

Get the Facts: Manganese in Southeast Chicago

Excessive levels of manganese were recently detected on the far Southeast Side of Chicago. This fact sheet was prepared to provide information on manganese, its health effects and steps being taken by the City to address the situation.

What is manganese?

Manganese is a metal used to make steel and other products. Manganese is also a nutrient found in several foods and is necessary for good health. However, in excess amounts, manganese can be a neurotoxin. This means it is harmful to the brain.

How can someone be exposed to excess amounts of manganese?

Manganese has been found in dust from industrial sources on the Southeast Side of Chicago. Workers whose jobs put them in contact with manganese regularly may be exposed to excess amounts. Residents who live near places where manganese is stored or handled may also be exposed to increased amounts. This can occur when manganese dust is blown or tracked off-site and into the surrounding area.

What health effects can occur in workers and residents after being exposed to excess amounts of manganese?

Workers with ongoing exposure to high amounts of manganese can have a number of bad health effects, including manganism, a disease similar to Parkinson's. Less is known about the health effects among residents who live near facilities that handle or use manganese. In several recent studies, manganese exposure is linked to lower IQ scores, tremors and poor balance.

How was manganese recently detected on the Southeast Side?

In November 2013, in response to resident concerns about petcoke, KCBX (located at 10730 S. Burley Avenue) was required to install air monitors at its site. This air monitoring began in February 2014. Results showed elevated levels of manganese coming from other sites. S.H. Bell (located at 10218 S. Avenue O.), was implicated as a source of the manganese. As a result, both the City and the United States Environmental Protection Agency (U.S. EPA) required S.H. Bell to install air monitors. Results of this air monitoring confirmed that manganese dust was blowing off-site. In early 2018, CDPH also found high levels of manganese in soil samples collected in the area, as further described below.

Does S.H. Bell store and handle manganese? Are there other companies that store and handle manganese?

Yes. S.H. Bell stores and handles manganese. At least four other facilities, including Watco Companies (2926 E. 126th Street), North American Stevedoring (located at 9301 S. Kreiter Avenue), Horsehead/American Zinc Recycling (located at 2701 E. 114th Street) and Calumet River Terminal Ltd (located at 10740 S. Burley Avenue), also store and handle manganese. As discussed below, efforts are underway to identify other companies that store or handle manganese on the Southeast Side.

Has manganese been detected in the soil?

Yes. In early 2018, CDPH tested the soil in a residential neighborhood near S.H. Bell. The findings indicated elevated levels of manganese, in three instances above the threshold U.S.EPA uses to identify sites for potential clean-up. CDPH has since referred the matter to the U.S. EPA, which will conduct a more thorough analysis and make recommendations for potential action.

What steps are being taken by the City to address this issue?

The following steps are being taken by the City to address this issue:

- The City has shared data from its soil samples with the U.S. EPA, which will conduct a more thorough analysis and make recommendations for potential action.
- The City passed an ordinance banning any new bulk manganese handling facilities and prohibiting existing facilities from expanding.
- Under its Bulk Solid Material Regulations, the City required S.H. Bell and Watco Companies to put into place more stringent dust control measures. To ensure these companies are complying with these requirements, the City is conducting regular inspections.
- The City has proposed updates to strengthen its Bulk Solid Materials Regulations and is currently seeking public feedback. You can provide feedback at cityofchicago.org/manganese.
- The City has hired a consultant to identify additional companies that store and handle manganese on the Southeast Side.

What should I do to protect against manganese dust?

For more information, please review “What I Can Do: Protecting Against Manganese Dust” available at cityofchicago.org/manganese.

What should I do if I’m experiencing an illness or other health issue I believe is due to manganese?

If you or a family member is experiencing an illness or other health issue and you are not sure about the cause of your symptoms, or have concerns about exposure to manganese, bring this to the attention of your health care provider. Inform your health care provider that you live near sites that store and handle manganese. If your doctor is unsure of how to address your concerns, have them call the CDPH at (312) 746-6621. You may also call this number if you have health-related questions or concerns. Spanish speakers are available.

What should I do if I see dust coming from a facility that stores or handles manganese?

If you see any dust coming from a facility that stores or handles bulk materials, call 311 to report it and the City will send an environmental inspector.

What does this mean for residents that live near one of these facilities?

Although new dust controls have been installed, we know manganese dust has blown from the S.H. Bell facility in the past. However, it is not known what amount of manganese, if any, individual residents have been exposed to or whether any health effects could have resulted or may result from that exposure. Until further information becomes available, residents should follow the instructions provided above.

To learn more visit: www.cityofchicago.org/manganese