February 13, 2015

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

Re: Chicago Port Railroad Company– Midwest Marine Terminals, Inc. Variance Request

To Whom It May Concern:

Thank you for the opportunity to comment on the application of Chicago Port Railroad Company– Midwest Marine Terminals, Inc. (hereinafter "CPR-MMT") for variances from the Department of Health's 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 nearly 10,000 members and activists in the City of Chicago, 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. For the reasons set forth below, the application is incomplete and fails to demonstrate that the requested variances will not have an adverse impact on the community and environment, and thus the request should be denied.

According to information derived from the demographic feature of U.S. EPA's ECHO database, there are 67,679 people who live within a three mile radius of the applicant's facility.[1] More than 80% of the people who live within this three mile radius are Hispanic (45.86%) or African-American (34.37%).[2] U.S. EPA's ECHO database also indicates a total of 23,470 households in this three mile radius, with a total population of 19,121 children 17 years and younger.[3]

According to the applicant's website, its location is "spread over 60 acres of terminal property, including 3200 ft. of dockwall, 15,000 ft of rail track, and 90,000 Sq ft of indoor storage." [4] Although the application stresses the rail component of these operations, the applicant's website asserts:

> "Located along the Calumet River, Midwest Marine Terminals, Inc. is easily accessible to the Great Lakes by ship, to the Inland River System by barge, to any major rail system by train, and to the expressway system by truck, Midwest Marine Terminals, is your full-service terminal, storage, and transportation partner."[5]

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[1] http://echo.epa.gov/detailed-facility-report?fid=110030776275
[2] Id.
[3] Id.
[4] http://www.midwestmarineterminals.com/mainpage.htm
[5] Id.

The applicant's facility is located adjacent to the Calumet River. Google Earth images appear to show outdoor storage piles on the applicant's facility, including piles adjacent to the Calumet River. The Calumet River is used extensively by recreational watercraft. Vehicle traffic entering-and-exiting the applicant's facility must use Torrence Avenue, a busy public road that connects residential areas in South Deering to residential areas in Hegewisch. Torrence Avenue is also the dividing line between industrial properties including CPR-MMT to the east and the ecologically valuable Indian Ridge Marsh and Big Marsh natural areas to the west.

Initial Public Requests

NRDC-SETF request CDPH to consult with the U.S. EPA and IL EPA regarding two aspects of the applicant's operations that are directly relevant to the applicant's claims and CDPH's review process. First, according to U.S. EPA's ECHO database, Midwest Marine Terminals may not be in compliance with the reporting requirements arising from its general stormwater permit.[6] Second, neither ECHO nor U.S. EPA's Facility Registry System indicates that the facility possesses an air permit. Similarly, the inventory of Illinois air permits maintained by U.S. EPA Region 5 does not appear to include a record of an air permit for this facility. NRDC-SETF are not in the same position as federal and state regulators to evaluate the compliance and permitting status of the applicant's facility. Consequently, NRDC-SETF request consultation and an independent assessment among local, state and federal regulators regarding these compliance and enforcement matters, and that CDPH incorporate these considerations into its deliberative process in the manner it deems appropriate to protect public health, safety and welfare.

Industrial Impacts to City Residents and Environment

Earlier this year, the City adopted the new Rules to help address the problem of harmful dust pollution from industrial sources. Dust pollution can cause permanent harm to people's lungs, significantly limit the uses and enjoyment (and so market values) of private property as well as public parks, and inhibit the growth of plants and wildlife.[7] While a significant impetus for the Rules was the clouds of petroleum coke and coal dust from several handlers along the Calumet River, the City appropriately sought to reduce dust from bulk materials more generally, adopting rules that apply city-wide to handlers of a range of bulk materials. This action represented a much-needed update to the City's existing measures to combat dust.

We continue to believe that the Rules are too lax in some areas; however, they represent a significant step forward in providing increased protections to Chicago communities.

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[6] http://echo.epa.gov/detailed-facility-report?fid=110030776275

[7] Comments of NRDC et al. ("Comments") at 3-7, 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.

Moreover, as set forth below in more detail, we believe it is imperative that the Commissioner stringently assess applications for variances to ensure the purposes of the Rules are not circumvented on a case-by-case basis.

Objections to Variance Provisions

In our prior comments on the City's proposed dust rules, we noted significant concerns with both the scope of the variance provision and the lack of procedural safeguards for making variance determinations.[8] We urged the City to dispense with the variance provision altogether, or at minimum to include additional safeguards both in terms of substance and process. The City responded by adding requirements for variance applications, an opportunity for public comment, and criteria for reviewing a variance application.[9] With these improvements, 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.

At the outset, we provide two general comments to guide this review. First, the area of fugitive dust regulation generally is plagued by a history of poor emissions estimates, overblown claims of control efficiencies, and vague requirements. As such, it is especially important that applications for variances are supported by detailed, site-specific information, robust technical demonstrations, and specific, enforceable proposed requirements. By contrast, the applicant repeatedly relies on broad, unsubstantiated claims to support its arguments that basic aspects of the CDPH regulations should not apply. For example:

1. What is the basis for the claim that "[t]here have never been any complaints regarding visible emissions from Facility operations."?

2. What are the "historic quantities handled and published emission factors"?

3. What is the empirical basis to assert PM emissions from BSM handling operations are..."negligible and insufficient to generate opacity greater than 10 percent or fugitive dust visible beyond the property line of the Facility."

Second, obligations and costs above what the facility would have borne under prior city, state and federal obligations are to be expected under this new set of regulations. Vague, unsubstantiated references to some increase in costs and burdens should not qualify as grounds for a variance. For example:

1. What is the basis for the claim that the costs to install, operate and maintain monitors is estimated to be $100,000?

2. What is the basis for the claim that the costs to install, operate and maintain a weather station is estimated to be $100,000?

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[8] Comments at 38-40.
[9] Rules Section 8.0

3. What is the basis for the claim that the costs to install complete covers over the facility's conveyors is estimated to be $10,000?

4. What is the basis for the claim that the costs to install, operate and maintain wheel wash stations and rumble strips is estimated to be $250,000?

5. What is the basis for the claim that the costs to pave any portion of the site is $8.00 per square foot?

6. What is the basis for the claim that the costs to employ a street sweeper is $250,000, plus $80,000 per year?

7. What is the basis for the claim that the costs to install a dust suppression system would be approximately $250,000?

The Bulk Materials At The Applicant's Facility Are Subject to Chicago's Rules For The Handling and Storage of Bulk Materials, Which Should Be Strictly Applied

The applicant repeatedly emphasizes that it does not handle coal or coke at its facility. At the same time, the applicant honestly acknowledges handling quantities of between 25-30,000 tons of a variety of other materials, including pig iron, HBI fines, DRI fines, alumina, fly ash, ground blast furnace slag, iron slag fines, kaolin, magnesite and quartzite. NRDC-SETF requests CDPH to review the Material Data Safety Sheets for these substances, which are attached to these comments and marked as NRDC-SETF Attachments One-Nine.

Pig Iron

Pig Iron is also known as Blast Furnace Iron. As acknowledged by another applicant, Calumet River Terminals in Exhibit A of its application, pig iron is "used as the mineral feedstock for steel production"; that "during storage and shipping, oxides of iron rust) form at the surface of these materials and the oxide particles may slough or scale off of the larger pieces during handling" and that iron oxide scale "may become airborne" and form particles in sizes that can travel "a few hundred feet" at wind speeds as low as ten miles per hour. [10]These features of pig iron bring it within the scope of the "bulk solid material" definition and suggest CPDH regulations should be strictly applied to CPR-MMT.

Fugitive dusts generated from the storage and handling of pig iron can threaten human health and the environment. According to the Material Data Safety Sheet for Blast Furnace Iron, BFI/pig iron contains iron, carbon, manganese, phosphorus, silicon and sulfur, each of which have their own hazard characteristics and corresponding OSHA and Threshold Limit Value standards. The MSDS hazard characterization includes this description "...Potentially hazardous quantities of airborne particulate and fume may be

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http://www.cityofchicago.org/content/dam/city/depts/cdph/environmental_health_and_food/VarReqfromCalumetRiverTerm10740SBurleyAve.pdf

generated...Avoid inhalation of metal dusts and fumes." Chronic inhalation of metallic fumes and dusts are associated with the conditions like benign pneumoconiosis, pulmonary disorders, central nervous system disorders, respiratory irritation, particulate irritation and other irritations of the skin, eyes, lungs and gastrointestinal tract. As to ecological risks, the MSDS notes "...individual components of the product have been found to be toxic to the environment. Metal dusts may migrate into soil and groundwater and be ingested by wildlife." Moreover, "...individual components of the product have been found to be absorbed by plants from soil." See: NRDC-SETF Attachment One.

In light of the CDPH regulations' plain language, the nature and scope of the potential risks of pig iron to human health and the environment, and the applicant's proximity to waterways, residential neighborhoods and public parks, we urge the Commissioner to conclude that this material is subject to the Rules, and that the Rules should be strictly applied.

Hot Briquetted Iron (HBI) and Direct Reduced Iron (DRI)

As stated by another variance applicant, Calumet River Terminals, in Attachment A to its variance application, "The composition of both HBI and DRI are similar, mainly 90+% iron, ~5% carbon and traces of carbon, phosphorous or sulphur. During storage and shipping, oxides of iron (rust) form at the surface of these materials and the oxide particles may slough or scale off of the larger pieces during handling. Up to 0.5% weight present of iron oxide scale that may form and separate from the BFI, HBI or DRI."[11] Attachment A of Calumet River Terminals further acknowledges that trace particles may become windborne, and that particles of this size (greater than 30 micrometers) can travel "a few hundred feet." [12]

According to the MSDS for hot briquetted iron (HBI), "dust and small pieces may cause mechanical irritation, redness and pain in contact with the eyes, which can result in redness and lacrimation. May cause conjunctivitis." The MSDS further states, "Inhalation of dust may cause irritation to the respiratory tracks. Symptoms may include coughing, sneezing, soreness of the throat and breathing difficulties. Repeated or prolonged exposure to this material may result in skin irritations in individuals with sensitive skin. Chronic exposure to iron dust has been associated with benign pneumoconiosis...". In terms of bulk handling, the MSDS cautions, "Broken pieces and dust generated during loading and unloading should be collected and dispose [sic] adequately." The MSDS further asserts, "During handling dust is generated..." See: NRDC-SETF Attachment Two.

In light of the CDPH regulations' plain language, the nature and scope of the potential risks of hot briquetted iron and direct reduced iron to human health and the environment, and the applicant's proximity to waterways, residential neighborhoods and public parks,

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http://www.cityofchicago.org/content/dam/city/depts/cdph/environmental_health_and_food/VarReqfromCalumetRiverTerm10740SBurleyAve.pdf

12 Id.

we urge the Commissioner to conclude that this material is subject to the Rules and the Rules should be strictly applied.

The applicant also describes several other substances that are present at its facility. This summary is derived from Material Safety Data Sheets for a small subset of these other substances.

Chemical Product	Hazards Identification	Handling/Storage	Exposure Control	Attachment Number
Alumina	Hazardous in case of skin contact, eye contact, ingestion and inhalation	Do not breathe dust. Avoid contact with skin and eyes.	Process enclosures, exhaust ventilation or other engineering controls to control airborne levels.	NRDC-SETF Attachment Three
Ground Blast Furnace Slag	May cause immediate or delayed irritation to the eyes and drying of the skin. Dust may irritate the nose throat and respiratory tract.	Exposure levels should be monitored regularly.	Ventilation and protective clothing.	NRDC-SETF Attachment Four
Fly Ash	Irritating to eyes, skin, nose, throat and respiratory tract.	Avoid generating dust. For bulk deliveries, closed pumping systems are recommended. Work areas should be cleaned regularly by wet sweeping or vacuuming.	Ventilation and protective clothing.	NRDC-SETF Attachment Five
Iron Slag Fines	Irritation to the eyes, skin and respiratory tract. The chemical constituents can cause more specific and potentially dangerous acute and chronic health effects.	Operations with the potential for generating high concentrations of airborne particulates should be evaluated and controlled as necessary. Fine dry material should be removed by vacuuming or wet sweeping methods to prevent spreading of dust. Do not release into sewers or waterways.	Do not breathe dusts, fume, gas, mist, vapor, spray. Avoid contact with skin and eyes.	NRDC-SETF Attachment Six
Kaolin	Hazardous in case of inhalation (lung irritant). Slightly hazardous in case of skin contact, eye contact and ingestion.	Keep in tightly closed containers. Use process enclosures, local exhaust ventilation or other engineering controls to keep airborne levels below exposure limits.	Do not breathe dust.	NRDC-SETF Attachment Seven
Magnesite	May cause central nervous system depression and cardiac disturbances. May cause eye, skin, respiratory and digestive tract irritation.	Minimize dust generation and accumulation. Store in a closed bag.	Avoid contact with skin and eyes. Avoid ingestion and inhalation. Ventilation and personal protective equipment.	NRDC-SETF Attachment Eight
Quartzite	Irritation to eyes, skin, nose, throat, mucous membrane and respiratory tract. The chemical constituents can cause more specific and potentially dangerous acute and chronic health effects.	Respirable dust and quartz levels should be monitored regularly. Use ventilation to limit endangering exposures.	Personal protective equipment.	NRDC-SETF Attachment Nine

CDPH Must Deny The Applicant's Request To Avoid Installing PM Monitors

The scope of the Commissioner's authority and responsibility is broad, extending to "...any matter, material or substance susceptible to being windborne and for the handling, transportation, disposition or other operation with respect to any material subject to being windborne." Municipal Code of Chicago 11-4-770. As pointed out by CDPH in its March 13, 2014 Response To Public Comments, the intent in establishing regulations is to protect public health and the environment from activities that have the potential to cause windborne dust, even "...existing businesses that are lawfully operating under current Chicago land use laws." 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. As asserted by CDPH, there are four categories of material and handling and storage activities that its own experts concluded can create airborne dust as part of the outdoor storage of materials - bulldozing and grading, material dropping operations, equipment travel on the surfaces of stockpiles and vehicle travel on paved roads. Id. at 4.

Consistent with the MCC, CDPH appropriately requires that these 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. Id. at 21. However, the actual success of a fugitive dust plan is not left to guesswork. For CDPH, empirically verifiable PM monitoring is a critical means to demonstrate the success of a fugitive dust plan for operators, regulators and residents. It is not an exaggeration to state that PM monitoring is a lynchpin of the new 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. Id. at 23.

Because of the importance of PM monitoring, the variance standard is the most difficult of any requirement in the CDPH regulations. 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, for example, bulldozing and grading, material dropping operations, equipment travel on the surfaces of stockpiles and vehicle travel on paved roads. The applicant must establish 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 emissions", it cannot be granted a variance from the requirement to establish a PM monitoring system in accordance with the regulations.

In light of CDPH's approach – operational flexibility combined with a mandatory requirement to install and operate PM monitors – CPR-MMT's request for an exemption variance from PM monitoring is ill-conceived.

For CPR-MMT, 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 one way for the applicant to attempt to demonstrate there are no off-site fugitive dust emissions is to establish the PM monitoring network now required by the regulations. If PM monitoring establishes 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 a more effective fugitive dust plan. In any event, it is much more likely 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.

The Applicant Has Not Met The Standard for Receiving A Variance From Several Operational Requirements

In addition to its variance request from PM monitoring requirements, the applicant also requests variances from several other requirements of the CDPH regulations.

In its variance application, the applicant must describe the process or activity for which the variance is sought, and demonstrate why the variance will not result in a public nuisance or "adversely impact the surrounding area, the surrounding, environment, or surrounding property values."[13] The applicant also must explain why compliance would

[13] Rules Section 8.0(2)(b) and (d).

impose an arbitrary or unreasonable hardship.[14] 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 a demonstration has been made that any adverse impacts will be minimal.[15] Because the application falls short in many respects, we urge the Commissioner to deny the variance requests.[16]

Wind Monitoring

The applicant's facility currently includes outdoor storage piles, unenclosed conveyors and unpaved roadways. The facility is handling multiple kinds of materials, many of which are capable of becoming windborne. In light of the multiple, facility-wide sources of fugitive emissions, it is especially important for the applicant to have detailed, real-time, site-specific data regarding wind and weather conditions. Perhaps most importantly, this data will enable the facility to adjust its operations in light of high wind events in order to minimize the risk of releases. Following extensive study, the City concluded that the risks of fugitive dust releases were greatest when wind speeds exceed 15 mph. For this reason, the City prudently requires bulk material facilities like CPR-MMT to have the on-site capability to assess and respond to wind conditions, in order proactively to avoid releases when the risks are greatest.

By contrast, the applicant requests a variance from any requirement to implement a wind monitoring station. The applicant's request does not attempt to refute the City's conclusion that the risk of fugitive emissions is disproportionately greater when wind speeds exceed 15 mph. Rather, the applicant broadly and without supporting information claims a wind monitoring station would cost $100,000. It further asserts that on-line data provides the same information, but notably does not identify the on-line source of this data. Consistent with its failure to identify the alternative source of data, the applicant also seeks to be excused from any ongoing reporting requirements for information it derives from this unnamed source. Without knowing the precise on-line source of the applicant's wind speed and direction data, the City cannot evaluate the credibility of this data for critical features like source, time lapse, distance from the applicant's facility and potential differences in wind data based on location. On-line but off-site data cannot be

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[14] *Id.* at (e)(i). While Section 8 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, Dept. of Housing and Economic Development, "Zoning Board Rules and Regulations," August 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.

[15] *See* Rules Section 8.0(3)(a).

[16] *See* Rules Section 8.0(3)(b). At most, the Commissioner should only grant the portions of the variance for which the applicant has provided the requisite supporting information and require supplemental information to be provided moving forward, upon which the variance is conditioned. *Id.* at (3)(c) ("The 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.")

as representative as a properly designed onsite monitor that characterizes the risk of the release of materials from the applicant's facility into nearby residential neighborhoods, public lands or waterways. For these reasons, NRDC and SETF oppose the applicant's request for a variance from this requirement.

Wheel Washing and Rumble Strips

The applicant also seeks to avoid wheel washing and rumble strip requirements. These requirements are designed to help prevent the tracking of material onto public roadways. This could be material which is handled and stored on the site or dust and debris that is derived from this material (for example, iron oxide particles). It could also be material that adheres to vehicles from unpaved areas of the applicant's facility, which can also create dust and be deposited on public streets. These requirements are especially important for CPR-MMT because of its location. The facility is located on Torrence Avenue, a major public roadway connecting residential neighborhoods to the north and south. Trucks must move on public roads to gain access to the facility. Because of this configuration, the risk of public exposure to any materials adhering to trucks and subsequently deposited on roadways is particularly acute. The proximity of residential neighborhoods increases the risk of direct public exposure to materials on the wheels and associated undercarriage of trucks.

Off-Site Roadway Cleaning

The applicant seeks a variance from requirements to comply with off-site roadway cleaning requirements. The importance of the complete implementation of this City requirement for this applicant is unmistakably apparent in light of the location of the facility. The roadways that serve the facility traverse densely populated residential neighborhoods. Because of this configuration, the risk of public exposure to any materials deposited on roadways is particularly acute, including for pedestrians and children playing in immediately adjacent residential areas. As with many of its other variance requests, the applicant speculates about the cost, difficulty and inconvenience of implementing this measure, but provides no empirical data demonstrating an unreasonable hardship. Consequently, NRDC and SETF contend CDPH must deny this variance request.

On-Site Paving

The need for wheel washing, rumble strips and off-site roadway cleaning are underscored by the applicant's honest admissions about the physical characteristics of its site. The applicant's facility "...does not contain internal roads per se". Instead, vehicles move across "wide unmarked areas of gravel and compacted dirt." This movement of vehicles occurs in a "random fashion."

This pre-industrial aspect of the applicant's operation is also strong evidence of the need to impose the basic industrial hygiene requirement of paved internal roadways. For its part, the City asserts that vehicle travel on <u>paved</u> roads is a major source of fugitive emissions at bulk material facilities; the potential for releases is heightened when the roadway is unpaved, and when the roadway material itself could be a source of the

fugitive dispersion of dust. By contrast, the applicant never provides any empirical estimate regarding the cumulative fugitive dust emissions from the random movement of vehicles across its 60-acre, unpaved site. The applicant also fails to quantify the impacts arising from another fundamental concern with unpaved industrial sites, namely, the release of loose material in stormwater runoff. This concern is heightened by virtue of the facility's location adjacent to the Calumet River. Both fugitive dust emissions and the release of loose material entrained in runoff could also affect ecologically valuable wetlands directly to the west across Torrence Avenue. In terms of any hardship, the applicant provides no basis for its cost estimate of $8.00/sq. foot for paving, nor any total cost estimate for installing paved roads throughout its facility. Any costs to this applicant must also be considered in light of its avoided costs by comparison to a compliant competitor that paves its roadways. For these reasons, NRDC and SETF assert this variance request must be denied.

Conveyor Covers

The applicant employs 6 100-ft. long portable conveyors. The applicant points out that these conveyors already incorporate covers on spouts and transfer points, but objects to the requirement that the conveyors be completely covered. Notably, the applicant does not object on the basis of technical infeasibility. Moreover, in an application filled with large cost estimates, the estimated costs for completely covering the conveyors - $10,000 for each of six conveyors - is notably modest by comparison. Perhaps for this reason, the applicant doesn't threaten the shutdown of the facility or the wholesale loss of jobs as part of requesting this variance. Instead, it simply concludes the costs outweigh the benefits.

Having invoked a cost-benefit analysis (which NRDC and SETF note is not the standard for assessing burden in a variance request), the applicant fails to provide any information in support of this its conclusions. As to the costs, the applicant provides no basis for its estimate of $10,000/conveyor. As to the benefits, the applicant provides no empirical basis for its claim that covered spouts and transfer points "provide adequate protection against fugitive dust migration," especially in light of the range of materials at the facility and the intensity of facility operations. The applicant applies no emission estimates or emission factors for the unenclosed portions of the conveyors. The applicant makes no reference to any information derived from any professional source, regulatory standard, academic article or analogous facility. This lack of information is especially notable in light of the fact that conveyors are air emitting sources that are frequently addressed in air construction and operating permits. In the absence of supporting information, the City does not have an adequate basis to evaluate this request. For this reason, NRDC and SETF assert this request must be denied.

Dust Suppressant

In response to public comments, the City broadened the allowable approaches to dust suppression, stating that "as long as a facility is applying water or another solution in a manner that effectively suppresses fugitive dust, it does not matter whether they use a hose, a cannon, a mister or another technology." The City's further allows that dust suppressant systems must be operable but not necessarily dispensing at all times.

Despite these accommodations, the applicant contends it should not be required to employ any dust suppression system to control fugitive emissions from its outdoor storage piles. The applicant simply makes an unsubstantiated statement that "[m]aterials stored outdoors at the Facility do not produce significant fugitive dust". Having honestly acknowledged that outdoor storage piles are sources of fugitive dust, the applicant provides no information of what it regards as "significant," a stark omission in light of the range of materials at the facility and the intensity of facility operations. The applicant applies no emission estimates or emission factors for materials it stores outside. The applicant makes no reference to any information derived from any professional source, regulatory standard, academic article or analogous facility. This lack of information is especially notable in light of the fact that unenclosed storage piles are air emitting sources that are frequently addressed in air construction and operating permits. In the absence of supporting information, the City does not have an adequate basis to evaluate this claim.

The application is equally devoid of information demonstrating any analysis of alternatives for suppressing dust from the materials on the site that cannot be sprayed with water (cement, fertilizer, alumina). For example, unlike many other applicants, this applicant possesses operational flexibility in the form of a 90,000 sq. ft. warehouse which obviates the need for dust suppression for enclosed materials. Moreover, the City Rules provide the applicant with the flexibility to tailor different dust suppression systems to different materials that are handled and stored outdoors; it's not clear the applicant has contemplated this type of more tailored approach. For example, the applicant has not explained why it cannot employ a misting or heating system (by contrast to a spraying system). In light of this operational and regulatory flexibility, the applicant's request is devoid of financial information to justify the purported $250,000 cost, or any other hardship the applicant would experience in order to comply. Consequently, NRDC and SETF contend CDPH must deny this variance request.

50 Foot Setbacks

The applicant seeks a variance from the requirement for a 50 foot setback from waterways for material piles. Instead, the applicant proposes operating exactly as it has, with 25 foot setbacks. Despite operating a 60-acre site with a 90,000 sq. foot enclosure, the applicant is unwilling to move outdoor storage piles *an additional 8.3 yards* back from the adjacent waterway.

The reason for 50 foot setbacks is to help prevent leachate and runoff from being discharged from material piles into waterways. CDPH's regulations serve the critical purpose of helping to ensuring that rainfall and snowmelt that come into contact with industrial materials do not create polluted leachate that enters waterways. For water that doesn't percolate through material piles, the risk is poorly controlled stormwater runoff. The applicant's request is based on broad, largely unsupported assertions of effective physical barriers that would prevent polluted wastewater from entering the Calumet River. This is an unsupported, unsubstantiated claim. It overlooks that leachate and runoff threaten surface soil, subsurface materials and groundwater and may have complex hydrologic and hydrogeologic pathways into surface waters like the Calumet River. As

to this request, the lack of supporting data and calculations renders the application incomplete on its face.

The applicant's arguments about hardship are similarly deficient. Notably, the City's Rules provide for a 24-hour exemption for material which is being loaded or unloaded. In making its variance request, the applicant is asking the Commissioner to accept the premise that the only place where it can store material is within 50 feet of the waterway. This is not accurate. While the setback requirements may have the effect of changing material throughput and the configuration of material storage at the applicant's site, they do not render outdoor storage "impracticable". Material piles can be moved elsewhere, inbound and outbound shipments of materials are unaffected during a 24-hour period, and there is still the possibility of reduced permanent storage even on the narrow strip of land for which the variance is sought. The applicant has not demonstrated that the setback requirements will create an arbitrary or unreasonable hardship because it has only evaluated a worst case scenario. The invoked "parade of horribles" (30% loss in revenue, significant reduction in the amount of material stored, likely shutdown and loss of jobs) is not an empirical basis justifying a variance. For example, the applicant does not evaluate alternatives that may require some changes in business practice, but nonetheless will comply with the regulations. Consequently, NRDC and SETF contend CDPH must deny this variance request.

Runoff Management

The applicant seeks a variance from employing runoff management even though it acknowledges that it is already subject to stormwater management requirements pursuant to a (general) National Pollutant Discharge Elimination System Permit. The applicant honestly acknowledges that its NPDES obligations include best management practices to control runoff. Perhaps because of this existing obligation, the applicant cites no additional costs to comply with the City's regulations. Instead, the applicant yet again invokes a "parade of horribles", stating "From Torrence Avenue on the east to the river, all stormwater runs through the Facility. The cost to the Facility to implement controls for all of this runoff would more [sic] than the Facility could bear and likely lead to a shutdown, and resulting loss of jobs and revenues."

There are several problems with this variance request. The first and most obvious is that the applicant's 60-acre facility itself encompasses "[f]rom Torrence Avenue on the east to the river." Consequently, it is entirely appropriate for the applicant to bear responsibility for runoff management for this area. Perhaps more fundamentally, the applicant never describes its pre-existing obligations pursuant to its NPDES general permit, and provides no demonstration of compliance with these obligations. A variance may be appropriate if these requirements are identical-in-substance with the City's requirements, and if the applicant is fully compliant. Unfortunately, because of the lack of detail in the application, the City has no basis to evaluate the facility's existing runoff management obligations and its compliance with these NPDES-based requirements. Moreover, in light of this existing obligation to manage runoff, the applicant's unsubstantiated claims of additional hardship arising from the City regulations must be viewed skeptically. For these reasons, the variance request must be denied.

Recordkeeping

The applicant seeks to avoid all requirements related to street sweeping, weather data, the use of dust suppression, fugitive dust monitoring and observed instances of visible fugitive dust and opacity. In keeping with its request for wholesale variances from these basic requirements, it also seeks a variance from related recordkeeping requirements.

Because NRDC and SETF assert all of these requirements should be imposed on the applicant's facility, they also assert the facility must also comply with the related reporting requirements. NRDC and SETF further note that the applicant fails to propose alternative reporting measures to demonstrate on an ongoing basis that the facility is not a source of fugitive dust emissions. The facility's approach to reporting – trust but don't verify – is again directly contrary to the fundamental purposes of the City's regulations.

The City Is Not Preempted From Regulating the Applicant's Facility

The applicant incorrectly argues that the Federal Railway Safety Act (FRSA) preempts the City of Chicago Rules. Even on its face, the application acknowledges there are multiple aspects of non-rail site operations. These include operations related to barges and on-road vehicles, the operation of a 90,000 sq. ft. enclosure, the maintenance of multiple outdoor bulk material piles, and the on-site processing and storage of multiple types of materials.

The Applicant further claims that the state of Illinois has classified CPR-MMT as part of the federal rail system and that this classification places the facility solely and exclusively under the federal regulations set forth in the FRSA. This is an incorrect interpretation of the FRSA. The general purpose of the FRSA is to ensure and promote universal safety standards in federal railway operations across the United States and to limit railroad accidents and incidents.[17] The FRSA applies to all rail carriers, defined as a person who provides rail transportation; railroads, and non-highway ground transportation that operates on rails; and safety related railroad employees.[18] The FRSA only preempts state and local laws that are below the federal minimum safety regulations, but not state and local laws that exceed them.[19]

The FRSA does not address environmental concerns and is limited to rail-specific safety standards and regulations. Subchapter II of the FRSA provides an exhaustive list of the particular aspects of rail safety that are included in the FRSA. These aspects of rail safety are as follows:

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[17] 49 USCA § 20101

[18] 49 USCA § 20102

[19] 49 USCA § 20106

- Restricted access to rolling equipment
- Visible markers for rear cars
- Passenger cars
- Grade crossing and railroad rights of way
- Licensing or certification of locomotive operators
- Automatic train control and related systems
- Event recorders
- Tampering with safety and operational monitoring devices
- Maintenance-of-way operations on railroad bridges
- Alcohol and controlled substances testing
- Power break safety
- Track safety
- Locomotive visibility
- Blue signal protection for on-track vehicles
- Report on bridge displacement detection systems
- Institute for railroad safety
- Warning of civil liability
- Railroad car visibility
- Coordination with the Department of Labor
- Positive train control system progress report
- Railroad trespassing, vandalism, and highway-rail grade crossing warning sign violation prevention strategy
- Notification of grade crossing problems
- Audible warnings at highway-rail grade crossings
- Capital grants for rail line relocation projects
- Tank cars
- Railroad safety risk reduction program
- Implementation of positive train control systems
- Railroad safety technology grants
- Roadway user sight distance at highway-rail grade crossings
- National crossing inventory
- Fostering introduction of new technology to improve safety at highway-rail grade crossings
- Minimum training standards and plans
- Certification of train conductors
- Development and use of rail safety technology
- Limitations on non-federal alcohol and drug testing
- Emergency escape breathing apparatus
- Railroad safety improvement grants[20]

None of these rail safety categories are related to the kinds of public health, safety and welfare concerns arising from wholly ancillary bulk material management and storage.

[20] 49 USCA § 201

Operating under the theory of *expressio unius est exclusio alterius*, if Congress had intended the FRSA to extend to bulk material facilities, it would have included it in Subchapter II of FRSA. The City of Chicago Rules address the handling and storage of bulk materials, a topic that is outside FRSA's scope. Therefore, the applicant's assertion that is exempt from City regulations because of federal preemption is not accurate or effective.

For these reasons, we respectfully request that the Commissioner deny Chicago Port Railroad Company– Midwest Marine Terminals, Inc.'s application for a variance. Please do not hesitate to contact us if you have any questions.

Sincerely,

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Enc

Menu

ECHO Enforcement and Compliance History Online

Detailed Facility Report

Facility Summary

MIDWEST MARINE TERMINALS
11701 S TORRENCE AVE, CHICAGO, IL 60617

Facility Information (FRS)

FRS ID: 110030776275
EPA Region: 05
Latitude: 41.68304
Longitude: -87.55937
Locational Data Source: FRS
Industry:
Indian Country: N

Regulatory Interests

Clean Air Act: No Information
Clean Water Act: Minor, Permit Expired (ILR006553)
Resource Conservation and Recovery Act: No Information
Safe Drinking Water Act: No Information

Also Reports

Air Emissions Inventory (EIS): No Information
Greenhouse Gas Emissions (eGGRT): No Information
Toxic Releases (TRI): No Information

Enforcement and Compliance Summary

Statute	Insp (5 Years)	Date of Last Inspection	Current Compliance Status	Qtrs in NC (of 12)	Qtrs in Significant Violation	Informal Enforcement Actions (5 years)	Formal Enforcement Actions (5 years)	Penalties from Formal Enforcement Actions (5 years)	EPA Cases (5 years)	Penalties from EPA Cases (5 years)
CWA			Noncompliance	4	0					

Related Reports: CWA Effluent Charts CWA Pollutant Loading Report

Facility/System Characteristics

Facility/System Characteristics

Statute	Identifier	Universe	Status	Areas	Permit Expiration Date	Indian Country	Latitude	Longitude
	110030776275					N	41.68304	-87.55937
CWA	ILR006553	Minor: General Permit Covered Facility	Expired	Storm Water Industrial	04/30/2014	N	41.683021	-87.55937

Facility Address

System	Identifier	Facility Name	Facility Address
FRS	110030776275	MIDWEST MARINE TERMINALS	11701 S TORRENCE AVE, CHICAGO, IL 60617
ICP	ILR006553	MIDWEST MARINE TERMINALS	11701 S TORRENCE AVE, CHICAGO, IL 60617

Facility SIC Codes

System	Identifier	SIC Code	SIC Desc
No data records returned			

Facility NAICS Codes

System	Identifier	NAICS Code	NAICS Desc
No data records returned			

Facility Tribe Information

Tribal Name	EPA Tribal ID	Distance to Tribe (miles)
No data records returned		

Enforcement and Compliance

Compliance Monitoring History (5 years)

Statute	Source ID	System	Inspection Type	Lead Agency	Date	Finding
No data records returned						

Entries in italics are not considered inspections in official counts.

Compliance Summary Data

Statute	Source ID	Current SNC/HPV	Description	Current As Of	Qtrs in NC (of 12)
CWA	ILR006553			09/30/2014	4

Three Year Compliance Status by Quarter

Statute	Program/Pollutant /Violation Type	QTR 1	QTR 2	QTR 3	QTR 4	QTR 5	QTR 6	QTR 7	QTR 8	QTR 9	QTR 10	QTR 11	QTR 12	QTR 13*
	CWA (Source ID: ILR006553)	10/01-12/31 2011	01/01-03/31 2012	04/01-06/30 2012	07/01-09/30 2012	10/01-12/31 2012	01/01-03/31 2013	04/01-06/30 2013	07/01-09/30 2013	10/01-12/31 2013	01/01-03/31 2014	04/01-06/30 2014	07/01-09/30 2014	10/01-12/31 2014
	Facility-Level Status	No Viol	No Viol	No Viol	No Viol	No Viol	No Viol	No Viol	No Viol	In Viol	In Viol	In Viol	In Viol	In Viol
	SNC/RNC History										N(RptViol)	N(RptViol)	N(RptViol)	
	Permit Schedule Violations													
CWA	Schedule Event unachieved and not reported: Develop Storm Water Control Program									11-01-13	>>>>>>>>	>>>>>>>>	>>>>>>>>	>>>>>>>>

*Quarter 13 is draft/unofficial and has not been fully quality assured. Read more

Informal Enforcement Actions (5 Years)

Statute	Source ID	Type of Action	Lead Agency	Date
No data records returned				

Formal Enforcement Actions (5 Years)

Statute	Source ID	Type of Action	Lead Agency	Date	Penalty	Penalty Description
No data records returned						

ICIS Case History (5 years)

Primary Law/Section	Case No.	Case Type	Lead Agency	Case Name	Issued/Filed Date	Settlement Date	Federal Penalty	State/Local Penalty	SEP Cost	Comp Action Cost
No data records returned										

Environmental Conditions

Water Quality

Permit ID	Watershed (HUC 8)	Watershed Name (HUC 8)	Watershed (HUC 12)	Watershed Name (HUC 12)	Receiving Waters	Impaired Waters	Combined Sewer System?
ILR006553	04040001	LITTLE CALUMET-GALIEN				No	

Air Quality

Non-Attainment Area?	Pollutant(s)
Yes	Ozone
No	Lead
Yes	Particulate Matter

Pollutants

TRI History of Reported Chemicals Released in Pounds per Year at Site

TRI Facility ID	Year	Total Air Emissions	Surface Water Discharges	Off-Site Transfers to POTWs	Underground Injections	Releases to Land	Total On-site Releases	Total Off-site Releases
No data records returned								

TRI Total Releases and Transfers in Pounds by Chemical and Year

Chemical Name
No data records returned

Demographic Profile

Demographic Profile of Surrounding Area (3 Miles)

This section provides demographic information regarding the community surrounding the facility. ECHO compliance data alone are not sufficient to determine whether violations at a particular facility had negative impacts on public health or the environment. Statistics are based upon the 2010 US Census and American Community Survey data, and are accurate to the extent that the facility latitude and longitude listed below are correct. The latitude and longitude are obtained from the EPA Locational Reference Table (LRT) when available.

Radius of Area:	3	Land Area:	87%	Households in Area:	23,470
Center latitude:	41.683021	Water Area:	13%	Housing Units in Area:	26,502
Center Longitude:	-87.55937	Population Density:	2,759/sq.mi.	Households on Public Assistance:	782
Total Persons:	67,679	Percent Minority:	81%	Persons Below Poverty Level:	34,673

Race Breakdown	Persons (%)	Age Breakdown	Persons (%)
White:	27,743 (40.99%)	Child 5 years and younger:	4,975 (7.35%)
African-American:	23,264 (34.37%)	Minors 17 years and younger:	19,121 (28.25%)
Hispanic-Origin:	31,036 (45.86%)	Adults 18 years and older:	48,558 (71.75%)
Asian/Pacific Islander:	227 (.34%)	Seniors 65 years and older:	8,300 (12.26%)
American Indian:	495 (.73%)		
Other/Multiracial:	15,950 (23.57%)		

Education Level (Persons 25 & older)	Persons (%)	Income Breakdown	Households (%)
Less than 9th Grade:	5,848 (12.94%)	Less than $15,000:	4,413 (18.03%)
9th through 12th Grade:	5,310 (11.75%)	$15,000 - $25,000:	3,374 (13.78%)
High School Diploma:	15,479 (34.26%)	$25,000 - $50,000:	6,526 (26.66%)
Some College/2-yr:	12,520 (27.71%)	$50,000 - $75,000:	5,169 (21.12%)
B.S./B.A. or More:	6,021 (13.33%)	Greater than $75,000:	4,996 (20.41%)