

**WAC 463-85-230 Emissions and electrical production monitoring, recordkeeping and reporting requirements.** (1) Monitoring and record-keeping requirements. For all baseload electric generation facilities or units and baseload electric cogeneration facilities or units subject to WAC 463-85-120, the following parameters shall be monitored and reported as explained below:

(a) Electrical output: Electrical output as measured at the point of connection with the local electrical distribution network or transmission line, as appropriate. Measurement will be on an hourly or daily basis and recorded in a form suitable for use in calculating compliance with the greenhouse gases emissions performance standard;

(b) Useful thermal energy output: Quantity of energy supplied to nonelectrical production uses determined by monitoring both the energy supplied and the unused energy returned by the thermal energy user or uses. The required monitoring can be accomplished through:

(i) Measurement of the mass, pressure, and temperature of the supply and return streams of the steam or thermal fluid; or

(ii) Use of thermodynamic calculations as approved by ecology.

(iii) Measurements will be on an hourly or daily basis and recorded in a form suitable for use in calculating compliance with the greenhouse gases emissions performance standard; and

(c) Regulated greenhouse gases emissions.

(i) The regulated greenhouse gases emissions are the emissions of regulated greenhouse gases from the main plant exhaust stack and any bypass stacks or flares. For baseload electric generation facilities or units and baseload electric cogeneration facilities or units utilizing CO<sub>2</sub> controls and sequestration to comply with the greenhouse gases emissions performance standard, direct and fugitive CO<sub>2</sub> emissions from the CO<sub>2</sub> separation and compression process are included.

(ii) Carbon dioxide (CO<sub>2</sub>).

(A) For baseload electric generation facilities or units and baseload electric cogeneration facilities or units subject to WAC 463-85-120, producing 350 MW or more of electricity, CO<sub>2</sub> emissions will be monitored by a continuous emission monitoring system meeting the requirements of 40 C.F.R. Sections 75.10 and 75.13 and 40 C.F.R. Part 75 Appendix F. If allowed by the requirements of 40 C.F.R. Part 72, a facility may estimate CO<sub>2</sub> emissions through fuel carbon content monitoring and methods meeting the requirements of 40 C.F.R. Sections 75.10 and 75.13 and 40 C.F.R. Part 75 Appendix G.

(B) When the monitoring data from a continuous emission monitoring system does not meet the completeness requirements of 40 C.F.R. Part 75, the baseload electric generation facility operator or operator will substitute data according to the process in 40 C.F.R. Part 75.

(C) Continuous emission monitors for CO<sub>2</sub> will be installed at a location meeting the requirements of 40 C.F.R. Part 75, Appendix A. The CO<sub>2</sub> and flow monitoring equipment must meet the quality control and quality assurance requirements of 40 C.F.R. Part 75, Appendix B.

(iii) Nitrous oxide (N<sub>2</sub>O). For baseload electric generation facilities or units or baseload electric cogeneration facilities or units subject to WAC 463-85-120 producing 350 MW or more of electricity, N<sub>2</sub>O emissions shall be determined as follows:

(A) For the first year of operation, N<sub>2</sub>O emissions are estimated by use of emission factors as published by the Environmental Protection Agency, the federal Department of Energy's Energy Information

Agency, or other authoritative source as approved by ecology for use by the facility.

(B) For succeeding years, N<sub>2</sub>O emissions will be estimated through use of generating unit specific emission factors derived through use of emissions testing using ecology or Environmental Protection Agency approved methods. The emission factor shall be derived through testing N<sub>2</sub>O emissions from the stack at varying loads and through at least four separate test periods spaced evenly throughout the first year of commercial operation.

(iv) Methane (CH<sub>4</sub>). For baseload electric generation facilities or units or baseload electric cogeneration facilities or units subject to WAC 173-407-120 producing 350 MW or more of electricity, CH<sub>4</sub> emissions shall be determined as follows:

(A) For the first year of operation, CH<sub>4</sub> emissions are estimated by use of emission factors as published by the Environmental Protection Agency, the federal Department of Energy's Energy Information Agency, or other authoritative source as approved by ecology for use by the facility.

(B) For succeeding years, CH<sub>4</sub> emissions will be estimated through use of plant specific emission factors derived through use of emissions testing using ecology or Environmental Protection Agency approved methods. The emission factor shall be derived through testing CH<sub>4</sub> emissions from the stack at varying loads and through at least four separate test periods spaced evenly through the first year of commercial operation.

(d) Fuel usage and heat content information.

(i) Fossil fuel usage will be monitored by measuring continuous fuel volume or weight as appropriate for the fuel used. Measurement will be on an hourly or daily basis and recorded in a form suitable for use in calculating greenhouse gases emissions.

(ii) Renewable energy fuel usage will be monitored by measuring continuous fuel volume or weight as appropriate for the fuel used. Measurement will be on an hourly or daily basis and recorded in a form suitable for use in calculating greenhouse gases emissions.

(iii) Heat content of fossil fuels shall be tested at least once per calendar year. The owner or operator of the baseload electric generation facility or unit shall submit a proposed fuel content monitoring program to EFSEC for EFSEC's approval. Upon request and submission of appropriate documentation of fuel heat content variability, EFSEC may allow a source to:

(A) Test the heat content of the fossil fuel less often than once per year; or

(B) Utilize representative heat content for the renewable energy source instead of the periodic monitoring of heat content required above.

(iv) Renewable energy fuel heat content will be tested monthly or with a different frequency approved by EFSEC. A different frequency will be based on the variability of the heat content of the renewable energy fuel.

(A) If the baseload electric generation facilities or units or baseload electric cogeneration facilities or units subject to WAC 463-85-120 using a mixture of renewable and fossil fuels do not adjust their greenhouse gases emissions by accounting for the heat input from renewable energy fuels, monitoring of the heat content of the renewable energy fuels is not required.

(B) Upon request and with appropriate documentation, EFSEC may allow a source to utilize representative heat content for the renewable energy source instead of the periodic monitoring of heat content required above.

(2) Reporting requirements. The results of the monitoring required by this section shall be reported to EFSEC and ecology annually.

(a) Facilities or units subject to the reporting requirements of 40 C.F.R. Part 75. Annual emissions of CO<sub>2</sub>, N<sub>2</sub>O and CH<sub>4</sub> will be reported to ecology and EFSEC by January 31 of each calendar year for emissions that occurred in the previous calendar year. The report may be an Excel™ or CSV format copy of the report submitted to EPA per 40 C.F.R. Part 75 with the emissions for N<sub>2</sub>O and CH<sub>4</sub> appended to the report.

(b) For facilities or units not subject to the reporting requirements of 40 C.F.R. Part 75, annual emissions of CO<sub>2</sub>, N<sub>2</sub>O and CH<sub>4</sub> and supporting information will be reported to ecology and the air quality permitting authority with jurisdiction over the facility by January 31 of each calendar year for emissions that occurred in the previous calendar year.

[Statutory Authority: Chapters 80.70 and 80.80 RCW and RCW 80.50.040. WSR 08-14-064, § 463-85-230, filed 6/25/08, effective 7/26/08.]