

BEFORE THE NORTH CAROLINA  
ENVIRONMENTAL MANAGEMENT COMMISSION

STATE OF NORTH CAROLINA	)	
	)	
COUNTY OF ALAMANCE	)	
	)	
IN THE MATTER OF:	)	SPECIAL ORDER BY CONSENT
STERICYCLE, INC.	)	
	)	SOC 2022- <u>002</u>
	)	
HAW RIVER, ALAMANCE COUNTY	)	
NORTH CAROLINA	)	
[SITE NUMBER 1000010]	)	

This SPECIAL ORDER BY CONSENT (hereinafter referred to as the "ORDER") is made and entered into pursuant to North Carolina General Statute 143-215.110 by and between STERICYCLE, INC. (hereafter referred to as the "COMPANY") and the ENVIRONMENTAL MANAGEMENT COMMISSION, an agency of the State of North Carolina (hereinafter referred to as the "COMMISSION").

WITNESSETH:

- I. The COMMISSION and the COMPANY do hereby stipulate and agree to the following:
  - A. The COMPANY operates a facility in Haw River, NC (hereafter referred to as the "FACILITY") with two hospital, medical, and infectious waste incinerators ("HMIWIs") known as Unit 1 and Unit 2. The FACILITY currently operates under Title V Air Quality Permit No. 05896T25, issued on December 19, 2016.
  - B. To control emissions from the HMIWIs, each is equipped with several control devices, including a packed bed scrubber, a venturi scrubber, and a sulfur impregnated carbon bed. Each is also equipped with a bypass stack, which is designed to allow the FACILITY to divert high pressure and high temperature gases and circumvent its emission control equipment, thereby releasing uncontrolled emissions into the atmosphere, in the event of a process upset that may result in a

Special Order By Consent  
STERICYCLE, INC.

potentially catastrophic event that could cause harm to the employees, the FACILITY, and the environment.

- C. The FACILITY is subject to 15A NCAC 02D .1206, which establishes regulations for HMIWIs in North Carolina requiring HMIWIs to adhere to emissions standards and operational standards as well as monitoring, recordkeeping, and reporting requirements. Rule 02D .1206 incorporates by reference portions of the federal New Source Performance Standards including 40 CFR § 60.56c. 15A NCAC 02D .1206(d)(4).
- D. This section of the federal regulations provides that the “[u]se of the bypass stack shall constitute a violation of the PM, dioxin/furan, HCl, Pb, Cd and Hg emissions limits.” 40 CFR § 60.56c(f)(6). The COMPANY contends, among other things, that these violations can be excused by the SSM defense set forth in 15A NCAC 2D .0535.
- E. On April 22, 2019, the bypass stack at Unit 1 was opened as designed for eleven (11) minutes after a fuse blew in the control panel.
- F. On August 13, 2019, the bypass stack at Unit 2 was opened as designed for thirteen (13) minutes after a breach in the piping in the FACILITY’s packed bed scrubber.
- G. On January 31, 2020, the bypass stack at Unit 1 was opened as designed for three (3) minutes after a relay on the ash system shorted out.
- H. On March 29, 2020, the bypass stack at Unit 2 was opened as designed for twelve (12) minutes after a faulty draft transmitter registered a positive draft when in fact the system was shutting down normally.
- I. On July 2, 2020, the bypass stack at Unit 1 was opened as designed for eleven (11) minutes after a failure in the water level controller in the primary cooling vessel caused a low water condition.
- J. On July 23, 2020, the bypass stack at Unit 2 was opened as designed for five (5) minutes after an ID fan vibration sensor detected high vibrations and automatically initiated a fan shutdown sequence.
- K. On October 22, 2020, the bypass stack at Unit 1 was opened as designed for three (3) minutes after a fault in the programmable logic controller resulted in control power loss.

Special Order By Consent  
STERICYCLE, INC.

- L. On November 13, 2020, the bypass stack at Unit 2 was opened as designed for three (3) minutes after a faulty level controller in the cooling tower caused an unacceptably high temperature in the absorber.
- M. On February 1, 2021, the bypass stack at Unit 1 was opened as designed for two (2) minutes after a faulty feed hopper resulted in a programmable logic controller fault.
- N. On February 3, 2021, the bypass stack at Unit 2 was opened as designed for two (2) minutes after a short in a conduit caused the programmable logic controller to fault.
- O. On September 15, 2021, the bypass stack at Unit 2 was opened as designed for two (2) minutes after the lead operator mistakenly turned off the scrubber in Unit 2 when intending to shut off Unit 1.
- P. On October 15, 2021, the bypass stack at Unit 1 was opened as designed for twelve (12) minutes after the absorber pump failed, resulting in high absorber temperatures.
- Q. On December 31, 2021, the bypass stack at Unit 1 was opened as designed for six (6) minutes due to an electrical short in wiring in the conduit next to the feed hopper which tripped the programmable logic controller.
- R. On April 28, 2022, the bypass stack at Unit 2 was opened as designed for one (1) hour and two (2) minutes due to a loss of cooling water flow, which resulted in a high adsorber temperature.
- S. The COMPANY has undertaken efforts to reduce the frequency of bypass events at the FACILITY.
- T. The COMPANY commissioned a risk analysis to identify potential process and infrastructure improvements that could help reduce the frequency and duration of events that result in opening of the bypass stack.
- U. Based on the results of that analysis, the COMPANY has committed to make the following upgrades to the FACILITY, which are intended to address design changes that may mitigate identified process failure modes and their consequences and may result in mitigating events that result in use of the bypass stacks at the FACILITY.
  - 1. Electrical: Wiring redone, including consideration of wire routing to bypass critical components; more robust DC power supply, including separation of

Special Order By Consent  
STERICYCLE, INC.

power sources to bypass critical components and non-critical components; redundant power supplies for all 24VDC devices; power supplies with selective fuse break technology; redundant AC power supply; new control panels; new electrical components (fuses, circuit breakers, power supplies, etc.); and new uninterruptible power supply.

2. Mechanical System: Redundant pump for evaporative cooler brine recirculation; acid gas absorber and evaporative cooler pumps switched from belt driven to direct driven; replace piping between the new pumps and the system components; new, stainless steel pipe supports; convert emergency bypass system from hydraulic to pneumatic; and replace limit switches and add new switches to certain locations.
3. Instruments: New instruments; thermocouples replaced with duplex thermocouples; and redundant duplex thermocouples in bypass critical locations.
4. Controls: New HMI control and process monitoring screens; redundant HMI computers and screens; and new control logic (automatic switching to redundant pumps, comparative logic between redundant thermocouples, more robust alarming and interlocks, active control of process related equipment, etc.).

THEREFORE, the COMMISSION and the COMPANY, desiring to resolve and settle the compliance issues between them, have agreed to enter into this ORDER with the following terms and conditions:

- II. The COMPANY, desiring to operate in a safe and environmentally sound manner during the period of this ORDER and thereafter in accordance with the rules and regulations of the COMMISSION, does hereby agree to the following conditions to help reduce associated bypass events:
  - A. Unless excused or delayed pursuant to Paragraph V, the COMPANY will complete the upgrades to the Unit 1 HMIWI at the FACILITY by November 30, 2022 and upgrades to the Unit 2 HMIWI at the FACILITY by June 30, 2023.

Special Order By Consent  
STERICYCLE, INC.

- B. Within thirty (30) days of the completion of the upgrades, the COMPANY shall submit to the Division of Air Quality (“DAQ”) a written report confirming the completion of the upgrades.
- C. The COMPANY will submit a Bypass Reduction Plan (“PLAN”) to DAQ for approval within fifteen (15) days of the entry of this ORDER. Upon written approval of the PLAN by DAQ, the COMPANY will retain records demonstrating compliance with the Procedures set forth in the PLAN for the duration of this ORDER.

III. The COMPANY shall pay the following penalties:

- A. The COMPANY agrees to pay DAQ a civil penalty in the amount of sixty-five thousand dollars (\$65,000) for the bypass events described in Paragraph I. E.-R. of this ORDER. This amount shall be paid within 30 days of the effective date of this ORDER.
- B. The COMPANY agrees that, unless excused under Paragraph V, the COMPANY will pay stipulated penalties according to the following schedule during the period of this ORDER:

<u>Deadlines and Requirements</u>	<u>Stipulated Penalties</u>
Failure to comply with schedule deadline	\$250 per day for the first 5 days and \$500 per day thereafter.
Bypass event that lasts for less than 5 minutes that are not attributable to a failure to adhere to the Bypass Reduction Plan	\$2,500
Bypass event that lasts between 5 and 10 minutes that are not attributable to a failure to adhere to the Bypass Reduction Plan	\$5,000
Bypass event that lasts for less than 20 minutes that are not attributable to a failure to adhere to the Bypass Reduction Plan <sup>1</sup>	\$10,000

The COMPANY shall notify DAQ in writing of any violation of Paragraph II of this ORDER within ten (10) days of discovering such violation. Failure to pay the civil

---

<sup>1</sup> Bypass events that are attributable to a failure to follow the Bypass Reduction Plan or that last longer than twenty minutes are not covered by this SOC and will be dealt with through the Division’s ordinary enforcement processes.

Special Order By Consent  
STERICYCLE, INC.

penalties within thirty (30) days of receipt of the Director's written demand will be grounds for a collection action, which the Attorney General is hereby authorized to initiate. The only issue in such an action will be whether thirty (30) days has lapsed.

- IV. Upon the occurrence of any bypass event during the period of this ORDER, the COMPANY shall notify DAQ as soon as possible but no later than twenty-four (24) hours after the event occurs. Within thirty (30) days of the event, the COMPANY shall submit a written explanation to DAQ regarding the cause of the bypass event and records demonstrating compliance with the Protocol set forth in the PLAN.
- V. The COMPANY's obligation to comply with the schedule set forth in this ORDER for the completion of upgrades for which a stipulated penalty may be assessed, may be delayed or excused only to the extent that noncompliance is caused by circumstances beyond control of the COMPANY, as determined by the DAQ Director. Failure to obtain funding will not be considered events beyond the COMPANY's control. If any such delaying event occurs, the COMPANY shall notify DAQ in writing within ten (10) days of encountering or discovering the delaying event, describing in detail the event or delay, the precise cause(s) of the event or delay, the measure(s) taken and to be taken by the COMPANY to prevent or minimize the event or delay, and the schedule by which those measures will be implemented.
- VI. In addition to the stipulated penalties set forth in Paragraph III, in the event the COMPANY violates this ORDER, the COMPANY may be subject to an injunction action pursuant to N.C.G.S. § 143-215.114C for relief necessary to prevent or abate future bypass events. Subject to footnote 1 and except as authorized pursuant to Paragraph III and this Paragraph, the COMPANY shall not be issued any further Notices of Violation or Civil Penalties, or otherwise be subject to enforcement action for the violations specified in Paragraph I or for bypass events that occur during the pendency of this ORDER. Any other violations for which the COMPANY is responsible, shall subject the COMPANY to appropriate enforcement action pursuant to N.C.G.S. §§ 143-215.114A, 143-215.114B and 143-215.114C.

Special Order By Consent  
STERICYCLE, INC.

- VII. The COMPANY agrees to waive any rights it may have to seek judicial review to challenge this ORDER. All notices and reports required by this ORDER shall be delivered to:

Regional Air Quality Supervisor  
N.C. Dept. of Environmental Quality  
450 West Hanes Mill Rd, Suite 300  
Winston Salem, North Carolina 27105

All payments required from the COMPANY by this ORDER shall be delivered to:

Enforcement Group – Payments  
NCDEQ – DAQ  
1641 Mail Service Center  
Raleigh, North Carolina 27699-1641

Any notice required or permitted by this ORDER to the COMPANY shall be delivered to:

Stericycle, Inc.  
Kirk Yarbrough  
Facility Manager  
1168 Porter Ave.  
Haw River, NC 27258

Don Nuss  
Regional Compliance Manager  
3614 Hoskins Court  
Hamilton, OH 45011

- VIII. Final approval of and entry into this ORDER are subject to the requirements that the COMMISSION give notice of proposed special orders to the public, and that the public have at least thirty (30) days within which to comment on the ORDER.
- IX. Should any provision of this ORDER be declared by a court of competent jurisdiction to be inconsistent with Federal or State law and therefore unenforceable, the remaining provisions hereof shall remain in full force and effect.
- X. The Parties may jointly stipulate and agree to modify this ORDER at any time subject to the requirements of 15A NCAC 02D .2203. Any modifications of this ORDER must be agreed to in writing and signed by both parties.

Special Order By Consent  
STERICYCLE, INC.

- XI. In the event that the COMPANY experiences more than nine (9) bypass events in any ninety-day period, the DAQ Director may terminate this Order. Such termination shall be effective immediately upon notice in writing to the COMPANY.
- XII. Except as otherwise set forth herein, this ORDER is not and shall not be interpreted to be a permit or modification of an existing permit under Federal, State or local law, and shall not be construed to waive or relieve the COMPANY of its obligations to comply in the future with any permit.
- XIII. This ORDER is effective on execution by the COMMISSION and shall expire ninety (90) days after DAQ's written acknowledgment of the written report prepared, certified and submitted by the COMPANY demonstrating that the FACILITY has completed the upgrades set forth in Paragraph I.U or on June 30, 2023, whichever comes first.

Special Order By Consent  
STERICYCLE, INC.

ATTESTED:

STERICYCLE, INC.

BY:

Richard M. Moran  
[STERICYCLE]

DATE:

12/19/22

APPROVED AND ACCEPTED:

BY:

Michael A. Abaya  
Environmental Management Commission

DATE:

12/19/22