Overview of the HMIWI Rules and Changes

Production Floor (Stericycle)



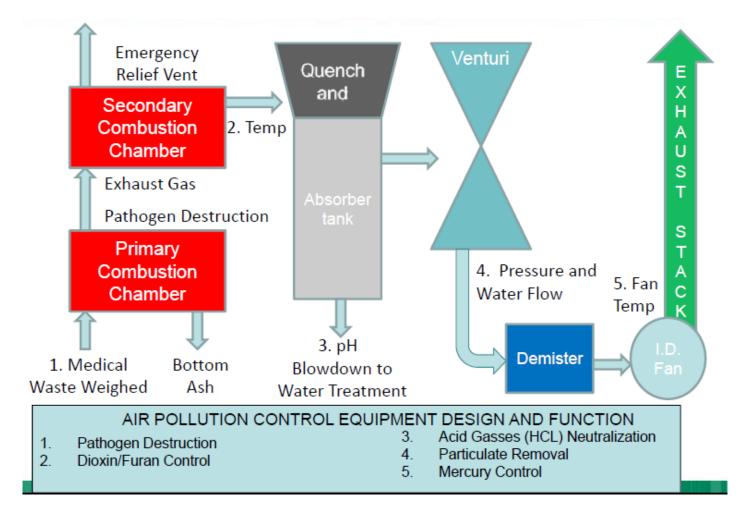
Production Floor (Stericycle)



Barcode reading and weighing



Current Controls @ Haw River, NC



Comparison of Emission Standards (Corrected to 7% Oxygen)

1997 Emission Limits

- Particulate Matter = 34 mg/dscm
- Carbon Monoxide = 40 ppmv
- Dioxin/Furan = 125 ng/dscm
- Hydrogen chloride = 100 ppmv or 93%
- Sulfur dioxide = 55 ppmv
- Nitrogen oxides = 250 ppmv
- Lead = 1.2 mg/dscm
- Cadmium = 0.16 mg/dscm or 65%
- Mercury = 0.55 mg/dscm or 85%

2009 Emission Limits

- Particulate Matter = 25 mg/dscm
- Carbon Monoxide = 11 ppmv
- Dioxin/Furan = 9.3 ng/dscm
- Hydrogen chloride = 6.6 ppmv
- Sulfur dioxide = 9.0 ppmv
- Nitrogen oxides = 140 ppmv
- Lead = 0.036 mg/dscm
- Cadmium = 0.0092 mg/dscm
- Mercury = 0.018 mg/dscm

Comparison of 1997 and 2009 Emission Standards

- Particulate Matter = 26.5% reduction
- Carbon Monoxide = 72.5% reduction
- Dioxin/Furan = 92.6% reduction
- Hydrogen chloride = 93.4% reduction
- Sulfur dioxide = 83.6% reduction
- Nitrogen oxides = 44.0% reduction
- Lead = 97.0% reduction
- Cadmium = 94.2% reduction
- Mercury = 96.7% reduction

Timeline from January 1, 2011 Effective Date to July 1, 2013 Compliance Date

Task	Approximate Time Required
Design Improvements and Upgrades to APC and DAS	6 months
Bench Testing of Changes	2 months
Contracting for Design and Permits	1 month
Preparation of Permit(s)	2 months
DAQ Review and Permit Issuance	6 months
Procurement of Equipment and Construction Services	2 months
Fabrication and Shipment of Equipment	6 months
Equipment Installation	2 months
Equipment Shakedown	1 month
Stack Testing	1 month
Stack Test Lab Results and Report Preparation/Submittal	1 month 8

Changes to Published Rule

- July 1, 2013 Compliance Date
 - 9 months after Option 1 date of October 6, 2012
 - 15 months sooner than Option 2 date of October 6, 2014
- Clarify bypass event prohibition
- Clarify emission standard applicability requirements
- Clarify compliance monitoring guidelines

130A-309.26. Regulation of medical waste.

- (a) As used in this section:
 - (1) "Sharps" means needles, syringes, and scalpel blades.
 - (2) "Treatment" means any process, including steam sterilization, chemical treatment, incineration, and other methods approved by the Commission which changes the character or composition of medical waste so as to render it noninfectious.
- (b) It is the intent of the General Assembly to protect the public health by establishing standards for the safe packaging, storage, treatment, and disposal of medical waste. The Commission shall adopt and the Department shall enforce rules for the packaging, storage, treatment, and disposal of:
 - (1) Medical waste at facilities where medical waste is generated;
 - (2) Medical waste from the point at which the waste is transported from the facility where it was generated;
 - (3) On-site and off-site treatment of medical waste; and
 - (4) The off-site transport, storage, treatment or disposal of medical waste.

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130A-309.26. Regulation of medical waste. (continued)

(c) No later than 1 August 1990, the Commission shall adopt rules necessary to protect the health, safety, and welfare of the public and to carry out the purpose of this section. Such rules shall address, but need not be limited to, the packaging of medical waste, including specific requirements for the safe packaging of sharps and the segregation, storage, treatment, and disposal of medical wastes at the facilities in which such waste is generated. (1989, c. 784, s. 2; 1995 (Reg. Sess., 1996), c. 594, s. 20.)

15A NCAC 13B .1203 GENERAL REQUIREMENTS FOR REGULATED MEDICAL WASTE

- (a) Regulated medical waste shall be treated prior to disposal. Acceptable methods of treatment are as follows:
 - (1) blood and body fluids in individual containers in volumes greater than 20 ml Incineration or sanitary sewage systems, provided the sewage treatment authority is notified;
 - (2) microbiological waste Incineration, steam sterilization, microwave treatment, or chemical treatment;
 - (3) pathological wastes Incineration.
- (b) Other methods of treatment shall require approval by the Division.
- (c) Regulated medical waste treated in accordance with Paragraph (a) of this Rule may be managed in accordance with 15A NCAC 13B .0100 .0700.

15A NCAC 13B .1203 GENERAL REQUIREMENTS FOR REGULATED MEDICAL WASTE (continued)

- d) Crematoriums are not subject to the requirements of Rule .1207(3) of this Section.
- (e) A person who treats Regulated medical waste at the generating facility or within an integrated medical facility is not subject to the storage and record keeping requirements of Rule .1207(1) of this Section.
- (f) Generating facilities and integrated medical facilities in operation on October 1, 1990 that incinerate Regulated medical waste are not subject to the requirements of Rule .1207(3)(a-l) of this Section until January 1, 1995.

History Note: Authority G.S. 130A-309.26;

Eff. October 1, 1990;

Amended Eff. April 1, 1993.