

OPACITY MONITORING FOR COMBUSTION EQUIPMENT

(except emergency generator)

SIZE (Heat Input) Million BTU/hour	COAL / SOLID FUELS	# 6 & # 4 FUEL OIL	# 2 and LIGHTS	GAS
heat input > 250	COM	COM	COM ^{1, 2}	NONE
100 < heat input ≤ 250	COM	COM	COM ^{1, 2}	NONE
20 < heat input ≤ 100	COM	DAILY VISUAL ¹	WEEKLY VISUAL	NONE
1 ≤ heat input ≤ 20	COM OR DAILY VISUAL FOR WOOD	WEEKLY VISUAL	MONTHLY VISUAL	NONE

COM - means Continuous Opacity Monitor.

VISUAL - All of the above categories required to conduct a "Visual" exercise are subject to a tiered corrective actions approach.

First – Conduct a visual survey during daylight hours to identify if the stack has visible emissions (other than condensed water vapor) greater than the prescribed standard..

Second - When emissions are visible, take corrective action on the equipment immediately.

Third - Do a NJ Method 2 observation (with a certified reader) once per day until emissions are no longer visible (item three is required if the opacity problem is not resolved within 24 hours).

Fourth - Report permit violations pursuant to N.J.A.C. 7:27-22.19.

- 1 See Testing and Monitoring Guidance Chart (Non-Utility Boiler Testing) for monitoring recommendations. Testing and Monitoring Guidance chart supersedes this chart for COM. However this chart must be used if COM is not required by Testing and Monitoring Guidance Chart for Combustion Equipment Testing. (Added on 2/24/03)

DAILY VISUAL is OK when distillate oil is used as a backup fuel (use of oil limited to 500 hours per year) in combustion equipment having heat input rate between 100-250 MM Btu/hour. (Added on 2/21/06)

- 2 Not required for Simple Cycle Turbines that are Peaking Units. A peaking unit has an average capacity factor of no more than 10% during the previous 3 calendar years and a capacity factor of no more than 20% in each of those calendar years. If these conditions are met, the Operating Permit can allow visual observations (by a certified smoke reader) once every 100 hours of oil firing operation, using NJ Test Method Number 2. Monitoring and recordkeeping can occur at a lesser frequency if circumstances prohibit conducting a visual determination (e.g., nighttime operation, weather conditions, unplanned dispatching, etc.) within the 100-hour timeframe. However, in no case should the interval between visual determinations exceed 125 hours of oil firing operation. If the visual observation occurs at a lesser frequency than every 100 hours, the reason for monitoring at the lesser frequency must be recorded.

Furthermore, the permit should include a requirement to install and operate a continuous opacity monitor when actual distillate oil operation exceeds 500 hours in a calendar year. The monitoring protocol should be submitted consistent with the requirements of N.J.A.C.7: 27-22.18(a) and within 90 days of exceeding the 500-hour threshold. Installation and operation of the monitor would be required within 180 days of exceeding the 500-hour threshold. Refer to N.J.A.C.7: 27-22.18 & 19 for other applicable requirements. (Added on 7/26/04)