

1 15A NCAC 02D .0535 is amended as published in 30:23 NCR 2442-2448 follows:

2
3 **15A NCAC 02D .0535 EXCESS EMISSIONS REPORTING AND MALFUNCTIONS**

4 (a) Applicability: 15A NCAC 02D .0535 shall not be in effect if 15A NCAC 02D .0545 is valid. This Rule shall not
5 apply to sources to which Rule .0524, .1110, or .1111 of this Subchapter applies. In the event that United States
6 Environmental Protection Agency's regulation, State Implementation Plans: Response to Petition for Rulemaking;
7 Restatement and Update of EPA's SSM Policy Applicable to SIPs; Findings of Substantial Inadequacy; and SIP Calls to
8 Amend Provisions Applying to Excess Emissions During Periods of Startup, Shutdown and Malfunction, published in the
9 Code of Federal Regulations (CFR) at 40 CFR 52 on June 12, 2015, is:

10 (1) declared or adjudged to be invalid or unconstitutional or stayed by the United States Court of Appeals
11 for the Fourth Circuit, by the District of Columbia Circuit, or by the United States Supreme Court; or

12 (2) withdrawn, repealed, revoked, or otherwise rendered of no force and effect by the United States
13 Environmental Protection Agency, Congress, or Presidential Executive Order;

14 such action shall render Rule .0545 of this Subchapter as invalid, void, stayed, or otherwise without force and effect upon
15 the date such action becomes final and effective. At the time of such action, sources that were subject to Rule .0545 of
16 this Subchapter shall be subject to this Rule.

17 ~~(a)~~(b) For the purposes of this Rule Rule, the following definitions apply:

18 (1) "Excess Emissions" "excess emissions" means an emission rate that exceeds any applicable emission
19 limitation or standard allowed by any rule in Sections .0500, .0900, .1200, or .1400 of this Subchapter;
20 or by a permit condition; or that exceeds an emission limit established in a permit issued under 15A
21 NCAC 02Q .0700-.0700;

22 (2) "Malfunction" "malfunction" means any unavoidable failure of air pollution control equipment,
23 process equipment, or process to operate in a normal and usual manner that results in excess
24 emissions. Excess emissions during periods of routine start-up and shut-down of process equipment
25 are shall not be considered a malfunction. Failures caused entirely or in part by poor maintenance,
26 careless operationsoperations, or any other upset condition within the control of the emission source
27 are shall not be considered a malfunction. malfunction;

28 (3) "Start-up" "start-up" means the initial commencement of operation or subsequent commencement of
29 operation of any source that has shut-down or ceased operation for a period sufficient to cause
30 temperature, pressure, process, chemical, or a pollution control device imbalance that would result in
31 excess emission. emission; and

32 (4) "Shut-down" "shut-down" means the cessation of the operation of any source for any purpose.

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

36 (c) Any excess emissions that do not occur during start-up or shut-down are shall be considered a violation of the
37 appropriate applicable rule unless the owner or operator of the source of excess emissions demonstrates to the Director,

1 Director that the excess emissions are the result of a malfunction. To determine if the excess emissions are the result of a
2 malfunction, the Director shall ~~consider, along with any other pertinent information, consider~~ the following:

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

20 All malfunctions shall be repaired as expeditiously as practicable. The Director shall not excuse excess emissions caused
21 by malfunctions from a source for more than 15 percent of the operating time during each calendar year. The Director
22 may require the owner or operator of a facility to maintain records of the time that a source operates when it or its air
23 pollution control equipment is malfunctioning or otherwise has excess emissions.

24 (d) All electric utility boiler units shall have a malfunction abatement plan approved by the Director as satisfying the
25 requirements of Subparagraphs ~~(4)(d)(1)~~ through ~~(3)(d)(3)~~ of this ~~Paragraph~~ Rule. In addition, the Director may require
26 any other source to have a malfunction abatement plan approved by the Director as satisfying the requirements of
27 Subparagraphs ~~(4)(d)(1)~~ through ~~(3)(d)(3)~~ of this ~~Paragraph~~ Rule. If the Director requires a malfunction abatement plan
28 for a source other than an electric utility boiler, the owner or operator of that source shall submit a malfunction abatement
29 plan within 60 days after receipt of the Director's request. The malfunction plans of electric utility boiler units and of
30 other sources required to have them shall be implemented ~~when a malfunction or other breakdown occurs.~~ at all times.
31 The ~~purpose-objectives~~ of the malfunction abatement plan ~~is are~~ to prevent, detect, and correct malfunctions or
32 equipment failures that could result in excess emissions. A malfunction abatement plan shall contain:

- 33 (1) a ~~complete~~ preventive maintenance program including:
 - 34 (A) the identification of individuals or positions responsible for inspecting,
35 ~~maintaining~~ maintaining, and repairing air cleaning devices;
 - 36 (B) a description of the items or conditions that will be inspected and maintained;
 - 37 (C) the frequency of the inspection, maintenance services, and repairs; and

- 1 (D) an identification and quantities of the replacement parts that shall be maintained in inventory
2 for quick replacement;
- 3 (2) an identification of the source and air cleaning operating variables and outlet variables, such as
4 opacity, grain loading, and pollutant concentration, that may be monitored to detect a malfunction or
5 failure; the normal operating range of these variables and a description of the method of monitoring or
6 surveillance procedures and of informing operating personnel of any malfunctions, including alarm
7 systems, ~~lights~~lights, or other indicators; and
- 8 (3) a description of the corrective procedures that the owner or operator will take in case of a malfunction
9 or failure to achieve compliance with the applicable rule as expeditiously as ~~practicable~~practicable, but
10 no longer than the next boiler or process outage that would provide for an orderly repair or correction
11 of the malfunction or 15 days, whichever is shorter. If the owner or operator anticipates that the
12 malfunction would continue for more than 15 days, a case-by-case repair schedule shall be established
13 by the Director with the source. The owner or operator shall maintain logs to show that the operation
14 and maintenance parts of the malfunction abatement plan are implemented. These logs are subject to
15 inspection by the Director ~~or his designee~~ upon request during business hours.
- 16 (e) The owner or operator of any source required by the Director to have a malfunction abatement plan shall submit a
17 malfunction abatement plan to the Director within ~~six months~~60 days after it has been required by the Director. The
18 malfunction abatement plan and any amendment to it shall be reviewed by the ~~Director or his designee~~Director. If the
19 plan carries out the objectives described by Paragraph (d) of this Rule, the Director shall approve it. If the plan does not
20 carry out the objectives described by Paragraph (d) of this Rule, the Director shall disapprove the plan. The Director
21 shall state ~~his~~the reasons for ~~his~~the disapproval. The ~~person owner or operator~~ who submits the plan shall submit an
22 amendment to the plan to satisfy the reasons for the Director's disapproval within 30 days of receipt of the Director's
23 notification of disapproval. Any person having an approved malfunction abatement plan shall submit to the Director for
24 ~~his~~the approval amendments reflecting changes in any element of the plan required by Paragraph (d) of this Rule or
25 amendments when requested by the Director. The malfunction abatement plan and amendments to it shall be
26 implemented within 90 days upon receipt of written notice of approval.
- 27 (f) The owner or operator of a source of excess emissions that last for more than four hours and that results from a
28 malfunction, a breakdown of process or control ~~equipment~~equipment, or any other abnormal conditions, shall:
- 29 (1) notify the Director ~~or his designee~~ of any such occurrence by 9:00 a.m. Eastern time of the Division's
30 next business day of becoming aware of the occurrence and describe:
- 31 (A) name and location of the ~~facility~~facility;
- 32 (B) the nature and cause of the malfunction or ~~breakdown~~breakdown;
- 33 (C) the time when the malfunction or breakdown is first ~~observed~~observed;
- 34 (D) the expected ~~duration~~duration; and
- 35 (E) an estimated rate of emissions;
- 36 (2) notify the Director ~~or his designee~~ immediately by 9:00 a.m. Eastern time of the Division's next
37 business day when the corrective measures have been accomplished;

- 1 (3) submit to the Director within 15 days after the ~~request~~notification in Subparagraph (f)(1) of this Rule,
2 a written report that includes:
3 (A) name and location of the ~~facility,~~facility;
4 (B) identification or description of the processes and control devices involved in the malfunction
5 or ~~breakdown,~~breakdown;
6 (C) the cause and nature of the ~~event,~~event;
7 (D) time and duration of the violation or the expected duration of the excess emission if the
8 malfunction or breakdown has not been ~~fixed,~~fixed;
9 (E) estimated quantity of pollutant ~~emitted,~~emitted;
10 (F) steps taken to control the emissions and to prevent recurrences and if the malfunction or
11 breakdown has not been fixed, steps planned to be ~~taken,~~taken; and
12 (G) any other pertinent information requested by the Director. ~~After the malfunction or~~
13 ~~breakdown has been corrected, the Director may require the owner or operator of the source~~
14 ~~to test the source in accordance with Section .2600 of this Subchapter to demonstrate~~
15 ~~compliance.~~

16 After the malfunction or breakdown has been corrected, the Director may require the owner or operator of the source to
17 test the source in accordance with Section .2600 of this Subchapter to demonstrate compliance.

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

26
27 *History Note: Authority G.S. 143-215.3(a)(1);143-215.107(a)(4); 143-215.107(a)(5);*

28 *Eff. March 1, 1983;*

29 *Amended Eff. May 22, 2018; June 1, 2008; April 1, 2001; July 1, 1998; July 1, 1996; October 1,*
30 *1991; May 1, 1990; April 1, 1986; July 1, 1984.*

31

1 15A NCAC 02D .0545 is adopted with changes as published in 30:23 NCR 2442-2448 as follows:

2
3 **15A NCAC 02D .0545 TREATMENT OF MALFUNCTION EVENTS AND WORK PRACTICES FOR**
4 **START-UP AND SHUT-DOWN OPERATIONS**

5 (a) Applicability. In the event that United States Environmental Protection Agency's regulation, State
6 Implementation Plans: Response to Petition for Rulemaking; Restatement and Update of EPA's SSM Policy
7 Applicable to SIPs; Findings of Substantial Inadequacy; and SIP Calls to Amend Provisions Applying to Excess
8 Emissions During Periods of Startup, Shutdown and Malfunction, published in the Code of Federal Regulations
9 (CFR) at 40 CFR 52 on June 12, 2015, is:

10 (1) declared or adjudged to be invalid or unconstitutional or stayed by the United States Court of
11 Appeals for the Fourth Circuit, by the District of Columbia Circuit, or by the United States
12 Supreme Court; or

13 (2) withdrawn, repealed, revoked, or otherwise rendered of no force and effect by the United States
14 Environmental Protection Agency, Congress, or Presidential Executive Order;

15 such action shall render this Rule as invalid, void, stayed, or otherwise without force and effect upon the date such
16 action becomes final and effective. At the time of such action, sources that were subject to this Rule shall be subject
17 to Rule .0535 of this Subchapter. This Rule shall not apply to sources to which Rule .0524, .1110, or .1111 of this
18 Subchapter applies.

19 (b) For the purposes of this Rule, the following definitions apply:

20 (1) ~~"Excess Emissions"~~ "excess emissions" means an emission rate that exceeds any applicable
21 emission limitation or standard allowed by any rule in Sections .0500, .0900, .1200, or .1400 of
22 this Subchapter; by a permit condition; or that exceeds an emission limit established in a permit
23 issued pursuant to 15A NCAC 02Q ~~.0700~~ .0700;

24 (2) ~~"Malfunction"~~ "malfunction" means any unavoidable failure of air pollution control equipment,
25 process equipment, or process to operate in a normal and usual manner. Failures caused entirely
26 or in part by poor maintenance, careless operations or any other upset condition within the control
27 of the emission source shall not be considered a malfunction.

28 (3) ~~"Start-up"~~ "start-up" means the initial commencement of operation or subsequent commencement
29 of operation of any source that has shut-down or ceased operation for a period sufficient to cause
30 temperature, pressure, process, chemical, or a pollution control device imbalance that would result
31 in excess ~~emissions~~ emissions; and

32 (4) ~~"Shut down"~~ "shut-down" means the cessation of the operation of any source for any purpose.

33 (c) Malfunctions. All facilities subject to this ~~rule~~ Rule shall:

34 (1) ~~Comply~~ comply with the otherwise applicable emissions limits; or

35 (2) ~~Comply~~ comply with the source specific malfunction work practice standard permit condition
36 described in Paragraph (d) of this Rule.

37 (d) Source Specific Malfunction Work Practice Standard Permit Condition.

- 1 (1) A facility may request a source specific malfunction work practice standard to be included in the
- 2 state and federal enforceable section of its air permit, after review by EPA and the public.
- 3 (2) The source specific malfunction work practice standard shall minimize emissions during the
- 4 malfunction event and require the malfunction duration to be minimized.
- 5 (3) Subparagraphs (e)(1) and (e)(5) of this Rule shall be addressed in the source specific malfunction
- 6 work practice standard. Any facility requesting a source specific malfunction work practice
- 7 standard shall meet the requirements of Subparagraphs (f)(1) through (f)(3) of this Rule.
- 8 (4) Requests shall be made through the application for a permit, permit modification, or permit
- 9 renewal pursuant to the permit application requirements in 15A NCAC 02Q .0300 or .0500. The
- 10 public notice requirements specified in 15A NCAC 02Q .0306 and .0307 shall be followed for all
- 11 proposed work practice standards in non-Title V permits. Public notice requirements specified in
- 12 15A NCAC 02Q .0521 shall be followed for all proposed work practice standards in Title V
- 13 permits.
- 14 (5) At all times, the source shall be operated in a manner consistent with good practice for minimizing
- 15 emissions and the owner or operator shall use their best efforts regarding planning, design, and
- 16 operating procedures. The owner or operator's actions during malfunction periods shall be
- 17 documented by properly signed, contemporaneous operating logs or other relevant evidence.
- 18 (6) Failure to implement or follow the Source Specific Malfunction Work Practice Standard Permit
- 19 Condition shall be a violation of Paragraph (d) of this Paragraph.
- 20 (7) Facilities that follow a Source Specific Malfunction Work Practice Standard Permit Condition
- 21 during a malfunction that has been addressed in the Source Specific Malfunction Work Practice
- 22 Standard Permit Condition shall be deemed in compliance.
- 23 (e) The Director shall determine the appropriate enforcement response for excess emissions due to a malfunction.
- 24 The Director shall ~~consider, along with any other pertinent information,~~ consider the following:
 - 25 (1) The air cleaning device, process equipment, or process has been maintained and operated, to the
 - 26 maximum extent practicable, consistent with good practice for minimizing emissions;
 - 27 (2) Repairs have been made expeditiously when the emission limits have been exceeded;
 - 28 (3) The amount and duration of the excess emissions, including any bypass, have been minimized to
 - 29 the maximum extent practicable;
 - 30 (4) All practical steps have been taken to minimize the impact of the excess emissions on ambient air
 - 31 quality;
 - 32 (5) The excess emissions are not part of a recurring pattern indicative of inadequate design, operation,
 - 33 or maintenance;
 - 34 (6) The requirements of Paragraph (h) of this Rule have been met; ~~and~~
 - 35 (7) If the source is required to have a malfunction abatement plan, the source has followed that
 - 36 plan-plan; and All malfunctions shall be repaired as expeditiously as practicable. The facility shall

1 ~~maintain records of the time that a source operates when it or its air pollution control equipment is~~
2 ~~malfunctioning or otherwise has excess emissions.~~

3 (8) any other pertinent information.

4 All malfunctions shall be repaired as expeditiously as practicable. The facility shall maintain records of the time that
5 a source operates when it or its air pollution control equipment is malfunctioning or otherwise has excess emissions.

6 (f) All electric utility boiler units shall have a malfunction abatement plan approved by the Director as satisfying the
7 requirements of Subparagraphs (f)(1) through (f)(3) of this Rule. In addition, the Director may require any other
8 source to have a malfunction abatement plan approved by the Director as satisfying the requirements of
9 Subparagraphs (f)(1) through (f)(3) of this Rule. If the Director requires a malfunction abatement plan for a source
10 other than an electric utility boiler, the owner or operator of that source shall submit a malfunction abatement plan
11 within 60 days after receipt of the Director's request. The malfunction abatement plans of electric utility boiler units
12 and of other sources required to have malfunction abatement plans shall be implemented at all times. The
13 ~~purpose/objectives~~ of the malfunction abatement plan ~~is/are~~ to prevent, detect, and correct malfunctions that may
14 result in excess emissions. A malfunction abatement plan shall contain:

15 (1) a preventive maintenance program including:

16 (A) the identification of individuals or positions responsible for inspecting, maintaining, and
17 repairing air cleaning devices;

18 (B) a description of the items or conditions that will be inspected and maintained;

19 (C) the frequency of the inspection, maintenance services, and repairs; and

20 (D) an identification and quantities of the replacement parts that shall be maintained in
21 inventory for quick replacement;

22 (2) an identification of the source and air cleaning operating variables and outlet variables that may be
23 monitored to detect a malfunction; the normal operating range of these variables and a description
24 of the method of monitoring and of informing operating personnel of any malfunctions; and

25 (3) a description of the corrective procedures that the owner or operator will take in case of a
26 malfunction or failure to achieve compliance with the applicable rule as expeditiously as
27 practicable. The owner or operator shall maintain logs to show that the operation and maintenance
28 parts of the malfunction abatement plan are implemented.

29 (g) The owner or operator of any source required by the Director to have a malfunction abatement plan shall submit
30 a malfunction abatement plan to the Director within 60 days after it has been required by the Director. The
31 malfunction abatement plan and any amendment to it shall be reviewed by the Director. If the plan carries out the
32 objectives described by Paragraph (f) of this Rule, the Director shall approve it. If the plan does not carry out the
33 objectives described by Paragraph (f) of this Rule, the Director shall disapprove the plan. The owner or operator
34 shall submit an amendment to the plan to satisfy the plan requirements within 30 days of receipt of the Director's
35 notification of disapproval. Any ~~person~~ owner or operator of any source having an approved malfunction abatement
36 plan shall submit to the Director for approval amendments reflecting changes in any element of the malfunction
37 abatement plan required by Paragraph (f) of this Rule or amendments when requested by the Director. The

1 malfunction abatement plan and amendments to it shall be implemented within 90 days upon receipt of written
2 notice of approval.

3 (h) The owner or operator of a source of excess emissions that last for more than four hours and that results from a
4 malfunction shall:

5 (1) notify the Director of any such occurrence by 9:00 a.m. Eastern time of the Division's next
6 business day of becoming aware of the occurrence and describe:

7 (A) name and location of the facility;

8 (B) the nature and cause of the malfunction;

9 (C) the time when the malfunction is first observed;

10 (D) the expected duration; and

11 (E) an estimated rate of emissions;

12 (2) notify the Director by 9:00 a.m. Eastern time of the Division's next business day when the
13 corrective measures have been accomplished;

14 (3) submit to the Director, within 15 days after the notification in Subparagraph (h)(1) of this
15 Paragraph, a written report that includes:

16 (A) name and location of the facility;

17 (B) identification or description of the processes and control devices involved in the
18 malfunction;

19 (C) the cause and nature of the event;

20 (D) time and duration of the violation or the expected duration of the excess emission if the
21 malfunction has not been fixed;

22 (E) estimated quantity of pollutant emitted;

23 (F) steps taken to control the emissions and to prevent recurrences and if the malfunction has
24 not been fixed, steps planned to be taken; and

25 (G) any other pertinent information requested by the Director.

26 After the malfunction has been corrected, the Director may require the owner or operator of the source to test the
27 source in accordance with Section .2600 of this Subchapter to demonstrate compliance.

28 (i) Start-up and Shut-down: During periods of start-up and shut-down, sources at facilities subject to this Rule shall
29 comply with any one of the following:

30 (1) the applicable SIP emission limit in the 15A NCAC 02D rules, or a permit limit established in a
31 permit issued pursuant to 15A NCAC 2Q .0700;

32 (2) the applicable work practice standards in Subparagraphs (j)(1) through (j)(13) of this Rule;

33 (3) work practice standards currently in effect for federal rules promulgated since 2009 that address
34 compliance during start-up and shut-down operations for equipment that would be subject to the
35 federal rule except for rule applicability exemptions; or

36 (4) source specific start-up and shut-down work practice standard permit conditions described in
37 Paragraph (k) of this Rule.

1 Excess emissions during start-up and shut-down shall be considered a violation of the applicable rule if the owner or
2 operator cannot demonstrate that the work practice standards in Subparagraphs (i)(2), (i)(3), or (i)(4) of this Rule
3 were followed. Facilities may comply with Subparagraphs (i)(1) or (i)(2) of this Rule during start-up and shut-down
4 without a specific permit condition. Facilities that choose to comply with Subparagraph (i)(3) of this Rule during
5 start-up and shut-down shall apply for and receive a permit condition that indicates the specific federal work practice
6 standard that shall be followed. ~~Failure to implement or follow the work practice standard shall be considered a~~
7 ~~violation of Subparagraph (i)(3) of this Rule.~~ Facilities that choose to comply with Subparagraph (i)(4) of this Rule
8 during start-up and shut-down shall apply for and receive a permit condition described in Paragraph (k) of this Rule.
9 ~~Failure to implement or follow the work practice standard shall be considered a violation of Subparagraph (i)(4) of~~
10 ~~this Rule.~~

11 (j) Generally Available Work Practices for Start-Up and Shut-Down Operations. The owner or operator shall, to
12 the extent practicable, operate the source and any associated air pollution control equipment or monitoring
13 equipment in a manner consistent with best practicable air pollution control practices to minimize emissions during
14 start-up and shut-down. The following generally available work practice standards shall be followed:

- 15 (1) Periods of start-up and shut-down shall be documented in a permanent form suitable for inspection
16 and submission to the Division. Documentation of start-ups and shut-downs shall include specific
17 identification of each period of start-up or shut-down where a work practice standard is used and
18 information required to demonstrate compliance with the applicable work practices. Start-up and
19 shut-down operations shall occur as expeditiously as possible while minimizing emissions.
- 20 (2) Boilers and other combustion sources. All combustion sources shall commence operations while
21 firing on the cleanest permitted fuel, to the extent practicable. The source shall minimize the start-
22 up and shut-down periods to the extent practicable.
 - 23 (A) For sources for which the manufacturer has established recommended procedures for
24 start-ups and shut-downs, the source shall follow the manufacturer's recommended
25 procedures.
 - 26 (B) For sources for which there is no manufacturer-recommended procedures for start-ups
27 and shut-downs, the source shall follow recommended procedures for a unit of similar
28 design for which manufacturer's recommended procedures are available.
- 29 (3) Baghouses shall be operated upon start-up of emission unit, or when baghouse temperature
30 exceeds the dew point, whichever occurs later, or as specified by manufacturer.
- 31 (4) Cyclones shall be operated at all times, including start-up and shut-down of the emission unit.
- 32 (5) Electrostatic precipitators (ESP) shall be operated upon start-up of emission unit, or when effluent
33 temperature exceeds the dew point, whichever occurs later, or as specified by manufacturer.
- 34 (6) Selective catalytic reduction (SCR) units shall be operated if catalyst bed temperature is greater
35 than 400°F, or as specified by manufacturer.
- 36 (7) Non-selective catalytic reduction (NSCR) units shall be operated when the effluent temperature is
37 between 700°F and 1500°F, or as specified by manufacturer.

- 1 (8) Scrubbers shall be operated at all times from initialization of start-up to completion of shut-down.
- 2 (9) Carbon adsorption shall be operated at all times from initialization of start-up to completion of
3 shut-down.
- 4 (10) Biofilters shall be operated at all times from initialization of start-up to completion of shut-down.
- 5 (11) Sorbent injection shall be operated at all times the gas stream temperature is greater than 300°F, or
6 as specified by manufacturer.
- 7 (12) Regenerative Thermal Oxidizers (RTO), thermal, and catalytic oxidizers shall be operated at all
8 times from initialization of start-up to completion of shut-down.
- 9 (13) Safety and fire protection protocols shall be followed during start-up and shut-down of all sources.

10 (k) Source Specific Start-Up and Shut-Down Work Practice Standard Permit Condition. A facility may request a
11 source specific start-up and shut-down work practice standard be included in the state and federal enforceable
12 section of their air permit, after review by EPA and the public. Such requests shall be made through the application
13 for a permit, permit modification, or permit renewal pursuant to the permit application requirements in 15A NCAC
14 02Q .0300 or .0500. The public notice requirements specified in 15A NCAC 02Q .0306 and .0307 shall be followed
15 for all proposed work practice standards in non-Title V permits. Public notice requirements specified in 15A NCAC
16 02Q .0521 shall be followed for all proposed work practice standards in Title V permits. Requests for work practice
17 standards for periods of start-up and shut-down shall include the following considerations:

- 18 (1) the work practice standard is specific to a source and the associated control strategy;
- 19 (2) demonstration that the use of the control strategy for the source is technically infeasible during
20 start-up or shut-down periods;
- 21 (3) the work practice standard requires that the frequency and duration of operation in start-up or shut-
22 down mode are minimized to the greatest extent practicable;
- 23 (4) at all times, the source shall be operated in a manner consistent with good practice for minimizing
24 emissions and the source uses best efforts regarding planning, design, and operating procedures;
25 and
- 26 (5) the owner or operator's actions during start-up and shut-down periods shall be documented by
27 properly signed, contemporaneous operating logs or other relevant evidence.

28 Any source without a start-up and shut-down work practice standard permit condition shall be required to comply
29 with any applicable emission limit. Facilities that follow a source specific start-up and shut-down work practice
30 standard permit condition during start-up and shut-down shall be deemed in compliance.

31
32 *History Note:* Authority G.S. 143-215.3(a)(1);143-215.107(a)(4); 143-215.107(a)(5);
33 *Eff. May 22, 2018.*

1 15A NCAC 02D .0902 is amended as published in 30:20 NCR 2137-2138 as follows:
2

3 **15A NCAC 02D .0902 APPLICABILITY**

4 (a) The rules in this Section ~~do~~ **shall** not apply except as specifically set out in this Rule.

5 (b) This Section applies to sources that emit greater than or equal to 15 pounds of volatile organic compounds per day
6 unless specified otherwise in this Section.

7 (c) Rules .0925, .0926, .0927, .0928, .0931, .0932, .0933, and .0958 of this Section apply regardless of the level of
8 emissions of volatile organic compounds unless provisions specified in Paragraph (d)(1) of this Rule are applied.

9 (d) This Section does not apply to:

10 (1) sources that emit less than 800 pounds of volatile organic compounds per calendar month and that are:

11 (A) bench-scale, on-site equipment used exclusively for chemical or physical analysis for quality
12 control purposes, staff instruction, water or wastewater analyses, or non-production
13 environmental compliance assessments;

14 (B) bench-scale experimentation, chemical or physical analyses, training or instruction from not-
15 for-profit, non-production educational laboratories;

16 (C) bench-scale experimentation, chemical or physical analyses, training or instruction from
17 hospitals or health laboratories pursuant to the determination or diagnoses of illness; or

18 (D) research and development laboratory activities, provided the activity produces no commercial
19 product or feedstock material; or

20 (2) emissions of volatile organic compounds during startup or shutdown operations from sources ~~which~~
21 ~~that~~ use incineration or other types of combustion to control emissions of volatile organic compounds
22 whenever the off-gas contains an explosive mixture during the startup or shutdown operation if the
23 exemption is approved by the Director as meeting the requirements of this Subparagraph.

24 (e) The following rules of this Section apply to facilities located statewide:

25 (1) .0925, Petroleum Liquid Storage in Fixed Roof Tanks, for fixed roof tanks at gasoline bulk plants and
26 gasoline bulk terminals;

27 (2) .0926, Bulk Gasoline Plants;

28 (3) .0927, Bulk Gasoline Terminals;

29 (4) .0928, Gasoline Service Stations Stage I;

30 (5) .0932, Gasoline Truck Tanks and Vapor Collection Systems;

31 (6) .0933, Petroleum Liquid Storage in External Floating Roof Tanks, for external floating roof tanks at
32 bulk gasoline plants and bulk gasoline terminals;

33 (7) .0948, VOC Emissions from Transfer Operations;

34 (8) .0949, Storage of Miscellaneous Volatile Organic Compounds; and

35 ~~(9) .0958, Work Practices for Sources of Volatile Organic Compounds.~~

36 (f) Except as provided in Paragraph (e) of this Rule, the rules in this Section apply to facilities subject to Section
37 182(b)(2) of the Clean Air Act with potential to emit 100 or more tons per year of VOC and to facilities with potential to

1 emit less than 100 tons per year of volatile organic compounds in categories for which the United States Environmental
2 Protection Agency has issued Control Technique Guidelines that are located in the following moderate nonattainment
3 areas for the 1997 8-hour ozone standard as designated in 40 CFR ~~81.334~~:81.334 prior to January 2, 2014:

- 4 (1) Cabarrus County;
- 5 (2) Gaston County;
- 6 (3) Lincoln County;
- 7 (4) Mecklenburg County;
- 8 (5) Rowan County;
- 9 (6) Union County; and
- 10 (7) Davidson Township and Coddle Creek Township in Iredell County.

11 These facilities are subject to reasonably available control technology requirements under this Section and shall comply
12 with these requirements in accordance with Rule .0909 of this Section through use of Rule .0951 of this ~~Section~~Section
13 and with Rule .0958 of this Section.

14 (g) If any county or part of a county to which this Section applies is later designated in 40 CFR 81.334 as attainment and
15 becomes a maintenance area for the 1997 8-hour ozone standard, all sources in that county or part of county subject to
16 Paragraph (f) of this Rule that achieved compliance in accordance with Rule .0909 of this Section shall continue to
17 comply with this Section. Facilities with potential to emit less than 100 tons of volatile organic compounds per year for
18 ~~which that~~ the compliance date in Rule .0909 of this Section has not passed before redesignation of the area to attainment
19 for the 1997 ozone standard shall comply in accordance with Paragraph (h) of this Rule.

20 (h) If a violation of the 1997 ambient air quality standard for ozone occurs when the areas listed in Paragraph (f) become
21 ozone maintenance area, no later than 10 days after the violation occurs, the Director shall initiate technical analysis to
22 determine the control measures needed to attain and maintain the 1997 8-hour ambient air quality standard for ozone. By
23 the following May 1, the Director shall implement the specific stationary source control measures contained in this
24 Section that are required as part of the control strategy necessary to bring the area into compliance and to maintain
25 compliance with the 1997 8-hour ambient air quality standard for ozone. The Director shall implement the rules in this
26 Section identified as being necessary by the analysis by notice in the North Carolina Register. The notice shall identify
27 the rules that are to be implemented and shall identify whether the Rules implemented are to apply in the areas listed in
28 Paragraph (f) of this Rule. At least one week before the scheduled publication date of the North Carolina Register
29 containing the Director's notice implementing rules in this Section, the Director shall send written notification to all
30 permitted facilities within the counties in which the Rules of this Section are being implemented notifying them that they
31 are or may be subject to the requirements defined in Rule .0909 of this Section.

32 For Mecklenburg County, "Director" means, for the purpose of notifying permitted facilities in Mecklenburg County, the
33 Director of the Mecklenburg County local air pollution control program.

34 (i) Sources whose emissions of volatile organic compounds ~~that~~ are not subject to limitation under this Section may still
35 be subject to emission limits on volatile organic compounds in Rules .0524, .1110, or .1111 of this Subchapter.

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37 *History Note:* Authority G.S. 143-215.3(a)(1); 143-215.107(a)(5);

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Eff. July 1, 1979;
Amended Eff. November 1, 2016; May 1, 2013; September 1, 2010; January 1, 2009; July 1, 2007;
March 1, 2007; August 1, 2004; July 1, 2000; April 1, 1997; July 1, 1996; July 1, 1995; May 1, 1995;
July 1, 1994.