

## **Fugitive Dust Plan Fact Sheet S.H. Bell Company Chicago Terminal**

### Description of Operation:

The S.H. Bell Co. Chicago Terminal handles, processes, and stores materials that are transported to and from the facility by barge, rail, and truck. The facility handles bulk materials including ferro alloys, direct reduced iron (DRI) (not fines), hot briquetted iron (HBI), pig iron, iron ore, and silicon metal as well as non-bulk materials which do not have the potential to become airborne or scattered by wind, such as graphite electrodes and cast aluminum and steel shapes. Our Fugitive Dust Plan fully meets all the requirements under the City's Bulk Material Regulations and exceeds them in certain areas. The following is a description of the various dust control measures.

### Dust Control Measures and Equipment:

Various dust control measures and equipment are used to address potential dust emissions, including:

- Manganese-containing materials ("Affected Materials") are not stored outdoors.
- Controls for material transfer points:
  - water spray systems that include direct application to material, mobile misters, and dry foggers
  - total enclosure
  - dust collectors for box and bag filling, truck loadout sheds, and portable dust collectors for use at various other transfer points
- Detailed operating procedures for each operation/transfer point, with specific dust control procedures based on material type – Dry Materials/Wetted Materials and Affected Materials and non-Affected Materials.
- Wet suppressant spray system and enclosure for jaw crushing/screening operations; no outdoor screening of Affected Materials.
- Covered conveyor for rail loading.

### Roadway Dust and Track-Out Prevention:

- All internal roads that trucks travel on are paved.
- Maximum vehicle speed of 8 mph.
- Daily road sweeping/watering on all internal roads.
- Street sweeper equipped with a water spray and vacuum system.
- Minimum monthly chemical dust suppressant application.
- All outgoing material transport trucks are tarped and are cleaned by rumble strips.
- Public roads are inspected for material track-out and are cleaned if track-out is found.

### Fugitive Dust Measurements:

The following fugitive dust measurement actions are used:

- Four (4) continuous PM10 monitors placed within the fence line at the Facility.
- Meteorological Station to monitor and log wind speed and wind direction and to provide alerts of high wind events.
- Daily observations for fugitive dust at least once per shift for each active operation controlled by total enclosure or dust collector at both the operation and nearest property line (based on wind direction); observations at least three times per working shift for outdoor activities such as barge unloading, truck unloading, and working outdoor piles.
- Quarterly Method 9 opacity reads performed by a certified professional on outdoor storage piles, roadways, and material transfer points.

### Contingency Plans:

The Facility has developed contingency plans to respond to various potential fugitive dust conditions.

- Respond to elevated visible dust:
  - Immediate deployment of applicable additional controls such as the mobile misters/dry fogging system.
  - Increased observations for visible dust.
  - If necessary, the activities at the source will be suspended pending favorable weather conditions.
- Respond to high wind events:
  - Automated alert system to notify personnel of high wind events;
  - Automatic suspension of outdoor activities involving Affected Materials, such as barge and truck unloading.
  - Employ additional control measures for non-Affected Material operations and suspend activities if additional control is found to be ineffective.
- Respond to elevated PM10 monitor readings:
  - Automated alert system to notify personnel of alert conditions.
  - Investigate to determine suspected source(s).
  - Increasingly aggressive mitigation efforts based on the level of alert.
  - Suspension of suspected source activity if warranted.