

APPENDIX 34 INCINERATORS

AIR CURTAIN BURNERS

Air curtain burners are covered under Rule **15A NCAC 2D .1904**, Air Curtain Burners. They are not covered under Section **15A NCAC 2D .1200**, Control of Emissions from Incinerators.*

HAZARDOUS WASTE INCINERATORS: 15A NCAC 2D .1203

Permitting

The Division of Air Quality is the sole permitting agency for hazardous waste incinerator emissions and operations. The Division of Waste Management permits only the waste handling aspects of these operations.[†]

*Brock Nicholson to Regional Air Quality Supervisors, *et al.*, "Air Curtain Burners," 19 July 1996 (memorandum).

[†]*Report of Proceedings of Public Hearing on Proposed Amendments to Rules 15A NCAC 2D .1201-.1208, 2Q .0102, .0306, and .0702; and the Repeal of 15A NCAC 2D .0523 and .1209 Incinerator Rule Amendments*, Aug. 20, 1999, p.I-1.

SEWAGE SLUDGE AND SLUDGE INCINERATORS: 15A NCAC 2D .1204

Hydrogen Chloride Emission Standard:15A NCAC 2D .1204(c)(6)

Rule 15A NCAC 2D .1204(c)(6) limits uncontrolled emissions of hydrogen chloride to four pounds per hour. If emissions of hydrogen chloride exceed four pounds per hour, an add-on control device is required. This control device must be capable of reducing hydrogen chloride emissions by at least 90 percent by weight or to no more than 50 parts per million (ppm) by volume, corrected to seven percent oxygen (dry basis). A control device reducing emissions to four pounds per hour is not sufficient unless it also reduces emissions by at least 90 percent or to no more than 50 ppm.

OTHER INCINERATORS: 15A NCAC 2D .1208

Pet Incinerators

Rule 15A NCAC 2D .1208(2)(A) exempts pet incinerators from the air toxic requirements of Rule 15A NCAC 2D .1208. However, pet incinerators may become subject to the air toxic rules when a SIC (standard industrial classification) call or a modification is made for a facility having a pet incinerator. Also new pet incinerators are subject to the air toxic rules. Pet incinerators have to comply with the particulate, sulfur dioxide, visible emissions, and odorous emissions standards. Pet incinerators are not subject to the temperature monitoring and recordkeeping requirements of Rule 15A NCAC 2D .1208(e) unless the Director specifically requires a particular pet incinerator to monitor and keep records for temperature.*

Crematory Incinerators

Crematory incinerators have two options for compliance. First they can comply with all the emission control standards and metal ambient standards in Rule 15A NCAC 2D .1208(b), including demonstrating compliance with the air toxic rules, and operational standard of 1600°F

*Thomas Allen to Ray Stewart, "Incinerators" 1 Dec. 1993 (memorandum).

for one second in Rule **15A NCAC 2D .1208(c)(2)**. If this option is used, the presumption is that the minimum time and temperature are adequate to reduce all the organic emissions to levels below the permit exemption levels in Rule **15A NCAC 2Q .0711**, Emission Rates Requiring a Permit. The second option is to comply as an incinerator whose emissions of all toxic air pollutants are below the permit exemption levels in **15A NCAC 2Q .0711**. To use this option, the owner or operator of the incinerator has to demonstrate, by submitting acceptable stack test data, that emissions of all toxic air pollutants are below the levels in Rule **15A NCAC 2Q .0711**. If this option is used, the incinerator would be subject to the same requirements as a pet incinerator as described above.*

Boilers and Industrial Furnaces Burning Hazardous Waste

Boilers and industrial furnaces burning hazardous waste, as defined under the RCRA rules, are covered under the other incinerator requirements of **15A NCAC 2D .1208**. The incinerator rules are intended to apply only to boilers and industrial furnaces that are covered under the hazardous waste combustion maximum achievable control technology rules. Other boilers and industrial furnaces burning waste are exempted from the incinerators rules.†

Hydrogen Chloride Emission Standard:15A NCAC 2D .1208(b)(6)

Rule **15A NCAC 2D .1208(b)(6)** limits uncontrolled emissions of hydrogen chloride to four pounds per hour. If emissions of hydrogen chloride exceed four pounds per hour, an add-on control device is required. This control device must be capable of reducing hydrogen chloride emissions by at least 90 percent by weight or to no more than 50 parts per million (ppm) by volume. A control device reducing emissions to four pounds per hour is not sufficient unless it also reduces emissions by at least 90 percent or to no more than 50 ppm.

*Thomas Allen to Ray Stewart, "Incinerators," 1 Dec. 1993 (memorandum). Joelle Bryan to Paul Rayhill, 29 Nov. 1994, letter on crematoria complying with incinerator and air toxic rules. Thomas Allen to Paul Rayhill, "Crematory incinerators," 10 Feb. 1994 (letter).

† *Addendum to Report of Proceedings of Public Hearing on Proposed Amendments to 15A NCAC 2D .1201, Incinerator Rule*, Aug. 20, 1999, p. 1. Thomas Allen to Tim Roberts, 26 May 2000 (letter on applicability of incinerator rules to boilers burning waste at Mallinckrodt).

COMPLIANCE WITH AIR TOXIC RULES

All incinerators have to demonstrate compliance with the air toxic rules. This demonstration is made considering only emissions from the incinerators at the facility. If the facility has sources of toxic air pollutants other than incinerators, these sources are ignored for the purposes of this demonstration.* Once a facility-wide air toxics evaluation is required, then the emissions from both the incinerators and other sources at the facility are included in the evaluation. (All existing incinerators should have already demonstrated compliance with the air toxic rules.)

*A. Preston Howard, Jr. to Alan Klimek, "Incinerators and Air Toxic Reviews," 29 Sept. 1992 (memorandum).