



Waste Management
ENVIRONMENTAL QUALITY

FACILITY COMPLIANCE INSPECTION REPORT
Division of Waste Management
Solid Waste Section

UNIT TYPE:											
Lined MSWLF		LCID		YW		Transfer		Compost		SLAS	COUNTY: Alamance PERMIT NO.: 01-02 FILE TYPE: COMPLIANCE
Closed MSWLF		HHW		White goods		Incineration	X	T&P		FIRM	
CDLF		Tire T&P / Collection		Tire Monofill		Industrial Landfill		DEMO		SDTF	

Date of Site Inspection: May 18, 2016

Date of Last Inspection: May 11, 2015

FACILITY NAME AND ADDRESS:

Stericycle, Inc. Medical Waste Incinerator Facility
1168 Porter Avenue
Haw River, NC 27258

GPS COORDINATES: N: 36.06599 W: -79.34881

FACILITY CONTACT NAME AND PHONE NUMBER:

Stericycle, Inc.
A. Alan Skrzypczak, Plant Manager
w. 336-578-8901 x.24
c. 336-269-2140
f. 336-578-8903
askrzypczak@stericycle.com

FACILITY CONTACT ADDRESS:

Stericycle, Inc.
Don Nuss, Regional Environmental Manager – Atlantic Region
3614 Hoskins Court
Hamilton, OH 45011
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PARTICIPANTS:

John Patrone, Environmental Senior Specialist - Solid Waste Section (SWS)
Bill Patrakis, Environmental Senior Specialist – SWS
Elizabeth Patterson, Environmental Senior Specialist – SWS
Don Nuss, Regional Environmental Manager - Atlantic Region – Stericycle, Inc.
A. Alan Skrzypczak, Plant Manager – Stericycle, Inc.
Kirk Yarbrough, Operations Supervisor – Incinerator – Stericycle, Inc.
Andrea Carden, Transportation – Stericycle, Inc.

STATUS OF PERMIT:

Permit To Operate (PTO) issued May 4, 2012
PTO renewal application has been submitted to the SWS

PURPOSE OF SITE VISIT:

Comprehensive Inspection

STATUS OF PAST NOTED VIOLATIONS:

None

FACILITY COMPLIANCE INSPECTION REPORT
Division of Waste Management
Solid Waste Section

Page 2 of 5

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 18, 2016, John Patrone, Bill Patrakis, and Elizabeth Patterson met with Don Nuss, Alan Skrzypczak, Kirk Yarbrough, 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 a day, 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. All out of state trailers and customer loaded trailers are refrigerated. Local route trailers are commonly not refrigerated.
9. The facility uses Road Net to track drivers dispatched on local routes from the Haw River facility. Driver data is displayed on a large monitor. The system uses GPS to obtain real-time information regarding route, driver status, truck location, etc.
10. During fiscal year 2014 - 2015, the facility 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. Training is conducted by company personnel, on-line, and with training modules. An employee training record was verified.
12. Regulated medical waste boxes observed had a label with generator and transporter/treatment facility information and a barcode containing the required information. The boxes contained the universal biohazard symbol and medical waste statement. Box barcodes on client-loaded trailers (refrigerated trailers stored at businesses) are scanned upon incineration. Individual box barcode is scanned at pickup and upon incineration. Scanned information is sent to the facility database to include: date received, number of boxes per generator, weight of each box, date treated, generator billing, etc. The facility also maintains a hand-written log of when trailers are picked-up and received.
13. Impress upon generators and Stericycle, Inc. personnel to confirm that the date of shipment is also marked on individual boxes picked-up.
14. 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).
15. The facility maintains records of the amount of solid waste received and origin of loads. Records were verified for May [through the 17th] 2016 = 1,030,899.81 lbs, February 2016 = 1,878,063.83 lbs, October 2015 = 2,012,526.11 lbs, and August 2015 = 1,957,559.15 lbs.

FACILITY COMPLIANCE INSPECTION REPORT

Division of Waste Management

Solid Waste Section

Page 3 of 5

16. Facility throughput is ~ 2M lbs/month. The monthly throughput includes decreased waste processing during incinerator scheduled maintenance.
17. Monthly ash disposal records were verified for March 2016 = 43 containers at 280.58 tons, January 2016 = 37 containers at 241.3 tons, November 2015 = 42 containers at 270.68 tons, and July 2015 = 53 containers at 309.74 tons.
18. The facility annual report (FAR) was received by the SWS dated July 6, 2015. Facility throughput for July 2014 through June 2015 is 11,865.87 tons or 23,731,745.94 lbs. The amount of ash produced from incineration during the same time period is 3,631.42 tons.
19. Incinerator ash is disposed of at the Upper Piedmont Regional Landfill (73-04).
20. Ash is stored on site in 20 yd³ 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.
21. During the inspection two empty roll-off containers were in the dewatering area, two full roll-off containers were in the dewatering area, and two empty roll-off containers (tarped) were stored in the parking lot.
22. The facility routinely operates both incinerators. Scheduled maintenance is conducted for each incinerator. Incinerator maintenance occurred: 5/24/15 – 5/28/15, 6/13/15 – 6/21/15, 7/13/15 – 7/16/15, 7/31/15 – 8/8/15, 9/13/15 – 9/17/15, 10/4/15 – 10/7/15, 11/1/15 – 11/5/15, 11/9/15 – 11/12/15, 12/5/15 – 12/14/15, 1/1/16 – 1/8/16, 1/31/16 – 2/3/16, 3/5/16 – 3/15/16, 4/2/16 – 4/8/16, and 5/8/16 – 5/12/16. The records indicate that during scheduled maintenance there is a decrease in the number of containers/amount of waste material processed.
23. During incinerator maintenance waste material throughput is cut by ~ 1/2 - 2/3. Local routes are given priority to be incinerated and waste material on refrigerated trailers is stored accordingly. Medical waste is also transferred and redirected to other Stericycle, Inc. facilities.
24. A backfill manifest is maintained for boxes transferred to other locations. The backfill manifest was verified for the following dates (trailers loaded and hauled-off): May 11 – 17, 2016, May 12 – 13, 2016, March 3 – 4, 2016, and December 20 – 22, 2015.
25. The facility has two floor scales and two belt scales. The scales were tested by Carlton Scale on January 13, 2016, October 13, 2015, and April 13, 2015.
26. The facility has a Division of Air Quality (DAQ) Title V permit, number 05896/T24, issued 11/06/15 – expiration 01/31/16. The permit renewal application has been submitted to DAQ.
27. The facility (DAQ) emissions test for mercury was conducted in April 2016. The result is in the process of being evaluated. The previous emissions test for all required pollutants was conducted on April 28 – 30 and May 1, 2015. Compliance is indicated.
28. The facility was inspected by the DAQ in February 2016 and found to be in compliance at that time.
29. The two facility incinerators are natural gas automatic feed dual chamber controlled air Joy Energy Systems, Inc. T-Series units, model number 2500 TES.
30. As initially designed, the maximum charging rate for each incinerator is 1,911 lbs/hour or 91,728 lbs/day for both units.
31. The current DAQ permit states that the maximum charging rate for unit 1 is 2,092.0 lbs/hour and unit 2 is 2,093.1 lbs/hour.
32. 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.
33. The facility maintains continuous monitoring records of the primary and secondary chamber temperatures. Records were verified for: 4/30/16, 2/11/16, 12/3/15, and 6/25/15. The primary chamber is required to be $\geq 1200^{\circ}$ F and the secondary chamber $\geq 1800^{\circ}$ F [for a minimum of ≥ 1 second].
34. During the inspection incinerator unit No. 1 was operating at 1840° F in the primary chamber and 2056° F in the secondary chamber and 44.5 inches water column (W.C.). Incinerator unit No. 2 was operating at 1670° F in the primary chamber and 1965° F in the secondary chamber and 41.8 inches W.C.
35. Mr. Skrzypczak stated that the incinerator reduces material in ~ 3 – 4 hours, is batch-fed ~ every 6 minutes, and that the ash represents a 70 percent volume reduction.
36. The facility has an Industrial User Pretreatment Permit (IUP, No. 0030) from the City of Graham issued October 1, 2013 – expiration June 30, 2016.

FACILITY COMPLIANCE INSPECTION REPORT
Division of Waste Management
Solid Waste Section

Page 4 of 5

37. Process water associated with the incinerator units is treated on site. Treated water is piped to the City of Graham wastewater treatment plant (WWTP).
38. 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.
39. 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.
40. 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 yd³ 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.
41. The 2 yd³ containers are dumped into 20 yd³ roll-off containers. The roll-off 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.
42. The facility takes two representative ash samples annually. Composite samples are gathered from a 20 yd³ roll-off container. The facility has a toxicity characteristic leaching procedure (TCLP), paint filter test, and pH analysis conducted. Records were reviewed for samples analyzed by Pace Analytical Services, Inc. taken on February 16, 2016 and October 1, 2015. The results indicate compliance.
43. 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 return.
44. It was stated that a contingency plan for the transport of regulated medical waste is maintained in each vehicle and that drivers are familiar with the plan. The master copy of the Hazardous Materials Emergency Response Manual was verified.
45. The universal biohazard symbol was displayed on trailers stored at the facility.
46. During the inspection the facility had 12 refrigerated trailers on site containing waste material. Trailer temperatures ranged from 35° F to 45° F.
47. Waste material received pertaining to the medical waste transfer station, operated on the receiving floor of the facility, is sorted and loaded into a refrigerated transfer trailer. Ms. Carden stated that a transfer trailer is shipped-out to other Stericycle, Inc. facilities ~ twice a week. At the time of the inspection the transfer trailer did not contain any waste material.
48. Transit time was verified for four boxes observed on the incinerator receiving line. The boxes were shipped on refrigerated trailers and were received at the facility on May 16 and 17, 2016. The boxes are expected to be incinerated May 18, 2016.
49. Access roads are of all-weather construction.
50. Facility financial assurance has been submitted to the SWS.
51. The facility is secured by a locked gate.
52. 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.
53. The PTO renewal application has been submitted to the SWS.

FACILITY COMPLIANCE INSPECTION REPORT
Division of Waste Management
Solid Waste Section

Page 5 of 5

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

Phone: 336-776-9673

John Patrone, Environmental Senior Specialist
Division of Waste Management, NCDEQ

Sent on: May 27, 2016	X	Email		Hand delivery		US Mail		Certified No. []
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