

**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5**

IN THE MATTER OF:

S.H. Bell Company
Chicago, Illinois

Proceedings Pursuant to
Section 113(a)(1) of the
Clean Air Act, 42 U.S.C.
§ 7413(a)(1)

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NOTICE OF VIOLATION

EPA-5-14-IL-15

NOTICE OF VIOLATION

The U.S. Environmental Protection Agency (EPA) is issuing this Notice of Violation under Section 113(a)(1) of the Clean Air Act, 42 U.S.C. § 7413(a)(1). EPA finds that S.H. Bell Company (S.H. Bell) is violating the Illinois State Implementation Plan (SIP) as follows:

Statutory and Regulatory Background

1. On February 21, 1980, EPA approved SIP 212.301 as part of the federally enforceable SIP for Illinois. 45 Fed. Reg.11493.
2. SIP Rule 212.301 states, “[n]o person shall cause or allow the emission of fugitive particulate matter from any process, including any material handling or storage activity, that is visible by an observer looking generally toward the zenith at a point beyond the property line of the emission source.”
3. On February 21, 1980, EPA approved SIP Rule 212.306 as part of the federally enforceable SIP for Illinois. 45 Fed. Reg.11493.
4. SIP Rule 212.306 states, “All normal traffic pattern access areas surrounding storage piles specified in Rule 203(f)(3)(A) [Section 212.304] and all normal traffic pattern roads and parking facilities which are located on 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, in accordance with the operating program required by Rule 203(f)(3)(F) [Sections 212.309, 212.310 and 212.312].
5. On September 13, 1999, EPA approved SIP Rule 212.316 as part of the federally enforceable SIP for Illinois. 64 Fed. Reg. 37851.
6. SIP Rule 212.316(d) states, “no person shall cause or allow fugitive particulate matter emissions from any storage pile to exceed an opacity of 10 percent, to be measured four feet from the pile surface.”

7. On April 10, 2006, the Illinois Environmental Protection Agency (IEPA) issued a Federally Enforceable State Operating Permit (FESOP) to S.H. Bell at its 10218 South Avenue O, Chicago, Illinois location, under the Application Number 83020023.
8. Condition Number 2(c) of S.H. Bell's FESOP lists emission limitations for storage piles. Specifically, "no person shall cause or allow fugitive particulate matter emissions from any storage pile to exceed an opacity of 10%, to be measured four feet from the pile surface," pursuant to SIP Rule 212.316(d).
9. Condition Number 9 of S.H. Bell's FESOP states "no person shall cause or allow any visible emissions of fugitive particulate matter from any process, including material handling or storage activity, beyond the property line of the emission source..." pursuant to SIP Rule 212.301.

Findings of Fact

10. S.H. Bell is a bulk material storage handling facility located at 10218 South Avenue O, Chicago, Illinois (the facility).
11. S.H. Bell performs crushing, screening, loading and unloading operations of various materials, 90% of which are manganese-based alloys.
12. EPA inspected the facility on April 25, 2014; May 19, 2014; and May 20, 2014.
13. On each of the three inspections, April 25, 2014; May 19, 2014; and May 20, 2014, EPA inspectors noted dry, dusty roads with heavy truck traffic.
14. At the April 25, 2014 inspection, James Langbehn, S.H. Bell Terminal Manager, stated that S.H. Bell waters its roadways two times each day: in the morning and at 3:00 pm.
15. At the April 25, 2014 inspection, James Langbehn stated that S.H. Bell purchased a water truck one week before the inspection to do additional pile and roadway watering.
16. At the May 19, 2014 inspection, James Langbehn stated that S.H. Bell typically watered its roadway 2 times each hour.
17. At the May 19, 2014 inspection, EPA inspectors witnessed S.H. Bell watering its roads at 11:31 am and 11:52 am.
18. On May 19, 2014, an EPA inspector certified to perform EPA Reference Method 9 conducted visible emission observations on a direct reduced iron (DRI) storage pile at the barge pile loading dock.
19. DRI is a manganese-based alloy.
20. At the May 20, 2014 inspection, two EPA inspectors witnessed fugitive dust crossing the property line at multiple locations at S.H. Bell.

21. At the May 20, 2014 inspection, EPA inspectors witnessed S.H. Bell watering its roads at 7:58 am, 8:16 am, and 8:35 am.
22. At the May 20, 2014 inspection, James Langbehn stated that the water truck operates from 7 am to 3 pm.
23. KCBX Terminals Company (KCBX) operates two bulk storage facilities at 3259 East 100th Street (North Plant) and 10740 South Burley Avenue (South Plant) in Chicago, Illinois. The North and South Plants unload, store, and load coal and petroleum coal that contain trace amounts of manganese. The North Plant is located directly west, across the Calumet River, of S.H. Bell.
24. Analysis of the materials processed by KCBX have demonstrated manganese is present in trace amounts.
25. On February 28, 2014, an air monitor at KCBX North Plant, near the S.H. Bell facility, reported readings of 0.576 microgram per cubic meter concentration of manganese at its North Plant NE monitoring station. The wind on February 28, 2014 was from the south-southeast.
26. The Agency for Toxic Substances and Disease Registry (ATSDR) has identified the inhalation minimal risk level (MRL) for chronic exposure to manganese to be 0.3 $\mu\text{g}/\text{m}^3$. An MRL is an estimate of the daily human exposure to a hazardous substance that is likely to be without appreciable risk of adverse non-cancer health effects over a specified duration of exposure.
27. On April 17, 2014, EPA staff conducted a first round of wipe sampling from home and public spaces in the residential neighborhoods adjacent to the North and South Plants. Eleven wipes were given to the EPA Regional Laboratory for analysis for metals and polycyclic aromatic hydrocarbons.
28. On May 20, 2014, EPA received results from the preliminary wipe sampling conducted April 17, 2014. The wipe sample taken in direct proximity to the S.H. Bell facility, approximately 2,640 feet away, showed the highest concentration of manganese, at 11.5%, as compared to the other 10 samples which ranged in manganese concentration between 2% to 7%.

Violations

29. On April 25, 2014, EPA inspectors noted that normal traffic pattern access areas surrounding storage piles, and throughout the property were not treated with water, oils, or other chemical dust suppressants pursuant to SIP Rule 212.306.
30. From 11:33 am through 11:39 am on May 19, 2014, an observation using Method 9 visible emissions found opacity from a storage pile on the barge pile loading dock to have an opacity average of 12.7%. Opacity readings reached 85% during the 6-minute average. A 12.7% opacity average is in excess of SIP Rule 212.316(d).

31. From 11:45 am through 11:51 am on May 19, 2014, an observation using Method 9 visible emissions found opacity from a storage pile on the barge pile loading dock to have an opacity average of 10.4%. Opacity readings reached 80% during the 6-minute average. A 10.4% opacity average is in excess of SIP Rule 212.316(d).
32. On May 20, 2014, EPA inspectors noted and photographed visible fugitive particulate matter from material handling crossing the western property line beyond the emission source, and at the eastern property line beyond the emission source at the S.H. Bell facility, in violation of SIP Rule 212.301.

Environmental Impact of Violations

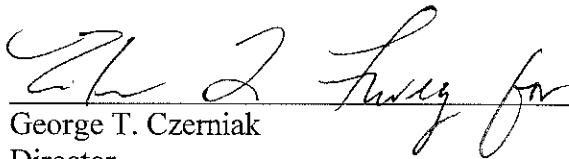
33. These violations have caused or can cause excess emissions of particulate matter.

Particulate Matter: Particulate matter, especially fine particulates contains microscopic solids or liquid droplets, which can get deep into the lungs and cause serious health problems. Particulate matter exposure contributes to:

- irritation of the airways, coughing, and difficulty breathing;
- decreased lung function;
- aggravated asthma;
- chronic bronchitis;
- irregular heartbeat;
- nonfatal heart attacks; and
- premature death in people with heart or lung disease.

Date

7/15/14


George T. Czerniak
Director
Air and Radiation Division

CERTIFICATE OF MAILING

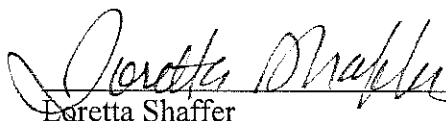
I, Loretta Shaffer, certify that I sent a Notice of Violation, No. EPA-5-14-IL-15, by
Certified Mail, Return Receipt Requested, to:

James M. Langbehn
S.H. Bell Company
10218 South Avenue O
Chicago, Illinois 60617

I also certify that I sent copies of the Notice of Violation by first-class mail to:

Eric Jones, Manager
Compliance Unit
Bureau of Air
Illinois Environmental Protection Agency
1021 North Grand Avenue East
Springfield, Illinois 62794

On the 17 day of July 2014.



Loretta Shaffer
Program Technician
AECAB, PAS

CERTIFIED MAIL RECEIPT NUMBER: 70010320 0006 0186 0064