography and population because a sizable portion of the 60633 zip code consists of non-residential areas located further away from the facility, rendering its overall density relatively low as compared to other parts of the City and more importantly the area around the facility.

Moreover, 60633 ironically does *not* contain the dense East Side area to the north of the facility that Watco *does* flag as being downwind between the facility and the monitors at Washington High School and in U.S. EPA’s 2015 Xact Study.<sup>25</sup> And the majority of land in the 60633 zip code is located to the East of the facility, an area that receives relatively little wind from the facility’s direction as demonstrated by the wind rose provided by Watco. The only direct acknowledgment of the Avon Trails/Hegewisch community to its south, in the direction of the strong north winds that cross the Watco site many months of the year (as taken up in more detail below), is a brief reference to the residences closest to the facility,<sup>26</sup> without further description of the dense community and the recreational ball fields immediately next door to Watco.

Nor does Watco provide any information on the demographics of the impacted population, ignoring that portions qualify as environmental justice communities. For

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<sup>23</sup> This comment on residential density is meant to highlight shortcomings in the metrics that Watco chooses to describe the impacted community, and not to discount the importance of protecting air quality in open spaces and recreational areas as well, especially for children.

<sup>24</sup> Request at 3.

<sup>25</sup> See Request at 27.

<sup>26</sup> Request at 3.

example, census tracts 5206 and 5203 to the north of Watco are approximately 80% Hispanic, with annual household incomes of approximately \$40,000.

Watco thus falls far short in describing “the population and geographic area affected by, or potentially affected by, the process or activity” at issue in the variance request.

*Process or Activity for which the Variance is Requested, Quantity and Types of Materials Used in the Process or Activity, Sections 8.0(2)(b) and (c)*

Watco also misses the mark in describing the process or activity for which the variance is requested, as well as the quantity and types of materials used in the process or activity, by downplaying the scale of its manganese operations and failing to provide detailed information on materials to CDPH. Sections 8.0(2)(b) and (c) require Watco to submit this key information as part of its variance request.

First, Watco attempts to minimize the scale of its manganese operations by comparing the percentage of manganese-containing materials that it handles to the higher percentage handled by S.H. Bell. Watco highlights that “only approximately 29% of the materials handled at the site contain manganese” compared with S.H. Bell’s disclosure to U.S. EPA that “typically 90% of the materials stored at its facility contain manganese.”<sup>27</sup> However, Watco reports having indoor storage capacity that is nearly five times S.H. Bell’s total indoor and outdoor storage capacity combined (as reported in its April and September 2017 fugitive dust plans) – 885,509 tons of indoor storage at Watco<sup>28</sup> versus 66,400 tons of indoor storage and 140,000 tons of outdoor storage at S.H. Bell.<sup>29</sup> Thus, while neither company provides a clear picture of how much manganese dust-generating materials it handles and how (both claim trade secret protection for detailed information on products handled), it is not at all clear that Watco engages in lower volume, lower frequency manganese activities than S.H. Bell.

Second, Watco incorrectly asserts that it is “exempted” from providing detailed inventory information to CDPH about the names and tonnages of materials used at its facility, because that information constitutes confidential trade secrets and provision to the Department “would risk [its] release.”<sup>30</sup> The Rules expressly require a fugitive dust plan to include “a description of the Facility’s operations, including a list of all Bulk Solid Materials handled at the Facility.”<sup>31</sup> The variance provision, in turn, requires the

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<sup>27</sup> Request at 4, citing CDPH’s Determination on Variance Request, October 17, 2016, in turn referencing U.S. EPA’s Notice of Violation from July 2014.

<sup>28</sup> *Id.* Watco also reports have an additional 111,000 square feet of outdoor storage capacity.

<sup>29</sup> Ex. 12, S.H. Bell, Fugitive Dust Plan, Revised, April 2017, at 2 and Ex. 13, S.H. Bell, Fugitive Dust Plan, Revised, September 2017 (excerpt), at 2. We note that S.H. Bell appears to have changed its policy for storage of “Affected Materials” of ½ inch or smaller diameter, committing to only store such materials within bulk material storage buildings. *See* Ex. 3, S.H. Bell September 2017 Letter, at 7.

<sup>30</sup> *See* Request at 4.

<sup>31</sup> Rules at 3.0(3)(b).

requester to provide, “in detail,” “the quantity and types of materials used in the process or activity” at issue in the Request.<sup>32</sup> Nothing in the Chicago code provision cited by Watco allows the company to withhold that information from CDPH in the first instance.

The company points to Section 11-4-310 of the Municipal Code of Chicago in support of its claim of exemption.<sup>33</sup> The purpose of Section 11-4-310 is to protect trade secrets that have already been disclosed to CDPH; it operates on the assumption that information containing trade secrets will necessarily be provided to CDPH. Section 11-4-310(b) gives the commissioner authority to determine the validity of a trade secret, and devise measures to protect the trade secret. Section 11-4-310(a) states that the government must shield confidential information from the public. If businesses could claim exemptions to disclosing trade secrets to the CDPH, the protections and procedures outlined in Section 11-4-310 would be meaningless.

In addition, it is not clear that a description of materials being handled and the tonnages being handled, as required by the Rules, do in fact constitute protected trade secret information that the City may not disclose to the public. Section 11-4-120 of the Municipal Code defines a trade secret as “any scientific or technical information...or business plan which is secret in that it has not been published or disseminated or otherwise become a matter of general public knowledge, and which has competitive value.” The City’s zoning regulations require handlers of coal and petroleum coke to report monthly tonnage information for each of these materials.<sup>34</sup> KCBX has complied with this requirement for several years without to our knowledge claiming trade secret protection, and the City has disclosed the reported information upon Request by the public. Thus, information on the types of materials and tonnages handled by KCBX is a matter of general public knowledge, and so weighs against granting trade secret status to parallel information from Watco (or S.H. Bell).

*Watco’s Own Opacity Testing Demonstrates that the Company Violated the Rules’ Opacity Limit During Barge Unloading Activities*

As noted above, Watco’s own opacity testing demonstrates that the PM monitors are needed and the variance request should be denied. Watco submits as part of its Request opacity testing data showing that the facility’s barge-to-truck operations were in violation of the Rules’ 10% opacity limit earlier this year. Notably, CDPH cited concerns with dust

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<sup>32</sup> Rules at 8.0(2)(c).

<sup>33</sup> Request at 4, fnt. 3.

<sup>34</sup> Chicago Zoning Ordinance and Land Use Ordinance, 17-9-0117-B(5).

from exactly these operations in denying Kinder Morgan’s variance request.<sup>35</sup> Moreover, as the testing was done at the facility’s own initiative, it is very likely that the results reflect best-case site conditions for emissions; presumably, other violations from similar operations have and will continue to occur. Watco thus has failed to meet the high burden of demonstrating that it qualifies for a variance from the PM monitoring requirements. Not only should CDPH deny the Request, but to ensure that such violations do not occur in the future, it should require that all such transfers occur indoors.

Watco is apparently unaware that the Rules contain a 10% opacity limit on dust from “any Bulk Solid Material storage pile, Transfer Point, roadway or parking area” within a regulated facility.<sup>36</sup> The barge-to-truck operations at issue qualify as a transfer point subject to this limitation. In submitting its own opacity testing data, the company represents that the high-wind operations tested “did not generate non-compliant dust levels,” citing only to the 20% opacity limit contained in the state regulations.<sup>37</sup> This misstep not only demonstrates the company’s inadequate knowledge of the regulations, but also of the regulatory history: The 10% limit was adopted in large part in recognition that the existing state 20% limit was inadequate to protect city neighborhoods from adjacent dust-generating facilities. At 17.75% opacity,<sup>38</sup> the company-measured levels are well above the City’s 10% limit.

In addition, even higher opacity levels likely occur when the facility is not taking every precaution to produce test results supporting its variance application. As we have highlighted many times, the problem with outdoor operations that depend on consistent, stringent adherence to work practices for dust control is that actual practices are likely to fall short of the mark. Higher opacity levels than those in Watco’s proffered tests are also likely because winds at the site at times exceed the 21 mph speeds measured during the testing. Finally, we were not able to find any description of the materials being transferred during the tests in Watco’s Request, which begs the question of whether Watco tested materials that are more likely to create dust (such as fine manganese materials that cannot be watered) or some other material that does not pose as significant a dust risk.

The location of the opacity violations further supports that barge-to-truck operations are resulting in off-site fugitive dust emissions, and thus that Watco has failed to meet its burden to avoid PM monitoring.<sup>39</sup> The “barge loadout area” is located along the North border of the site, on the Calumet River and immediately next to another warehouse

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<sup>35</sup> Ex. 6 at 11.

<sup>36</sup> Section 3.0(2)(b).

<sup>37</sup> Request at 18, citing to 35 Ill. Admin. Code 212.316.

<sup>38</sup> Request at 18 and Appendix G, test results for 8:15 a.m. start time.

<sup>39</sup> See Section 3.0(4).

facility.<sup>40</sup> While we were not able to clearly discern the location of the tested operations from the opacity test results or Watco's discussion of them, it is reasonable to assume that the barge-to-truck operations tested occurred very close to the dock and so to the facility's fenceline on both the North and East borders. The combination of excess measured opacity and a testing location near the fenceline supports that the facility's operations are resulting in off-site fugitive dust emissions.

Finally, the results of the barge-to-truck loading operations create significant concern that similarly high opacity levels are occurring from truck transfers at Watco that involve tipping the truck container back and unloading material to an outdoor pad, with subsequent movements by smaller trucks or front-end loaders.<sup>41</sup> Watco provides no indication that the materials handled in this manner are not expected to generate dust; for example, the Request does not offer opacity testing results for this area. Additionally, the use of a front-end loader in particular creates concerns about dust creation, given the relatively open bucket that is responsible for moving the material. It is also not clear whether there is any kind of wall or screening around the concrete pad to control dust to some degree, based on Images 9 to 11 in the Request. Nor is there any indication that Watco is considering a "dry fog" system for this outdoor concrete transfer pad, as it describes for the barge loading area.<sup>42</sup> The likelihood of high opacity at these operations combined with the lack of proposed controls again supports rejection of Watco's variance Request.

*Watco Fails to Show that Compliance will Pose an Arbitrary and Unreasonable Hardship*

Watco argues that installation of PM monitors would constitute an arbitrary and unreasonable hardship under Rule 8.0 (2)(e) of the Air Pollution Control Rules and Regulations.<sup>43</sup> It suggests supposed alternative monitoring methods that it claims would represent a more "reasonable financial and human-resources burden." Watco's claim parallels that made by S.H. Bell in 2016, and despite these claims, CDPH required S.H. Bell to install PM monitors.<sup>44</sup> Here, Watco's request not only fails to explain why the differences between itself and S.H. Bell warrant CDPH coming to a different conclusion on PM monitoring, but also fails entirely to acknowledge the substantial financial resources of the company as a whole. While Section 8.0(2)(e) does not lay out additional guidance on what constitutes an arbitrary and unreasonable

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<sup>40</sup> See Appendix E.

<sup>41</sup> Request at 14.

<sup>42</sup> Request at 21.

<sup>43</sup> Rule 8.0(2)(e).

<sup>44</sup> Ex. 14. Letter from Kim Walberg, Attorney for S.H. Bell to Dr. Julie Morita, Commissioner, CDPH, Request for Variation from 90 Day Compliance, December 2, 2016 at 1-2, available at [https://www.cityofchicago.org/content/dam/city/depts/cdph/general/VarianceRequestfromS.H.BellCo.\\_10218S.Ave.O\\_12-2-2016.pdf](https://www.cityofchicago.org/content/dam/city/depts/cdph/general/VarianceRequestfromS.H.BellCo._10218S.Ave.O_12-2-2016.pdf).

hardship, 8.03(b) specifies that the Commissioner may deny a variance request if it is incomplete. Watco certainly does not provide adequate information to support this assertion.

**Financial burden.** Installing the PM monitors is not a financial hardship for Watco. In 2016, S.H. Bell, a family-owned company that grosses between \$500,000 to \$1 million, with approximately 29-50 employees,<sup>45</sup> was ordered to install PM monitors. (In its variance request, S.H. Bell also asserted that it had a net operating loss of \$500,000 in 2016.) Despite the fact that S.H. Bell had already tried other measures to address dust emissions, CDPH mandated the company to install the PM monitors.

Watco Companies, LLC, the parent company of Watco Transloading, grossed approximately \$638 million in 2016.<sup>46</sup> According to the company's website and other public sources, it is one of the largest short line railroad and transloading companies in the United States, with operations overseas as well.<sup>47</sup> Watco's acquisition of 20 terminals from Kinder Morgan – including the facility at issue here – was backed by SkyKnight Capital, an investment firm with ties to Crowley Maritime, in turn one of the largest maritime businesses in the U.S.<sup>48</sup> According to articles on the acquisition, Watco is in growth mode, with significant new expansion initiatives underway.<sup>49</sup> The company thus can clearly afford to install PM monitors at its Chicago facility as required by the Rules, and has failed to provide any evidence to the contrary.

**Alternative and current dust mitigation measures.** All of the alternative measures proposed by Watco are measures that are independently required by the Dust Rules and cannot take the place of the PM monitor requirement. Indeed, as CDPH pointed out when it denied Kinder Morgan's variance request, permanent monitors operate continuously and measure and record dust emissions in a way that the other dust mitigation measures do not.<sup>50</sup> Watco also claims that given its prior activity to ensure that dust emissions did not harm the community, the PM monitors would impose an unnecessary and arbitrary burden because Watco has already engaged in preventative measures, and alternative methods are available. In its variance request in 2016, S.H. Bell outlined its plans to install "baghouses" at their facility to collect dust, and asked the CDPH to postpone its mandate for PM monitor installation until these baghouses could be installed. Nonetheless, CDPH denied a variance and required S.H. Bell to install PM monitors irrespective of the status of the baghouses.

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<sup>45</sup> See Ex. 15, S.H. Bell business profile on manta.com, <https://www.manta.com/c/mm2j3jm/s-h-bell-company>, accessed October 11, 2017.

<sup>46</sup> See Ex. 16, "Moody's changes Watco's ratings outlook to negative, affirms B1 Corporate Family Rating," moodys.com, March 31, 2017, available at [https://www.moodys.com/research/Moodys-changes-Watcos-ratings-outlook-to-negative-affirms-B1-Corporate--PR\\_364279](https://www.moodys.com/research/Moodys-changes-Watcos-ratings-outlook-to-negative-affirms-B1-Corporate--PR_364279).

<sup>47</sup> See, e.g., Ex. 17, "About Us," Watco Companies, available at <https://www.watcocompanies.com/about/company/>, accessed October 11, 2017.

<sup>48</sup> See Ex. 18, "Watco to acquire 20 U.S. bulk terminals from Kinder Morgan," *American Shipper*, November 11, 2016, available at <http://www.americanshipper.com/main/news/watco-to-acquire-20-us-bulk-terminals-from-kinder-66012.aspx>.

<sup>49</sup> See *id.*

<sup>50</sup> CDPH Determination: Kinder Morgan Variance Request, 11 (May 3, 2017), available at the MRL is now five years old, and thus may not adequately account for research conducted since then, or research in the pipeline or under development.

Furthermore, S.H. Bell had allocated \$1.2 million to “robust” and “enhanced” dust control measures from May 2014 to December 2016;<sup>51</sup> still, after only four months of PM10 monitoring, the fence-line monitoring data show an average manganese concentration of 0.32 µg/m<sup>3</sup>,<sup>52</sup> which exceeds the inhalation minimal risk level (MRL) for chronic exposure by 0.02.<sup>53</sup> These excessive monthly averages occurred despite S.H. Bell taking numerous “extensive dust control measures”<sup>54</sup> to improve dust emissions, including using monsoons; applying sprays on roads; hiring someone to oversee daily dust observations; using a wet sweeper truck; using a dry fog system; and installing a meteorological station to observe and monitor weather conditions.<sup>55</sup>

### **Further Evidence Supports that Watco is a Significant Source of Manganese on the Southeast Side that Adversely Impacts the Surrounding Area**

In addition to misrepresenting the impacted community, downplaying the scale of its operations and submitting its own best-case testing data showing a violation of the Rules, Watco fails to demonstrate that it is not a significant source of manganese in the surrounding community through its overly selective analysis of existing data and nearby facilities. It thus fails to meet its burden of showing that the “Facility’s operations do not result in off-site fugitive dust emissions”<sup>56</sup> and that “issuance of the variance will not create a public nuisance or adversely impact the surrounding area, surrounding environment, or surrounding property uses.”<sup>57</sup> Everyone agrees that there are other known sources of manganese in the area – but Watco stretches the truth when it claims that the Xact study provides no evidence that its facility is a significant source of manganese in the community.

In particular, Watco distorts and inconsistently references data on wind direction to serve its interests. It also draws inappropriately broad conclusions about its lack of responsibility for manganese in the air from data that simply show there are likely other sources as well.

***Wind strength and direction.*** With respect to wind strength and direction, while the predominant wind looking at an annual wind rose is from the South/Southwest, Watco omits that there is also a strong North/Northeast wind that traverses the facility a good portion of the year. This North/Northeast wind can be seen from the KCBX wind rose

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<sup>51</sup> Ex. 14 at 2-3.

<sup>52</sup> Ex. 19, U.S. EPA, Notice of Violation, S.H. Bell Company, Chicago, Illinois, August 7, 2017 at 5, available at <https://www.epa.gov/sites/production/files/2017-08/documents/sh-bell-chicago-nov-20170807-5pp.pdf>.

<sup>53</sup> *Id.* At 4.

<sup>54</sup> Ex. 14 at 4-5.

<sup>55</sup> *Id.*

<sup>56</sup> Section 3.0(4).

<sup>57</sup> Section 8.0(2)(d).



that the company provides,<sup>58</sup> the study period wind rose in the Xact study,<sup>59</sup> and monthly Midway wind roses.<sup>60</sup> Moreover, the North/Northeast wind is predominant over the South/Southwest wind in the spring and early summer months (March-May) when bulk handling operations in this area historically are more active than during the winter or late fall.<sup>61</sup> Wind speeds during these periods reach in excess of 20 mph, well above levels considered high winds under the Rules.<sup>62</sup> From June to September when operations are still strong, the North/Northeast wind drops off but is still notable; it only really diminishes from October to January when operations slow as well (and during this period when the wind is more from the South, wind speeds overall are lower). Also, there is a strong West/Northwest wind starting in October and carrying through spring, that likely results in dust blowing into Hegeswich and the Wolf Lake recreational areas. There is no monitoring data from these adjacent areas that experience significant winds from the facility, hence Watco has failed to establish that it does not result in offsite fugitive dust emissions in these areas.

***Other manganese sources.*** Nor has Watco “refute[d]”<sup>63</sup> U.S. EPA’s conclusion that the facility is the main contributing source of manganese in the area. Watco states that “[o]bserved manganese levels have a negative correlation with activity at the Facility.”<sup>64</sup> In support of this statement, Watco points to only three instances out of 34, or about 9%, when the top 1% monitored levels did not coincide with activity at the Watco facility. Such a low percentage of instances does not “refute” that Watco is a main source of the high readings detected in the study overall or generally establish a negative correlation between the high readings and activity at the site. Watco goes on to assert that “[t]here are also many hourly manganese concentrations in Table 3 where the wind direction at the time of the hourly manganese is inconsistent with the Kinder Morgan facility being the source.”<sup>65</sup> Watco does not explain how this conclusion fits with U.S. EPA’s finding that “[t]he majority of these peak periods had winds emanating from the area of Kinder Morgan.” While Watco omits any specific analysis of this point, we reviewed Table 3 and found that 11 of 34 readings show wind directions greater than 220 degrees or less than 180 degrees, a rough approximation for winds not blowing from Watco’s direction (notably, two of these readings overlap with two of the three readings during which Watco was not operating). Again this analysis leaves the vast majority of 1% readings

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<sup>58</sup> Request at 28, Figure 3 (meteorological data from KCBX South Terminal monitor).

<sup>59</sup> Appendix D at 4 of 13.

<sup>60</sup> Ex. 20, Iowa Environmental Mesonet, Iowa State University, Wind Roses for Midway Airport, December 1995 to August 2016, available at [http://mesonet.agron.iastate.edu/sites/windrose.phtml?station=MDW&network=IL\\_ASOS](http://mesonet.agron.iastate.edu/sites/windrose.phtml?station=MDW&network=IL_ASOS).

<sup>61</sup> *Id.*

<sup>62</sup> Section 2.0(12).

<sup>63</sup> Request at 30-31.

<sup>64</sup> *Id.* at 30.

<sup>65</sup> *Id.* at 31.

occurring during Watco operating times, when the wind was coming from the direction of Watco.

Other notable issues with Watco's attempts to discredit U.S. EPA's Xact study:

1. The company on the one hand claims U.S. EPA's Xact study cannot be used to attribute any problems to its facility, then turns around and says data from the co-located monitor at Washington High School reflects dust control measures that the company and Kinder Morgan have made.<sup>66</sup> Watco cannot have it both ways – the company is clearly a significant contributor to air pollution levels measured at Washington High School and Rowan Park, and there is good reason to believe it contributes to even higher levels of manganese at its South fenceline, given Northerly winds.
2. In attempting to point to other sources of manganese in the area as explaining the elevated manganese levels at the Xact and Washington High School monitors, Watco ironically focuses on the Defense Logistics Agency (“DLA”) facility with outdoor manganese piles that is “only” approximately 2 miles from the monitors. However, Watco omits that there is very little wind in the area blowing from the East, the direction in which the DLA facility is located relative to these monitors, as seen from the wind roses cited in the Request and these comments. Given this distance between the facility and monitors, and the lack of Easterly winds in the area, it is doubtful that the levels measured at these two monitors are explained by the DLA facility. This is not to say that we are unconcerned by the DLA facility's outdoor manganese storage, but that Watco cannot point to the facility to escape responsibility and avoid PM monitoring.
3. In addition, while there is a downward trend in PM10 and manganese discernable from the Washington High School annual average data, the data also shows significant variability from year-to-year, with some years taking a significant jump from prior years. Moreover, we independently graphed the manganese data from the monitor, which shows reason for concern with manganese emissions in particular.<sup>67</sup> Annual average manganese levels at the Washington High School monitor went *up* between 2014 and 2015 following the City's adoption of its Rules (this increase is also seen in the graph

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<sup>66</sup> Compare Request at 28 (“the EPA Metals Study did not provide evidence that the manganese containing dust came from the Kinder Morgan facility”) and 31 (“From the long-term Illinois EPA PM-10 monitoring results [from the Washington High School monitor located in close proximity to the Xact Study monitor], a reasonable inference can be drawn that steps taken previously by Kinder Morgan and additional steps more recently by Watco at the Facility have reduced the fugitive dust emissions to a level that supports granting this variance request”).

<sup>67</sup> Ex. 21, Graph of Manganese Data from Washington High School, compiled from hazardous air pollutant data available on U.S. EPA's website, <https://www.epa.gov/outdoor-air-quality-data/monitor-values-report-hazardous-air-pollutants>, accessed September 21, 2017.

provided by Watco<sup>68</sup>). In addition, though annual average levels subsequently decreased between 2015 and 2016, there is a notable upturn in 2017 manganese levels to date from the 2016 average, in contrast to the downward slope presented in Watco's manganese graph.<sup>69</sup> This upturn is also evident in the 90<sup>th</sup> and 95<sup>th</sup> percentile measures, shown in our graph. This data continues to support that monitoring closer to the facility at its fenceline is needed and justified. In addition, the annual averages from the Washington High School monitor fail to convey the significant differences in manganese concentrations in the shorter term that can occur with varying operations at facilities like Watco. Data from S.H. Bell to date shows some monthly averages well above the MRL, as well as significant spikes in manganese on an even shorter term.<sup>70</sup> These shorter term high levels are of concern from a health perspective as discussed above, and again show why fenceline monitoring is needed at Watco.

4. The company goes on at length complaining about U.S. EPA's treatment of the MRL and RfC in the Xact Study.<sup>71</sup> However, U.S. EPA fully acknowledged the MRL in its analysis and used the MRL as its primary metric, along with its discussion of the RfC.<sup>72</sup> It is belittling to CDPH for the company to state that this entirely straightforward discussion of the two screening levels "caused the Department to misconstrue the underlying data presented in the U.S. EPA Metals Study in its denial of the Kinder Morgan variance request."<sup>73</sup> Rather, it is Watco who misconstrues or misrepresents a purpose of the Xact Study, which was to flag elevated levels of manganese and the likely sources of them for further investigation through additional monitoring closer to the identified sources.<sup>74</sup> Indeed, the Xact Study clearly

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<sup>68</sup> Request at 26.

<sup>69</sup> When we revisited U.S. EPA's website on October 6, 2017, the reported 2017 year-to-date mean for manganese at the Washington High School monitor was 0.0735 ug/m<sup>3</sup>. This level is an increase from the 2016 mean of 0.06834 ug/m<sup>3</sup>, and is significantly greater than the 2017 year-to-date mean provided by Watco of about 0.05 ug/m<sup>3</sup>. Recognizing that the October year-to-date mean for 2017 likely includes several more months of relatively higher manganese emissions over the summer following the seasonal patterns in the area, this discrepancy at least calls into question whether there is a reliable downturn in manganese emissions and concentrations in the community, and so weighs against Watco's variance Request to avoid monitoring.

<sup>70</sup> Ex. 22, S.H. Bell, Filter-based Monitor (S4) Data From the FRM Monitor, March through July 2017, available at <https://www.epa.gov/il/sh-bell-chicago-air-monitoring-data>.

<sup>71</sup> Request at 23.

<sup>72</sup> In addition, with respect to the RfC, the mere fact that an uncertainty factor of 1000 is less common does not in itself render it inappropriate. Moreover, assuming Watco's numbers are correct, 32% of RfCs employed uncertainty factors of 1000, hardly rendering them exceptional.

<sup>73</sup> Request at 25.

<sup>74</sup> Appendix D at 2, recognizing that manganese levels were below the ATSDR's MRL, the U.S. EPA's "currently recommended" threshold. As we have pointed out before, the MRL is likely not protective of human health because it MRL is now five years old, and thus may not adequately account for research conducted since then that demonstrates that lower and lower levels of manganese exposure pose a risk

states that “[f]ollow-up monitoring closer to the fenceline of the main Mn-contributing facility [Watco] may be useful to characterize the maximum exposure level in the community. There are residences and a park immediately south of [Watco] that may be experiencing metals concentrations significantly higher than what was measured in this study.”<sup>75</sup> CDPH cites exactly this passage in its rejection of Kinder Morgan’s PM monitoring variance request, along with concerns about the outdoor transfer of manganese-containing materials from barges prior to indoor storage – as noted above, the very operations that Watco’s opacity testing results show has violated the Rules’ opacity limit.<sup>76</sup>

5. Watco assumes that if the measured levels in the Xact Study and at the Washington High School monitor are below the MRL, it is dispositive of the existence of a manganese problem and/or the need for fenceline monitoring. In fact, the Xact and Washington High School monitors are relatively far away from Watco’s fenceline. As we have seen from S.H. Bell’s Chicago monitoring and levels at the Washington High School and KCBX monitors, as well as with experience in East Liverpool,<sup>77</sup> levels of manganese can be significantly higher closer to the fenceline. Thus, U.S. EPA appropriately concluded in the Xact Study that monitoring closer to the facility could be helpful in characterizing exposures to the community. Nor do these monitors capture potential impacts to residents to the South, discussed elsewhere in these comments.
6. In trying to support its conclusion that the U.S. EPA Xact Study results “do not indicate there is any adverse impact on the surrounding area,” Watco also discusses the KCBX and S.H. Bell monitors, concluding that both show “no harmful health impacts” from manganese.<sup>78</sup> However, one week after Watco submitted its application, U.S. EPA issued a Notice of Violation to S.H. Bell citing a four-month manganese average of 0.32 ug/m<sup>3</sup>, well above the average of 0.22 ug/m<sup>3</sup> cited by Watco, and alleging a violation of the Illinois State Implementation Plan’s prohibition on air pollution.<sup>79</sup> In addition, the KCBX monitors were not installed specifically due to manganese concerns, and even then data from the monitors showed manganese levels significant enough to

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to human health. NRDC, SETF, SSCBP, et. al, Comment re S.H. Bell Variance Request (July 7, 2017). Also, the risks associated with short-term manganese exposure are not reflected in the chronic MRL.

<sup>75</sup> *Id.*

<sup>76</sup> See Ex. 6, CDPH Kinder Morgan variance decision at 8 and 11.

<sup>77</sup> See Ex. 23, Letter from Michelle Colledge, ATSDR, to Ed Nam, Acting Dir, Air and Radiation Division, U.S. EPA, September 22, 2016, at 3, Table 2 (showing progressively higher manganese monitoring results closer to the facility fenceline), available at

[https://www.atsdr.cdc.gov/HAC/pha/SHBell/SH\\_Bell\\_LHC\\_to\\_ARD\\_Region\\_5\\_v\\_9-22-16\\_508.pdf](https://www.atsdr.cdc.gov/HAC/pha/SHBell/SH_Bell_LHC_to_ARD_Region_5_v_9-22-16_508.pdf).

<sup>78</sup> Request at 25, fnt. 23.

<sup>79</sup> Ex. 19.

trigger a closer look based on the non-cancer risk/hazard index for the 95<sup>th</sup> UCL mean concentration. That closer look indicated a source between the two KCBX facilities, and the subsequent monitoring at S.H. Bell to date has registered significantly higher manganese levels than those seen at KCBX, again supporting that facilities like S.H. Bell and Watco can pose manganese health risks to fence-line communities and should not be allowed to avoid monitoring.

7. Finally, Watco's reference to the "typical manganese concentration in an urban area" in critiquing the Xact Study<sup>80</sup> also fails to make its case to avoid monitoring. Indeed, non-trivial urban background levels of manganese make the opposite case: that facility-specific emissions above background are of MORE concern because they add to already-elevated levels. Watco cannot avoid responsibility for locating in an urban industrialized area by claiming its contribution to pollution should be considered less egregious because others around it also pollute the air.

### **Department's December 2016 Inspection Report**

Watco asserts that when CDPH rejected Kinder Morgan's variance request, it relied, in part, on a December 2016 inspection, and argues that (1) it has corrected some of the issues cited in the December 2016 inspection, (2) the inspector misunderstood the operating procedures at the facility, leading to erroneous conclusions about dust management practices, and (3) dust present on the internal facility roads is not evidence that dust emissions are leaving the Facility.<sup>81</sup> Despite Watco's efforts to distract CDPH from the ongoing fugitive dust issues, the December 2016 inspection report documents fugitive dust emissions and other activities that likely cause additional fugitive dust emissions. CDPH must deny the Request to avoid installing PM monitors, because the monitors will provide CDPH with critical information to evaluate fugitive dust emissions. Moreover, Watco has failed to show that the fugitive dust emissions will not pose a nuisance or adversely impact the surrounding area.

The December 2016 inspection report found and documented with photos several compliance issues at the Kinder Morgan facility:<sup>82</sup>

1. Dry and dusty access roads
2. No sweeper or water truck in operation during the inspection
3. A daily log that lacked information about water application to the roads
4. Track-out on 126<sup>th</sup> Street
5. Absence of a 30 foot height pole designed to gauge the height of the bulk material pile
6. Truck wheels picking up and dispersing dust
7. Absence of a berm at the river edge

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<sup>80</sup> Request at 30.

<sup>81</sup> Request at 2.

<sup>82</sup> Request at Appendix I.

In rejecting Kinder Morgan's request for a variance with regard to the installation of PM monitors, CDPH concluded that Kinder Morgan's operational practices did not effectively control dust.<sup>83</sup> CDPH specifically highlighted the tracking out and truck wheels picking up and dispersing dust documented in the December 2016 inspection. It also noted that the detection of manganese dust downwind from the Kinder Morgan facility constituted a strong indicator that the fugitive dust was leaving the facility. Watco does not address the concerns of track out or truck wheels picking up and dispersing dust and, most importantly, as demonstrated in the extensive comments above, has not otherwise shown that its activities do not result in fugitive dust emissions offsite.

### **Conclusion**

CDPH must deny the Request because Watco has not and cannot meet the variance standard for escaping PM monitoring. As a preliminary matter, Watco's opacity testing reveals that it has substantially exceeded the 10% standard with its reported 17.75% opacity, and there is good reason to believe that this result is not an isolated incident for outdoor transfer operation. Such outdoor transfer operations appear to happen frequently, given the volume of material handled by Watco going from barge to truck and truck to storage.

In addition to the opacity violation, Watco has filed an incomplete variance request that fails to show that Watco has controlled dust emissions so that the facility will not impact the surrounding community. Watco's description of its operations downplays the sheer volume of material that it handles by comparing itself to competitor S.H. Bell on a *percentage* basis, and omits critical information on amounts and types of materials handled. Watco again misleads when it describes the impacted community too narrowly and omits the fenceline community to the south of the facility. The Request also leaves out key information about the socioeconomic status of the surrounding community; this is an environmental justice community that has been unduly burdened with environmental harm. Granting the request would be an unjustified step back in the City's progress towards addressing the cumulative environmental burdens on this community.

The Request attempts to erase the adverse impacts of its operations by claiming that the results of U.S. EPA's Xact Study point to other sources of manganese and implying that the existence of other sources negates its role as a source of manganese; this disingenuous argument should be rejected out of hand considering the available data and likely impacts to the community immediately south of Watco. Similarly, while Watco and S.H. Bell have advanced the argument that their manganese emissions are not impacting public health, they have no evidence of that and the manganese emissions at S.H. Bell's facility were significant enough that they exceeded the ATSDR's MRL and led U.S. EPA to

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<sup>83</sup> Ex. 6 at 11.

issue a notice of violation (and ATSDR recently confirmed that shorter-term exposures to elevated levels of manganese, such as we are seeing with seasonal operations at facilities on the Southeast Side, are of concern from a public health perspective). Moreover, Watco argues that the December 2016 Inspection Report reflected a flawed understanding and did not show fugitive dust emissions, but the relatively recent report specifically documented track out and trucks picking up and dispersing dust. Monitoring at the Watco facility is critical so that CDPH can determine the extent that manganese dust is leaving the facility through trucks and other routes, and better understand the exposures in the community.

Finally, the Request fails to show that the PM Monitor installation will impose an arbitrary and unreasonable hardship especially when the cost of the monitors appears to be a drop in the bucket as compared to Watco's overall budget and the expenditures to date do not prove that monitoring is unnecessary. Moreover, the amount of money that Watco has spent on dust controls to date is a much less important consideration with respect to PM monitoring: The central question is whether the site continues to have operations that pose a high risk of dangerous dust levels. The company's opacity data and the City's inspection report, among the other evidence discussed above, answers this question with a yes.

For these reasons, we urge CDPH to deny the renewed variance request.

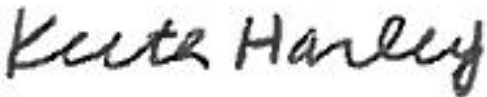
Thank for your consideration,



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