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Air Permits Section

July 26, 2010

**Memorandum**

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To: Sheila C. Holman, Director  
Division of Air Quality

From: Ronald E. Slack, Regional Supervisor *RES*  
DAQ, Mooresville Regional Office

Subject: Hearing Officer's Report and Recommendations  
Renewal of Air Permit Number 05896T18  
Stericycle, Inc.  
Haw River, Alamance County, North Carolina, Facility ID 04/01/00010

Enclosed, please find my report (as Hearing Officer) regarding a public hearing held May 25, 2010 to receive public comments on the proposed renewal of the Stericycle, Inc. Haw River Air Permit Number 05896T18. The hearing was held at Alamance Community College, 1247 Jimmie Kerr Road, Graham, North Carolina. Approximately 70 citizens participated in the hearing and 27 people provided oral comments. The comment period remained open until June 30, 2010. Approximately 46 emails and government resolutions were received from May 18, 2010 through July 1, 2010 provided comments on the draft permit. Actual written comments, registration forms, etc. are not being transmitted with this report. These materials will be retained at the MRO as part of the Hearing Officer's record in accordance with the DAQ's retention schedule. Copies are available upon request. Should you have any questions regarding this report, please call me at 704) 235-2229.

DATE: July 26, 2010

MEMORANDUM

TO: Sheila C. Holman, Director

FROM: Ronald Slack *ALL*  
Hearing Officer for Stericycle Inc.

SUBJECT: Recommendation Regarding Issuance of a Title V Air Quality Permit for the operation of two dual chamber medical waste incinerators with controls at Stericycle, Inc., Porter Avenue, Haw River, North Carolina

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This report is organized as follows:

- I. Summary of the Hearing
- II. Recommendations
- III. Discussion of Recommendations
- IV. Discussion of Citizen Concerns
- V. Final Recommendation
- VI. Appendices containing comments and materials received from the citizens

I. SUMMARY

I was appointed to serve as hearing officer by Keith Overcash, Director of the Division of Air Quality for a public hearing to allow for citizen comments with regards to the issuance of a permit renewal for the operation of two dual chamber hospital/medical/infectious waste incinerators (HMIWI) each equipped with a packed bed scrubber, associated quench column in series with a venturi scrubber equipped with a mist eliminator at Stericycle, Inc., (Stericycle). The plant is located at 1168 Porter Avenue, Haw River, Alamance County, North Carolina. The required 30 day public notice was published on April 23<sup>rd</sup>, 2010 in The Greensboro News & Record and the hearing was held on May 25, 2010.

In preparing for the hearing, I reviewed the draft permit, the permit review, recent source test results, inspection reports, previous air permits, annual and semiannual reports from the facility.

Prior to the hearing, I visited the Stericycle plant twice. During the first visit, I observed the operation of the facility and followed waste through the process. The facility explained how they monitor waste going to the incinerators and how they separate waste from dental offices which may contain mercury. The second visit was to clarify operation of the system used when there are disruptions in the control devices.

Gautam Patnaik received approximately 96 emails requesting a hearing. The hearing was conducted at Alamance Community College, 1247 Jimmie Kerr Road, Graham, North Carolina, on Tuesday, May 25, 2010. The hearing started at 6 PM and lasted until approximately 7:30 PM. There were approximately 70 attendees and, of those, 27 spoke. Three minutes were allowed for each presentation. John Folks of the Alamance County Environmental Health Department and Willie Mae Currie, a member of the North Carolina Senior Tarheel Legislature were present at the hearing. Ms. Currie offered comments. After the hearing, I have received comments via e-mail from 46 individuals, some of whom also spoke at the hearing.

The speakers and emails addressed (in written as well as verbal) several areas of concern:

- Deny permit if it is issued under current rules.
- Restrict bypass events and make them violations.
- Require Stericycle to notify the public when there is a bypass event.
- Adopt new EPA regulations for HMIWI early.
- Health concerns from the emissions.
- Conduct more source testing.
- Change the opacity limit to 5 percent.
- Require Stericycle to divert waste to alternate technology such as Autoclaves.
- Phase out burning of pathological waste within 2 years.
- Prove that burning of pharmaceutical waste does not affect human health.
- Prohibit burning of "non-hazardous" trace chemotherapy waste.
- Prohibit burning of international garbage.
- Prohibit burning of plastics and burning of paper.
- Prohibit burning of paper.
- Restrict burning of non-hazardous pharmaceutical waste and develop alternatives.
- Require CEMs for Lead, Mercury and Dioxins.
- Change the CO permit conditions from a 3-hour rolling average to a 1-hour rolling average.
- Continuously monitor the pressure drop across the venture scrubbers and the charging rate to the incinerators.
- Annually review all malfunctions shutdowns, and operating problems to determine if there are violations.
- Conduct unannounced inspections during normal operating hours including nighttime operation.
- Invoice Stericycle millions for the air pollution they emit.
- Waste reduction and segregation.

The end of the comment period was June 30, 2010.

## II. RECOMMENDATIONS

A. I recommend that Stericycle, Inc. be issued the Title V Air Quality Permit with the following changes and conditions:

1. Include a stipulation specifying that the facility meet the requirements of 40 CFR 60 Subpart Ce by October 6, 2014 or earlier.
2. In the permit review, calculate what would be the typical annual limits of various pollutants subject to the October 6, 2009 revisions to 40 CFR 60 Subpart Ce, assuming stack air flows

were based on flows observed in the latest source tests results. This provides the public with an approximate emission limit and will help avoid confusion expressed during the hearing.

3. Include the packed bed scrubber liquid flow rate as a required monitoring parameter. The facility monitors this periodically. This flow rate monitoring requirement was removed in an earlier permit because it was not specifically required by 40 CFR 60 Subpart Ec. However, when this flow is interrupted, it can affect operation of the incinerators.
4. Condition 2.1-A. 1.d.(1)(3). The permit requirements for the oxygen and carbon monoxide continuous emission monitors do not have sufficient information to establish proper operating procedures. The permit engineer should meet with the DAQ Stationary Source Compliance Branch to establish specific permit conditions that meet requirements in 40 CFR 60 Subpart Ec and performance specifications in 40 CFR Part 60, Appendix B.
5. Additional Recommended changes to the Draft Permit.
  - a. Match equipment description in with Section 1 with Condition 2.1-A.
  - b. Separate equipment description in 2.1-A into two sources.
  - c. Condition 2.1 A.d.(3) Change to read “primary chamber and secondary chamber of each unit” and to read “pH for each wet scrubber system.”
  - d. Condition 2.1 A.e.(1)B.i Include Table 1.a. of 40 CFR 60 Subpart Ce for a large facility.
  - e. Clearly specify testing requirements for visible emissions, particulate matter (PM), carbon monoxide (CO), hydrogen chloride (HCl), and toxics in a table.
  - f. The facility’s diesel-fired emergency generator (Emission Source ID No. EG01) is subject to the Area Source provisions of 40 CFR 63 Subpart ZZZZ, which is the NESHAP standard for Reciprocating Internal Combustion Engines (RICE) promulgated on March 3, 2010.

#### B. Additional Non-Permit Recommendations for North Carolina

Changes in 40 CFR 60 Subpart Ce and Subpart Ec are expected to result in the closure of several HMIWI throughout the country. The Division of Solid Waste rules allow for alternate methods of treatment of pathological waste that some waste generators are reluctant to use. Consequently, in the interest of reducing unnecessary incinerated waste, I recommend that the Division of Environmental Assistance and Outreach along with the Division of Solid Waste, and the Division of Air Quality, host a meeting with, or request to speak at a scheduled meeting of the North Carolina Hospital Association and/or other waste generators to discuss implications of the October 6, 2009 revisions to 40 CFR 60 Subpart Ce and Subpart Ec and to discuss how to minimize waste sent to incineration. Waste treatment facilities such as Stericycle should be invited to attend and to offer their assistance to those waste generators. The waste management plan requirements in 60.55c of the October 6, 2009 revisions to 40 CFR 60 Subpart Ec, effective not later than October 6, 2014, may require a culture shift to implement.

### III. DISCUSSION OF RECOMMENDATIONS

- 1 A. While Stericycle is aware that they will be subject to the October 6, 2009 revisions to 40 CFR 60 Subpart Ce and Subpart Ec NLT October 6, 2014, they could be subject earlier if 15A NCAC 2D. 1206 is changed.
- 2 B. Because emission limits are listed as milligrams per dry standard cubic meter in 40 CFR 60 Subpart Ce Tables 1A and 1B, the pound/hour or pound/year limits cannot be easily listed in the permit because the air flow from the incinerator stacks can vary. Calculations in the permit review can provide some approximate numbers for the public to understand.
- 3 C. The facility currently monitors the liquid flow rates in the packed bed scrubbers. This flow rate monitoring requirement was removed in an earlier permit because it was not specifically required by 40 CFR 60 Subpart Ec. However, when this flow is interrupted, it can result in activation of the bypass system.
- 4 D. Additional recommended changes to the Draft Permit are mainly housekeeping changes to be more consistent with other Title V facilities.
- 5 E. Bill Patrakis of the North Carolina Division of Solid Waste explained the difficulty he has had in getting medical facilities to consider better waste segregation and to consider alternatives to incineration. The one hospital that accepted his recommendations reduced HMIWI generation and saved considerable money.

#### IV. Discussion of Citizen Concerns

- A. **Comment: Deny renewal of the permit.** Response. The purpose of the hearing was to comment on the draft permit renewal for Stericycle, Inc., and to recommend appropriate changes to the renewal.
- B. **Comment: Make any bypass event be considered a violation.** Response: A bypass stack means a device used for discharging combustion gases to avoid severe damage to the air pollution control device or other equipment. Under the current regulations, the use of the bypass stack is allowed during periods of start-ups, shutdowns, and malfunctions but not allowed during normal operating conditions. Therefore some bypass events are not violations. Because the facility has not installed the engineering capabilities to operate without a bypass, I do not recommend any changes. Not later than October 6, 2014, Stericycle must have engineered systems in place to minimize use of the bypass stack. The October 6, 2009 revisions to 40 CFR 60 Subpart Ec (applicable to existing sources not later than October 6, 2014) consider any use of the bypass stack a violation of the PM, dioxin/furan, HCl, lead (Pb), cadmium (Cd), and mercury (Hg) emissions limits. The allowance for bypass use during startup, shutdown and malfunction was eliminated.
- C. **Comment: Require Stericycle to notify the public when there is a bypass event.** Response: Based on reports for calendar year 2009, ES01 operated in bypass mode for a total of 0.24 hours while ES02 operated in bypass mode for a total of 0.17 hours. According to plant personnel, during previous years the facility operated in bypass mode for about 0.06% of the time (approximately 4.5 hours) during an estimated 7500 annual hours of operation. Consequently these periods of incinerator operation with the bypass damper open would last probably no longer than 1 hour at a time. Many of these bypass events last only a few minutes and be over before any notifications can practically be made. 15A NCAC 2D

.0535 requires Stericycle to report excess emissions that last more than 4 hours to the regional office by 9 A.M of the next business day. Consequently, if a bypass event lasts longer than 4 hours it should be reported and the public can contact the Winston Salem Regional Office of the Division of Air Quality about the event. Additionally, the draft permit requires any use of bypass stack to be reported in semiannual reports that are available in the Winston Salem Regional Office of the Division of Air Quality files.

- D. Comment: Include a requirement for the facility to meet new EPA regulations for HMIWI by October 2012. Additionally, at least 4 municipalities requested early adaption.** Response. Early adoption of rules is beyond the scope of this hearing. This is a decision for the Environmental Management Commission.
- E. Comment: Stericycle emissions affect the public health.** Response: The draft permit includes emission standards from 15A NCAC 02D .1100 – “Control of Toxic Air Pollutants”) and 40 CFR 60 Subpart Ce – “Emission Guidelines for and Compliance Times for Hospital/Medical/Infectious Waste Incinerators. Stericycle has demonstrated compliance with both standards. The North Carolina Ambient Air Levels (AALs) listed in 15A NCAC 2D .1100 for the pollutants of concern were established to protect public health. Based on the initial modeling, it appears that the public health is being protected. For pollutants with multiple emission standards, (ie. mercury, dioxins etc., which have standards in both 15A NCAC 2D .1100 as well as 40 CFR 60 Subpart Ce), the current standard that is the most stringent applies. Periodic source tests verify compliance with those standards when the facility is operating in accordance with their permit. A review of testing conducted during the last four years show pollutant emissions have been consistently below permit limits. Emissions of dioxins, a concern of several commenters, actually met the requirements of the October 6, 2009 revisions to 40 CFR 60 Subpart Ce (applicable to existing sources not later than October 6, 2014), Table 2b. for the last two tests.
- F. Comment: Conduct more source testing.** Response. NSPS Subpart Ec requires testing every 3 years for PM, CO, and HCl, and annually for visible emissions. If a violation is determined by source testing, testing must be conducted annually for a minimum of 3 years. For this permit, incinerators are tested for PM and HCl every two years. Carbon monoxide, while required to be tested every 3 years, has historically also been tested every 2 years. Visible emissions are tested annually. Additionally, the Division of Air Quality requires testing for lead, arsenic, beryllium, cadmium, chlorine, chromium VI, hexachlorodibenzo-p-dioxin, tetrachlorodibenzo-p-dioxin, hydrogen chloride, hydrogen fluoride, manganese, and nickel every 24 to 26 months on an incinerator selected by DAQ. Consequently, significantly more testing is required in this permit than is required in the October 6, 2009 revisions to 40 CFR 60 Subpart Ec.
- G. Comment: Require a lower opacity of 5 percent.** Response. Stericycle must currently comply with a 10% opacity visible emissions limit in 15ANCAC 2D. 1206. For 40 CFR 60 Subpart Ec regulations effective NLT October 2014, this is reduced to 6%. Since the facility must make extensive control device changes to meet the new limits, permitted opacity limits should only change when the facility is subject to the new regulations.
- H. Comment: Require Stericycle to either stop using incinerators and use alternate technology such as Autoclaves, or divert more of their waste to Autoclaves.** Response. Requiring Stericycle to use alternate technology is beyond the scope of this hearing. North

Carolina and EPA regulations allow for HMIWI to treat appropriate waste. Stericycle, in their written comments after the hearing, stated that “while other technologies, such as autoclaves, exist to treat most medical wastes, there are some wastes that cannot be treated effectively or safely by steam sterilization. Pathological waste, such as limbs and tissues, are too dense for the steam to penetrate. Trace-chemotherapeutic wastes and some RCRA non-hazardous pharmaceuticals are not sufficiently affected for treatment by steam sterilization and could volatilize (turn to steam) potentially creating a more dangerous chemical exposure to the environment. Ultimately these compounds could create a potential impact to clean water through sewer or landfill disposal of insufficiently treated waste. Additionally for purposes of diversion control of potentially abused pharmaceuticals, (controlled substances and other prescription and over the counter drugs), incineration is the preferred method of complete destruction.” Additionally, one of the hearing speakers stated that the Stericycle autoclave facility in Concord, North Carolina was only operating at 33 percent capacity and could take waste from Haw River. Stericycle responded that the Concord autoclave does have some capacity but that it currently operates at 79% of its available capacity. While there is disagreement with Stericycle’s contention that not all pathological waste can be treated using alternate technology, 40 CFR 60 Subpart Ce and Subpart Ec allow for incineration of pathological waste. It is interesting to note that the last HMIWI in California closed in 2001. According to Stericycle, California, like many of the states surrounding North Carolina who do not have commercial HMIWI, now sends much, if not all of their pharmaceutical and chemotherapeutic waste to other states for incineration. Additionally in their written comments Stericycle reported that approximately 90% of the waste they handle is treated in autoclaves or other approved alternative technologies.

- I. Comment: Phase out burning of pathological waste within 2 years.** Response: This is beyond the scope of this hearing. EPA regulations specifically allow for burning of pathological waste.
- J. Comment: DAQ and Stericycle should present proof to the public that burning pharmaceuticals is not deleterious to human health and the environment.** Response: Providing proof that incineration of pharmaceuticals is not deleterious to human health and the environment is beyond the scope of this hearing. The draft permit allows for incineration of non-hazardous pharmaceuticals. Hospital and medical office red-bag waste is by definition bio-hazardous infectious waste. Treatments such as autoclaving, or microwaving may render the infectious waste harmless but often has no impact on the non-hazardous pharmaceutical waste identified by EPA. Hazardous chemical/pharmaceutical waste must be properly stored, manifested, transported, and incinerated following specific regulations and using federally permitted transporters and incineration firms. “Cradle to grave” tracking insures that spills or releases anywhere en route are handled in an environmentally responsible manner. RCRA-permitted incineration facilities, known as TSDFs (Treatment, Storage, and Disposal Facilities) burn these chemicals at temperatures high enough to break down the chemicals into their individual components, such as carbon dioxide and water. Stericycle is not permitted to incinerate hazardous pharmaceuticals.
- K. Comment: Prohibit burning of non-hazardous trace chemotherapy waste.** Response: This comment was mainly concerned with the volume of plastics included in the chemotherapy waste which may result in increased dioxin emissions. The permit defined non-hazardous materials as those substances that are not regulated under 15A NCAC 13A .0106 which refers to 40 CFR 261 “Identification and Listing of Hazardous Waste.” A

container that holds the chemotherapy agent arsenic trioxide, which is a P-listed hazardous waste, is not "RCRA empty" unless all the contents have been removed and it is triple rinsed. Since this is not feasible in a healthcare facility, all containers that have held arsenic trioxide should be discarded as hazardous waste, regardless of contents.

The other eight chemotherapy drugs regulated by EPA as hazardous waste are U-listed. If all the contents have been removed that can be removed through normal means (such as drawing liquid out with a syringe), and there is no more than 3% by weight remaining, the container is considered "RCRA empty" and can be disposed as trace chemotherapy waste in the yellow or white container. If either of these criteria is not met, it should be disposed of as hazardous waste. For a container that has held a P-listed hazardous waste to be "RCRA empty" and therefore not regulated as hazardous waste, all the contents must be removed and it must be triple rinsed. For a container that has held a U-listed waste or a characteristic waste to be "RCRA empty," all the contents must be removed that can be removed through normal means, including drawing out with a syringe, and there is no more than 3% by weight remaining. If both of these conditions are met, the container is not regulated as a hazardous waste.

- L. Comment: Stop burning international garbage.** Response. USDA regulates garbage entering the US to prevent the introduction and dissemination of pests and diseases of plants, livestock, and poultry. USDA regulations now allow for regulated garbage to be sterilized or incinerated. Since incineration is authorized, international garbage can be incinerated at Stericycle. Recently, the Stericycle facility in Concord, North Carolina submitted a solid waste permit application for their autoclave in Concord, NC requesting a modification to allow the facility to treat international garbage. When issued, this provides another facility for the Stericycle Corporation to treat international garbage.
- M. Comment: Prohibit burning of plastics to reduce dioxins.** Response: Plastic containers, IV bags, tubing, as well as other plastics containing pathological waste can be incinerated at Stericycle. The facility controls dioxin emissions sufficiently to meet the requirements of the October 6, 2009 revisions to 40 CFR 60 Subpart Ce (applicable to existing sources not later than October 6, 2014), Table 2b. for the last two tests. While segregation of plastics at the waste generator is recommended, not all plastics can be removed from the waste stream. Stericycle does not segregate materials from the regulated waste stream received from generators. It is up to the generators to separate plastic. Stericycle has a limited program to train major customers and the company requires waste segregation by the generator prior to waste leaving the generator site. Stericycle prohibits the opening of contaminated sharps containers and regulated red bag waste to prevent percutaneous injuries in accordance with 29 CFR 1910.1030 Bloodborne pathogens, specifically §1910.1030(d). The Economic Impacts of Revised MACT Standards for Hospital/Medical/Infectious Waste incinerators, July 2009, Table 4-2 indicates that the estimated baseline price Stericycle, Inc. Haw River receives is \$504/ton, but the prices increases to \$974 per ton after the new MACT Standards are in effect. Eventually, by 2014, price demand should result in even better waste segregation.
- N. Comment: Prohibit burning of paper so that it can be recycled.** Response: While segregation of paper at the waste generator is recommended, it is not required. Consequently, Stericycle can burn paper.

- O. Comment: Require CEMs for Lead, Mercury and Dioxins.** Response: EPA analyzed the cost of CEMS for various pollutants to the costs of incinerators, emission controls and parameter monitors and concluded the cost of CEMS were unreasonably high relative to the cost of incinerators and emission controls needed for compliance. Consequently, 40 CFR 60 Subpart Ec allows facilities to conduct testing and use parametric monitoring to demonstrate compliance instead of using CEMs.
- P. Comment: Change the CO permit conditions from a 3-hour rolling average to a 1-hour rolling average. The concern was that the CO compliance limit calculated as 40 ppmv using a 3-hour rolling average is too long and allows higher CO emissions and therefore needs to be more stringent. The 3-hour rolling average at 40 ppmv authorizes more frequent and longer duration CO spikes above 40 ppmv than a 1-hour rolling average would.** Response: Test results show that the facility emitted CO at a rate between 0.03 ppmv to 2.3 ppmv during the last four source tests. These results are well below the current standard of 40 ppmv. Obviously requiring a 1-hour rolling average is more stringent, but unnecessary based on the test results. One of my recommendations is to have the permit engineer meet with DAQ Stationary Source Compliance Branch to establish appropriate operational procedures for Stericycle's continuous emission monitors.
- Q. Comment: Require an automatic review of carbon monoxide spikes from CEMs for potential violations.** Response: Data from the Stericycle CEMs will be reviewed at the Raleigh Central Office. If a rolling average emission result exceeds the permit limit, the facility will be in violation.
- R. Comment: Require Stericycle to continuously monitor the pressure drop across the venture scrubbers and the charging rate to the incinerators.** Response: This is a requirement currently in the draft permit.
- S. Comment: Annually review all bypass events, malfunctions, shutdowns, and operating problems to determine if Stericycle is violating their permit.** Response: The facility provides an annual compliance certification (ACC) that includes any violations of their permit as well as deviations of their permit conditions. These reports are thoroughly reviewed. Equipment calibrations and other paperwork based on the ACC are reviewed during facility inspections. Semiannual reports list times of bypass events and other information used to assess compliance. Inspections combined with reports and source tests provide sufficient information to evaluate if Stericycle is violating their permit.
- T. Comment: Conduct unannounced inspections during normal operating hours including nighttime operation.** Response: Daylight inspections are sufficient to determine compliance. Two of the last three facility inspections were conducted during the same time source tests were being conducted. According to the principal inspector, none of these inspections were announced to the facility. Two inspectors were at the facility for 3 days during the 2010 inspection due to the number of source tests. Stericycle records all of the operating data. Data for nighttime operations can be thoroughly reviewed during the inspection. The inspections conducted at the facility are well-written and thorough and data-logged information is checked.
- U. Comment: Charge Stericycle millions of dollars for air and other environmental pollution.** Response: Annual Title V billing fees include a fee of \$25/ton of emissions.

**V. Comment: Improve waste reduction and segregation at the waste generator.**

Response: EPA amended the waste management plan provisions in the October 6, 2009 revisions to 40 CFR 60 Subpart Ec to promote greater waste segregation (*e.g.*, plastics, metals, PCB containing wastes, pharmaceuticals and recyclables). This amendment also requires Stericycle to train their waste generator clients and to make sure their clients prepare their own plans. The current waste management plan in the draft permit does not include all the requirements in the October 6, 2009 revisions, but does require some segregation at the waste generator facilities. I do not recommend any changes to what is stated in the draft permit. Additionally, according to Stericycle, this requirement is currently under litigation with EPA.

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V. Final Recommendation

It is this Hearing Officer's recommendation that the permit be issued after incorporating the recommendations listed. Many of the requests, suggestions, and recommendations from speakers at the public hearing and from written comments received during the comment period were outside the scope of DAQ's authority under the North Carolina Administrative Code. It is also hoped that a concerted effort be made to reduce unnecessary incineration through better waste management.

Ronald E. Slack  
Ronald E. Slack, Reg. Air Quality Supervisor

7/26/2010  
Date

- C: Sheila Holman (list of emails without attachments)  
Don Van der Vaart (list of emails without attachments)  
Margaret Love (list of emails without attachments)

VII. Appendices containing comments and materials received from the citizens

1. Three ring binder containing emails and written comments from the hearing.
2. Three ring binder containing the registration sheets with the speakers sheets in front.

## Appendix A

**REQUESTS FOR HEARING – STERICYCLE, INC.**  
**MAY 25, 2010**

ORDER	SPEAKER	AFFILIATION	ISSUE
1	Rosalie Samson	Citizen	Health
2	Lyn Roberts	Citizen	Health
3	Lauren Russell	Citizen	Health
4	Peter Mooney	Citizen	Autoclave
5	Dean Naujoks	Yadkin Riverkeeper	Open Government
6	Catherine Vaughn	Citizen	Health
7	Gabriel Pelli	Citizen	Autoclave
8	Beverly Wiggins	Citizen	Autoclave
9	James Lovejoy	Citizen	Water Quality
10	William Brown	Citizen	
11	Carole Troxler	Citizen	
12	Mary Lucas	Citizen	Autoclave
13	Catherine Miller	Citizen	Health
14	Tom Lux	Citizen	Health
15	Jill Rosenblum	Citizen	
16	Katherine Seaton	Citizen	Autoclave
17	Debbie Tunnell	Citizen	
18	Efrain Ramirez	Citizen	Attachment from Haw Riverkeeper, Air and Water Quality
19	MaryJane Copeland	Citizen	Attachment from Haw Riverkeeper, Air and Water Quality
20	Monica Reckless	Citizen	Health, Air and Water Quality
21	Tamera	Citizen	Water Quality
22	Steve Wing	Associate Professor of Epidemiology, UNC	
23	Tom Vanderbeck	Chatham County Commissioner	
24	Robert Russell	Citizen	Health
25	Mike Holland, PhD	CERES Director	Health
26	Susan Attermeir, PhD	Citizen	
27	Cathy Milner Markatos	Citizen	Autoclave
28	Patricia Logos	Citizen	Air Quality
29	Susan T. Draughon	Citizen	Health
30	Omega Wilson	President/WERA	Environmental/Health
31	Judith Butt, PhD	Citizen	Environmental/Health
32	Diane Vannais	Citizen	Heavy Metal Waste
33	Beth Kricker	Citizen	Health
34	Patrick Inman	Citizen	Health/Environmental
35	Laura Wilson	Citizen	Bringing in other states medical waste/Health
36	Heather Fisher	Citizen	Health
37	Carol A. Prokop	Citizen	Health/Autoclave
38	Whitney & Barbara Irwin	Citizens	Autoclave
39	Dr. Laura Wimbish-Vanderbeck	Citizen	Health
40	J.L. Emery, Jr.	Citizen	Health
41	Gary D. Simpson	Haw River Assembly and CCEC Member	Health/Air Quality
42	Jude Lobe	Citizen	Health/Autoclave
43	Cindy Champion	Citizen	
44	Lori Hawkins	Citizen	Health
45	Zika Wolfe	Citizen	
46	Kim Calhoun	Citizen	Environment
47	Bert Bowe	Citizen	Health
48	Saundra Bock	Citizen	Attachment from Haw Riverkeeper
49	Sheila Flannery	Citizen	Health, Air and Water Quality
50	Sue Schwartz	Citizen	Health
51	Barbara Hatcher	Citizen	
52	Pam Rademacher	Citizen	Air Quality
53	Susan Helmer	Citizen	Health/Environment
54	Beth C. Burke	Citizen	
55	Deborah	Citizen	Health/Environment
56	Alma Vinje-Harrewijn	Citizen	
57	Joanne Dahill	Citizen	Health/Environment
58	Sylvia and Donald	Citizen	

	Stanat		
59	Arianna Bara	Citizen	Health/Environment
60	Jesse Kaufmann	Citizen	Health/Environment
61	Laura Herbst	Citizen	Environmental
62	Stephanie Waters	Citizen	Health
63	Wanda Sundermann	Citizen	
64	Rebecca S. Batts	Citizen	Health
65	Pamela Groben, MD	Citizen	Autoclave/Environment
66	Erin Kimrey	Citizen	Autoclave/Air Quality
67	Cindy Atkins	Citizen	Autoclave/Health
68	Barbara Culbertson	Citizen	
69	Lucinda and Jeffrey Kahler	Citizens	Environment/Health
70	Liane Salgado	Citizen	Environment/Health
71	Gerald L. Featherstone	Citizen	Heavy Metal/Autoclave/Environment
72	Anne Brown	Citizen	
73	Wendy Smith	Town of Chapel Hill Stormwater Management Division	Environment/Health
74	Elaine Chiosso	Haw Riverkeeper	Attachment from Haw Riverkeeper, Water Quality
75	Anne Cassebaum	Citizen	Environment
76	Judith Brooks	Citizen	Environment/Health
77	Tasseli McKay	Citizen	Health
78	Brian Powell	Citizen	Air Quality
79	Jennifer Van Vickle	Citizen	Environment
80	Elizabeth Hoffman	Citizen	Health
81	John D. Runkle	NC WARN	Air Quality
82	Heather Leigh Wallace	Citizen	
83	Martha Hamblin	Citizen	Environment
84	Marcia E. Herman-Giddens, PA	Citizen	Air and Water Quality
85	John S. Powell	Citizen	Environment
86	Melissa Rooney, PhD	Citizen	Attachment from Durham News/Health
87	Catherine Elkes	Citizen	Autoclave/Environment
88	Sue Dayton	Blue Ridge Environmental Defense League	Environment/Health
89	Beverly Kerr	Citizen	Environment/Health/Autoclave
90	Jill Ridky, PhD	Citizen	Environment/Health
91	Pat and Bob Coleman	Citizens	
92	Susan Sewell	Citizen	Attachment from Durham News/Autoclave
93	Linda Kolstee-Ozkaynak	Citizen	Health
94	Carolyn Cole	Citizen	
95	John Bell	Citizen	
96	Nancy Tilly	Citizen	Environment

Ceres – Coalition for Environmental Responsibility and Education through Sustainability

WERA – West End Revitalization Association

CCEC – Chatham Citizens for Effective Communities

NC WARN – North Carolina Waste Awareness and Reduction Network

## APPENDIX B

PUBLIC HEARING FOR STERICYCLE, INC. – Alamance Community College, 1247 Jimmie Kerr Road, Graham, NC

Order	Speaker	Affiliation	Issue 1	Issue 2	Issue 3
1	Kim Gugino	Private Citizen	Deny Permit	Water Pollution	
2	Mike Holland	Ceres	Use Autoclave	Use CEMs	
3	Alan Burns	CHE Co-chair	Adapt early		
4	Catherine Mitchell	CHE Co-chair	Adapt early		
5	Selin Hoboy	Stericycle Employee	Stericycle meets standards		
6	Beverly Kerr	Private Citizen	Adapt early	Test more	
7	Pat Hill	BREDL	Groundwater pollution from flyash		
8	David Mickey	BREDL	Adapt early	No plastics	No paper
9	Willie Mae Currie	NC Sr. Tarheel Legislature	Waste is from other states		
10	Carolyn Cole	BREDL	15 Comments	No plastics	No garbage
11	Sue Dayton	BREDL	New rules now	No plastics	No paper
12	Elaine Chiosso	Haw River Keeper	Deny Permit	Incineration	
13	Frances Blalock	Private Citizen	Groundwater Pollution from flyash		
14	Chris Carter	Private Citizen	Bill Stericycle for pollution		
15	Eric Hently		Use Autoclave		
16	Heather Bjork	Private Citizen	Use Autoclave	Concord autoclave only at 33% capacity	
17	Irene Kittrell	Private Citizen	New rules now	No plastics	Phase out incineration
18	David Bjork	Private Citizen	Use Autoclave	Adapt early	
19	Matthew Townsend	Private Citizen	Adapt early		
20	Connie Crawford	Private Citizen	Use Autoclave		
21	Megan Squire	Private Citizen	Use Autoclave	Deny permit	
22	Tony Crider	Private Citizen	More VE and other monitoring	Concerned with by-pass	
23	Kevin Meehan	Private Citizen	Blames Stericycle for increased number of exceptional children (EC)		
24	Sarah Cook	Private Citizen	Wants Governor to protect citizens		
25	Anne Cassebaum	Private Citizen	Use Autoclave	No announced inspections	Too much mercury
26	Jennifer S. Van Vicille	Private Citizen	Require Stericycle to inform customers about Autoclave	Requested Office Mgr to autoclave, but told that Stericycle "would figure it out".	
27	Jenifer Vizas	Private Citizen	Deny Permit	Increased EC in county.	

BREDL – Blue Ridge Environmental Defense League

Ceres – Coalition for Environmental Responsibility and Education through Sustainability

CHE – Citizens for a Healthy Environment

EC – Exceptional Children

## APPENDIX C

### COMMENTS RECEIVED IN RELATION TO THE STERICYCLE HEARING CONDUCTED ON MAY 25, 2010

E-MAIL DATE	FROM	AFFILIATION	COMMENT
5/18/10	Sharon Dent	Citizen	Oppose renewing permit
5/20/10	Lynne Millies	Citizen	Autoclave, potential health and environmental concerns
5/20/10	Ti and Nicole Harmony	Citizen	Autoclave, potential health and environmental concerns
5/21/10	Ursula Lobacz	Citizen	Potential health risks
5/23/10	Janet Ulisse	Citizen	Potential health and environmental concerns
5/24/10	Laura J. Royster	Citizen	Shut down facility, reduce the amount of waste or local waste only, potential health concerns
5/24/10	Barbara and Tony D'Anna	Citizens	Outdated equipment, autoclave
5/25/10	Elise Shaner	Citizen	Strong regulatory requirements
5/25/10	Roy King	Citizen	Shut down facility
5/26/10	Sue Dayton, Carolyn Cole, David Mickey	BREDL	BREDL
5/26/10	Steven Reinhartsen	Citizen	Withhold permit
5/26/10	Heather Leigh Wallace	Citizen	30-day extension for public comment
5/26/10	Aimee Tattersall	Citizen	Autoclave or rescind permit due to potential health concerns
5/27/10	Sue Dayton, Carolyn Cole, David Mickey	BREDL	BREDL (Resent a revised comments copy)
5/27/10	Gary Cohen via David Mickey	HCWH	Autoclave everything within 2 years, prohibit burning of plastics (produces dioxin) and paper (can recycle paper), restrict international garbage, restrict burning of non-hazardous pharmaceutical and chemotherapy waste by holding stakeholder meetings to find alternatives over the next two years, notify public of bypass events.
5/27/10	Irene P. Kittrell	Citizen	Revise permit, autoclave, potential health and environmental concerns
5/28/10	Christian Stalberg	CCA	Revise permit, no plastic burning, shred paper, no international garbage, public data, fines
5/28/10	Debbie Cook	Citizen	Autoclave, potential health and environmental concerns
5/28/10	Al Burson	Stericycle	Comments/responses Stericycle would like to make part of the comment record
5/28/10	Carolyn Rhode	Citizen	Autoclave, potential health concerns
5/28/10	Robert and Pattie Stuart	Citizen	Autoclave, potential health and environment concerns
5/28/10	Melissa Tolbert	Citizen	Attachment from BREDL, autoclave, health and environmental concerns
5/28/10	Rose Shepherd	Citizen	Autoclave, no permit renewal
5/29/10	Donna Bonds	Citizen	Attachment from BREDL, potential health and environmental concerns, deny permit
5/29/10	Steve Wing	Citizen	Autoclave
5/30/10	Marc Dreyfors	TFF	Deny air permit, autoclave, adhere to the new EPA standards
5/31/10	George and Carole Troxler	Citizens	Adhere to the new EPA standards
6/1/10	Rob Tolbert	Citizen	Potential health concerns, autoclave
6/1/10	Ronie A. Eguren	Citizen	No permit renewal, public health and environmental concerns
6/3/10	Anthony Holderied	Citizen	Deny permit, autoclave, potential health concerns
6/5/10	David Hill	Citizen	Adhere to the new EPA standards, autoclave, air quality concerns
6/9/10	Matthew Gugino	Citizen	Health concerns
6/14/10	Max & Sue Isley	Citizens	Health concerns, economic impact, adhere to the new EPA standards
6/15/10	Mayor Boggs	Town of Haw River	Resolution, adhere to the new EPA standards
6/16/10	Tom Sander	Citizen	Autoclave, public health and environmental concerns
6/16/10	Jordan Carduner	Citizen	Public health and environmental concerns, adhere to the new EPA standards
6/16/10	Carole Troxler	Citizen	Deny permit, autoclave, health and environmental concerns, adhere to the new EPA standards
6/21/10	Donna Bonds	Citizen	Air Quality concerns
6/27/10	James and Thelma Garbutt	Citizens	Deny permit, adhere to the new EPA standards, health concerns
6/28/10	John Richardson, MSP	Town of Chapel Hill	Resolution, adhere to the new EPA standards
6/28/10	Carrboro Board of Aldermen	Town of Carrboro	Resolution
6/28/10	Hillsborough Town Board	Town of Hillsborough	Resolution, adhere to the new EPA standards
6/28/10	Anne Cassebaum	Citizen	Adhere to the new EPA standards, public health and environmental concerns, autoclave
6/28/10	Orange County Board of Commissioners	Orange County	Resolution, adhere to the new EPA standards
6/29/10	Donna Bonds	Citizen	Autoclave, adhere to the new EPA standards, public health and environmental concerns
7/1/10	Glendel Stephenson, Mayor	City of Mebane	Resolution, adhere to the new EPA standards

BREDL – Blue Ridge Environmental Defense League  
HCWH – Health Care Without Harm  
CCA – Center for Community Alternatives  
TFF – The Forest Foundation

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