

AIR PERMIT REVIEW, AQ-16

APPLICANT	SITE LOCATION	COUNTY	
Stericycle, Inc.	Haw River	Alamance	
CONTACT		PHONE	
Alan Skrzypczak		336-578-8900 ext. 24	
APPLICATION FOR:	Existing P/N		
Administrative Amendment	05896T14		
APP. No.	REVIEWER	SIGNATURE	DATE
0100010.02B	Kevin Godwin		XX
RECOMMENDATION AND COMMENT		FEE CLASS	
XX		Title V	

1. Purpose of Application:

Stericycle, Inc. operates 2 dual chamber hospital, medical, infectious waste incinerators (HMIWI) at this Haw River site. The incinerators are regulated under 40 CFR 60.30e “Emission Guidelines and Compliance Times for HMIWI.” In summary, through rule 40 CFR 62 Subpart HHH “Federal Plan Requirements for HMIWI Constructed On or Before June 20, 1996” the EPA proposed a Federal plan for HMIWI [FR July 6, 1996]. This action promulgated the Federal plan to implement emission guidelines for HMIWI located in States without approved State plans. The Federal plan is an interim action until the effective date of an approved State plan. To date, North Carolina has not received EPA approval of 15A NCAC 2D .1206 “HMIWI.” Thus, Subpart HHH implements the emissions guidelines and requirements found in 40 CFR 60.30e, Subpart Ce until such time as State regulations 15A NCAC 2D .1206 are approved by EPA.

Existing Title V operating permit No. 05896T14 issued on June 9, 2002 and effective on August 5, 2002, is being reopened to:

- clarify existing monitoring conditions,
- define previously undefined terms and conditions, and
- better organize conditions particularly in regards grouping state-only and federal requirements.

No new equipment or increase in plant-wide emissions is being permitted as a result of this revision.

The changes are outlined in detail below.

- A) Specific Condition 2.1A.1.b.(4) - The condition is modified to clarify that operation above the established maximum or below the established minimum parameters shall constitute a violation of the applicable emission standard as indicated in this permit except during start-up, shutdown, or malfunction.
- B) Specific Condition 2.1A1.b.(4) Table - Values for the site specific operating parameters determined by most recent approved stack test are placed in two tables, one table for each unit. **Note:** Consistent with 40 CFR 60.51c - Definitions, the maximum charge rates placed in the tables are 110% of the lowest 3 hour average charge rates measured during the most recent performance test. Thus, the maximum charge rates are determined as follows:

Unit 1 (1.1)*(1,910 lb/hr) = 2,101 lb/hr

Unit 2 (1.1)*(1,906 lb/hr) = 2,096 lb/hr

These rates will likely change as dictated by required performance testing.

Also, the table heading is changed to read “Operating Scenario Defining Compliance”

- C) Specific Condition 2.1A.1.b.(5) and (6) - Values for proper operating temperatures for the secondary chamber based on most recent stack test are inserted here.

D) Specific Condition 2.1A.1.b.(7)

B. - International garbage as defined in the USDA Airport and Maritime Operations Manual Glossary is considered waste material derived in whole or in part from fruits, vegetables, meats, or other plant or animal material, and other refuse of any character whatsoever that has been associated with any such material aboard any means of conveyance and includes food scraps, table refuse, galley refuse, food wrappers, or packaging materials, and other waste material from stores, food preparation areas, passengers' or crews' quarters, dining rooms, or any other areas on vessels, aircraft, or other means of conveyance.

D. - The term "contraband" is deleted and replaced with more accurate language which identifies the waste material as controlled substances being disposed of for law enforcement agencies.

Chewing tobacco is removed as a waste stream item. The facility had originally anticipated burning waste chewing tobacco under contract from a local commercial tobacco manufacturer, but has since decided against such an agreement.

E) Specific Condition 2.1A.1.b.(8) – The condition referencing the 10 percent opacity visible emission standard is inserted at this point. Following the first sentence stating the visible emissions standard, appropriate monitoring conditions are inserted. The Permittee must observe the emission points once daily for visible emissions above normal. Normal visible emissions must be established within the first 30 days of the effective date of the permit. The Permittee must keep a log on-site of all visible emissions monitoring activities that shall include date and time, results of observations noting the sources that are in non-compliance and any corrective actions taken, and the results of corrective actions. Reporting is not required. The visible emissions monitoring language used here is applied consistently to other Title V facilities in North Carolina. **Note:** According to regional comments, data Stericycle has collected and submitted to date indicate very low visible emissions – in the range of 0 to 5 percent opacity.

F) Specific Condition 2.1A.1.b.(9)A. - Venturi Scrubber monitoring requirements now include values for minimum pressure drop and maximum charging rate as determined based by the most recent stack test.

G) Specific Condition 2.1A.1.d.(4) - This condition is reorganized and combined with existing paragraph (3). Monitoring the packed bed scrubbers outlet temperature and pressure drop is now found in Section 2.2B. as a state-only requirement. This is appropriate since monitoring these parameters is not required by NSPS. 40 CFR 60.58c(b)(2)(xi) and (xii) require recording of outlet temperature of the venturi scrubber and pressure drop across the venturi scrubber.

H) Specific Condition 2.1A.1.e.(1)B.

iv. - The requirement for maintaining records of liquor flow rate to the packed bed scrubbers is removed as this is not a requirement of NSPS. 40 CFR 60.58c(b)(2)(ix) requires records of liquor flow rate to the venturi scrubbers only.

v. - The requirement to record the horsepower or amperage to the wet scrubbers system is removed. 40 CFR 60.56c(f)(1) requires the Permittee to record either charge rate and pressure drop **or** horsepower or amperage. Since Stericycle will record the charge rate and pressure drop, recording of horsepower or amperage is overly redundant.

vi. - The requirement to record pressure drop across the packed bed scrubbers is moved to Section 2.2B, state-only, as this is not applicable to this facility (see G) above).

vii. - The requirement to record temperature at the outlet from the packed bed scrubbers is moved to Section 2.2B state-only, as this is not a requirement of NSPS. 40 CFR 60.58c(b)(2)(xii) requires the Permittee to record temperature at the outlet of the venturi scrubbers only.

viii. - The requirement to record pH at the inlet to the venturi scrubbers is removed as NSPS requires recording pH at the inlet to the packed bed scrubbers only.

I) Specific Condition 2.1A.1.e.(4) – According to the preamble to Subpart Ec, the waste management plan mentioned in 60.55c applies to health care facilities (i.e. waste generators) rather than waste disposal facilities. As such, this condition is revised to read: "Annually, the Permittee shall draft and submit a waste management plan describing what actions are taken to encourage waste minimization and elimination of non-conforming waste from generators."

J) Multiple Emission Source Specific Condition 2.2 A.4. (State-only) - This updated condition now requires more frequent mercury testing than previous. The Permittee shall test one of two incinerators once each

calendar year quarter to demonstrate compliance with 15A NCAC 2D .1100 for mercury emissions. If 4 consecutive performance tests indicate compliance, the testing schedule is relaxed. **Note:** Stericycle has indicated that it has aggressively enacted a program to encourage waste generators throughout North Carolina to minimize their mercury disposal.

2. Application Chronology:

July 29, 2002	received letter from Stericycle requesting changes to Permit No. 05896T14, administrative amendment application No. 0100010.02B assigned to a permit engineer,
August 7, 2002	received letter from Stericycle referencing meeting to discuss recordkeeping and reporting requirements under Permit No. 05896T14,
October 7, 2002	received letter from EPA acknowledging receipt of August 19, 2002 petition submitted on behalf of Group Against Stericycle Pollution (GASP),
November 7, 2002	received regional Comments and Recommendations and attachments regarding administrative amendment,
December 2, 2002	received letter from Stericycle better outlining changes,
January 8, 2003	received GASP petition from EPA via fax,
January 28, 2003	meeting between DAQ (Winston Salem Regional Office included in conference call) and Stericycle further discussing administrative amendment,
April 8, 2003	received comments from Alan Skrzypczak, Stericycle Plant Manager,
April 9, 2003	received comments from Dan March, Winston-Salem Regional Office Compliance Engineer,
April 30, 2003	received additional comments from Alan Skrzypczak,
May 1, 2003	received additional comments from Dan March,
XX	draft permit noticed to the public,

3. New Equipment/Change in Emissions and Regulatory Review

No new equipment is proposed with this permit revision. As described above, the following regulations are applicable to the HMIWIs at the facility:

15A NCAC 2D .1206 "Hospital, Medical, Infectious Waste Incinerators"

15A NCAC 2D .0524 -NSPS "Standards of Performance for Hospital/Medical/Infectious Waste Incinerators"

As these two HMIWIs were constructed prior to June 20, 1996, Subpart Ce "Emission Guidelines and Compliance Times for HMIWIs" sets forth minimum requirements for approval of a State Implementation Plan regulating HMIWIs.

2D .0535 "Excess Emissions Reporting And Malfunctions"

- applies to all units.
- compliance is expected throughout.

4. NSPS, NESHAPS, PSD, and Attainment Status

NSPS

New Source Performance Standards (NSPS) **do** apply.

NESHAPS

National Emission Standards for Hazardous Air Pollutants (NESHAPS) **do not** apply.

Attainment Status

Alamance County is in attainment for all pollutants.

PSD

The facility has a major source threshold of 250 ton/year.

The facility's current Prevention of Significant Deterioration (PSD) status is minor. This permit revision will not change the facility's PSD status.

For Alamance County, the PM₁₀ minor source baseline has been triggered. No increase in emissions is experienced as a result of this permit revision.

5. Facility Wide Air Toxics:

North Carolina's air toxics regulations are not applicable to this permit revision.

6. Facility Compliance Status:

The facility's compliance status is discussed in the Regional P&O dated April 2, 2003. The Winston-Salem Regional Office recommends issuance of P/N 05896T15.

7. Stipulation Review:

No new stipulations are included in this permit revision. Changes to current stipulations are summarized above.

8. Conclusions, Comments, and Recommendations:

All applicable DAQ air requirements should be met. I recommend issuance of the air permit.

9. Miscellaneous Requirements:

PE Seal

Pursuant to 2Q .0112, no PE Seal was required because the permit revision does not involve the determination of applicability and appropriateness or performance of air pollution capture and control systems [15A NCAC 2Q .0112(b)(2) and (3)].

Zoning

The requirement to be accompanied by a zoning consistency determination does not apply to this application because it is not a "new facility or an expansion of an existing facility" as specified in 2Q 0304.

Fee Classification

Based on potential to emit, this facility has been classified as **Title V Major**. The facility's current IMPAQ status is **Title V Major**. This modification **will not** change the fee classification.