

How polluting is the HERC Trash Incinerator?

The “Hennepin Energy Recovery Center” trash incinerator in Minneapolis is the [largest](#) of seven trash incinerators in Minnesota, burning 1,000 tons of trash per day. It is the largest stationary source of air pollution in the county. Here are some of the main pollutants they released in 2020, according to Minnesota Pollution Control Agency [data](#):

| Pollutant | Emissions (pounds/year) | Health Effects |
|---|-------------------------|--|
| Global Warming Pollution (in CO ₂ equivalents) | 755,316,938 | Extreme weather, disease, crop damage, species extinction |
| Nitrogen Oxides | 765,000 | triggers asthma attacks, chronic respiratory disease and stroke |
| Hydrochloric Acid | 84,640 | irritates eyes, skin, and nose, damages lungs |
| Carbon Monoxide | 50,280 | headaches and dizziness; increases lifetime risk of heart disease |
| Particulate Matter | 35,751 | heart attacks, stroke, irregular heartbeat, aggravated asthma, decreased lung function, difficulty breathing |
| Sulfur Dioxide | 30,200 | triggers asthma attacks; chronic respiratory and heart diseases; stroke |
| Volatile Organic Compounds | 3,545 | eye, nose and throat irritation, headaches, loss of coordination and nausea, liver, kidney and central nervous system damage, cancer |
| Lead | 1.9 | damages nervous system and kidneys, lowers IQ, increases likelihood of antisocial behavior |
| Mercury | 3.4 | damage to nervous, digestive, and immune systems, lowers IQ |
| Nickel | 17 | allergy, cardiovascular and kidney diseases, lung fibrosis, lung and nasal cancer |
| Cadmium | 0.7 | kidney disease; lung cancer |
| Arsenic | 1.4 | lung, skin, bladder, and liver cancers; irritation of the skin and mucous membranes; affects the brain and nervous system |
| Chromium (VI) | 1.9 | lung cancer, shortness of breath, coughing, and wheezing |
| Dioxins / furans | 0.004 | cancers, birth defects, inability to maintain pregnancy, decreased fertility, reduced sperm counts, endometriosis, diabetes, learning disabilities, immune system suppression, lowered testosterone levels |

To put the smaller numbers in perspective, mercury is one of the toxic pollutants for which there is no known safe level of exposure. Lead and dioxins also have no “safe” level. [Dioxins](#) are the most toxic chemicals known to science – 140,000 times more toxic than mercury – and incinerators are a major source (but good data is lacking, with annual testing underestimating actual emissions by up to 1,290 times). The HERC incinerator reported releasing 3.4 lbs of mercury into the air in 2020, not counting that which gets into the air and water via the ash. A highly cited Minnesota [study](#) found that if approximately one gram of mercury (the amount in a single fever thermometer) is deposited to a 20-acre lake each year from the atmosphere, this small amount, over time, can contaminate the fish in that lake to the point where they should not be eaten. 3.4 pounds of mercury equals 1,542 grams. That means the incinerator, in a typical year, is releasing enough mercury sufficient to keep over 1,500 20-acre lakes so contaminated that the fish are not safe to eat. The state [advises](#) to limit fish consumption due to mercury contamination.