



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION 5  
77 WEST JACKSON BOULEVARD  
CHICAGO, ILLINOIS 60604**

**DATE:** DEC 03 2018

**SUBJECT:** CLEAN AIR ACT INSPECTION REPORT  
Ardagh Glass Inc., Burlington, Wisconsin

**FROM:** David Sutlin, Environmental Engineer  
AECAB (MN/OH)

**THRU:** Brian Dickens, Section Chief  
AECAB (MN/OH)

**TO:** File

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**BASIC INFORMATION**

**Facility Name:** Ardagh Glass Inc.

**Facility Location:** 815 S. McHenry Street, Burlington, Wisconsin

**Date of Inspection:** November 15, 2018

**EPA Inspector(s):**

1. David Sutlin, Environmental Engineer
2. Dakota Prentice, Environmental Engineer

**Other Attendees**

1. Ronn Hand, Plant Engineer
2. Paul Wilson, Batch and Furnace Manager
3. Lloyd Taylor, Plant Manager
4. Huey Shann Sue, Corporate Environmental Engineer (by phone)
5. Richard Tomicek, Corporate Vice President of Environmental Compliance & Sustainability (by phone)

**Contact Email Address:** Lloyd Taylor -lloyd.w.taylor@ardaghgroup.com

**Purpose of Inspection:** To determine compliance with the facility's operating permits and any applicable federal regulations.

**Facility Type:** Glass container manufacturing

**Arrival Time:** 10:30 AM

**Departure Time:** 12:30 PM

**Inspection Type:**

- ☒ Unannounced Inspection
- ☐ Announced Inspection

**OPENING CONFERENCE**

- ☒ Credentials Presented
- ☒ CBI warning to facility provided

The following information was obtained verbally from Ardagh representatives unless otherwise noted.

**Company Ownership:** Ardagh purchased the facility from Verallia (a subsidiary of Saint-Gobain) approximately 3-4 years ago.

**Process Description:**

The facility operates two oxy-fuel glass furnaces. Sand, soda ash, lime, coloring agents, and recycled glass (cullet) are mixed and conveyed to day bins mounted over each furnace. The material is then continuously pushed from the bin into the furnace. Each furnace has its own exhaust stack, but emissions from the furnaces are not controlled. A continuous opacity monitoring system (COMS) is deployed on both furnace stacks. After 24 hours in the furnace, the molten glass is fed through a forehearth to various bottle forming machines. Once formed the bottles are fed through annealing ovens, coated for lubricity, and inspected for quality.

**Staff Interview:**

Furnace No. 6 currently produces flint (clear) glass using 20% cullet, and furnace No. 7 currently produces amber-colored glass using 40% cullet. The cullet partially includes recycled glass purchased from third parties. This cullet is inspected for color, organic content, and particle size, and batches with an excess of unwanted materials get rejected. The facility uses limestone and sand which are mined in Wisconsin, and soda ash which is mined in Wyoming. The facility tries to keep these sources of raw materials constant to improve the consistency of the glass. The facility does not currently use glass manufacturing metal hazardous air pollutants, as defined at 40 C.F.R. Part 63, Subpart SSSSSS - Glass Manufacturing Area Sources, as a raw material.

Ardagh representatives stated that the facility's reported lead emissions were based on a composite of lead stack test results from several Ardagh facilities but could not definitively state how lead is introduced into the glass making process.

### TOUR INFORMATION

**EPA toured the facility:** Yes

**Data Collected and Observations:**

- EPA observed yellowish-brown emissions from the furnace No. 7 stack.
- The 1-hour average opacity exceeded 20% once within the prior two weeks at both furnace stacks, according to the COMS monitor in the furnace control room.

**Photos and/or Videos:** were taken during the inspection.

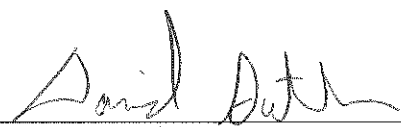
**Field Measurements:** were not taken during this inspection.

### CLOSING CONFERENCE

**Requested documents and information:**

- Most recent stack test report for the furnaces
- Process flow diagram
- COMS data for past 2 years
- Records of any past lead emissions testing at the Burlington facility

### SIGNATURES

Report Author:  Date: 12/3/18

Section Chief:  Date: 12/3/18

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**APPENDICES AND ATTACHMENTS**

Appendix A: Digital Image Log

**Facility Name:** Ardagh Glass Inc.

**Facility Location:** 815 S. McHenry Street, Burlington, Wisconsin

**Date of Inspection:** November 15, 2018

**APPENDIX A: DIGITAL IMAGE LOG**

|                                                       |                                                                                                                            |
|-------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------|
| <b>1. Inspector Name:</b><br>David Sutlin             | <b>2. Date(s) of Inspection:</b><br>November 15, 2018                                                                      |
| <b>3. Company/Facility Name:</b><br>Ardagh Glass Inc. | <b>4. Street Address, City, State:</b><br>815 S. McHenry Street, Burlington, Wisconsin                                     |
| <b>5. Number of Images:</b><br>2                      | <b>6. Archival Record Location:</b><br>C:\Users\dsutlin\OneDrive - Environmental Protection Agency (EPA)\Facilities\Ardagh |

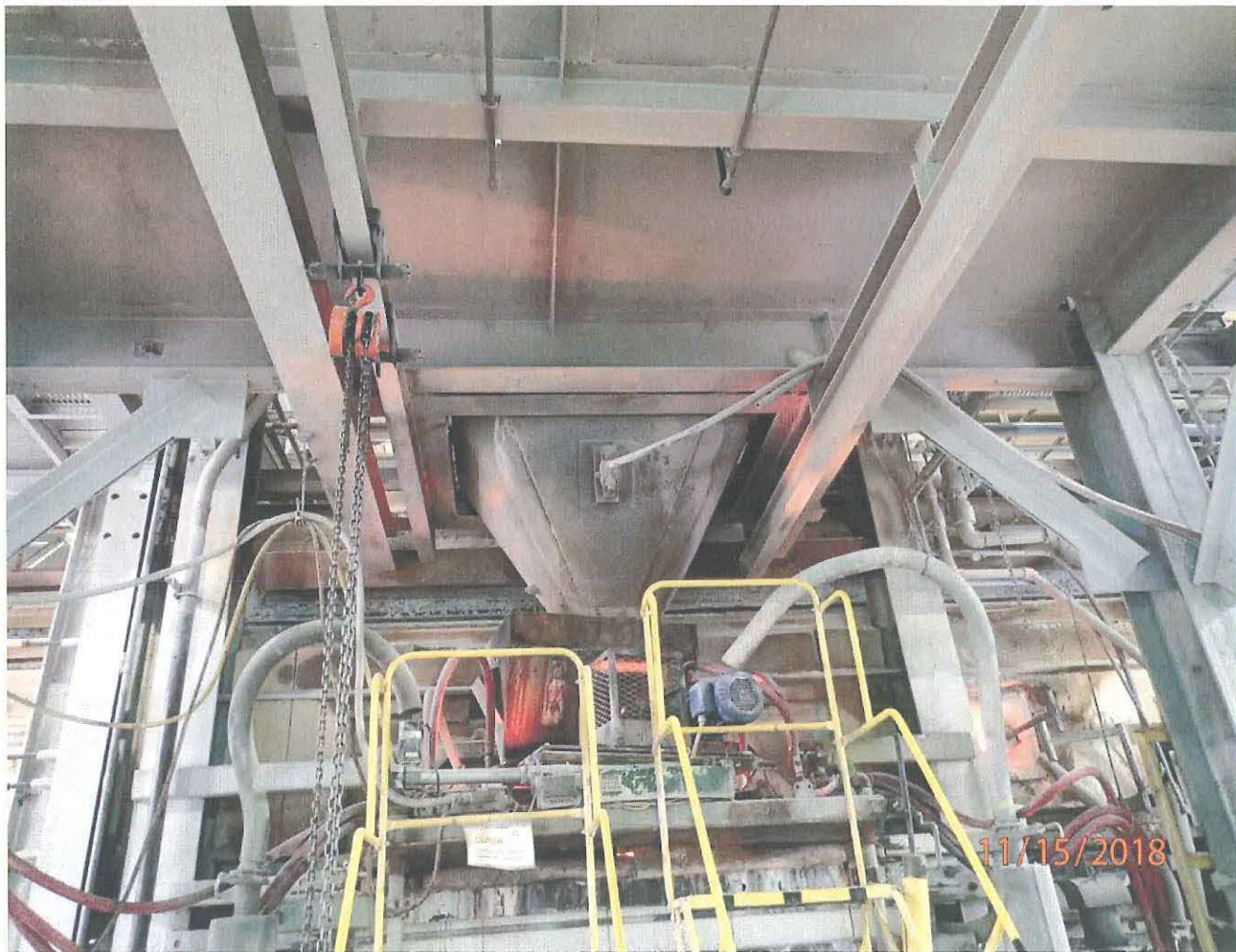


Figure 1: PB150001.JPG

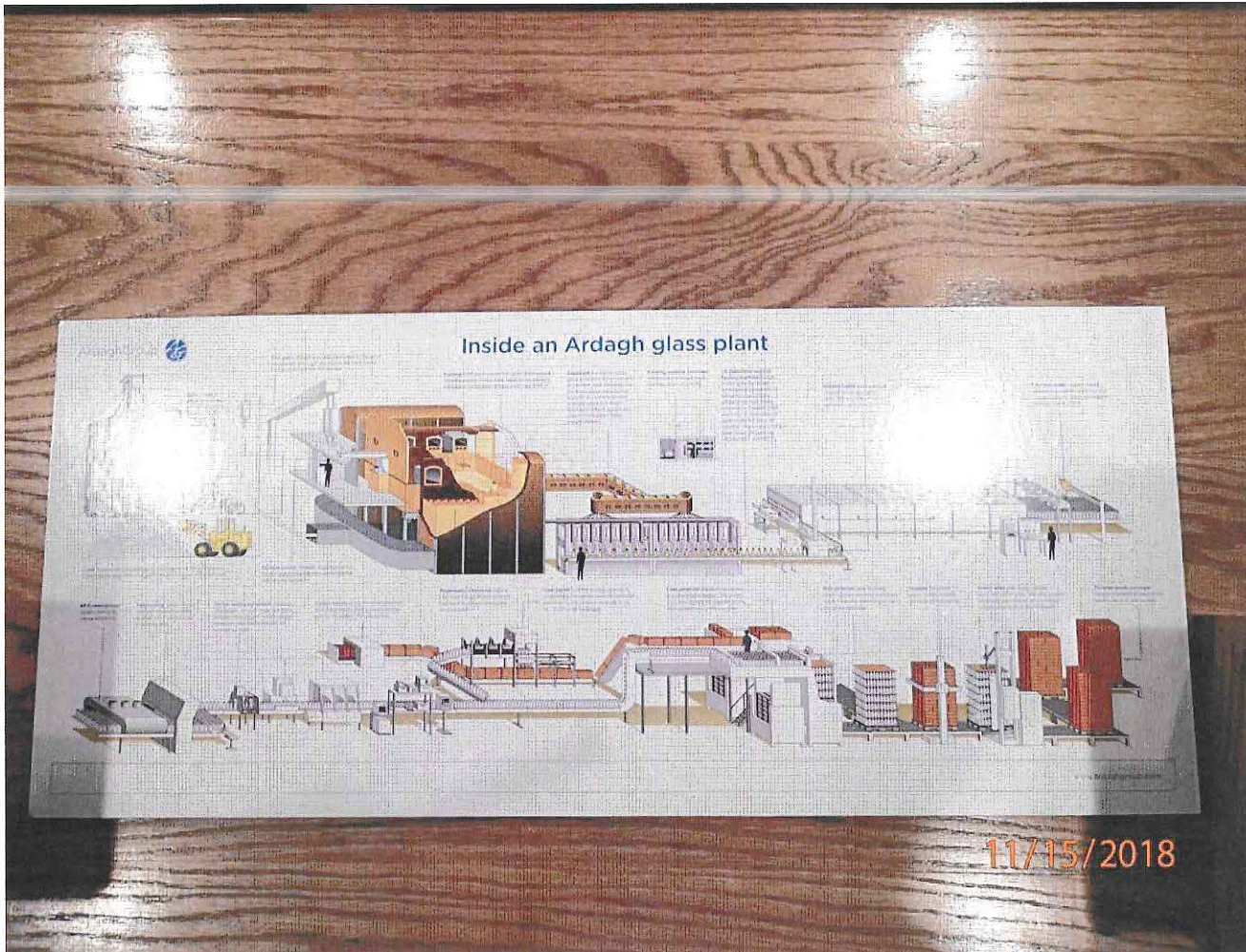
Date and Time: 11/15/2018 14:02

Description: Furnace #6 charging location

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2: PB150002

Date and Time: 11/15/2018 14:02

Description: Ardagh glass manufacturing process diagram