



**STATE OF TENNESSE**  
**DEPARTMENT OF ENVIRONMENT AND CONSERVATION**  
**Division of Water Resources**

Nashville Environmental Field Office  
711 R.S. Gass Blvd.

Nashville, Tennessee 37216

Phone 615-687-7000

Statewide 1-888-891-8332

Fax 615-687-7078

September 6, 2019

Mr. Tim Ellis, Manager  
Carlex Glass America LLC  
7200 Centennial Boulevard  
Nashville, TN 37209

**RE: Compliance Evaluation Inspection**  
Carlex Glass America, LLC – Nashville Glass Plant  
NPDES Permit No. TN0003573  
Davidson County

Dear Mr. Ellis,

On July 02, 2019, Division of Water Resources (the Division) staff began a Compliance Evaluation Inspection of Carlex Glass America, LLC - Nashville Glass Plant NPDES Permit No. TN0003573. The purpose of this inspection was to determine compliance with the terms of NPDES permit TN0003573, which became effective on October 1, 2016, and will expire on September 30, 2020. A partial record review was conducted on site at Carlex on July 11, 2019; after required laboratory analysis were provided by Mr. Sean Coury, the record review was completed remotely on July 16, 2019, from the Nashville Environmental Field Office. An inspection of Outfall 001 and 002 was conducted on by boat on the Cumberland River on August 23, 2019; this date marks the completion of the inspection. The inspection was conducted by Division staff, Ms. Virginia Lawrence. Jordan Fey, also with the Division, assisted Ms. Lawrence during the outfall inspection. Mr. Corey Lovell and Mr. Sean Coury provide their assistance during the site and record reviews. The Division is appreciative of everyone's time and courtesy demonstrated during the course of the inspection.

**Record Review**

A records review of the self-monitoring data submitted by the facility via NetDMR was conducted as part of the inspection. A summary of violations report was also pulled from the EPA's Integrated Compliance Information System (ICIS) which indicated that the following effluent violations were reported from June 2016 through June 2019:

- Two total suspended solids; IMP4, December 2017, July 2018

September 6, 2019

Carlex Glass America, LLC. – Nashville Plant NPDES Permit # TN0003573 CEI

Page 2 of 3

- Seven pH; Outfall 002, July 2016, December 2016, August 2017, January 2018, February 2018, March 2018
- Five flow; SW1 and SW2, December 2017, April 2018, December 2018
- One oil and grease; IMP4 , August 2017, September 2017
- Three total phosphorus; IMP4, June 2016, June 2018

Additionally, time gaps in records were observed. Flow meter calibration records, flow data, and laboratory reports are missing for 2017. Unreported flow data for 2017 and 2018, was addressed in a separate Notice of Violation issued by TDEC's Compliance and Enforcement Unit, on April 11, 2019. No discrepancies were found in the transfer of data when comparing laboratory bench sheets to Carlex's monthly operation Reports on file with the Division.

Carlex's NPDES permit is pursuant to Tennessee Multi Sector Permit requirements (TMSP) Sector E; The Storm Water Prevention Pollution Plan (SWPPP) was reviewed during this inspection and contained all of the requirements elements outlined in the permit. Additionally, the SWPPP is reviewed and certified annually, and includes a comprehensive Best Manage BMP program.

### Site Review

Carlex is authorized to discharge process wastewater/cooling water (via internal monitoring points IMP1, IMP2 and IMP3 and combined and limited at IMP4) and stormwater runoff through Outfall 001 (wet weather SW1), non-contact cooling water and stormwater runoff through Outfalls 002 and 003 (wet weather SW2 and SW3). Additionally, Carlex is authorized for the operation of a Cooling Water Intake Structure. Discharges are authorized to Cumberland River at mile 182.0 for Outfall 001, mile 182.0 for Outfall 002, and mile 176.4 via unnamed tributary for Outfall 003.

Division staff observed cullet tracked throughout the grounds around the facility, but was not observed at internal monitoring points or at outfalls. Sampling occurs at Outfall 001, 002, and 003; a discussion of sampling procedure and review of internal monitoring point indicate that sampling is occurring as outlined in the permit. Field measurements of D.O., and pH, are taken within the 15 minute hold time. Sampling and field measurements are conducted by ERM. Sample analysis is contracted out to Test America.

A weir has been installed at IMP-2 for flow measurement. At the time of inspection, the velocity flow sensor at IMP- 2 was out of order. Flow reading reliability at this location has been a reoccurring issue due to poor channel conditions that produce turbulent flow. Carlex is currently evaluating alternate flow measure technologies to determine if a more reliable option is available. Spare parts are now maintained on site to allow for a quicker response time when flow meter sensors malfunction. The velocity flow sensor at IMP-2 must be repaired or replaced with a more reliable technology to measure **flow within 30 days of receipt** of this letter. Continue

September 6, 2019

Carlex Glass America, LLC. – Nashville Plant NPDES Permit # TN0003573 CEI

Page 3 of 3

using the weir and staff gauge as a secondary means to measure flow for reporting and operation purposes.

The intake structures for on the Cumberland River were reviewed. During the inspection, one pump was in operation, and two were down and marked with lockout tag out tags. No sheen or observable impacts to the intake waters were noted. The river water, used as non-contact cooling water, is treated for solids removal in a series of clarifiers. The clarifiers were observed during the inspection, no issues were noted with the process. However, corroded seeps were observed on the outside of the above ground metal clarifier units.

Due to inaccessible steep terrain, Outfall 002 was observed by Division staff from a boat on the Cumberland River on August 23, 2019. Both Outfalls 001 and 002, appear to bear no observable impact on the receiving waters. Vegetation is blocking the outfall sign for Outfall 002. Please remove the vegetation from around the sign or place another in a location that is visible from the receiving waters.

### **Conclusion**

Overall, the facility is well maintained and operated. No major concerns were noted during the course of the inspection and the facility appears to operating in manner compliant with the terms of its NPDES permit. However, the flow sensor issues need to be resolved.

### **Action Items and recommendations**

Vegetation is blocking the outfall sign for Outfall 002. Please remove the vegetation from around the sign or place another in a location that is visible from the receiving waters.

The velocity flow sensor at IMP-2 must be repaired or replaced with more reliable flow measurement technology **within 30 days of receipt** of this letter.

The Division would like to thank the personnel at the Carlex Glass America, LLC – Nashville Glass Plant, for their assistance provided during the inspection. If you have questions or concerns about the inspection or this letter, please contact Virginia Lawrence at (615) 687-7123, or via e-mail at [Virginia.Lawrence@tn.gov](mailto:Virginia.Lawrence@tn.gov)



Virginia Lawrence  
Environmental Scientist  
Division of Water Resource

ecopy: Corey Lovell, Carlex Glass America, LLC, [clovell@carlex.com](mailto:clovell@carlex.com)  
Sean Coury, COURY Science and Eng., [sean.coury@couryse.com](mailto:sean.coury@couryse.com)