

1 15A NCAC 02D .1701 is proposed for readoption without any changes as follows:
2

Commented [AR1]: 15A NCAC 02D .1701 is proposed for readoption without any changes.

3 **SECTION .1700 - MUNICIPAL SOLID WASTE LANDFILLS**
4

5 **15A NCAC 02D .1701 DEFINITIONS**

6 For the purpose of this Rule the definitions contained in 40 CFR 60.751 shall apply.
7

8 *History Note: Authority G.S. 143-213; 143-215.3(a)(1);*
9 *Eff. July 1, 1998.*
10
11

1 15A NCAC 02D .1702 is proposed for re adoption with substantive changes as follows:

Commented [AR2]: 15A NCAC 02D .1702 is proposed for re adoption update rule language to expand the date for existing landfills subject to Emissions Guidelines and update federal references.

2
3 **15A NCAC 02D .1702 APPLICABILITY**

4 (a) All existing MSW landfills that meet the following conditions are subject to this Section:

- 5 (1) The landfill has accepted waste at any time since November 8, 1987, or has additional permitted
6 capacity available for future waste deposition and has not been documented as being permanently
7 closed; and
8 (2) The landfill was in operation, or construction, reconstruction, or modification was commenced
9 before ~~May 30, 1991~~, July 17, 2014.

Commented [PB3]: This is the new date for the existing landfills to be subject to the Emissions Guidelines.

10 (b) Physical or operational changes made to an existing MSW landfill solely to comply with an emission standard
11 under this Section are not considered a modification or reconstruction, and do not subject an existing MSW landfill to
12 the requirements of 40 CFR 60, Subpart ~~WWW-XXX~~ or 15A NCAC 2D .0524.

Commented [PB4]: This is the name of the Regulations for new landfills.

13
14 *History Note:* Authority G.S. 143-213; 143-215.3(a)(1); 143-215.107(a)(5),(10);
15 Eff. July 1, 1998.
16
17

1 15A NCAC 02D .1703 is proposed for readoption without substantive changes as follows:

Commented [AR5]: 15A NCAC 02D .1703 is proposed for readoption update rule language to be consistent with federal rules.

2
3 **15A NCAC 02D .1703 EMISSION STANDARDS**

4 (a) Any MSW landfill subject to this Section and meeting the following two conditions shall meet the gas collection
5 and control requirements of Paragraph (b) of this Rule:

6 (1) The landfill has a design capacity greater than or equal to 2.75 million tons and 2.5 million cubic
7 meters. The owner or operator of the landfill may calculate the design capacity in either tons or
8 cubic meters for comparison with the exemption values. Any density conversion shall be
9 documented and submitted along with the initial reporting requirements of Rule .1708(a) of this
10 Section; and

11 (2) The landfill has a non-methane organic compound (NMOC) emission rate of 55 tons per year or
12 more. The NMOC emission rate shall be calculated by following the procedures outlined in 40 CFR
13 60.754.

14 (b) Each owner or operator of a MSW landfill meeting the conditions of Paragraph (a) of this Rule shall:

15 (1) submit to the Director a site-specific design plan for the gas collection and control system that meets
16 the requirements of 40 CFR 60.752(b)(2)(i);

17 (2) install a gas collection system that meets the requirements of 40 CFR 60.752(b)(2)(ii); and

18 (3) control the collected emissions of MSW landfill gas through the use of one or more of the following
19 control devices:

20 (A) An open flare designed and operated in accordance with the parameters established in 40
21 CFR 60.18;

22 (B) A control system designed and operated to reduce NMOC by 98 weight percent; ~~or~~

23 (C) An enclosed combustor designed and operated to reduce the outlet NMOC concentration
24 to 20 parts per million as hexane by volume, on a dry basis at three percent oxygen, or
25 less; or

26 (D) a treatment system that processes the collected gas for subsequent sale or use in accordance
27 with 40 CFR 60.752(b)(2)(iii)(C).

Commented [PB6]: This option was always in WWW but was left out of the State Regulations.

28 (c) The gas collection and control system required under Paragraph (b) of this Rule may be capped or removed
29 provided that all the conditions of 40 CFR 60.752(b)(2)(v)(A), (B) and (C) are met.

30
31 *History Note: Authority G.S. 143-215.3(a)(1); 143-215.107(a)(5),(10);*
32 *Eff. July 1, 1998;*
33 *Amended Eff. July 1, 2000.*
34
35

1 15A NCAC 02D .1704 is proposed for readoption without any changes as follows:
2

Commented [AR7]: 15A NCAC 02D .1704 is proposed for readoption without any changes.

3 **15A NCAC 02D .1704 TEST METHODS AND PROCEDURES**

4 The MSW landfill NMOC emission rate shall be calculated by following the procedures in 40 CFR 60.754, as
5 applicable, in order to determine whether the landfill meets the conditions of Rule .1703(a)(2) of this Section.
6

7 *History Note:* Authority G.S. 143-215.3(a)(1); 143-215.66; 143-215.107(a)(5),(10);
8 Eff. July 1, 1998.
9
10

1 15A NCAC 02D .1705 is proposed for re adoption without substantive changes as follows:
2

Commented [AR8]: 15A NCAC 02D .1705 is proposed for re adoption update rule language to make general formatting changes to be consistent with the APA.

3 **15A NCAC 02D .1705 OPERATIONAL STANDARDS**

4 The owner and operator of a MSW landfill required to install a landfill gas collection and control system to comply
5 with ~~Rule .1703(b) of this Section~~ 15A NCAC 02D .1703(b) shall:

- 6 (1) operate the collection system in accordance with 40 CFR 60.753(a);
- 7 (2) operate the collection system with negative pressure at each wellhead in accordance with 40 CFR
8 60.753(b);
- 9 (3) operate each interior wellhead in the collection system in accordance with 40 CFR 60.753(c);
- 10 (4) operate the collection system so that the methane concentration is less than 500 parts per million
11 above background at the surface of the landfill. To determine if this level is exceeded, the owner
12 and operator shall follow the procedures given in 40 CFR 60.753(d);
- 13 (5) operate the collection system such that all collected gases are vented to a control system designed
14 and operated in compliance with ~~Rule .1703(b)(3) of this Section~~ 15A NCAC 02D .1703(b)(3). In
15 the event that the gas collection and control system is inoperable, measures shall be taken as outlined
16 in 40 CFR 60.753(e);
- 17 (6) operate the control system at all times when the collected gas is routed to the control system;
- 18 (7) take corrective action as specified in 40 CFR 60.755(c) if monitoring demonstrates that the operation
19 standards and requirements of Items (2), (3), and (4) of this Rule are not met. If the required
20 corrective actions are taken, the emissions monitored shall not be considered a violation of the
21 operational standards of this Rule.

22
23 *History Note:* Authority G.S. 143-215.3(a)(1); 143-215.107(a)(5),(10);
24 Eff. July 1, 1998.
25

1 15A NCAC 02D .1706 is proposed for readoption without substantive changes as follows:
2

Commented [AR9]: 15A NCAC 02D .1706 is proposed for readoption update rule language to make general formatting changes to be consistent with the APA.

3 **15A NCAC 02D .1706 COMPLIANCE PROVISIONS**

4 (a) Compliance with ~~Rule .1703(b) of this Section~~ 15A NCAC 02D .1703(b) shall be determined using the provisions
5 of 40 CFR 60.755(a).

6 (b) Compliance with ~~Rule .1705(1) of this Section~~ 15A NCAC 02D .1705(1) shall be determined using the provisions
7 of 40 CFR 60.755(b).

8 (c) Compliance with the surface methane operational standards of ~~Rule .1705(4) of this Section~~ 15A NCAC 02D
9 .1705(4) shall be achieved using the procedures of 40 CFR 60.755(c) and (d).

10 (d) The provisions of this Rule apply at all times, except during periods of start-up, shutdown, or malfunction,
11 provided that the duration of start-up, shutdown, or malfunction shall not exceed five days for collection systems and
12 shall not exceed one hour for treatment or control devices.

13
14 *History Note:* Authority G.S. 143-215.3(a)(1); 143-215.66; 143-215.107(a)(5),(10);
15 Eff. July 1, 1998.
16

1 15A NCAC 02D .1707 is proposed for readoption without substantive changes as follows:

Commented [AR10]: 15A NCAC 02D .1707 is proposed for readoption update rule language to make general formatting changes to be consistent with the APA.

2
3 **15A NCAC 02D .1707 MONITORING PROVISIONS**

4 (a) The owner or operator of a MSW landfill who is required to comply with ~~Rule .1703(b)(2) of this Section 15A~~
5 ~~NCAC 02D .1703(b)(2)~~ for an active gas collection system shall perform the monitoring requirements as outlined in
6 40 CFR 60.756(a).

7 (b) The owner or operator of an MSW landfill seeking to comply with the provisions of ~~Rule .1703(b)(3)(C) of this~~
8 ~~Section 15A NCAC 02D .1703(b)(3)(C)~~ using an enclosed combustor shall perform the monitoring requirements as
9 outlined in 40 CFR 60.756(b).

10 (c) The owner or operator of an MSW landfill seeking to comply with the provisions of ~~Rule .1703(b)(3)(A) of this~~
11 ~~Section 15A NCAC 02D .1703(b)(3)(A)~~ using an open flare shall perform the monitoring requirements as outlined in
12 40 CFR 60.756(c).

13 (d) The owner or operator of an MSW landfill seeking to comply with the provisions of ~~Rule .1703(b)(3) of this~~
14 ~~Section 15A NCAC 02D .1703(b)(3)~~ using a device other than an open flare or an enclosed combustor shall comply
15 with the provisions of 40 CFR 60.756(d).

16 (e) The owner or operator of an MSW landfill seeking to comply with the provisions of ~~Rule .1703(b)(3)(B) of this~~
17 ~~Section 15A NCAC 02D .1703(b)(3)(B)~~ using an active collection system or seeking to monitor alternative parameters
18 to those required by ~~Rule .1704 through .1707 of this Section 15A NCAC 02D .1704 through .1707~~ shall comply with
19 the provisions of 40 CFR 60.756(e).

20 (f) The owner or operator of an MSW landfill seeking to comply with the provisions of ~~Rule .1706(e) of this~~
21 ~~Section 15A NCAC 02D .1706(e)~~ shall do so in accordance with 40 CFR 60.756(f).

22
23 *History Note:* Authority G.S. 143-215.3(a)(1); 143-215.66; 143-215.107(a)(5),(10);
24 Eff. July 1, 1998.
25

1 15A NCAC 02D .1708 is proposed for readoption without substantive changes as follows:

Commented [AR11]: 15A NCAC 02D .1708 is proposed for readoption update rule language to make general formatting changes to be consistent with the APA and to update federal rule citations.

2
3 **15A NCAC 02D .1708 REPORTING REQUIREMENTS**

4 (a) The owner or operator of a MSW landfill subject to this Rule according to ~~Rule .1702 of this Section~~ 15A NCAC
5 02D .1702 shall submit an initial design capacity report to the Director in accordance with the following:

- 6 (1) The initial design capacity report shall fulfill the requirements of the notification of the date
7 construction is commenced as required under 40 CFR 60.7(a)(1) and shall be submitted no later than
8 the earliest of the day from the dates given in 40 CFR 60.757(a)(1)(i) through 40 CFR
9 60.757(a)(1)(iii);
10 (2) The initial design capacity report shall contain the information given in 40 CFR 60.757(a)(2)(i) and
11 40 CFR 60.757(a)(2)(ii); and
12 (3) An amended design capacity report shall be submitted to the Director in accordance with 40 CFR
13 60.757(a)(3) whenever an increase in the design capacity of the landfill results in the design capacity
14 of the landfill to exceed 2.5 million cubic meters and 2.75 million tons.

Commented [PB12]: Citation should be 40 CFR 60.757(a)(10(i) through 40 CFR 60.757(a)(1(ii);

15 (b) The owner or operator of a MSW landfill subject to this Section shall submit a NMOC emission report to the
16 Director initially and annually thereafter, except as provided for in 40 CFR 60.757(b)(1)(ii) or (b)(3). The initial
17 NMOC emission rate report shall be submitted within 90 days of the day waste acceptance commences and may be
18 combined with the initial design capacity report required in Paragraph (a) of this Section. The NMOC emission rate
19 report shall:

- 20 (1) contain an annual or five-year estimate of the NMOC emission rate calculated using the formula
21 and procedures provided in 40 CFR 60.754(a) or (b), as applicable; and
22 (2) include all the data, calculations, sample reports and measurements used to estimate the annual or
23 five-year emissions.

24 (c) The owner or operator of a MSW landfill subject to ~~Rule .1703(b) of this Section~~ 15A NCAC 02D .1703(b) shall
25 submit a collection and control system design plan to the Director within one year of the first report, required under
26 Paragraph (b) of this Rule, in which the emission rate exceeds 55 tons per year, except as provided for in 40 CFR
27 60.757(c)(1) and (c)(2).

28 (d) The owner or operator of a controlled landfill shall submit a closure report to the Director within 30 days of
29 cessation of waste acceptance. If a closure report has been submitted to the Director, no additional waste shall be
30 placed into the landfill without first filing a notification of modification as described under 40 CFR 60.7(a)(4). The
31 Director may request such additional information as may be necessary to verify that permanent closure of the MSW
32 landfill has taken place in accordance with the requirements of 40 CFR 258.60.

33 (e) The owner or operator of a controlled MSW landfill shall submit an equipment removal report 30 days prior to
34 removal or cessation of operation of the control equipment according to ~~Rule .1703(e) of this Section~~ 15A NCAC
35 02D .1703(c) The report shall contain the items listed in 40 CFR 60.757(e)(1). The Director may request such
36 additional information as may be reasonably necessary to verify that all the conditions for removal in 40 CFR
37 60.752(b)(2)(v) have been met.

1 (f) The owner or operator of a MSW landfill seeking to comply with ~~Rule .1703(b)(2) of this Section 15A NCAC 02D~~
2 .1703(b)(2) using an active collection system designed in accordance with 40 CFR 60.752(b)(2)(ii) shall submit annual
3 reports of the recorded information in 40 CFR 60.757(f)(1) through (f)(6). The initial annual report shall be submitted
4 within 180 days of installation and start-up of the collection and control system, and shall include the initial
5 performance test report required under 40 CFR 60.8.

6 (g) The owner or operator of a MSW landfill seeking to comply with ~~Rule .1703(b)(3) of this Section 15A NCAC~~
7 02D .1703(b)(3) using an enclosed combustion device or flare shall report the excess as defined in 40 CFR
8 60.758(c)(1).

9 (h) The owner or operator of a MSW landfill required to comply with ~~Rule .1703(b)(1) of this Section 15A NCAC~~
10 02D .1703(b)(1) shall include the information given in 40 CFR 60.757(g)(1) through (g)(6) with the initial
11 performance test report required under 40 CFR 60.8.

12
13 *History Note:* Authority G.S. 143-215.3(a)(1); 143-215.65; 143-215.66; 143-215.107(a)(5),(10);
14 Eff. July 1, 1998;
15 Amended Eff. July 1, 2000.
16
17

1 15A NCAC 02D .1709 is proposed for readoption without substantive changes as follows:

3 **15A NCAC 02D .1709 RECORDKEEPING REQUIREMENTS**

4 (a) The owner or operator of a MSW landfill subject to this Section and having a maximum design capacity equal to
5 or greater than 2.5 million cubic meters and 2.75 million tons shall keep on-site for at least five years records of the
6 information listed in 40 CFR 60.758(a). Off-site records may be maintained if they are retrievable within four hours.
7 Either paper copy or electronic formats of the records shall be acceptable.

8 (b) The owner or operator of a controlled landfill shall keep up-to-date, readily accessible records for the life of the
9 control equipment of the data listed in 40 CFR ~~60.757(b)(1) through (b)(4)~~ 60.758(b)(1) through (b)(4) as measured
10 during the initial performance test or compliance determination. Records of subsequent tests or monitoring shall be
11 maintained for a minimum of five years. Records of the control device vendor specifications shall be maintained until
12 removal.

13 (c) Each owner or operator of a MSW landfill subject to this Section shall keep for five years up-to-date, readily
14 accessible continuous records of the equipment operating parameters specified to be monitored in ~~Rule .1707 of this~~
15 ~~Section 15A NCAC 02D .1707~~ and records for periods of operation during which the parameter boundaries established
16 during the most recent performance test are exceeded. The parameter boundaries considered in excess of those
17 established during the performance test are defined in 40 CFR ~~60.757(e)(1)(i)~~ 60.758(c)(1)(i) and (ii) and are also
18 required to be reported ~~under-pursuant to Rule .1708(g) of this Section.~~ 15A NCAC 02D .1708(g).

19 (d) The owner or operator of a MSW landfill subject to ~~Rule .1703(b) of this Section~~ 15A NCAC 02D .1703(b) shall
20 keep for the life of the collection system an up-to-date, readily accessible plot map showing existing and planned
21 collectors in the system and provide unique identification location labels for each collector. Records of newly installed
22 collectors shall be maintained in accordance with 40 CFR 60.758(d)(1) and documentation of asbestos-containing or
23 nondegradable waste excluded from collection shall be kept in accordance with 40 CFR 60.758(d)(2).

24 (e) The owner or operator of a MSW landfill subject to ~~Rule .1703(b) of this Section~~ 15A NCAC 02D .1703(b) shall
25 keep for at least five years records of emissions from the collection and control system exceeding the emission
26 standards in accordance with 40 CFR 60.758(e).

27 (f) The owner or operator of MSW landfill subject to ~~Rule .1703(b) of this Section~~ 15A NCAC 02D .1703(b) shall
28 keep up-to-date, readily accessible continuous records of the indication of flow to the control device or the indication
29 of bypass flow or records of monthly inspections of car-seals or lock-and-key configurations used to seal bypass lines,
30 specified ~~under-pursuant to~~ 40 CFR 60.756.

31 (g) The owner or operator of MSW landfill subject to ~~Rule .1703(b) of this Section~~ 15A NCAC 02D .1703(b) who
32 uses a boiler or process heater with a design heat input capacity of 44 megawatts or greater to comply with 40 CFR
33 60.752(b)(2)(iii) shall keep an up-to-date, readily accessible record of all periods of operation of the boiler or process
34 heater.

35 (h) The owner or operator of MSW landfill seeking to comply with the provisions of ~~Rule .1703(b) of this Section~~ 15A
36 ~~NCAC 02D .1703(b)~~ by use of an open flare shall keep up-to-date, readily accessible continuous records of the flame

Commented [AR13]: 15A NCAC 02D .1709 is proposed for readoption update rule language to make general formatting changes to be consistent with the APA and update federal rule citations.

Commented [PB14]: The correct citation is 60 CFR .758(b)(1) through (b)(4).

Commented [PB15]: The correct citation is 40 CFR 60.758(c)(1)(i) and (ii).

1 or flare pilot flame monitoring specified ~~under~~ pursuant to 40 CFR 60 .756(c), and up-to-date, readily accessible
2 records of all periods of operation in which the flame or flare pilot flame in absent.
3

4 *History Note:* Authority G.S. 143-215.3(a)(1); 143-215.65; 143-215.66; 143-215.107(a)(4),(5),(10);
5 Eff. July 1, 1998;
6 Amended Eff. July 1, 2000.
7
8

1 ~~15A NCAC 02D .1710 is proposed for readoption without substantive changes as follows:~~

Commented [AR16]: 15A NCAC 02D .1710 is proposed for readoption update rule language to make general formatting changes to be consistent with the APA.

2
3 **15A NCAC 02D .1710 COMPLIANCE SCHEDULES**

4 (a) Except as provided in Paragraph (b) of this Rule, the schedule for compliance with the requirements of this
5 Section shall meet the following deadlines:

- 6 (1) Each existing MSW landfill subject to this Section according to ~~Rule .1702 of this Section 15A~~
7 ~~NCAC 02D .1702~~ and exceeding the design capacity limitation of ~~Rule .1703(a)(1) of this Section~~
8 ~~15A NCAC 02D .1703(a)(1)~~ shall submit an application for a permit ~~under~~ pursuant to 15A NCAC
9 ~~2Q02Q .0500~~ by July 1, 1999.
- 10 (2) Each existing MSW landfill subject to this Section according to ~~Rule .1702 of this Section 15A~~
11 ~~NCAC 02D .1702~~ and exceeding the design capacity and NMOC emission rate limitations of ~~Rule~~
12 ~~.1703(a)(1) and (2) of this Section shall:~~ 15A NCAC 02D .1703(a)(1) and (2) shall:
- 13 (A) submit a site-specific design plan for the gas collection and control system to the Director
14 by July 1, 1999; and
- 15 (B) plan, award contracts, and install MSW landfill air emission collection and control system
16 capable of meeting the emission standards established ~~under Rule .1703 pursuant to 15A~~
17 ~~NCAC 02D .1703~~ of this Section by January 1, 2001.

18 (b) For each existing MSW landfill subject to this Section as specified in ~~Rule .1702 of this Section 15A NCAC 02D~~
19 ~~.1702~~ and meeting the design capacity condition of ~~Rule .1703(a)(1) of this Section 15A NCAC 02D .1703(a)(1)~~
20 whose NMOC emission rate is less than 55 tons per year on July 1, 1998, shall:

- 21 (1) submit a site-specific design plan for the gas collection and control system to the Director within 12
22 months of first exceeding the NMOC emission rate of 55 tons per year; and
- 23 (2) plan, award contracts, and install MSW landfill air emission collection and control system capable
24 of meeting the emission standards established ~~under Rule .1703 of this Section pursuant to 15A~~
25 ~~NCAC 02D .1703~~ within 30 months of the date when the conditions in ~~Rule .1703(a)(2) of this~~
26 ~~Section 15A NCAC 02D .1703(a)(2)~~ are met.

27
28 *History Note:* Authority G.S. 143-215.3(a)(1); 143-215.107(a)(4),(5);
29 Eff. July 1, 1998.
30
31
32