Anchor Glass Container Corporation
Jacksonville Plant

Facility ID No. 0310005
Duval County

Draft/Proposed Title V Air Operation Permit Revision

Permit No. 0310005-020-AV
(Revision of Title V Air Operation Permit No. 0310005-013-AV)

Permitting Authority:

State of Florida
Department of Environmental Protection
Waste & Air Resource Management Program, Northeast District

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Title V Air Operation Permit Revision

Permit No. 0310005-020-AV

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FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

NORTHEAST DISTRICT
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2121 Huron Street
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Draft/Proposed Permit No. 0310005-020-AV
Jacksonville Plant
Facility Id No. 0310005
Title V Air Operation Permit Revision

The purpose of this permit is to revise the Title V air operation permit 0310005-013-AV for the above referenced facility to incorporate the provisions of air construction permits 0310005-016-AC and 0310005-017-AC. The existing Jacksonville Plant is located in Duval County at 2121 Huron Street, Jacksonville, Florida. UTM Coordinates are: Zone 17, 431.50 km East and 3357.50 km North. Latitude is: 30º 20' 57" North; and, Longitude is: 81º 42' 53" West.

The Title V air operation permit is issued under the provisions of Chapter 403, Florida Statutes (F.S.), and Florida Administrative Code (F.A.C.) Chapters 62-4, 62-210, 62-213. The above named permittee is hereby authorized to operate the facility in accordance with the terms and conditions of this permit.

Initial Effective Date: May 9, 2013
Revision Effective Date: December 9, 2014
Renewal Application Due Date: September 17, 2017
Expiration Date: April 30, 2018

Richard S. Rachal III, P.G.
Program Administrator
Waste and Air Resource Management Program

RSR/bcs

SECTION I. FACILITY INFORMATION.

Subsection A. Facility Description.

Anchor Glass Container Corporation manufactures various types and colors of container glass primarily for the food and beverage industry. The facility consists of a raw material batching operation, two glass melting furnaces and six glass container forming and finishing lines. The raw material batching operation consists of three operations including raw material delivery by truck and rail, raw material transfer by bucket elevator and storage in separate storage silos. Raw material mixing consists of mixing and precisely weighing raw materials prior to feed into the glass melting furnaces.

The glass furnaces are precisely fed the raw material mix for continuous melting. The furnaces are fired by natural gas, propane fuel, and electric boost. After melting, the glass is cooled to forming temperatures in the refiner, alcoves, and forehearths. The glass melting furnaces are each subject to the process weight table listed in Rule 62-296.320 FAC, and Rule 2.1101, JEPB. Additional emission limitations, throughput limitations, and production limitations have been placed into the permit to avoid Prevention of Significant Deterioration (PSD) applicability requirements as indicated in Air Construction Permits No. 0310005-008-AC and 0310005-012-AC.

Glass forming consists of shearing mechanisms by which the molten glass is cut into precise increments of hot, viscous glass called gobs, which are gravity fed to the forming machines. The forming machines shape the glass through mechanical and air blowing processes into containers at the rate of hundreds per minute.

Hot end container coating consists of a vapor deposition hood, which is where a tin based coating is applied to the containers prior to the cold end coating process.

Containers are belt conveyed to the glass annealing lehrs, where residual stresses induced during glass container forming are removed prior to container cooling.

Cold End Container Coating allows the containers to pass through a fog-coating hood which applies a food-grade material for surface lubricity to aid in subsequent handling. A spray coater applies a polyethylene coating afterwards as a scratch preventative.

A video-jet printing system puts identifying numbers on selected containers and cartons as required by customers.

In the packaging area containers are placed into cardboard boxes or onto pallets for bulk handling and shipping.

The facility is a major source of air pollution for Title V purposes because the potential emissions of regulated air pollutants are greater than 100 tons per year pursuant to Rule 62-210.200(188), FAC, and Rule 2.301, JEPB. The facility is a major stationary source of air pollution for Prevention of Significant Deterioration (PSD) purposes because the potential emissions of PSD air pollutants are greater than 250 tons per year pursuant to Rule 62-210.200(189), FAC, and Rule 2.301, JEPB. Based upon the Title V permit revision application received on September 15, 2014, this facility is not a major source of hazardous air pollutants (HAPs).

Subsection B. Summary of Emissions Units.

EU No.	Brief Description
Regulated Emissions Units	
003	Glass Melting Furnace No. 3
004	Glass Melting Furnace No. 4
014	Emergency Diesel Engine Generator

Subsection C. Applicable Regulations.

Based on the Title V air operation permit revision application received September 15, 2014, this facility is not a major source of hazardous air pollutants (HAP). The existing facility is a PSD major source of air pollutants in accordance with Rule 62-212.400, F.A.C. A summary of applicable regulations is shown in the following table.

Regulation	EU No(s).
City of Jacksonville Ordinance Code, Title X, Chapter 360 [Environmental Regulation], Chapter 362 [Air and Water Pollution], Chapter 376 [Odor Control], JEPB Rule 1 [Final Rules with Respect to Organization, Procedure, and Practice]; JEPB Rule 2, Parts I through VII, and Parts IX through XIV	003, 004, 014
40 CFR 63, Subpart A, NESHAP General Provisions	014
40 CFR 63, Subpart ZZZZ	014

The following conditions apply facility-wide to all emission units and activities:

FW1. Appendices. The permittee shall comply with all documents identified in Section IV, Appendices, listed in the Table of Contents. Each document is an enforceable part of this permit unless otherwise indicated. [Rule 62-213.440, F.A.C.]

Emissions and Controls

FW2. General Volatile Organic Compounds (VOC) Emissions or Organic Solvents (OS) Emissions. The permittee shall allow no person to store, pump, handle, process, load, unload or use in any process or installation, volatile organic compounds or organic solvents without applying known and existing vapor emission control devices or systems deemed necessary and ordered by the Department. [Rule 62-296.320(1), F.A.C., and Rule 2.1101, JEPB]

{Permitting Note: Nothing is deemed necessary and ordered at this time.}

FW3. General Visible Emissions. No person shall cause, let, permit, suffer or allow to be discharged into the atmosphere the emissions of air pollutants from any activity equal to or greater than 20% opacity. EPA Method 9 is the method of compliance pursuant to Chapter 62-297, F.A.C., and Rule 2.1201, JEPB. This regulation does not impose a specific testing requirement. [Rule 62-296.320(4)(b)1, F.A.C., and Rule 2.1101, JEPB]

FW4. Unconfined Particulate Matter. No person shall cause, let, permit, suffer or allow the emissions of unconfined particulate matter from any activity, including vehicular movement; transportation of materials; construction; alteration; demolition or wrecking; or industrially related activities such as loading, unloading, storing or handling; without taking reasonable precautions to prevent such emissions. Reasonable precautions to prevent emissions of unconfined particulate matter at this facility include:

a. Paving and maintenance of roads, parking areas and yards.
b. Application of water or chemicals to control emissions from such activities as demolition of buildings, grading roads, construction, and land clearing.
c. Application of asphalt, water, oil, chemicals or other dust suppressants to unpaved roads, yards, open stock piles and similar activities.
d. Removal of particulate matter from roads and other paved areas under the control of the owner or operator of the facility to prevent reentrainment, and from buildings or work areas to prevent particulate from becoming airborne.
e. Landscaping or planting of vegetation.
f. Use of hoods, fans, filters, and similar equipment to contain, capture and/or vent particulate matter.
g. Confining abrasive blasting where possible.
h. Enclosure or covering of conveyor systems.

[Rule 62-296.320(4)(c), F.A.C., and Rule 2.1101, JEPB]

Annual Reports and Fees

See Appendix RR, Facility-wide Reporting Requirements for additional details.

FW5. Electronic Annual Operating Report and Title V Annual Emissions Fees. The information required by the Annual Operating Report for Air Pollutant Emitting Facility [Including Title V Source Emissions Fee Calculation] (DEP Form No. 62-210.900(5)) shall be submitted by April 1 of each year, for the previous calendar year, to the Department of Environmental Protection's Division of Air Resource Management. Each Title V source shall submit the annual operating report using the DEP's Electronic Annual Operating Report (EAOR) software, unless the Title V source claims a technical or financial hardship by submitting DEP Form No. 62-210.900(5) to the DEP Division of Air Resource Management instead of using the reporting software. Emissions shall be computed in accordance with the provisions of subsection 62-210.370(2), F.A.C. Each Title V source must pay between January 15 and April 1 of each year an annual emissions fee in an amount

determined as set forth in subsection 62-213.205(1), F.A.C. The annual fee shall only apply to those regulated pollutants, except carbon monoxide and greenhouse gases, for which an allowable numeric emission-limiting standard is specified in the source's most recent construction permit or operation permit. Upon completing the required EAOR entries, the EAOR Title V Fee Invoice can be printed by the source showing which of the reported emissions are subject to the fee and the total Title V Annual Emissions Fee that is due. The submission of the annual Title V emissions fee payment is also due (postmarked) by April 1st of each year. A copy of the system-generated EAOR Title V Annual Emissions Fee Invoice and the indicated total fee shall be submitted to: **Major Air Pollution Source Annual Emissions Fee, P.O. Box 3070, Tallahassee, Florida 32315-3070.** Additional information is available by accessing the Title V Annual Emissions Fee On-line Information Center at the following Internet web site: http://www.dep.state.fl.us/air/emission/tvfee.htm. [Rules 62-210.370(3), 62-210.900 & 62-213.205, F.A.C.; and, §403.0872(11), Florida Statutes (2013), and Rules 2.301 and 2.501, JEPB]

{Permitting Note: Resources to help you complete your AOR are available on the electronic AOR (EAOR) website at: http://www.dep.state.fl.us/air/emission/eaor. If you have questions or need assistance after reviewing the information posted on the EAOR website, please contact the Department by phone at (850) 717-9000 or email at eaor@dep.state.fl.us.}

{Permitting Note: The Title V Annual Emissions Fee form (DEP Form No. 62-213.900(1)) has been repealed. ***A separate Annual Emissions Fee form is no longer required to be submitted by March 1st each year.****}*

FW6. Annual Statement of Compliance. The permittee shall submit an annual statement of compliance to the compliance authority at the address shown on the cover of this permit within 60 days after the end of each calendar year during which the Title V permit was effective. [Rules 62-213.440(3)(a)2. & 3. and (b), F.A.C., and Rule 2.501, JEPB]

FW7. Prevention of Accidental Releases (Section 112(r) of CAA).

a. As required by Section 112(r)(7)(B)(iii) of the CAA and 40 CFR 68, the owner or operator shall submit an updated Risk Management Plan (RMP) to the Chemical Emergency Preparedness and Prevention Office (CEPPO) RMP Reporting Center. (See paragraph e., below.)

b. As required under Section 252.941(1)(c), F.S., the owner or operator shall report to the appropriate representative of the Division of Emergency Management, as established by department rule, within one working day of discovery of an accidental release of a regulated substance from the stationary source, if the owner or operator is required to report the release to the United States Environmental Protection Agency under Section 112(r)(6) of the CAA.

c. The owner or operator shall submit the required annual registration fee to the Division of Emergency Management on or before April 1, in accordance with Part IV, Chapter 252, F.S., and Rule 9G-21, F.A.C.

d. Any required written reports, notifications, certifications, and data required to be sent to the Division of Emergency Management, should be sent to: Division of Emergency Management, 2555 Shumard Oak Boulevard, Tallahassee, FL 32399-2100, Telephone: (850) 413-9970, Fax: (850) 488-1739.

e. Any Risk Management Plans, original submittals, revisions, or updates to submittals, should be sent electronically through EPA's Central Data Exchange system at the following address: https://cdx.epa.gov. Information on electronically submitting risk management plans using the Central Data Exchange system is available at: http://www.epa.gov/osweroe1/content/rmp/index.htm. The RMP Reporting Center can be contacted at: RMP Reporting Center, Post Office Box 10162, Fairfax, VA 22038, Telephone: (703) 227-7650.

f. Any required reports to be sent to the National Response Center, should be sent to: National Response Center, EPA Office of Solid Waste and Emergency Response, USEPA (5305 W), 401 M Street SW, Washington, D.C. 20460, Telephone: (800) 424-8802.

g. Send the required annual registration fee using approved forms made payable to: Cashier, Division of Emergency Management, State Emergency Response Commission, 2555 Shumard Oak Boulevard, Tallahassee, FL 32399-2149
[Part IV, Chapter 252, F.S.; and, Rule 9G-21, F.A.C.]

FW8. Excess emissions resulting from startup, shutdown, or malfunction of any emission unit shall be permitted providing (1) best operational practices to minimize emissions are adhered to and (2) the duration of excess emissions shall be minimized but in no case exceed two hours in any 24 hour period unless specifically authorized by the Permitting Authority for longer duration. Excess emissions which are caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure which may reasonably be prevented during startup, shutdown, or malfunction shall be prohibited. In the case of excess emissions resulting from malfunctions, each owner or operator shall notify the Permitting Authority in accordance with Rule 62-4.130, FAC and Rule 2.1401, JEPB. A full written report on the malfunctions shall be submitted to the Permitting Authority in a quarterly report, if requested by the Permitting Authority.
[Rule 62-210.700(1), (4), and (6), FAC, and Rule 2.201, JEPB]

The following Facility-wide conditions are not federally enforceable:

FW9. Objectionable Odor Prohibited. No person shall cause, suffer, allow or permit the discharge of air pollutants, which cause or contribute to an objectionable odor. An "objectionable odor" means any odor present in the outdoor atmosphere which by itself or in combination with other odors, is or may be harmful or injurious to human health or welfare, which unreasonably interferes with the comfortable use and enjoyment of life or property, or which creates a nuisance. [Rule 62-296.320(2) and 62-210.200(Definitions), F.A.C. and Rule 2.1101, JEPB]

FW10. The facility shall be subject to the City of Jacksonville Ordinance Code, Title X, Chapter 360 [Environmental Regulation], Chapter 362 [Air and Water Pollution], Chapter 376 [Odor Control], and JEPB Rule 1 [Final Rules with Respect to Organization, Procedure, and Practice].

FW11. The facility shall be subject to JEPB Rule 2, Parts I through VII, and Parts IX through XIV.

The specific conditions in this section apply to the following emissions unit:

EU No.	Brief Description
003	Glass Melting Furnace No. 3

An end port regenerative glass melting furnace fired by natural gas or propane. The burner tip configuration may be configured as four burner tips (two per side) rated at 21 MMBtu per hour each or six burner tips (three per side) rated at 15 MMBtu per hour each. It is noted that firing alternates periodically from side to side of the furnace. It is noted that there is a potential heat capacity difference of three MMBtu per hour (45 MMBtu - 42 MMBtu) (approximately 7.1% difference) between the two configurations.

Additional heat may be obtained from an electric boost with a maximum heat input of 8.6 X 10^6 Btu per hour.

Essential Potential to Emit (PTE) Parameters

A.1. This emissions unit shall be allowed to operate continuously, i.e., 8760 hours per year.

[Rule 62-210.300(2)(a), FAC, and Rule 2.301, JEPB]

Emission Limitations and Standards

{Permitting Note: The attached Table 1, Summary of Air Pollutant Standards, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

A.2. The maximum process weight rate shall be limited to 14.70 tons per hour and 128,772 tons per year of raw materials, cullet, and additives for glass production. The glass pull rate shall be limited to a maximum of 312.26 tons per day (TPD) and 113,976.1 tons per year (TPY).

[Rule 62-212.400, FAC, and Rule 2.401, JEPB]

A.3. Fossil fuels which may be fired are natural gas or propane. The maximum heat input from the combustion of fossil fuels shall be limited to 51.86 X 10^6 Btu per hour and 454,293.6 X 10^6 Btu per year (445.39 X 10^6 cubic feet per year of natural gas at a nominal heat content of 1020 Btu per cubic foot). The maximum heat input from the electrical boost system shall be limited to 8.6 X 10^6 Btu per hour (2500 KVA) and 75,336 X 10^6 Btu per year.

[Rule 62-212.400, FAC, and Rule 2.401, JEPB]

Particulate Matter (PM) and PM_{10}

A.4. Allowable PM emissions shall be determined by use of the equation E = 3.59 X P^ $^{0.62}$, where P is less than or equal to 10.09 tons per hour, E = emissions in pounds per hour and P = process weight rate in tons per hour. For process weight rates in excess of 10.09 tons per hour the maximum allowable PM emissions shall not exceed 15.05 pounds per hour. PM emissions shall not exceed 65.90 tons per year.

[Rule 62-296.320(4)(a), FAC, Rule 62-212.400, FAC, Rule 2.1101, JEPB, and Rule 2.401, JEPB]

A.5. Maximum allowable PM_{10} emissions shall not exceed 14.29 pounds per hour and 62.61 tons per year. Compliance with the PM limit indicates compliance with the PM_{10} limit.

[Rule 62-296.320(4)(a), FAC, Rule 62-212.400, FAC, Rule 2.1101, JEPB, and Rule 2.401, JEPB]

Visible Emissions

A.6. Visible emissions (VE) shall be limited to less than twenty (20) percent (%) opacity.

[Rule 62-296.320(4)(b), FAC, and Rule 2.1101, JEPB]

Sulfur Dioxide (SO_2)

A.7. SO_2 emissions shall not exceed 44.24 pounds per hour and 193.76 tons per year.

[Rule 62-212.400, FAC, and Rule 2.401, JEPB]

Oxides of Nitrogen (NO_x)

A.8. NO_x emissions shall not exceed 106.26 pounds per hour and 465.43 tons per year.

[Rule 62-212.400, FAC, and Rule 2.401, JEPB]

Test Methods and Procedures

{Permitting Note: The attached Table 2, Summary of Compliance Requirements, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

A.9. Testing for demonstration of compliance shall be performed in accordance with EPA Reference Method 5 (as described in 40 CFR 60, Appendix A) for the determination of the PM emissions rate.

[Rule 62-296.320(4)(a)3., FAC, and Rule 2.1101, JEPB]

A.10. Testing for demonstration of compliance shall be performed in accordance with EPA Reference Method 9 (as described in 40 CFR 60, Appendix A) for the visual determination of opacity.

[Rule 62-296.320(4)(b), FAC, and Rule 2.1101, JEPB]

A.11. CEMS data shall be used for the determination of SO_2 emissions. Stack testing shall be performed in accordance with EPA RM 6 or 6C (as described in 40 CFR 60, Appendix A-4) for the determination of SO_2 emissions if minimum CEMS data requirements are insufficient.

[Permit 0310005-017-AC, Rule 62-4.070(3), FAC and Rule 2.1401, JEPB]

A.12. CEMS data shall be used for the determination of NO_x emissions. Stack testing for shall be performed in accordance with EPA RM 7, 7A, or 7E (as described in 40 CFR 60, Appendix A-4) for the determination of NO_x emissions if minimum CEMS data requirements are insufficient.

[Permit 0310005-017-AC, Rule 62-4.070(3), FAC and Rule 2.1401, JEPB]

A.13. PM testing and VE testing shall be conducted concurrently and during each federal fiscal year. VE testing shall be conducted for a minimum period of 30 minutes. PM testing minimum sample volume shall be 25 dry standard cubic feet per run. Compliance testing for this emissions unit shall be conducted in accordance with the approved Test Plan on file with the Permitting Authority, Appendix TP.
[Rule 62-212.400, FAC, Rule 62.297.310(7)(a)1., FAC, Rule 2.401, JEPB, and Rule 2.1201, JEPB]

A.14. SO_2 and NO_x compliance testing on the furnace shall be conducted 270 days prior to the expiration date of this permit. Compliance testing for this emissions unit shall be conducted in accordance with the approved Test Plan on file with the Permitting Authority, Appendix TP. CEMS data may be substituted for the required stack testing data provided the CEMS have been appropriately certified including but not limited to satisfactory completion of the Performance Specification Test and the initial RATA test. These tests shall be submitted to the Compliance Authority prior to the required stack testing date.

{Permitting Note: The initial CEMS certification, including RATAs, has already been successfully completed and submitted to the Department.}

[Permit 0310005-017-AC, Rule 62-212.400, FAC, Rule 62-297.310(7)(a)1, FAC, Rule 2.401, JEPB, and Rule 2.1201,
JEPB]

Recordkeeping and Reporting Requirements

A.15. In order to provide reasonable assurance that applicable PSD significant levels are not exceeded with the modification and operation of glass melting furnace No. 3, restrictions have been placed on the following parameters:

a. Process weight rate (including the daily average percentage of cullet processed)
b. Glass pull rate
c. Fuel firing rate
d. Heat input from the electrical boost system
e. PM, PM_{10}, SO_2, and NOx emissions

These restrictions are in the Emission Limitations specific conditions listed above.

The permittee shall maintain records of items a., b., c., and d. above on a **daily** basis including the type of fuel used (natural gas or propane). During periods when stack testing is being conducted, the operating conditions during testing shall be recorded as set forth in the approved Test Plan on file with the Permitting Authority, Appendix TP. This information shall be recorded and summarized in a daily log. Owners or operators shall maintain these records for a minimum period of five (5) years.

[Rule 62-212.400, FAC, Rule 62-4.070(3), FAC, Rule 2.401, JEPB, and Rule 2.1401, JEPB]

A.16. The permittee shall submit the records required by **Specific Condition (SC) No. A.15.** above to the Compliance Authority every six (6) months. The reports shall cover the period of January through June (report due on or before September 1) and July through December (report due on or before March 1).

[Rule 62-212.400, FAC, Rule 62-4.070(3), FAC, Rule 62-213.440(1)(b), FAC, Rule 2.501, JEPB, Rule 2.401, JEPB, and Rule 2.1401, JEPB]

A.17. Pursuant to Rule 62-212.300(1)(e), F.A.C., and Rule 2.401, JEPB the applicant shall provide reports in summarizing actual emissions of pollutants (NO_x, SO_2, PM, PM_{10}, and $PM_{2.5}$) computed in accordance with the requirements of Rule 62-210.370, F.A.C., and Rule 2.301, JEPB for each year during the 5-year period from CY 2015 to CY 2019. These reports shall be due by March 1 of the following year.

[Rule 62-212.300(1)(e), FAC, and Rule 2.401, JEPB]

{Permitting Note: Records may be submitted electronically with prior approval of the Permitting Authority.}

Continuous Monitoring Requirements

A.18. The requirement to install the SO_2 and NOx CEMS and the EWCS is part of a supplemental environmental project (SEP) required by a Consent Order with Compliance Plan entered into by Anchor Glass Container Corporation and the City of Jacksonville, Neighborhoods Department, Environmental Quality Division (EQD) and approved by the City of Jacksonville Environmental Protection Board (EPB). The Consent Order with Compliance Plan was signed, approved by the EPB, and became effective on December 9, 2013.

The applicant has requested that the CEMS for SO_2 and NOx be used to determine compliance with applicable SO_2 and NOx emission limits. As stated in the SEP the CEMS will provide real-time feedback concerning SO_2 and NOx emissions ensuring that plant compliance with permit limits is continuously monitored.

The EWCS will ensure that all materials, not just the materials in the batch house (material weighing system already in place), will be weighed before being charged to the furnaces. The weights will be downloaded into the current batch material tracking software system. This will improve plant compliance with permit language that necessitates weighing materials to determine raw material process weight(s).

Although the furnaces are **not subject to New Source Performance Standards (NSPS) for the pollutants SO_2 and NOx** the General Requirements section of 40 Code of Federal Regulation (CFR), Part 60, Subpart A contains generally acceptable monitoring requirements for CEMS which would be appropriate to use as quality assurance, record-keeping, and reporting procedures for the SO_2 and NOx CEMS to be installed at the Anchor Glass Container Corporation facility. In order to provide assurance that the data generated by the CEMS is accurate and relevant the CEMS require Initial Performance Specification Testing, periodic Quarterly auditing procedures, and an annual Relative Accuracy Test Audit (RATA). Therefore the continuous monitoring systems (CEMS for SO_2 and NOx) and continuous flow monitor installed pursuant to the referenced Consent Order with Compliance Plan shall be subject to the following quality assurance, record-keeping, and reporting procedures:

1. Performance specifications found in 40 CFR 60, Appendix B and Appendix F,
2. Verification of operational status shall, as a minimum, include completion of the manufacturer's written requirements or recommendations for installation, operation, and calibration of the device,
3. The CEMS zero and span shall be conducted in accordance with the procedures and frequencies found in 40 CFR 60.13(d),
4. The CEMS shall be in continuous operation and shall meet minimum frequency of operation requirements as specified in 40 CFR 60.13(e),
5. Representative measurements and applicable procedures as specified in 40 CFR 60.13(f) shall be followed,
6. Data shall be reduced in accordance with procedures (as applicable) in accordance with 40 CFR 60.13(h)
7. A notification of the date upon which demonstration of the continuous monitoring system(s) performance commences shall be submitted to the Compliance Authority a minimum of 15 days prior to such date,
8. Maintain records of the occurrence and duration of periods when the continuous monitoring system is inoperative,
9. Submit semi-annually excess emission reports and monitoring system performance reports as described in 40 CFR 60.7(c),

10. The excess emissions report form and the summary report form (Use Figure 1 form) shall be submitted as described in 40 CFR 60.7(d),
11. The permittee shall maintain a file of all measurements, including continuous monitoring system, monitoring device, and performance testing measurements; all continuous monitoring system performance evaluations; all continuous monitoring system or monitoring device calibration checks; adjustments and maintenance performed on these systems or devices in accordance with the procedures in 40 CFR 60.7(f).
12. Furnace No. 3: Determine the SO_2 and NOx pounds per hour emission rate based on the arithmetic average of the hourly emissions data during each furnace operating day.
13. Furnace No. 3: Compliance with the short term SO_2 and NOx emission limits is based on the average emission rates for SO_2 and NOx for 30 successive furnace operating days. A separate calculation is completed at the end of each furnace operating day and a new 30-day rolling average emission rate for SO_2 and NOx is calculated to show compliance with the pound per hour limit.
14. Furnace No. 3: Compliance with the long term (12 month rolling total) SO_2 and NOx emission limits is based on the average emission rates for SO_2 and NOx for 12 successive furnace operating months. A separate calculation is completed at the end of each furnace operating month and a new 12 month rolling total emission rate for SO_2 and NOx is calculated to show compliance with the tons per year limit.

{Permitting Note: The initial CEMS certification, including RATAs, has already been successfully completed and submitted to the Department.}

[Permit 0310005-017-AC]

The specific conditions in this section apply to the following emissions unit:

EU No.	Brief Description
004	Glass Melting Furnace No. 4

An end port two pass regenerator furnace system fired by natural gas or propane. The burner tips are currently configured at six burner tips (three per side) (11 MMBtu per hour each) or they may be configured at four burner tips (two per side) rated at 21 MMBtu per hour each. Either burner configuration may be used depending upon operational needs of the facility.

Additional heat may be obtained from an electric boost with a maximum heat input of 7.0 X 10^6 Btu per hour.

Essential Potential to Emit (PTE) Parameters

B.1. This emissions unit shall be allowed to operate continuously, i.e., 8760 hours per year.
[Rule 62-210.200(PTE), FAC, and Rule 2.301, JEPB]

Emission Limitations and Standards

{Permitting Note: The attached Table 1, Summary of Air Pollutant Standards, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

B.2. The maximum process weight rate shall be limited to 13.73 tons per hour and 120,274.8 tons per year of raw materials, cullet, and additives for glass production. The glass pull rate shall be limited to a maximum of 280 tons per day (TPD) and 102,200 tons per year (TPY).
[Permits 0310005-004-AC and 0310005-007-AC]

B.3. Fossil fuels which may be fired are natural gas or propane. The maximum heat input from the combustion of fossil fuels shall be limited to 54.60 X 10^6 Btu per hour and 478,296 X 10^6 Btu per year (468.92 X 10^6 cubic feet per year of natural gas at a nominal heat content of 1020 Btu per cubic foot). The maximum heat input from the electrical boost system shall be limited to 7.0 X 10^6 Btu per hour and 61,320 X 10^6 Btu per year.
[Rule 62-212.300(3)(c), FAC, and Rule 2.401, JEPB]

Particulate Matter (PM)

B.4. Allowable PM emissions shall be determined by use of the equation E = 3.59 X P^ $^{0.62}$, where P is less than or equal to 13.73 tons per hour, E = emissions in pounds per hour and P = process weight rate in tons per hour. The maximum allowable PM emissions at the maximum permitted process weight rate (13.73 tons per hour) shall not exceed 18.22 pounds per hour and 79.72 tons per year.
[Rule 62-296.320(4)(a)2., FAC, Rule 62-212.300(3)(c), FAC, Rule 2.1101, JEPB, and Rule 2.401, JEPB]

Visible Emissions

B.5. Visible emissions (VE) shall be limited to less than twenty (20) percent (%) opacity.
[Rule 62-296.320(4)(b), FAC, and Rule 2.1101, JEPB]

Test Methods and Procedures

{Permitting Note: The attached Table 2, Summary of Compliance Requirements, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

B.6. Testing for demonstration of compliance shall be performed in accordance with EPA Reference Method 5 (as described in 40 CFR 60, Appendix A) for the determination of the PM emissions rate.
[Rule 62-296.320(4)(a)3., FAC, Rule 62-212.300(1)(e), FAC, Rule 2.1101, JEPB and Rule 2.401,JEPB]

B.7. Testing for demonstration of compliance shall be performed in accordance with EPA Reference Method 9 (as described in 40 CFR 60, Appendix A) for the visual determination of opacity.
[Rule 62-296.320(4)(b)4., FAC, and Rule 2.1101, JEPB]

B.8. CEMS data shall be used for the determination of SO_2 emissions. Stack testing shall be performed in accordance with EPA RM 6 or 6C (as described in 40 CFR 60, Appendix A-4) for the determination of SO_2 emissions if minimum CEMS data requirements are insufficient.
[Permit 0310005-017-AC, Rule 62-212.300(1)(e), FAC and Rule 2.401, JEPB]

B.9. CEMS data shall be used for the determination of NO_x emissions. Stack testing shall be performed in accordance with EPA RM 7, 7A, or 7E (as described in 40 CFR 60, Appendix A-4) for the NO_x emissions if minimum CEMS data requirements are insufficient.
[Permit 0310005-017-AC, Rule 62-212.300(1)(e), FAC and Rule 2.401, JEPB]

B.10. PM and VE compliance testing shall be conducted concurrently and shall be conducted each federal fiscal year. PM testing minimum sample volume shall be 25 dry standard cubic feet per run. VE testing shall be conducted for a minimum period of 30 minutes. Compliance testing for this emissions unit shall be conducted in accordance with the approved Test Plan on file with the Permitting Authority, Appendix TP.
[Rule 62-297.310(4)(a)(2), FAC, Rule 62-212.300(1)(e)1., FAC, Rule 2.1201, JEPB and Rule 2.401, JEPB]

B.11. SO_2 and NO_x compliance testing on the furnace shall be conducted each calendar year for 5 years from CY 2012 until CY 2016. Compliance testing for this emissions unit shall be conducted in accordance with the approved Test Plan on file with the Permitting Authority, Appendix TP. CEMS data may be substituted for the required stack testing data for Calendar Year 2014 provided the CEMS have been appropriately certified including but not limited to satisfactory completion of the Performance Specification Test and the initial RATA test. These tests (Performance Specification Test and the initial RATA test) shall be submitted to the Compliance Authority prior to October 1, 2014. CEMS data shall be substituted for the required stack testing data for Calendar Year 2015 and 2016.
{Permitting Note: The test conducted in March 2012 for demonstration of compliance for the air construction permit counts as the first test.}
{Permitting Note: The initial CEMS certification, including RATAs, has already been successfully completed and submitted to the Department.}

[Permit 0310005-017-AC, Rule 62-212.300(1)(e)1., FAC and Rule 2.401, JEPB]

Recordkeeping and Reporting Requirements

B.12. The restrictions placed on the following parameters have been retained from previous permits (Permit Nos. 0310005-004-AC and 0310005-006-AV) in order to provide reasonable assurance that applicable PSD significant emission rates are not exceeded with the modification and operation of Glass Melting Furnace No. 4:

a. Process weight rate (including the daily average percentage of cullet processed)
b. Glass pull rate
c. Heat input rate from natural gas and propane
d. Heat input from the electrical boost system

These restrictions are in the Emission Limitations and Standards specific conditions listed above. [Rule 62-212.300(1)(e), FAC, Rule 62-213.440(1)(b), FAC, Rule 2.401, JEPB and Rule 2.501, JEPB]

B.13. The permittee shall maintain records of items a., b., c., and d. in **Specific Condition No. B.12(a)** above on a daily basis including the type of fuel used (natural gas or propane). During periods when stack testing is being conducted, the operating conditions during testing shall be recorded as set forth in the approved Test Plan on file with the Permitting Authority, Appendix TP. This information shall be recorded and summarized in a daily log. The permittee shall maintain these records for a minimum period of five (5) years.

[Rule 62-212.300(1)(e), FAC, Rule 62-213.440(1)(b), FAC Rule 62-4.070(3), FAC, Rule 2.401, JEPB, Rule 2.501, JEPB and Rule 2.1401, JEPB]

B.14. The permittee shall submit the records, required by **Specific Condition No. B.13.** above, to the Permitting Authority every six (6) months. The reports shall cover the period of January through June (report due on or before September 1) and July through December (report due on or before March 1). [Rule 62-213.440(1)(b), FAC, Rule 62-4.070(3), FAC, Rule 2.501, JEPB and Rule 2.1401, JEPB]

{Permitting Note: Records may be submitted electronically with prior approval of the Permitting Authority.}

B.15. Air Construction Permit No. 0310005-012-AC was based on an analysis that compared baseline actual emissions with projected actual emissions and avoided the requirements of subsection 62-212.400(4) through (12), FAC for several pollutants. Therefore, pursuant to Rule 62-212.300(1)(e), FAC, the permittee is subject to the following monitoring, reporting and recordkeeping provisions.

a. The permittee shall monitor the emissions of any PSD pollutant that the Permitting Authority identifies could increase as a result of the modification and that is emitted by any emissions unit that could be affected. Annual stack test data shall be used to generate production based emission factors to calculate and maintain a record of the annual emissions, in tons per year on a calendar year basis, for a period of 5 years (i.e., 2012 - 2016). Test data from each year shall be used to generate new production based emission factors. Emissions shall be computed in accordance with the provisions in Rule 62-210.370, FAC. A **Post-Project Emissions Multi-Year Tracking Sheet** is attached for use as a worksheet.

b. The permittee shall complete and submit the attached **Project Emissions Increase Report** (Appendix PEI) to the Permitting Authority within 60 days after the end of each calendar year during the 5-year period setting out the unit's annual emissions during the calendar year that preceded submission of the report. The report shall also include any other information that the permittee wishes to include in the report.

c. For this emissions unit, the following are the baseline actual emissions: 579 tons per year (TPY) of NO_x; 45 TPY of PM; 42.75 TPY of PM_{10}; 121 TPY of SO_2; 10 TPY of CO; and 10 TPY of VOC.

d. The information required to be documented and maintained pursuant to subparagraphs 62-212.300(1)(e)1 and 2, FAC, shall be submitted to the Permitting Authority, which shall make it available for review to the general public.

For this emissions unit, the Permitting Authority requires the annual reporting of actual PM, PM10, SO2 and NOx emissions. ***{Permitting Note: CEMS data shall be used to determine SO_2 and NO_x emissions as noted in Specific Conditions B.11. and B.16.}***
[Permit 0310005-012-AC, Rule 62-210.370, FAC, Rule 62-212.300(1)(e), FAC, Rule 2.301, JEPB and Rule 2.401, JEPB]

<u>Continuous Monitoring Requirements</u>

B.16. The requirement to install the SO_2 and NO_x CEMS and the EWCS is part of a supplemental environmental project (SEP) required by a Consent Order with Compliance Plan entered into by Anchor Glass Container Corporation and the City of Jacksonville, Neighborhoods Department, Environmental Quality Division (EQD) and approved by the City of Jacksonville Environmental Protection Board (EPB). The Consent Order with Compliance Plan was signed, approved by the EPB, and became effective on December 9, 2013.

The applicant has requested that the CEMS for SO_2 and NOx be used to determine compliance with applicable SO2 and NOx emission limits and determination of SO_2 and NOx emissions. As stated in the SEP the CEMS will provide real-time feedback concerning SO_2 and NOx emissions ensuring that plant compliance with permit limits is continuously monitored.

The EWCS will ensure that all materials, not just the materials in the batch house (material weighing system already in place), will be weighed before being charged to the furnaces. The weights will be downloaded into the current batch material tracking software system. This will improve plant compliance with permit language that necessitates weighing materials to determine raw material process weight(s).

Although the furnaces are **not subject to New Source Performance Standards (NSPS) for the pollutants SO2 and NOx** the General Requirements section of 40 Code of Federal Regulation (CFR), Part 60, Subpart A contains generally acceptable monitoring requirements for CEMS which would be appropriate to use as quality assurance, record-keeping, and reporting procedures for the SO_2 and NOx CEMS to be installed at the Anchor Glass Container Corporation facility. In order to provide assurance that the data generated by the CEMS is accurate and relevant the CEMS require Initial Performance Specification Testing, periodic Quarterly auditing procedures, and an annual Relative Accuracy Test Audit (RATA).

Therefore the continuous monitoring systems (CEMS for SO_2 and NOx) and continuous flow monitor installed pursuant to the referenced Consent Order with Compliance Plan shall be subject to the following quality assurance, record-keeping, and reporting procedures:

1. Performance specifications found in 40 CFR 60, Appendix B and Appendix F,
2. Verification of operational status shall, as a minimum, include completion of the manufacturer's written requirements or recommendations for installation, operation, and calibration of the device,
3. The CEMS zero and span shall be conducted in accordance with the procedures and frequencies in 40 CFR 60.13(d),
4. The CEMS shall be in continuous operation and shall meet minimum frequency of operation requirements as specified in 40 CFR 60.13(e),
5. Representative measurements and applicable procedures as specified in 40 CFR 60.13(f) shall be followed,
6. Data shall be reduced in accordance with procedures (as applicable) in accordance with 40 CFR 60.13(h)
7. A notification of the date upon which demonstration of the continuous monitoring system(s) performance commences shall be submitted to the Compliance Authority a minimum of 15 days prior to such date,
8. Maintain records of the occurrence and duration of periods when the continuous monitoring system is inoperative,
9. Submit semi-annually excess emission reports and monitoring system performance reports as described in 40 CFR 60.7(c),
10. The excess emissions report form and the summary report form (Use Figure 1 form) shall be submitted as described in 40 CFR 60.7(d),
11. The permittee shall maintain a file of all measurements, including continuous monitoring system, monitoring device, and performance testing measurements; all continuous monitoring system performance evaluations; all continuous monitoring system or monitoring device calibration checks; adjustments and maintenance performed on these systems or devices in accordance with the procedures in 40 CFR 60.7(f).
12. Furnace No. 4: Determine the SO_2 and NOx pounds per hour emission rate based on the arithmetic average of the hourly emissions data during each furnace operating day.
13. Furnace No. 4: Determination of the short term SO_2 and NOx emissions is based on the average emission rates for SO_2 and NOx for 30 successive furnace operating days. A separate calculation is completed at the end of each furnace operating day and a new 30-day rolling average emission rate for SO_2 and NOx is calculated.

14. Furnace No. 4: Determination of the long term (12 month rolling total) SO_2 and NOx emissions is based on the average emission rates for SO_2 and NOx for 12 successive furnace operating months. A separate calculation is completed at the end of each furnace operating month and a new 12 month rolling total emission rate for SO_2 and NOx is calculated.

{Permitting Note: The initial CEMS certification, including RATAs, has already been successfully completed and submitted to the Department.}

[Permit 0310005-017-AC]

The specific conditions in this section apply to the following emissions unit(s):

EU No.	Brief Description
014	Emergency Diesel Engine Generator

One emergency diesel engine generator (Model No.: NT-280-IF) manufactured by Cummins.

Description of Engine	Year Built	Displacement/ Horsepower	Rule Applicability
Diesel Emergency Generator	1972	2.33 liters/cylinder / 255 HP	40 CFR Part 63, Subpart ZZZZ

{Permitting Note: This permit section addresses an existing, emergency stationary compression ignition (CI) reciprocating internal combustion engine (RICE) constructed prior to June 12, 2006 with a site rating of less than 500 brake horsepower (HP) located at an area source of HAP emissions.}

{This emissions unit is subject to 40 CFR 63, Subpart ZZZZ - National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines; 40 CFR 63, Subpart A, General Provisions; Rule 62-204.800(11), F.A.C., and Rule 2.201, JEPB }

Essential Potential to Emit (PTE) Parameters

C.1. The owner or operator shall operate and maintain the emergency stationary RICE according to the following:

a. There is no time limit on the use of emergency stationary RICE in emergency situations.
b. The emergency stationary RICE may be operated for the purpose of maintenance checks and readiness testing, provided that the tests are recommended by Federal, State or Local government, the manufacturer, the vendor, or the insurance company associated with the engine. Maintenance checks and readiness testing of such units is limited to 100 hours per year.
d. The emergency stationary RICE may be operated up to 50 hours per year in non-emergency situations, but those 50 hours are counted towards the 100 hours per year provided for maintenance checks and readiness testing.
e. The 50 hours per year for non-emergency situations may not be used for peak shaving or to generate income for a facility to supply power to an electric grid or otherwise supply non-emergency power as part of a financial arrangement with another entity.

[40 CFR 63.6640(f), Rule 62-204.800(11), FAC and Rule 2.201, JEPB]

C.2. The owner or operator shall minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes.
[40 CFR 63.6625(h), Rule 62-204.800(11), FAC and Rule 2.201, JEPB]

Emission Limitations and Standards

{Permitting Note: The attached Table 1, Summary of Air Pollutant Standards, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

C.3. The owner or operator shall comply with the following requirements as outlined in 40 CFR 63, Subpart ZZZZ, Table 2d.

a. Change oil and filter every 500 hours of operation or annually, whichever comes first, or use an oil analysis program to extend this interval, as provided in **Specific Condition No. C.4.** for this emissions unit below.
b. Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first.
c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.

[40 CFR 63.6603(a), Rule 62-204.800(11), FAC and Rule 2.201, JEPB]

C.4. The owner or operator has the option of using an oil analysis program to extend the oil change requirement. The oil analysis shall be performed at the same frequency specified for changing the oil in **Specific Condition No. C.3.** for this emissions unit. The analysis program shall at a minimum analyze the following three parameters: Total Base Number, viscosity, and percent water content. The condemning limits for these parameters are as follows: Total Base Number is less than 30 percent of the Total Base Number of the oil when new; viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new; or percent water content (by volume) is greater than 0.5. If all of these condemning limits are not exceeded, the engine owner or operator is not required to change the oil. If any of the limits are exceeded, the engine owner or operator shall change the oil within 2 days of receiving the results of the analysis; if the engine is not in operation when the results of the analysis are received, the engine owner or operator shall change the oil within 2 days or before commencing operation, whichever is later. The owner or operator shall keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for the engine. The analysis program shall be part of the maintenance plan for the engine.
[40 CFR 63.6625(i), Rule 62-204.800(11), FAC and Rule 2.201, JEPB]

C.5. The owner or operator shall operate and maintain the stationary RICE and after-treatment control device (if any) according to the manufacturer's emission-related written instructions or develop and follow their own maintenance plan which shall provide, to the extent practicable, for the maintenance and operation of the engine in a manner consistent with good air pollution control practices for minimizing emissions.
[40 CFR 63.6625(e), Rule 62-204.800(11), FAC and Rule 2.201, JEPB]

Monitoring Requirements

C.6. The owner or operator shall install a non-resettable hour meter if one is not already installed.
[40 CFR 63.6625(f), Rule 62-204.800(11), FAC and Rule 2.201, JEPB]

Compliance Requirements

C.7. Operation and Maintenance of Equipment. At all times the owner or operator shall operate and maintain the stationary RICE, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Compliance Authority which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.
[40 CFR 63.6605, Rule 62-204.800(11), FAC and Rule 2.201, JEPB]

Recordkeeping and Reporting Requirements

C.8. The owner or operator shall keep records of the maintenance conducted on the stationary RICE in order to demonstrate that the stationary RICE and after-treatment control device (if any) was operated and maintained according to their own maintenance plan.
[40 CFR 63.6655(e), Rule 62-204.800(11), FAC and Rule 2.201, JEPB]

C.9. The owner or operator shall keep records of the hours of operation of the engine that is recorded through the non-resettable hour meter. The owner or operator shall document how many hours are spent for emergency operation, including what classified the operation as emergency and how many hours are spent for non-emergency operation. If the engines are used for demand response operation, the owner or operator shall keep records of the notification of the emergency situation, and the time the engine was operated as part of demand response.
[40 CFR 63.6655(f), Rule 62-204.800(11), FAC and Rule 2.201, JEPB]

C.10. The records in **Specific Condition Nos. C.8. and C.9.** for this emissions unit shall be kept and maintained for a minimum period of five (5) years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. Records shall be provided to the Compliance Authority upon request.
[40 CFR 63.6660, Rule 62-204.800(11), FAC and Rule 2.201, JEPB]

SECTION IV. APPENDICES.

The Following Appendices Are Enforceable Parts of This Permit:

Appendix A, Glossary.
Appendix CO, Consent Order effective December 9, 2013
Appendix I, List of Insignificant Emissions Units and/or Activities.
Appendix NESHAP, Subpart A – General Provisions.
Appendix NESHAP, Subpart ZZZZ
Appendix PEI, Project Emissions Increase Report
Appendix RR, Facility-wide Reporting Requirements.
Appendix TP, Compliance Test Plan
Appendix TR, Facility-wide Testing Requirements.
Appendix TV, Title V General Conditions.
Appendix U, List of Unregulated Emissions Units and/or Activities