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Please Refer to:
027563-6

June 10, 2014

VIA MESSENGER

Commissioner Bechara Choucair, M.D.
Chicago Department of Public Health
333 South State Street
Room 200
Chicago, Illinois 60604

RE: S.H. Bell Company
10218 South Avenue O
Chicago, Illinois

Request for Variations from Regulations
Air Pollution Control Rules and Regulations
For Control of Emissions from the Handling
and Storage of Bulk Material Piles

Dear Commissioner Choucair:

Our firm represents S.H. Bell Company ("S.H. Bell Co.") which is authorized by the State of Illinois to operate a raw material warehouse facility located at 10218 South Avenue O, Chicago, Illinois (the "Facility"). The 25 acre Facility is zoned Planned Manufacturing District No. 6, Lake Calumet ("PMD 6"). We hereby submit this correspondence pursuant to Section 8.0, Variance from Regulations, of the City of Chicago Department of Public Health – Rules and Regulations for Bulk Materials Storage (the "Regulations") promulgated March 13, 2014. The Regulations are intended to target facilities that store materials having the potential to emit dust associated with coal and coke.

Importantly, S.H. Bell Co. does not process, store or transfer coal, petroleum coke ("petcoke"), or metallurgical coke ("metcoke"). At this raw material warehouse, S.H. Bell Co. processes, stores and transfers materials such as ferroalloys, pig iron, silicon carbide, refractory products, graphite electrodes and primary nonferrous materials such as copper, zinc and

aluminum, typically in ingot form. S.H. Bell Co. is therefore not a high-risk facility for the emissions that are the target of the Regulations.

I. INTRODUCTION

S.H. Bell Co., a family owned business, operates a raw material warehouse which provides handling, storage, processing and packaging services to a customer base comprised of producers, and international traders and importers of metals, minerals, and semi-finished raw materials used in industrial processes in North America. S.H. Bell Co. does not store, process or transport coal, petcoke or metcoke.

S.H. Bell Co. is a long-standing member of and a vital contributor to the South Chicago Community. It began operations in Chicago forty years ago when it purchased the riverfront property of the Chicago Block Company, Inc. on the east bank of the Calumet River. In 1977, it acquired more property adjacent to the southeast side of the facility, and further expanded in 1983 by acquiring approximately one-half of the adjacent property to the north, formerly owned by The American Ship Building Company.

In 2000, S.H. Bell Co. opened a warehouse facility located in the Illinois International Port District at Lake Calumet. This expansion has given S.H. Bell Co. the opportunity to employ twenty-seven family wage earners as well as six full-time contractors at its South Chicago facility, and results in the company contributing annually an estimated \$2.5 million towards the local economy in salaries, wages, benefits and lease payments and an additional \$3.4 million towards local vendor services.

Strict compliance with the Regulations, particularly the fugitive dust monitoring requirements and harsh waterway setbacks, would lead to devastating impacts on S.H. Bell Co.'s ability to operate and the likely shutdown of the Facility, ultimately resulting in the loss of approximately 33 jobs, many of them union, and close to \$6 million towards the local economy. S.H. Bell Co. fights for every dollar it earns and every customer relationship is of critical importance. Compliance with the Regulations will force S.H. Bell Co. to pass on at least a portion of the additional costs to its customers resulting in the loss of customer relationships which have been developed over decades.

II. S.H. BELL CO.'S FUGITIVE OPERATING PROGRAM.

S.H. Bell Co. works closely with AMEC, an environmental consultant, to craft environmentally sound practices at the Facility. S.H. Bell Co. already complies with robust state and local regulations aimed at limiting Fugitive Dust¹ and protecting public health. S.H. Bell Co. previously adopted and implemented a Fugitive Operating Program, as required by 35 IAC § 212.309, and the City of Chicago specifically approved its program. S.H. Bell Co. recently updated its Fugitive Operating Program to address the Regulations' new requirements. Copies of S.H. Bell Co.'s Fugitive Operating Program/Fugitive Dust Plan updated as of June 10, 2014 and

¹ Unless otherwise indicated, capitalized terms used herein have the meanings ascribed to them in Section 2.0 of the Regulations.

Factsheet/Executive Summary, per Section 3.0(3) of the Regulations, are attached as Exhibit A. The attached plan reflects the variances requested herein.

According to S.H. Bell Co.'s current best practices, small particle storage piles (one-half inch in size or less) are stored primarily within bulk material storage buildings or under roofed bins (three-sided, roofed, paved areas). Piles that are stored outdoors are either tarped or sprayed using a water truck until crusted to prevent Fugitive Dust emissions. The piles are inspected daily to ensure adequacy of the control method. All roadways, paved and unpaved, are sprayed daily with a water truck (weather permitting), and all paved roads are swept daily (weather permitting). Other areas, including ramps, are sprayed as deemed necessary by the Facility manager. All vehicles must adhere to the posted speed limit of 5 miles per hour. Any employee who violates the 5 miles per hour speed limit will be disciplined because of failure to provide satisfactory results by not following procedures. Any material leaked by a vehicle onto an internal road is cleaned by the end of each eight hour shift and any material that has the potential to leak into a waterway is cleaned immediately.

Many of S.H. Bell Co.'s operations are conducted indoors including bag and box filling and crushing and screening. The bag and box filling operations are not only conducted indoors, but any emissions from these operations are controlled by a dust collector with an estimated 99% control efficiency. Such control devices are inspected, maintained and repaired as necessary. Further, removal of the collected materials from the dust collectors is performed indoors or within an enclosure. To reduce emissions during jaw crushing/screening activities, which are conducted in a separate warehouse from bag and box filling, all doors, windows and other openings in this warehouse are closed, and a wet suppressant spray system is operated. S.H. Bell Co. also utilizes a portable box screener, which may be used outdoors, but only for wet materials. Otherwise, all dry materials are screened indoors.

The transfer of materials at S.H. Bell Co.'s facility is also managed to reduce and control emissions. Dry materials are loaded onto trucks within a loadout shed or partial enclosure and proper loading methods are followed, including minimizing drop heights, all of which are effective at controlling emissions. Semi-trucks carrying materials out of the facility are covered. For barge unloading, S.H. Bell Co. may utilize wet suppression for material that is water compatible, such as pig iron. For materials that cannot be sprayed with water, such as ferroalloys, they are unloaded when the wind speed is 20 miles per hour or less. If wind speeds are believed to be approaching the threshold of 20 miles per hour, the facility manager consults readily available weather sources to assess recorded wind speeds in the vicinity to determine if barge unloading operations should be temporarily suspended. In addition, material that cannot be wet is unloaded directly to truck beds using a large dock excavator that adheres to unloading procedures designed to reduce fugitive particulate emissions, such as minimizing drop heights.

S.H. Bell Co.'s employees are trained annually in proper Fugitive Dust control procedures and records of dust control practices are kept as required by the Illinois EPA. Finally, S.H. Bell Co. submits quarterly and annual reports of its control measures to the Illinois EPA. To impose additional costly and unnecessary requirements on S.H. Bell Co. under the Regulations on top of its already extensive Fugitive Operating Program would be economically crippling to this family owned business.

III. REGULATIONS FROM WHICH VARIATIONS ARE REQUESTED

As discussed more fully below, S.H. Bell Co. respectfully requests Variations with respect to the following Regulations: 3.0(4); 3.0(5); 3.0(7); 3.0(10); 3.0(11); 3.0(12); 3.0(13); 3.0(15); 5.0(3); 5.0(4); and 5.0(5).

A. SECTION 3.0 OPERATING AND MAINTENANCE PRACTICES.

1. 3.0(4) Fugitive Dust Monitoring.

Section 3.0(4) requires the Facility Owner or Operator to “install, operate and maintain, according to manufacturer’s specifications, permanent, continuous Federal Equivalent Method (“FEM”) real-time PM10 monitors around the perimeter of the Facility” in accordance with certain specified requirements, one of which is that “[d]uring the first year of monitoring, at least one monitor shall be placed along each side facing the four cardinal directions” around the Facility. S.H. Bell Co. requests a complete variance from this Regulation because it imposes unreasonable hardship and is duplicative of measures already taken by S.H. Bell Co. as part of its Fugitive Operating Program to exercise effective control of dust emissions. S.H. Bell Co. strongly believes the public derives greater benefit from dust control and prevention, than from dust monitoring, and desires to focus its limited resources in that direction.

S.H. Bell Co. is not a petcoke or metcoke bulk materials facility, which is the facility type that represents the source of the nuisance dust complaint and triggered the development of the Regulations. S.H. Bell Co.’s raw material warehouse is not a Clean Air Act Permit Program (CAAPP) or Title V source since actual emissions are less than the Title V source thresholds for all pollutants and the facility can continue to restrict production levels to exist as a synthetic minor source (as originally permitted). Actual facility emissions of PM10 reported in the Annual Emissions Reports (AER) since 2011 on average have been a nominal 5.4 tons/yr.

Even more, it is technically infeasible to rely on FEM monitors which alone cannot accurately evaluate Fugitive Dust in the ambient air around the Facility. Without an analysis of wind direction and no ability to determine causation of the source of the specifically monitored dust (PM) levels, it is possible that monitored readings will arbitrarily trigger response activities for detection of Fugitive Dust not attributable to the Facility. Although the monitors may detect ambient particulate matter, they cannot distinguish background concentrations or origin and thus are ineffective for their intended purpose.

S.H. Bell Co.’s previously approved Fugitive Operating Program has effectively controlled Fugitive Dust emissions at the Facility without continuous PM10 monitoring. As discussed in Section II, S.H. Bell Co.’s Fugitive Operating Program/Fugitive Dust Plan has been updated to provide for additional dust control measures consistent with the Regulations which likewise render permanent and continuous PM10 monitors unnecessary.

Although S.H. Bell Co. seeks a complete variance from the dust monitoring requirements of Section 3.0(4), as discussed below, per Section 3.0(5), S.H. Bell Co. is willing to purchase and

install a meteorological station costing approximately \$19,000 (plus approximately \$12,000 annually in reporting and maintenance) to collect wind speed and wind direction data. S.H. Bell Co. would therefore have site specific, real time information in order to make decisions concerning curtailment or temporary suspension of selected operations.

2. 3.0(5) Wind Monitoring.

Section 3.0(5) requires the Facility Owner or Operator to “install, operate and maintain, according to manufacturer’s specifications, a weather station or other permanent device to monitor and log wind speed and wind direction at the Facility at an unobstructed, unsheltered area, centrally positioned in relation to the storage piles, and at a minimum height of 10 meters above ground level, unless another height is appropriate pursuant to applicable U.S. Environmental Protection Agency protocols and guidance.” Section 6.0(2) requires compliance with this Regulation within 90 days of the March 13, 2014 issuance of the Regulations, i.e., by June 11, 2014. S.H. Bell Co. requests an extension of the timeframe to complete this requirement to October 9, 2014. An additional 120 days is necessary for installation of a meteorological monitoring tower and related equipment, including equipment procurement, initial equipment calibration, preparation of the site with a concrete base, and electrical service and establishment of cellular modem service necessary for data review and capture.

3. 3.0(7) Transfer Points.

Section 3.0(7) requires the Facility Owner or Operator to “maintain all material transfer points” such that Fugitive Dust does not exceed a 10% opacity limit via: (a) total enclosure; (b) water spray system; (c) vented to air pollution control equipment; or (d) transfer of only Moist Material. “Transfer Points” are defined as “the location at or within a facility where material being moved, carried, or conveyed is dropped or deposited.” S.H. Bell Co. requests a partial variance from this Regulation because full compliance at every Transfer Point imposes unreasonable hardship and is duplicative of measures already taken by S.H. Bell Co. as part of its Fugitive Operating Program.

(a) Requiring S.H. Bell Co. To Use A Water Spray System Or To Transfer Only Moist Material At All Transfer Points Is Technically Infeasible.

S.H. Bell Co. is a raw material warehouse. As part of its Fugitive Operating Program, S.H. Bell Co. sprays outdoor storage piles which can be sprayed with a water truck. However, use of a water spray system or the transfer of Moist Material (defined as material with a moisture content of 3% by weight) is detrimental to the integrity of certain material stored and transferred by S.H. Bell Co., such as ferroalloys. Adding water and moisture content to ferroalloys, used in the production of steel, can result in a significant explosion hazard when the material is introduced into furnaces at steel mills. It is also technically infeasible, for example, to affix a water spray to a front end loader used by S.H. Bell Co. at certain Transfer Points because it will interfere with the loading bucket that is already in place. As an alternative to using water to control emissions, per its Fugitive Operating Program, S.H. Bell Co. uses an excavator, for example at barge loading and unloading, to reduce emissions by minimizing drop heights.

Additionally, the Fugitive Operating Program calls for additional precautions when wind speeds approach 20 miles per hour, including possible temporary suspension of operations. All of these precautions, similar to the Regulations, are aimed at reducing emissions.

Moreover, given Chicago's climate, the use of water to moisten materials is weather-dependent and only seasonally available. In Chicago, freezing temperatures can occur anytime from November to April. On average, there are 122 days annually in which the temperature is at or below freezing at some point, and 43 days annually when the daytime temperature does not rise above freezing. From November to March, weather this cold can last all day.² The use of a water spray system on all materials at all Transfer Points is therefore technically infeasible, and further may create hazardous conditions for employees.

(b) Requiring S.H. Bell Co. To Use A Total Enclosure Or Air Pollution Equipment At All Transfer Points Is Technically And Economically Infeasible.

For the reasons discussed below, the use of a total enclosure or air pollution control equipment in loading and unloading materials at all Transfer Points is both technically and economically infeasible, and S.H. Bell Co. seeks a partial variance from Sections 3.0(11)-(13), in addition to Section 3.0(7).

4. 3.0(11) Truck Loading and Unloading.

Section 3.0(11) requires the Facility Owner or Operator to ensure that truck loading and unloading occurs in compliance with Section 3.0(7). In accordance with S.H. Bell Co.'s Fugitive Operating Program, truck loading of dry materials is done within a bulk material storage building or a partial enclosure, both of which are effective at controlling dust emissions.

The construction of a truck loadout shed with dust collection is technically infeasible because there is no available land that meets setback requirements (discussed in Section B.1. below) which could support the installation of a truck loadout shed. Given S.H. Bell Co.'s existing facilities, it is unclear whether installation of such a shed would meet the location of the existing railway right-of-way, the City of Chicago's right-of-way on the roads or the proposed setback requirements. Likewise, the construction of a building for the unloading of trucks is also technically infeasible given S.H. Bell Co.'s configuration because the building would need to be large enough to accommodate a truck dumping trailer, e.g., an 80-foot by 40-foot building with 40-foot eaves.

The costs inherent in the construction of a building for loading and unloading trucks are prohibitive. S.H. Bell Co.'s previously approved Fugitive Operating Program has effectively controlled Fugitive Dust emissions at the Facility during truck loading and unloading, and, as discussed in Section II, its updated Fugitive Operating Program/Fugitive Dust Plan provides for additional dust control measures consistent with the Regulations.

² <http://www.currentresults.com/Weather/Illinois/Places/chicago-temperatures-by-month-average.php>.

5. 3.0(12) Railcar Loading and Unloading.

Section 3.0(12) requires the Facility Owner or Operator to ensure that railcar loading and unloading occurs in compliance with Section 3.0(7). Railcar loading and unloading is an infrequent activity at the Facility, occurring on average three to four times per month. S.H. Bell Co. will obtain a water spray system to control Fugitive Dust emissions during railcar loading and unloading operations in compliance with Section 3.0(7). S.H. Bell Co. requests a 90-day extension of time until September 9, 2014 to complete this requirement. S.H. Bell Co. is working with a vendor to procure the water suppression equipment (on a rent to purchase basis). Procurement of the equipment has an anticipated lead time of at least six weeks. Additional time is required after delivery of the equipment to ensure its successful operation.

6. 3.0(13) Barge and Boat Loading and Unloading.

Section 3.0(13) requires the Facility Owner or Operator to conduct barge material loading only through an "enclosed chute that uses a water spray system or an air pollution control system, or other mechanism described in the approved Fugitive Dust Plan." As a raw material warehouse, S.H. Bell Co. does far more unloading of barges than loading. On the infrequent occasions when S.H. Bell Co. does load barges, per its updated Fugitive Operating Program/Fugitive Dust Plan, it uses an excavator to load the material and minimize emissions. The excavator is utilized to scoop material from the dock and places it directly into the barge hold. The excavator is able to reach directly into the barge, minimizing drop height and any emissions. Accordingly, an enclosed chute is unnecessary to control emissions during the infrequent occasions a barge is loaded and S.H. Bell Co.'s updated Fugitive Operating Program / Fugitive Dust Plan provides an effective mechanism to control Fugitive Dust emissions during barge loading. Therefore, S.H. Bell Co. requests a partial variance from Section 3.0(13).

In addition, S.H. Bell Co. requests a variance from the barge unloading requirements of Section 3.0(13). Section 3.0(13) requires barge unloading to be conducted in a manner that will minimize dust in compliance with Section 3.0(7). As discussed in Section II, above, when unloading bulk materials from barges, S.H. Bell Co. does implement measures to minimize dust. Specifically, S.H. Bell Co. uses an excavator which allows the Facility to minimize the handling of the material and reduce drop heights. The excavator scoops material from the barge and places it directly into the bed of a waiting truck. Pursuant to the Fugitive Operating Program, the excavator operator is able to maneuver the loaded bucket into the bed of the trailer, minimizing the drop height and resulting emissions. While reducing drop heights may reduce operational efficiency, it is nonetheless highly effective at minimizing dust emissions in compliance with Section 3.0(7). The loaded truck then transports the material directly to the storage location, significantly reducing the number of times the material is handled. As a back-up to the excavator, S.H. Bell Co. uses boom cranes which offer similar advantages to an excavator in controlling drop heights and emissions.

7. 3.0(10) Vehicle Leaking.

Section 3.0(10) requires that in the event a vehicle leaks material or liquid that contains material onto an Internal Road or into a waterway, the Facility Owner or Operator "shall clean

the affected road within one hour with a street sweeper or water and shall clean the affected waterway immediately.” S.H. Bell Co. requests a partial variance from this Regulation such that it is permitted to clean solid spills on an Internal Road which are not in the entry/exit way of the Facility by the end of a regular working shift rather than within one hour. Solid spills at this Facility do not create the risk of spreading airborne particulate matter because the material is greater than ½ inch in size. Due to the material’s size and density, it is unlikely to cause Fugitive Dust emissions. Spills which are not in the entry/exit way are likewise not at risk of being tracked out of the Facility. Requiring workers to stop and clean up nonhazardous solid spills within an hour needlessly interferes with productivity. A regular working shift is eight hours. There is no risk to the public by having the type of spills described above cleaned at the end of a shift, instead of within one hour. However, in the unique circumstance where there is a material spill that does create airborne dust or is otherwise hazardous, S.H. Bell Co. will take immediate remedial measures.

8. 3.0(15) Roadway Cleaning.

Section 3.0(15) requires that the Facility Owner or Operator “use a street sweeper to clean any paved road that is used to transport material inside or within one quarter mile of the perimeter of the Facility;” that the street sweeper “be equipped with a water spray, for use during non-freezing weather” and a “vacuum system;” and that “not more than 4 hours elapse[] between each street sweeper cleaning or after every 100 truck material receipts or dispatches.” S.H. Bell Co. requests a partial variance from this Regulation to the extent it requires sweeping one quarter mile of the perimeter outside of the Facility. S.H. Bell Co. already maintains a dry street sweeper and a water truck for use inside the perimeter of the Facility.

The Regulation neither addresses insurance liability nor the coordination and required approvals needed from the City of Chicago’s Department of Public Works and the associated employee’s union that would be necessary for a private party, such as S.H. Bell Co., to conduct a necessary public function like sweeping public streets. S.H. Bell Co.’s Fugitive Dust Program already implements measures, such as rumble strips that shake off loose dust and material, to prevent the track-out of materials outside of the Facility and onto the public way. These are preferable to requiring S.H. Bell Co. to purchase and maintain a street sweeper with a water spray to perform public street cleaning. Notwithstanding this, assuming all the above described insurance and approval issues are resolved, once per regular eight hour working shift, S.H. Bell Co. is willing to dry sweep the approximately one quarter mile of the perimeter section of the Facility on Avenue N up to 100th Street.

B. SECTION 5.0 OUTDOOR BULK SOLID MATERIAL STORAGE.

1. 5.0(3) Protection of Waterways.

Section 5.0(3) requires that “[o]utdoor storage piles be set back at least 50 feet from any waterway.” S.H. Bell Co. requests a partial variance from this Regulation to require only a 20 foot setback. Fifty feet is overly restrictive in light of S.H. Bell Co.’s existing approved Fugitive Operating Program required for outdoor storage. The area is already zoned for heavy industrial use and has been used as such for decades. 50 foot setbacks would severely limit S.H. Bell Co.’s

ability to store any bulk materials outdoors, even when implementing the approved protections of S.H. Bell Co.'s existing Fugitive Operating Program.

Assessment of the property identifies a narrow slice of land between two boat slips as the only location capable of meeting the Regulation's setback requirements. *See Site Photos* (one illustrating 50 foot setback in yellow and one without), attached as Exhibit B. After compliance, all that would be left for outdoor storage would in some places be at most a ten-foot strip. Outdoor storage of the material in this space is impracticable. Compliance with this Regulation would therefore have a direct negative impact on the fundamental nature and purpose of S.H. Bell Co.'s business, its daily operating practices and its economic investment in the Facility, reducing annual revenue by 20%.

Constructing a building enclosure for indoor storage is likewise infeasible. A current estimate of the construction of a 50 foot wide by 400 foot long building is approximately \$1.3 million, not including design, permitting and site preparation. Such a building is impracticably narrow for the nature of S.H. Bell Co.'s business. Indoor storage for typical inbound shipments would require a minimum of 80,000 square feet and cost at least \$5.2 million to construct. Absent a variation, S.H. Bell Co. will suffer a significant reduction in the amount of material stored and the Facility's operational throughput, likely leading to shutdown, and the resulting loss of jobs and local revenue.

At its current 20 foot setback, S.H. Bell Co. is already actively engaged in waterline protection measures, rendering an additional 30 foot setback unnecessary. *See Photos* showing water lines protections, attached as Exhibit C. As a raw material warehouse, S.H. Bell Co.'s outdoor storage piles typically consist of ferroalloys, pig iron, direct reduced iron, hot briquetted iron, aluminum and zinc. These materials are not water soluble which prevents storage piles from eroding into the waterway. Although the site borders the Calumet River, there are no discrete storm water discharge points. Most of the perimeter of the storage areas which borders the river is comprised of absorbent materials such as dirt, rock and/or gravel which are designed to prevent storm water runoff. S.H. Bell Co. utilizes containment walls to keep the storage materials from entering the absorbent zone maintaining a 20 foot setback from the river. Steel pilings provide a barrier between site activities and the river in other areas of the site bordering the river.

2. 5.0(4) High Wind Events.

Section 5.0(4) requires that "[d]isturbance of outdoor Bulk Solid Material piles" including "outdoor loading, unloading, and any other Processing" shall be "suspended during High Wind Conditions." Section 2.0(12) defines "High Wind Conditions" as "average wind speeds exceed[ing] 15 miles per hour over two consecutive five minute intervals of time." S.H. Bell Co. requests a partial variance of this Regulation to permit the handling of materials without consideration of suspension in wind speeds of up to 20 miles per hour (based on two consecutive five minute intervals of time).

The National Weather Service's NOAA database for 2013 alone reveals the average monthly wind speed in Chicago exceeds 10 mph. Defining High Wind Conditions within the

normal range of wind speed in Chicago and then completely prohibiting any movement, including loading and unloading, during that time will shut down operations at the Facility 40% to 60% of the time, resulting in lost productivity, efficiency, revenues and income for its employees.

Alternative measures pursuant to S.H. Bell Co.'s Fugitive Operating Program are already in place to control dust emission in windy conditions, including the daily spraying of materials which can be sprayed. S.H. Bell Co. regularly tests for moisture content of bulk materials. Moist Material, which is defined by the Regulations as having a moisture content of 3% by weight, is not going to be spread by wind, regardless of speed, and therefore should not be subject to this Regulation's complete ban on movement.

Moreover, as previously discussed, S.H. Bell Co. is willing to install a meteorological station to collect wind speed and wind direction data and, therefore, would have site specific, real time information in order to make decisions concerning curtailment or temporary suspension of selected operations. The City of Chicago previously stated that the key factor in determining compliance with this requirement is the prohibition on Fugitive Dust. Therefore, if a facility has measures in place to effectively prevent Fugitive Dust emissions during High Wind Conditions, they need not stop work as evidenced by the language of Section 5.0(4) which requires work to be suspended during high winds, "unless alternate measures are implemented to effectively control dust in accordance with the approved Fugitive Dust Control Plan." S.H. Bell Co. has implemented such measures, and thus the purpose of the Regulation is satisfied.

3. 5.0(5) Dust Suppressant System.

Section 5.0(5) requires the Facility Owner or Operator to "apply Chemical Stabilizers and/or maintain and operate water spray bars, a misting system, water spray systems and/or water trucks to prevent Fugitive Dust emissions in violation of 3.0(2)." Section 3.0(2) prohibits the emission of Fugitive Dust that is "visible beyond the property line of the Facility" and "within the property line of the Facility at any Bulk Solid Material storage pile, Transfer Point, roadway or parking area that exceeds 10% opacity, or other applicable opacity standard set forth in an applicable State Permit, Law, Rule or Regulation." These dust suppressant systems must be operable and able to dispense at all times, unless all bulk storage material piles are covered, including when temperatures are below freezing.

S.H. Bell Co. maintains operable dust suppression systems for paved and unpaved roadways (water truck/sweeper), crusher-screener (water spray system at jaw crusher and associated transfer points), outside small particle storage piles (wet suppression with water truck, until crusted), and barge unloading (water spray system if material is compatible and dry). S.H. Bell Co. requests a partial variance from this Regulation relative to the requirement of operable systems when temperatures are below freezing (i.e., chemical stabilizers and/or water heating systems). In S.H. Bell Co.'s experience during subfreezing conditions, violation of Section 3.02 is not compromised relative to roadways and storage piles due to frozen/snow covered surfaces and subsequent condensation upon thawing events, in addition to quick crusting of outdoor storage piles. The crusher-screener water spray system is operable in all weather conditions, as this application occurs indoors. Otherwise, S.H. Bell Co.'s work practice standards described

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herein in Section II and within S.H. Bell Co.'s existing Fugitive Operating Program provide assurance that the Facility will comply with Section 3.02 during subfreezing conditions.

IV. CONCLUSION

Apart from the Regulations for which Variations are sought, S.H. Bell Co. maintains and operates the Facility in accordance with all applicable licenses and certifications and complies with all federal, state and local requirements. The Regulations, while effective with respect to bulk solid material like coal, petcoke and metcoke, are inappropriate to the types of materials stored by S.H. Bell Co. which generate little Fugitive Dust.

Again, S.H. Bell Co. does not store, process or transport coal, petcoke or metcoke, the Regulations' primary targets. The Regulations' stated purpose is to prescribe reasonable practices and minimize harmful emissions. S.H. Bell Co. had previously implemented an aggressive Fugitive Operating Program which accomplished those ends in an effective manner, and has further enhanced its Fugitive Operating Program in light of the Regulations' additional requirements.

For all of the foregoing reasons, S.H. Bell Co. Company respectfully requests approval of the specified Variations from the Regulations. Thank you for your careful consideration of this matter which is of great importance to S.H. Bell Co., its customers and its employees. Please do not hesitate to contact us with questions or requests for more information.

Very truly yours,

TAFT STETTINIUS & HOLLISTER LLP


Kim R. Walberg

KRW:kmm
Enclosure

cc: Alderman John A. Pope (via messenger)
John M. Bell (via e-mail)
Scott Dismukes, Esq. (via e-mail)
Jack Guthman, Esq. (via e-mail)
Edward Kus, Esq. (via e-mail)

EXHIBIT A

Fugitive Operating Program/ Fugitive Dust Plan

**S.H. Bell Co.
10218 South Avenue O
Chicago, Illinois 60617
I.D. No. 031600BWX**

June 10, 2014

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Figure 1 Facility Diagram

Figure 2 Roadway Location Map

Introduction

This Fugitive Operating Program/Fugitive Dust Plan has been prepared for the S.H. Bell Company (S.H. Bell Co.) Chicago Terminal, located at 10218 South Avenue O, in Chicago, Illinois, in accordance with the following regulations:

Title 35 of the Illinois Administrative Code Part 212 (35 IAC 212):


- Subpart K – Fugitive Particulate Matter
- Subpart L, Section 324 – Particulate Matter Emissions from Process Emission Units in Certain Areas

City of Chicago Department of Public Health (Department) – Rules and Regulation for Bulk Materials Storage, March 13, 2014 (Chicago Bulk Materials Regulation)

The Fugitive Operating Program is required by 35 IAC 212.309. Applicable requirements of Subpart K and Section 324 of Subpart L are addressed in this document. This document represents an update to S.H. Bell Co.'s Fugitive Operating Program, which was last revised in August 2012, to incorporate the requirements of the recently promulgated Chicago Bulk Materials Regulation.

Certification by Owner

S.H. Bell Co. is the owner/operator of the facility and responsible for execution of this Fugitive Operating Program/Fugitive Dust Plan. S.H. Bell Co. hereby certifies that all control measures, devices, and technologies have been properly calibrated and maintained, all appropriate facility staff has been trained on the proper application of and operation of all control measures, devices, and technologies. Further, the calculation of maximum indoor and outdoor bulk storage as noted herein is also certified by the facility owner.

Signature: 

Printed Name: SAMUEL H. BELL

Title: V.P. / PARTNER

Date: 10 JUNE 2014

Facility Description

The S.H. Bell Co. Chicago Terminal consists of the following: an office building; a completely enclosed jaw crushing/screening plant; storage buildings for processed raw materials; storage buildings for primary bulk materials; a scale house; barge unloading slips; and gravel-covered, landscaped and asphalt-paved areas. The entire facility is approximately 25 acres in size with buildings and paved areas constituting more than 95% of the total area. Facility characteristics are shown on Figure 1, including approximate locations of:

- Storage piles
- Normal traffic pattern access around storage piles
- All normal traffic patterns within the source
- Location of unloading and transporting operations with pollution control equipment

Operations at the facility typically include the receiving of several different raw materials, including ferroalloys, pig iron, silicon carbide, magnesite, refractory products, graphite electrodes and primary nonferrous materials such as copper, zinc, and aluminum, typically in ingot form.. Raw materials to be processed and/or stored at the facility are transported to the facility by barge, rail and truck. Typically, with limited exception, the unloading of the bulk material barges is completed using a large dock excavator that places the raw materials into trucks.

Most raw materials unloaded are stored within the bulk material storage buildings prior to processing and/or reloading. The truck loadout operations of dry material are completed with a front-end loader within a partial enclosure. Some unloaded raw materials are transferred to the material crushing and screening areas to be processed, and some raw materials are subject to further processing through boxing and bagging operations. Raw materials are crushed and screened according to size; smaller processed raw materials are placed within paved, roofed storage bins, while larger raw materials are placed in storage piles located adjacent to protected storage bins. Processed or stored materials are then reloaded to truck or rail, and then distributed to consumers.

Bulk Solid Material Storage Capacity

Approximate indoor area available for storage

Ryerson: 55,000 square feet

Norcon: 28,000 square feet

Total indoor available storage area: 83,000 square feet

Average material storage: 0.8 tons/square foot

Density of material: 280 lbs/cubic foot

Indoor bulk material storage capacity: 66,400 tons

Approximate outdoor area available for storage (assuming 20' setback from water)

Middle slip: 550' x 75' = 41,250 square feet

West of office: 200' x 150' = 30,000 square feet

Southern Corner: ½ (300' x 300') = 45,000 square feet

Total outdoor available area: 116,250 square feet

Average material storage: 1.2 tons/square foot

Density of material: 280 lbs/cubic foot

Outside bulk material storage capacity: 139,000 tons or 37,000 cubic yards

Specific Requirements

This section provides a detailed discussion of the regulatory requirements in Subpart K and Section 324 of Subpart L and the Chicago Bulk Materials Regulation that are applicable to specific operations and activities performed at S.H. Bell Co. along with the associated compliance method/best management practice. The following section, Best Management Practices, includes a summary of these practices and compliance methods.

General

Requirement at 212.301: No fugitive particulate matter from any process, including material handling or storage, shall cross the property line, defined as being visible by an observer looking generally toward the zenith at a point beyond the property line of the source.

S.H. Bell Co. Compliance Method: The control measures included in this revised Fugitive Operating Program prevent fugitives from leaving the property..

Storage Piles

Requirement at 212.304: All storage piles with more than 50 tons/year of fugitive particulate emissions shall be protected by a cover or sprayed with a surfactant solution or water on a regular basis, as needed, or treated by an equivalent method. This requirement is not applicable to specific storage piles if fugitive particulate emissions from the piles do not cross the property line either by direct wind action or re-entrainment.

Requirement at 212.316(d): Fugitive particulate matter emissions from any storage pile cannot exceed an opacity of 10%, to be measured four feet from the pile surface.

S.H. Bell Co. Compliance Method: Although the storage piles at the facility do not have uncontrolled emissions of more than 50 tons/year of particulate, as a Best Management Practice, S.H. Bell Co. has elected to apply these requirements to piles of small particles (material of ½ inch in diameter or less).

Small-particle raw materials and smaller processed raw materials are primarily sorted in the primary bulk material storage building or within the roofed material storage bins, which consist of three-sided, roofed, paved areas. Materials stored outdoors, which consist of particles one-half inch in size or less are sprayed daily (weather permitting) with water using a water truck until crusted, subject to customer material specifications or tarped when no material transfer is occurring.

Conveyor Loading Operations

Requirement at 212.305: All conveyor loading operations to storage piles specified in 212.304 shall utilize spray systems, telescopic chutes, stone ladders, or other equivalent methods.

Requirement at 212.316(f): Fugitive particulate matter emissions from any unit with no other opacity limitation shall not exceed an opacity of 20%.

S.H. Bell Co. Compliance Method: No equipment at S.H. Bell Co. is subject to this requirement.

Traffic Areas

Requirement at 212.306: All normal traffic pattern access areas surrounding storage piles specified in 212.304 and all normal traffic pattern roads and parking facilities which are located in mining or manufacturing property shall be paved or treated with water, oils or chemical dust suppressants. All paved areas shall be cleaned on a regular basis. All areas treated with water, oils or chemical dust suppressants shall have the treatment applied on a regular basis, as needed.

Requirement at 212.316(c): Fugitive particulate matter emissions from any roadway or parking area may not exceed an opacity of 10%.

S.H. Bell Co. Compliance Method: All paved facility roadways are swept daily, weather permitting, by the company-owned, mechanical-brush sweeper which is equipped with a collection hopper. After the completion of a shipment of raw materials, the sweeper cleans, in a timely manner, the area where the materials were stored. Sweepings dust generated will be stored in storage piles in the Norcon building at the facility.

Unpaved and paved roads will be sprayed daily with water from the facility water truck, weather permitting. All unpaved access roads and ramps are also sprayed (weather permitting) as deemed necessary by the facility manager with a dust suppressant for the purpose of reducing fugitive dust emissions caused by wind or vehicular/equipment traffic. All vehicles entering and exiting the facility drive at the posted speed limit to ensure fugitive dust control. Signs are posted at the facility entrance and throughout the facility indicating the speed limit for vehicular traffic.

The City of Chicago Bulk Materials Regulation requires that sweeping be performed so that not more than 4 hours elapses between each street sweeper cleaning or after every 100 truck material receipts or dispatches, but not less than one time daily when the facility is open for business, unless the roads are free and clear of any material transported to or from the facility. For each 24 hour day, beginning at 12:01 AM, the Facility shall document whether for that day street sweeping will be performed every four hours or every 100 trucks, or whether the roads are free and clear of any material transported to or from the facility. Any material leaked by a vehicle onto an internal road which are not in the entry/exit way of the Facility will be cleaned by the end of a regular working shift. In the unique circumstance where there is a material spill that does create airborne dust or is otherwise hazardous, S.H. Bell Co. will take immediate remedial measures. Any material that has the potential to leak into a waterway will be cleaned immediately.

Air Pollution Control Equipment

Requirements at 212.324(f): For any process unit subject to 212.324(a), the owner or operator shall maintain and repair all air pollution control equipment in a manner that assures emission limits and standards will be met. Proper maintenance shall include the following minimum requirements: 1) visual

inspections of air pollution control equipment, 2) maintenance of an adequate inventory of spare parts, and 3) expeditious repairs, unless the emission unit is shut down.

S.H. Bell Co. Compliance Method: Inspections of the dust collectors are performed, spare parts are maintained at the facility, and repairs, when required, are made expeditiously. To ensure continued proper operation and adequate control, weekly inspections of control devices are performed and include several items as detailed in the Recordkeeping section of this Plan.

Materials Collected by Pollution Control Equipment

Requirement at 212.307: All unloading and transporting operations of materials collected by pollution control equipment shall be enclosed or shall utilize spraying, pelletizing, screw conveying or other equivalent methods.

Requirement at 212.313: Particulate collection equipment emissions shall not exceed 0.03 grains/dscf. The particulate control devices have a stated efficiency of 99%.

S.H. Bell Co. Compliance Method: A dust collector is operated on each of the bag-filling and box-filling operations to reduce fugitive dust emissions resulting from these operations. As the box filling dust collector is located inside an enclosure and the bag filling dust collector is located inside a building, fugitive emissions generated by removal of material collected in the dust collectors are controlled by the building/enclosure. The collection bags in the dust collectors are cleaned regularly to ensure efficient operation.

Spraying or Choke-Feeding Required

Requirement at 212.308: Crushers, grinding mills, screening operations, bucket elevators, conveyor transfer points, conveyors, bagging operations, storage bins and fine product truck and railcar loading operations shall be sprayed with water or a surfactant solution, utilize choke feeding or be treated by an equivalent method.

Requirement at 212.316(b): Fugitive particulate matter emissions generated by the crushing or screening of slag, stone, coke or coal cannot exceed an opacity of 10%.

Requirement at 212.316(f): Fugitive particulate matter emissions from any unit with no other opacity limitation shall not exceed an opacity of 20%. The Bulk Materials Regulation, at Part B, Section 3.0(2)(b), supersedes this requirement by requiring a 10% opacity limit.

This section applies to the following sources at S.H. Bell Co. , compliance methods for which are discussed individually:

Crushing/Screening – A wet suppressant spray system is operated during all jaw crushing/screening operations to reduce fugitive dust emissions from the processed materials. During jaw crushing/screening activities all doors, windows, and other openings are also kept closed. Facility managers periodically inspect the jaw crushing/screening operation to ensure the dust control procedures are being used and are operating effectively.

The portable box screener is used for screening wet materials; if dry materials are to be screened, it is only used inside a facility building.

Truck Loading / Unloading – Loading operations of dry materials involving trucks are completed within a loadout shed or within a bulk material storage building, for the purpose of reducing fugitive dust emission levels. Materials stored outside which are damp are loaded outside. Facility managers are on-hand during truck loading operations to ensure that proper loading methods are followed. Proper loading methods include minimizing material drop heights, determining that weather conditions are favorable, and ensuring equipment is properly operated and maintained.

For truck unloading, materials carried by in-house drayage trucks are unloaded within a bulk material storage building. Full size trucks from off-site are unloaded into three-sided steel receiving pans located outdoors in a manner which minimizes drop heights.

Barge Unloading / Loading – Barge unloading operations are completed under the supervision of the facility manager to ensure that all barge unloading operations for materials that cannot be sprayed with water are completed when the wind speed is 20 miles per hour or less and that unloading operations are completed so as to minimize drop height to reduce fugitive dust emissions. If excess wind speed is observed, the facility manager will consult readily available weather sources (such as Internet weather sites) until such time as the meteorological station required by the Chicago Bulk Materials Regulation is installed and operating, to determine wind speeds in the vicinity and determine if loading/unloading operations should be temporarily suspended. Materials which can be sprayed with water, such as pig iron, are sprayed with water prior to unloading. Materials that cannot be sprayed with water, such as ferroalloys are unloaded directly to truck beds with a large dock excavator that will adhere to unloading procedures designed to reduce fugitive particulate emissions.

Barge loading is a far more infrequent activity than barge unloading. On the infrequent occasions when S.H. Bell Co. does load barges, it uses an excavator to load the material and minimize emissions. The excavator is utilized to scoop material from the dock and places it directly into the barge hold. The excavator is able to reach directly into the barge, minimizing drop height and any emissions.

Railcar Unloading / Loading -Section 3.0(12) of the Bulk Materials Regulation requires the Facility Owner or Operator to ensure that railcar loading and unloading occurs in compliance with Section 3.0(7). S.H. Bell Co. will obtain a water spray system to control fugitive dust emissions during railcar loading and unloading operations and thus ensure compliance with the requirements of Section 3.0(7). S.H. Bell Co. has requested a 90-day extension of time until September 9, 2014 to complete this requirement. S.H. Bell Co. is working with a vendor to procure the water suppression equipment (on a rent to purchase basis). Procurement of the equipment has an anticipated lead time of at least six weeks. Additional time is required after delivery of the equipment to ensure its successful operation.

Vehicle Covering

Requirement at 212.315: Second division vehicles (such as pick-up trucks) or a semi-trailer cannot be operated without a cover sufficient to prevent the release of particulate matter into the atmosphere.

The Bulk Materials Regulation at Part B, Section 3.0(9) requires truck trailers to be immediately covered before leaving the Facility in one of the following manners: i) a solid sliding cover or stackable cover on the top of the truck trailer that is kept completely closed except during loading, or ii) a continuous tarp that completely covers the truck trailer and that is installed or constructed to prevent wind from entering over the leading edge of the trailer rim into the interior of the trailer.

S.H. Bell Co. Compliance Method: All semi-trucks carrying materials out of the facility are covered.

Exterior Truck Routes

The Chicago Bulk Materials Regulation requires a description of the truck routes within one quarter mile of the perimeter of the facility be included in this plan. Figure 2 shows the roadways in the direct vicinity of the facility and highlights those which are used by trucks coming to and leaving from S.H. Bell Co.

All trucks enter and leave the facility over the truck scales at the northeastern corner of the property. Trucks enter from the intersection of South Avenue N and East 100th Street. These two roads are the most used access roads by truck traffic into the facility. Trucks coming from the west will typically travel east along East 100th Street and then travel south along South Avenue N to the facility entrance. Trucks leaving the facility and heading west will follow the reverse of this route. Trucks coming from the east will typically travel northwest along Indianapolis Boulevard to East 100th Street and head west, turning south to travel along South Avenue N to the facility entrance. Trucks leaving the facility and heading east will follow the reverse of this route.

All roads used by trucks entering or leaving S.H. Bell Co. are paved - South Avenue N, East 100th Street, and Indianapolis Boulevard. The City of Chicago regularly sweeps roads in the vicinity of the S.H. Bell Co. facility. Current dust control measures employed on roadways, as described above, including sweeping, dust suppression, a speed limit of 5 mph, and minimizing the amount of loose material carried out of the facility by trucks. All trucks carrying material out of the facility are tarped prior to leaving the facility.

Best Management Practices

The previously noted compliance methods, as well as other Best Management Practices, are utilized to achieve compliance with this revised Fugitive Operating Program/Fugitive Dust Plan. This section provides a summary of these practices and methods in tabular format.

Summary Table of BMPs

Small Particle Storage Piles (1/2 inch in size or less)	
	Stored primarily within bulk material storage buildings or under roofed bins (three-sided, roofed, paved areas)
	Piles that are stored outdoors are either tarped or sprayed daily using a water truck
	Piles are inspected every day to ensure adequacy of control method
Traffic Areas	
	All roadways (paved and unpaved) are sprayed daily with water from a water truck, weather permitting
	All paved roadways are swept daily, weather permitting
	Other areas, including ramps, are sprayed as deemed necessary by the facility manager
	All vehicles must adhere to the posted speed limit (5 mph)
	Any material leaked by a vehicle onto an internal road which is not in the entry / exit way of the Facility will be cleaned by the end of the shift; any material that has the potential to leak into a waterway will be cleaned immediately; a material spill that creates airborne dust will be cleaned immediately
Air Pollution Control Equipment	
	Bag and box filling operations are each controlled by a dust collector with a stated efficiency of 99%
	Control devices are inspected, spare parts maintained, and repairs are made when required
	Removal of collected materials from the dust collectors is performed indoors or within an enclosure
Crushing/Screening	
	During jaw crushing/screening activities, all doors, windows and other openings are closed
	Wet suppressant spray system operated during all jaw crushing/screening operations
	Portable box screener is used for wet materials or indoors if used for screening dry materials
Truck Loading / Unloading	
	Loading operations of dry materials are completed within a loadout shed or within a building
	Proper loading methods are followed, including minimizing drop heights
	Unloading operations using in-house drayage trucks are completed within a bulk material storage building
Barge Unloading / Loading	
	Proper unloading methods are followed, including minimizing drop heights
	Unloading operations are only performed when wind speed is 20 mph or less
	Materials that can be sprayed with water (such as pig iron) are sprayed prior to unloading
	Materials that cannot be sprayed with water are unloaded directly to truck beds
	Proper loading methods directly into a barge are followed, including minimizing drop heights
Railcar Loading / Unloading	
	S.H. Bell Co. will obtain a water spray system to control fugitive dust, to be operational by September 9, 2014
Vehicle Covering	
	Semi-trucks carrying materials out of the facility are covered

General	
	Employees are trained annually in proper fugitive dust control procedures
	Records of dust control practices are kept as required (detailed in the following section)
	Any spilled/misplaced material in areas not normally used for storage will be removed by the end of each work shift

Dust Suppressant Application Summary

The following summarizes the use of dust suppressants at the facility:

Location	Suppressant Type	Application Frequency
Unpaved areas	Water	Daily (weather permitting)
Paved areas	Water	Daily (weather permitting)
Small particle piles	Water	Daily, or until crusted
Crusher/screener	Water	Whenever operations are performed
Railcar Loading / Unloading	Water	Whenever dry materials that can be sprayed are loaded or unloaded via railcar
Barge unloading	Water	Whenever dry materials that can be sprayed are unloaded

Dust Monitoring Plan

Quarterly Opacity Testing

On a quarterly basis, an individual trained and certified to evaluate visible emissions and read opacity in accordance with the measurement method specified in 35 IAC 212.107 (Method 22) will perform at least two opacity reads. One read will be performed during minimal wind conditions and one during average wind conditions to ensure that representative weather conditions are covered. The average wind speed for Chicago, Illinois is 10.3 miles per hour (mph), therefore, the average wind conditions are defined as wind speeds of approximately 10 mph. The readings will be taken at a representative outdoor storage pile.

Wind Monitoring

A meteorological monitoring system will be installed in accordance with the Chicago Bulk Materials Regulation (Part B, Section 3.0(5)) to measure wind speed at the facility. The meteorological monitoring system will be calibrated on a semi-annual basis and the wind speed sensors will be swapped and bearings replaced. On an annual basis, the wind direction sensors will be swapped and bearings replaced. S.H. Bell Co. has requested an extension of timeframe to complete this requirement until October 9, 2014. An additional 120 days is necessary for installation of a meteorological monitoring tower and related equipment, including equipment procurement, initial equipment calibration, preparation of the site with a concrete base, and electrical service and establishment of cellular modem service necessary for data review and capture.

Recordkeeping

The following records are kept in accordance with fugitive dust control measures, on the schedule noted below, and maintained for a minimum period of three (3) years from the date the record is created:

Area	Item	Recordkeeping Frequency
Unpaved and paved areas	Water application ¹	Daily
Paved areas	Sweeping	Whenever performed, including date and time and truck count, if applicable
Barge unloading / loading	Following proper procedures	Whenever activities are performed
Truck loading/unloading	Following proper procedures	Whenever activities are performed
Railcar loading/unloading	Following proper procedures	Whenever activities are performed
Crusher/screener	Following proper procedures	Whenever operations are performed
Control devices	Inspection, maintenance and repair ²	Whenever performed
Small particle piles	Water application/observation	Daily
Facility wide	Water and/or chemical stabilizer application ³	Whenever control measures are used
Facility wide	Instances of suspension of water and/or chemical stabilizer application ³	Whenever control measures were not used
Facility wide	Date and time of suspension of operations	Whenever operations are suspended due to high winds (>20 mph)
Facility wide	Date and time when application of control of any transfer point was suspended	Whenever control was not performed
Facility wide	Results of quarterly opacity readings	Quarterly
Weather Station	Wind speed and direction	Daily
Weather Station	Inspection, maintenance and repair ⁴	Whenever performed, at a minimum on a monthly basis
Off-site area	Presence of dust ⁵	Once per month

Responsible personnel for each of these items will vary, but overall responsibility for implementation of the inspection, maintenance, and testing requirements will remain with the Terminal Manager.

Notes:

- For water application to roadways by truck, the following information is recorded:
 - Name and location of roadway controlled
 - Application rate of truck
 - Frequency of application
 - Width of each application
 - Identification of each truck used

- Total quantity of water or chemical used for each application

2. The following records are kept in accordance with control device maintenance and repair:

- Written records of inspections, maintenance, and repairs. The control devices are inspected weekly, when operations are being performed, and the results of the inspection recorded. The items inspected include, but are not limited to the following:
 - Differential pressure across the control device
 - Proper operation of hopper discharge device
 - Observation of visible emissions

In the event that any of these items are found to be deficient (e.g., pressure outside of appropriate range, non-normal visible emissions, etc.), troubleshooting and corrective action is immediately begun to return the device to proper operation. Records are kept of all subsequent corrective action activities. Records are also kept whenever maintenance or repairs are performed.

- Documentation of any period when any process emission unit was operating and the associated control device was not operating or was malfunctioning so as to cause an emission level in excess of the limitation, including the causes for non-operation or malfunction, corrective actions taken, and repairs made.
- Written record of all spare parts not readily available from local suppliers

3. For transfer points, vehicles loading, and truck, railcar, and barge loading and unloading, if water and/or chemical stabilizer is applied, the application must be recorded as well as any time when application is suspended for any reason.

4. Inspection of the wind speed measurement device will be performed as necessary.

The following will be inspected, performed, and/or recorded, on a semi-annual basis:

- Calibration of the meteorological monitoring system
- Wind speed sensors will be swapped and bearings replaced

The following will be inspected, performed, and/or recorded, on an annual basis:

- Wind direction sensors will be swapped and bearings replaced

5. The off-site area consisting of the area directly adjacent to the facility access point (near the intersection of the corner of South Avenue N and East 101st Street) will be checked for the presence of materials that appear to have originated from the S.H. Bell Co. facility. If materials are noted in this area, they will be collected and taken back to the S.H. Bell Co. facility.

Training

Facility personnel are trained annually on methods used to reduce fugitive dust emission levels at the facility as indicated by the provisions of this program. Personnel are trained in monitoring and recordkeeping as required by the responsibilities of their position. Dated records of all employee training are maintained at the facility.

Reports

Quarterly Exception Reports

A quarterly report is submitted to the Illinois EPA which includes the following information:

- the dates any necessary control measures were not implemented
- a listing of the control measures
- the reason the control measures were not implemented
- any correction action taken

This information includes, but is not limited to, those dates when controls were not applied based on a belief that application of such control measures would have been unreasonable given prevailing atmospheric conditions, which shall constitute a defense to these. This report is submitted to the Illinois EPA thirty days from the end of the quarter – quarters end March 31, June 30, September 30, and December 31.

Annual Reports

An annual report shall be submitted to Illinois EPA which contains a summary of the written records of application of control measures as may be needed for compliance with opacity limitations.

Program Update

Facility operations are periodically reviewed in conjunction with this Fugitive Operating Program / Fugitive Dust Plan, typically annually, and submitted to the Department by January 31 of each year. Any change, modification, or addition to the operations described in this plan will be submitted to the Department for review and approval at least 30 days prior to any such change, modification, or additional. Any revisions of this plan will also be submitted to the Illinois EPA.

Variance Request

S.H. Bell Co. has filed a Variance Request for certain provisions of the Chicago Bulk Materials Regulation. The request is pending for the following portions of the rule; this current plan assumes that all variance requests will be granted.

Part B: BULK SOLID MATERIAL FACILITIES

3.0 Operating and Maintenance Practices

- 3.0 (4) The rule requires installation and operation of four continuous Federal Equivalent (FEM) real-time ambient PM10 monitors; S.H. Bell Co. is requesting a complete variance from this Regulation because it imposes unreasonable hardship and is duplicative of measures already taken by S.H. Bell Co. as part of its Fugitive Operating Program to exercise effective control of dust emissions. S.H. Bell Co. strongly believes the public derives greater benefit from dust control and prevention, than from dust monitoring, and desires to focus its limited resources in that direction.
- 3.0(5) The rule requires installation, operation, and maintenance of a weather station to monitor and log wind speed and wind direction at the Facility. S.H. Bell Co. is requesting a variance strictly in terms of an extension of the compliance date to satisfy this requirement until October 9, 2014.
- 3.0(7) The rule requires maintenance of “all material transfer points” such that Fugitive Dust does not exceed a 10% opacity limit via (a) total enclosure, (b) water spray system, (c) venting to air pollution control equipment, or (d) transfer of only moist material. S.H. Bell Co. is requesting a partial variance from this regulation because full compliance at every transfer point for every material is either technically infeasible or duplicative of measures already taken by S.H. Bell Co. as part of its Fugitive Operating Program / Fugitive Dust Program described herein.
- 3.0 (10) The rule requires spills on interior roads be cleaned within one hour; S.H. Bell Co. is proposing to clean solid spills on internal roads which are not in the entry/exit way of the Facility by the end of a regular working shift;
- 3.0 (11) Truck loading and unloading must be performed in accordance with 3.0 (7) which specifies requirements for transfer points; S.H. Bell Co. cannot comply with the total enclosure / dust collection requirements

due to location constraints. Truck loading of dry materials occurs within a loadout shed or within a bulk material storage building. Unloading of material via in-house drayage trucks occurs within a bulk material storage building. Full size trucks are unloaded to three-sided steel receiving pans in a manner consistent with good operating practices (i.e., minimizing drop heights).

- 3.0 (12) Railcar loading and unloading must be performed in accordance with 3.0 (7) which specifies requirements for transfer points; S.H. Bell Co. will obtain a water spray system to control fugitive dust during railcar operations, as feasible based on material compatibility, but is requesting a variance strictly in terms of an extension of the compliance date to satisfy this requirement until September 9, 2014.
- 3.0 (13) Barge loading and unloading must be performed in accordance with 3.0 (7) which specifies requirements for transfer points; S.H. Bell Co. cannot comply with water suppression control for all materials or an air pollution control system for the reasons set forth in the variance request and is requesting to utilize its best operating practices (e.g., minimizing drop height, monitoring wind speed) to meet the requirements.
- 3.0 (15) The rule requires roadway sweeping, with no provision for weather; roads cannot be swept when wet as it will ruin filters and clog the material collection hopper.
- 3.0 (15) The rule requires sweeping of roads outside the property; sweeping public roads is unsafe and the City of Chicago already performs sweeping. To the extent that liability and union issues could be overcome, and approvals are obtained, S.H. Bell Co. is willing to dry sweep the quarter mile of the perimeter section of the Facility on Avenue N up to 100th Street.

Part D: OUTDOOR STORAGE OF BULK SOLID MATERIALS OTHER THAN COKE OR COAL

5.0 Outdoor Bulk Solid Material Storage

- 5.0 (3) The rule requires a 50 foot setback from waterways; due to property configuration, S.H. Bell Co. is requesting a variance for a 20 foot setback
- 5.0 (4) The rule defines high wind conditions as average wind speeds exceeding 15 mph over two consecutive five minute intervals of time and which requires suspension of outdoor activities; S.H. Bell Co. is requesting high wind to be defined as exceeding 20 mph before the consideration of suspension of activities.



- KEY**
 (ALL LOCATIONS APPROXIMATE)
- APPROXIMATE FACILITY BOUNDARY
 - TYPICAL STORAGE PILE LOCATIONS
 - EP EMISSION POINT
 - TYPICAL TRAFFIC PATTERNS
 - COVERED MANHOLE
 - ⊙ INLET TO COMBINED SEWER
 - ⊕ PROPOSED WIND SPEED MONITOR

THE INFORMATION ON THIS SHEET WAS TAKEN FROM
 GRIELEY & PLATT PLAN ENGINEERING, INC.
 DATED JANUARY 1984
 ROWLAND A. FABIAN
 DATED JAN. 28, 1987

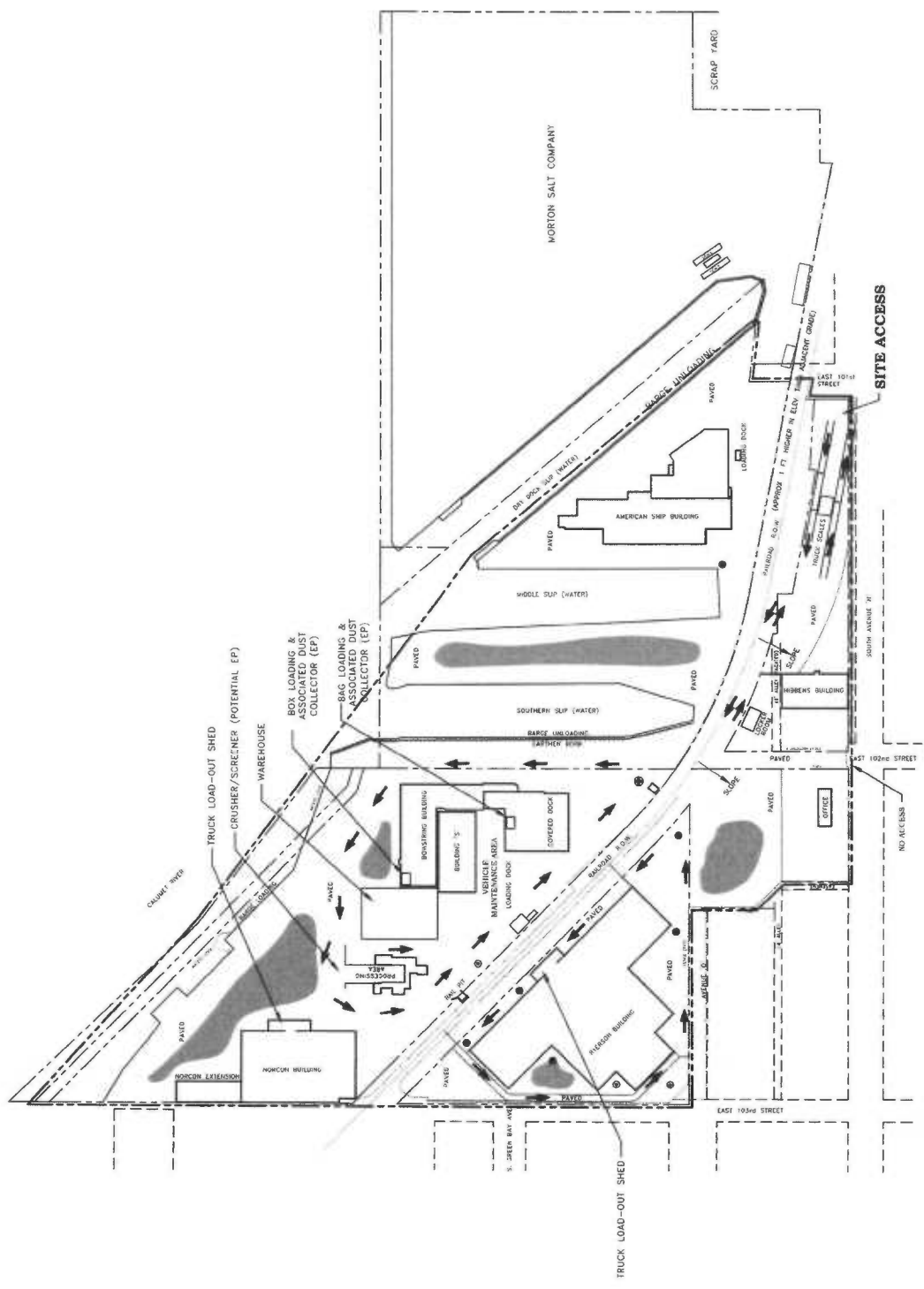
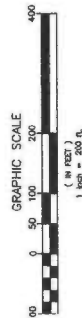


FIGURE 1

FACILITY DIAGRAM
 Chicago Terminal
 S.H. Bell Company
 Chicago, IL

PROJECT NUMBER
 34-10130933

APPROVED
 KP

DATE
 05/08/14

REVISION DATE
 06/10/14



DRAWN
 GAP



ROADWAY LOCATION MAP
 Chicago Terminal
 S.H. Bell Company
 Chicago, IL
 PROJECT NUMBER 3410130933
 DRAWN GAP
 APPROVED KP
 DATE 05/08/14
 REVISION DATE



LEGEND:
 - - - - - APPROXIMATE SITE BOUNDARY
 ——— PRIMARY TRUCK TRAFFIC ROUTES

FIGURE 2

FACTSHEET / EXECUTIVE SUMMARY

Fugitive Dust Plan

S.H. Bell Company

Applicability

The S.H. Bell Company Chicago Terminal, located at 10218 South Avenue O, in Chicago, Illinois, has prepared a Fugitive Operation Program / Fugitive Dust Plan accordance with the following regulations:

- Title 35 of the Illinois Administrative Code Part 212:
 - Subpart K – Fugitive Particulate Matter
 - Subpart L, Section 324 – Particulate Matter Emissions from Process Emission Units in Certain Areas
- City of Chicago Department of Public Health (Department) – Rules and Regulation for Bulk Materials Storage, March 13, 2014 (Chicago Bulk Materials Regulation)

The referenced plan has been submitted to the Department as required and is available in its entirety on the City's website.

Facility Description

S.H. Bell Company is a family owned business that provides handling, storage, processing and packaging services to a customer base comprised of producers, and international traders and importers of metals, minerals, and semi-finished raw materials used in industrial processes here in North America. S.H. Bell is a longstanding member of the South Chicago community.

The Chicago Terminal on South Avenue O is approximately 25 acres in size with buildings and paved areas constituting more than 95% of the total area and consists of the following: an office building; a completely enclosed jaw crushing/screening plant; storage buildings for processed raw materials; storage buildings for primary bulk materials; a scale house; barge unloading slips; and gravel-covered, landscaped and asphalt-paved areas.

Operations at the facility typically include the receiving of several different raw materials, including ferroalloys, pig iron, and primary nonferrous materials such as copper, zinc, and aluminum, typically in ingot form. Raw materials to be processed and/or stored at the facility are transported to and from the facility by barge, rail and truck.

Best Management Practices

S.H. Bell Company has been operating in accordance with applicable air pollution control requirements of the Illinois EPA and will continue to comply with those regulations as well as the newly promulgated Chicago Bulk Materials Regulation. The following page provides a summary of the ongoing Best Management Practices at S.H. Bell Company, most of which have been in-place for more than 10 years. Appropriate records of these practices are maintained and reports prepared and submitted as required by the referenced regulations.

Summary of Best Management Practices

Small Particle Storage Piles (1/2 inch in size or less)	
	Stored primarily within bulk material storage buildings or under roofed bins (three-sided, roofed, paved areas)
	Piles that are stored outdoors are either tarped or sprayed daily using a water truck
	Piles are inspected every day to ensure adequacy of control method
Traffic Areas	
	All roadways (paved and unpaved) are sprayed daily with water from a water truck, weather permitting
	All paved roadways are swept daily, weather permitting
	Other areas, including ramps, are sprayed as deemed necessary by the facility manager
	All vehicles must adhere to the posted speed limit (5 mph)
	Any material leaked by a vehicle onto an internal road which is not in the entry / exit way of the Facility will be cleaned by the end of the shift; any material that has the potential to leak into a waterway will be cleaned immediately; a material spill that creates airborne dust will be cleaned immediately
Air Pollution Control Equipment	
	Bag and box filling operations are each controlled by a dust collector with a stated efficiency of 99%
	Control devices are inspected, spare parts maintained, and repairs are made when required
	Removal of collected materials from the dust collectors is performed indoors or within an enclosure
Crushing/Screening	
	During jaw crushing/screening activities, all doors, windows and other openings are closed
	Wet suppressant spray system operated during all jaw crushing/screening operations
	Portable box screener is used for wet materials or indoors if used for screening dry materials
Truck Loading / Unloading	
	Loading operations of dry materials are completed within a loadout shed or within a building
	Proper loading methods are followed, including minimizing drop heights
	Unloading operations using in-house drayage trucks are completed within a bulk material storage building
Barge Unloading / Loading	
	Proper unloading methods are followed, including minimizing drop heights
	Unloading operations are only performed when wind speed is 20 mph or less
	Materials that can be sprayed with water (such as pig iron) are sprayed prior to unloading
	Materials that cannot be sprayed with water are unloaded directly to truck beds
	Proper loading methods directly into a barge are followed, including minimizing drop heights
Railcar Loading / Unloading	
	S.H. Bell Company will obtain a water spray system to control fugitive dust, to be operational by September 9, 2014
Vehicle Covering	
	Semi-trucks carrying materials out of the facility are covered
General	
	Employees are trained annually in proper fugitive dust control procedures
	Records of dust control practices are kept as required (detailed in the following section)
	Any spilled/misplaced material in areas not normally used for storage will be removed by the end of each work shift

EXHIBIT B



E-102nd-St

S-Avenue

E-103rd-St

S-Galunet-River-St

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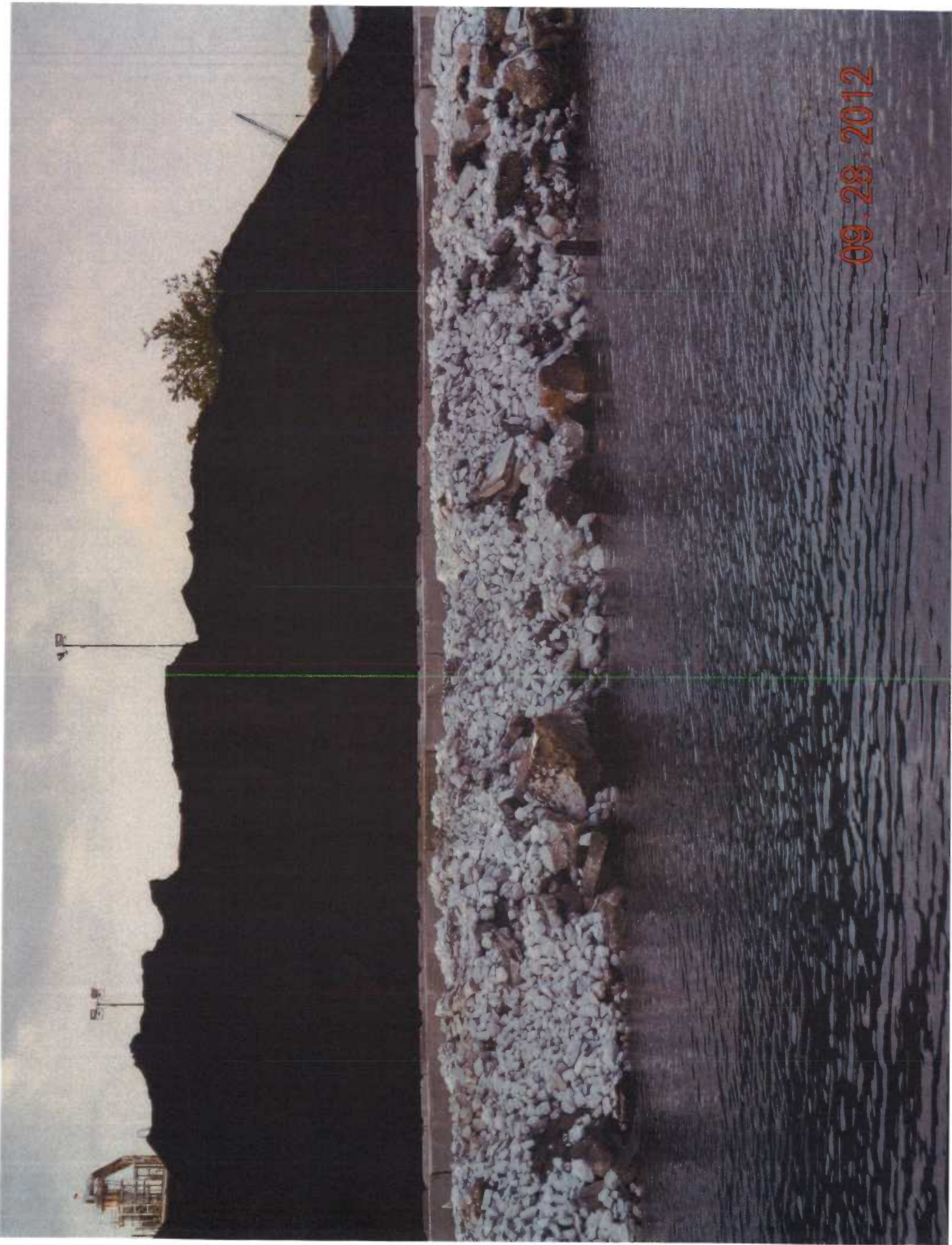
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EXHIBIT C



09.28.2012

