# FACILITY COMPLIANCE INSPECTION REPORT
## Division of Waste Management
## Solid Waste Section

| UNIT TYPE: | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Lined MSWLF | | LCID | | YW | | Transfer | | Compost | | SLAS | |
| Closed MSWLF | | HHW | | White goods | | Incin | X | T&P | | FIRM | |
| CDLF | | Tire T&P / Collection | | Tire Monofill | | Industrial Landfill | | DEMO | | SDTF | |

COUNTY: **Alamance**
PERMIT NO.: **01-02**
FILE TYPE: COMPLIANCE

**Date of Site Inspection:** May 11, 2015 **Date of Last Inspection:** May 20, 2014

**FACILITY NAME AND ADDRESS**:
Stericycle, Inc. Medical Waste Incinerator Facility
1168 Porter Avenue
Haw River, NC 27258

**GPS COORDINATES**: **N**: 36.06599 **E**: -79.34881

**FACILITY CONTACT NAME AND PHONE NUMBER**:
Stericycle, Inc.
A. Alan Skrzypczak, Plant Manager
w. 336-578-8901 x.24
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askrzypczak@stericycle.com

**FACILITY CONTACT ADDRESS**:
Stericycle, Inc.
Don Nuss, Regional Environmental Manager – Atlantic Region
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Hamilton, OH 45011
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dnuss@stericycle.com

**PARTICIPANTS**
John Patrone, Environmental Senior Specialist - Solid Waste Section (SWS)
Deb Aja, Western District Supervisor – SWS
Bill Patrakis, Environmental Senior Specialist – SWS
Sarah Rice, Compliance Officer – SWS
Don Nuss, Regional Environmental Manager - Atlantic Region – Stericycle, Inc. [via cell phone]
A. Alan Skrzypczak, Plant Manager – Stericycle, Inc.
Andrea Carden, Transportation – Stericycle, Inc.

**STATUS OF PERMIT**:
Permit To Operate (PTO) issued May 4, 2012
PTO expiration date January 31, 2016

**PURPOSE OF SITE VISIT**:
Comprehensive Inspection

## STATUS OF PAST NOTED VIOLATIONS

None

## OBSERVED VIOLATIONS

None

The item(s) listed above were observed by Section staff and require action on behalf of the facility in order to come into or maintain compliance with the Statutes, Rules, and/or other regulatory requirements applicable to this facility. Be advised that pursuant to N.C.G.S. 130A-22, an administrative penalty of up to $15,000 per day may be assessed for each violation of the Solid Waste Laws, Regulations, Conditions of a Permit, or Order under Article 9 of Chapter 130A of the N.C. General Statutes. Further, the facility and/or all responsible parties may also be subject to enforcement actions including penalties, injunction from operation of a solid waste management facility or a solid waste collection service and any such further relief as may be necessary to achieve compliance with the North Carolina Solid Waste Management Act and Rules.

## ADDITIONAL COMMENTS

On May 11, 2015, John Patrone, Deb Aja, Bill Patrakis, and Sarah Rice met with Don Nuss, Alan Skrzypczak, and Andrea Carden to conduct a comprehensive inspection of the Stericycle, Inc. Medical Waste Incinerator Facility on Porter Avenue in Haw River, Alamance County.

1. The facility is a medical waste treatment operation consisting of two incinerator units.
2. A medical waste transfer station is operated at the facility.
3. The facility incinerates medical waste (regulated and non-regulated), United States Department of Agriculture (USDA) Animal and Plant Health Inspection Service - Plant Protection and Quarantine (APHIS-PPQ) regulated garbage, controlled substances, chemotherapeutic waste, healthcare industry documents, and pharmaceuticals.
4. The office is open Monday through Friday 8:00 am to 5:00 pm. Facility operation/incineration occurs 24 hours, 7 days a week.
5. During the inspection both incinerators were in operation.
6. The facility permit, site plan, operations plan, and contingency plan were discussed.
7. Stericycle, Inc. vehicles transport ~ 100 percent of the material received.
8. Ms. Carden stated that ~ 90 percent of all out of state trailers and customer loaded trailers are refrigerated and that local route trailers are commonly not refrigerated.
9. The facility uses Road Net to track drivers dispatched on local routes from Haw River. Driver data is displayed on a large monitor. The system uses GPS to obtain real-time information regarding route, driver status, truck location, etc. The facility also has XATA units in each truck that monitors minute by minute route information.
10. The facility has accepted waste material from numerous states and Washington, DC.
11. The facility provides training for plant personnel – annually, biennially, and as needed. Training categories include: Bloodborne pathogens, emergency action plans, hazard communication, machine guarding, personal protective equipment, spill response, lockout/tagout control, confined spaces, waste acceptance protocol, incinerator operation, and dental waste management. Training for DOT hazardous materials and forklift operation is scheduled triennially. Mr. Skrzypczak stated that training is conducted by company personnel in person and via computer and that training was conducted in January 2015. Bloodborne pathogen training was last conducted on September 22, 2014 for 31 employees.
12. Regulated medical waste boxes observed had a label with barcode containing generator information. The boxes contained the universal biohazard symbol and medical waste statement. Individual box barcode is scanned at pickup and upon incineration. Boxes on client-loaded trailers (refrigerated trailers stored at businesses) are scanned upon incineration. The trailer pickup date and trailer received date are recorded. Scanned information is sent to the facility database that is updated accordingly to include: date received, number of boxes per generator, date treated, generator billing, etc. The facility also maintains a hand-written log of when trailers are received. If needed, the log can be used as backup.
13. The facility provides clients with boxes, totes, labels, and plastic bags. Plastic bags are imprinted with data stated to meet the requirements of 15A NCAC 13B .1204(a)(1) and DOT red bag regulations (02/14/03).

14. The facility maintains records of the amount of solid waste received and origin of loads. Records were verified for May 7, 2015, March 3, 2015, November 25, 2014, and July 15, 2014. The amount of solid waste received May 2015 [to date] is 714,513 lbs, March 2015 is 2,205,787 lbs, November 2014 is 2,176,340 lbs, and July 2014 is 2,203,259 lbs.
15. Facility throughput is ~ 2M lbs/month. The monthly throughput includes decreased waste acceptance during incinerator scheduled maintenance.
16. Monthly ash disposal records were verified for June 2014 = 301.56 tons (47 containers), October 2014 = 273.88 tons (39 containers), and February 2015 = 300.1 tons (43 containers).
17. The facility annual report (FAR) was received by the SWS on July 14, 2014. Facility throughput for July 2013 through June 2014 is 9,862.872 tons or 19,725,743.6 lbs. The amount of ash produced from incineration during the same time period is 3,202.47 tons.
18. Incinerator ash is disposed of at the Upper Piedmont Regional Landfill (73-04).
19. Ash is stored on site in 20 $yd^3$ roll-off containers. Generally, two containers are filled with ash daily and two containers a day, six days a week, are hauled to the landfill.
20. During the inspection one roll-off container was en route to the landfill and five were on site (4 empty and 1 dewatering).
21. The facility routinely operates both incinerators. Scheduled maintenance is conducted for each incinerator. Incinerator maintenance occurred: 6/2/14 – 6/9/14, 6/23/14 – 6/25/14, 7/28/14 – 7/30/14, 8/18/14 – 8/20/14, 9/1/14 – 9/4/14, 9/15/14 – 9/18/14, 10/6/14 – 10/10/14, 10/27/14 – 10/29/14, 12/1/14 – 12/5/14, 12/15/14 – 12/17/14, 12/24/14 – 12/26/14, 1/1/15 – 1/9/15, 1/19/15 – 1/21/15, 2/16/15 – 2/17/15, 2/23/15 – 2/27/15, 3/16/15 – 3/20/15, 4/6/15 – 4/10/15, and 4/20/15 – 4/23/15. The records indicate that during scheduled maintenance there is a decrease in incinerator throughput and the number of containers received.
22. During incinerator maintenance throughput is cut by ~ 2/3. Local route waste material is given priority to be incinerated. Waste material on refrigerated trailers is stored accordingly. Waste material is also transferred to other Stericycle, Inc. facilities. A backfill manifest is maintained for boxes transferred to other locations.
23. The facility has five scales: two floor scales, two belt scales, and one portable scale. The scales were tested by Carlton Scale on July 7, 2014, October 1, 2014, and December 3, 2014. Zero error/within allowable limit is indicated for each test.
24. The facility has a Division of Air Quality (DAQ) Title V permit, number 05896/T22, issued 05/21/14 – expiration 01/31/16.
25. Facility (DAQ) emissions tests were conducted on April 28 – 30 and May 1, 2015. The results are in the process of being evaluated. The previous emissions tests were conducted on May 6 – 8, 2014. Compliance is indicated.
26. The two facility incinerators are natural gas automatic feed dual chamber controlled air Joy Energy Systems, Inc. T-Series units, model number 2500 TES.
27. As designed, the maximum charging rate for each incinerator is 1,911 lbs/hour or 91,728 lbs/day for both units.
28. The DAQ permit states the maximum charging rate for unit 1 is 1,952.6 lbs/hour and unit 2 is 2,091.9 lbs/hour.
29. If the facility plans to increase the charging rate of the incinerators, from 1,911 lbs/hour to current DAQ permit charging rates, the SWS should be contacted prior to the change in operation.
30. The facility maintains continuous monitoring records of the primary and secondary chamber temperatures. Records were verified for: 07/01/14, 09/19/14, 01/10/15, and 04/14/15. The primary chamber is required to be $\geq$ 1200° F and the secondary chamber $\geq$ 1800° F [minimum of $\geq$ 1 second].
31. During the inspection incinerator unit No. 1 was operating at 1380° F in the primary chamber and 1931° F in the secondary chamber and 42.9 inches water column (W.C.). Incinerator unit No. 2 was operating at 1592° F in the primary chamber and 1906° F in the secondary chamber and 42.2 inches W.C.
32. Mr. Skrzypczak stated that the incinerator reduces material in ~ 3 – 4 hours, batch-fed ~ every 6 minutes, and that the ash represents a 68 – 70 percent volume reduction.
33. The facility has an Industrial User Pretreatment Permit (IUP, No. 0030) from the City of Graham issued October 1, 2013 – expiration June 30, 2016.

34. Process water associated with the incineration units is treated on site. Treated water is piped to the City of Graham wastewater treatment plant (WWTP).
35. Reusable containers are washed with a mycobactericidal disinfectant. The containers are washed on the floor adjacent to the incinerators. Mr. Skrzypczak stated that the floor drains route to municipal sewer/the City of Graham WWTP.
36. Vehicle trailers are cleaned with a pressure washer and mycobactericidal disinfectant in the truck wash bay. Floor drains for the truck wash bay are piped for reuse in the incinerator ash water-quench process.
37. Each incinerator is equipped with an ash removal process. Ash drops from the rear of the incinerator into a water-quench tank. A mechanical arm rakes the ash from the quench tank dragging it up a dewatering ramp. The ash is deposited into a 2 $yd^3$ container. Facility personnel sort out large pieces of ash (2 - 4 times/hour), raking it into a 30 gallon cart. The sorted ash is re-incinerated.
38. The 2 $yd^3$ containers are dumped into 20 $yd^3$ roll-off containers. The 20 $yd^3$ containers are dewatered on a covered cement slab. Floor drains for the dewatering process are piped for reuse in the incinerator ash water-quench process.
39. The facility takes two representative ash samples annually. Composite samples are gathered from a 20 $yd^3$ roll-off container. It conducts a toxicity characteristic leaching procedure (TCLP), paint filter test for liquids, and determines pH. Records were reviewed for samples analyzed by Pace Analytical Services, Inc. taken on October 10, 2014 and April 14, 2015. The results show compliance. The facility also took an ash sample for lead on January 30, 2015. The result shows compliance.
40. The facility waste screening process consists of: generator requirements to properly package and label boxes, drivers trained to reject boxes if inaccurately packaged and/or labeled, client contract requirement to abide by waste acceptance rules, Stericycle, Inc. sales personnel educating clients, related information available - printed and online, employee training regarding unacceptable waste, and routine screening of ash noting material requiring reburn.
41. It was stated that a contingency plan (pertaining to the transport of regulated medical waste) is maintained in each vehicle and that drivers are familiar with the plan.
42. The universal biohazard symbol is displayed on trailers.
43. During the inspection the facility had three refrigerated trailers on site containing waste material. Trailer temperature ranged from 35° F to 45° F. The facility had seven empty unrefrigerated trailers and routinely uses eleven trailers for equipment storage.
44. Ms. Carden stated that waste material received pertaining to the medical waste transfer station, operated on the receiving floor of the facility, is sorted and quickly loaded into a refrigerated transfer trailer. A transfer trailer is shipped-out to other Stericycle, Inc. facilities ~ twice a week.
45. Transit time was verified for four boxes observed on the operations line. The boxes were shipped on refrigerated trailers and are expected to be incinerated May 11, 2015.
46. Facility financial assurance is under discussion with SWS.
47. Access roads are of all-weather construction.
48. The facility is secured by a locked gate.
49. The facility permit number is posted on the gate. An intercom system is accessible. Mr. Skrzypczak stated that personnel are at the facility 24 hours, 7 days a week.
50. The PTO expiration date is January 31, 2016.
51. The PTO renewal application shall be submitted to the SWS by July 31, 2015.

Please contact me if you have any questions or concerns regarding this inspection report.

John Patrone

Digitally signed by John Patrone
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John Patrone, Environmental Senior Specialist
Division of Waste Management, NCDENR

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| **Sent on:** May 20, 2015 | X | Email | | Hand delivery | | US Mail | | Certified No. [ ] |

Electronic Copies: Deb Aja, Western District Supervisor - SWS
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