## IN OPPOSITION TO SB 451, which would give renewable energy certificates to the Covanta Marion incinerator.

## **Energy Justice Network Fact Sheet about Covanta Marion Incinerator in Brooks, Oregon**

In Maryland, the State Senate passed legislation twice in the past two years that would remove renewable energy credits from trash incinerators. In New York, a state with 10 trash incinerators, the state chose not to grant renewable energy credits to trash incineration, despite three efforts to do so. The New York State Department of Environmental Conservation objected to this on the basis that trash incinerators in the state are far more polluting than the state's coal power plants.<sup>1</sup>

According to the latest available data from EPA's National Emissions Inventory<sup>2</sup> (for 2014), the Covanta Marion trash incinerator released 667,424 pounds of health-damaging emissions (not including greenhouse gases, which were another 334,521,491 pounds of  $CO_2$  equivalents). This is in a year when they averaged burning just 473 tons/day, 86% of their 550 ton/day capacity.

They're the #1 air polluter in Marion County, and are responsible for 36% of the county's total industrial air pollution out of 29 facilities reporting to EPA from that county.

In 2014, Covanta Marion reported releasing:

556,000 lbs of Nitrogen Oxides (NOx) 48,400 lbs of Sulfur Dioxide (SO2) 21,300 lbs of Particulate Matter (PM10) 21,300 lbs of Fine Particulate Matter (PM2.5) 20,400 lbs of Carbon Monoxide (CO) 13 lbs of Lead 12 lbs of Mercury

Several other types of unhealthy emissions were not included in this particular 2014 EPA report. To put the smaller numbers in perspective, mercury is one of the toxic pollutants for which there is <u>no known safe level of exposure</u><sup>3</sup> Lead is also known not to have any "safe" level. Ditto for dioxin, for which we don't have good emissions data. The incinerator reported releasing 12 pounds of mercury into the air in 2014, not counting that which gets into the air and water via the ash. Mercury is incredibly toxic. A highly cited Minnesota <u>study</u><sup>4</sup> 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. 12 pounds of mercury equals 5,443 grams. That means the incinerator is releasing enough mercury sufficient to keep 5,400 20-acre lakes so contaminated that the fish are not safe to eat.

Although the above 2014 emissions data from the Covanta Marion incinerator are bad enough, it should be noted that the once-per-year testing for toxic emissions are almost certainly a significant understatement of actual toxic emissions – both in terms of the quantities that are reported and the number of types of toxins that are not monitored or reported at all.

The toxic emissions testing is only done once annually over about a 3-day time frame when the incinerator is operating optimally. Data from Europe indicate that toxic emissions during non-optimal periods of operation (startup, shutdown, and unexpected irregularities) can have emissions of dioxins, for example, that are 30 to 50 times greater than those during periods of optimal operation.<sup>5</sup> The once-per-year tests also do not account for significant fluctuations in the waste mix that can have serious effects on the amount of toxins being emitted. For example, a load of blue bin medical waste that is filled with plastics (now being imported from out-of-state in increasing amounts) will introduce more carbon and chlorine that will result in more acid gases, anthropogenic greenhouse gas, and toxins than other types of waste.

Annual testing is like having a speed limit where a speed trap is set just one day a year, there are signs warning "speed trap ahead" and the driver's brother runs the speed trap (Covanta hires their own contractor to do the testing). In reality, incinerators are "speeding" many other days of the year, with excessive emissions during startup, shutdown and malfunction times, when testing is not done.

## Footnotes

1. New York statement with pollution charts: http://tinyurl.com/y6r254bg

2. <u>https://www.epa.gov/air-emissions-inventories/2014-national-emissions-inventory-nei-data</u> (Click on "Facility Mapping" to search for data on the Covanta Marion incinerator.)

- 3. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3096006/
- 4. http://www.newmoa.org/prevention/mercury/mercurylake.pdf
- 5. http://www.ejnet.org/toxics/cems/dioxin.html
- 6. Additional information about incinerators: <u>http://www.energyjustice.net/incineration</u>

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