## 15A NCAC 02D .0535 EXCESS EMISSIONS REPORTING AND MALFUNCTIONS

(a) For this Rule the following definitions apply:

- (1) "Excess Emissions" means an emission rate that exceeds any applicable emission limitation or standard allowed by any rule in Sections .0500, .0900, .1200, or .1400 of this Subchapter; or by a permit condition; or that exceeds an emission limit established in a permit issued under 15A NCAC 02Q .0700.
- (2) "Malfunction" means any unavoidable failure of air pollution control equipment, process equipment, or process to operate in a normal and usual manner that results in excess emissions. Excess emissions during periods of routine start-up and shut-down of process equipment are not considered a malfunction. Failures caused entirely or in part by poor maintenance, careless operations or any other upset condition within the control of the emission source are not considered a malfunction.
- (3) "Start-up" means the commencement of operation of any source that has shut-down or ceased operation for a period sufficient to cause temperature, pressure, process, chemical, or a pollution control device imbalance that would result in excess emission.
- (4) "Shut-down" means the cessation of the operation of any source for any purpose.

(b) This Rule does not apply to sources to which Rules .0524, .1110, or .1111 of this Subchapter applies unless excess emissions exceed an emission limit established in a permit issued under 15A NCAC 02Q .0700 that is more stringent than the emission limit set by Rules .0524, .1110 or .1111 of this Subchapter.

(c) Any excess emissions that do not occur during start-up or shut-down are considered a violation of the appropriate rule unless the owner or operator of the source of excess emissions demonstrates to the Director, that the excess emissions are the result of a malfunction. To determine if the excess emissions are the result of a malfunction, the Director shall consider, along with any other pertinent information, the following:

- (1) The air cleaning device, process equipment, or process has been maintained and operated, to the maximum extent practicable, consistent with good practice for minimizing emissions;
- (2) Repairs have been made expeditiously when the emission limits have been exceeded;
- (3) The amount and duration of the excess emissions, including any bypass, have been minimized to the maximum extent practicable;
- (4) All practical steps have been taken to minimize the impact of the excess emissions on ambient air quality;
- (5) The excess emissions are not part of a recurring pattern indicative of inadequate design, operation, or maintenance;
- (6) The requirements of Paragraph (f) of this Rule have been met; and
- (7) If the source is required to have a malfunction abatement plan, it has followed that plan. All malfunctions shall be repaired as expeditiously as practicable. However, the Director shall not excuse excess emissions caused by malfunctions from a source for more than 15 percent of the operating time during each calendar year. The Director may require the owner or operator of a facility to maintain records of the time that a source operates when it or its air pollution control equipment is malfunctioning or otherwise has excess emissions.

(d) All electric utility boiler units shall have a malfunction abatement plan approved by the Director as satisfying the requirements of Subparagraphs (1) through (3) of this Paragraph. In addition, the Director may require any other source to have a malfunction abatement plan approved by the Director as satisfying the requirements of Subparagraphs (1) through (3) of this Paragraph. If the Director requires a malfunction abatement plan for a source other than an electric utility boiler, the owner or operator of that source shall submit a malfunction abatement plan within 60 days after receipt of the Director's request. The malfunction plans of electric utility boiler units and of other sources required to have them shall be implemented when a malfunction or other breakdown occurs. The purpose of the malfunction abatement plan is to prevent, detect, and correct malfunctions or equipment failures that could result in excess emissions. A malfunction abatement plan shall contain:

- (1) a complete preventive maintenance program including:
  - (A) the identification of individuals or positions responsible for inspecting, maintaining and repairing air cleaning devices;
  - (B) a description of the items or conditions that will be inspected and maintained;
  - (C) the frequency of the inspection, maintenance services, and repairs; and
  - (D) an identification and quantities of the replacement parts that shall be maintained in inventory for quick replacement;

- (2) an identification of the source and air cleaning operating variables and outlet variables, such as opacity, grain loading, and pollutant concentration, that may be monitored to detect a malfunction or failure; the normal operating range of these variables and a description of the method of monitoring or surveillance procedures and of informing operating personnel of any malfunctions, including alarm systems, lights or other indicators; and
- (3) a description of the corrective procedures that the owner or operator will take in case of a malfunction or failure to achieve compliance with the applicable rule as expeditiously as practicable but no longer than the next boiler or process outage that would provide for an orderly repair or correction of the malfunction or 15 days, whichever is shorter. If the owner or operator anticipates that the malfunction would continue for more than 15 days, a case-by-case repair schedule shall be established by the Director with the source. The owner or operator shall maintain logs to show that the operation and maintenance parts of the malfunction abatement plan are implemented. These logs are subject to inspection by the Director or his designee upon request during business hours.

(e) The owner or operator of any source required by the Director to have a malfunction abatement plan shall submit a malfunction abatement plan to the Director within six months after it has been required by the Director. The malfunction abatement plan and any amendment to it shall be reviewed by the Director or his designee. If the plan carries out the objectives described by Paragraph (d) of this Rule, the Director shall approve it. If the plan does not carry out the objectives described by Paragraph (d) of this Rule, the Director shall disapprove the plan. The Director shall state his reasons for his disapproval. The person who submits the plan shall submit an amendment to the plan to satisfy the reasons for the Director's disapproval within 30 days of receipt of the Director for his approval. Any person having an approved malfunction abatement plan shall submit to the Director for his approval amendments reflecting changes in any element of the plan required by Paragraph (d) of this Rule or amendments when requested by the Director. The malfunction abatement plan and amendments to it shall be implemented within 90 days upon receipt of written notice of approval.

(f) The owner or operator of a source of excess emissions that last for more than four hours and that results from a malfunction, a breakdown of process or control equipment or any other abnormal conditions, shall:

- (1) notify the Director or his designee of any such occurrence by 9:00 a.m. Eastern time of the Division's next business day of becoming aware of the occurrence and describe:
  - (A) name and location of the facility,
  - (B) the nature and cause of the malfunction or breakdown,
  - (C) the time when the malfunction or breakdown is first observed,
  - (D) the expected duration, and
  - (E) an estimated rate of emissions;
- (2) notify the Director or his designee immediately when the corrective measures have been accomplished;
- (3) submit to the Director within 15 days after the request a written report that includes:
  - (A) name and location of the facility,
  - (B) identification or description of the processes and control devices involved in the malfunction or breakdown,
  - (C) the cause and nature of the event,
  - (D) time and duration of the violation or the expected duration of the excess emission if the malfunction or breakdown has not been fixed,
  - (E) estimated quantity of pollutant emitted,
  - (F) steps taken to control the emissions and to prevent recurrences and if the malfunction or breakdown has not been fixed, steps planned to be taken, and
  - (G) any other pertinent information requested by the Director. After the malfunction or breakdown has been corrected, the Director may require the owner or operator of the source to test the source in accordance with Section .2600 of this Subchapter to demonstrate compliance.

(g) Start-up and shut-down. Excess emissions during start-up and shut-down are considered a violation of the appropriate rule if the owner or operator cannot demonstrate that the excess emissions are unavoidable. To determine if excess emissions are unavoidable during startup or shutdown the Director shall consider the items listed in Paragraphs (c)(1), (c)(3), (c)(4), (c)(5), and (c)(7) of this Rule along with any other pertinent information. The Director may specify for a particular source the amount, time, and duration of emissions allowed during start-up or shut-down. The owner or operator shall, to the extent practicable, operate the source and any associated air pollution control equipment or

monitoring equipment in a manner consistent with best practicable air pollution control practices to minimize emissions during start-up and shut-down.

History Note: Authority G.S. 143-215.3(a)(1);143-215.107(a)(4); 143-215.107(a)(5); Eff. March 1, 1983; Amended Eff. June 1, 2008; April 1, 2001; July 1, 1998; July 1, 1996; October 1, 1991; May 1, 1990; April 1, 1986; July 1, 1984.