



MINNESOTA POLLUTION CONTROL AGENCY

Understanding the 2000 Air Emissions Summary

Attached is your facility's 2000 Air Emission Summary. Please carefully review your facility's 2000 Air Emissions Summary to verify that the estimated 2000 air emissions are accurate. You have until February 1, 2002, to request changes to 2000 emissions data that will result in a decrease of emissions. If you notice an error, please make a copy of the 2000 Air Emissions Summary, indicate what is in error, attach a letter that explains your position in detail and mail it to Dana Vanderbosch, MPCA, Integrated Data Management Unit, 520 Lafayette Rd N, St. Paul, MN 55155. Please note that this letter must be postmarked no later than February 1, 2002, if you wish to request a decrease in emissions.

The 2000 Air Emission Summary describes the emission sources, emission factors, control equipment and calculated emissions for 2000. It is not intended to be an in-depth description of how the emissions were calculated, but rather a brief overview of the components used to calculate those emissions. There is a great deal of information packed into this summary and it was necessary for us to cut certain column widths in order for all this information to fit on one page. Since this format may be difficult to understand, the following is a glossary of the column headings found on the summary:

Unit#: This is a number that the database system automatically assigns to the emission unit. Emission Inventory Coordinators and permit staff have no control over this numbering system and we cannot change an emission unit # once one has been assigned.

Unit Description: This is a description of the emission source provided to us by your facility.

Seg: This is the number assigned to a segment. A segment is a component or a portion of an emission unit. For example, a boiler may have two segments: one for natural gas and one for #2 fuel oil.

Segment Description: This is a description of the segment.

SCC: Emission factors are assigned a Source Classification Code (SCC) by the Environmental Protection Agency (EPA). For example, the seven emission factors used to calculate emissions for a reciprocating diesel engine are combined under one SCC.

Pollutant: We calculate emissions for the following pollutants: carbon dioxide (CO), nitrogen oxides (NO_x), lead (Pb), particulate matter (PM), PM smaller than 10 micrometers (PM₁₀), sulfur dioxide (SO₂) and volatile organic compounds (VOC).

Emission Factor (lb/unit): An emission factor is the amount of pollution emitted in pounds per throughput unit.

Calculation Method: This will tell you what method of calculation we have used. The most common methods are AP-42 /FIRE emission factors (which are factors published by the EPA), stack test, continuous emission monitor (CEM), TANKS and mass balance. The description 'Other' denotes a wide variety of alternative calculation methods.

Throughput: This is the amount of material that passed through the emission source in 2000.

Units: The throughput units are the units of measurement in which the throughput was reported.

Control Equipment: A brief description of any control equipment in shown in this column.

Contr%: This indicates the percent control, or control efficiency, that the control equipment provides for a given pollutant.

Capt%: This column indicates the percent of pollution captured by the control equipment. It is sometimes referred to as capture efficiency. In general, control equipment that entirely encloses the emission source outlet captures 100% of the pollution, whereas control equipment that does not entirely enclose the emission source outlet only captures 60-80% of the pollution.

Comb%: This is the result of multiplying the control % by the capture % to give an overall combined capture/control efficiency of the control device for a given pollutant.

Actual tons: This is the amount of actual pollution in tons that has been calculated. It takes into account control equipment if appropriate.

Air Emissions Summary For Year 2000

Minnesota Pollution Control Agency

Page 1 of 2

Contact: Eberley, Lee W(118)

NSP - Monticello Nuclear Plant (Facility ID#: 17100019)

Unit#	Unit Description	Seg	Seg Description	SCC	Pollutant	Emission	Calculation	Throughput	Units	Control	Contr%	Capt%	Comb%	Actual tons
						Factor	Method			Equipment				
						(lb/unit)								
EU 001	Boiler	1	#2 fuel oil	10200501	CO	5.000000	AP-42/FIRE	269.40	1000 gallo					.67
					Lead	0.001260	AP-42/FIRE	269.40	1000 gallo					.00
					NOx	0.187000	Stack test	35,187.17	Million BT					3.29
					PM	3.300000	AP-42/FIRE	269.40	1000 gallo					.44
					PM10	2.300000	AP-42/FIRE	269.40	1000 gallo					.31
					SO2	157.000000	AP-42/FIRE	269.40	1000 gallo					10.57
					VOC	0.200000	AP-42/FIRE	269.40	1000 gallo					.03
EU 002	Diesel Generator 11	1	Diesel	20100102	CO	130.000000	AP-42/FIRE	4.70	1000 gallo					.31
					NOx	604.000000	AP-42/FIRE	4.70	1000 gallo					1.42
					PM	42.500000	AP-42/FIRE	4.70	1000 gallo					.10
					PM10	42.500000	AP-42/FIRE	4.70	1000 gallo					.10
					SO2	39.700000	AP-42/FIRE	4.70	1000 gallo					.09
					VOC	49.300000	AP-42/FIRE	4.70	1000 gallo					.12
EU 003	Diesel Generator 12	1	Diesel	20100102	CO	130.000000	AP-42/FIRE	7.10	1000 gallo					.46
					NOx	604.000000	AP-42/FIRE	7.10	1000 gallo					2.14
					PM	42.500000	AP-42/FIRE	7.10	1000 gallo					.15
					PM10	42.500000	AP-42/FIRE	7.10	1000 gallo					.15
					SO2	39.700000	AP-42/FIRE	7.10	1000 gallo					.14
					VOC	49.300000	AP-42/FIRE	7.10	1000 gallo					.18
EU 004	Security Diesel Genera	1	Diesel	20100102	CO	130.000000	AP-42/FIRE	1.00	1000 gallo					.07
					NOx	604.000000	AP-42/FIRE	1.00	1000 gallo					.30
					PM	42.500000	AP-42/FIRE	1.00	1000 gallo					.02
					PM10	42.500000	AP-42/FIRE	1.00	1000 gallo					.02
					SO2	39.700000	AP-42/FIRE	1.00	1000 gallo					.02
					VOC	49.300000	AP-42/FIRE	1.00	1000 gallo					.02
EU 005	Fire Pump Diesel Engi	1	Diesel	20100102	CO	130.000000	AP-42/FIRE	1.00	1000 gallo					.07
					NOx	604.000000	AP-42/FIRE	1.00	1000 gallo					.30
					PM	42.500000	AP-42/FIRE	1.00	1000 gallo					.02
					PM10	42.500000	AP-42/FIRE	1.00	1000 gallo					.02
					SO2	39.700000	AP-42/FIRE	1.00	1000 gallo					.02
					VOC	49.300000	AP-42/FIRE	1.00	1000 gallo					.02
EU 006	Diesel Generator 13	1	Diesel	20100102	CO	130.000000	AP-42/FIRE	2.01	1000 gallo					.13

Air Emissions Summary For Year 2000

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Page 2 of 2

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					NOx	2.573000	Stack test	281.40	Million BT				.36
					PM	42.500000	AP-42/FIRE	2.01	1000 gallo				.04
					PM10	42.500000	AP-42/FIRE	2.01	1000 gallo				.04
					SO2	39.700000	AP-42/FIRE	2.01	1000 gallo				.04
					VOC	49.300000	AP-42/FIRE	2.01	1000 gallo				.05
EU 007	Temporary Engine > 60	1	Diesel	20100102	CO	130.000000	AP-42/FIRE	.00	1000 gallo				.00
					NOx	604.000000	AP-42/FIRE	.00	1000 gallo				.00
					PM	42.500000	AP-42/FIRE	.00	1000 gallo				.00
					PM10	42.500000	AP-42/FIRE	.00	1000 gallo				.00
					SO2	39.700000	AP-42/FIRE	.00	1000 gallo				.00
					VOC	49.300000	AP-42/FIRE	.00	1000 gallo				.00
EU 008	Temporary Engine < 60	1	Diesel	20100102	CO	130.000000	AP-42/FIRE	.00	1000 gallo				.00
					NOx	604.000000	AP-42/FIRE	.00	1000 gallo				.00
					PM	42.500000	AP-42/FIRE	.00	1000 gallo				.00
					PM10	42.500000	AP-42/FIRE	.00	1000 gallo				.00
					SO2	39.700000	AP-42/FIRE	.00	1000 gallo				.00
					VOC	49.300000	AP-42/FIRE	.00	1000 gallo				.00
				Total	CO	1.70							
					NOx	7.82							
					Pb	.00							
					PM10	.85							
					PM	.78							
					SO2	10.89							
					VOC	.42							