

Comparison of Covanta Source Test Results And Medical Waste Incinerator Limits

(Second column shows current pollutant emission limits for Covanta incinerator, right hand column shows the limits for a large new medical waste incinerator, and the columns between show the actual emissions by year from the Covanta incinerator. Highlighted numbers show instances where the large medical waste incinerator emission limits were exceeded by the Covanta incinerator – by multiple amounts in most cases.)

| Pollutant | Covanta (OR Rules OAR 340 Division 230) Current Permit | 2013 Emission Level from Testing | 2014 Emission Level from Testing | 2015 Emission Level from Testing | 2016 Emission Level from Testing | 2017 Emission Level from Testing | 2018 Emission Level from Testing | 2019 Emission Level from Testing | Large New Medical Waste Incinerator (40 CFR Part 60, Subpart Ec) |
|-----------------------|--|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|--|
| PM | 25 mg/m ³ | 6.35 mg/m ³ | 8.45 | 5.87 | 2.81 | 3.31 | 16.55 | 1.69 | 18 mg/m ³ |
| HCl | 29 ppm | 10.73 ppm | 18.36 | 13.37 | 6.00 | 7.83 | 9.26 | 11.90 | 5.1 ppm |
| SO₂ | 29 ppm | 29 ppm | 40 | 40 | 56 | 25 | 24 | No data | 8.1 ppm |
| CO | 100 ppm | 98 ppm | 94 | 75 | 89 | 76 | 98 | No data | 11 ppm |
| NO_x | 205 ppm | 189 ppm | 190 | 195 | 185 | 195 | 194 | No data | 140 ppm |
| Cadmium | 0.020 mg/m ³ | 0.0002 mg/m³ | 0.0015 | 0.0003 | 0.0005 | 0.0009 | 0.0026 | 0.0036 | 0.00013 mg/m³ |
| Lead | 0.20 mg/m ³ | 0.0024 mg/m³ | 0.0153 | 0.0014 | 0.0035 | 0.0040 | 0.0082 | 0.0017 | 0.00069 mg/m³ |
| Mercury | 0.050 mg/m ³ | 0.0056 mg/m³ | 0.0061 | 0.0016 | 0.0014 | 0.0030 | 0.0026 | 0.0036 | 0.0013 mg/m³ |
| Dioxin | 15 ng/m ³ | 0.519 ng/m ³ | 0.372 | 0.525 | 0.832 | 0.400 | 5.76 | 2.35 | 9.3 ng/m ³ |

Highlighted pollutants and values for the Covanta Marion incinerator would NOT meet large new medical waste incinerator limits that are shown in the right hand column even though it burns medical waste in over five times the amount that would qualify a medical waste incinerator to be classified as “large”. [See these medical waste emission standards at <https://www.govinfo.gov/content/pkg/CFR-2015-title40-vol7/pdf/CFR-2015-title40-vol7-part60-subpartEc.pdf> (page 297 for definition of “large hospital/infectious/medical waste incinerator” and pages 314 and 315 for emission limits for those).] The above numbers highlighted in

gray don't on the face of it even meet the Covanta Marion air quality permit limits (second column from left) that existed at the time, but they get around that by the overly lenient permit rule that allows a certain percentage difference (75%) between SO₂ in the inlet gas versus outlet gas to satisfy emission requirements even when they exceed the emission limits as expressed in "concentration" terms.