SWCAA
Southwest Clean Air Agency

11815 NE 99th Street, Suite 1294
Vancouver, WA 98682
(360) 574-3058
www.swcleanair.org

March 4, 2021

Mr. Jacob Wendler
Owens-Brockway Glass Container – Plant 2
2310 N Hendrickson Drive
Kalama, WA 98625

Subject: Final Air Discharge Permit for Two New Downdraft Tables in Mold Shop

Dear Mr. Wendler:

A final determination to issue Air Discharge Permit 21-3455 has been completed for Air Discharge Permit Application CO-1036 pursuant to Section 400-110(4) of the General Regulations for Air Pollution Sources of the Southwest Clean Air Agency (SWCAA). Public notice for Air Discharge Permit Application CO-1036 was published on SWCAA's internet website on January 28, 2021. SWCAA did not receive a request for a public comment period in response to the public notice and has concluded that significant public interest does not exist for this determination. Therefore, a public comment period will not be provided for this permitting action. Electronic copies of Air Discharge Permit 21-3455 and the associated Technical Support Document are available for public review in the permit section of SWCAA's internet website (http://www.swcleanair.org/permits/adpfinal.asp). Original copies are enclosed for your files.

This Air Discharge Permit may be appealed directly to the Pollution Control Hearings Board (PCHB) at P.O. Box 40903, Olympia, Washington 98504-0903 within 30 days of receipt as provided in RCW 43.21B.

If you have any comments, or desire additional information, please contact me or Clint Lamoreaux at (360) 574-3058, extension 131.

Sincerely,

Uri Papish
Executive Director

cc: Neal Homan
Owens-Brockway Glass Container – Plant 2
2310 N Hendrickson Drive
Kalama, WA 98625

UP: cl

Enclosures: Air Discharge Permit 21-3455 and Technical Support Document

SOUTHWEST CLEAN AIR AGENCY

AIR DISCHARGE PERMIT
SWCAA 21-3455

Issued: March 4, 2021

Facility Name:	Owens-Brockway Glass Container, Inc. – Plant 2
Physical Location:	2310 N Hendrickson Drive Kalama, WA 98625
SWCAA ID:	2284

REVIEWED BY: _____
Paul T. Mairose, Chief Engineer

APPROVED BY: _____
Uri Papish, Executive Director

TABLE OF CONTENTS

1. Equipment/Activity Identification

ID No.	Generating Equipment/Activity	# of Units	Control Measure/Equipment	# of Units
Material Handling & Maintenance				
1	Raw Material Elevator	1	Fabric Filtration (Flex Kleen – 400 acfm) Process Enclosure	1
2	Mixed Batch Elevator	1	Fabric Filtration (Flex Kleen – 400 acfm) Process Enclosure	1
3	Mixed Batch Day Bins	1	Fabric Filtration (Flex Kleen – 400 acfm) Process Enclosure	1
4	Cullet Elevator	1	Fabric Filtration (Flex Kleen – 400 acfm) Process Enclosure	1
5	Silos #1 & #2 – Sand	2	Fabric Filtration (Flex Kleen – 400 acfm) Process Enclosure	1
6	Silo #3 – Soda Ash	1	Fabric Filtration (Flex Kleen – 400 acfm) Process Enclosure	1
7	Silo #4 – Feldspar	1	Fabric Filtration (Flex Kleen – 400 acfm) Process Enclosure	1
8	Silo #5 – Limestone	1	Fabric Filtration (Flex Kleen – 400 acfm) Process Enclosure	1
9	Silo #6 – Cullet	1	Fabric Filtration (Flex Kleen – 400 acfm) Process Enclosure	1
10	Silo #7 – Cullet	1	Fabric Filtration (Flex Kleen – 400 acfm) Process Enclosure	1
11	Silo #8 – Cullet	1	Fabric Filtration (Flex Kleen – 400 acfm) Process Enclosure	1
12	Silo #9 - Cullet	1	Fabric Filtration (Flex Kleen – 400 acfm) Process Enclosure	1
13	Mold Shop	N/A	Mold Shop Ventilation System – Fabric Filtration (Donaldson Torit – 1,800 acfm), Downdraft Tables (4) (DualDraw – 5,000 acfm)	5
Natural Gas Fired Equipment				
14	Glass Melt Furnace (40 MMBtu/hr Oxy-fuel, electric boost)	1	Oxy-fuel to minimize NO_X, Dry Scrubbing for acid gases, Baghouse for PM, Low Sulfur Fuel (Natural Gas)	1
15	Forehearth Heater – Line 1 (2.55 MMBtu/hr)	1	Low Sulfur Fuel (Natural Gas)	N/A
16	Forehearth Heater – Line 2 (2.55 MMBtu/hr)	1	Low Sulfur Fuel (Natural Gas)	N/A
17	Shrink Wrap Packaging Heater (0.15 MMBtu/hr)	1	Low Sulfur Fuel (Natural Gas)	N/A

ID No.	Generating Equipment/Activity	# of Units	Control Measure/Equipment	# of Units
Emergency Generators				
18	62 kW Emergency Generator Engine	1	Ultra Low Sulfur Diesel (≤ 0.0015% S) Limited Operation EPA Tier 2 Certification	N/A
19	515 kW Emergency Generator Engine	1	Ultra Low Sulfur Diesel (≤ 0.0015% S) Limited Operation EPA Tier 2 Certification	N/A
Tin Coating				
20	East Hot End Coating Line	1	None	N/A
21	West Hot End Coating Line	1	None	N/A
Other				
22	Mold Swabbing	N/A	None	N/A
23	Evaporative VOC Sources	N/A	Oil skimmer on cullet cooling water	1

2. Approval Conditions

The following tables detail the specific requirements of this permit. In addition to the requirements listed below, equipment at this facility may be subject to other federal, state, and local regulations. The permit requirement number is identified in the left hand column. The text of the permit requirement is contained in the middle column. The emission unit, equipment, or activity to which the permit requirement applies is listed in the right hand column. Informational items may be shown in square brackets below the approval condition.

Air Discharge Permit 20-3420 is superseded in its entirety by this Air Discharge Permit.

Emission Limits

No.	Emission Limits	Equipment/ Activity
1.	PM_{10} emissions from each raw material and cullet handling baghouse must not exceed 150 pounds per year. PM_{10} emissions from any individual dust collector must not exceed a concentration of 0.005 gr/dscf (1-hour average). Annual emissions must be calculated from actual hours of dust collector operation consistent with the methodology found in Section 6 of the Technical Support Document for this Permit.	1 – 12
2.	PM_{10} emissions from the Mold Shop ventilation system must not exceed 676 pounds per year. PM_{10} emissions from the Mold Shop ventilation system dust collector must not exceed a concentration of 0.005 gr/dscf (1-hour average). Annual emissions must be calculated from actual hours of dust collector operation consistent with the methodology found in Section 6 of the Technical Support Document for this Permit.	13

<table>
<tr><th>No.</th><th>Emission Limits</th><th>Equipment/ Activity</th></tr>
<tr><td>3.</td><td>Emissions of nickel compounds and hexavalent chromium compounds from thermal spraying must not exceed:

<table>
<tr><u>Pollutant</u></td><td><u>Emission Limit (lbs/calendar year)</u></td></tr>
<tr><td>Nickel Compounds as Ni</td><td>0.1</td></tr>
<tr><td>Hexavalent Chromium Compounds as Cr</td><td>0.00006</td></tr>
</table>

Unless source emission testing is conducted, annual emissions must be calculated from the amount of material sprayed, the nickel and chromium content of the material sprayed, and the combined capture and filter efficiency consistent with the methodology and assumptions found in Section 6 of the Technical Support Document for this Permit. When emission factors from source emissions testing are available for this activity at this facility, those emission factors must be used to calculate annual emissions.</td><td>13</td></tr>
<tr><td>4.</td><td>Emissions from the Glass Melt Furnace exhaust stack must not exceed:

<table>
<tr><u>Pollutant</u></td><td>Emission Limit lb/ton glass <u>(1-hour average)</u></td><td>Emission Limit <u>lb/hr (1-hr average)</u></td><td><u>Emission Limit (tons)</u></td></tr>
<tr><td>NO_X</td><td>1.0</td><td>11.5</td><td>50.19 (12 month rolling total)</td></tr>
<tr><td>CO</td><td>0.20</td><td>2.3</td><td>10.04 (per calendar year)</td></tr>
<tr><td>VOC as C_3H_8</td><td>0.20</td><td>2.3</td><td>10.04 (per calendar year)</td></tr>
<tr><td>SO_2</td><td>0.50</td><td>5.7</td><td>26.33 (per calendar year)</td></tr>
<tr><td>PM (filterable)</td><td>0.09</td><td>1.0</td><td>5.27 (per calendar year)</td></tr>
<tr><td>PM_{10}</td><td>0.27</td><td>3.1</td><td>14.57 (per calendar year)</td></tr>
<tr><td>$PM_{2.5}$</td><td>0.27</td><td>3.1</td><td>14.57 (per calendar year)</td></tr>
</table>

With the exception of formaldehyde, hydrogen chloride, hydrogen fluoride, and lead, emissions of each toxic air pollutant must not exceed the Small Quantity Emission Rate for that toxic air pollutant listed in Washington Administrate Code 173-460 (as in effect August 21, 1998). Emissions of formaldehyde, hydrogen chloride, hydrogen fluoride, and lead must not cause their respective Acceptable Source Impact Levels listed in Washington Administrative Code 173-460 (as in effect August 21, 1998) to be exceeded.

The hourly emission rate limits for SO_2, filterable PM, PM_{10}, and $PM_{2.5}$ do not apply during periods of scheduled maintenance, startup and shutdown periods. Emissions during scheduled maintenance during which the emission control equipment must be bypassed, startup periods, and shutdown periods must be counted towards compliance with the annual and 12-month rolling total emission limits.

Annual emissions must be calculated from Continuous Emissions Monitoring System (CEMS) data where available. If CEMS data is not available (this permit does not require installation of a CEMS), emissions must be calculated using emission factors developed during source emissions testing. If source emissions testing data is not available, emissions must be calculated using the methodology found in Section 6 of the Technical Support Document for this Air Discharge Permit.</td><td>14</td></tr>
</table>

No.	Emission Limits	Equipment/ Activity
5.	Emissions from the Forehearth Heaters and the Shrink Wrap Packaging Heaters must not exceed: Unit / NO_X / CO / PM_{10} Forehearth Heater #1: 2,190 lb/yr / 1,840 lb/yr / 166 lb/yr Forehearth Heater #2: 2,190 lb/yr / 1,840 lb/yr / 166 lb/yr Shrink Wrap Packaging Heater: 129 lb/yr / 108 lb/yr / 10 lb/yr Annual emissions must be calculated from actual fuel consumption consistent with the methodology found in Section 6 of the Technical Support Document for this Permit.	15 - 17
6.	With the exception of the Glass Melt Furnace exhaust stack and the emergency generator engines, visible emissions from approved equipment must not exceed 0% opacity for more than 3 minutes in any one hour period as determined in accordance with SWCAA Method 9 (found in Appendix A of SWCAA 400).	1 – 13, 15 - 17
7.	Visible emissions from the Glass Melt Furnace exhaust stack must not exceed 10% opacity for more than 3 minutes in any one hour period as determined in accordance with SWCAA Method 9 (found in Appendix A of SWCAA 400) except during startup, shutdown, and approved maintenance events.	14
8.	Visible emissions from the diesel-fired emergency generator engines must not exceed 10% opacity for more than 3 minutes in any one hour period as determined in accordance with SWCAA Method 9 (found in Appendix A of SWCAA 400) except during startup. For the purposes of this requirement, the startup period ends when the earlier of the following operating events occurs: (a) The engine has reached normal operating temperature; or (b) The engine has been operating for 15 minutes.	18, 19
9.	Combined emissions from the East Hot End Coating Line and the West Hot End Coating Line must not exceed: Pollutant / Emission Limit lb/day / Emission Limit tons per calendar year Organic tin (as Sn): 6.1 / 1.12 Hydrogen chloride: 2.8 / 0.52 Unless otherwise approved by SWCAA, annual emissions must be calculated using a material balance approach assuming that any organic tin utilized and not accounted for on the surface of the bottles or equipment is emitted to the ambient air and that all chloride associated with deposited tin forms hydrogen chloride. If measurements of deposited tin or hydrogen chloride source test data are not available, the permittee must assume that one third of the tin utilized is deposited on bottles or other surfaces.	20, 21
10.	Particulate matter emissions from mold swabbing must not exceed 4.00 tons per year. Annual emissions must be calculated using the methodology found in Section 6 of the Technical Support Document for this Air Discharge Permit.	22

No.	Emission Limits	Equipment/ Activity
11.	Emissions of volatile organic compounds from evaporative sources (e.g. mineral oil lubricants) must not exceed 12.00 tons per year. Annual emissions must be calculated using a mass balance approach as described in Section 6 of the Technical Support Document for this Air Discharge Permit.	23

Operating Limits and Requirements

No.	Operating Limits and Requirements	Equipment/ Activity
12.	Reasonable precautions must be taken at all times to prevent and minimize fugitive emissions from plant operations.	Facilitywide
13.	Operations that cause or contribute to a nuisance odor must use recognized good practice and procedures to reduce these odors to a reasonable minimum.	Facilitywide
14.	With the exception of the Glass Melt Furnace, each pollution control device must be operated whenever the processing equipment served by that control device is in operation. All emission control devices must be operated and maintained in accordance with the manufacturer's specifications. Furthermore, control devices must be operated in a manner that minimizes emissions. The air pollution control equipment for the Glass Melt Furnace may only be bypassed for necessary maintenance. Bypass of the melt furnace emission control devices must not exceed 144 hours per year. All maintenance must be conducted in a manner consistent with good air pollution control practices for minimizing emissions. [40 CFR 60.292(e)]	1 – 23
15.	Emission units identified in this Permit must be maintained and operated in total and continuous conformity with the conditions identified in this Permit. SWCAA reserves the right to take any and all appropriate action to maintain the conditions of this Permit, including directing the facility to cease operations until corrective action can be completed.	1 – 23
16.	Each baghouse and dust collector must be equipped with a differential pressure gauge capable of continuously measuring the pressure drop across filtration media in the unit.	1 - 13
17.	The Mold Shop Ventilation System must utilize filter cartridges rated to MERV 15 or better. The downdraft tables in the Mold Shop must utilize HEPA rated (99.97% of 0.3 μm particles) or better filter cartridges.	13
18.	All thermal spraying must be conducted on the downdraft tables in the Mold Shop.	13
19.	Unless a subsequent air dispersion modeling analysis is conducted to demonstrate compliance with applicable air quality standards, the melt furnace exhaust stack must discharge at least 100 feet above grade. Any device that obstructs or prevents vertical discharge is prohibited.	14
20.	The melt furnace heaters, forehearth heaters, and shrink wrap packaging heaters must only be fired on natural gas.	14 - 17

No.	Operating Limits and Requirements	Equipment/ Activity
21.	A bag leak detection system must be installed downstream of the Glass Melt Furnace baghouse. The leak detection system must be operated whenever the Glass Melt Furnace baghouse is in operation except for system breakdowns, out-of-control periods, calibration checks or maintenance. The leak detection system must be installed, operated, and maintained in accordance with the requirements in 40 CFR 63.11453(c) and the site specific monitoring plan required by 40 CFR 63.11453(c)(2).	14
22.	If the results of a required inspection of the Glass Melt Furnace emission control system indicate a problem with the operation of the emission control system, the permittee must take immediate corrective action to return the control device to normal operation according to the equipment manufacturer's specifications or instructions. [40 CFR 63.11455(d)(4)]	14
23.	The permittee must maintain adequate spare parts to make routine repairs to the Glass Melt Furnace emission control system and bag leak detection system as necessary. Spare bag filters for the Glass Melt Furnace baghouse are mandatory spare parts.	14
24.	The concentration of oxygen fed to the Glass Melt Furnace must be at least 92% by volume.	14
25.	A stoichiometric excess of oxygen must be maintained in the Glass Melt Furnace.	14
26.	The 1-hour average rate of reagent fed to the Glass Melt Furnace dry scrubbing system must be at or above the reagent feed rate measured during the most recent source emissions test that demonstrated compliance with the SO_2 emission rate limit. Reagent feed must be expressed in pounds of reagent per ton of glass.	14
27.	Exhaust air from each baghouse and the emergency generator engines must be discharged vertically into the ambient air. Any device that obstructs or prevents vertical discharge is prohibited.	1 - 12, 18, 19
28.	The diesel-fired emergency generator engines must only be fired on #2 diesel or better. The sulfur content of the fuel fired in the diesel engines must not exceed 0.0015% by weight (15 ppm). A fuel certification from the fuel supplier may be used to demonstrate compliance with this requirement.	18 – 19
29.	Operation of the emergency generator engines for maintenance checks and readiness testing must not exceed 100 hours per year. Emergency operation of the emergency generator engines is not limited. A nonresettable time totalizer must be installed on each engine and used to measure hours of operation.	18 – 19
30.	Operation of the emergency generator engines must be limited to maintenance checks, readiness testing, and as necessary to provide emergency power.	18 – 19
31.	The emergency generator engines may not be operated at the same time for maintenance checks and readiness testing.	18 - 19

Monitoring and Recordkeeping Requirements

No.	Monitoring and Recordkeeping Requirements	Equipment/ Activity
32.	Each record required by this Permit must include the date and the name of the person making the record entry. If a control device or process is not operating during a specific time period, a record must be made to that effect.	Facilitywide
33.	All records required by this Permit must be kept for a minimum period of no less than five years and must be maintained in a form readily available for inspection by SWCAA representatives.	Facilitywide
34.	The Glass Melt Furnace emission control system must be inspected prior to initial facility startup and at least once every 12 months thereafter. At a minimum, each inspection must include a visual inspection of the system ductwork and fabric filter unit for leaks and an inspection of the inside of the fabric filter for structural integrity and fabric filter condition. [40 CFR 63.11455(d)(1)]	14

No.	Monitoring and Recordkeeping Requirements	Equipment/ Activity
35.	The following information must be collected, recorded at the intervals specified below, and readily available on-site for inspection: (a) The number of hours each material handling or maintenance baghouse is operated must be recorded at least once for each calendar year; (b) The total amount of each raw material used to make glass must be recorded at least once for each calendar month; (c) The amount of natural gas consumed by the Glass Melt Furnace Heaters, the Forehearth Heaters, and the Shrink Wrap Packaging Heater must be recorded at least once for each calendar month; (d) The melt furnace glass production rate must be recorded at least once for each day of operation; (e) The total amount of glass produced must be recorded at least once for each calendar month; (f) To assure a stoichiometric excess of oxygen in the Glass Melt Furnace, the oxygen concentration in the Glass Melt Furnace exhaust must be measured continuously and recorded at least once for each hour of operation. The measuring point must be upstream from where quench air is added. When accurate measurements cannot be made in the exhaust duct due to conditions within the duct (for example when low capacity operation causes quench air to influence the upstream oxygen measurement), the oxygen concentration must be measured at an alternate location, or locations. These alternative locations(s) must provide representative measurements of excess oxygen in the Glass Melt Furnace. When utilizing an alternative sampling location, the oxygen content must be measured at least once each day of operation, or within 60 minutes of reducing the oxygen to fuel ratio at any burner, whichever is more frequent; (g) The oxygen to fuel ratio at each Glass Melt Furnace burner must be monitored continuously and logged at least once for each hour of operation; (h) The oxygen concentration of the oxygen mixture fed to the Glass Melt Furnace must be determined and recorded at least once per day or once per batch, whichever is less frequent. A certification of purity from the oxygen supplier may be used in lieu of oxygen testing by the permittee; (i) The feed rate and type of reagent fed to the Glass Melt Furnace dry scrubbing system must be recorded for each hour of operation; (j) The output of the Glass Melt Furnace bag leak detector must be recorded continuously (at least one cycle of measurement every 15 minutes of operation); (k) The results of the inspections of the Glass Melt Furnace emission control system must be recorded for each occurrence; (l) The number of hours any portion of the Glass Melt Furnace emission control system is offline, and the reason for each outage, must be documented for each occurrence; and (m) The results of each inspection of the Glass Melt Furnace bag leak detection monitoring system, calibration, monitoring system maintenance, and corrective action taken to return the monitoring system to normal operation must be recorded. [40 CFR 63.11454(a)(5)]	1 – 12, 14-17

No.	Monitoring and Recordkeeping Requirements	Equipment/ Activity
36.	The following information must be collected, recorded at the intervals specified below, and readily available on-site for inspection: (a) The Mold Shop Ventilation System and the DualDraw downdraft tables must be inspected for proper operation each month that thermal spraying is conducted. The results of the inspections must be recorded for each occurrence, and any month without thermal spraying must be noted in the record. The inspection must include, at a minimum, assuring that adequate airflow is available to capture thermal spraying fume, and that filters are properly installed. (b) The amount and composition of each thermal spraying material used in the Mold Shop must be recorded for each calendar year. (c) The number of hours each emergency generator engine is operated each calendar year must be recorded from the non-resettable hour meter on each engine. The permittee must document how many hours are spent for emergency operation, including what classified the operation as emergency and how many hours were spent for non-emergency operation; (d) The fuel sulfur content of diesel burned in each emergency generator engine must be determined and recorded for each fuel delivery. A fuel supplier certification may be used in lieu of actual fuel testing; (e) The weight of each container of monobutyltin trichloride must be recorded prior to usage, daily during usage, and when the container is disconnected from the feed system; (f) The mass of each mold swabbing material used must be recorded for each calendar month. Alternatively the amount of each mold swabbing material purchased must be recorded for each calendar month; and (g) The mass of each lubricant and hydraulic oil used must be recorded for each calendar month. Alternatively the amount of each lubricant and hydraulic oil purchased must be recorded for each calendar month.	13, 18 - 23
37.	Maintenance and repair activities that may affect emissions must be logged for each occurrence. For the emergency generator engines the documentation must include a description of the maintenance and/or repair conducted and the hour meter reading on the engine at the time of the maintenance or repair.	Facilitywide
38.	Excess emissions, and upset conditions that cause excess emissions, must be recorded for each occurrence.	Facilitywide
39.	All air quality related complaints received by the permittee regarding activities controlled by the permittee and the results of any subsequent investigation or corrective action must be recorded for each occurrence.	Facilitywide

Emission Monitoring and Testing Requirements

No.	Emission Monitoring and Testing Requirements	Equipment/ Activity
40.	Initial source emissions testing is required each time the furnace is replaced or reconstructed (including re-bricking). The initial source emissions test date of the new or reconstructed furnace serves as the basis for determining when subsequent source emissions testing is due. Initial source emissions testing of the new or re-built Glass Melt Furnace must be conducted in accordance with Appendix A of this Permit within 60 days after achieving the maximum production rate at which the Glass Melt Furnace will be operated, but not later than 180 days after initial startup. Subsequent source emissions testing must be conducted at the frequencies indicated in Appendix A.	14

Reporting Requirements

No.	Reporting Requirements	Equipment/ Activity
41.	Shutdowns and the initiation of cold start-up periods for the Glass Melt Furnace must be reported to SWCAA within 1 business day of each event. The permittee may provide initial notification by telephone; however a written notification (facsimile, electronic mail or letter) must be submitted within 10 days of the event.	14
42.	Excess emissions must be reported to SWCAA as follows: (a) As soon as possible, but no later than 12 hours after discovery for emissions that represent a potential threat to human health or safety; (b) As soon as possible, but no later than 48 hours after discovery for emissions which the permittee wishes to claim as unavoidable pursuant to SWCAA 400-107(1); and (c) No later than 30 days after the end of the month of discovery for all other excess emissions. The permittee may provide initial notification to SWCAA via telephone. A message may be left on the answering machine for upset conditions that occur outside of normal business hours.	Facilitywide
43.	Deviations from permit conditions must be reported no later than 30 days after the end of the month during which the deviation is discovered.	Facilitywide
44.	All air quality related complaints received by the permittee regarding activities controlled by the permittee must be reported to SWCAA within three days of receipt. The report must include the results of any subsequent investigation or corrective action related to the complaint.	Facilitywide
45.	Source emission test results must be reported to SWCAA in writing within 45 days of test completion.	14
46.	If the Glass Melt Furnace emission control system must be bypassed to conduct routine maintenance, the permittee must submit a report to SWCAA at least 10 calendar days prior to conducting the maintenance. If 10 calendar days cannot be provided, the report must be submitted as soon as practicable. The report must include an explanation of the schedule of the maintenance. [40 CFR 60.292(e)(3)]	14

No.	Reporting Requirements	Equipment/ Activity
47.	The permittee must submit a site-specific monitoring plan to SWCAA within 60 days of initial startup in accordance with 40 CFR 63.11453(c)(2). The site specific monitoring plan will be considered final only after SWCAA's written approval. SWCAA may require modifications to the site specific monitoring plan prior to final approval.	14
48.	The permittee must submit a Notification of Compliance Status to SWCAA within 60 days after completion of the initial source emissions test described in Appendix A. The Notice of Compliance Status must contain all elements described in 40 CFR 63.9(h).	14
49.	A written report must be submitted to SWCAA at least seven (7) days prior to the use of any new VOC, TAP, or HAP containing product. The report must include the following: (a) The SDS or technical data sheet for each product; (b) A description of the type of product (e.g. lubricant, resin, paint, solvent, etc.) and where it will be used at the facility; (c) The date by which the permittee intends to begin use of the product; (d) The intended maximum usage rate of the product; (e) A quantification of the increase or decrease in emissions of VOC, TAPs, and HAPs resulting from use of the product; and (f) A summary of any applicable requirement that would apply as a result of using the new product. If the use of any new product results in the exceedance of the applicable SQER for any TAP and/or any emission limit established by this Permit, the permittee must submit a permit application to SWCAA to request a permit revision. Use of the new product must not begin until a revised permit is issued. Any new product used only for testing purposes does not need to be reported to SWCAA prior to use, provided the quantity of usage does not exceed five (5) gallons.	Facilitywide
50.	The following emissions related records must be reported to SWCAA by March 15th for the previous calendar year: (a) The total amount of each raw material used to make glass; (b) The number of hours each baghouse and mold shop filter system was operated; (c) The total quantity of glass produced during normal operations and the total quantity of glass produced while the emission control system is not operating; (d) The amount of natural gas consumed by the Glass Melt Furnace Heaters, Forehearth Heaters, and the Shrink Wrap Packaging Heaters; (e) The total number of hours each emergency generator engine operated; (f) The total amount of monobutyltin trichloride used; (g) The mass of each mold swabbing material used or the mass of each mold swabbing material purchased, and the amount sent offsite as waste; (h) The mass of each lubricant and hydraulic oil used or the amount of each lubricant and hydraulic oil purchased, and the amount sent offsite as waste; (i) The amount and composition of each thermal spraying material used in the Mold Shop; and (j) Air emissions of criteria air pollutants, volatile organic compounds, hazardous air pollutants (HAPs), and toxic air pollutants (TAPs).	Facilitywide

3. General Provisions

No.	General Provisions
A.	For the purpose of ensuring compliance with this Permit, duly authorized representatives of the Southwest Clean Air Agency shall be permitted access to the permittee's premises and the facilities being constructed, owned, operated and/or maintained by the permittee for the purpose of inspecting said facilities. These inspections are required to determine the status of compliance with this Permit and applicable regulations and to perform or require such tests as may be deemed necessary.
B.	The provisions, terms and conditions of this Permit shall be deemed to bind the permittee, its officers, directors, agents, servants, employees, successors and assigns, and all persons, firms, and corporations acting under or for the permittee.
C.	The requirements of this Permit shall survive any transfer of ownership of the source or any portion thereof.
D.	This Permit shall be posted conspicuously at or be readily available near the source.
E.	Approval to construct or modify specific pollution generating equipment shall become invalid if construction is not commenced within eighteen months after the date of issuance of this Permit, if construction is discontinued for a period of eighteen months or more, or if construction is not completed within a reasonable time.
F.	This Permit does not supersede requirements of other Agencies with jurisdiction and further, this Permit does not relieve the permittee of any requirements of any other governmental Agency. In addition to this Permit, the permittee may be required to obtain permits or approvals from other agencies with jurisdiction.
G.	Compliance with the terms of this Permit does not relieve the permittee from the responsibility of compliance with SWCAA General Regulations for Air Pollution Sources, previously issued Regulatory Orders, RCW 70.94, Title 173 WAC or any other applicable emission control requirements, nor from the resulting liabilities and/or legal remedies for failure to comply.
H.	If any provision of this Permit is held to be invalid, all unaffected provisions of the Permit shall remain in effect and be enforceable.
I.	No change in this Permit shall be made or be effective except as may be specifically set forth by written order of the Southwest Clean Air Agency upon written application by the permittee for the relief sought.
J.	The Southwest Clean Air Agency may, in accordance with RCW 70.94 impose such conditions as are reasonably necessary to assure the maintenance of compliance with the terms of this Permit, the Washington Clean Air Act, and the applicable rules and regulations adopted under the Washington Clean Air Act.

Appendix A
Source Emission Testing Requirements
Glass Melt Furnace

1. Introduction:

The purpose of this testing is to quantify emissions from the Glass Melt Furnace exhaust stack and to provide an adequate assurance of compliance with the terms and conditions of this Air Discharge Permit.

2. Testing Requirements:

a. An initial source emissions test to quantify emissions of NO_X, CO, VOCs, SO_2, PM, metals, HF, HCl and sulfuric acid mist from the Glass Melt Furnace exhaust stack was conducted in December 2012.

Unless otherwise directed or approved by SWCAA, the permittee must conduct testing for the constituents listed in the table below using the test methods, testing schedule/frequency and minimum test run duration indicated in the table. Testing for each constituent must consist of a minimum of three sampling runs.

Constituent	Test Method or Equivalent[1]	Testing Schedule / Frequency[3, 4]	Minimum Test Run Duration
Stack gas velocity, flow rate	EPA Methods 1 and 2	Initially and each year	N/A
Stack gas O_2, CO_2, dry molecular weight	EPA Method 3A	Initially and each year	60 minutes
Stack gas moisture content	EPA Method 4	Initially and each year	60 minutes
Filterable particulate matter or PM_{10}[5]	EPA Method 5 or 201A	Initially and once every 5 years	180 minutes
Sulfur dioxide[7]	EPA Method 6 or 6C	Initially, each year and each scrubbing reagent change[6]	60 minutes
Nitrogen oxides	EPA Method 7E	Initially and each year	60 minutes
Opacity of emissions	SWCAA Method 9	Initially and each year	6 minutes
Carbon monoxide	EPA Method 10	Initially and each year	60 minutes
Volatile organic compounds	EPA Method 25A/18[2]	Initially and once every 5 years	60 minutes
Metals (arsenic, cadmium, chromium, lead, manganese, and nickel)[5]	EPA Method 29	Initially and once every 5 years	60 minutes
Condensable particulate matter	EPA Method 202	Initially and once every 5 years	180 minutes

Appendix A
Source Emission Testing Requirements
Glass Melt Furnace

2. Testing Requirements (continued):

[1] The use of an alternate or equivalent test method must be pre-approved by SWCAA in writing.

[2] Methane and ethane concentrations measured by EPA Method 18 may be subtracted from the total hydrocarbon concentration measured by EPA Method 25A to determine the VOC concentration. When using EPA Method 25A, results must be reported as propane.

[3] Tests conducted more than three months before the required due date will not satisfy the periodic source emission testing requirement without prior approval from SWCAA.

[4] Testing must be conducted no later than the end of the same calendar month during which the initial source emissions test was conducted. Initial source emissions testing for the first gas-fired furnace was conducted in December 2012. Based on the December 2012 date, subsequent testing of constituents with a testing frequency of "each year" must be conducted before the end of December each year. Subsequent testing for constituents with a testing frequency of "Once every 5 years" must be conducted before the end of December every 5 following years (e.g. December 2017, December 2022, etc.).

Initial source emissions testing is required each time the furnace is replaced or reconstructed (re-bricking constitutes re-construction). The initial test date of the new or reconstructed furnace serves as the basis for determining subsequent test dates. Initial source emissions testing of a new or reconstructed furnace must be conducted within 60 days after achieving the maximum production rate at which the Glass Melt Furnace will be operated, but not later than 180 days after initial startup.

[5] Metals and PM testing must be conducted while the glass melt furnace is producing the glass that has the greatest potential to emit glass manufacturing metal HAP (arsenic, cadmium, chromium, lead, and nickel) from among the glass formulations that will be used at the facility.

[6] Both trona and sodium sesquicarbonate are approved for use as reagents in the dry scrubbing system. If the facility switches from one reagent to another, source emissions testing must be conducted with the new reagent to demonstrate continued compliance with the SO_2 emission limits. Source emissions testing with the new reagent must be completed within 30 days of the change unless such testing has already been conducted within the preceding 12 calendar months. Additional source emissions testing must be conducted as necessary to assure that whichever reagent is in use has been tested within the preceding 12 calendar months.

[7] Unless otherwise approved by SWCAA, SO_2 testing must be conducted while the glass melt furnace is producing the glass that has the greatest potential to emit SO_2 on a pound SO_2 per ton glass basis.

Appendix A
Source Emission Testing Requirements
Glass Melt Furnace

2. Testing Requirements (continued):

b. A comprehensive test plan must be submitted to SWCAA for review and approval at least 10 business days prior to testing.

c. SWCAA personnel must be notified of the test date at least 5 days prior to the testing campaign so that they may be present during testing.

3. Source Operation:

a. A complete record of operational parameters applicable to the testing, including but not limited to the following must be kept during emissions testing to correlate operations with emissions and must be recorded in the final report of the test results.

1) Glass production rate
2) Glass recipe
3) Glass melting furnace firing rate
4) Glass melting furnace oxygen addition rate
5) Glass melting furnace exhaust oxygen concentration (prior to quench air addition)
6) Startups and shutdowns
7) Scrubber reactant type (e.g. trona or sodium sodium sesquicarbonate)
8) Scrubber reactant introduction rate to dry scrubbing system
9) Bag leak detection system output

b. Source operations during emissions testing must be representative of maximum intended operating conditions.

Appendix A
Source Emission Testing Requirements
Glass Melt Furnace

4. Reporting:

The results of all required testing must be submitted to SWCAA within 45 days of test completion. Unless otherwise directed by SWCAA, a single hard copy of each report and an electronic copy (e.g. portable document format) of each report must be submitted. Each report must include:

a. A description of the source including manufacturer, model number and design capacity of the equipment, and the location of the sample ports or test locations.
b. Time and date of the test and identification and qualifications of the personnel involved.
c. A summary of results, reported in units and averaging periods consistent with the applicable emission standards or limits. At a minimum all pollutant emission rates must be reported in units of lb/hr and lb/ton glass produced. In addition, emissions of NO_X, CO, and SO_2 must be reported in units of ppmvd and ppmvd @ 15% O_2; VOC emissions must be reported as C_3H_8 in units of ppmvd and ppmvd @ 15% O_2; and particulate matter emissions must be reported in units of gr/dscf and gr/dscf @ 15% O_2.
d. A summary of control system or equipment operating conditions.
e. A summary of production related parameters, including all parameters listed in Section 3.a.
f. A description of the test methods or procedures used including all field data, quality assurance/quality control procedures and documentation.
g. A description of the analytical procedures used including all laboratory data, quality assurance/quality control procedures and documentation.
h. Copies of field data and example calculations.
i. Chain of custody information.
j. Calibration documentation.
k. Discussion of any abnormalities associated with the results.
l. A statement signed by the senior management official of the testing firm certifying the validity of the source test report.

5. Changes to Testing Requirements:

Source emissions testing must be conducted as specified in the sections above. The Permittee may submit a written request to SWCAA for approval of minor modifications to the requirements above or the testing schedule. Upon review of the request and in accordance with EPA delegation, SWCAA will inform the Permittee in writing of any approved modifications.

SWCAA
Southwest Clean Air Agency

11815 NE 99th Street, Suite 1294
Vancouver, WA 98682
(360) 574-3058
www.swcleanair.org

State Environmental Policy Act
DETERMINATION OF SEPA EXEMPT - SWCAA 21-005

Description of proposal:

ADP Application CO-1036: The proponent has applied for a permit to install two new downdraft tables in the Mold Shop. With installation of these two new replacement downdraft tables, all thermal spraying will be conducted using the four (two new and two existing) downdraft tables equipped with HEPA filters. These equipment changes are associated with a reduction in potential emissions from thermal spraying and will not materially change the nature of the permitted activity. This permitting action is not expected to have any impact on any other element of the environment including traffic, glare, housing, or recreation opportunities.

Proponent:

Owens-Brockway Glass Container – Plant 2

Location of proposal, including street address if any:

2310 N Hendrickson Drive, Kalama, WA 98625

Lead agency: Southwest Clean Air Agency

The lead agency for this proposal has determined that the proposed project is exempt from SEPA under WAC 197-11-800(3) as follows: "The repair, remodeling, maintenance, or minor alteration of existing private or public structures, facilities or equipment, including utilities, recreation, and transportation facilities involving no material expansions or changes in use beyond that previously existing; ...". The proposed project is identified as maintenance of existing facility and as such it does not have a probable significant impact on the environment. Neither an environmental checklist nor an environmental impact statement (EIS) is required under RCW 43.21C.030(2)(c). This decision was made by the lead agency after review of the proponent's proposal and the information on file with the lead agency. This information is available to the public on request.

☒ **This project/permitting action by SWCAA is SEPA exempt.**

Responsible official: Paul T. Mairose, P.E.
Position/title: Chief Engineer

Address: Southwest Clean Air Agency
11815 NE 99th St, Suite 1294
Vancouver, WA 98682-2322
Phone: (360) 574-3058 ext. 130

Signature: Paul T Mairose Date: 3/4/2021