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ARTICLE 2.0000 AIR POLLUTION CONTROL REGULATIONS AND PROCEDURES

Section 2.1700 Municipal Solid Waste Landfills

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SECTION 2.1700 MUNICIPAL SOLID WASTE LANDFILLS

2.1701 DEFINITIONS

For the purpose of MCAPCO Regulation 2.1701 - "Definitions", the definitions contained in 40 CFR 60.751 shall apply.

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

2.1702 APPLICABILITY

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

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

(b) Physical or operational changes made to an existing MSW landfill solely to comply with an emission standard under MCAPCO Section 2.1700 - "Municipal Solid Waste Landfills", are not considered a modification or reconstruction, and do not subject an existing MSW landfill to the requirements of 40 CFR 60, Subpart WWW or MCAPCO Regulation 2.0524 - "New Source Performance Standards".

History Note: Authority G.S. 143-213; 143-215.3(a)(1); 143-215.107(a)(5), (10);
Eff. July 1, 1998.

2.1703 EMISSION STANDARDS

(a) Any MSW landfill subject to MCAPCO Section - 2.1700 - "Municipal Solid Waste Landfills", and meeting the following two conditions shall meet the gas collection and control requirements of Paragraph (b) of this Regulation:

- (1) The landfill has a design capacity greater than or equal to 2.75 million tons and 2.5 million cubic meters. The owner or operator of the landfill may calculate the design capacity in either tons or cubic meters for comparison with the exemption values. Any density conversion shall be documented and submitted along with the initial reporting requirements of MCAPCO Regulation 2.1708 - "Reporting Requirements" Paragraph (a); and
- (2) The landfill has a non-methane organic compound (NMOC) emission rate of 55 tons per year or more. The NMOC emission rate shall be calculated by following the procedures outlined in 40 CFR 60.754.

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

- (1) submit to the Director a site-specific design plan for the gas collection and control system that meets the requirements of 40 CFR 60.752(b)(2)(i);
- (2) install a gas collection system that meets the requirements of 40 CFR 60.752(b)(2)(ii); and
- (3) control the collected emissions of MSW landfill gas through the use of one or more of the following control devices:
 - (A) An open flare designed and operated in accordance with the parameters established in 40 CFR 60.18;
 - (B) A control system designed and operated to reduce NMOC by 98 weight percent;
or
 - (C) An enclosed combustor designed and operated to reduce the outlet NMOC concentration to 20 parts per million as hexane by volume, on a dry basis at three percent oxygen, or less.

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

History Note: Authority G.S. 143-215.3(a)(1); 143-215.107(a)(5), (10);
Eff. July 1, 1998.
Amended Eff. July 1, 2000

2.1704 TEST METHODS AND PROCEDURES

The MSW landfill NMOC emission rate shall be calculated by following the procedures in 40 CFR 60.754, as applicable, in order to determine whether the landfill meets the conditions of MCAPCO Regulation 1703 - "Emissions Standards" Subparagraph (a)(2).

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

2.1705 OPERATIONAL STANDARDS

The owner and operator of a MSW landfill required to install a landfill gas collection and control system to comply with MCAPCO Regulation 2.1703 - "Emission Standards" Paragraph (b) shall:

- (1) operate the collection system in accordance with 40 CFR 60.753(a);
- (2) operate the collection system with negative pressure at each wellhead in accordance with 40 CFR 60.753(b);
- (3) operate each interior wellhead in the collection system in accordance with 40 CFR 60.753(c);
- (4) operate the collection system so that the methane concentration is less than 500 parts per million above background at the surface of the landfill. To determine if this level is exceeded, the owner and operator shall follow the procedures given in 40 CFR 60.753(d);
- (5) operate the collection system such that all collected gases are vented to a control system designed and operated in compliance with MCAPCO Regulation 2.1703 - "Emissions Standards" Subparagraph (b)(3). In the event that the gas collection and control system is inoperable, measures shall be taken as outlined in 40 CFR 60.753(e);
- (6) operate the control system at all times when the collected gas is routed to the control system;
- (7) take corrective action as specified in 40 CFR 60.755(c) if monitoring demonstrates that the operation standards and requirements of Paragraphs (2), (3), and (4) of this Regulation are not met. If the required corrective actions are taken, the emissions monitored shall not be considered a violation of the operational standards of this Regulation.

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

2.1706 COMPLIANCE PROVISIONS

(a) Compliance with MCAPCO Regulation 2.1703 - "Emissions Standards" Paragraph (b) shall be determined using the provisions of 40 CFR 60.755(a).

(b) Compliance with MCAPCO Regulation 2.1705 - "Operational Standards" Paragraph (1) shall be determined using the provisions of 40 CFR 60.755(b).

(c) Compliance with the surface methane operational standards of MCAPCO Regulation 2.1705 - "Operational Standards" Paragraph (4) shall be achieved using the procedures of 40 CFR 60.755(c) and (d).

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

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

2.1707 MONITORING PROVISIONS

(a) The owner or operator of a MSW landfill who is required to comply with MCAPCO Regulation 2.1703 - "Emissions Standards" Subparagraph (b)(2) for an active gas collection system shall perform the monitoring requirements as outlined in 40 CFR 60.756(a).

(b) The owner or operator of an MSW landfill seeking to comply with the provisions of MCAPCO Regulation 2.1703 - "Emissions Standards" Part (b)(3)(C) using an enclosed combustor shall perform the monitoring requirements as outlined in 40 CFR 60.756(b).

(c) The owner or operator of an MSW landfill seeking to comply with the provisions of MCAPCO Regulation 2.1703 - "Emissions Standards" Part (b)(3)(A) using an open flare shall perform the monitoring requirements as outlined in 40 CFR 60.756(c).

(d) The owner or operator of an MSW landfill seeking to comply with the provisions of MCAPCO Regulation 2.1703 - "Emission Standards" Subparagraph (b)(3) using a device other than an open flare or an enclosed combustor shall comply with the provisions of 40 CFR 60.756(d).

(e) The owner or operator of an MSW landfill seeking to comply with the provisions of MCAPCO Regulation 2.1703 - "Emissions Standards" Part (b)(3)(B) using an active collection system or seeking to monitor alternative parameters to those required by MCAPCO Regulations 2.1704 - "Test Methods and Procedures" through 2.1707 - "Monitoring Provisions" shall comply with the provisions of 40 CFR 60.756(e).

(f) The owner or operator of an MSW landfill seeking to comply with the provisions of MCAPCO Regulation 2.1706 - "Compliance Provisions" Paragraph (c) shall do so in accordance with 40 CFR 60.756(f).

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

2.1708 REPORTING REQUIREMENTS

(a) The owner or operator of a MSW landfill subject to MCAPCO Regulation 2.1702 - “Applicability”, shall submit an initial design capacity report to the Director in accordance with the following:

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

(b) The owner or operator of a MSW landfill subject to MCAPCO Section 2.1700 - “Municipal Solid Waste Landfills”, shall submit a NMOC emission report to the Director initially and annually thereafter, except as provided for in 40 CFR 60.757(b)(1)(ii) or (b)(3). The initial NMOC emission rate report shall be submitted within 90 days of the day waste acceptance commences and may be combined with the initial design capacity report required in Paragraph (a) of this Regulation. The NMOC emission rate report shall:

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

(c) The owner or operator of a MSW landfill subject to MCAPCO 2.1703 - “Emission Standards” Paragraph (b), shall submit a collection and control system design plan to the Director within one year of the first report, required under MCAPCO Regulation 2.1703 - “Emission Standards” Paragraph (b), in which the emission rate exceeds 55 tons per year, except as provided for in 40 CFR 60.757(c)(1) and (2).

(d) The owner or operator of a controlled landfill shall submit a closure report to the Director within 30 days of cessation of waste acceptance. If a closure report has been submitted to the Director, no additional waste shall be placed into the landfill without first filing a notification of modification as described under 40 CFR 60.7(a)(4). The Director may request such additional information as may be necessary to verify that permanent closure of the MSW landfill has taken place in accordance with the requirements of 40 CFR 60.758.

(e) The owner or operator of a controlled MSW landfill shall submit an equipment removal report 30 days prior to removal or cessation of operation of the control equipment according to

MCAPCO Regulation 2.1703 - "Emission Standards" Paragraph (c). The report shall contain the items listed in 40 CFR 60.757(e)(1). The Director may request such additional information as may be reasonably necessary to verify that all the conditions for removal in 40 CFR 60.752(b)(2)(v) have been met.

(f) The owner or operator of a MSW landfill seeking to comply with MCAPCO Regulation 2.1703 - "Emission Standards" Subparagraph (b)(2), using an active collection system designed in accordance with 40 CFR 60.752(b)(2)(ii) shall submit annual reports of the recorded information in 40 CFR 60.757(f)(1) through (f)(6). The initial annual report shall be submitted within 180 days of installation and start-up of the collection and control system, and shall include the initial performance test report required under 40 CFR 60.8.

(g) The owner or operator of a MSW landfill seeking to comply with MCAPCO Regulation 2.1703 - "Emission Standards" Subparagraph (b) (3), using an enclosed combustion device or flare shall report the excess as defined in 40 CFR 60.758(c)(1).

(h) The owner or operator of a MSW landfill required to comply with MCAPCO Regulation 2.1703 - "Emission Standards" Subparagraph (b)(1), shall include the information given in 40 CFR 60.757(g)(1) through (6) with the initial performance test report required under 40 CFR 60.8.

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

2.1709 RECORDKEEPING REQUIREMENTS

- (a) The owner or operator of a MSW landfill subject to MCAPCO Section 2.1700 - “Municipal Solid Waste Landfills”, and having a maximum design capacity equal to 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 information listed in 40 CFR 60.758(a). Off-site records may be maintained if they are retrievable within four hours. Either paper copy or electronic formats of the records shall be acceptable.
- (b) The owner or operator of a controlled landfill shall keep up-to-date, readily accessible records for the life of the control equipment of the data listed in 40 CFR 60.757(b)(1) through (b)(4) as measured during the initial performance test or compliance determination. Records of subsequent tests or monitoring shall be maintained for a minimum of five years. Records of the control device vendor specifications shall be maintained until removal.
- (c) Each owner or operator of a MSW landfill subject to MCAPCO Section 2.1700 - “Municipal Solid Waste Landfills”, shall keep for five years up-to-date, readily accessible continuous records of the equipment operating parameters specified to be monitored in MCAPCO Regulation 2.1707 - “Monitoring Provisions”, and records for periods of operation during which the parameter boundaries established during the most recent performance test are exceeded. The parameter boundaries considered in excess of those established during the performance test are defined in 40 CFR 60.757(c)(1)(i) and (ii) and are also required to be reported under MCAPCO Regulation 2.1708 - “Reporting Requirements” Paragraph (g).
- (d) The owner or operator of a MSW landfill subject to MCAPCO Regulation 2.1703 - “Emission Standards” Paragraph (b), shall keep for the life of the collection system an up-to-date, readily accessible plot map showing existing and planned collectors in the system and provide unique identification location labels for each collector. Records of newly installed collectors shall be maintained in accordance with 40 CFR 60.758(d)(1) and documentation of asbestos-containing or nondegradable waste excluded from collection shall be kept in accordance with 40 CFR 60.758(d)(2).
- (e) The owner or operator of a MSW landfill subject to MCAPCO Regulation 2.1703 - “Emission Standards” Paragraph (b), shall keep for at least five years records of emissions from the collection and control system exceeding the emission standards in accordance with 40 CFR 60.758(e).
- (f) The owner or operator of a MSW landfill subject to MCAPCO Regulation 2.1703 - “Emission Standards” Paragraph (b), shall keep up-to-date, readily accessible continuous records of the indication of flow to the control device or the indication of bypass flow or records of monthly inspections of car-seals or lock-and-key configurations used to seal bypass lines, specified under 40 CFR 60.756.
- (g) The owner or operator of a MSW landfill subject to MCAPCO Regulation 2.1703 - “Emission Standards” Paragraph (b), who uses a boiler or process heater with a design heat input

capacity of 44 megawatts or greater to comply with 40 CFR 60.752(b)(2)(iii) shall keep an up-to-date, readily accessible record of all periods of operation of the boiler or process heater.

(h) The owner or operator of a MSW landfill seeking to comply with the provisions of MCAPCO Regulation 2.1703 - "Emission Standards" Paragraph (b), by use of an open flare shall keep up-to-date, readily accessible continuous records of the flame or flare pilot flame monitoring specified under 40 CFR 60 .756(c), and up-to-date, readily accessible records of all periods of operation in which the flame or flare pilot flame in absent.

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

2.1710 COMPLIANCE SCHEDULES

(a) Except as provided for in Paragraph (b) of this Regulation, the schedule for compliance with the requirements of MCAPCO Section 2.1700 - "Municipal Solid Waste Landfills", shall meet the following deadlines:

- (1) Each existing MSW landfill subject to MCAPCO Section 2.1700 - "Municipal Solid Waste Landfills", according to MCAPCO Regulation 2.1702 - "Applicability", and exceeding the design capacity limitation of MCAPCO Regulation 2.1703 - "Emission Standards" Subparagraph (a)(1), shall submit an application for a permit under MCAPCO Section 1.5500 - "Title V Procedures" by July 1, 1999.
- (2) Each existing MSW landfill subject to MCAPCO Section 2.1700 - "Municipal Solid Waste Landfills", according to MCAPCO Regulation 2.1702 - "Applicability", and exceeding the design capacity and NMOC emission rate limitations of MCAPCO Regulation 2.1703 - "Emission Standards" Subparagraphs (a)(1) and (2) shall:
 - (A) submit a site-specific design plan for the gas collection and control system to the Director by July 1, 1999; and
 - (B) plan, award contracts, and install MSW landfill air emission collection and control system capable of meeting the emission standards established under MCAPCO Regulation 2.1703 - "Emission Standards", by January 1, 2001.

(b) For each existing MSW landfill subject to MCAPCO Section 2.1700 - "Municipal Solid Waste Landfills", as specified in MCAPCO Regulation 2.1702 - "Applicability", and meeting the design capacity condition of MCAPCO Regulation 2.1703 - "Emission Standards" Subparagraph (a)(1), whose NMOC emission rate is less than 55 tons per year on July 1, 1998, shall:

- (1) submit a site-specific design plan for the gas collection and control system to the Director within 12 months of first exceeding the NMOC emission rate of 55 tons per year; and
- (2) plan, award contracts, and install MSW landfill air emission collection and control system capable of meeting the emission standards established under MCAPCO

Regulation 2.1703 - “Emission Standards”, within 30 months of the date when the conditions in MCAPCO Regulation 2.1703 - “Emissions Standards” Subparagraph (a)(2) are met.

History Note: Authority G.S. 143-215.3(a)(1); 143-215.107(a)(4),(5);
Eff. July 1, 1998.