



Facts about General Iron

In response to recent inquiries from neighbors about General Iron's operations along the North Branch of the Chicago River, the fact is that metal shredding and recycling is a vital and necessary business that, at times, is also gritty. While we welcome questions and concerns about our facility, we would like to address the substantial misinformation that is being spread about us in the neighborhood, which we have also called home for more than a half-century.

General Iron has served the metal recycling needs of Chicago for 110 years and currently employs approximately 125 individuals, predominantly minorities earning an average annual salary of \$80,000. Metal recycling is a critical element of solid waste management, and keeping discarded autos, appliances, and demolition materials out of landfills helps make Chicago a green, sustainable city, while conserving energy and natural resources.

We understand that the neighborhood around General Iron is changing and that is why the company signed an agreement with the City of Chicago to end operations at the north side facility at the end of 2020. In the meantime, we have spent millions of dollars in recent years to ensure that our operation fully complies with, or outperforms, applicable environmental regulations enforced by the City of Chicago and the Illinois EPA and the U.S. EPA. The agreement with the city imposes strict oversight of General Iron's activities, including limiting the shredder to operating between the hours of 7 a.m. to 9 p.m.

The following unvarnished facts provide some important context for the ongoing discussion about General Iron's operations:

Air Emissions Testing Under U.S. EPA-Approved Protocols and Supervision

Air emissions testing supervised by the Illinois EPA and the U.S. EPA in June 2018 demonstrated that no emissions of 17 specific metals or filterable particulate matter (PM) from shredding operations violated any permitted levels or applicable requirements. In fact, the measured PM emission rate from shredding operations was less than three percent of the hourly PM emission limit allowed in General Iron's state operating permit. As stated by the U.S. EPA on its [website](#), the results of the metals emissions test indicated that the "emission rates are low compared to EPA emission limits." The tests confirmed the effectiveness of the shredder's high-efficiency air filter, consisting of a capture hood, cyclone, and roll-media filter system, to control PM and metals emissions.

General Iron also recently conducted performance testing, under the supervision of the U.S. EPA, of a new regenerative thermal oxidizer (RTO) that was installed this summer to reduce volatile organic compound (VOC) emissions from the shredder. The preliminary test results, which will become public when finalized, demonstrate that General Iron is meeting a minimum destruction efficiency of the RTO for VOC emissions from the shredder of at least 98 percent. This means that General Iron is outperforming a state regulation designed to help bring the region into attainment with the National Ambient Air Quality Standard (NAAQS) for ozone by reducing shredder VOC emissions well in excess of the required 81 percent.

General Iron is the first metal shredding facility in Chicago and the Midwest, and one of the first in the country, to utilize the RTO's proven and highly effective technology to control VOC emissions. The RTO installation and successful performance test, and subsequent state permitting, will fully resolve the alleged violations that the EPA issued in July 2018. Therefore, any assertion that "air pollution" from the facility is getting worse is simply false. And, given the recent EPA-supervised emissions testing, there is absolutely no basis for additional testing or monitoring.

Commercial Air Monitoring Sensors and Readings

Recently, several neighborhood residents have expressed concern about air quality based on PM_{2.5} readings from a PurpleAir sensor and an AirBeam2 sensor. Unfortunately, it is inaccurate and inappropriate to assert a health risk to the community based on the readings from these sensors.

Just like the standard for ozone, the U.S. EPA sets National Ambient Air Quality Standards for other pollutants, including PM_{2.5}. The Illinois EPA operates and maintains an EPA-approved air monitoring network throughout the state, and data from those monitors are used to determine compliance with the pollutant-specific NAAQS. The State of Illinois is in attainment with the PM_{2.5} NAAQS.

PurpleAir sells commercial ambient air sensors to the public over the internet. AirBeam2 is a handheld air sensor that is also sold to the public over the internet. These sensors cannot be used to determine compliance with the federal NAAQS because they do not use a measurement technology approved by the EPA. They are not located at monitoring stations that are operated and maintained in accordance with EPA quality control standards for ambient air monitoring. Because the real time data generated by these sensors has not been validated or verified by the state and federal EPAs, it is inappropriate to assert that this data reflects a representative measure of the area's air quality.

According to the PurpleAir.com website, there is a sensor maintained by a citizen group, Sheffield Neighbors, located near the southwest corner of West Dickens and North Clifton avenues, which is approximately 1,200 feet north-northeast of General Iron's property. Readings from this sensor have been cited in @clean_nb tweets, linking them to General Iron's facility. General Iron is located in an industrial corridor, adjacent to several large tracts of vacant, unvegetated land, as well as heavily trafficked roadways. All of these uses are located west of the sensor. Given the wind speed and direction at any particular time, and other activities taking place on nearby properties, there is simply no way to attribute any of the readings from this sensor to General Iron's activities.

Further, the PurpleAir.com readings tweeted by @clean_nb are well within established levels for acceptable air quality determined by the EPA Air Quality Index (AQI), which is an index for reporting daily air quality. Certain tweets by @clean_nb assert inaccurate and inflammatory statements about the PurpleAir readings that do not reflect the area's air quality. For example, under the AQI, air quality is acceptable at readings at or below 100. The public is not likely affected by values between 101 and 150. Values above 151 are considered unhealthy. The AQI goes all the way up to a level of 500. Yet, certain tweets by @clean_nb completely disregard the AQI in attempting to link General Iron to causing poor air quality.

For example, @clean_nb tweeted the PurpleAir sensor readings of 84 (on Nov. 25, 2019) and 87 (on July 10, 2019) as being alarming, but they are below the AQI acceptable level. On Nov. 20, 2019, @clean_nb tweeted out the values of 118 and 123, stating that the "air in Lincoln Park is not healthy to breathe

today.” Those values are not considered unhealthy under the AQI and are consistent with values from sensors located both east and west of General Iron, indicating that there was likely a more regional reason for the higher PM_{2.5} levels that day and that Lincoln Park was not being singled out.

Links to Asthma and Health Risks Based on CDC and UIC Studies are Unsubstantiated

In September 2019, Ald. Brian Hopkins (2nd Ward) stated that “In the downwind Zip Code of 60614, measured particulate air pollution (PM_{2.5}) typically associated with asthma was found to be more severe than 95% of all zip codes in the state.” However, the Center for Disease Control’s *500 Cities Project*, which formed the basis of that statement, did not attempt to correlate PM_{2.5} concentration, or any other environmental pollutant, with asthma. In fact, an analysis of the data showed that among five behavioral risk factors, the rate of smoking has the highest correlation with the asthma rate. Further, his statement that the measured air pollution in 60614 is more severe than 95 percent of all zip codes in the state could not be verified. In fact, all of Cook County has high PM_{2.5} concentrations compared to the rest of Illinois.

At the same time, the alderman stated that the CDC asthma study “would find alarming rates in the adjacent neighborhood, with reported cases in the top quartile of the entire State of Illinois.” In fact, the asthma rate in the neighborhoods adjacent to General Iron is not alarming because the 2015 average asthma rate in those neighborhoods was 7.76 percent, while the 2015 average asthma rate statewide was 8.4 percent. And the highest asthma rate in the area adjacent to General Iron was 9.1 percent, which is significantly below the lowest asthma rate in the top quartile – 10.8 percent – statewide.

In May 2018, Dr. Julie Morita, then commissioner of the city’s department of public health, stated in a letter to a neighborhood resident that “it is inaccurate and inappropriate . . . to assert that there is a risk to health for residents living near General Iron based on the preliminary conclusions of . . . [a] pilot study” by researchers at the University of Illinois at Chicago. Yet, that study is often cited by neighborhood residents, public officials, and the media as providing the gospel truth about the air quality surrounding General Iron.

In March 2019, Dr. Victoria Persky, one of the authors of the UIC study, testified at a hearing before the Chicago Board of Zoning Appeals:

“But the little monitoring we did – we didn’t have enough data; we didn’t have enough resources. And so far, there’s been no data that I know of that shows the potential impact from the specific metals and other contaminants being used by General Iron.”

Dialogue Based on Facts and Science

General Iron appreciates its neighbors’ concerns and continually strives to ensure that its operation is the best in class compared to any similar facility in the United States. The company is keeping its promise to protect public health and the environment every day. The company hopes its neighbors will give serious consideration to the facts we have addressed, grounded on legitimate science, and the company looks forward to a genuine dialogue on that basis. Unfortunately, it appears that tweeting inaccurate and irresponsible information is driving neighborhood engagement, rather than discussing real facts.

For more information about General Iron, please visit: www.general-iron.com.