How polluting is the trash incinerator in Montgomery County?

The "Montgomery County Resource Recovery Facility" in Dickerson, Maryland is a county-owned trash incinerator operated by Covanta (now named Reworld as of April 2024), the nation's largest trash incineration corporation. It's the #1 industrial air polluter in Montgomery County. On top of their routine air pollution, they've had more uncontrolled waste pile fires requiring an off-site emergency response than any other incinerator in the company's 34-plant U.S. fleet.

The latest available data from EPA's National Emissions Inventory shows that the incinerator released:

				2020	#1 or #2 industrial air polluter in MoCo for most pollutants
Pollutant (in pounds except CO2e)	2014	2017	2020	rank	Health Effects
Global Warming Pollution (in tons of CO ₂ equivalents)	611,773	629,162	603,027	1	Extreme weather, disease, crop damage, species extinction
Nitrogen Oxides	853,428	883,419	806,496	1	triggers asthma attacks, chronic respiratory disease and stroke
Hydrochloric Acid	159,184	116,405	118,490	1	irritates eyes, skin, and nose, damages lungs
Sulfur Dioxide	139,809	205,058	163,040	2	triggers asthma attacks; chronic respiratory and heart diseases; stroke
Carbon Monoxide	120,321	77,996	106,836	4	headaches and dizziness; increases lifetime risk of heart disease
Particulate Matter	102,091	58,792	25,501	2	heart attacks, stroke, irregular heartbeat, aggravated asthma, decreased lung function, difficulty breathing
Fine Particulate Matter	98,760	53,393	23,663	2	same as above, but worse, get deep into lungs and into blood stream
Volatile Organic Compounds	4,387	3,864	1,946	10	eye, nose and throat irritation, headaches, loss of coordination and nausea, liver, kidney and central nervous system damage, cancer
Ammonia	3,588	3,633	9,051	1	nose and throat irritation
Formaldehyde	124	120	113	10	eyes, skin, and nose irritation; increases lifetime risk of cancer
Beryllium	76	0.2	.2	2	lung cancer; harms liver, kidneys, heart, nerves and lymphatic system
Lead	58	42	80	2	damages nervous system and kidneys, lowers IQ, increases likelihood of antisocial behavior
Mercury	24	17	2	1	damage to nervous, digestive, and immune systems, lowers IQ
Hexachlorobenzene	12	11	11	1	liver, kidney, and thyroid cancers
Chromium (VI)	4	4	4	2	lung cancer, shortness of breath, coughing, and wheezing
Cadmium	2	4	3	3	kidney disease; lung cancer
Arsenic	2	3	8	1	lung, skin, bladder, and liver cancers; irritation of the skin and mucous membranes and effects in the brain and nervous system

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, and dioxins are the most toxic chemicals known to science, and incinerators are a major source (but good data is lacking). The incinerator reported releasing 24 lbs of mercury into the air in 2014, 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. ¹ 24 pounds of mercury equals 10,886 grams. That means the incinerator, in a typical year, is releasing enough mercury sufficient to keep nearly 11,000 20-acre lakes so contaminated that the fish are not safe to eat.

¹ "One Gram of Mercury Can Contaminate a Twenty Acre Lake: An Clarification of This Commonly Cited Statistic," Summary Prepared by Interstate Mercury Education and Reduction Clearinghouse, 2004. www.newmoa.org/prevention/mercury/mercury/lake.pdf